UNIVERSIDAD DE SEVILLA

**ESCUELA TÉCNICA SUPERIOR DE INGENIERÍA**

# DOCUMENTO ANEXO 1. DATOS DE LOS APOYOS 1 Y 2

## HERRAMIENTA PARA EL CÁLCULO DE APOYOS EN LÍNEAS ELÉCTRICAS DE ALTA TENSIÓN

**TRABAJO PRESENTADO PARA OPTAR AL TÍTULO DE**

**MÁSTER DE SISTEMAS DE ENERGÍA ELÉCTRICA**

**POR**

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**SEVILLA, DICIEMBRE DE 2017**

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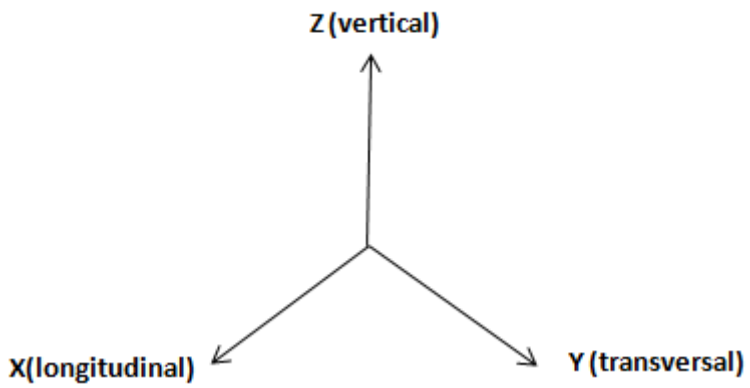
# 1 DATOS DEL APOYO 1

El apoyo presenta 8 crucetas, 2 de las cuales corresponden a los cables de tierra. Para cada cruceta se define el nudo de aplicación de la carga. La base del apoyo quedará definida por 4 nudos empotrados:

| Nudos Empotrados | Cruceta /nudos aplicación carga | Nº nudos | Nudo 1 | Nudo 2 | Nudo 3 | Nudo 4 | Nudo 5 | Nudo 6 |
|---|---|---|---|---|---|---|---|---|
| 1 | CT1 | 1 | 10 | | | | | |
| 12 | CT2 | 1 | 11 | | | | | |
| 13 | C1 | 1 | 4 | | | | | |
| 14 | C2 | 1 | 6 | | | | | |
| | C3 | 1 | 8 | | | | | |
| | C4 | 1 | 5 | | | | | |
| | C5 | 1 | 7 | | | | | |
| | C6 | 1 | 9 | | | | | |
| | C7 | | | | | | | |
| | C8 | | | | | | | |
| | C9 | | | | | | | |
| | C10 | | | | | | | |
| | C11 | | | | | | | |
| | C12 | | | | | | | |

A continuación se definen las coordenadas longitudinal, transversal y vertical de los nudos pertenecientes a la estructura expresadas en milímetros. También se incluyen 12 nudos de orientación (no pertenecientes a la estructura) necesarios para definir algunas barras. Para otras barras, se utilizaran nudos pertenecientes a la estructura para definir la orientación de su perfil. Adicionalmente, se indica el número de barras que llegan al nudo, indicándose 0 para aquellos nudos que son exclusivamente de orientación.



DATOS DEL APOYO 1

| Nudo | x (mm) | y (mm) | z (mm) | N. Barras en nudo |
|---|---|---|---|---|
| 1 | 1258 | 1258 | 0 | 3 |
| 2 | 550 | 550 | 10000 | 10 |
| 3 | 550 | 550 | 15000 | 8 |
| 4 | 0 | -2100 | 14000 | 4 |
| 5 | 0 | 2100 | 14000 | 4 |
| 6 | 0 | -2100 | 12000 | 4 |
| 7 | 0 | 2100 | 12000 | 4 |
| 8 | 0 | -2100 | 10000 | 4 |
| 9 | 0 | 2100 | 10000 | 4 |
| 10 | 0 | 0 | 17800 | 5 |
| 11 | 0 | -200 | 17800 | 3 |
| 12 | 1258 | -1258 | 0 | 3 |
| 13 | -1258 | -1258 | 0 | 3 |
| 14 | -1258 | 1258 | 0 | 3 |
| 15 | 550 | -550 | 10000 | 11 |
| 16 | -550 | -550 | 10000 | 10 |
| 17 | -550 | 550 | 10000 | 11 |
| 18 | 550 | -550 | 15000 | 8 |
| 19 | -550 | -550 | 15000 | 8 |
| 20 | -550 | 550 | 15000 | 8 |
| 21 | 1214 | -1214 | 625 | 5 |
| 22 | 1170 | -1170 | 1250 | 4 |
| 23 | 1125 | -1125 | 1875 | 4 |
| 24 | 1081 | -1081 | 2500 | 4 |
| 25 | 1037 | -1037 | 3125 | 4 |
| 26 | 992 | -992 | 3750 | 4 |
| 27 | 948 | -948 | 4375 | 4 |
| 28 | 904 | -904 | 5000 | 4 |
| 29 | 859 | -859 | 5625 | 4 |
| 30 | 815 | -815 | 6250 | 4 |
| 31 | 771 | -771 | 6875 | 4 |
| 32 | 727 | -727 | 7500 | 4 |
| 33 | 682 | -682 | 8125 | 4 |
| 34 | 638 | -638 | 8750 | 4 |
| 35 | 594 | -594 | 9375 | 4 |
| 36 | 0 | -550 | 10000 | 4 |
| 37 | 0 | 550 | 10000 | 4 |
| 38 | 550 | -550 | 11000 | 9 |
| 39 | 550 | -550 | 12000 | 12 |
| 40 | 550 | -550 | 13000 | 9 |
| 41 | 550 | -550 | 14000 | 12 |
| 42 | 366 | -366 | 15930 | 6 |

| Nudo | x (mm) | y(mm) | z (mm) | N. Barras en nudo |
|---|---|---|---|---|
| 43 | -366 | -366 | 15930 | 6 |
| 44 | 366 | 366 | 15930 | 6 |
| 45 | -366 | 366 | 15930 | 6 |
| 46 | 183 | -183 | 16870 | 5 |
| 47 | -183 | -183 | 16870 | 5 |
| 48 | 183 | 183 | 16870 | 5 |
| 49 | -183 | 183 | 16870 | 5 |
| 50 | 100 | 100 | 17290 | 4 |
| 51 | 275 | -1325 | 14000 | 4 |
| 52 | -275 | -1325 | 14000 | 5 |
| 53 | 275 | -1325 | 14500 | 5 |
| 54 | -275 | -1325 | 14500 | 5 |
| 55 | -275 | 1325 | 14500 | 5 |
| 56 | 275 | 1325 | 14500 | 5 |
| 57 | -275 | 1325 | 14000 | 4 |
| 58 | 275 | 1325 | 14000 | 5 |
| 59 | -275 | -1325 | 12000 | 5 |
| 60 | 275 | -1325 | 12000 | 4 |
| 61 | 275 | -1325 | 12500 | 5 |
| 62 | -275 | -1325 | 12500 | 5 |
| 63 | 275 | 1325 | 12000 | 5 |
| 64 | -275 | 1325 | 12000 | 4 |
| 65 | 275 | 1325 | 12500 | 5 |
| 66 | -275 | 1325 | 12500 | 5 |
| 67 | 275 | -1325 | 10000 | 4 |
| 68 | -275 | -1325 | 10000 | 5 |
| 69 | -275 | -1325 | 10500 | 5 |
| 70 | 275 | -1325 | 10500 | 5 |
| 71 | 275 | 1325 | 10000 | 5 |
| 72 | 275 | 1325 | 10500 | 5 |
| 73 | -275 | 1325 | 10500 | 5 |
| 74 | -275 | 1325 | 10000 | 4 |
| 75 | 1214 | 0 | 625 | 8 |
| 76 | 0 | -1214 | 625 | 6 |
| 77 | 1214 | 1214 | 625 | 5 |
| 78 | -1214 | 1214 | 625 | 5 |
| 79 | -1214 | -1214 | 625 | 5 |
| 80 | 1170 | 1170 | 1250 | 4 |
| 81 | -1170 | 1170 | 1250 | 4 |
| 82 | -1170 | -1170 | 1250 | 4 |
| 83 | 1125 | 1125 | 1875 | 4 |
| 84 | -1125 | 1125 | 1875 | 4 |

DATOS DEL APOYO 1

| Nudo | x (mm) | y(mm) | z (mm) | N. Barras en nudo |
|---|---|---|---|---|
| 84 | -1125 | 1125 | 1875 | 4 |
| 85 | -1125 | -1125 | 1875 | 4 |
| 86 | 1081 | 1081 | 2500 | 4 |
| 87 | -1081 | 1081 | 2500 | 4 |
| 88 | -1081 | -1081 | 2500 | 4 |
| 89 | 1037 | 1037 | 3125 | 4 |
| 90 | -1037 | 1037 | 3125 | 4 |
| 91 | -1037 | -1037 | 3125 | 4 |
| 92 | 992 | 992 | 3750 | 4 |
| 93 | -992 | 992 | 3750 | 4 |
| 94 | -992 | -992 | 3750 | 4 |
| 95 | 948 | 948 | 4375 | 4 |
| 96 | -948 | 948 | 4375 | 4 |
| 97 | -948 | -948 | 4375 | 4 |
| 98 | 904 | 904 | 5000 | 4 |
| 99 | -904 | 904 | 5000 | 4 |
| 100 | -904 | -904 | 5000 | 4 |
| 101 | 859 | 859 | 5625 | 4 |
| 102 | -859 | 859 | 5625 | 4 |
| 103 | -859 | -859 | 5625 | 4 |
| 104 | 815 | 815 | 6250 | 4 |
| 105 | -815 | 815 | 6250 | 4 |
| 106 | -815 | -815 | 6250 | 4 |
| 107 | 771 | 771 | 6875 | 4 |
| 108 | -771 | 771 | 6875 | 4 |
| 109 | -771 | -771 | 6875 | 4 |
| 110 | 727 | 727 | 7500 | 4 |
| 111 | -727 | 727 | 7500 | 4 |
| 112 | -727 | -727 | 7500 | 4 |
| 113 | 682 | 682 | 8125 | 4 |
| 114 | -682 | 682 | 8125 | 4 |
| 115 | -682 | -682 | 8125 | 4 |
| 116 | 638 | 638 | 8750 | 4 |
| 117 | -638 | 638 | 8750 | 4 |
| 118 | -638 | -638 | 8750 | 4 |
| 119 | 594 | 594 | 9375 | 4 |
| 120 | -594 | 594 | 9375 | 4 |

| Nudo | x (mm) | y(mm) | z (mm) | N. Barras en nudo |
|---|---|---|---|---|
| 121 | -594 | -594 | 9375 | 4 |
| 122 | 550 | 550 | 11000 | 9 |
| 123 | -550 | 550 | 11000 | 9 |
| 124 | -550 | -550 | 11000 | 9 |
| 125 | 550 | 550 | 12000 | 11 |
| 126 | -550 | 550 | 12000 | 12 |
| 127 | -550 | -550 | 12000 | 11 |
| 128 | 550 | 550 | 13000 | 9 |
| 129 | -550 | 550 | 13000 | 9 |
| 130 | -550 | -550 | 13000 | 9 |
| 131 | 550 | 550 | 14000 | 11 |
| 132 | -550 | 550 | 14000 | 12 |
| 133 | -550 | -550 | 14000 | 11 |
| 134 | 100 | -100 | 17290 | 5 |
| 135 | -100 | -100 | 17290 | 5 |
| 136 | -100 | 100 | 17290 | 4 |
| 137 | -1214 | 0 | 625 | 8 |
| 138 | 0 | 1214 | 625 | 6 |
| 139 | 550 | 0 | 17800 | 0 |
| 140 | -550 | 0 | 17800 | 0 |
| 141 | 0 | 550 | 17800 | 0 |
| 142 | 0 | -550 | 17800 | 0 |
| 143 | 1258 | -1258 | 0 | 0 |
| 144 | -1258 | 1258 | 0 | 0 |
| 145 | 550 | -550 | 10000 | 0 |
| 146 | -550 | 550 | 10000 | 0 |
| 147 | 0 | -1214 | 17800 | 0 |
| 148 | 0 | 1214 | 17800 | 0 |
| 149 | 0 | -2100 | 17800 | 0 |
| 150 | 0 | 2100 | 17800 | 0 |

En la siguiente tabla, se indican las propiedades geométricas y mecánicas de cada perfil angular de lados iguales utilizado en este apoyo, necesarias para el cálculo de la estructura (área, momentos de inercia, momento de torsión y longitud del ala)

| Número | Perfil | Area (cm2) | Ix (m4) | Iy (m4) | J(m4) | Ala (mm) |
|---|---|---|---|---|---|---|
| 1 | L45X45X4 | 3,49 | 6,4551E-08 | 6,4551E-08 | 2,87282E-09 | 45 |
| 2 | L50X50X4 | 3,89 | 8,9875E-08 | 8,9875E-08 | 3,18472E-09 | 50 |
| 3 | L50X50X5 | 4,8 | 1,0944E-07 | 1,0944E-07 | 6,06289E-09 | 50 |
| 4 | L60X60X4 | 4,71 | 1,5773E-07 | 1,5773E-07 | 3,90005E-09 | 60 |
| 5 | L100X100X9 | 17,3 | 1,6093E-06 | 1,6093E-06 | 6,95743E-08 | 100 |
| 6 | L120X120X12 | 27,5 | 3,6637E-06 | 3,6637E-06 | 1,95129E-07 | 120 |
| 7 | L150X150X12 | 34,8 | 7,3637E-06 | 7,3637E-06 | 2,48961E-07 | 150 |

Para definir las barras es necesario indicar:

- Perfil de la barra
- Tipo de barra (1- Biarticualda; 2- Biempotrada; 3- Articulada-Empotrada; 4- Empotrada-Articulada), teniendo en cuenta que:

  Nudo articulado: Nudo que tiene permitido realizar desplazamientos verticales, longitudinales y transversales.

  Nudo empotrado: Nudo que tiene restringidos los desplazamientos verticales, longitudinales y transversales.

- Nudo inicial
- Nudo final
- Nudo orientación

DATOS DEL APOYO 1

| Barra | perfil | Tipo | Nudo inicial | Nudo final | Nudo Ref. |
|---|---|---|---|---|---|
| 1 | 7 | 2 | 12 | 21 | 13 |
| 2 | 7 | 2 | 1 | 77 | 12 |
| 3 | 7 | 2 | 14 | 78 | 1 |
| 4 | 7 | 2 | 13 | 79 | 14 |
| 5 | 7 | 2 | 21 | 22 | 79 |
| 6 | 7 | 2 | 77 | 80 | 21 |
| 7 | 7 | 2 | 78 | 81 | 77 |
| 8 | 7 | 2 | 79 | 82 | 78 |
| 9 | 7 | 2 | 22 | 23 | 82 |
| 10 | 7 | 2 | 80 | 83 | 22 |
| 11 | 7 | 2 | 81 | 84 | 80 |
| 12 | 7 | 2 | 82 | 85 | 81 |
| 13 | 7 | 2 | 23 | 24 | 85 |
| 14 | 7 | 2 | 83 | 86 | 23 |
| 15 | 7 | 2 | 84 | 87 | 83 |
| 16 | 7 | 2 | 85 | 88 | 84 |
| 17 | 7 | 2 | 24 | 25 | 88 |
| 18 | 7 | 2 | 86 | 89 | 24 |
| 19 | 7 | 2 | 87 | 90 | 86 |
| 20 | 7 | 2 | 88 | 91 | 87 |
| 21 | 7 | 2 | 25 | 26 | 91 |
| 22 | 7 | 2 | 89 | 92 | 25 |
| 23 | 7 | 2 | 90 | 93 | 89 |
| 24 | 7 | 2 | 91 | 94 | 90 |
| 25 | 6 | 2 | 26 | 27 | 94 |
| 26 | 6 | 2 | 92 | 95 | 26 |
| 27 | 6 | 2 | 93 | 96 | 92 |
| 28 | 6 | 2 | 94 | 97 | 93 |
| 29 | 6 | 2 | 27 | 28 | 97 |
| 30 | 6 | 2 | 95 | 98 | 27 |
| 31 | 6 | 2 | 96 | 99 | 95 |
| 32 | 6 | 2 | 97 | 100 | 96 |
| 33 | 6 | 2 | 28 | 29 | 100 |
| 34 | 6 | 2 | 98 | 101 | 28 |
| 35 | 6 | 2 | 99 | 102 | 98 |
| 36 | 6 | 2 | 100 | 103 | 99 |
| 37 | 6 | 2 | 29 | 30 | 103 |
| 38 | 6 | 2 | 101 | 104 | 29 |
| 39 | 6 | 2 | 102 | 105 | 101 |
| 40 | 6 | 2 | 103 | 106 | 102 |
| 41 | 6 | 2 | 30 | 31 | 106 |
| 42 | 6 | 2 | 104 | 107 | 30 |

| Barra | perfil | Tipo | Nudo inicial | Nudo final | Nudo Ref. |
|---|---|---|---|---|---|
| 43 | 6 | 2 | 105 | 108 | 104 |
| 44 | 6 | 2 | 106 | 109 | 105 |
| 45 | 6 | 2 | 31 | 32 | 109 |
| 46 | 6 | 2 | 107 | 110 | 31 |
| 47 | 6 | 2 | 108 | 111 | 107 |
| 48 | 6 | 2 | 109 | 112 | 108 |
| 49 | 6 | 2 | 32 | 33 | 112 |
| 50 | 6 | 2 | 110 | 113 | 32 |
| 51 | 6 | 2 | 111 | 114 | 110 |
| 52 | 6 | 2 | 112 | 115 | 111 |
| 53 | 6 | 2 | 33 | 34 | 115 |
| 54 | 6 | 2 | 113 | 116 | 33 |
| 55 | 6 | 2 | 114 | 117 | 113 |
| 56 | 6 | 2 | 115 | 118 | 114 |
| 57 | 6 | 2 | 34 | 35 | 118 |
| 58 | 6 | 2 | 116 | 119 | 34 |
| 59 | 6 | 2 | 117 | 120 | 116 |
| 60 | 6 | 2 | 118 | 121 | 117 |
| 61 | 6 | 2 | 35 | 15 | 121 |
| 62 | 6 | 2 | 119 | 2 | 35 |
| 63 | 6 | 2 | 120 | 17 | 119 |
| 64 | 6 | 2 | 121 | 16 | 120 |
| 65 | 2 | 1 | 120 | 37 | 145 |
| 66 | 2 | 1 | 37 | 119 | 145 |
| 67 | 2 | 1 | 36 | 121 | 146 |
| 68 | 2 | 1 | 36 | 35 | 146 |
| 69 | 2 | 1 | 15 | 116 | 143 |
| 70 | 2 | 1 | 16 | 117 | 144 |
| 71 | 2 | 1 | 2 | 34 | 143 |
| 72 | 2 | 1 | 17 | 118 | 144 |
| 73 | 2 | 1 | 34 | 110 | 143 |
| 74 | 2 | 1 | 118 | 111 | 144 |
| 75 | 2 | 1 | 116 | 32 | 143 |
| 76 | 2 | 1 | 117 | 112 | 144 |
| 77 | 2 | 1 | 32 | 104 | 143 |
| 78 | 2 | 1 | 112 | 105 | 144 |
| 79 | 2 | 1 | 110 | 30 | 143 |
| 80 | 2 | 1 | 111 | 106 | 144 |
| 81 | 2 | 1 | 30 | 98 | 143 |
| 82 | 2 | 1 | 106 | 99 | 144 |
| 83 | 2 | 1 | 104 | 28 | 143 |
| 84 | 2 | 1 | 105 | 100 | 144 |

DATOS DEL APOYO 1

| Barra | perfil | Tipo | Nudo inicial | Nudo final | Nudo Ref. |
|---|---|---|---|---|---|
| 85 | 2 | 1 | 28 | 92 | 143 |
| 86 | 2 | 1 | 100 | 93 | 144 |
| 87 | 2 | 1 | 98 | 26 | 143 |
| 88 | 2 | 1 | 99 | 94 | 144 |
| 89 | 2 | 1 | 121 | 33 | 146 |
| 90 | 2 | 1 | 120 | 113 | 145 |
| 91 | 2 | 1 | 35 | 115 | 146 |
| 92 | 2 | 1 | 119 | 114 | 145 |
| 93 | 2 | 1 | 115 | 31 | 146 |
| 94 | 2 | 1 | 114 | 107 | 145 |
| 95 | 2 | 1 | 33 | 109 | 146 |
| 96 | 2 | 1 | 113 | 108 | 145 |
| 97 | 2 | 1 | 109 | 29 | 146 |
| 98 | 2 | 1 | 108 | 101 | 145 |
| 99 | 2 | 1 | 31 | 103 | 146 |
| 100 | 2 | 1 | 107 | 102 | 145 |
| 101 | 2 | 1 | 103 | 27 | 146 |
| 102 | 2 | 1 | 102 | 95 | 145 |
| 103 | 2 | 1 | 29 | 97 | 146 |
| 104 | 2 | 1 | 101 | 96 | 145 |
| 105 | 4 | 1 | 92 | 24 | 143 |
| 106 | 4 | 1 | 93 | 88 | 144 |
| 107 | 4 | 1 | 26 | 86 | 143 |
| 108 | 4 | 1 | 94 | 87 | 144 |
| 109 | 4 | 1 | 86 | 22 | 143 |
| 110 | 4 | 1 | 87 | 82 | 144 |
| 111 | 4 | 1 | 24 | 80 | 143 |
| 112 | 4 | 1 | 88 | 81 | 144 |
| 113 | 4 | 1 | 97 | 25 | 146 |
| 114 | 4 | 1 | 96 | 89 | 145 |
| 115 | 4 | 1 | 27 | 91 | 146 |
| 116 | 4 | 1 | 95 | 90 | 145 |
| 117 | 4 | 1 | 91 | 23 | 146 |
| 118 | 4 | 1 | 90 | 83 | 145 |
| 119 | 4 | 1 | 25 | 85 | 146 |
| 120 | 4 | 1 | 89 | 84 | 145 |
| 121 | 4 | 1 | 85 | 21 | 146 |
| 122 | 4 | 1 | 84 | 77 | 145 |
| 123 | 4 | 1 | 23 | 79 | 146 |
| 124 | 4 | 1 | 83 | 78 | 145 |
| 125 | 4 | 3 | 21 | 75 | 143 |
| 126 | 4 | 3 | 77 | 75 | 143 |

| Barra | perfil | Tipo | Nudo inicial | Nudo final | Nudo Ref. |
|---|---|---|---|---|---|
| 127 | 4 | 3 | 78 | 137 | 144 |
| 128 | 4 | 3 | 79 | 137 | 144 |
| 129 | 4 | 3 | 21 | 76 | 146 |
| 130 | 4 | 3 | 77 | 138 | 145 |
| 131 | 4 | 3 | 78 | 138 | 145 |
| 132 | 4 | 3 | 79 | 76 | 146 |
| 133 | 4 | 2 | 75 | 76 | 147 |
| 134 | 4 | 2 | 75 | 138 | 148 |
| 135 | 4 | 2 | 137 | 138 | 148 |
| 136 | 4 | 2 | 137 | 76 | 147 |
| 137 | 4 | 1 | 12 | 75 | 1 |
| 138 | 4 | 1 | 1 | 75 | 143 |
| 139 | 4 | 1 | 14 | 137 | 13 |
| 140 | 4 | 1 | 13 | 137 | 144 |
| 141 | 4 | 1 | 12 | 76 | 146 |
| 142 | 4 | 1 | 1 | 138 | 145 |
| 143 | 4 | 1 | 14 | 138 | 145 |
| 144 | 4 | 1 | 13 | 76 | 146 |
| 145 | 4 | 1 | 22 | 75 | 143 |
| 146 | 4 | 1 | 80 | 75 | 143 |
| 147 | 4 | 1 | 81 | 137 | 144 |
| 148 | 4 | 1 | 82 | 137 | 144 |
| 149 | 5 | 2 | 15 | 38 | 16 |
| 150 | 5 | 2 | 2 | 122 | 15 |
| 151 | 5 | 2 | 17 | 123 | 2 |
| 152 | 5 | 2 | 16 | 124 | 17 |
| 153 | 5 | 2 | 38 | 39 | 16 |
| 154 | 5 | 2 | 122 | 125 | 15 |
| 155 | 5 | 2 | 123 | 126 | 2 |
| 156 | 5 | 2 | 124 | 127 | 17 |
| 157 | 5 | 2 | 39 | 40 | 16 |
| 158 | 5 | 2 | 125 | 128 | 15 |
| 159 | 5 | 2 | 126 | 129 | 2 |
| 160 | 5 | 2 | 127 | 130 | 17 |
| 161 | 5 | 2 | 40 | 41 | 16 |
| 162 | 5 | 2 | 128 | 131 | 15 |
| 163 | 5 | 2 | 129 | 132 | 2 |
| 164 | 5 | 2 | 130 | 133 | 17 |
| 165 | 5 | 2 | 41 | 18 | 16 |
| 166 | 5 | 2 | 131 | 3 | 15 |
| 167 | 5 | 2 | 132 | 20 | 2 |
| 168 | 5 | 2 | 133 | 19 | 17 |

DATOS DEL APOYO 1

| Barra | perfil | Tipo | Nudo inicial | Nudo final | Nudo Ref. |
|---|---|---|---|---|---|
| 169 | 1 | 1 | 15 | 2 | 139 |
| 170 | 1 | 2 | 2 | 37 | 141 |
| 171 | 1 | 2 | 37 | 17 | 141 |
| 172 | 1 | 1 | 17 | 16 | 140 |
| 173 | 1 | 2 | 16 | 36 | 142 |
| 174 | 1 | 2 | 36 | 15 | 142 |
| 175 | 1 | 1 | 38 | 122 | 139 |
| 176 | 1 | 1 | 122 | 123 | 141 |
| 177 | 1 | 1 | 123 | 124 | 140 |
| 178 | 1 | 1 | 124 | 38 | 142 |
| 179 | 1 | 1 | 39 | 125 | 139 |
| 180 | 1 | 1 | 125 | 126 | 141 |
| 181 | 1 | 1 | 126 | 127 | 140 |
| 182 | 1 | 1 | 127 | 39 | 142 |
| 183 | 1 | 1 | 40 | 128 | 139 |
| 184 | 1 | 1 | 128 | 129 | 141 |
| 185 | 1 | 1 | 129 | 130 | 140 |
| 186 | 1 | 1 | 130 | 40 | 142 |
| 187 | 1 | 1 | 41 | 131 | 139 |
| 188 | 1 | 1 | 131 | 132 | 141 |
| 189 | 1 | 1 | 132 | 133 | 140 |
| 190 | 1 | 1 | 133 | 41 | 142 |
| 191 | 1 | 1 | 18 | 3 | 139 |
| 192 | 1 | 1 | 19 | 18 | 142 |
| 193 | 1 | 1 | 20 | 19 | 140 |
| 194 | 1 | 1 | 3 | 20 | 141 |
| 195 | 3 | 1 | 2 | 123 | 141 |
| 196 | 3 | 1 | 15 | 124 | 142 |
| 197 | 3 | 1 | 122 | 17 | 141 |
| 198 | 3 | 1 | 38 | 16 | 142 |
| 199 | 3 | 1 | 38 | 2 | 139 |
| 200 | 3 | 1 | 124 | 17 | 140 |
| 201 | 3 | 1 | 122 | 15 | 139 |
| 202 | 3 | 1 | 123 | 16 | 140 |
| 203 | 3 | 1 | 39 | 122 | 139 |
| 204 | 3 | 1 | 125 | 123 | 141 |
| 205 | 3 | 1 | 126 | 124 | 140 |
| 206 | 3 | 1 | 127 | 38 | 142 |
| 207 | 3 | 1 | 125 | 38 | 139 |
| 208 | 3 | 1 | 126 | 122 | 141 |
| 209 | 3 | 1 | 127 | 123 | 140 |
| 210 | 3 | 1 | 39 | 124 | 142 |

| Barra | perfil | Tipo | Nudo inicial | Nudo final | Nudo Ref. |
|---|---|---|---|---|---|
| 211 | 3 | 1 | 39 | 128 | 139 |
| 212 | 3 | 1 | 125 | 129 | 141 |
| 213 | 3 | 1 | 126 | 130 | 140 |
| 214 | 3 | 1 | 127 | 40 | 142 |
| 215 | 3 | 1 | 40 | 125 | 139 |
| 216 | 3 | 1 | 128 | 126 | 141 |
| 217 | 3 | 1 | 129 | 127 | 140 |
| 218 | 3 | 1 | 130 | 39 | 142 |
| 219 | 3 | 1 | 40 | 131 | 139 |
| 220 | 3 | 1 | 128 | 132 | 141 |
| 221 | 3 | 1 | 129 | 133 | 140 |
| 222 | 3 | 1 | 130 | 41 | 142 |
| 223 | 3 | 1 | 128 | 41 | 139 |
| 224 | 3 | 1 | 129 | 131 | 141 |
| 225 | 3 | 1 | 130 | 132 | 140 |
| 226 | 3 | 1 | 40 | 133 | 142 |
| 227 | 3 | 1 | 41 | 3 | 139 |
| 228 | 3 | 1 | 133 | 20 | 140 |
| 229 | 3 | 1 | 131 | 18 | 139 |
| 230 | 3 | 1 | 132 | 19 | 140 |
| 231 | 3 | 1 | 131 | 20 | 141 |
| 232 | 3 | 1 | 41 | 19 | 142 |
| 233 | 3 | 1 | 132 | 3 | 141 |
| 234 | 3 | 1 | 133 | 18 | 142 |
| 235 | 4 | 2 | 4 | 51 | 149 |
| 236 | 4 | 4 | 51 | 41 | 149 |
| 237 | 4 | 2 | 4 | 52 | 149 |
| 238 | 4 | 4 | 52 | 133 | 149 |
| 239 | 4 | 2 | 5 | 57 | 150 |
| 240 | 4 | 4 | 57 | 132 | 150 |
| 241 | 4 | 2 | 5 | 58 | 150 |
| 242 | 4 | 4 | 58 | 131 | 150 |
| 243 | 4 | 2 | 6 | 60 | 149 |
| 244 | 4 | 4 | 60 | 39 | 149 |
| 245 | 4 | 2 | 6 | 59 | 149 |
| 246 | 4 | 4 | 59 | 127 | 149 |
| 247 | 4 | 2 | 7 | 64 | 150 |
| 248 | 4 | 4 | 64 | 126 | 150 |
| 249 | 4 | 2 | 7 | 63 | 150 |
| 250 | 4 | 4 | 63 | 125 | 150 |
| 251 | 4 | 2 | 8 | 67 | 149 |
| 252 | 4 | 4 | 67 | 15 | 149 |

DATOS DEL APOYO 1

| Barra | perfil | Tipo | Nudo inicial | Nudo final | Nudo Ref. |
|---|---|---|---|---|---|
| 253 | 4 | 2 | 8 | 68 | 149 |
| 254 | 4 | 4 | 68 | 16 | 149 |
| 255 | 4 | 2 | 9 | 71 | 150 |
| 256 | 4 | 4 | 71 | 2 | 150 |
| 257 | 4 | 2 | 9 | 74 | 150 |
| 258 | 4 | 4 | 74 | 17 | 150 |
| 259 | 1 | 2 | 4 | 53 | 149 |
| 260 | 1 | 4 | 53 | 18 | 149 |
| 261 | 1 | 2 | 4 | 54 | 149 |
| 262 | 1 | 4 | 54 | 19 | 149 |
| 263 | 1 | 2 | 5 | 55 | 150 |
| 264 | 1 | 4 | 55 | 20 | 150 |
| 265 | 1 | 2 | 5 | 56 | 150 |
| 266 | 1 | 4 | 56 | 3 | 150 |
| 267 | 1 | 2 | 6 | 61 | 149 |
| 268 | 1 | 4 | 61 | 40 | 149 |
| 269 | 1 | 2 | 6 | 62 | 149 |
| 270 | 1 | 4 | 62 | 130 | 149 |
| 271 | 1 | 2 | 7 | 66 | 150 |
| 272 | 1 | 4 | 66 | 129 | 150 |
| 273 | 1 | 2 | 7 | 65 | 150 |
| 274 | 1 | 4 | 65 | 128 | 150 |
| 275 | 1 | 2 | 8 | 69 | 149 |
| 276 | 1 | 4 | 69 | 124 | 149 |
| 277 | 1 | 2 | 8 | 70 | 149 |
| 278 | 1 | 4 | 70 | 38 | 149 |
| 279 | 1 | 2 | 9 | 73 | 150 |
| 280 | 1 | 4 | 73 | 123 | 150 |
| 281 | 1 | 2 | 9 | 72 | 150 |
| 282 | 1 | 4 | 72 | 122 | 150 |
| 283 | 1 | 1 | 53 | 51 | 149 |
| 284 | 1 | 1 | 51 | 52 | 4 |
| 285 | 1 | 1 | 52 | 54 | 149 |
| 286 | 1 | 1 | 54 | 53 | 4 |
| 287 | 1 | 1 | 56 | 58 | 150 |
| 288 | 1 | 1 | 58 | 57 | 5 |
| 289 | 1 | 1 | 57 | 55 | 150 |
| 290 | 1 | 1 | 55 | 56 | 5 |
| 291 | 1 | 1 | 61 | 60 | 149 |
| 292 | 1 | 1 | 60 | 59 | 6 |
| 293 | 1 | 1 | 59 | 62 | 149 |
| 294 | 1 | 1 | 61 | 62 | 6 |

| Barra | perfil | Tipo | Nudo inicial | Nudo final | Nudo Ref. |
|---|---|---|---|---|---|
| 295 | 1 | 1 | 64 | 63 | 7 |
| 296 | 1 | 1 | 63 | 65 | 150 |
| 297 | 1 | 1 | 65 | 66 | 7 |
| 298 | 1 | 1 | 66 | 64 | 150 |
| 299 | 1 | 1 | 69 | 70 | 8 |
| 300 | 1 | 1 | 70 | 67 | 149 |
| 301 | 1 | 1 | 67 | 68 | 8 |
| 302 | 1 | 1 | 68 | 69 | 149 |
| 303 | 1 | 1 | 73 | 72 | 9 |
| 304 | 1 | 1 | 72 | 71 | 150 |
| 305 | 1 | 1 | 71 | 74 | 9 |
| 306 | 1 | 1 | 73 | 74 | 150 |
| 307 | 1 | 1 | 52 | 41 | 149 |
| 308 | 1 | 1 | 132 | 58 | 150 |
| 309 | 1 | 1 | 59 | 39 | 149 |
| 310 | 1 | 1 | 126 | 63 | 150 |
| 311 | 1 | 1 | 68 | 15 | 149 |
| 312 | 1 | 1 | 17 | 71 | 150 |
| 313 | 1 | 1 | 53 | 41 | 149 |
| 314 | 1 | 1 | 54 | 133 | 149 |
| 315 | 1 | 1 | 55 | 132 | 150 |
| 316 | 1 | 1 | 56 | 131 | 150 |
| 317 | 1 | 1 | 62 | 127 | 149 |
| 318 | 1 | 1 | 61 | 39 | 149 |
| 319 | 1 | 1 | 66 | 126 | 150 |
| 320 | 1 | 1 | 65 | 125 | 150 |
| 321 | 1 | 1 | 69 | 16 | 149 |
| 322 | 1 | 1 | 70 | 15 | 149 |
| 323 | 1 | 1 | 73 | 17 | 150 |
| 324 | 1 | 1 | 72 | 2 | 150 |
| 325 | 1 | 1 | 15 | 17 | 10 |
| 326 | 1 | 1 | 16 | 2 | 10 |
| 327 | 1 | 1 | 127 | 125 | 10 |
| 328 | 1 | 1 | 39 | 126 | 10 |
| 329 | 1 | 1 | 131 | 133 | 10 |
| 330 | 1 | 1 | 41 | 132 | 10 |
| 331 | 2 | 2 | 18 | 42 | 16 |
| 332 | 2 | 2 | 42 | 46 | 43 |
| 333 | 2 | 2 | 134 | 46 | 50 |
| 334 | 2 | 2 | 3 | 44 | 15 |
| 335 | 2 | 2 | 44 | 48 | 42 |
| 336 | 2 | 2 | 50 | 48 | 136 |

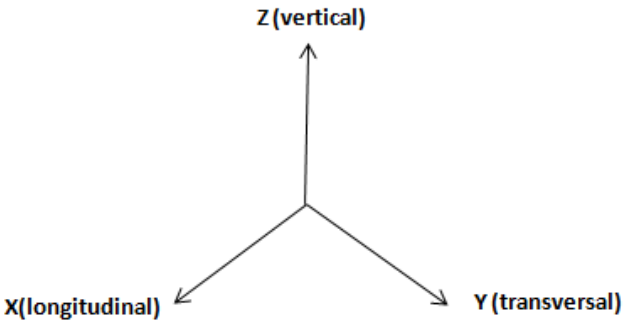
| Barra | perfil | Tipo | Nudo inicial | Nudo final | Nudo Ref. |
|---|---|---|---|---|---|
| 337 | 2 | 2 | 20 | 45 | 2 |
| 338 | 2 | 2 | 45 | 49 | 44 |
| 339 | 2 | 2 | 136 | 49 | 135 |
| 340 | 2 | 2 | 19 | 43 | 17 |
| 341 | 2 | 2 | 43 | 47 | 45 |
| 342 | 2 | 2 | 135 | 47 | 134 |
| 343 | 2 | 2 | 134 | 10 | 135 |
| 344 | 2 | 2 | 50 | 10 | 134 |
| 345 | 2 | 2 | 136 | 10 | 50 |
| 346 | 2 | 2 | 135 | 10 | 136 |
| 347 | 2 | 2 | 11 | 10 | 134 |
| 348 | 2 | 2 | 11 | 134 | 135 |
| 349 | 2 | 2 | 11 | 135 | 134 |
| 350 | 2 | 2 | 50 | 134 | 10 |
| 351 | 2 | 2 | 134 | 135 | 10 |
| 352 | 2 | 2 | 135 | 136 | 10 |
| 353 | 2 | 2 | 136 | 50 | 10 |
| 354 | 1 | 1 | 42 | 44 | 10 |
| 355 | 1 | 1 | 44 | 45 | 10 |
| 356 | 1 | 1 | 45 | 43 | 10 |
| 357 | 1 | 1 | 43 | 42 | 10 |
| 358 | 1 | 1 | 42 | 3 | 10 |
| 359 | 1 | 1 | 44 | 20 | 10 |
| 360 | 1 | 1 | 45 | 19 | 10 |
| 361 | 1 | 1 | 43 | 18 | 10 |
| 362 | 1 | 1 | 46 | 48 | 10 |
| 363 | 1 | 1 | 48 | 49 | 10 |
| 364 | 1 | 1 | 49 | 47 | 10 |
| 365 | 1 | 1 | 47 | 46 | 10 |
| 366 | 1 | 1 | 44 | 46 | 10 |
| 367 | 1 | 1 | 45 | 48 | 10 |
| 368 | 1 | 1 | 43 | 49 | 10 |
| 369 | 1 | 1 | 47 | 42 | 10 |

# 2 DATOS DEL APOYO 2

El apoyo presenta 8 crucetas, 2 de las cuales corresponden a los cables de tierra. Para cada cruceta se define los nudos de aplicación de la carga. La base del apoyo quedará definida por 4 nudos empotrados:

| Nudos Empotrados | Cruceta /nudos aplicación carga | Nº nudos | Nudo 1 | Nudo 2 | Nudo 3 | Nudo 4 | Nudo 5 | Nudo 6 |
|---|---|---|---|---|---|---|---|---|
| 359 | CT1 | 4 | 1 | 2 | 5 | 6 | | |
| 360 | CT2 | 1 | 4 | | | | | |
| 361 | C1 | 1 | 47 | | | | | |
| 362 | C2 | 1 | 90 | | | | | |
| 370 | C3 | 1 | 133 | | | | | |
| 371 | C4 | 1 | 42 | | | | | |
| | C5 | 1 | 85 | | | | | |
| | C6 | 1 | 128 | | | | | |
| | C7 | | | | | | | |
| | C8 | | | | | | | |
| | C9 | | | | | | | |
| | C10 | | | | | | | |
| | C11 | | | | | | | |
| | C12 | | | | | | | |

A continuación se definen las coordenadas longitudinal, transversal y vertical de los nudos pertenecientes a la estructura expresadas en milímetros. También se incluyen 142 nudos de orientación (no pertenecientes a la estructura) necesarios para definir algunas barras. Para otras barras, se utilizaran nudos pertenecientes a la estructura para definir la orientación de su perfil. Adicionalmente, se indica el número de barras que llegan al nudo, indicándose 0 para aquellos nudos que son exclusivamente de orientación.



DATOS DEL APOYO 2

| Nudo | x (mm) | y(mm) | z (mm) | N. Barras en nudo |
|---|---|---|---|---|
| 1 | -60 | -60 | 40088 | 5 |
| 2 | -60 | 60 | 40088 | 6 |
| 3 | 0 | 0 | 40088 | 4 |
| 4 | 0 | 325 | 40088 | 4 |
| 5 | 60 | -60 | 40088 | 5 |
| 6 | 60 | 60 | 40088 | 6 |
| 7 | -79 | -79 | 39968 | 6 |
| 8 | -79 | 79 | 39968 | 7 |
| 9 | 79 | -79 | 39968 | 6 |
| 10 | 79 | 79 | 39968 | 7 |
| 11 | 114 | -114 | 39745 | 4 |
| 12 | 114 | 114 | 39745 | 4 |
| 13 | -114 | 114 | 39745 | 4 |
| 14 | -114 | -114 | 39745 | 4 |
| 15 | 181 | -181 | 39322 | 4 |
| 16 | 181 | 181 | 39322 | 4 |
| 17 | -181 | 181 | 39322 | 4 |
| 18 | -181 | -181 | 39322 | 4 |
| 19 | 273 | -273 | 38740 | 4 |
| 20 | 273 | 273 | 38740 | 4 |
| 21 | -273 | 273 | 38740 | 4 |
| 22 | -273 | -273 | 38740 | 4 |
| 23 | 369 | -369 | 38128 | 6 |
| 24 | 369 | 369 | 38128 | 6 |
| 25 | -369 | 369 | 38128 | 6 |
| 26 | -369 | -369 | 38128 | 6 |
| 27 | 580 | -580 | 36788 | 8 |
| 28 | 580 | 580 | 36788 | 8 |
| 29 | -580 | 580 | 36788 | 8 |
| 30 | -580 | -580 | 36788 | 8 |
| 31 | 580 | -580 | 35788 | 10 |
| 32 | 580 | 0 | 36288 | 4 |
| 33 | 580 | 580 | 35788 | 11 |
| 34 | 0 | 580 | 36288 | 4 |
| 35 | -580 | 580 | 35788 | 10 |
| 36 | -580 | 0 | 36288 | 4 |
| 37 | -580 | -580 | 35788 | 11 |
| 38 | 0 | -580 | 36288 | 4 |
| 39 | -290 | 1740 | 36288 | 4 |
| 40 | 290 | 1740 | 36288 | 4 |
| 41 | -290 | 1740 | 35788 | 5 |
| 42 | 0 | 2900 | 35788 | 4 |

| Nudo | x (mm) | y(mm) | z (mm) | N. Barras en nudo |
|---|---|---|---|---|
| 43 | 290 | 1740 | 35788 | 4 |
| 44 | 290 | -1740 | 36288 | 4 |
| 45 | -290 | -1740 | 36288 | 4 |
| 46 | 290 | -1740 | 35788 | 5 |
| 47 | 0 | -2900 | 35788 | 4 |
| 48 | -290 | -1740 | 35788 | 4 |
| 49 | 580 | -580 | 34788 | 6 |
| 50 | 580 | 0 | 35288 | 4 |
| 51 | 580 | 580 | 34788 | 6 |
| 52 | 0 | 580 | 35288 | 4 |
| 53 | -580 | 580 | 34788 | 6 |
| 54 | -580 | 0 | 35288 | 4 |
| 55 | -580 | -580 | 34788 | 6 |
| 56 | 0 | -580 | 35288 | 4 |
| 57 | 0 | 0 | 35788 | 4 |
| 58 | 580 | -580 | 33788 | 6 |
| 59 | 580 | 0 | 34288 | 4 |
| 60 | 580 | 580 | 33788 | 6 |
| 61 | 0 | 580 | 34288 | 4 |
| 62 | -580 | 580 | 33788 | 6 |
| 63 | -580 | 0 | 34288 | 4 |
| 64 | -580 | -580 | 33788 | 6 |
| 65 | 0 | -580 | 34288 | 4 |
| 66 | 580 | -580 | 32788 | 9 |
| 67 | 580 | 0 | 33288 | 4 |
| 68 | 580 | 580 | 32788 | 9 |
| 69 | 0 | 580 | 33288 | 4 |
| 70 | -580 | 580 | 32788 | 9 |
| 71 | -580 | 0 | 33288 | 4 |
| 72 | -580 | -580 | 32788 | 9 |
| 73 | 0 | -580 | 33288 | 4 |
| 74 | 580 | -580 | 31788 | 10 |
| 75 | 580 | 0 | 32288 | 4 |
| 76 | 580 | 580 | 31788 | 11 |
| 77 | 0 | 580 | 32288 | 4 |
| 78 | -580 | 580 | 31788 | 10 |
| 79 | -580 | 0 | 32288 | 4 |
| 80 | -580 | -580 | 31788 | 11 |
| 81 | 0 | -580 | 32288 | 4 |
| 82 | -290 | 1740 | 32288 | 4 |
| 83 | 290 | 1740 | 32288 | 4 |
| 84 | -290 | 1740 | 31788 | 5 |

DATOS DEL APOYO 2

| Nudo | x (mm) | y(mm) | z (mm) | N. Barras en nudo |
|---|---|---|---|---|
| 85 | 0 | 2900 | 31788 | 4 |
| 86 | 290 | 1740 | 31788 | 4 |
| 87 | 290 | -1740 | 32288 | 4 |
| 88 | -290 | -1740 | 32288 | 4 |
| 89 | 290 | -1740 | 31788 | 5 |
| 90 | 0 | -2900 | 31788 | 4 |
| 91 | -290 | -1740 | 31788 | 4 |
| 92 | 580 | -580 | 30788 | 6 |
| 93 | 580 | 0 | 31288 | 4 |
| 94 | 580 | 580 | 30788 | 6 |
| 95 | 0 | 580 | 31288 | 4 |
| 96 | -580 | 580 | 30788 | 6 |
| 97 | -580 | 0 | 31288 | 4 |
| 98 | -580 | -580 | 30788 | 6 |
| 99 | 0 | -580 | 31288 | 4 |
| 100 | 0 | 0 | 31788 | 4 |
| 101 | 580 | -580 | 29788 | 6 |
| 102 | 580 | 0 | 30288 | 4 |
| 103 | 580 | 580 | 29788 | 6 |
| 104 | 0 | 580 | 30288 | 4 |
| 105 | -580 | 580 | 29788 | 6 |
| 106 | -580 | 0 | 30288 | 4 |
| 107 | -580 | -580 | 29788 | 6 |
| 108 | 0 | -580 | 30288 | 4 |
| 109 | 580 | -580 | 28788 | 9 |
| 110 | 580 | 0 | 29288 | 4 |
| 111 | 580 | 580 | 28788 | 9 |
| 112 | 0 | 580 | 29288 | 4 |
| 113 | -580 | 580 | 28788 | 9 |
| 114 | -580 | 0 | 29288 | 4 |
| 115 | -580 | -580 | 28788 | 9 |
| 116 | 0 | -580 | 29288 | 4 |
| 117 | 580 | -580 | 27788 | 10 |
| 118 | 580 | 0 | 28288 | 4 |
| 119 | 580 | 580 | 27788 | 11 |
| 120 | 0 | 580 | 28288 | 4 |
| 121 | -580 | 580 | 27788 | 10 |
| 122 | -580 | 0 | 28288 | 4 |
| 123 | -580 | -580 | 27788 | 11 |
| 124 | 0 | -580 | 28288 | 4 |
| 125 | -290 | 1740 | 28288 | 4 |
| 126 | 290 | 1740 | 28288 | 4 |
| 127 | -290 | 1740 | 27788 | 5 |

| Nudo | x (mm) | y(mm) | z (mm) | N. Barras en nudo |
|---|---|---|---|---|
| 128 | 0 | 2900 | 27788 | 4 |
| 129 | 290 | 1740 | 27788 | 4 |
| 130 | 290 | -1740 | 28288 | 4 |
| 131 | -290 | -1740 | 28288 | 4 |
| 132 | 290 | -1740 | 27788 | 5 |
| 133 | 0 | -2900 | 27788 | 4 |
| 134 | -290 | -1740 | 27788 | 4 |
| 135 | 0 | 0 | 27788 | 4 |
| 136 | 0 | 587 | 27479 | 4 |
| 137 | 593 | 0 | 27187 | 4 |
| 138 | -594 | 594 | 27163 | 4 |
| 139 | 594 | -594 | 27163 | 4 |
| 140 | 594 | 594 | 27163 | 4 |
| 141 | 607 | -607 | 26558 | 4 |
| 142 | 607 | 607 | 26558 | 4 |
| 143 | 0 | -587 | 27479 | 4 |
| 144 | -593 | 0 | 27187 | 4 |
| 145 | -594 | -594 | 27163 | 4 |
| 146 | -607 | 607 | 26558 | 4 |
| 147 | -607 | -607 | 26558 | 4 |
| 148 | 0 | 607 | 26566 | 4 |
| 149 | 620 | 0 | 25956 | 4 |
| 150 | -620 | 620 | 25943 | 4 |
| 151 | 620 | -620 | 25943 | 4 |
| 152 | 620 | 620 | 25943 | 4 |
| 153 | 0 | 633 | 25341 | 4 |
| 154 | -633 | 633 | 25328 | 4 |
| 155 | 633 | -633 | 25328 | 4 |
| 156 | 633 | 633 | 25328 | 4 |
| 157 | 646 | 0 | 24725 | 4 |
| 158 | -646 | 646 | 24713 | 4 |
| 159 | 646 | -646 | 24713 | 4 |
| 160 | 646 | 646 | 24713 | 4 |
| 161 | -659 | 659 | 24098 | 4 |
| 162 | 659 | -659 | 24098 | 4 |
| 163 | 659 | 659 | 24098 | 4 |
| 164 | 0 | 660 | 24093 | 4 |
| 165 | 673 | 0 | 23461 | 4 |
| 166 | -673 | 673 | 23448 | 4 |
| 167 | 673 | -673 | 23448 | 4 |
| 168 | 673 | 673 | 23448 | 4 |
| 169 | 0 | 687 | 22804 | 4 |
| 170 | -687 | 687 | 22798 | 4 |

DATOS DEL APOYO 2

| Nudo | x (mm) | y(mm) | z (mm) | N. Barras en nudo |
|---|---|---|---|---|
| 171 | 687 | -687 | 22798 | 4 |
| 172 | 687 | 687 | 22798 | 4 |
| 173 | -701 | 701 | 22133 | 4 |
| 174 | 701 | -701 | 22133 | 4 |
| 175 | 701 | 701 | 22133 | 4 |
| 176 | 702 | 0 | 22118 | 4 |
| 177 | 717 | -717 | 21408 | 4 |
| 178 | 717 | 717 | 21408 | 4 |
| 179 | 0 | -607 | 26566 | 4 |
| 180 | -620 | 0 | 25956 | 4 |
| 181 | -620 | -620 | 25943 | 4 |
| 182 | 0 | -633 | 25341 | 4 |
| 183 | -633 | -633 | 25328 | 4 |
| 184 | -646 | 0 | 24725 | 4 |
| 185 | -646 | -646 | 24713 | 4 |
| 186 | -659 | -659 | 24098 | 4 |
| 187 | 0 | -660 | 24093 | 4 |
| 188 | -673 | 0 | 23461 | 4 |
| 189 | -673 | -673 | 23448 | 4 |
| 190 | 0 | -687 | 22804 | 4 |
| 191 | -687 | -687 | 22798 | 4 |
| 192 | -701 | -701 | 22133 | 4 |
| 193 | -702 | 0 | 22118 | 4 |
| 194 | -717 | 717 | 21408 | 4 |
| 195 | -717 | -717 | 21408 | 4 |
| 196 | 0 | -715 | 21484 | 4 |
| 197 | 0 | 715 | 21484 | 4 |
| 198 | -730 | -730 | 20808 | 4 |
| 199 | -730 | 730 | 20808 | 4 |
| 200 | 730 | -730 | 20808 | 4 |
| 201 | 730 | 730 | 20808 | 4 |
| 202 | 730 | 0 | 20790 | 4 |
| 203 | 0 | 744 | 20151 | 4 |
| 204 | -744 | 744 | 20148 | 4 |
| 205 | 744 | -744 | 20148 | 4 |
| 206 | 744 | 744 | 20148 | 4 |
| 207 | 758 | 0 | 19495 | 4 |
| 208 | -758 | 758 | 19468 | 4 |
| 209 | 758 | -758 | 19468 | 4 |
| 210 | 758 | 758 | 19468 | 4 |
| 211 | 0 | 772 | 18830 | 4 |
| 212 | -772 | 772 | 18818 | 4 |
| 213 | 772 | -772 | 18818 | 4 |

| Nudo | x (mm) | y(mm) | z (mm) | N. Barras en nudo |
|---|---|---|---|---|
| 214 | 772 | 772 | 18818 | 4 |
| 215 | 786 | 0 | 18179 | 4 |
| 216 | -786 | 786 | 18168 | 4 |
| 217 | 786 | -786 | 18168 | 4 |
| 218 | 786 | 786 | 18168 | 4 |
| 219 | -800 | 800 | 17518 | 4 |
| 220 | 800 | -800 | 17518 | 4 |
| 221 | 800 | 800 | 17518 | 4 |
| 222 | 0 | 802 | 17452 | 4 |
| 223 | -818 | 818 | 16708 | 4 |
| 224 | 818 | 818 | 16708 | 4 |
| 225 | -730 | 0 | 20790 | 4 |
| 226 | 0 | -744 | 20151 | 4 |
| 227 | -744 | -744 | 20148 | 4 |
| 228 | -758 | 0 | 19495 | 4 |
| 229 | -758 | -758 | 19468 | 4 |
| 230 | 0 | -772 | 18830 | 4 |
| 231 | -772 | -772 | 18818 | 4 |
| 232 | -786 | 0 | 18179 | 4 |
| 233 | -786 | -786 | 18168 | 4 |
| 234 | -800 | -800 | 17518 | 4 |
| 235 | 0 | -802 | 17452 | 4 |
| 236 | 818 | -818 | 16708 | 4 |
| 237 | -818 | -818 | 16708 | 4 |
| 238 | -814 | 0 | 16879 | 4 |
| 239 | 814 | 0 | 16879 | 4 |
| 240 | -828 | -828 | 16218 | 4 |
| 241 | -828 | 828 | 16218 | 4 |
| 242 | 828 | -828 | 16218 | 4 |
| 243 | 828 | 828 | 16218 | 4 |
| 244 | 0 | 831 | 16093 | 4 |
| 245 | 844 | 0 | 15468 | 4 |
| 246 | -844 | 844 | 15458 | 4 |
| 247 | 844 | -844 | 15458 | 4 |
| 248 | 844 | 844 | 15458 | 4 |
| 249 | 0 | 860 | 14736 | 4 |
| 250 | -861 | 861 | 14688 | 4 |
| 251 | 861 | -861 | 14688 | 4 |
| 252 | 861 | 861 | 14688 | 4 |
| 253 | -876 | 876 | 13988 | 4 |
| 254 | 876 | -876 | 13988 | 4 |
| 255 | 876 | 876 | 13988 | 4 |
| 256 | 877 | 0 | 13932 | 4 |

DATOS DEL APOYO 2

| Nudo | x (mm) | y(mm) | z (mm) | N. Barras en nudo |
|---|---|---|---|---|
| 257 | 894 | -894 | 13148 | 4 |
| 258 | 894 | 894 | 13148 | 4 |
| 259 | 0 | -831 | 16093 | 4 |
| 260 | -844 | 0 | 15468 | 4 |
| 261 | -844 | -844 | 15458 | 4 |
| 262 | 0 | -860 | 14736 | 4 |
| 263 | -861 | -861 | 14688 | 4 |
| 264 | -876 | -876 | 13988 | 4 |
| 265 | -877 | 0 | 13932 | 4 |
| 266 | -894 | 894 | 13148 | 4 |
| 267 | -894 | -894 | 13148 | 4 |
| 268 | 0 | -892 | 13198 | 4 |
| 269 | 0 | 892 | 13198 | 4 |
| 270 | -910 | -910 | 12378 | 4 |
| 271 | -910 | 910 | 12378 | 4 |
| 272 | 910 | -910 | 12378 | 4 |
| 273 | 910 | 910 | 12378 | 4 |
| 274 | 910 | 0 | 12392 | 4 |
| 275 | -926 | 926 | 11608 | 4 |
| 276 | 926 | -926 | 11608 | 4 |
| 277 | 926 | 926 | 11608 | 4 |
| 278 | 0 | 927 | 11593 | 4 |
| 279 | 943 | 0 | 10826 | 4 |
| 280 | -944 | 944 | 10778 | 4 |
| 281 | 944 | -944 | 10778 | 4 |
| 282 | 944 | 944 | 10778 | 4 |
| 283 | 0 | 959 | 10075 | 4 |
| 284 | -961 | 961 | 10016 | 4 |
| 285 | 961 | -961 | 10016 | 4 |
| 286 | 961 | 961 | 10016 | 4 |
| 287 | -975 | 975 | 9349 | 4 |
| 288 | 975 | -975 | 9349 | 4 |
| 289 | 975 | 975 | 9349 | 4 |
| 290 | 977 | 0 | 9267 | 4 |
| 291 | 993 | -993 | 8492 | 4 |
| 292 | 993 | 993 | 8492 | 4 |
| 293 | -910 | 0 | 12392 | 4 |
| 294 | -926 | -926 | 11608 | 4 |
| 295 | 0 | -927 | 11593 | 4 |
| 296 | -943 | 0 | 10826 | 4 |
| 297 | -944 | -944 | 10778 | 4 |
| 298 | 0 | -959 | 10075 | 4 |

| Nudo | x (mm) | y(mm) | z (mm) | N. Barras en nudo |
|---|---|---|---|---|
| 299 | -961 | -961 | 10016 | 4 |
| 300 | -975 | -975 | 9349 | 4 |
| 301 | -977 | 0 | 9267 | 4 |
| 302 | -993 | 993 | 8492 | 4 |
| 303 | -993 | -993 | 8492 | 4 |
| 304 | 0 | -992 | 8554 | 4 |
| 305 | 0 | 992 | 8554 | 4 |
| 306 | -1010 | -1010 | 7731 | 4 |
| 307 | -1010 | 1010 | 7731 | 4 |
| 308 | 1010 | -1010 | 7731 | 4 |
| 309 | 1010 | 1010 | 7731 | 4 |
| 310 | 1009 | 0 | 7743 | 4 |
| 311 | -1026 | 1026 | 6970 | 4 |
| 312 | 1026 | -1026 | 6970 | 4 |
| 313 | 1026 | 1026 | 6970 | 4 |
| 314 | 0 | 1026 | 6963 | 4 |
| 315 | 1042 | 0 | 6200 | 4 |
| 316 | -1043 | 1043 | 6170 | 4 |
| 317 | 1043 | -1043 | 6170 | 4 |
| 318 | 1043 | 1043 | 6170 | 4 |
| 319 | 0 | 1058 | 5464 | 4 |
| 320 | -1059 | 1059 | 5406 | 4 |
| 321 | 1059 | -1059 | 5406 | 4 |
| 322 | 1059 | 1059 | 5406 | 4 |
| 323 | -1074 | 1074 | 4737 | 4 |
| 324 | 1074 | -1074 | 4737 | 4 |
| 325 | 1074 | 1074 | 4737 | 4 |
| 326 | 1075 | 0 | 4649 | 4 |
| 327 | 1092 | -1092 | 3868 | 4 |
| 328 | 1092 | 1092 | 3868 | 4 |
| 329 | -1009 | 0 | 7743 | 4 |
| 330 | -1026 | -1026 | 6970 | 4 |
| 331 | 0 | -1026 | 6963 | 4 |
| 332 | -1042 | 0 | 6200 | 4 |
| 333 | -1043 | -1043 | 6170 | 4 |
| 334 | 0 | -1058 | 5464 | 4 |
| 335 | -1059 | -1059 | 5406 | 4 |
| 336 | -1074 | -1074 | 4737 | 4 |
| 337 | -1075 | 0 | 4649 | 4 |
| 338 | -1092 | 1092 | 3868 | 4 |
| 339 | -1092 | -1092 | 3868 | 4 |
| 340 | 0 | -1091 | 3938 | 4 |

DATOS DEL APOYO 2

| Nudo | x (mm) | y(mm) | z (mm) | N. Barras en nudo |
|---|---|---|---|---|
| 341 | 0 | 1091 | 3938 | 4 |
| 342 | -1108 | -1108 | 3114 | 4 |
| 343 | -1108 | 1108 | 3114 | 4 |
| 344 | 1108 | -1108 | 3114 | 4 |
| 345 | 1108 | 1108 | 3114 | 4 |
| 346 | 1108 | 0 | 3125 | 4 |
| 347 | -1124 | 1124 | 2360 | 4 |
| 348 | 1124 | -1124 | 2360 | 4 |
| 349 | 1124 | 1124 | 2360 | 4 |
| 350 | 0 | 1125 | 2329 | 4 |
| 351 | 1141 | 0 | 1577 | 4 |
| 352 | -1142 | 1142 | 1520 | 4 |
| 353 | 1142 | -1142 | 1520 | 4 |
| 354 | 1142 | 1142 | 1520 | 4 |
| 355 | -1158 | 1158 | 770 | 4 |
| 356 | 0 | 1158 | 771 | 4 |
| 357 | 1158 | -1158 | 770 | 4 |
| 358 | 1158 | 1158 | 770 | 4 |
| 359 | -1175 | 1175 | 0 | 2 |
| 360 | 1175 | -1175 | 0 | 2 |
| 361 | 1175 | 0 | 0 | 2 |
| 362 | 1175 | 1175 | 0 | 2 |
| 363 | -1108 | 0 | 3125 | 4 |
| 364 | -1124 | -1124 | 2360 | 4 |
| 365 | 0 | -1125 | 2329 | 4 |
| 366 | -1141 | 0 | 1577 | 4 |
| 367 | -1142 | -1142 | 1520 | 4 |
| 368 | 0 | -1158 | 771 | 4 |
| 369 | -1158 | -1158 | 770 | 4 |
| 370 | -1175 | 0 | 0 | 2 |
| 371 | -1175 | -1175 | 0 | 2 |
| 372 | 581 | 0 | 27788 | 0 |
| 373 | 0 | 581 | 27788 | 0 |
| 374 | -581 | 0 | 27788 | 0 |
| 375 | 0 | -581 | 27788 | 0 |
| 376 | -60 | -60 | 40108 | 0 |
| 377 | 60 | -60 | 40108 | 0 |
| 378 | -60 | 60 | 40108 | 0 |
| 379 | 60 | 60 | 40108 | 0 |
| 380 | -60 | -60 | 40108 | 0 |
| 381 | -60 | -60 | 40108 | 0 |
| 382 | -60 | 60 | 40108 | 0 |

| Nudo | x (mm) | y(mm) | z (mm) | N. Barras en nudo |
|---|---|---|---|---|
| 383 | 60 | -60 | 40108 | 0 |
| 384 | 79 | -79 | 39988 | 0 |
| 385 | 79 | 79 | 39988 | 0 |
| 386 | -79 | 79 | 39988 | 0 |
| 387 | -79 | -79 | 39988 | 0 |
| 388 | -60 | -60 | 40108 | 0 |
| 389 | 0 | 0 | 40108 | 0 |
| 390 | -60 | 60 | 40108 | 0 |
| 391 | 0 | 0 | 40108 | 0 |
| 392 | -60 | 60 | 40108 | 0 |
| 393 | 0 | 325 | 40108 | 0 |
| 394 | 0 | 325 | 40108 | 0 |
| 395 | 0 | 325 | 40108 | 0 |
| 396 | 369 | -369 | 38148 | 0 |
| 397 | 369 | 369 | 38148 | 0 |
| 398 | -369 | 369 | 38148 | 0 |
| 399 | -369 | -369 | 38148 | 0 |
| 400 | 580 | -580 | 36808 | 0 |
| 401 | 580 | 580 | 36808 | 0 |
| 402 | -580 | 580 | 36808 | 0 |
| 403 | -580 | -580 | 36808 | 0 |
| 404 | -580 | 580 | 36808 | 0 |
| 405 | -290 | 1740 | 36308 | 0 |
| 406 | 580 | 580 | 36808 | 0 |
| 407 | 290 | 1740 | 36308 | 0 |
| 408 | -290 | 1740 | 36308 | 0 |
| 409 | -290 | 1760 | 36288 | 0 |
| 410 | 290 | 1760 | 36288 | 0 |
| 411 | -580 | 580 | 35808 | 0 |
| 412 | -290 | 1740 | 35808 | 0 |
| 413 | -290 | 1740 | 35808 | 0 |
| 414 | -290 | 1740 | 35808 | 0 |
| 415 | 0 | 2900 | 35808 | 0 |
| 416 | 290 | 1740 | 35808 | 0 |
| 417 | 580 | -580 | 36808 | 0 |
| 418 | 290 | -1740 | 36308 | 0 |
| 419 | -580 | -580 | 36808 | 0 |
| 420 | -290 | -1740 | 36308 | 0 |
| 421 | 290 | -1740 | 36308 | 0 |
| 422 | 290 | -1720 | 36288 | 0 |
| 423 | -290 | -1720 | 36288 | 0 |
| 424 | 580 | -580 | 35808 | 0 |

DATOS DEL APOYO 2

| Nudo | x (mm) | y(mm) | z (mm) | N. Barras en nudo |
|---|---|---|---|---|
| 425 | 290 | -1740 | 35808 | 0 |
| 426 | 290 | -1740 | 35808 | 0 |
| 427 | 290 | -1740 | 35808 | 0 |
| 428 | 0 | -2900 | 35808 | 0 |
| 429 | -290 | -1740 | 35808 | 0 |
| 430 | 580 | -580 | 35808 | 0 |
| 431 | 580 | 580 | 35808 | 0 |
| 432 | -580 | 580 | 35808 | 0 |
| 433 | -580 | -580 | 35808 | 0 |
| 434 | 580 | -580 | 35808 | 0 |
| 435 | 0 | 0 | 35808 | 0 |
| 436 | -580 | -580 | 35808 | 0 |
| 437 | 0 | 0 | 35808 | 0 |
| 438 | 580 | -580 | 32808 | 0 |
| 439 | 580 | 580 | 32808 | 0 |
| 440 | -580 | 580 | 32808 | 0 |
| 441 | -580 | -580 | 32808 | 0 |
| 442 | -580 | 580 | 32808 | 0 |
| 443 | -290 | 1740 | 32308 | 0 |
| 444 | 580 | 580 | 32808 | 0 |
| 445 | 290 | 1740 | 32308 | 0 |
| 446 | -290 | 1740 | 32308 | 0 |
| 447 | -290 | 1760 | 32288 | 0 |
| 448 | 290 | 1760 | 32288 | 0 |
| 449 | -580 | 580 | 31808 | 0 |
| 450 | -290 | 1740 | 31808 | 0 |
| 451 | -290 | 1740 | 31808 | 0 |
| 452 | -290 | 1740 | 31808 | 0 |
| 453 | 0 | 2900 | 31808 | 0 |
| 454 | 290 | 1740 | 31808 | 0 |
| 455 | 580 | -580 | 32808 | 0 |
| 456 | 290 | -1740 | 32308 | 0 |
| 457 | -580 | -580 | 32808 | 0 |
| 458 | -290 | -1740 | 32308 | 0 |
| 459 | 290 | -1740 | 32308 | 0 |
| 460 | 290 | -1720 | 32288 | 0 |
| 461 | -290 | -1720 | 32288 | 0 |
| 462 | 580 | -580 | 31808 | 0 |
| 463 | 290 | -1740 | 31808 | 0 |
| 464 | 290 | -1740 | 31808 | 0 |
| 465 | 290 | -1740 | 31808 | 0 |
| 466 | 0 | -2900 | 31808 | 0 |
| 467 | -290 | -1740 | 31808 | 0 |
| 468 | 580 | -580 | 31808 | 0 |
| 469 | 580 | 580 | 31808 | 0 |
| 470 | -580 | 580 | 31808 | 0 |
| 471 | -580 | -580 | 31808 | 0 |
| 472 | 580 | -580 | 31808 | 0 |
| 473 | 0 | 0 | 31808 | 0 |
| 474 | -580 | -580 | 31808 | 0 |
| 475 | 0 | 0 | 31808 | 0 |
| 476 | 580 | -580 | 28808 | 0 |
| 477 | 580 | 580 | 28808 | 0 |
| 478 | -580 | 580 | 28808 | 0 |
| 479 | -580 | -580 | 28808 | 0 |
| 480 | -580 | 580 | 28808 | 0 |
| 481 | -290 | 1740 | 28308 | 0 |
| 482 | 580 | 580 | 28808 | 0 |
| 483 | 290 | 1740 | 28308 | 0 |
| 484 | -290 | 1740 | 28308 | 0 |
| 485 | -290 | 1760 | 28288 | 0 |
| 486 | 290 | 1760 | 28288 | 0 |
| 487 | -580 | 580 | 27808 | 0 |
| 488 | -290 | 1740 | 27808 | 0 |
| 489 | -290 | 1740 | 27808 | 0 |
| 490 | -290 | 1740 | 27808 | 0 |
| 491 | 0 | 2900 | 27808 | 0 |
| 492 | 290 | 1740 | 27808 | 0 |
| 493 | 580 | -580 | 28808 | 0 |
| 494 | 290 | -1740 | 28308 | 0 |
| 495 | -580 | -580 | 28808 | 0 |
| 496 | -290 | -1740 | 28308 | 0 |
| 497 | 290 | -1740 | 28308 | 0 |
| 498 | 290 | -1720 | 28288 | 0 |
| 499 | -290 | -1720 | 28288 | 0 |
| 500 | 580 | -580 | 27808 | 0 |
| 501 | 290 | -1740 | 27808 | 0 |
| 502 | 290 | -1740 | 27808 | 0 |
| 503 | 290 | -1740 | 27808 | 0 |
| 504 | 0 | -2900 | 27808 | 0 |
| 505 | -290 | -1740 | 27808 | 0 |
| 506 | -580 | -580 | 27808 | 0 |
| 507 | -580 | -580 | 27808 | 0 |
| 508 | -580 | 580 | 27808 | 0 |
| 509 | 580 | -580 | 27808 | 0 |
| 510 | -580 | 580 | 27808 | 0 |

| Nudo | x (mm) | y(mm) | z (mm) | N. Barras en nudo |
|---|---|---|---|---|
| 511 | 0 | 0 | 27808 | 0 |
| 512 | 0 | 0 | 27808 | 0 |
| 513 | 0 | 0 | 27808 | 0 |

En la siguiente tabla, se indican las propiedades geométricas y mecánicas de cada perfil angular de lados iguales, necesarias para el cálculo de la estructura (área, momentos de inercia, momento de torsión y longitud del ala)

| Número | Perfil | Area (cm2) | Ix (m4) | Iy (m4) | J(m4) | Ala (mm) |
|---|---|---|---|---|---|---|
| 1 | L120X120X10 | 23,2 | 3,12478E-06 | 3,12478E-06 | 1,15889E-07 | 120 |
| 2 | L150X150X10 | 29,27 | 6,24751E-06 | 6,24751E-06 | 1,46857E-07 | 150 |
| 3 | L150X150X12 | 34,8 | 7,36368E-06 | 7,36368E-06 | 2,48961E-07 | 150 |
| 4 | L150X150X14 | 40,3 | 8,45349E-06 | 8,45349E-06 | 3,90027E-07 | 150 |
| 5 | L150X150X15 | 43 | 8,98051E-06 | 8,98051E-06 | 4,75864E-07 | 150 |
| 6 | L40X40X4 | 3,08 | 4,50943E-08 | 4,50943E-08 | 2,49455E-09 | 40 |
| 7 | L45X45X4 | 3,49 | 6,4551E-08 | 6,4551E-08 | 2,87282E-09 | 45 |
| 8 | L50X50X4 | 3,89 | 8,98746E-08 | 8,98746E-08 | 3,18472E-09 | 50 |
| 9 | L60X60X4 | 4,71 | 1,57733E-07 | 1,57733E-07 | 3,90005E-09 | 60 |
| 10 | L60X60X5 | 5,82 | 1,92782E-07 | 1,92782E-07 | 7,43937E-09 | 60 |
| 11 | L70X70X5 | 6,84 | 3,13245E-07 | 3,13245E-07 | 8,73476E-09 | 70 |
| 12 | L90X90X7 | 12,2 | 9,22625E-07 | 9,22625E-07 | 3,0014E-08 | 90 |

Para definir las barras es necesario indicar:

- Perfil de la barra
- Tipo de barra (1- Biarticualda; 2- Biempotrada; 3- Articulada-Empotrada; 4- Empotrada-Articulada)
- Nudo inicial, final y de orientación.

| Barra | perfil | Tipo | Nudo inicial | Nudo final | Nudo Ref. |
|---|---|---|---|---|---|
| 1 | 10 | 2 | 1 | 7 | 5 |
| 2 | 10 | 2 | 7 | 14 | 9 |
| 3 | 10 | 2 | 14 | 18 | 11 |
| 4 | 10 | 2 | 18 | 22 | 15 |
| 5 | 10 | 2 | 22 | 26 | 19 |
| 6 | 10 | 2 | 2 | 8 | 1 |
| 7 | 10 | 2 | 8 | 13 | 7 |
| 8 | 10 | 2 | 13 | 17 | 14 |
| 9 | 10 | 2 | 17 | 21 | 18 |
| 10 | 10 | 2 | 21 | 25 | 22 |
| 11 | 10 | 2 | 5 | 9 | 6 |
| 12 | 10 | 2 | 9 | 11 | 10 |
| 13 | 10 | 2 | 11 | 15 | 12 |
| 14 | 10 | 2 | 15 | 19 | 16 |
| 15 | 10 | 2 | 19 | 23 | 20 |
| 16 | 10 | 2 | 6 | 10 | 2 |
| 17 | 10 | 2 | 10 | 12 | 8 |
| 18 | 10 | 2 | 12 | 16 | 13 |
| 19 | 10 | 2 | 16 | 20 | 17 |
| 20 | 10 | 2 | 20 | 24 | 21 |
| 21 | 6 | 1 | 1 | 8 | 376 |
| 22 | 6 | 1 | 5 | 7 | 377 |
| 23 | 6 | 1 | 2 | 10 | 378 |
| 24 | 6 | 1 | 6 | 9 | 379 |
| 25 | 10 | 1 | 10 | 11 | 9 |
| 26 | 10 | 1 | 8 | 12 | 10 |
| 27 | 10 | 1 | 7 | 13 | 8 |
| 28 | 10 | 1 | 9 | 14 | 7 |
| 29 | 7 | 1 | 11 | 16 | 12 |
| 30 | 7 | 1 | 12 | 17 | 13 |
| 31 | 7 | 1 | 13 | 18 | 14 |
| 32 | 7 | 1 | 14 | 15 | 11 |
| 33 | 6 | 1 | 1 | 2 | 380 |
| 34 | 6 | 1 | 1 | 5 | 381 |
| 35 | 6 | 1 | 2 | 6 | 382 |
| 36 | 6 | 1 | 5 | 6 | 383 |
| 37 | 7 | 1 | 9 | 10 | 384 |
| 38 | 7 | 1 | 10 | 8 | 385 |
| 39 | 7 | 1 | 8 | 7 | 386 |
| 40 | 7 | 1 | 7 | 9 | 387 |
| 41 | 6 | 3 | 1 | 3 | 388 |
| 42 | 6 | 4 | 3 | 6 | 389 |
| 43 | 6 | 3 | 2 | 3 | 390 |

| Barra | perfil | Tipo | Nudo inicial | Nudo final | Nudo Ref. |
|---|---|---|---|---|---|
| 44 | 6 | 4 | 3 | 5 | 391 |
| 45 | 11 | 1 | 2 | 4 | 392 |
| 46 | 11 | 1 | 4 | 6 | 393 |
| 47 | 11 | 1 | 4 | 8 | 394 |
| 48 | 11 | 1 | 4 | 10 | 395 |
| 49 | 7 | 1 | 16 | 19 | 15 |
| 50 | 7 | 1 | 17 | 20 | 16 |
| 51 | 7 | 1 | 18 | 21 | 17 |
| 52 | 7 | 1 | 15 | 22 | 18 |
| 53 | 6 | 1 | 19 | 24 | 20 |
| 54 | 6 | 1 | 20 | 25 | 21 |
| 55 | 6 | 1 | 21 | 26 | 22 |
| 56 | 6 | 1 | 22 | 23 | 19 |
| 57 | 10 | 2 | 24 | 28 | 25 |
| 58 | 10 | 2 | 25 | 29 | 26 |
| 59 | 10 | 2 | 26 | 30 | 23 |
| 60 | 10 | 2 | 23 | 27 | 24 |
| 61 | 7 | 1 | 23 | 28 | 24 |
| 62 | 7 | 1 | 24 | 29 | 25 |
| 63 | 7 | 1 | 25 | 30 | 26 |
| 64 | 7 | 1 | 26 | 27 | 23 |
| 65 | 6 | 1 | 23 | 24 | 396 |
| 66 | 6 | 1 | 24 | 25 | 397 |
| 67 | 6 | 1 | 25 | 26 | 398 |
| 68 | 6 | 1 | 26 | 23 | 399 |
| 69 | 11 | 2 | 28 | 33 | 29 |
| 70 | 11 | 2 | 29 | 35 | 30 |
| 71 | 11 | 2 | 30 | 37 | 27 |
| 72 | 11 | 2 | 27 | 31 | 28 |
| 73 | 10 | 3 | 27 | 32 | 28 |
| 74 | 10 | 4 | 32 | 33 | 28 |
| 75 | 10 | 3 | 28 | 32 | 27 |
| 76 | 10 | 4 | 32 | 31 | 27 |
| 77 | 10 | 3 | 28 | 34 | 29 |
| 78 | 10 | 4 | 34 | 35 | 29 |
| 79 | 10 | 3 | 29 | 34 | 28 |
| 80 | 10 | 4 | 34 | 33 | 28 |
| 81 | 10 | 3 | 29 | 36 | 30 |
| 82 | 10 | 4 | 36 | 37 | 30 |
| 83 | 10 | 3 | 30 | 36 | 29 |
| 84 | 10 | 4 | 36 | 35 | 29 |
| 85 | 10 | 3 | 30 | 38 | 27 |
| 86 | 10 | 4 | 38 | 31 | 27 |

| Barra | perfil | Tipo | Nudo inicial | Nudo final | Nudo Ref. |
|---|---|---|---|---|---|
| 87 | 10 | 3 | 27 | 38 | 30 |
| 88 | 10 | 4 | 38 | 37 | 30 |
| 89 | 10 | 1 | 27 | 28 | 400 |
| 90 | 10 | 1 | 28 | 29 | 401 |
| 91 | 10 | 1 | 29 | 30 | 402 |
| 92 | 10 | 1 | 30 | 27 | 403 |
| 93 | 8 | 3 | 29 | 39 | 404 |
| 94 | 8 | 2 | 39 | 42 | 405 |
| 95 | 8 | 3 | 28 | 40 | 406 |
| 96 | 8 | 2 | 40 | 42 | 407 |
| 97 | 6 | 1 | 39 | 40 | 408 |
| 98 | 6 | 1 | 39 | 41 | 409 |
| 99 | 6 | 1 | 40 | 43 | 410 |
| 100 | 9 | 3 | 35 | 41 | 411 |
| 101 | 9 | 2 | 41 | 42 | 412 |
| 102 | 6 | 1 | 41 | 43 | 413 |
| 103 | 6 | 1 | 41 | 33 | 414 |
| 104 | 9 | 2 | 42 | 43 | 415 |
| 105 | 9 | 4 | 43 | 33 | 416 |
| 106 | 8 | 3 | 27 | 44 | 417 |
| 107 | 8 | 2 | 44 | 47 | 418 |
| 108 | 8 | 3 | 30 | 45 | 419 |
| 109 | 8 | 2 | 45 | 47 | 420 |
| 110 | 6 | 1 | 44 | 45 | 421 |
| 111 | 6 | 1 | 44 | 46 | 422 |
| 112 | 6 | 1 | 45 | 48 | 423 |
| 113 | 9 | 3 | 31 | 46 | 424 |
| 114 | 9 | 2 | 46 | 47 | 425 |
| 115 | 6 | 1 | 46 | 48 | 426 |
| 116 | 6 | 1 | 46 | 37 | 427 |
| 117 | 9 | 2 | 47 | 48 | 428 |
| 118 | 9 | 4 | 48 | 37 | 429 |
| 119 | 11 | 2 | 33 | 51 | 29 |
| 120 | 11 | 2 | 35 | 53 | 30 |
| 121 | 11 | 2 | 37 | 55 | 27 |
| 122 | 11 | 2 | 31 | 49 | 28 |
| 123 | 7 | 3 | 31 | 50 | 33 |
| 124 | 7 | 4 | 50 | 51 | 33 |
| 125 | 7 | 3 | 33 | 50 | 31 |
| 126 | 7 | 4 | 50 | 49 | 31 |
| 127 | 7 | 3 | 33 | 52 | 35 |
| 128 | 7 | 4 | 52 | 53 | 35 |
| 129 | 7 | 3 | 35 | 52 | 33 |

| Barra | perfil | Tipo | Nudo inicial | Nudo final | Nudo Ref. |
|---|---|---|---|---|---|
| 130 | 7 | 4 | 52 | 51 | 33 |
| 131 | 7 | 3 | 35 | 54 | 37 |
| 132 | 7 | 4 | 54 | 55 | 37 |
| 133 | 7 | 3 | 37 | 54 | 35 |
| 134 | 7 | 4 | 54 | 53 | 35 |
| 135 | 7 | 3 | 37 | 56 | 31 |
| 136 | 7 | 4 | 56 | 49 | 31 |
| 137 | 7 | 3 | 31 | 56 | 37 |
| 138 | 7 | 4 | 56 | 55 | 37 |
| 139 | 10 | 1 | 31 | 33 | 430 |
| 140 | 10 | 1 | 33 | 35 | 431 |
| 141 | 10 | 1 | 35 | 37 | 432 |
| 142 | 10 | 1 | 37 | 31 | 433 |
| 143 | 6 | 3 | 31 | 57 | 434 |
| 144 | 6 | 4 | 57 | 35 | 435 |
| 145 | 6 | 3 | 37 | 57 | 436 |
| 146 | 6 | 4 | 57 | 33 | 437 |
| 147 | 11 | 2 | 51 | 60 | 29 |
| 148 | 11 | 2 | 53 | 62 | 30 |
| 149 | 11 | 2 | 55 | 64 | 27 |
| 150 | 11 | 2 | 49 | 58 | 28 |
| 151 | 7 | 3 | 49 | 59 | 51 |
| 152 | 7 | 4 | 59 | 60 | 51 |
| 153 | 7 | 3 | 51 | 59 | 49 |
| 154 | 7 | 4 | 59 | 58 | 49 |
| 155 | 7 | 3 | 51 | 61 | 53 |
| 156 | 7 | 4 | 61 | 62 | 53 |
| 157 | 7 | 3 | 53 | 61 | 51 |
| 158 | 7 | 4 | 61 | 60 | 51 |
| 159 | 7 | 3 | 53 | 63 | 55 |
| 160 | 7 | 4 | 63 | 64 | 55 |
| 161 | 7 | 3 | 55 | 63 | 53 |
| 162 | 7 | 4 | 63 | 62 | 53 |
| 163 | 7 | 3 | 55 | 65 | 49 |
| 164 | 7 | 4 | 65 | 58 | 49 |
| 165 | 7 | 3 | 49 | 65 | 55 |
| 166 | 7 | 4 | 65 | 64 | 55 |
| 167 | 11 | 2 | 60 | 68 | 29 |
| 168 | 11 | 2 | 62 | 70 | 30 |
| 169 | 11 | 2 | 64 | 72 | 27 |
| 170 | 11 | 2 | 58 | 66 | 28 |
| 171 | 7 | 3 | 58 | 67 | 60 |
| 172 | 7 | 4 | 67 | 68 | 60 |

| Barra | perfil | Tipo | Nudo inicial | Nudo final | Nudo Ref. |
|---|---|---|---|---|---|
| 173 | 7 | 3 | 60 | 67 | 58 |
| 174 | 7 | 4 | 67 | 66 | 58 |
| 175 | 7 | 3 | 60 | 69 | 62 |
| 176 | 7 | 4 | 69 | 70 | 62 |
| 177 | 7 | 3 | 62 | 69 | 60 |
| 178 | 7 | 4 | 69 | 68 | 60 |
| 179 | 7 | 3 | 62 | 71 | 64 |
| 180 | 7 | 4 | 71 | 72 | 64 |
| 181 | 7 | 3 | 64 | 71 | 62 |
| 182 | 7 | 4 | 71 | 70 | 62 |
| 183 | 7 | 3 | 64 | 73 | 58 |
| 184 | 7 | 4 | 73 | 66 | 58 |
| 185 | 7 | 3 | 58 | 73 | 64 |
| 186 | 7 | 4 | 73 | 72 | 64 |
| 187 | 11 | 2 | 68 | 76 | 29 |
| 188 | 11 | 2 | 70 | 78 | 30 |
| 189 | 11 | 2 | 72 | 80 | 27 |
| 190 | 11 | 2 | 66 | 74 | 28 |
| 191 | 10 | 3 | 66 | 75 | 68 |
| 192 | 10 | 4 | 75 | 76 | 68 |
| 193 | 10 | 3 | 68 | 75 | 66 |
| 194 | 10 | 4 | 75 | 74 | 66 |
| 195 | 10 | 3 | 68 | 77 | 70 |
| 196 | 10 | 4 | 77 | 78 | 70 |
| 197 | 10 | 3 | 70 | 77 | 68 |
| 198 | 10 | 4 | 77 | 76 | 68 |
| 199 | 10 | 3 | 70 | 79 | 72 |
| 200 | 10 | 4 | 79 | 80 | 72 |
| 201 | 10 | 3 | 72 | 79 | 70 |
| 202 | 10 | 4 | 79 | 78 | 70 |
| 203 | 10 | 3 | 72 | 81 | 66 |
| 204 | 10 | 4 | 81 | 74 | 66 |
| 205 | 10 | 3 | 66 | 81 | 72 |
| 206 | 10 | 4 | 81 | 80 | 72 |
| 207 | 10 | 1 | 66 | 68 | 438 |
| 208 | 10 | 1 | 68 | 70 | 439 |
| 209 | 10 | 1 | 70 | 72 | 440 |
| 210 | 10 | 1 | 72 | 66 | 441 |
| 211 | 8 | 3 | 70 | 82 | 442 |
| 212 | 8 | 2 | 82 | 85 | 443 |
| 213 | 8 | 3 | 68 | 83 | 444 |
| 214 | 8 | 2 | 83 | 85 | 445 |
| 215 | 6 | 1 | 82 | 83 | 446 |

| Barra | perfil | Tipo | Nudo inicial | Nudo final | Nudo Ref. |
|---|---|---|---|---|---|
| 216 | 6 | 1 | 82 | 84 | 447 |
| 217 | 6 | 1 | 83 | 86 | 448 |
| 218 | 9 | 3 | 78 | 84 | 449 |
| 219 | 9 | 2 | 84 | 85 | 450 |
| 220 | 6 | 1 | 84 | 86 | 451 |
| 221 | 6 | 1 | 84 | 76 | 452 |
| 222 | 9 | 2 | 85 | 86 | 453 |
| 223 | 9 | 4 | 86 | 76 | 454 |
| 224 | 8 | 3 | 66 | 87 | 455 |
| 225 | 8 | 2 | 87 | 90 | 456 |
| 226 | 8 | 3 | 72 | 88 | 457 |
| 227 | 8 | 2 | 88 | 90 | 458 |
| 228 | 6 | 1 | 87 | 88 | 459 |
| 229 | 6 | 1 | 87 | 89 | 460 |
| 230 | 6 | 1 | 88 | 91 | 461 |
| 231 | 9 | 3 | 74 | 89 | 462 |
| 232 | 9 | 2 | 89 | 90 | 463 |
| 233 | 6 | 1 | 89 | 91 | 464 |
| 234 | 6 | 1 | 89 | 80 | 465 |
| 235 | 9 | 2 | 90 | 91 | 466 |
| 236 | 9 | 4 | 91 | 80 | 467 |
| 237 | 12 | 2 | 76 | 94 | 29 |
| 238 | 12 | 2 | 78 | 96 | 30 |
| 239 | 12 | 2 | 80 | 98 | 27 |
| 240 | 12 | 2 | 74 | 92 | 28 |
| 241 | 7 | 3 | 74 | 93 | 76 |
| 242 | 7 | 4 | 93 | 94 | 76 |
| 243 | 7 | 3 | 76 | 93 | 74 |
| 244 | 7 | 4 | 93 | 92 | 74 |
| 245 | 7 | 3 | 76 | 95 | 78 |
| 246 | 7 | 4 | 95 | 96 | 78 |
| 247 | 7 | 3 | 78 | 95 | 76 |
| 248 | 7 | 4 | 95 | 94 | 76 |
| 249 | 7 | 3 | 78 | 97 | 80 |
| 250 | 7 | 4 | 97 | 98 | 80 |
| 251 | 7 | 3 | 80 | 97 | 78 |
| 252 | 7 | 4 | 97 | 96 | 78 |
| 253 | 7 | 3 | 80 | 99 | 74 |
| 254 | 7 | 4 | 99 | 92 | 74 |
| 255 | 7 | 3 | 74 | 99 | 80 |
| 256 | 7 | 4 | 99 | 98 | 80 |
| 257 | 10 | 1 | 74 | 76 | 468 |
| 258 | 10 | 1 | 76 | 78 | 469 |

| Barra | perfil | Tipo | Nudo inicial | Nudo final | Nudo Ref. |
|---|---|---|---|---|---|
| 259 | 10 | 1 | 78 | 80 | 470 |
| 260 | 10 | 1 | 80 | 74 | 471 |
| 261 | 6 | 3 | 74 | 100 | 472 |
| 262 | 6 | 4 | 100 | 78 | 473 |
| 263 | 6 | 3 | 80 | 100 | 474 |
| 264 | 6 | 4 | 100 | 76 | 475 |
| 265 | 12 | 2 | 94 | 103 | 29 |
| 266 | 12 | 2 | 96 | 105 | 30 |
| 267 | 12 | 2 | 98 | 107 | 27 |
| 268 | 12 | 2 | 92 | 101 | 28 |
| 269 | 7 | 3 | 92 | 102 | 94 |
| 270 | 7 | 4 | 102 | 103 | 94 |
| 271 | 7 | 3 | 94 | 102 | 92 |
| 272 | 7 | 4 | 102 | 101 | 92 |
| 273 | 7 | 3 | 94 | 104 | 96 |
| 274 | 7 | 4 | 104 | 105 | 96 |
| 275 | 7 | 3 | 96 | 104 | 94 |
| 276 | 7 | 4 | 104 | 103 | 94 |
| 277 | 7 | 3 | 96 | 106 | 98 |
| 278 | 7 | 4 | 106 | 107 | 98 |
| 279 | 7 | 3 | 98 | 106 | 96 |
| 280 | 7 | 4 | 106 | 105 | 96 |
| 281 | 7 | 3 | 98 | 108 | 92 |
| 282 | 7 | 4 | 108 | 101 | 92 |
| 283 | 7 | 3 | 92 | 108 | 98 |
| 284 | 7 | 4 | 108 | 107 | 98 |
| 285 | 12 | 2 | 103 | 111 | 29 |
| 286 | 12 | 2 | 105 | 113 | 30 |
| 287 | 12 | 2 | 107 | 115 | 27 |
| 288 | 12 | 2 | 101 | 109 | 28 |
| 289 | 7 | 3 | 101 | 110 | 103 |
| 290 | 7 | 4 | 110 | 111 | 103 |
| 291 | 7 | 3 | 103 | 110 | 101 |
| 292 | 7 | 4 | 110 | 109 | 101 |
| 293 | 7 | 3 | 103 | 112 | 105 |
| 294 | 7 | 4 | 112 | 113 | 105 |
| 295 | 7 | 3 | 105 | 112 | 103 |
| 296 | 7 | 4 | 112 | 111 | 103 |
| 297 | 7 | 3 | 105 | 114 | 107 |
| 298 | 7 | 4 | 114 | 115 | 107 |
| 299 | 7 | 3 | 107 | 114 | 105 |
| 300 | 7 | 4 | 114 | 113 | 105 |
| 301 | 7 | 3 | 107 | 116 | 101 |

| Barra | perfil | Tipo | Nudo inicial | Nudo final | Nudo Ref. |
|---|---|---|---|---|---|
| 302 | 7 | 4 | 116 | 109 | 101 |
| 303 | 7 | 3 | 101 | 116 | 107 |
| 304 | 7 | 4 | 116 | 115 | 107 |
| 305 | 12 | 2 | 111 | 119 | 29 |
| 306 | 12 | 2 | 113 | 121 | 30 |
| 307 | 12 | 2 | 115 | 123 | 27 |
| 308 | 12 | 2 | 109 | 117 | 28 |
| 309 | 10 | 3 | 109 | 118 | 111 |
| 310 | 10 | 4 | 118 | 119 | 111 |
| 311 | 10 | 3 | 111 | 118 | 109 |
| 312 | 10 | 4 | 118 | 117 | 109 |
| 313 | 10 | 3 | 111 | 120 | 113 |
| 314 | 10 | 4 | 120 | 121 | 113 |
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| 317 | 10 | 3 | 113 | 122 | 115 |
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| 321 | 10 | 3 | 115 | 124 | 109 |
| 322 | 10 | 4 | 124 | 117 | 109 |
| 323 | 10 | 3 | 109 | 124 | 115 |
| 324 | 10 | 4 | 124 | 123 | 115 |
| 325 | 10 | 1 | 109 | 111 | 476 |
| 326 | 10 | 1 | 111 | 113 | 477 |
| 327 | 10 | 1 | 113 | 115 | 478 |
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| 333 | 6 | 1 | 125 | 126 | 484 |
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| 336 | 9 | 3 | 121 | 127 | 487 |
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| 340 | 9 | 2 | 128 | 129 | 491 |
| 341 | 9 | 4 | 129 | 119 | 492 |
| 342 | 8 | 3 | 109 | 130 | 493 |
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| 344 | 8 | 3 | 115 | 131 | 495 |

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| 347 | 6 | 1 | 130 | 132 | 498 |
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| 380 | 6 | 4 | 135 | 117 | 511 |
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| 383 | 1 | 2 | 140 | 142 | 138 |
| 384 | 1 | 2 | 142 | 152 | 146 |
| 385 | 1 | 2 | 152 | 156 | 150 |
| 386 | 1 | 2 | 156 | 160 | 154 |
| 387 | 1 | 2 | 160 | 163 | 158 |

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| 390 | 1 | 2 | 172 | 175 | 170 |
| 391 | 1 | 2 | 139 | 141 | 140 |
| 392 | 1 | 2 | 141 | 151 | 142 |
| 393 | 1 | 2 | 151 | 155 | 152 |
| 394 | 1 | 2 | 155 | 159 | 156 |
| 395 | 1 | 2 | 159 | 162 | 160 |
| 396 | 1 | 2 | 162 | 167 | 163 |
| 397 | 1 | 2 | 167 | 171 | 168 |
| 398 | 1 | 2 | 171 | 174 | 172 |
| 399 | 1 | 2 | 138 | 146 | 145 |
| 400 | 1 | 2 | 146 | 150 | 147 |
| 401 | 1 | 2 | 150 | 154 | 181 |
| 402 | 1 | 2 | 154 | 158 | 183 |
| 403 | 1 | 2 | 158 | 161 | 185 |
| 404 | 1 | 2 | 161 | 166 | 186 |
| 405 | 1 | 2 | 166 | 170 | 189 |
| 406 | 1 | 2 | 170 | 173 | 191 |
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| 408 | 1 | 2 | 147 | 181 | 141 |
| 409 | 1 | 2 | 181 | 183 | 151 |
| 410 | 1 | 2 | 183 | 185 | 155 |
| 411 | 1 | 2 | 185 | 186 | 159 |
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| 414 | 1 | 2 | 191 | 192 | 171 |
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| 496 | 2 | 2 | 218 | 221 | 216 |
| 497 | 2 | 2 | 177 | 200 | 178 |
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| 509 | 2 | 2 | 195 | 198 | 177 |
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| 515 | 8 | 3 | 177 | 202 | 372 |
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| 557 | 8 | 3 | 231 | 232 | 374 |
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| 559 | 8 | 3 | 217 | 235 | 375 |

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| 568 | 8 | 4 | 238 | 241 | 374 |
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| 578 | 3 | 2 | 252 | 255 | 250 |
| 579 | 3 | 2 | 236 | 242 | 224 |
| 580 | 3 | 2 | 242 | 247 | 243 |
| 581 | 3 | 2 | 247 | 251 | 248 |
| 582 | 3 | 2 | 251 | 254 | 252 |
| 583 | 3 | 2 | 223 | 241 | 237 |
| 584 | 3 | 2 | 241 | 246 | 240 |
| 585 | 3 | 2 | 246 | 250 | 261 |
| 586 | 3 | 2 | 250 | 253 | 263 |
| 587 | 3 | 2 | 237 | 240 | 236 |
| 588 | 3 | 2 | 240 | 261 | 242 |
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| 592 | 8 | 4 | 244 | 248 | 373 |
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| 594 | 8 | 4 | 244 | 246 | 373 |
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| 599 | 8 | 3 | 246 | 249 | 373 |
| 600 | 8 | 4 | 249 | 255 | 373 |
| 601 | 8 | 3 | 248 | 249 | 373 |
| 602 | 8 | 4 | 249 | 253 | 373 |

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| 605 | 8 | 3 | 252 | 256 | 372 |
| 606 | 8 | 4 | 256 | 257 | 372 |
| 607 | 8 | 3 | 236 | 259 | 375 |
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| 610 | 8 | 4 | 259 | 247 | 375 |
| 611 | 8 | 3 | 241 | 260 | 374 |
| 612 | 8 | 4 | 260 | 263 | 374 |
| 613 | 8 | 3 | 240 | 260 | 374 |
| 614 | 8 | 4 | 260 | 250 | 374 |
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| 625 | 3 | 2 | 254 | 257 | 255 |
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| 627 | 8 | 3 | 264 | 268 | 375 |
| 628 | 8 | 4 | 268 | 272 | 375 |
| 629 | 8 | 3 | 253 | 269 | 373 |
| 630 | 8 | 4 | 269 | 273 | 373 |
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| 633 | 8 | 3 | 255 | 269 | 373 |
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| 636 | 3 | 2 | 273 | 277 | 271 |
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| 638 | 3 | 2 | 282 | 286 | 280 |
| 639 | 3 | 2 | 286 | 289 | 284 |
| 640 | 3 | 2 | 257 | 272 | 258 |
| 641 | 3 | 2 | 272 | 276 | 273 |
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| 643 | 3 | 2 | 281 | 285 | 282 |
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| 645 | 3 | 2 | 266 | 271 | 267 |

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| 648 | 3 | 2 | 280 | 284 | 297 |
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| 650 | 3 | 2 | 267 | 270 | 257 |
| 651 | 3 | 2 | 270 | 294 | 272 |
| 652 | 3 | 2 | 294 | 297 | 276 |
| 653 | 3 | 2 | 297 | 299 | 281 |
| 654 | 3 | 2 | 299 | 300 | 285 |
| 655 | 8 | 3 | 257 | 274 | 372 |
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| 660 | 8 | 4 | 278 | 282 | 373 |
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| 699 | 8 | 3 | 300 | 304 | 375 |
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| 702 | 8 | 4 | 305 | 309 | 373 |
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| 706 | 8 | 4 | 305 | 307 | 373 |
| 707 | 4 | 2 | 292 | 309 | 302 |
| 708 | 4 | 2 | 309 | 313 | 307 |
| 709 | 4 | 2 | 313 | 318 | 311 |
| 710 | 4 | 2 | 318 | 322 | 316 |
| 711 | 4 | 2 | 322 | 325 | 320 |
| 712 | 4 | 2 | 291 | 308 | 292 |
| 713 | 4 | 2 | 308 | 312 | 309 |
| 714 | 4 | 2 | 312 | 317 | 313 |
| 715 | 4 | 2 | 317 | 321 | 318 |
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| 717 | 4 | 2 | 302 | 307 | 303 |
| 718 | 4 | 2 | 307 | 311 | 306 |
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| 723 | 4 | 2 | 306 | 330 | 308 |
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| 799 | 8 | 1 | 357 | 361 | 328 |
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| 808 | 8 | 4 | 350 | 354 | 338 |
| 809 | 8 | 3 | 345 | 350 | 328 |
| 810 | 8 | 4 | 350 | 352 | 328 |
| 811 | 8 | 3 | 348 | 351 | 328 |
| 812 | 8 | 4 | 351 | 358 | 328 |
| 813 | 8 | 3 | 349 | 351 | 327 |
| 814 | 8 | 4 | 351 | 357 | 327 |
| 815 | 8 | 3 | 352 | 356 | 338 |
| 816 | 8 | 4 | 356 | 362 | 338 |
| 817 | 8 | 3 | 354 | 356 | 328 |

| Barra | perfil | Tipo | Nudo inicial | Nudo final | Nudo Ref. |
|---|---|---|---|---|---|
| 818 | 8 | 4 | 356 | 359 | 328 |
| 819 | 8 | 3 | 338 | 363 | 339 |
| 820 | 8 | 4 | 363 | 364 | 339 |
| 821 | 8 | 3 | 339 | 363 | 338 |
| 822 | 8 | 4 | 363 | 347 | 338 |
| 823 | 8 | 3 | 344 | 365 | 327 |
| 824 | 8 | 4 | 365 | 367 | 327 |
| 825 | 8 | 3 | 342 | 365 | 339 |
| 826 | 8 | 4 | 365 | 353 | 339 |
| 827 | 8 | 3 | 347 | 366 | 339 |
| 828 | 8 | 4 | 366 | 369 | 339 |
| 829 | 8 | 3 | 364 | 366 | 338 |
| 830 | 8 | 4 | 366 | 355 | 338 |
| 831 | 8 | 3 | 353 | 368 | 327 |
| 832 | 8 | 4 | 368 | 371 | 327 |
| 833 | 8 | 3 | 367 | 368 | 339 |
| 834 | 8 | 4 | 368 | 360 | 339 |

UNIVERSIDAD DE SEVILLA

**ESCUELA TÉCNICA SUPERIOR DE INGENIERÍA**

# DOCUMENTO ANEXO 2. CÓDIGOS MATLAB DE LOS MÓDULOS DESARROLADOS

## HERRAMIENTA PARA EL CÁLCULO DE APOYOS EN LÍNEAS ELÉCTRICAS DE ALTA TENSIÓN

**TRABAJO PRESENTADO PARA OPTAR AL TÍTULO DE**

**MÁSTER DE SISTEMAS DE ENERGÍA ELÉCTRICA**

**POR**

**FRANCISCO JAVIER MATEOS MONTERO**

**SEVILLA, DICIEMBRE DE 2017**

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# 1 MÓDULO PARA EL CÁCULO DE ESFUERZOS Y DESPLAZAMIENTOS

```
%En la ruta de trabajo debe encontrarse el archivo excel con los
%datos del apoyo

prompt = {'introduzca el nombre del archivo de datos del apoyo:','introduzca la
velocidad del viento en km/h: '};
dlg_title = 'Datos de entrada';
num_lines= 1;
def     = {'ejemplo.xlsx','120'};
answer  = inputdlg(prompt,dlg_title,num_lines,def);

tic;
filename=answer{1};
velviento=str2double(answer{2});

%NUDOS
datosnudos=xlsread(filename,1,'B:F');
CoordXYZ=datosnudos(:,1:3);%matriz con las coordenadas de los nudos
NNT=length(CoordXYZ); % Número de nudos
BarrasNudo=datosnudos(:,4);
%Viento=datosnudos(:,5);
Vempaux=xlsread(filename,1,'G:G'); %Nudos que son apoyo de la estructura
NNCruceta=xlsread(filename,1,'I:O');%Nudos de aplicación de carga en crucetas
%BARRAS
datosbarras=xlsread(filename,2,'B:F');
NB=size(datosbarras,1); %Número de barras
perfil=datosbarras(:,1);
tipo=datosbarras(:,2);
NudosIFR=datosbarras(:,3:5);
%PERFILES
datosPerfiles=xlsread(filename,3,'B:F'); % AREA Ix Iy J
time(1)=toc;
%--------------------------------------------------------------------------
tic;
%CÁLCULO DE LA MATRIZ DE TRANSFORMACIÓN PARA CADA BARRA y
%CÁLCULO DE LA MATRIZ DE RIGIDEZ EN COORD. LOCALES PARA CADA BARRA
%CÁLCULO DE LA MATRIZ DE RIGIDEZ EN COORD. GLOBALES PARA CADA BARRA
CoordXYZ=CoordXYZ/1000; %coordenadas en metro
matrizT=zeros(12,12,NB); %matriz de transformación
KLbarra=zeros(12,12,NB);%matriz de rigidez en coord. locales
KGbarra=zeros(12,12,NB);%matriz de rigidez en coord. globales
datosPerfiles(:,1)=datosPerfiles(:,1)/100^2; %area perfil en metro^2
L=zeros(NB,1); %longitud de las barras
Lx=zeros(NB,1);
Ly=zeros(NB,1);
Lz=zeros(NB,1);
E=210000000000; %módulo de elasticidad en N/m2
G=E/(2*(1+0.3)); %módulo de cizalladura (elasticidad transversal) en KN/m2.
Coeficiente de Poisson = 0.3
for i=1:NB
    Ni=NudosIFR(i,1);
    Nf=NudosIFR(i,2);
    Nor=NudosIFR(i,3);
    %cálculo de la longitud de la barra
    Lx(i)=CoordXYZ(Nf,1)-CoordXYZ(Ni,1);
    Ly(i)=CoordXYZ(Nf,3)-CoordXYZ(Ni,3);
    Lz(i)=CoordXYZ(Nf,2)-CoordXYZ(Ni,2);
```

```
    L(i)=sqrt(Lx(i)^2+Ly(i)^2+Lz(i)^2);
    if tipo(i)==1
        %cálculo de los cosenos directores
        cosxX=Lx(i)/L(i);
        cosxY=Ly(i)/L(i);
        cosxZ=Lz(i)/L(i);
        cosyX=0;
        cosyY=0;
        cosyZ=0;
        coszX=0;
        coszY=0;
        coszZ=0;
    else
        Vi=CoordXYZ(Nor,1)-CoordXYZ(Ni,1);
        Vj=CoordXYZ(Nor,3)-CoordXYZ(Ni,3);
        Vk=CoordXYZ(Nor,2)-CoordXYZ(Ni,2);
        Wi=Ly(i)*Vk-Lz(i)*Vj;
        Wj=Lz(i)*Vi-Lx(i)*Vk;
        Wk=Lx(i)*Vj-Ly(i)*Vi;
        absW=sqrt(Wi^2+Wj^2+Wk^2);
        Ri=Lz(i)*Wj-Ly(i)*Wk;
        Rj=Lx(i)*Wk-Lz(i)*Wi;
        Rk=Ly(i)*Wi-Lx(i)*Wj;
        absR=sqrt(Ri^2+Rj^2+Rk^2);
        %Cálculo de cosenos directores
        cosxX=Lx(i)/L(i);
        cosxY=Ly(i)/L(i);
        cosxZ=Lz(i)/L(i);
        cosyX=Ri/absR;
        cosyY=Rj/absR;
        cosyZ=Rk/absR;
        coszX=Wi/absW;
        coszY=Wj/absW;
        coszZ=Wk/absW;
    end
    for r=1:4
        t=3*r-2;
        for j=t:t+2
         for k=t:t+2
             switch j
                 case {1,4,7,10}
                     switch k
                         case {1,4,7,10}
                             matrizT(j,k,i)=cosxX;
                         case {2,5,8,11}
                             matrizT(j,k,i)=cosyX;
                         case {3,6,9,12}
                             matrizT(j,k,i)=coszX;
                     end
                 case {2,5,8,11}
                     switch k
                         case {1,4,7,10}
                             matrizT(j,k,i)=cosxY;
                         case {2,5,8,11}
                             matrizT(j,k,i)=cosyY;
                         case {3,6,9,12}
                             matrizT(j,k,i)=coszY;
                     end
                 case {3,6,9,12}
                      switch k
                         case {1,4,7,10}
```

```
                            matrizT(j,k,i)=cosxZ;
                        case {2,5,8,11}
                            matrizT(j,k,i)=cosyZ;
                        case {3,6,9,12}
                            matrizT(j,k,i)=coszZ;
                    end
                end
            end
        end
    end


%montaje de la matriz de rigidez de cada barra
    switch tipo(i)
        case 1 %tipo celosía (articulado-articulado)
            %submatriz Kii (i nudo inicial de la barra)
            KLbarra(1,1,i)=E*datosPerfiles(perfil(i),1)/L(i);
            %submatriz Kjj (j nudo final de la barra)
            KLbarra(7,7,i)=E*datosPerfiles(perfil(i),1)/L(i);
            %submatriz Kij
            KLbarra(1,7,i)=-E*datosPerfiles(perfil(i),1)/L(i);
            %submatriz Kji (es la traspuesta de la submatriz Kij)
            KLbarra(7,1,i)=KLbarra(1,7,i);

        case 2 %tipo viga (empotrado-empotrado)
            %submatriz Kii (i nudo inicial de la barra)
            KLbarra(1,1,i)=E*datosPerfiles(perfil(i),1)/L(i);
            KLbarra(2,2,i)=12*E*datosPerfiles(perfil(i),2)/L(i)^3;
            KLbarra(2,6,i)=6*E*datosPerfiles(perfil(i),2)/L(i)^2;
            KLbarra(3,3,i)=12*E*datosPerfiles(perfil(i),3)/L(i)^3;
            KLbarra(3,5,i)=-6*E*datosPerfiles(perfil(i),3)/L(i)^2;
            KLbarra(4,4,i)=G*datosPerfiles(perfil(i),4)/L(i);
            KLbarra(5,3,i)=-6*E*datosPerfiles(perfil(i),3)/L(i)^2;
            KLbarra(5,5,i)=4*E*datosPerfiles(perfil(i),3)/L(i);
            KLbarra(6,2,i)=6*E*datosPerfiles(perfil(i),2)/L(i)^2;
            KLbarra(6,6,i)=4*E*datosPerfiles(perfil(i),2)/L(i);
            %submatriz Kjj (j nudo final de la barra)
            KLbarra(7,7,i)=E*datosPerfiles(perfil(i),1)/L(i);
            KLbarra(8,8,i)=12*E*datosPerfiles(perfil(i),2)/L(i)^3;
            KLbarra(8,12,i)=-6*E*datosPerfiles(perfil(i),2)/L(i)^2;
            KLbarra(9,9,i)=12*E*datosPerfiles(perfil(i),3)/L(i)^3;
            KLbarra(9,11,i)=6*E*datosPerfiles(perfil(i),3)/L(i)^2;
            KLbarra(10,10,i)=G*datosPerfiles(perfil(i),4)/L(i);
            KLbarra(11,9,i)=6*E*datosPerfiles(perfil(i),3)/L(i)^2;
            KLbarra(11,11,i)=4*E*datosPerfiles(perfil(i),3)/L(i);
            KLbarra(12,8,i)=-6*E*datosPerfiles(perfil(i),2)/L(i)^2;
            KLbarra(12,12,i)=4*E*datosPerfiles(perfil(i),2)/L(i);
            %submatriz Kij
            KLbarra(1,7,i)=-E*datosPerfiles(perfil(i),1)/L(i);
            KLbarra(2,8,i)=-12*E*datosPerfiles(perfil(i),2)/L(i)^3;
            KLbarra(2,12,i)=6*E*datosPerfiles(perfil(i),2)/L(i)^2;
            KLbarra(3,9,i)=-12*E*datosPerfiles(perfil(i),3)/L(i)^3;
            KLbarra(3,11,i)=-6*E*datosPerfiles(perfil(i),3)/L(i)^2;
            KLbarra(4,10,i)=-G*datosPerfiles(perfil(i),4)/L(i);
            KLbarra(5,9,i)=6*E*datosPerfiles(perfil(i),3)/L(i)^2;
            KLbarra(5,11,i)=4*E*datosPerfiles(perfil(i),3)/L(i) / 2;
            KLbarra(6,8,i)=-6*E*datosPerfiles(perfil(i),2)/L(i)^2;
            KLbarra(6,12,i)=4*E*datosPerfiles(perfil(i),2)/L(i) / 2;
            %submatriz Kji (es la traspuesta de la submatriz Kij)
            KLbarra(7:12,1:6,i)=KLbarra(1:6,7:12,i)';
```

```
        case 3 %tipo articulado - empotrado
            %submatriz Kii (i nudo inicial de la barra)
            KLbarra(1,1,i) =E*datosPerfiles(perfil(i),1)/L(i);
            KLbarra(2,2,i) =12*E*datosPerfiles(perfil(i),2)/L(i)^3 * 1/4;
            KLbarra(3,3,i) = 12*E*datosPerfiles(perfil(i),3)/L(i)^3 * 1/4;
            KLbarra(4,4,i) = G*datosPerfiles(perfil(i),4)/L(i);
            %submatriz Kjj (j nudo final de la barra)
            KLbarra(7,7,i) =E*datosPerfiles(perfil(i),1)/L(i);
            KLbarra(8,8,i) =12*E*datosPerfiles(perfil(i),2)/L(i)^3 * 1/4;
            KLbarra(8,12,i) = -6*E*datosPerfiles(perfil(i),2)/L(i)^2 * 1/2;
            KLbarra(9,9,i) = 12*E*datosPerfiles(perfil(i),3)/L(i)^3 * 1/4;
            KLbarra(9,11,i) = 6*E*datosPerfiles(perfil(i),3)/L(i)^2 * 1/2;
            KLbarra(10,10,i) = G*datosPerfiles(perfil(i),4)/L(i);
            KLbarra(11,9,i) = 6*E*datosPerfiles(perfil(i),3)/L(i)^2 * 1/2;
            KLbarra(11,11,i) = 4*E*datosPerfiles(perfil(i),3)/L(i) * 3/4;
            KLbarra(12,8,i) = -6*E*datosPerfiles(perfil(i),2)/L(i)^2 * 1/2;
            KLbarra(12,12,i) = 4*E*datosPerfiles(perfil(i),2)/L(i) * 3/4;
            %submatriz Kij
            KLbarra(1,7,i) =-E*datosPerfiles(perfil(i),1)/L(i);
            KLbarra(2,8,i) = -12*E*datosPerfiles(perfil(i),2)/L(i)^3 * 1/4;
            KLbarra(2,12,i) = 6*E*datosPerfiles(perfil(i),2)/L(i)^2 * 1/2;
            KLbarra(3,9,i) = -12*E*datosPerfiles(perfil(i),3)/L(i)^3 * 1/4;
            KLbarra(3,11,i) = -6*E*datosPerfiles(perfil(i),3)/L(i)^2 * 1/2;
            KLbarra(4,10,i) = -G*datosPerfiles(perfil(i),4)/L(i);
            %submatriz Kji (es la traspuesta de la submatriz Kij)
            KLbarra(7:12,1:6,i)=KLbarra(1:6,7:12,i)';

        case 4 %tipo empotrado -articulado
            %submatriz Kii (i nudo inicial de la barra)
            KLbarra(1,1,i) =E*datosPerfiles(perfil(i),1)/L(i);
            KLbarra(2,2,i) =12*E*datosPerfiles(perfil(i),2)/L(i)^3 * 1/4;
            KLbarra(2,6,i) = 6*E*datosPerfiles(perfil(i),2)/L(i)^2 * 1/2;
            KLbarra(3,3,i) = 12*E*datosPerfiles(perfil(i),3)/L(i)^3 * 1/4;
            KLbarra(3,5,i) = -6*E*datosPerfiles(perfil(i),3)/L(i)^2 * 1/2;
            KLbarra(4,4,i) = G*datosPerfiles(perfil(i),4)/L(i);
            KLbarra(5,3,i) = -6*E*datosPerfiles(perfil(i),3)/L(i)^2 * 1/2;
            KLbarra(5,5,i) = 4*E*datosPerfiles(perfil(i),3)/L(i) * 3/4;
            KLbarra(6,2,i) = 6*E*datosPerfiles(perfil(i),2)/L(i)^2 * 1/2;
            KLbarra(6,6,i) = 4*E*datosPerfiles(perfil(i),2)/L(i) * 3/4;
            %submatriz Kjj (j nudo final de la barra)
            KLbarra(7,7,i) =E*datosPerfiles(perfil(i),1)/L(i);
            KLbarra(8,8,i) =12*E*datosPerfiles(perfil(i),2)/L(i)^3 * 1/4;
            KLbarra(9,9,i) = 12*E*datosPerfiles(perfil(i),3)/L(i)^3 * 1/4;
            KLbarra(10,10,i) = G*datosPerfiles(perfil(i),4)/L(i);
            %submatriz Kij
            KLbarra(1,7,i) =-E*datosPerfiles(perfil(i),1)/L(i);
            KLbarra(2,8,i) = -12*E*datosPerfiles(perfil(i),2)/L(i)^3 * 1/4;
            KLbarra(3,9,i) = -12*E*datosPerfiles(perfil(i),3)/L(i)^3 * 1/4;
            KLbarra(4,10,i) = -G*datosPerfiles(perfil(i),4)/L(i);
            KLbarra(5,9,i) = 6*E*datosPerfiles(perfil(i),3)/L(i)^2 * 1/2;
            KLbarra(6,8,i) = -6*E*datosPerfiles(perfil(i),2)/L(i)^2 * 1/2;
            %submatriz Kji (es la traspuesta de la submatriz Kij)
            KLbarra(7:12,1:6,i)=KLbarra(1:6,7:12,i)';
    end
    %Matriz de rigidez de cada barra en coordenadas globales
    KGbarra(:,:,i)=matrizT(:,:,i)*KLbarra(:,:,i)*matrizT(:,:,i)';

end
```

```
clear i j k t r Ni Nf Nor cosxX cosxY cosxZ cosyX cosyY cosyZ coszX coszY coszZ
Vi Vj Vk Wi Wj Wk Ri Rj Rk absR absW
time(2)=toc;
%NOTA: MATLAB NO PERMITE CONVERTIR MATRICES 3-D EN MATRICES DISPERSAS
%--------------------------------------------------------------------------
tic;
%NUDOS PERTENIECIENTES A LA ESTRUCTURA
NN=0;
VauxNN=zeros(NNT);
for i=1:NNT
    if BarrasNudo(i)~=0
        NN=NN+1;
        VauxNN(i)=NN;
    end
end
%NN: número de nudos de la estructura
%NNT: número de nudos de la estructura + número de nudos de orientación
%(que no pertenecen a la estructura)
%VauxNN: vector auxiliar que relaciona el número de nudo sobre NNT y el
%número de nudo sobre NN
%--------------------------------------------------------------------------
%CÁLCULO DE LA MATRIZ DE RIGIDEZ DE LA ESTRUCTURA
NFC=NN*6;
MatrizK=zeros(NFC,NFC);
%MatrizK=sparse(NFC,NFC); %%% programa v1 hacemos sparse desde el inicio

for i=1:NB
    Niaux=NudosIFR(i,1);
    Nfaux=NudosIFR(i,2);
    Ni=VauxNN(Niaux);
    Nf=VauxNN(Nfaux);
    MatrizK((Ni*6-5):(Ni*6),(Ni*6-5):(Ni*6))=MatrizK((Ni*6-5):(Ni*6),(Ni*6-
5):(Ni*6))+KGbarra(1:6,1:6,i);
    MatrizK((Ni*6-5):(Ni*6),(Nf*6-5):(Nf*6))=MatrizK((Ni*6-5):(Ni*6),(Nf*6-
5):(Nf*6))+KGbarra(1:6,7:12,i);
    MatrizK((Nf*6-5):(Nf*6),(Nf*6-5):(Nf*6))=MatrizK((Nf*6-5):(Nf*6),(Nf*6-
5):(Nf*6))+KGbarra(7:12,7:12,i);
    MatrizK((Nf*6-5):(Nf*6),(Ni*6-5):(Ni*6))=MatrizK((Nf*6-5):(Nf*6),(Ni*6-
5):(Ni*6))+KGbarra(7:12,1:6,i);
end

clear i
%[I,J,s]=find(MatrizK); crea los vectores que definen la matriz dispersa
%--------------------------------------------------------------------------
%EMPOTRAMIENTOS
Nemp=size(Vempaux,1); %número de empotramientos
Vemp=zeros(Nemp,1); %vector con los nudos que son empotramientos
for i=1:Nemp
    Vemp(i)=VauxNN(Vempaux(i));
end

%--------------------------------------------------------------------------
%REESCRITURA DE LA MATRIZ DEL SISTEMA (condiciones de contorno)
%En los empotramientos, los desplazamientos son nulos y en el vector
%de carga aparecen las reacciones que son incógnitas. Reescribimos
%la matriz para pasar estas incógnitas al vector de desplazamientos.
%Empotramientos: desplazamientos restringidos, giros permitidos.
for i=1:Nemp
    for j=3:5
        MatrizK(:,Vemp(i)*6-j)=0;
```

```
        MatrizK(Vemp(i)*6-j,Vemp(i)*6-j)=-1;
    end
end

%Convertimos la matriz de rigidez en sparse
%MatrizK=sparse(MatrizK);
time(3)=toc;
%-------------------------------------------------------------------------
tic;
%MATRIZ DE CARGA
NCrucetas=size(NNCruceta,1); %número de crucetas del apoyo
Nhip=NCrucetas*3; %tres hipotesis de carga unitaria por cruceta

McargaTotal=zeros(NFC,2+Nhip); %matriz con los vectores de carga de cada
%estado de solicitación     programa v0
%%%McargaTotal=sparse(NFC,2+Nhip); %%%sparse en el vector de carga desde el
principio

Vnudosc=zeros(6,NCrucetas);

%solicitaciones unitarias
for i=1:NCrucetas
    for j=1:NNCruceta(i,1)
        Vnudosc(j,i)=VauxNN(NNCruceta(i,j+1));
    end
end

for k=1:NN
    for i=1:NCrucetas
        for r=1:NNCruceta(i,1)
            if k==Vnudosc(r,i)
                McargaTotal(6*k-5,i*3-2+2)=1/NNCruceta(i,1); %carga unitaria
horizontal
                McargaTotal(6*k-3,i*3-1+2)=1/NNCruceta(i,1); %carga unitaria
transversal
                McargaTotal(6*k-4,i*3+2)=-1/NNCruceta(i,1);   %carga unitaria
vertical
            end
        end
    end
end

%vector de carga viento (dirección de aplicación transversal)
XT=0;
XB=zeros(NB,1);
for i=1:NB
    XB(i)=sqrt(Lx(i)^2+Ly(i)^2)*datosPerfiles(datosbarras(i,1),5)/1000; %area
proyectada de cada barra en el plano normal a la dirección del viento
    XT=XT+XB(i);%area proyectada de todo el apoyo en el plano normal a la
dirección del viento
end
Xn=zeros(NNT,1);
for i=1:NNT
    for j=1:NB
        Ni=NudosIFR(j,1);
        Nf=NudosIFR(j,2);
        if i == Ni
            Xn(i)=Xn(i)+XB(j)/2;
        end
        if i == Nf
```

```
            Xn(i)=Xn(i)+XB(j)/2;
        end
    end
end

Xn=Xn/XT;%fuerza del viento unitaria sobre cada nudo del apoyo

Fc=(1700*(velviento/120)^2)*0.357*XT; %fuerza del viento sobre el apoyo

Viento=Xn*Fc; %fuerza del viento sobre cada nudo del apoyo


for i=1:NNT
    VCGaux=VauxNN(i); %auxiliar para relacionar NNT con NN
    if VCGaux~=0
        McargaTotal(VCGaux*6-3,1)=Viento(i);
    end
end

%vector de carga peso
dens=7850;
grav=9.81;
for i=1:NB
    Niaux=NudosIFR(i,1);
    Nfaux=NudosIFR(i,2);
    Ni=VauxNN(Niaux);
    Nf=VauxNN(Nfaux);
    peso=datosPerfiles(perfil(i),1)*L(i)*dens*grav;
    for j=1:NN
        if j==Ni
           McargaTotal(6*j-4,2)=McargaTotal(6*j-4,2)-peso/2;
        end
        if j==Nf
           McargaTotal(6*j-4,2)=McargaTotal(6*j-4,2)-peso/2;
        end
    end
end

%-------------------------------------------------------------------------
%DETECTOR FILAS/COLUMNAS NULAS EN LA MATRIZ DE RIGIDEZ MODIFICADA
VauxRecorridoK=zeros(NFC,1);
%VauxRecorridoK vector que identifica las filas/columnas dentro de la matriz.
%p.e. si el vector es (1,2,0,4,5) indica que la fila/columna 3 es nula
for i = 1: NFC
    modfil = 0;
    for j = 1 : NFC
        if MatrizK(i, j) < 0
            modfilaux = -MatrizK(i, j);
        else
            modfilaux = MatrizK(i, j);
        end
    modfil = modfil + modfilaux;
    end

    if modfil == 0
        VauxRecorridoK(i) = 0;
    else
        VauxRecorridoK(i) = i;
    end
```

```
end
%ELIMINACIÓN FILAS COLUMNAS NULAS
MatrizKaux=MatrizK;
McargaTotalaux=McargaTotal;
j=0;
for i=1:NFC
    if VauxRecorridoK(i)==0
        MatrizKaux(i-j,:)=[];
        MatrizKaux(:,i-j)=[];
        McargaTotalaux(i-j,:)=[];
        j=j+1;
    end
end
MatrizKaux=sparse(MatrizKaux);
McargaTotalaux=sparse(McargaTotalaux);
%-------------------------------------------------------------------------
%RESOLUCIÓN DEL SISTEMA
MdespYesfaux=MatrizKaux\McargaTotalaux;
MdespYesf=zeros(NFC,2+Nhip);
j=0;
for i=1:NFC
    if VauxRecorridoK(i)==0
        MdespYesf(i,:)=0;
        j=j+1;
    else
        MdespYesf(i,:)=MdespYesfaux(i-j,:);
    end
end
%MdespYesf contiene para todas las hipótesis, las reacciones en
%los empotramientos y los desplazamientos para el resto de los nudos

%Matriz con los desplazamientos de los nudos y
%Matriz con las reacciones en los empotramientos

Mdesp=full(MdespYesf); %matriz con desplazamientos y giros
Mreacc=zeros(6*Nemp,2+Nhip); %matriz con reacciones en los empotramientos
for i=1:Nemp
    for j=3:5
        Mreacc(i*6-j,:)=Mdesp(Vemp(i)*6-j,:);
        Mdesp(Vemp(i)*6-j,:)=0;
    end
end

%-------------------------------------------------------------------------
%Cálculo de los esfuerzos de cada barra en coordenadas locales
VdesbarraGl=zeros(12,2+Nhip);
MesfbarraLO=zeros(12*NB,2+Nhip);
Maxiles=zeros(NB,2+Nhip);
for i=1:NB
    Niaux=NudosIFR(i,1);
    Nfaux=NudosIFR(i,2);
    Ni=VauxNN(Niaux);
    Nf=VauxNN(Nfaux);
    for k=1:6
        VdesbarraGl(k,:)=Mdesp(6*Ni-6+k,:);
        VdesbarraGl(6+k,:)=Mdesp(6*Nf-6+k,:);
    end
    MdesbarraLO= matrizT(:,:,i)'*VdesbarraGl;
    MesfbarraLO(i*12-11:i*12,:)=KLbarra(:,:,i)*MdesbarraLO;
    Maxiles(i,:)=MesfbarraLO(i*12-5,:); %Matriz con axiles
```

```
end
time(4)=toc;
%--------------------------------------------------------------------------
tic;
%ESCRITURA DE RESULTADOS EN EXCEL

%Axiles
VNB=(1:NB)';
xlswrite(filename,VNB,5,'A3')
xlswrite(filename,Maxiles,5,'B3')

%Desplazamientos
Aux1despl=zeros(NN*6,1);
Aux2despl=cell(NN*6,1);
for i=1:NNT
    if VauxNN(i)~=0
        for k=1:6
            Aux1despl(VauxNN(i)*6-6+k,1)=i;
            switch k
                case {1}
                    Aux2despl(VauxNN(i)*6-6+k,1)={'D Longitudinal'};
                case {2}
                    Aux2despl(VauxNN(i)*6-6+k,1)={'D Vertical'};
                case {3}
                    Aux2despl(VauxNN(i)*6-6+k,1)={'D transversal'};
                case {4}
                    Aux2despl(VauxNN(i)*6-6+k,1)={'G Longitudinal'};
                case {5}
                    Aux2despl(VauxNN(i)*6-6+k,1)={'G Vertical'};
                case {6}
                    Aux2despl(VauxNN(i)*6-6+k,1)={'G transversal'};
            end
        end

    end

end

xlswrite(filename,Aux1despl,4,'A3')
xlswrite(filename,Aux2despl,4,'B3')
xlswrite(filename,Mdesp,4,'C3')

%Reacciones
Aux1reacc=zeros(Nemp*6,1);
Aux2reacc=cell(Nemp*6,1);
for i=1:Nemp
    for k=1:6
        Aux1reacc(i*6-6+k,1)=Vemp(i);
        switch k
            case {1}
               Aux2reacc(i*6-6+k,1)={'R longitudinal'};
            case {2}
               Aux2reacc(i*6-6+k,1)={'R vertical'};
            case {3}
               Aux2reacc(i*6-6+k,1)={'R transversal'};
            case {4}
               Aux2reacc(i*6-6+k,1)={'M longitudinal'};
            case {5}
               Aux2reacc(i*6-6+k,1)={'M vertical'};
            case {6}
```

```
                Aux2reacc(i*6-6+k,1)={'M transversal'};
        end
    end
end

xlswrite(filename,Aux1reacc,7,'A3')
xlswrite(filename,Aux2reacc,7,'B3')
xlswrite(filename,Mreacc,7,'C3')

%Esfuerzos en barras
Aux1esf=zeros(NB*12,2);
Aux2esf=cell(NB*12,1);
for j=1:NB
    for k=1:12
        Niaux=NudosIFR(j,1);
        Nfaux=NudosIFR(j,2);
        Ni=VauxNN(Niaux);
        Nf=VauxNN(Nfaux);
        if k<=6
            Aux1esf(j*12-12+k,2)=Ni;
        else
            Aux1esf(j*12-12+k,2)=Nf;
        end
        Aux1esf(j*12-12+k,1)=j;
        switch k
            case {1,7}
                Aux2esf(j*12-12+k,1)={'R long (axil)'};
            case {2,8}
                Aux2esf(j*12-12+k,1)={'R vert (cortante)'};
            case {3,9}
                Aux2esf(j*12-12+k,1)={'R trans (cortante)'};
            case {4,10}
                Aux2esf(j*12-12+k,1)={'M long (torsor)'};
            case {5,11}
                Aux2esf(j*12-12+k,1)={'M vert (flector)'};
            case {6,12}
                Aux2esf(j*12-12+k,1)={'M trans (flector)'};
        end
    end
end

xlswrite(filename,Aux1esf,6,'A3')
xlswrite(filename,Aux2esf,6,'C3')
xlswrite(filename,MesfbarraLO,6,'D3')
time(5)=toc;
xlswrite(filename,time,8,'A2')
```

# 2 MÓDULO PARA LA REPRESENTACIÓN GRÁFICA

```
prompt = {'introduzca el nombre del archivo de datos:','Hípotesis a representar:
','¿Desea aumentar efecto deformada?'};
dlg_title = 'Datos de entrada';
num_lines= 1;
%def     = {'ejemplo.xlsx','viento/peso/C(1..12)(L,T,V)/CT(1,2)(L,T,V)','S/N'};
def     = {'apoyo1.xlsx','','S'};
answer  = inputdlg(prompt,dlg_title,num_lines,def);

filename=answer{1};
hipotesis=answer{2};
EscalaDef=answer{3};

%filename='introduzca el nombre del archivo de datos(ejemplo.xlsx):';
%filename=input(filename,'s');

%hipotesis='Hípotesis a representar (viento/peso/C(1..12)(L,T,V)/CT(1,2)(L,T,V)
):';
%hipotesis=input(hipotesis,'s');

%EscalaDef='¿Desea aumentar efecto deformada?(S/N):';
%EscalaDef=input(EscalaDef,'s');

%NUDOS
datosnudos=xlsread(filename,1,'B:F');
COOR=datosnudos(:,1:3);%matriz con las coordenadas de los nudos
BarrasNudo=datosnudos(:,4);
NNT=length(COOR); % Número de nudos
%BARRAS
datosbarras=xlsread(filename,2,'B:F');
BARS=datosbarras(:,3:4);%matriz con los nudos inicial y final de cada barra

%DESPLAZAMIENTOS
switch hipotesis
    case{'viento'}
        desplazamientos=xlsread(filename,4,'C:C');
    case{'peso'}
        desplazamientos=xlsread(filename,4,'D:D');
    case{'CT1L'}
        desplazamientos=xlsread(filename,4,'E:E');
    case{'CT1T'}
        desplazamientos=xlsread(filename,4,'F:F');
    case{'CT1V'}
        desplazamientos=xlsread(filename,4,'G:G');
    case{'CT2L'}
        desplazamientos=xlsread(filename,4,'H:H');
    case{'CT2T'}
        desplazamientos=xlsread(filename,4,'I:I');
    case{'CT2V'}
        desplazamientos=xlsread(filename,4,'J:J');
    case{'C1L'}
        desplazamientos=xlsread(filename,4,'K:K');
    case{'C1T'}
        desplazamientos=xlsread(filename,4,'L:L');
    case{'C1V'}
        desplazamientos=xlsread(filename,4,'M:M');
```

```
    case{'C2L'}
        desplazamientos=xlsread(filename,4,'N:N');
    case{'C2T'}
        desplazamientos=xlsread(filename,4,'O:O');
    case{'C2V'}
        desplazamientos=xlsread(filename,4,'P:P');
    case{'C3L'}
        desplazamientos=xlsread(filename,4,'K:K');
    case{'C3T'}
        desplazamientos=xlsread(filename,4,'R:R');
    case{'C3V'}
        desplazamientos=xlsread(filename,4,'S:S');
    case{'C4L'}
        desplazamientos=xlsread(filename,4,'T:T');
    case{'C4T'}
        desplazamientos=xlsread(filename,4,'U:U');
    case{'C4V'}
        desplazamientos=xlsread(filename,4,'V:V');
    case{'C5L'}
        desplazamientos=xlsread(filename,4,'W:W');
    case{'C5T'}
        desplazamientos=xlsread(filename,4,'X:X');
    case{'C5V'}
        desplazamientos=xlsread(filename,4,'Y:Y');
    case{'C6L'}
        desplazamientos=xlsread(filename,4,'Z:Z');
    case{'C6T'}
        desplazamientos=xlsread(filename,4,'AA:AA');
    case{'C6V'}
        desplazamientos=xlsread(filename,4,'AB:AB');
    case{'C7L'}
        desplazamientos=xlsread(filename,4,'AC:AC');
    case{'C7T'}
        desplazamientos=xlsread(filename,4,'AD:AD');
    case{'C7V'}
        desplazamientos=xlsread(filename,4,'AE:AE');
    case{'C8L'}
        desplazamientos=xlsread(filename,4,'AF:AF');
    case{'C8T'}
        desplazamientos=xlsread(filename,4,'AG:AG');
    case{'C8V'}
        desplazamientos=xlsread(filename,4,'AH:AH');
    case{'C9L'}
        desplazamientos=xlsread(filename,4,'AI:AI');
    case{'C9T'}
        desplazamientos=xlsread(filename,4,'AJ:AJ');
    case{'C9V'}
        desplazamientos=xlsread(filename,4,'AK:AK');
    case{'C10L'}
        desplazamientos=xlsread(filename,4,'AL:AL');
    case{'C10T'}
        desplazamientos=xlsread(filename,4,'AM:AM');
    case{'C10V'}
        desplazamientos=xlsread(filename,4,'AN:AN');
    case{'C11L'}
        desplazamientos=xlsread(filename,4,'AO:AO');
    case{'C11T'}
        desplazamientos=xlsread(filename,4,'AP:AP');
    case{'C11V'}
        desplazamientos=xlsread(filename,4,'AQ:AQ');
    case{'C12L'}
```

```
        desplazamientos=xlsread(filename,4,'AR:AR');
    case{'C12T'}
        desplazamientos=xlsread(filename,4,'AS:AS');
    case{'C12V'}
        desplazamientos=xlsread(filename,4,'AT:AT');
end




if hipotesis ~=0
%Matriz con las coordenadas de la deformada
%(desplazamientos aplicados)
%NUDOS PERTENIECIENTES A LA ESTRUCTURA
NN=0;
VauxNN=zeros(NNT,1);
for i=1:NNT
    if BarrasNudo(i)~=0
        NN=NN+1;
        VauxNN(i,1)=NN;
    end
end

%escalado
if EscalaDef=='S'
    factdef=abs(max(desplazamientos));
    factdefaux=abs(min(desplazamientos));
    if factdefaux>factdef
        factdef=factdefaux;
    end
    factdef=1000/(factdef*1000);
else
    factdef=1;
end


COORDES=COOR;
aux=0;
for i=1:NNT
    if VauxNN(i)~=0
        COORDES(i,1)=COORDES(i,1)+desplazamientos((i-aux)*6-5)*1000*factdef;
        COORDES(i,2)=COORDES(i,2)+desplazamientos((i-aux)*6-3)*1000*factdef;
        COORDES(i,3)=COORDES(i,3)+desplazamientos((i+aux)*6-4)*1000*factdef;
    else
        aux=aux+1;
    end
end
end

%REPRESENTACIÓN DEL APOYO
pini=BARS(:,1);  pfin=BARS(:,2);
xini=COOR(pini,1); xfin=COOR(pfin,1);
yini=COOR(pini,2); yfin=COOR(pfin,2);
zini=COOR(pini,3); zfin=COOR(pfin,3);
%Matrices con las coordenadas inicial y final de cada barra
%(cada columna es una barra)
X=[xini';xfin']; Y=[yini';yfin']; Z=[zini';zfin'];
%Representación gráfica
plot3(X,Y,Z,'Color','k','linewidth',2);
```

```
hold on
if hipotesis ~=0
%REPRESENTACIÓN DE LA DEFORMADA
xinid=COORDES(pini,1); xfind=COORDES(pfin,1);
yinid=COORDES(pini,2); yfind=COORDES(pfin,2);
zinid=COORDES(pini,3); zfind=COORDES(pfin,3);
%Matrices con las coordenadas inicial y final de cada barra
%(cada columna es una barra)
XD=[xinid';xfind']; YD=[yinid';yfind']; ZD=[zinid';zfind'];
%Representación gráfica
plot3(XD,YD,ZD,'Color','r','LineStyle','--');
end
axis('image');
grid on
```

# 3 MÓDULO PARA LA REPRESENTACIÓN GRÁFICA 2

```
prompt = {'introduzca el nombre del archivo de datos:','Esfuerzos: ','¿Desea
aumentar efecto deformada?'};
dlg_title = 'Datos de entrada';
num_lines= 1;
%def     = {'ejemplo.xlsx','viento/peso/C(1..12)(L,T,V)/CT(1,2)(L,T,V)','S/N'};
def     = {'apoyo1.xlsx','valor/tipo','S'};
answer  = inputdlg(prompt,dlg_title,num_lines,def);

filename=answer{1};
Repres=answer{2};
EscalaDef=answer{3};



%NUDOS
datosnudos=xlsread(filename,1,'B:F');
COOR=datosnudos(:,1:3);%matriz con las coordenadas de los nudos
BarrasNudo=datosnudos(:,4);
NNT=length(COOR); % Número de nudos
%BARRAS
datosbarras=xlsread(filename,2,'B:F');
BARS=datosbarras(:,3:4);%matriz con los nudos inicial y final de cada barra
NB=length(BARS);
%DESPLAZAMIENTOS
desplazamientos=xlsread(filename,9,'C:C');


%Matriz con las coordenadas de la deformada
%(desplazamientos aplicados)
%NUDOS PERTENIECIENTES A LA ESTRUCTURA
NN=0;
VauxNN=zeros(NNT,1);
for i=1:NNT
    if BarrasNudo(i)~=0
        NN=NN+1;
        VauxNN(i,1)=NN;
    end
end

%escalado
if EscalaDef=='S'
    factdef=abs(max(desplazamientos));
    factdefaux=abs(min(desplazamientos));
    if factdefaux>factdef
        factdef=factdefaux;
    end
    factdef=1000/(factdef*1000);
else
    factdef=1;
end


COORDES=COOR;
aux=0;
for i=1:NNT
```

```
    if VauxNN(i)~=0
        COORDES(i,1)=COORDES(i,1)+desplazamientos((i-aux)*6-5)*1000*factdef;
        COORDES(i,2)=COORDES(i,2)+desplazamientos((i-aux)*6-3)*1000*factdef;
        COORDES(i,3)=COORDES(i,3)+desplazamientos((i+aux)*6-4)*1000*factdef;
    else
        aux=aux+1;
    end
end


%REPRESENTACIÓN DEL APOYO
pini=BARS(:,1);  pfin=BARS(:,2);



%REPRESENTACIÓN DE LA DEFORMADA
xinid=COORDES(pini,1); xfind=COORDES(pfin,1);
yinid=COORDES(pini,2); yfind=COORDES(pfin,2);
zinid=COORDES(pini,3); zfind=COORDES(pfin,3);
%Matrices con las coordenadas inicial y final de cada barra
%(cada columna es una barra)
XD=[xinid';xfind']; YD=[yinid';yfind']; ZD=[zinid';zfind'];

%Representación gráfica
axiles=xlsread(filename,9,'F:F'); %vector con los axiles
axilesabs=abs(axiles); %axiles en valor absoluto
total=sum(axilesabs); %sumatorio axiles absolutos
axilesabs=axilesabs/total; %porcentaje de cada axil absoluto respecto al total
axilabsaux=sort(axilesabs,'descend'); %porcentajes ordenados de mayor a menor

totalaux=0;%sumatorio para iteración para detectar valor de llegada al 60% 80%
100%
aux1=0; %corte en el 65%
aux2=0; %corte en el 90%



for i=1:NB
    totalaux=totalaux+axilabsaux(i);
    if aux1==0
        if totalaux >0.65
            aux1=axilabsaux(i);
        end
    end
    if aux2==0
        if totalaux >0.90
            aux2=axilabsaux(i);
        end
    end
end

switch Repres
case{'valor'}
for i=1:NB
if axilesabs(i) >= aux1
plot3(XD(:,i),YD(:,i),ZD(:,i),'Color','r','linewidth',2); %rojo
hold on
end
if axilesabs(i) < aux1
plot3(XD(:,i),YD(:,i),ZD(:,i),'Color','b','linewidth',2); %amarillo
```

```
hold on
end
if axilesabs(i) <= aux2
plot3(XD(:,i),YD(:,i),ZD(:,i),'Color','k','linewidth',2); %amarillo
hold on
end
end

axis('image');
grid on

case{'tipo'}


for i=1:NB
if axiles(i) > 0
plot3(XD(:,i),YD(:,i),ZD(:,i),'Color','r','linewidth',2); %traccion
hold on
end
if axiles(i) < 0
plot3(XD(:,i),YD(:,i),ZD(:,i),'Color','b','linewidth',2); %compresión
hold on
end
if axiles(i) == 0
plot3(XD(:,i),YD(:,i),ZD(:,i),'Color','k','linewidth',2);
hold on
end
end

axis('image');
grid on

end
```

UNIVERSIDAD DE SEVILLA

**ESCUELA TÉCNICA SUPERIOR DE INGENIERÍA**

# DOCUMENTO ANEXO 3. RESULTADOS NUMÉRICOS DE LOS APOYOS RESUELTOS

## HERRAMIENTA PARA EL CÁLCULO DE APOYOS EN LÍNEAS ELÉCTRICAS DE ALTA TENSIÓN

**TRABAJO PRESENTADO PARA OPTAR AL TÍTULO DE**

**MÁSTER DE SISTEMAS DE ENERGÍA ELÉCTRICA**

**POR**

**FRANCISCO JAVIER MATEOS MONTERO**

**SEVILLA, DICIEMBRE DE 2017**

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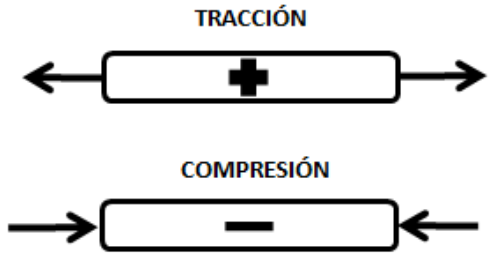
# 1 FUNDAMENTOS

A continuación se incluyen los resultados numéricos de los dos apoyos planteados en el proyecto.

Se presentan los desplazamientos y los giros sufridos por cada uno de los nudos, para cada una de los estados de cargas resueltas. Se parte de la hipótesis de que cualquier tipo de nudo perteneciente a la estructura tiene permitido el giro en los tres ejes. Los nudos empotrados tendrán impedidos los desplazamientos, mientras que los nudos articulados podrán sufrir desplazamientos en los tres sentidos.

Se calculan los esfuerzos resultantes de aplicar los distintos estados de carga. Para cada barra, encontramos el esfuerzo axil, los esfuerzos cortantes, el momento torsor y los momentos cortantes. Debido a la gran cantidad de resultados, tan solo se presentan en este anexo, de forma separada, el esfuerzo axil de cada barra. Los apoyos son siempre diseñados buscando el comportamiento cuasi-isostático de la estructura, con el fin de no someter a las barras a flexiones ni a momentos importantes. Por ello, en el diseño de apoyos, la importancia radica en los esfuerzo axiles de compresión y tracción que se producen, los cuales se transmiten desde el punto donde se producen hasta las cimentaciones.




Esfuerzo axil a tracción: La barra se encuentra sometida a un alargamiento.

Esfuerzo axil a compresión: La barra se encuentra sometida a una contracción.

Por último se presentan las reacciones que se producen en los nudos de la base del apoyo, los cuales se encuentran empotrados en la cimentación. Al tener impedidos los desplazamientos, aparecen reacciones que se oponen a las fuerzas aplicadas en la estructura (el sumatorio de las reacciones es de igual magnitud y sentido opuesto a las cargas aplicadas).

# 2 APOYO 1

## 2.1 DESPLAZAMIENTOS

| DESPLAZAMIENTOS (metros) | | VIENTO | PESO | CT1 | | | CT2 | | |
|---|---|---|---|---|---|---|---|---|---|
| Nudo | Desplazamiento | | | L | T | V | L | T | V |
| 1 | D Longitudinal | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 1 | D Vertical | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 1 | D transversal | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 1 | G Longitudinal | 3,79301E-05 | 1,42809E-06 | -5,2115E-10 | 1,31638E-09 | 2,46237E-11 | 7,10629E-10 | 1,31619E-09 | 7,4197E-12 |
| 1 | G Vertical | 0,000164226 | -3,16127E-05 | 5,7616E-09 | -1,83294E-08 | -4,67269E-10 | -3,53733E-09 | -1,83266E-08 | 9,35406E-10 |
| 1 | G transversal | -1,20007E-05 | 2,26587E-06 | -2,18372E-10 | 1,20945E-09 | 2,70713E-11 | 1,40678E-09 | 1,20926E-09 | -7,08087E-11 |
| 2 | D Longitudinal | -5,4515E-07 | 2,793E-07 | 2,75515E-07 | -6,26412E-11 | -8,44074E-12 | 2,68851E-07 | -6,26433E-11 | -9,13178E-12 |
| 2 | D Vertical | -0,000114929 | -5,96124E-05 | -3,75651E-08 | -3,75613E-08 | -4,03585E-09 | -3,75584E-08 | -3,75613E-08 | -3,30383E-09 |
| 2 | D transversal | 0,001368416 | -7,07394E-07 | 4,80185E-10 | 2,7735E-07 | 1,64946E-11 | 7,25679E-09 | 2,7735E-07 | -3,26759E-09 |
| 2 | G Longitudinal | 0,000225186 | -2,35766E-07 | -3,41612E-09 | 6,96436E-08 | -2,053E-10 | -2,24911E-09 | 6,96435E-08 | -1,41234E-09 |
| 2 | G Vertical | 0,000169236 | -1,82537E-05 | 5,96101E-09 | -9,57675E-09 | -2,10227E-11 | -2,84616E-09 | -9,57398E-09 | 1,25131E-09 |
| 2 | G transversal | -4,7462E-07 | 3,5133E-06 | -6,70456E-08 | 3,49068E-09 | 1,99959E-10 | -6,52965E-08 | 3,49055E-09 | 7,42595E-11 |
| 3 | D Longitudinal | 7,41186E-07 | -1,07421E-07 | 8,15408E-07 | 2,08171E-09 | 4,03346E-10 | 8,02883E-07 | 2,0817E-09 | 2,84606E-10 |
| 3 | D Vertical | -0,000152977 | -7,45965E-05 | -6,9248E-08 | -6,92714E-08 | -7,21095E-09 | -6,88915E-08 | -6,92714E-08 | -5,28226E-09 |
| 3 | D transversal | 0,002744142 | 9,93826E-07 | 2,03959E-09 | 8,17205E-07 | 4,00638E-10 | 1,35393E-08 | 8,17205E-07 | -1,48536E-08 |
| 3 | G Longitudinal | 0,000283892 | 3,06211E-06 | 1,12152E-09 | 1,30711E-07 | 3,31394E-10 | 2,54118E-09 | 1,30712E-07 | -2,461E-09 |
| 3 | G Vertical | 4,42272E-05 | -2,03836E-05 | -3,74878E-08 | -3,41658E-10 | -6,92119E-09 | 8,11033E-08 | -2,6014E-10 | 2,05656E-08 |
| 3 | G transversal | -1,17705E-06 | 1,05135E-06 | -1,30241E-07 | -1,80689E-09 | -3,91042E-10 | -1,2854E-07 | -1,80778E-09 | -6,23833E-10 |
| 4 | D Longitudinal | -2,93648E-07 | 5,36185E-07 | 6,83884E-07 | -1,54969E-12 | -1,70174E-12 | 7,26104E-07 | -1,55456E-12 | -6,11767E-11 |
| 4 | D Vertical | 0,000592945 | -8,44394E-05 | -2,25854E-11 | 2,68414E-07 | -7,53342E-09 | -4,30784E-10 | 2,68414E-07 | -1,44834E-08 |
| 4 | D transversal | 0,002460086 | 1,25079E-06 | 1,58216E-12 | 6,87988E-07 | -5,03672E-11 | 2,72674E-11 | 6,87988E-07 | -1,21053E-08 |
| 4 | G Longitudinal | 0,000284998 | -6,6183E-06 | -1,54696E-11 | 1,31402E-07 | -6,86484E-10 | -2,79627E-10 | 1,31402E-07 | -4,09771E-09 |
| 4 | G Vertical | -4,42064E-07 | -2,59657E-07 | 2,3286E-09 | -7,70029E-10 | 6,62835E-11 | -1,79765E-08 | -7,70025E-10 | 1,83601E-10 |
| 4 | G transversal | -1,02624E-06 | 9,28435E-07 | -1,20067E-07 | -2,25257E-10 | 7,91326E-12 | -1,19034E-07 | -2,25264E-10 | -1,58632E-10 |
| 5 | D Longitudinal | -2,9356E-07 | -5,39379E-07 | 6,8392E-07 | -4,43688E-13 | 1,67866E-12 | 6,41701E-07 | -4,24581E-13 | -5,81132E-11 |
| 5 | D Vertical | -0,000592945 | -8,40672E-05 | 1,10737E-11 | -2,68416E-07 | -7,53336E-09 | -3,97323E-10 | -2,68416E-07 | -5,8206E-10 |
| 5 | D transversal | 0,002460086 | -1,89637E-06 | 4,6656E-13 | 6,87988E-07 | 5,03737E-11 | -2,52391E-11 | 6,87988E-07 | -1,20044E-08 |
| 5 | G Longitudinal | 0,000284998 | 6,43558E-06 | -7,92371E-12 | 1,31404E-07 | 6,86441E-10 | 2,56363E-10 | 1,31404E-07 | -2,72574E-09 |
| 5 | G Vertical | 4,4217E-07 | -2,65948E-07 | -2,28649E-09 | 7,71167E-10 | 6,62627E-11 | -2,25913E-08 | 7,71182E-10 | -5,13306E-11 |
| 5 | G transversal | -1,02603E-06 | -9,3739E-07 | -1,19969E-07 | -2,22654E-10 | -8,00106E-12 | -1,21002E-07 | -2,22601E-10 | -1,75296E-10 |
| 6 | D Longitudinal | -7,5617E-08 | 3,51731E-07 | 4,51687E-07 | -1,42497E-11 | -9,41256E-13 | 4,86443E-07 | -1,42498E-11 | -1,18562E-12 |
| 6 | D Vertical | 0,000583288 | -8,09796E-05 | 1,61989E-12 | 2,30934E-07 | -5,98271E-09 | -1,94402E-12 | 2,30934E-07 | -1,11699E-08 |
| 6 | D transversal | 0,001892894 | 1,15075E-06 | -1,51406E-12 | 4,56927E-07 | -6,65188E-11 | -2,60208E-12 | 4,56927E-07 | -6,84982E-09 |
| 6 | G Longitudinal | 0,000285828 | -7,8292E-06 | 2,16143E-12 | 1,14837E-07 | -4,98903E-10 | 1,83065E-12 | 1,14837E-07 | -3,08324E-09 |
| 6 | G Vertical | -1,9398E-06 | 9,84927E-08 | 3,18103E-09 | -1,41836E-09 | 8,75216E-11 | -1,39458E-08 | -1,41836E-09 | 1,37898E-10 |
| 6 | G transversal | -7,84022E-07 | 1,02012E-06 | -9,78289E-08 | -4,76614E-10 | 2,20674E-11 | -9,57605E-08 | -4,76618E-10 | 3,81235E-11 |
| 7 | D Longitudinal | -7,562E-08 | -3,51745E-07 | 4,51684E-07 | -1,42527E-11 | 9,4077E-13 | 4,16927E-07 | -1,42525E-11 | 6,91687E-13 |
| 7 | D Vertical | -0,000583288 | -8,07018E-05 | -1,86865E-12 | -2,30934E-07 | -5,98271E-09 | -5,43611E-12 | -2,30934E-07 | -7,95446E-10 |
| 7 | D transversal | 0,001892894 | -1,51403E-06 | -1,52591E-12 | 4,56927E-07 | 6,65184E-11 | -4,37954E-13 | 4,56927E-07 | -6,71678E-09 |

APOYO 1

| DESPLAZAMIENTOS (metros) | | VIENTO | PESO | CT1 | | | CT2 | | |
|---|---|---|---|---|---|---|---|---|---|
| Nudo | Desplazamiento | | | L | T | V | L | T | V |
| 7 | G Longitudinal | 0,000285828 | 7,69079E-06 | 2,33219E-12 | 1,14838E-07 | 4,98897E-10 | 2,66561E-12 | 1,14838E-07 | -2,08557E-09 |
| 7 | G Vertical | 1,9398E-06 | 9,5796E-08 | -3,18467E-09 | 1,41832E-09 | 8,75235E-11 | -2,03115E-08 | 1,41831E-09 | 3,71626E-11 |
| 7 | G transversal | -7,83999E-07 | -1,01927E-06 | -9,78196E-08 | -4,76271E-10 | -2,20747E-11 | -9,98878E-08 | -4,76265E-10 | -6,12848E-12 |
| 8 | D Longitudinal | -4,85055E-08 | 1,61027E-07 | 2,72444E-07 | 1,03707E-12 | -9,2359E-13 | 2,9922E-07 | 1,03756E-12 | -9,16422E-13 |
| 8 | D Vertical | 0,000519013 | -7,47946E-05 | 1,25743E-12 | 1,72883E-07 | -4,79462E-09 | 3,1726E-12 | 1,72883E-07 | -8,11384E-09 |
| 8 | D transversal | 0,001369146 | 1,43469E-06 | -6,25281E-13 | 2,7738E-07 | -2,03355E-11 | -1,79266E-12 | 2,7738E-07 | -3,30436E-09 |
| 8 | G Longitudinal | 0,000261746 | -9,63788E-06 | -9,70662E-13 | 8,79751E-08 | -5,37699E-10 | 2,30423E-12 | 8,79751E-08 | -2,22453E-09 |
| 8 | G Vertical | 1,19E-07 | -3,88371E-07 | 3,54385E-09 | 5,16822E-11 | -7,28555E-12 | -9,83613E-09 | 5,16805E-11 | -6,60091E-12 |
| 8 | G transversal | -6,51113E-08 | 8,22801E-07 | -7,3171E-08 | 2,52219E-11 | -5,62627E-12 | -7,10303E-08 | 2,52214E-11 | -5,36024E-12 |
| 9 | D Longitudinal | -4,85106E-08 | -1,61026E-07 | 2,72442E-07 | 9,85071E-13 | 9,23412E-13 | 2,45666E-07 | 9,84611E-13 | 9,43347E-13 |
| 9 | D Vertical | -0,000519013 | -7,46169E-05 | -1,24346E-12 | -1,72883E-07 | -4,79464E-09 | 6,72172E-13 | -1,72883E-07 | -1,47552E-09 |
| 9 | D transversal | 0,001369146 | -1,61057E-06 | -6,2114E-13 | 2,7738E-07 | 2,03289E-11 | 5,46495E-13 | 2,7738E-07 | -3,26374E-09 |
| 9 | G Longitudinal | 0,000261746 | 9,54754E-06 | -9,79009E-13 | 8,7975E-08 | 5,37704E-10 | -4,25414E-12 | 8,7975E-08 | -1,14909E-09 |
| 9 | G Vertical | -1,19005E-07 | -3,88406E-07 | -3,54686E-09 | -5,18018E-11 | -7,28271E-12 | -1,69268E-08 | -5,18048E-11 | -7,92096E-12 |
| 9 | G transversal | -6,51129E-08 | -8,22789E-07 | -7,31719E-08 | 2,52457E-11 | 5,6235E-12 | -7,53127E-08 | 2,52469E-11 | 5,87394E-12 |
| 10 | D Longitudinal | -9,20301E-06 | -1,81214E-07 | 1,41333E-06 | -2,76778E-11 | 5,81783E-12 | 1,37606E-06 | -2,86231E-11 | -6,8766E-09 |
| 10 | D Vertical | -3,11162E-09 | -7,83415E-05 | -5,81783E-12 | -2,51721E-10 | -1,68972E-08 | 6,93145E-09 | -2,53669E-10 | -1,51525E-08 |
| 10 | D transversal | 0,003560575 | -1,5957E-06 | -2,76778E-11 | 1,41407E-06 | 2,51721E-10 | -3,37384E-11 | 1,414E-06 | -6,23886E-08 |
| 10 | G Longitudinal | 0,000277557 | -3,26693E-06 | 3,46388E-08 | 3,4635E-07 | 4,65618E-09 | 3,46872E-08 | 3,4649E-07 | -1,34629E-07 |
| 10 | G Vertical | 1,84131E-08 | 1,31781E-05 | 1,67126E-07 | 3,8044E-11 | 3,47308E-08 | -1,6113E-06 | 3,57917E-11 | 3,47519E-08 |
| 10 | G transversal | 1,14227E-05 | -9,49074E-09 | -3,85185E-07 | 3,49271E-08 | -2,69495E-12 | -2,84E-07 | 3,49276E-08 | -5,88036E-11 |
| 11 | D Longitudinal | -9,20563E-06 | -2,81172E-06 | 1,37606E-06 | -3,37384E-11 | -6,93145E-09 | 1,70575E-06 | -3,42293E-11 | -1,38169E-08 |
| 11 | D Vertical | 5,54487E-05 | -7,89479E-05 | 6,8766E-09 | 6,23886E-08 | -1,51525E-08 | 1,38169E-08 | 6,28299E-08 | -4,14576E-08 |
| 11 | D transversal | 0,003560615 | -1,60372E-06 | -2,86231E-11 | 1,414E-06 | 2,53669E-10 | -3,42293E-11 | 1,41637E-06 | -6,28299E-08 |
| 11 | G Longitudinal | 0,000277632 | -3,17694E-06 | 3,44895E-08 | 3,29422E-07 | 6,68054E-09 | 3,44252E-08 | 3,3401E-07 | -1,34104E-07 |
| 11 | G Vertical | 6,80719E-09 | 1,31512E-05 | 1,90727E-07 | 2,99355E-11 | 3,46733E-08 | -1,65628E-06 | 2,76653E-11 | 3,46778E-08 |
| 11 | G transversal | 1,14128E-05 | -3,97379E-08 | -3,1991E-07 | 3,48606E-08 | -5,44327E-11 | -4,35011E-07 | 3,48611E-08 | -1,00355E-10 |
| 12 | D Longitudinal | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 12 | D Vertical | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 12 | D transversal | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 12 | G Longitudinal | 3,79181E-05 | -1,40507E-06 | 6,12306E-10 | 1,28545E-09 | -1,16011E-11 | 1,84426E-09 | 1,28555E-09 | -3,07263E-11 |
| 12 | G Vertical | 0,000164397 | 3,13642E-05 | -7,05683E-09 | -1,78897E-08 | 2,82216E-10 | -1,63582E-08 | -1,7891E-08 | 1,7122E-09 |
| 12 | G transversal | 1,20127E-05 | 2,25094E-06 | -3,0955E-10 | -1,17848E-09 | 1,40421E-11 | -1,93488E-09 | -1,17858E-09 | 1,13846E-10 |
| 13 | D Longitudinal | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 13 | D Vertical | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 13 | D transversal | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 13 | G Longitudinal | 3,793E-05 | -1,42907E-06 | -5,22073E-10 | 1,32105E-09 | -2,44131E-11 | -1,75388E-09 | 1,32115E-09 | -4,41106E-11 |
| 13 | G Vertical | -0,000164227 | -3,16887E-05 | -5,77428E-09 | 1,83957E-08 | -4,64275E-10 | -1,50736E-08 | 1,83971E-08 | -1,9024E-09 |
| 13 | G transversal | -1,20008E-05 | -2,27117E-06 | -2,19193E-10 | 1,21413E-09 | -2,68604E-11 | -1,84438E-09 | 1,21422E-09 | -1,27239E-10 |
| 14 | D Longitudinal | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 14 | D Vertical | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 14 | D transversal | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 14 | G Longitudinal | 3,79181E-05 | 1,40413E-06 | 6,11205E-10 | 1,2807E-09 | 1,18203E-11 | -6,20731E-10 | 1,28051E-09 | -4,7778E-12 |
| 14 | G Vertical | -0,000164396 | 3,12888E-05 | 7,04163E-09 | 1,78222E-08 | 2,85332E-10 | -2,25954E-09 | 1,78194E-08 | -1,10874E-09 |

APOYO 1

| DESPLAZAMIENTOS (metros) | | VIENTO | PESO | CT1 | | | CT2 | | |
|---|---|---|---|---|---|---|---|---|---|
| Nudo | Desplazamiento | | | L | T | V | L | T | V |
| 14 | G transversal | 1,20127E-05 | -2,24568E-06 | -3,08551E-10 | -1,17374E-09 | -1,42617E-11 | 1,31676E-09 | -1,17354E-09 | 8,3013E-11 |
| 15 | D Longitudinal | 5,45198E-07 | 2,84077E-07 | 2,75512E-07 | 6,41562E-11 | -9,00356E-12 | 2,82177E-07 | 6,41546E-11 | -8,30193E-12 |
| 15 | D Vertical | 0,000114928 | -5,96629E-05 | -3,75653E-08 | 3,75615E-08 | -4,03587E-09 | -3,7572E-08 | 3,75615E-08 | -4,76789E-09 |
| 15 | D transversal | 0,001368449 | 5,30112E-07 | -4,81241E-10 | 2,7735E-07 | -1,68645E-11 | 6,29543E-09 | 2,7735E-07 | -3,30095E-09 |
| 15 | G Longitudinal | 0,000225181 | 2,39078E-07 | 3,47544E-09 | 6,96241E-08 | 2,13442E-10 | 4,64066E-09 | 6,96241E-08 | -9,952E-10 |
| 15 | G Vertical | 0,000169427 | 1,79971E-05 | -7,26343E-09 | -9,13287E-09 | -1,65466E-10 | -1,6073E-08 | -9,13427E-09 | 1,13431E-09 |
| 15 | G transversal | 4,85612E-07 | 3,47399E-06 | -6,71053E-08 | -3,46813E-09 | 1,90745E-10 | -6,88557E-08 | -3,4682E-09 | 3,17676E-10 |
| 16 | D Longitudinal | -5,45155E-07 | -2,79338E-07 | 2,75514E-07 | -6,26151E-11 | 8,44339E-12 | 2,82178E-07 | -6,26143E-11 | 7,7292E-12 |
| 16 | D Vertical | 0,000114929 | -5,96516E-05 | 3,75654E-08 | 3,75614E-08 | -4,03585E-09 | 3,75721E-08 | 3,75614E-08 | -4,76787E-09 |
| 16 | D transversal | 0,001368416 | 5,31519E-07 | 4,78918E-10 | 2,7735E-07 | -1,65002E-11 | -6,29768E-09 | 2,7735E-07 | -3,30054E-09 |
| 16 | G Longitudinal | 0,000225186 | 1,71089E-07 | -3,41778E-09 | 6,96465E-08 | 2,05434E-10 | -4,5848E-09 | 6,96466E-08 | -1,00315E-09 |
| 16 | G Vertical | -0,000169237 | -1,83227E-05 | -5,97384E-09 | 9,64359E-09 | -1,80131E-11 | -1,47814E-08 | 9,64497E-09 | -1,32606E-09 |
| 16 | G transversal | -4,74679E-07 | -3,52007E-06 | -6,70453E-08 | 3,49383E-09 | -1,99818E-10 | -6,87945E-08 | 3,4939E-09 | -3,27198E-10 |
| 17 | D Longitudinal | 5,452E-07 | -2,84041E-07 | 2,75513E-07 | 6,42549E-11 | 9,0005E-12 | 2,68848E-07 | 6,42579E-11 | 9,6586E-12 |
| 17 | D Vertical | -0,000114928 | -5,96237E-05 | 3,75651E-08 | -3,75615E-08 | -4,03587E-09 | 3,75584E-08 | -3,75615E-08 | -3,30385E-09 |
| 17 | D transversal | 0,001368449 | -7,05989E-07 | -4,82503E-10 | 2,7735E-07 | 1,6859E-11 | -7,25918E-09 | 2,7735E-07 | -3,26725E-09 |
| 17 | G Longitudinal | 0,000225181 | -3,03752E-07 | 3,47371E-09 | 6,96211E-08 | -2,13303E-10 | 2,30849E-09 | 6,9621E-08 | -1,42037E-09 |
| 17 | G Vertical | -0,000169425 | 1,79287E-05 | 7,24804E-09 | 9,06494E-09 | -1,62334E-10 | -1,56134E-09 | 9,06214E-09 | -1,42593E-09 |
| 17 | G transversal | 4,85552E-07 | -3,46724E-06 | -6,71055E-08 | -3,46495E-09 | -1,90892E-10 | -6,53551E-08 | -3,46482E-09 | -6,56562E-11 |
| 18 | D Longitudinal | -6,36337E-07 | 1,5281E-07 | 8,15459E-07 | -2,06806E-09 | 3,99769E-10 | 8,28405E-07 | -2,06804E-09 | 5,55595E-10 |
| 18 | D Vertical | 0,000152945 | -7,46971E-05 | -6,9276E-08 | 6,92731E-08 | -7,21058E-09 | -6,96974E-08 | 6,92731E-08 | -9,14936E-09 |
| 18 | D transversal | 0,002743478 | -1,50002E-06 | -2,09405E-09 | 8,17208E-07 | -4,02506E-10 | 8,82291E-09 | 8,17208E-07 | -1,5829E-08 |
| 18 | G Longitudinal | 0,000282746 | -3,0269E-06 | -1,79338E-09 | 1,30255E-07 | -3,89887E-10 | -1,22418E-09 | 1,30255E-07 | -3,41254E-09 |
| 18 | G Vertical | 5,59686E-05 | 9,24719E-06 | -1,62969E-09 | 3,57137E-08 | -6,88919E-09 | 1,16591E-07 | 3,5672E-08 | 2,09891E-08 |
| 18 | G transversal | 7,91872E-07 | 1,09155E-06 | -1,3068E-07 | 1,1224E-09 | -3,3195E-10 | -1,32984E-07 | 1,12206E-09 | -1,33581E-10 |
| 19 | D Longitudinal | 7,41343E-07 | 1,01061E-07 | 8,15468E-07 | 2,08303E-09 | -4,03345E-10 | 8,27992E-07 | 2,08304E-09 | -5,22293E-10 |
| 19 | D Vertical | 0,000152977 | -7,46998E-05 | 6,92777E-08 | 6,92719E-08 | -7,21095E-09 | 6,96342E-08 | 6,92719E-08 | -9,13974E-09 |
| 19 | D transversal | 0,002744142 | -1,81074E-06 | 2,07044E-09 | 8,17205E-07 | -4,00634E-10 | -9,42995E-09 | 8,17205E-07 | -1,56545E-08 |
| 19 | G Longitudinal | 0,000283893 | -3,2111E-06 | 1,12111E-09 | 1,30682E-07 | -3,32425E-10 | -3,22318E-10 | 1,30682E-07 | -3,10742E-09 |
| 19 | G Vertical | -4,42661E-05 | -2,1883E-05 | 3,66135E-08 | 2,30519E-09 | -6,83455E-09 | 1,55177E-07 | 2,34574E-09 | -3,53718E-08 |
| 19 | G transversal | -1,17783E-06 | -1,06425E-06 | -1,30268E-07 | -1,78832E-09 | 3,91724E-10 | -1,31952E-07 | -1,78805E-09 | 1,46735E-10 |
| 20 | D Longitudinal | -6,36457E-07 | -1,44444E-07 | 8,15407E-07 | -2,07024E-09 | -3,9975E-10 | 8,0246E-07 | -2,07028E-09 | -2,43134E-10 |
| 20 | D Vertical | -0,000152945 | -7,45933E-05 | 6,92462E-08 | -6,92738E-08 | -7,21058E-09 | 6,88248E-08 | -6,92738E-08 | -5,2716E-09 |
| 20 | D transversal | 0,002743478 | 6,73841E-07 | -2,05363E-09 | 8,1721E-07 | 4,02439E-10 | -1,29699E-08 | 8,1721E-07 | -1,50251E-08 |
| 20 | G Longitudinal | 0,000282745 | 2,86448E-06 | -1,77809E-09 | 1,30287E-07 | 3,88588E-10 | -2,32294E-09 | 1,30288E-07 | -2,65266E-09 |
| 20 | G Vertical | -5,59321E-05 | 7,79296E-06 | 6,70259E-10 | -3,77511E-08 | -6,79336E-09 | 1,18912E-07 | -3,7835E-08 | -3,3588E-08 |
| 20 | G transversal | 7,91284E-07 | -1,0813E-06 | -1,30666E-07 | 1,14501E-09 | 3,31107E-10 | -1,28345E-07 | 1,14596E-09 | 5,15872E-10 |
| 21 | D Longitudinal | -2,20642E-06 | 4,59469E-07 | 4,67386E-10 | -4,16381E-10 | 2,94907E-11 | 1,03386E-09 | -4,16381E-10 | 3,43122E-11 |
| 21 | D Vertical | 1,39013E-05 | -4,76592E-06 | -2,98023E-09 | 2,98364E-09 | -2,11376E-10 | -2,9616E-09 | 2,98364E-09 | -2,49661E-10 |
| 21 | D transversal | 3,31035E-05 | -8,4732E-08 | -4,58141E-10 | 6,79197E-10 | -3,23707E-11 | -9,9212E-11 | 6,79197E-10 | 1,01797E-11 |
| 21 | G Longitudinal | 4,2851E-05 | -2,61081E-06 | -9,15562E-10 | 3,4364E-09 | -1,19321E-10 | 3,07488E-10 | 3,4365E-09 | -1,66823E-10 |
| 21 | G Vertical | 0,000164477 | 3,13306E-05 | -7,03873E-09 | -1,77902E-08 | 2,78305E-10 | -1,63541E-08 | -1,77916E-08 | 1,7069E-09 |
| 21 | G transversal | 1,58084E-05 | 1,52192E-06 | -2,09448E-09 | -4,39842E-10 | -3,81267E-11 | -3,5297E-09 | -4,39939E-10 | 5,29584E-11 |
| 22 | D Longitudinal | -7,18995E-06 | 1,53576E-06 | 2,68616E-09 | -1,37232E-09 | 9,73287E-11 | 3,64251E-09 | -1,37232E-09 | 1,13341E-10 |

APOYO 1

| DESPLAZAMIENTOS (metros) | | VIENTO | PESO | CT1 | | | CT2 | | |
|---|---|---|---|---|---|---|---|---|---|
| Nudo | Desplazamiento | | | L | T | V | L | T | V |
| 22 | D Vertical | 2,7187E-05 | -9,18387E-06 | -5,77726E-09 | 5,78591E-09 | -4,1504E-10 | -5,7419E-09 | 5,78591E-09 | -4,89307E-10 |
| 22 | D transversal | 7,15545E-05 | -9,98641E-07 | -1,83517E-09 | 3,29975E-09 | -1,29756E-10 | -1,12216E-09 | 3,29975E-09 | -6,9961E-11 |
| 22 | G Longitudinal | 5,36737E-05 | -3,05111E-06 | -7,60584E-10 | 6,27125E-09 | -1,07746E-10 | 4,66854E-10 | 6,27134E-09 | -1,9117E-10 |
| 22 | G Vertical | 0,000165078 | 3,1365E-05 | -6,81478E-09 | -1,76222E-08 | 2,8125E-10 | -1,61504E-08 | -1,76235E-08 | 1,70775E-09 |
| 22 | G transversal | 1,78245E-05 | 6,61021E-07 | -5,1251E-09 | -3,08112E-11 | -6,64536E-11 | -6,29065E-09 | -3,09093E-11 | 1,97465E-11 |
| 23 | D Longitudinal | -1,04215E-05 | 2,56729E-06 | 6,62513E-09 | -2,0801E-09 | 1,46944E-10 | 7,86341E-09 | -2,0801E-09 | 1,72798E-10 |
| 23 | D Vertical | 3,87293E-05 | -1,33999E-05 | -8,54607E-09 | 8,5093E-09 | -6,2696E-10 | -8,52239E-09 | 8,5093E-09 | -7,39142E-10 |
| 23 | D transversal | 0,000116093 | -1,62283E-06 | -2,07056E-09 | 7,2439E-09 | -1,45921E-10 | -1,00547E-09 | 7,2439E-09 | -8,40628E-11 |
| 23 | G Longitudinal | 5,9807E-05 | -2,93418E-06 | 1,24251E-09 | 8,4624E-09 | 3,27563E-11 | 2,48267E-09 | 8,4625E-09 | -7,78655E-11 |
| 23 | G Vertical | 0,000164023 | 3,10536E-05 | -7,19579E-09 | -1,76423E-08 | 2,62859E-10 | -1,65192E-08 | -1,76437E-08 | 1,68945E-09 |
| 23 | G transversal | 1,21375E-05 | 2,09893E-06 | -7,84567E-09 | -1,06034E-09 | 4,93688E-12 | -8,96128E-09 | -1,06044E-09 | 1,02705E-10 |
| 24 | D Longitudinal | -1,00088E-05 | 2,30579E-06 | 1,23103E-08 | -2,07423E-09 | 1,46833E-10 | 1,38493E-08 | -2,07423E-09 | 1,73346E-10 |
| 24 | D Vertical | 5,04332E-05 | -1,74883E-05 | -1,12337E-08 | 1,11801E-08 | -8,45796E-10 | -1,11999E-08 | 1,11801E-08 | -9,95001E-10 |
| 24 | D transversal | 0,000163881 | -2,39525E-06 | -1,79693E-09 | 1,29267E-08 | -1,27186E-10 | -3,67987E-10 | 1,29267E-08 | -8,72331E-11 |
| 24 | G Longitudinal | 6,99549E-05 | -2,28477E-06 | 1,10577E-09 | 1,15116E-08 | 2,48316E-11 | 2,33359E-09 | 1,15117E-08 | -1,27338E-10 |
| 24 | G Vertical | 0,000164139 | 3,02419E-05 | -7,31121E-09 | -1,70841E-08 | 2,27261E-10 | -1,66102E-08 | -1,70855E-08 | 1,64649E-09 |
| 24 | G transversal | 7,15306E-06 | 3,342E-06 | -1,06669E-08 | -1,9286E-09 | 6,70997E-11 | -1,18202E-08 | -1,92869E-09 | 1,7442E-10 |
| 25 | D Longitudinal | -8,05548E-06 | 1,9119E-06 | 1,97232E-08 | -1,8009E-09 | 1,2765E-10 | 2,15745E-08 | -1,8009E-09 | 1,51991E-10 |
| 25 | D Vertical | 6,03339E-05 | -2,14382E-05 | -1,37778E-08 | 1,37396E-08 | -1,06443E-09 | -1,37565E-08 | 1,37396E-08 | -1,25237E-09 |
| 25 | D transversal | 0,000219799 | -2,26543E-06 | -1,81363E-09 | 2,04683E-08 | -1,28916E-10 | -2,96583E-11 | 2,04683E-08 | -1,36564E-10 |
| 25 | G Longitudinal | 7,9242E-05 | -1,10577E-06 | 7,10758E-10 | 1,41365E-08 | -1,17881E-12 | 1,93627E-09 | 1,41366E-08 | -1,88122E-10 |
| 25 | G Vertical | 0,000163814 | 2,95684E-05 | -7,45142E-09 | -1,66228E-08 | 1,95192E-10 | -1,67286E-08 | -1,66242E-08 | 1,60825E-09 |
| 25 | G transversal | 7,57841E-06 | 3,15215E-06 | -1,33943E-08 | -1,84361E-09 | 6,10426E-11 | -1,45378E-08 | -1,84371E-09 | 1,67771E-10 |
| 26 | D Longitudinal | -7,51089E-06 | 1,69106E-06 | 2,88467E-08 | -1,82189E-09 | 1,28487E-10 | 3,09884E-08 | -1,82189E-09 | 1,55091E-10 |
| 26 | D Vertical | 6,97433E-05 | -2,51611E-05 | -1,61796E-08 | 1,61561E-08 | -1,28074E-09 | -1,6148E-08 | 1,61561E-08 | -1,50578E-09 |
| 26 | D transversal | 0,00027948 | -1,96614E-06 | -1,9711E-09 | 2,9485E-08 | -1,39529E-10 | 1,74168E-10 | 2,9485E-08 | -2,11394E-10 |
| 26 | G Longitudinal | 8,86834E-05 | -1,29505E-06 | 4,96752E-10 | 1,64645E-08 | -1,56282E-11 | 1,76603E-09 | 1,64646E-08 | -2,2796E-10 |
| 26 | G Vertical | 0,000163864 | 2,89237E-05 | -7,89504E-09 | -1,64214E-08 | 1,6233E-10 | -1,71459E-08 | -1,64228E-08 | 1,57293E-09 |
| 26 | G transversal | 1,12915E-05 | 2,20257E-06 | -1,62589E-08 | -1,10417E-09 | 7,09189E-12 | -1,73898E-08 | -1,10426E-09 | 1,04695E-10 |
| 27 | D Longitudinal | -9,93806E-06 | 2,50503E-06 | 4,05758E-08 | -2,47912E-09 | 1,75387E-10 | 4,30364E-08 | -2,47912E-09 | 2,12525E-10 |
| 27 | D Vertical | 8,01089E-05 | -2,94939E-05 | -1,91964E-08 | 1,91922E-08 | -1,54922E-09 | -1,91886E-08 | 1,91922E-08 | -1,82506E-09 |
| 27 | D transversal | 0,000351855 | -2,12018E-06 | -2,48953E-09 | 4,08375E-08 | -1,75991E-10 | 7,67336E-11 | 4,08375E-08 | -3,39092E-10 |
| 27 | G Longitudinal | 0,000109458 | -2,54226E-06 | 2,09998E-11 | 2,11296E-08 | -4,66425E-11 | 1,38832E-09 | 2,11297E-08 | -3,12205E-10 |
| 27 | G Vertical | 0,000167167 | 2,83017E-05 | -8,01017E-09 | -1,57868E-08 | 1,23071E-10 | -1,72056E-08 | -1,57882E-08 | 1,52725E-09 |
| 27 | G transversal | 1,45377E-05 | 1,34964E-06 | -2,11536E-08 | -2,79762E-10 | -5,07649E-11 | -2,23549E-08 | -2,7986E-10 | 3,31809E-11 |
| 28 | D Longitudinal | -1,16539E-05 | 2,67216E-06 | 5,4812E-08 | -3,04033E-09 | 2,15354E-10 | 5,76474E-08 | -3,04033E-09 | 2,6315E-10 |
| 28 | D Vertical | 9,00196E-05 | -3,36061E-05 | -2,2043E-08 | 2,20476E-08 | -1,81857E-09 | -2,20204E-08 | 2,20476E-08 | -2,14278E-09 |
| 28 | D transversal | 0,000431351 | -2,83379E-06 | -2,95016E-09 | 5,48795E-08 | -2,08602E-10 | 7,76601E-11 | 5,48795E-08 | -4,97817E-10 |
| 28 | G Longitudinal | 0,000121403 | -1,78591E-06 | 7,01556E-10 | 2,4976E-08 | 2,51056E-12 | 2,08231E-09 | 2,49761E-08 | -3,20362E-10 |
| 28 | G Vertical | 0,000170355 | 2,76788E-05 | -8,1495E-09 | -1,50877E-08 | 8,07956E-11 | -1,72949E-08 | -1,50891E-08 | 1,4764E-09 |
| 28 | G transversal | 1,0588E-05 | 2,51345E-06 | -2,45483E-08 | -1,1903E-09 | 1,44072E-11 | -2,58282E-08 | -1,1904E-09 | 1,11081E-10 |
| 29 | D Longitudinal | -1,04362E-05 | 2,54751E-06 | 7,12277E-08 | -2,89951E-09 | 2,04612E-10 | 7,44577E-08 | -2,89951E-09 | 2,52707E-10 |
| 29 | D Vertical | 9,76231E-05 | -3,76061E-05 | -2,47509E-08 | 2,47555E-08 | -2,0944E-09 | -2,47544E-08 | 2,47555E-08 | -2,4707E-09 |
| 29 | D transversal | 0,000520969 | -2,46161E-06 | -2,93915E-09 | 7,13835E-08 | -2,08017E-10 | 5,31008E-10 | 7,13835E-08 | -6,62845E-10 |

APOYO 1

| DESPLAZAMIENTOS (metros) | | VIENTO | PESO | CT1 | | | CT2 | | |
|---|---|---|---|---|---|---|---|---|---|
| Nudo | Desplazamiento | | | L | T | V | L | T | V |
| 29 | G Longitudinal | 0,000134048 | -1,00679E-06 | 1,14566E-09 | 2,94275E-08 | 3,42205E-11 | 2,50223E-09 | 2,94276E-08 | -3,64245E-10 |
| 29 | G Vertical | 0,000171237 | 2,6813E-05 | -8,57764E-09 | -1,47382E-08 | 3,9978E-11 | -1,76821E-08 | -1,47396E-08 | 1,43197E-09 |
| 29 | G transversal | 8,11125E-06 | 2,9515E-06 | -2,8655E-08 | -2,03884E-09 | 7,32988E-11 | -2,99342E-08 | -2,03894E-09 | 1,87913E-10 |
| 30 | D Longitudinal | -9,35521E-06 | 2,13115E-06 | 9,0634E-08 | -2,60809E-09 | 1,84315E-10 | 9,42557E-08 | -2,60809E-09 | 2,2663E-10 |
| 30 | D Vertical | 0,000104923 | -4,13838E-05 | -2,72757E-08 | 2,72733E-08 | -2,37068E-09 | -2,726E-08 | 2,72733E-08 | -2,79577E-09 |
| 30 | D transversal | 0,000616485 | -2,40303E-06 | -2,87734E-09 | 9,10084E-08 | -2,03582E-10 | 1,04027E-09 | 9,10084E-08 | -8,77594E-10 |
| 30 | G Longitudinal | 0,000148464 | -9,50095E-07 | 1,33101E-09 | 3,43777E-08 | 5,33027E-11 | 2,68469E-09 | 3,43778E-08 | -4,27957E-10 |
| 30 | G Vertical | 0,000172018 | 2,5709E-05 | -8,59441E-09 | -1,40201E-08 | 1,69084E-12 | -1,76609E-08 | -1,40215E-08 | 1,38361E-09 |
| 30 | G transversal | 9,63195E-06 | 2,32569E-06 | -3,37821E-08 | -1,62732E-09 | 4,4642E-11 | -3,50492E-08 | -1,62742E-09 | 1,53293E-10 |
| 31 | D Longitudinal | -9,40938E-06 | 2,40722E-06 | 1,13232E-07 | -2,83454E-09 | 2,01035E-10 | 1,17259E-07 | -2,83454E-09 | 2,50137E-10 |
| 31 | D Vertical | 0,000109641 | -4,49167E-05 | -2,95757E-08 | 2,95456E-08 | -2,64443E-09 | -2,95936E-08 | 2,95456E-08 | -3,12125E-09 |
| 31 | D transversal | 0,000723176 | -1,92995E-06 | -2,62586E-09 | 1,13589E-07 | -1,83795E-10 | 1,74026E-09 | 1,13589E-07 | -1,12731E-09 |
| 31 | G Longitudinal | 0,000161283 | -1,0691E-06 | 1,26231E-09 | 3,89796E-08 | 5,12798E-11 | 2,62355E-09 | 3,89797E-08 | -5,09616E-10 |
| 31 | G Vertical | 0,000172606 | 2,45921E-05 | -8,63158E-09 | -1,33919E-08 | -3,34104E-11 | -1,76561E-08 | -1,33932E-08 | 1,34061E-09 |
| 31 | G transversal | 1,23189E-05 | 1,70802E-06 | -3,88733E-08 | -2,8763E-10 | -5,03749E-11 | -4,01758E-08 | -2,87725E-10 | 2,4626E-11 |
| 32 | D Longitudinal | -1,07814E-05 | 2,49578E-06 | 1,38946E-07 | -3,76957E-09 | 2,68119E-10 | 1,43397E-07 | -3,76957E-09 | 3,43141E-10 |
| 32 | D Vertical | 0,00011394 | -4,81967E-05 | -3,16142E-08 | 3,1577E-08 | -2,9128E-09 | -3,16081E-08 | 3,1577E-08 | -3,43676E-09 |
| 32 | D transversal | 0,000834803 | -2,29594E-06 | -2,95937E-09 | 1,39142E-07 | -2,08235E-10 | 1,86309E-09 | 1,39142E-07 | -1,47445E-09 |
| 32 | G Longitudinal | 0,000173221 | -2,3524E-06 | -5,26459E-10 | 4,37962E-08 | -8,2171E-11 | 8,31748E-10 | 4,37963E-08 | -7,32343E-10 |
| 32 | G Vertical | 0,000173296 | 2,33463E-05 | -8,8095E-09 | -1,26815E-08 | -8,25775E-11 | -1,77944E-08 | -1,26829E-08 | 1,28139E-09 |
| 32 | G transversal | 1,26607E-05 | 1,75633E-06 | -4,36854E-08 | 1,00736E-10 | -7,7021E-11 | -4,49999E-08 | 1,00641E-10 | -1,46349E-11 |
| 33 | D Longitudinal | -1,10014E-05 | 2,72632E-06 | 1,67799E-07 | -4,3477E-09 | 3,07965E-10 | 1,72653E-07 | -4,3477E-09 | 4,02837E-10 |
| 33 | D Vertical | 0,000115598 | -5,12562E-05 | -3,33427E-08 | 3,33604E-08 | -3,17979E-09 | -3,33813E-08 | 3,33604E-08 | -3,75569E-09 |
| 33 | D transversal | 0,000957118 | -3,09326E-06 | -4,45652E-09 | 1,67939E-07 | -3,20064E-10 | 8,12125E-10 | 1,67939E-07 | -1,97031E-09 |
| 33 | G Longitudinal | 0,000187168 | -2,89578E-06 | -1,5442E-09 | 4,95164E-08 | -1,55619E-10 | -1,62353E-10 | 4,95165E-08 | -9,17617E-10 |
| 33 | G Vertical | 0,000172141 | 2,20874E-05 | -9,0041E-09 | -1,22661E-08 | -1,13086E-10 | -1,79503E-08 | -1,22675E-08 | 1,24526E-09 |
| 33 | G transversal | 1,08972E-05 | 1,8857E-06 | -4,94344E-08 | -9,26425E-10 | -1,83136E-12 | -5,06797E-08 | -9,26525E-10 | 8,86056E-11 |
| 34 | D Longitudinal | -1,0341E-05 | 2,50259E-06 | 2,00547E-07 | -4,13033E-09 | 2,91157E-10 | 2,05795E-07 | -4,13033E-09 | 3,82088E-10 |
| 34 | D Vertical | 0,000117021 | -5,41511E-05 | -3,48954E-08 | 3,49451E-08 | -3,45233E-09 | -3,49094E-08 | 3,49451E-08 | -4,07618E-09 |
| 34 | D transversal | 0,001085488 | -3,59593E-06 | -5,25971E-09 | 2,0051E-07 | -3,77062E-10 | 5,10023E-10 | 2,0051E-07 | -2,48712E-09 |
| 34 | G Longitudinal | 0,000200765 | 2,99973E-07 | 2,09231E-09 | 5,52779E-08 | 1,28282E-10 | 3,57796E-09 | 5,5278E-08 | -7,48844E-10 |
| 34 | G Vertical | 0,000171252 | 2,08935E-05 | -8,28046E-09 | -1,12377E-08 | -1,22867E-10 | -1,71734E-08 | -1,12391E-08 | 1,21617E-09 |
| 34 | G transversal | 8,12622E-06 | 2,15787E-06 | -5,53985E-08 | -2,48731E-09 | 1,14167E-10 | -5,67459E-08 | -2,48741E-09 | 2,47514E-10 |
| 35 | D Longitudinal | -6,57381E-06 | 1,97926E-06 | 2,36469E-07 | -2,51138E-09 | 1,74753E-10 | 2,42312E-07 | -2,51137E-09 | 2,28242E-10 |
| 35 | D Vertical | 0,000116036 | -5,6977E-05 | -3,6335E-08 | 3,63709E-08 | -3,74024E-09 | -3,64012E-08 | 3,63709E-08 | -4,42109E-09 |
| 35 | D transversal | 0,001224316 | -1,33426E-06 | -3,09715E-09 | 2,36663E-07 | -2,09655E-10 | 3,22184E-09 | 2,36663E-07 | -2,85444E-09 |
| 35 | G Longitudinal | 0,000213634 | 3,17695E-06 | 5,79333E-09 | 6,14045E-08 | 4,06587E-10 | 7,27316E-09 | 6,14046E-08 | -6,04524E-10 |
| 35 | G Vertical | 0,000170593 | 1,95848E-05 | -7,68277E-09 | -1,00982E-08 | -1,38947E-10 | -1,65015E-08 | -1,00996E-08 | 1,17793E-09 |
| 35 | G transversal | 1,36212E-06 | 3,7412E-06 | -5,95091E-08 | -5,26063E-09 | 3,14034E-10 | -6,13662E-08 | -5,26073E-09 | 5,11821E-10 |
| 36 | D Longitudinal | -3,63157E-11 | 2,71519E-09 | 2,75366E-07 | 5,72621E-13 | -2,05741E-13 | 2,81723E-07 | 5,72258E-13 | -2,09682E-13 |
| 36 | D Vertical | 0,000107555 | -5,98688E-05 | 1,04048E-11 | 3,6134E-08 | -3,92259E-09 | 1,03002E-11 | 3,6134E-08 | -4,63583E-09 |
| 36 | D transversal | 0,001435551 | 7,0409E-06 | -1,78328E-10 | 2,746E-07 | -2,52025E-11 | -1,78591E-10 | 2,746E-07 | -2,94691E-09 |
| 36 | G Longitudinal | 0,000225184 | 2,05083E-07 | 2,88255E-11 | 6,96353E-08 | 2,09438E-10 | 2,7927E-11 | 6,96354E-08 | -9,99175E-10 |
| 36 | G Vertical | -9,30335E-08 | 8,33211E-08 | 4,61863E-09 | -1,27696E-10 | 4,63667E-11 | -9,45881E-09 | -1,27693E-10 | 4,84912E-11 |

APOYO 1

| DESPLAZAMIENTOS (metros) | | VIENTO | PESO | CT1 | | | CT2 | | |
|---|---|---|---|---|---|---|---|---|---|
| Nudo | Desplazamiento | | | L | T | V | L | T | V |
| 36 | G transversal | -4,74439E-09 | -3,90111E-09 | -6,89133E-08 | -6,27778E-12 | 2,24046E-12 | -6,80567E-08 | -6,27797E-12 | 2,3589E-12 |
| 37 | D Longitudinal | -3,34401E-11 | -2,7158E-09 | 2,75367E-07 | 6,06502E-13 | 2,05591E-13 | 2,69009E-07 | 6,06885E-13 | 1,92224E-13 |
| 37 | D Vertical | -0,000107555 | -5,98306E-05 | -1,03864E-11 | -3,61329E-08 | -3,92264E-09 | -1,04896E-11 | -3,61329E-08 | -3,20997E-09 |
| 37 | D transversal | 0,00143555 | -7,19768E-06 | -1,77975E-10 | 2,74619E-07 | 2,4353E-11 | -1,77685E-10 | 2,7462E-07 | -2,90726E-09 |
| 37 | G Longitudinal | 0,000225184 | -2,69759E-07 | 2,87927E-11 | 6,96324E-08 | -2,09301E-10 | 2,96868E-11 | 6,96322E-08 | -1,41635E-09 |
| 37 | G Vertical | 9,30362E-08 | 8,31746E-08 | -4,61502E-09 | 1,27886E-10 | 4,63359E-11 | -1,86926E-08 | 1,27894E-10 | 4,41153E-11 |
| 37 | G transversal | -4,74209E-09 | 3,90878E-09 | -6,89125E-08 | -6,25572E-12 | -2,23898E-12 | -6,97691E-08 | -6,25575E-12 | -2,12491E-12 |
| 38 | D Longitudinal | -3,85411E-06 | 9,93123E-07 | 3,58322E-07 | -2,2649E-09 | 1,79789E-10 | 3,65952E-07 | -2,2649E-09 | 2,44307E-10 |
| 38 | D Vertical | 0,00013017 | -6,44359E-05 | -4,61355E-08 | 4,61371E-08 | -4,65343E-09 | -4,61761E-08 | 4,61371E-08 | -5,62085E-09 |
| 38 | D transversal | 0,001621004 | -2,14863E-06 | -2,02479E-09 | 3,59962E-07 | -1,76101E-10 | 5,58807E-09 | 3,59962E-07 | -5,00047E-09 |
| 38 | G Longitudinal | 0,000267991 | -5,59584E-07 | -1,93567E-09 | 9,17347E-08 | -1,24742E-10 | -9,12829E-10 | 9,17347E-08 | -1,91177E-09 |
| 38 | G Vertical | 0,00014579 | 1,61299E-05 | -5,86946E-09 | -2,34829E-10 | -1,49428E-09 | 1,04238E-08 | -2,44167E-10 | 5,05211E-09 |
| 38 | G transversal | 2,29313E-06 | -1,61258E-06 | -9,25915E-08 | 2,4417E-09 | -1,38992E-10 | -9,34618E-08 | 2,44172E-09 | -2,17393E-10 |
| 39 | D Longitudinal | -1,85337E-06 | 1,0004E-06 | 4,55875E-07 | -1,64461E-09 | 1,01109E-10 | 4,64657E-07 | -1,64461E-09 | 1,58611E-10 |
| 39 | D Vertical | 0,000140841 | -6,84431E-05 | -5,37011E-08 | 5,37215E-08 | -5,28658E-09 | -5,37648E-08 | 5,37215E-08 | -6,49456E-09 |
| 39 | D transversal | 0,001893058 | 5,46794E-08 | -1,62878E-09 | 4,57508E-07 | -1,02642E-10 | 7,24671E-09 | 4,57508E-07 | -6,90634E-09 |
| 39 | G Longitudinal | 0,000276679 | 5,7249E-07 | 8,25682E-10 | 1,03912E-07 | 2,82315E-11 | 1,86489E-09 | 1,03912E-07 | -2,17404E-09 |
| 39 | G Vertical | 0,000123039 | 1,43654E-05 | -4,71045E-09 | 8,69521E-09 | -2,83159E-09 | 3,68337E-08 | 8,67788E-09 | 8,99829E-09 |
| 39 | G transversal | -2,47382E-06 | 8,26064E-07 | -1,03616E-07 | -1,1728E-09 | 3,49964E-11 | -1,04736E-07 | -1,1728E-09 | 5,07922E-11 |
| 40 | D Longitudinal | -1,22367E-06 | 4,27197E-07 | 5,65907E-07 | -1,39844E-09 | 1,67972E-10 | 5,75658E-07 | -1,39844E-09 | 2,25526E-10 |
| 40 | D Vertical | 0,000147495 | -7,14486E-05 | -6,00692E-08 | 6,00777E-08 | -5,91815E-09 | -6,02061E-08 | 6,00777E-08 | -7,36612E-09 |
| 40 | D transversal | 0,002174095 | -1,63003E-06 | -1,44252E-09 | 5,67657E-07 | -1,69001E-10 | 8,26839E-09 | 5,67657E-07 | -9,38591E-09 |
| 40 | G Longitudinal | 0,000284569 | -1,74846E-07 | 3,80236E-10 | 1,157E-07 | 3,30991E-11 | 1,49498E-09 | 1,157E-07 | -2,54843E-09 |
| 40 | G Vertical | 0,000100287 | 1,26009E-05 | -3,55144E-09 | 1,76253E-08 | -4,1689E-09 | 6,32436E-08 | 1,75999E-08 | 1,29445E-08 |
| 40 | G transversal | -2,87918E-07 | 5,40766E-09 | -1,15698E-07 | -3,48706E-10 | 3,44062E-11 | -1,16714E-07 | -3,48727E-10 | 7,04849E-11 |
| 41 | D Longitudinal | -4,58578E-07 | 7,40309E-07 | 6,86535E-07 | -8,92183E-10 | 7,68228E-11 | 6,97564E-07 | -8,9218E-10 | 1,24637E-10 |
| 41 | D Vertical | 0,000151169 | -7,35481E-05 | -6,52198E-08 | 6,5219E-08 | -6,54587E-09 | -6,54626E-08 | 6,5219E-08 | -8,23206E-09 |
| 41 | D transversal | 0,00245978 | 3,11818E-07 | -8,91952E-10 | 6,88304E-07 | -7,77785E-11 | 9,97817E-09 | 6,88304E-07 | -1,21428E-08 |
| 41 | G Longitudinal | 0,000285209 | 8,97911E-07 | -1,35234E-10 | 1,25674E-07 | -8,59344E-11 | 3,48367E-10 | 1,25675E-07 | -3,34207E-09 |
| 41 | G Vertical | 7,81279E-05 | 1,0924E-05 | -2,59056E-09 | 2,66695E-08 | -5,52904E-09 | 8,99172E-08 | 2,6636E-08 | 1,69668E-08 |
| 41 | G transversal | -5,66524E-07 | -6,85552E-08 | -1,25569E-07 | 3,08885E-10 | -9,94682E-11 | -1,27135E-07 | 3,08958E-10 | -2,3179E-10 |
| 42 | D Longitudinal | 2,34556E-06 | -1,86454E-06 | 9,4696E-07 | 1,23866E-08 | -2,4362E-09 | 9,62353E-07 | 1,23867E-08 | -3,71352E-09 |
| 42 | D Vertical | 0,000105506 | -7,72687E-05 | -5,75036E-08 | 6,23547E-08 | -1,05578E-08 | -5,67736E-08 | 6,23547E-08 | -1,33703E-08 |
| 42 | D transversal | 0,003012046 | -1,33293E-06 | -1,24321E-08 | 9,48675E-07 | -2,43136E-09 | -1,73775E-09 | 9,48675E-07 | -2,07864E-08 |
| 42 | G Longitudinal | 0,00027611 | -2,80397E-06 | -1,65733E-08 | 1,45588E-07 | -4,89249E-09 | -3,68114E-08 | 1,45633E-07 | -4,00595E-08 |
| 42 | G Vertical | 3,52682E-05 | 1,11651E-05 | -4,62294E-09 | 1,55503E-08 | 9,64239E-09 | -2,83625E-07 | 1,54785E-08 | 4,86536E-08 |
| 42 | G transversal | 5,83478E-06 | 5,30998E-06 | -1,51964E-07 | -2,42155E-08 | 7,29701E-09 | -1,56163E-07 | -2,42364E-08 | 2,09105E-08 |
| 43 | D Longitudinal | 2,33476E-06 | -1,70792E-06 | 9,46956E-07 | 1,23686E-08 | -2,43328E-09 | 9,61108E-07 | 1,23686E-08 | -3,71709E-09 |
| 43 | D Vertical | 0,000102512 | -7,69408E-05 | 6,23934E-08 | 5,74699E-08 | -1,0558E-08 | 6,46317E-08 | 5,74699E-08 | -1,34336E-08 |
| 43 | D transversal | 0,003013267 | 5,24955E-07 | -1,23488E-08 | 9,487E-07 | 2,43467E-09 | -2,47667E-08 | 9,487E-07 | -1,53497E-08 |
| 43 | G Longitudinal | 0,000278613 | 5,32358E-07 | -2,28855E-08 | 1,52187E-07 | 7,3169E-09 | -5,24745E-09 | 1,52232E-07 | -2,70871E-08 |
| 43 | G Vertical | -2,67182E-05 | -8,84578E-06 | 1,92534E-08 | 8,24505E-09 | 9,70634E-09 | -2,59502E-07 | 8,31448E-09 | -2,86166E-08 |
| 43 | G transversal | -8,15384E-06 | -6,77351E-07 | -1,45334E-07 | -1,52716E-08 | 4,92675E-09 | -1,4703E-07 | -1,52508E-08 | -6,47241E-10 |
| 44 | D Longitudinal | 2,33443E-06 | 1,63919E-06 | 9,4682E-07 | 1,23646E-08 | 2,43315E-09 | 9,32673E-07 | 1,23646E-08 | 1,15045E-09 |

APOYO 1

| DESPLAZAMIENTOS (metros) | | VIENTO | PESO | CT1 | | | CT2 | | |
|---|---|---|---|---|---|---|---|---|---|
| Nudo | Desplazamiento | | | L | T | V | L | T | V |
| 44 | D Vertical | -0,000102512 | -7,67868E-05 | -6,23012E-08 | -5,74718E-08 | -1,05578E-08 | -6,00611E-08 | -5,74719E-08 | -7,68094E-09 |
| 44 | D transversal | 0,003013267 | -1,47726E-06 | -1,24364E-08 | 9,4869E-07 | -2,43435E-09 | -1,4072E-11 | 9,48689E-07 | -2,02138E-08 |
| 44 | G Longitudinal | 0,000278658 | -2,34409E-06 | -2,44187E-08 | 1,49893E-07 | -7,22449E-09 | -4,23652E-08 | 1,49797E-07 | -4,0364E-08 |
| 44 | G Vertical | 2,66978E-05 | -6,83012E-06 | -1,45089E-08 | -5,22066E-09 | 9,58681E-09 | -2,88041E-07 | -5,10359E-09 | 4,64036E-08 |
| 44 | G transversal | -8,15348E-06 | 3,9012E-07 | -1,44641E-07 | -1,60256E-08 | -4,88949E-09 | -1,44524E-07 | -1,60531E-08 | -1,01368E-08 |
| 45 | D Longitudinal | 2,3452E-06 | 1,79616E-06 | 9,46852E-07 | 1,23829E-08 | 2,43608E-09 | 9,31462E-07 | 1,23829E-08 | 1,15946E-09 |
| 45 | D Vertical | -0,000105506 | -7,71181E-05 | 5,74134E-08 | -6,2356E-08 | -1,05577E-08 | 5,8141E-08 | -6,23561E-08 | -7,74461E-09 |
| 45 | D transversal | 0,003012046 | 3,49931E-07 | -1,23186E-08 | 9,48678E-07 | 2,43183E-09 | -2,3012E-08 | 9,48678E-07 | -1,59239E-08 |
| 45 | G Longitudinal | 0,000276162 | 9,63027E-07 | -1,50944E-08 | 1,43264E-07 | 4,99871E-09 | 5,45237E-09 | 1,43166E-07 | -2,88764E-08 |
| 45 | G Vertical | -3,52193E-05 | 9,12901E-06 | 9,28036E-09 | -1,85647E-08 | 9,78251E-09 | -2,64472E-07 | -1,86853E-08 | -2,76662E-08 |
| 45 | G transversal | 5,83318E-06 | -4,59594E-06 | -1,51268E-07 | -2,34461E-08 | -7,33689E-09 | -1,48661E-07 | -2,34174E-08 | 5,93813E-09 |
| 46 | D Longitudinal | 4,45976E-07 | -2,46621E-06 | 1,12237E-06 | 2,65565E-08 | -5,26136E-09 | 1,15409E-06 | 2,65562E-08 | -1,14911E-08 |
| 46 | D Vertical | 5,45447E-05 | -7,82768E-05 | -3,67934E-08 | 4,7259E-08 | -1,3744E-08 | -3,11374E-08 | 4,72588E-08 | -1,83555E-08 |
| 46 | D transversal | 0,003287834 | -2,48796E-06 | -2,68439E-08 | 1,12396E-06 | -5,26685E-09 | -5,33886E-09 | 1,12396E-06 | -2,8088E-08 |
| 46 | G Longitudinal | 0,000311652 | -3,36507E-07 | 9,35258E-09 | 2,30802E-07 | -3,50662E-09 | 4,36639E-07 | 2,30711E-07 | 7,05867E-08 |
| 46 | G Vertical | 2,12715E-05 | 1,43158E-05 | 1,28272E-08 | 8,49135E-09 | 2,78455E-08 | -5,98404E-07 | 8,37164E-09 | 8,85823E-08 |
| 46 | G transversal | 1,04037E-05 | 1,41202E-06 | -2,27743E-07 | 5,83771E-09 | 4,6589E-09 | -5,86553E-07 | 5,83521E-09 | 2,00928E-08 |
| 47 | D Longitudinal | 4,53056E-07 | -2,42267E-06 | 1,12234E-06 | 2,6588E-08 | -5,26724E-09 | 1,15334E-06 | 2,65877E-08 | -1,14905E-08 |
| 47 | D Vertical | 5,06761E-05 | -7,81271E-05 | 4,7346E-08 | 3,66955E-08 | -1,37441E-08 | 5,59024E-08 | 3,66952E-08 | -1,86697E-08 |
| 47 | D transversal | 0,003288115 | 1,31972E-06 | -2,63377E-08 | 1,12399E-06 | 5,2583E-09 | -4,88672E-08 | 1,12399E-06 | -1,72216E-08 |
| 47 | G Longitudinal | 0,000310871 | 2,93134E-06 | 5,50486E-09 | 2,30847E-07 | 4,65173E-09 | -4,19895E-07 | 2,30755E-07 | 7,81615E-08 |
| 47 | G Vertical | -1,97303E-05 | 5,56584E-06 | 1,51883E-08 | -6,0914E-09 | 2,79376E-08 | -5,96124E-07 | -5,97525E-09 | -3,19459E-08 |
| 47 | G transversal | 3,6208E-06 | -2,50815E-07 | -2,277E-07 | 9,10715E-09 | 3,44496E-09 | -5,87725E-07 | 9,10949E-09 | -5,22776E-09 |
| 48 | D Longitudinal | 4,52381E-07 | 2,0895E-06 | 1,12191E-06 | 2,65794E-08 | 5,26873E-09 | 1,09089E-06 | 2,65789E-08 | -9,51978E-10 |
| 48 | D Vertical | -5,06763E-05 | -7,78634E-05 | -4,71779E-08 | -3,66898E-08 | -1,37456E-08 | -3,86302E-08 | -3,66891E-08 | -8,82306E-09 |
| 48 | D transversal | 0,003288113 | -2,52403E-06 | -2,68096E-08 | 1,12402E-06 | -5,2616E-09 | -4,30007E-09 | 1,12402E-06 | -2,77583E-08 |
| 48 | G Longitudinal | 0,000310711 | 9,2682E-07 | 4,9245E-09 | 2,36376E-07 | -4,88384E-09 | 4,25368E-07 | 2,36622E-07 | 6,53829E-08 |
| 48 | G Vertical | 1,97105E-05 | 8,71517E-06 | -5,23658E-09 | 1,1075E-08 | 2,77435E-08 | -6,06101E-07 | 1,12656E-08 | 8,51845E-08 |
| 48 | G transversal | 3,64779E-06 | -2,1354E-07 | -2,34998E-07 | 8,429E-09 | -3,45006E-09 | 1,25285E-07 | 8,39626E-09 | -1,15813E-08 |
| 49 | D Longitudinal | 4,45526E-07 | 2,13267E-06 | 1,12195E-06 | 2,6548E-08 | 5,26267E-09 | 1,0902E-06 | 2,65474E-08 | -9,63133E-10 |
| 49 | D Vertical | -5,45449E-05 | -7,80298E-05 | 3,66081E-08 | -4,72568E-08 | -1,37448E-08 | 4,22776E-08 | -4,72565E-08 | -9,13476E-09 |
| 49 | D transversal | 0,003287835 | 1,26567E-06 | -2,63574E-08 | 1,12397E-06 | 5,26367E-09 | -4,78733E-08 | 1,12397E-06 | -1,75603E-08 |
| 49 | G Longitudinal | 0,000311506 | 4,20049E-06 | 1,00412E-08 | 2,36396E-07 | 3,24535E-09 | -4,12347E-07 | 2,36641E-07 | 7,40987E-08 |
| 49 | G Vertical | -2,11946E-05 | 1,11477E-05 | -2,95862E-09 | -1,33773E-08 | 2,80738E-08 | -6,03658E-07 | -1,35719E-08 | -3,01474E-08 |
| 49 | G transversal | 1,03507E-05 | -5,91154E-07 | -2,34976E-07 | 6,48084E-09 | -4,67605E-09 | 1,24123E-07 | 6,51614E-09 | 1,01817E-08 |
| 50 | D Longitudinal | -3,42268E-06 | 1,14105E-06 | 1,23337E-06 | 1,7512E-08 | 3,4596E-09 | 1,12346E-06 | 1,7511E-08 | -3,42645E-09 |
| 50 | D Vertical | -2,63639E-05 | -7,79942E-05 | -3,05671E-08 | -2,36136E-08 | -1,52057E-08 | -1,83157E-08 | -2,3602E-08 | -4,55473E-09 |
| 50 | D transversal | 0,003418084 | -1,36546E-06 | -1,81686E-08 | 1,23608E-06 | -3,55985E-09 | 9,58726E-08 | 1,23614E-06 | -4,97955E-09 |
| 50 | G Longitudinal | 0,00028181 | -2,33411E-06 | 2,76151E-08 | 2,79592E-07 | -6,72832E-10 | 7,27774E-08 | 2,79216E-07 | -7,89046E-08 |
| 50 | G Vertical | 9,76386E-07 | 1,33474E-05 | 5,08761E-09 | 1,6667E-09 | 3,44955E-08 | -1,09122E-06 | 1,65612E-09 | 3,83643E-08 |
| 50 | G transversal | 1,08344E-05 | 4,16789E-08 | -2,84449E-07 | 3,47299E-08 | 3,03518E-10 | -1,609E-07 | 3,47243E-08 | -1,95572E-09 |
| 51 | D Longitudinal | -5,06565E-07 | 2,93821E-07 | 6,85264E-07 | -4,39283E-10 | 3,71548E-11 | 7,11659E-07 | -4,39284E-10 | 5,98E-11 |
| 51 | D Vertical | 0,000371961 | -7,90736E-05 | -3,26989E-08 | 1,66822E-07 | -7,04099E-09 | -3,26647E-08 | 1,66822E-07 | -1,14044E-08 |
| 51 | D transversal | 0,002460093 | 9,03276E-07 | -4,64687E-10 | 6,88143E-07 | -6,39356E-11 | 5,06451E-09 | 6,88143E-07 | -1,2134E-08 |

APOYO 1

| DESPLAZAMIENTOS (metros) | | VIENTO | PESO | CT1 | | | CT2 | | |
|---|---|---|---|---|---|---|---|---|---|
| Nudo | Desplazamiento | | | L | T | V | L | T | V |
| 51 | G Longitudinal | 0,000284734 | -6,40603E-06 | -1,45201E-09 | 1,3072E-07 | -6,09595E-10 | -1,66207E-09 | 1,3072E-07 | -4,03465E-09 |
| 51 | G Vertical | -7,22093E-09 | 2,79615E-07 | 1,5515E-09 | -5,14529E-10 | 4,5856E-11 | -1,85879E-08 | -5,14524E-10 | 1,09774E-10 |
| 51 | G transversal | -6,65452E-07 | 1,68814E-06 | -1,2233E-07 | -7,3217E-10 | 3,34883E-11 | -1,22482E-07 | -7,32119E-10 | -8,35224E-11 |
| 52 | D Longitudinal | -4,42046E-07 | 2,92583E-07 | 6,85263E-07 | -4,38838E-10 | 3,71205E-11 | 7,11657E-07 | -4,3884E-10 | 5,98543E-11 |
| 52 | D Vertical | 0,000372344 | -7,95443E-05 | 3,26751E-08 | 1,66823E-07 | -7,04047E-09 | 3,22343E-08 | 1,66823E-07 | -1,13145E-08 |
| 52 | D transversal | 0,002459862 | 7,89571E-07 | 4,6752E-10 | 6,8783E-07 | -3,63346E-11 | -5,01068E-09 | 6,8783E-07 | -1,20759E-08 |
| 52 | G Longitudinal | 0,000285071 | -6,63018E-06 | 1,45322E-09 | 1,30798E-07 | -6,12255E-10 | 1,1203E-09 | 1,30798E-07 | -3,9913E-09 |
| 52 | G Vertical | 3,02071E-07 | -8,55219E-07 | 1,5524E-09 | 4,67505E-10 | -3,94261E-11 | -1,85662E-08 | 4,6751E-10 | -2,82885E-11 |
| 52 | G transversal | -2,80249E-07 | -8,65738E-07 | -1,22412E-07 | 6,38001E-10 | -3,09344E-11 | -1,2253E-07 | 6,37939E-10 | -8,58817E-11 |
| 53 | D Longitudinal | -1,68028E-07 | 1,59856E-07 | 7,47913E-07 | -1,85088E-10 | 1,63113E-11 | 7,74801E-07 | -1,85084E-10 | 4,82392E-11 |
| 53 | D Vertical | 0,000371961 | -7,87742E-05 | -3,26985E-08 | 1,66823E-07 | -7,04108E-09 | -3,26631E-08 | 1,66823E-07 | -1,14046E-08 |
| 53 | D transversal | 0,002602503 | -1,33164E-06 | -1,6827E-09 | 7,536E-07 | -3,75218E-10 | 3,74321E-09 | 7,536E-07 | -1,41622E-08 |
| 53 | G Longitudinal | 0,000287937 | -4,46647E-06 | -9,84104E-10 | 1,31766E-07 | -8,53118E-10 | 9,04064E-09 | 1,31763E-07 | -2,05024E-09 |
| 53 | G Vertical | 7,38381E-06 | 1,21014E-06 | 3,29375E-09 | 4,4341E-09 | -8,73878E-10 | 2,54498E-09 | 4,42839E-09 | 3,00362E-09 |
| 53 | G transversal | 1,15886E-05 | 3,00209E-06 | -1,27245E-07 | 8,52743E-09 | -1,68741E-09 | -9,93144E-08 | 8,51855E-09 | 4,14102E-09 |
| 54 | D Longitudinal | -6,75425E-08 | 1,60128E-07 | 7,47913E-07 | -1,84366E-10 | 1,61593E-11 | 7,74801E-07 | -1,84362E-10 | 4,80376E-11 |
| 54 | D Vertical | 0,000372345 | -7,91427E-05 | 3,26747E-08 | 1,66823E-07 | -7,04055E-09 | 3,22328E-08 | 1,66823E-07 | -1,13145E-08 |
| 54 | D transversal | 0,002602598 | -1,48929E-06 | 1,67213E-09 | 7,53466E-07 | -3,61999E-10 | -3,96696E-09 | 7,53466E-07 | -1,40805E-08 |
| 54 | G Longitudinal | 0,00028766 | -3,78962E-06 | -1,95632E-09 | 1,29268E-07 | 1,46089E-10 | -1,2621E-08 | 1,29265E-07 | -9,33729E-10 |
| 54 | G Vertical | -6,10904E-06 | -2,87028E-06 | 8,59282E-09 | 3,48591E-10 | -9,59779E-10 | 7,88059E-09 | 3,54161E-10 | -4,92902E-09 |
| 54 | G transversal | -1,04421E-05 | -4,95969E-06 | -1,1904E-07 | -1,36611E-09 | -1,13167E-09 | -9,06902E-08 | -1,35749E-09 | -7,22996E-09 |
| 55 | D Longitudinal | -1,68081E-07 | -1,58139E-07 | 7,4789E-07 | -1,85694E-10 | -1,63013E-11 | 7,21001E-07 | -1,85701E-10 | 1,57855E-11 |
| 55 | D Vertical | -0,000371961 | -7,85405E-05 | 3,26679E-08 | -1,66825E-07 | -7,04104E-09 | 3,27029E-08 | -1,66825E-07 | -2,67669E-09 |
| 55 | D transversal | 0,002602503 | 5,93281E-07 | -1,66414E-09 | 7,53601E-07 | 3,75195E-10 | -7,08981E-09 | 7,53601E-07 | -1,34121E-08 |
| 55 | G Longitudinal | 0,000287934 | 4,39939E-06 | -8,98772E-10 | 1,31923E-07 | 8,45806E-10 | -1,09217E-08 | 1,31929E-07 | -4,34936E-10 |
| 55 | G Vertical | -7,37863E-06 | 1,00783E-06 | -3,4027E-09 | -4,71497E-09 | -8,60677E-10 | -4,15412E-09 | -4,72658E-09 | -4,58813E-09 |
| 55 | G transversal | 1,15808E-05 | -2,69827E-06 | -1,2699E-07 | 8,96598E-09 | 1,66691E-09 | -1,54916E-07 | 8,98402E-09 | 7,26171E-09 |
| 56 | D Longitudinal | -6,75957E-08 | -1,58413E-07 | 7,4789E-07 | -1,84971E-10 | -1,61493E-11 | 7,21001E-07 | -1,84979E-10 | 1,58877E-11 |
| 56 | D Vertical | -0,000372345 | -7,89138E-05 | -3,26555E-08 | -1,66823E-07 | -7,04054E-09 | -3,30972E-08 | -1,66823E-07 | -2,76613E-09 |
| 56 | D transversal | 0,002602598 | 7,54614E-07 | 1,6588E-09 | 7,53466E-07 | 3,62002E-10 | 7,29774E-09 | 7,53466E-07 | -1,33566E-08 |
| 56 | G Longitudinal | 0,000287657 | 3,7296E-06 | -2,02268E-09 | 1,29418E-07 | -1,52655E-10 | 8,64084E-09 | 1,29424E-07 | -1,31323E-09 |
| 56 | G Vertical | 6,10364E-06 | -2,66169E-06 | -8,68945E-09 | -7,6955E-11 | -9,71684E-10 | -9,40333E-09 | -6,56723E-11 | 2,85185E-09 |
| 56 | G transversal | -1,04335E-05 | 4,63924E-06 | -1,18796E-07 | -1,78467E-09 | 1,1501E-09 | -1,47143E-07 | -1,80214E-09 | -4,72291E-09 |
| 57 | D Longitudinal | -5,06557E-07 | -2,9261E-07 | 6,85268E-07 | -4,39071E-10 | -3,7159E-11 | 6,58873E-07 | -4,39066E-10 | -1,4602E-11 |
| 57 | D Vertical | -0,000371961 | -7,88399E-05 | 3,26684E-08 | -1,66824E-07 | -7,04095E-09 | 3,27022E-08 | -1,66824E-07 | -2,67678E-09 |
| 57 | D transversal | 0,002460094 | -1,54967E-06 | -4,59334E-10 | 6,88143E-07 | 6,39412E-11 | -5,9886E-09 | 6,88143E-07 | -1,2006E-08 |
| 57 | G Longitudinal | 0,000284734 | 6,2226E-06 | -1,43353E-09 | 1,3072E-07 | 6,09602E-10 | -1,22418E-09 | 1,3072E-07 | -2,81555E-09 |
| 57 | G Vertical | 7,29249E-09 | 2,76186E-07 | -1,52399E-09 | 5,15325E-10 | 4,5847E-11 | -2,16635E-08 | 5,15335E-10 | -1,82706E-11 |
| 57 | G transversal | -6,65191E-07 | -1,69436E-06 | -1,2226E-07 | -7,34061E-10 | -3,33849E-11 | -1,2211E-07 | -7,3419E-10 | -1,48651E-10 |
| 58 | D Longitudinal | -4,42038E-07 | -2,91367E-07 | 6,85267E-07 | -4,38628E-10 | -3,71247E-11 | 6,58873E-07 | -4,38622E-10 | -1,44787E-11 |
| 58 | D Vertical | -0,000372344 | -7,93154E-05 | -3,2656E-08 | -1,66823E-07 | -7,04046E-09 | -3,30965E-08 | -1,66823E-07 | -2,76593E-09 |
| 58 | D transversal | 0,002459862 | -1,43433E-06 | 4,59923E-10 | 6,8783E-07 | 3,6342E-11 | 5,93816E-09 | 6,8783E-07 | -1,2003E-08 |
| 58 | G Longitudinal | 0,000285071 | 6,44922E-06 | 1,44839E-09 | 1,30798E-07 | 6,12283E-10 | 1,78218E-09 | 1,30798E-07 | -2,76669E-09 |
| 58 | G Vertical | -3,02006E-07 | -8,55823E-07 | -1,52571E-09 | -4,66555E-10 | -3,94451E-11 | -2,16445E-08 | -4,66537E-10 | -5,0885E-11 |

APOYO 1

| DESPLAZAMIENTOS (metros) | | VIENTO | PESO | CT1 | | | CT2 | | |
|---|---|---|---|---|---|---|---|---|---|
| Nudo | Desplazamiento | | | L | T | V | L | T | V |
| 58 | G transversal | -2,80212E-07 | 8,62731E-07 | -1,22339E-07 | 6,43282E-10 | 3,07665E-11 | -1,22222E-07 | 6,43471E-10 | -2,68489E-11 |
| 59 | D Longitudinal | -1,12388E-06 | 3,27895E-07 | 4,5364E-07 | -8,11632E-10 | 4,91112E-11 | 4,75056E-07 | -8,11632E-10 | 7,72999E-11 |
| 59 | D Vertical | 0,000362197 | -7,52631E-05 | 2,66249E-08 | 1,42341E-07 | -5,63579E-09 | 2,61053E-08 | 1,42341E-07 | -8,83365E-09 |
| 59 | D transversal | 0,001892397 | 7,68591E-07 | 7,62408E-10 | 4,56638E-07 | -4,83356E-11 | -3,80191E-09 | 4,56638E-07 | -6,82142E-09 |
| 59 | G Longitudinal | 0,000284625 | -7,50687E-06 | 1,05619E-09 | 1,13572E-07 | -4,11801E-10 | 8,76751E-10 | 1,13572E-07 | -2,95582E-09 |
| 59 | G Vertical | 9,20463E-07 | -9,30053E-07 | 2,52477E-09 | 8,79151E-10 | -5,29929E-11 | -1,42338E-08 | 8,79151E-10 | -8,32645E-11 |
| 59 | G transversal | 2,03859E-06 | -1,2954E-06 | -1,00206E-07 | 1,84484E-09 | -6,95263E-11 | -9,95913E-08 | 1,84484E-09 | -1,25242E-10 |
| 60 | D Longitudinal | -1,18871E-06 | 3,29293E-07 | 4,53642E-07 | -8,12482E-10 | 4,91611E-11 | 4,75059E-07 | -8,12482E-10 | 7,7379E-11 |
| 60 | D Vertical | 0,00036214 | -7,47942E-05 | -2,66257E-08 | 1,42332E-07 | -5,63546E-09 | -2,61117E-08 | 1,42332E-07 | -8,83353E-09 |
| 60 | D transversal | 0,00189317 | 7,2549E-07 | -7,66112E-10 | 4,57212E-07 | -8,42625E-11 | 3,79548E-09 | 4,57212E-07 | -6,87762E-09 |
| 60 | G Longitudinal | 0,000284263 | -7,23156E-06 | -1,05223E-09 | 1,13343E-07 | -4,01197E-10 | -8,82951E-10 | 1,13343E-07 | -2,93792E-09 |
| 60 | G Vertical | -9,42404E-07 | 5,44573E-07 | 2,52551E-09 | -9,38549E-10 | 5,91121E-11 | -1,42321E-08 | -9,3855E-10 | 9,23688E-11 |
| 60 | G transversal | -2,69669E-06 | 2,20165E-06 | -1,00202E-07 | -2,23274E-09 | 8,73858E-11 | -9,96035E-08 | -2,23274E-09 | 1,54204E-10 |
| 61 | D Longitudinal | -5,3149E-07 | 1,08685E-07 | 5,06211E-07 | -3,41919E-10 | 2,09232E-11 | 5,27761E-07 | -3,41918E-10 | 3,27496E-11 |
| 61 | D Vertical | 0,000362142 | -7,4495E-05 | -2,66244E-08 | 1,42334E-07 | -5,63556E-09 | -2,61085E-08 | 1,42334E-07 | -8,83367E-09 |
| 61 | D transversal | 0,002035741 | -2,00949E-06 | -2,00812E-09 | 5,1421E-07 | -2,98771E-10 | 2,71627E-09 | 5,1421E-07 | -8,37E-09 |
| 61 | G Longitudinal | 0,000289004 | -4,25807E-06 | -5,83692E-10 | 1,12204E-07 | -4,0446E-10 | 5,8808E-09 | 1,12202E-07 | -1,56917E-09 |
| 61 | G Vertical | 1,32876E-05 | 1,79941E-06 | 3,90534E-09 | 2,2435E-09 | -4,9933E-10 | -8,08215E-10 | 2,24007E-09 | 1,82482E-09 |
| 61 | G transversal | 2,12661E-05 | 3,53928E-06 | -1,09128E-07 | 4,4555E-09 | -9,05312E-10 | -9,16343E-08 | 4,45019E-09 | 2,65475E-09 |
| 62 | D Longitudinal | -4,31216E-07 | 1,08974E-07 | 5,06211E-07 | -3,41806E-10 | 2,08957E-11 | 5,27761E-07 | -3,41805E-10 | 3,27155E-11 |
| 62 | D Vertical | 0,000362198 | -7,48617E-05 | 2,66236E-08 | 1,42342E-07 | -5,63587E-09 | 2,61021E-08 | 1,42342E-07 | -8,83374E-09 |
| 62 | D transversal | 0,002035402 | -2,07203E-06 | 2,00774E-09 | 5,13969E-07 | -2,82746E-10 | -2,71978E-09 | 5,13969E-07 | -8,34511E-09 |
| 62 | G Longitudinal | 0,000289122 | -4,01359E-06 | -1,1464E-09 | 1,10962E-07 | 1,82712E-10 | -7,61609E-09 | 1,1096E-07 | -9,69846E-10 |
| 62 | G Vertical | -1,28458E-05 | -2,5773E-06 | 7,05536E-09 | 4,64603E-10 | -5,92633E-10 | 2,34203E-09 | 4,67938E-10 | -2,95346E-09 |
| 62 | G transversal | -2,1262E-05 | -4,33844E-06 | -1,04244E-07 | -7,01937E-10 | -7,60709E-10 | -8,67475E-08 | -6,96766E-10 | -4,36371E-09 |
| 63 | D Longitudinal | -1,12388E-06 | -3,26386E-07 | 4,53639E-07 | -8,11618E-10 | -4,91121E-11 | 4,32223E-07 | -8,11617E-10 | -2,09329E-11 |
| 63 | D Vertical | -0,000362197 | -7,50918E-05 | -2,66222E-08 | -1,42341E-07 | -5,63579E-09 | -2,71418E-08 | -1,42341E-07 | -2,43792E-09 |
| 63 | D transversal | 0,001892397 | -1,13132E-06 | 7,63655E-10 | 4,56638E-07 | 4,8335E-11 | 5,32797E-09 | 4,56638E-07 | -6,72475E-09 |
| 63 | G Longitudinal | 0,000284625 | 7,37063E-06 | 1,05701E-09 | 1,13572E-07 | 4,11805E-10 | 1,23648E-09 | 1,13572E-07 | -2,13223E-09 |
| 63 | G Vertical | -9,20469E-07 | -9,28432E-07 | -2,52884E-09 | -8,79179E-10 | -5,29942E-11 | -1,92874E-08 | -8,79179E-10 | -2,27237E-11 |
| 63 | G transversal | 2,0386E-06 | 1,29241E-06 | -1,00201E-07 | 1,84513E-09 | 6,95204E-11 | -1,00815E-07 | 1,84514E-09 | 1,3677E-11 |
| 64 | D Longitudinal | -1,18871E-06 | -3,27782E-07 | 4,53641E-07 | -8,12469E-10 | -4,9162E-11 | 4,32223E-07 | -8,12468E-10 | -2,09536E-11 |
| 64 | D Vertical | -0,00036214 | -7,46229E-05 | 2,66227E-08 | -1,42333E-07 | -5,63546E-09 | 2,71367E-08 | -1,42333E-07 | -2,43733E-09 |
| 64 | D transversal | 0,00189317 | -1,0893E-06 | -7,67385E-10 | 4,57212E-07 | 8,42624E-11 | -5,32897E-09 | 4,57212E-07 | -6,70909E-09 |
| 64 | G Longitudinal | 0,000284263 | 7,09571E-06 | -1,05282E-09 | 1,13343E-07 | 4,01198E-10 | -1,22215E-09 | 1,13343E-07 | -2,13555E-09 |
| 64 | G Vertical | 9,42399E-07 | 5,42792E-07 | -2,52957E-09 | 9,38492E-10 | 5,91124E-11 | -1,92871E-08 | 9,38491E-10 | 2,58713E-11 |
| 64 | G transversal | -2,69667E-06 | -2,19807E-06 | -1,00198E-07 | -2,23266E-09 | -8,73859E-11 | -1,00797E-07 | -2,23267E-09 | -2,05543E-11 |
| 65 | D Longitudinal | -4,31219E-07 | -1,0834E-07 | 5,06211E-07 | -3,41845E-10 | -2,08952E-11 | 4,84661E-07 | -3,41845E-10 | -9,06507E-12 |
| 65 | D Vertical | -0,000362198 | -7,46904E-05 | -2,66208E-08 | -1,42342E-07 | -5,63587E-09 | -2,71422E-08 | -1,42342E-07 | -2,43797E-09 |
| 65 | D transversal | 0,002035402 | 1,64026E-06 | 2,00947E-09 | 5,13969E-07 | 2,82746E-10 | 6,73697E-09 | 5,13969E-07 | -7,77965E-09 |
| 65 | G Longitudinal | 0,00028912 | 3,95056E-06 | -1,18128E-09 | 1,11051E-07 | -1,86634E-10 | 5,28943E-09 | 1,11054E-07 | -1,38684E-09 |
| 65 | G Vertical | 1,28425E-05 | -2,45325E-06 | -7,13299E-09 | -3,03049E-10 | -5,99766E-10 | -1,18444E-08 | -2,96337E-10 | 1,67457E-09 |
| 65 | G transversal | -2,1257E-05 | 4,14918E-06 | -1,04133E-07 | -9,52464E-10 | 7,71768E-10 | -1,21632E-07 | -9,62871E-10 | -2,69712E-09 |
| 66 | D Longitudinal | -5,31494E-07 | -1,08051E-07 | 5,06211E-07 | -3,41958E-10 | -2,09227E-11 | 4,84661E-07 | -3,41958E-10 | -9,08587E-12 |

APOYO 1

| DESPLAZAMIENTOS (metros) | | VIENTO | PESO | CT1 | | | CT2 | | |
|---|---|---|---|---|---|---|---|---|---|
| Nudo | Desplazamiento | | | L | T | V | L | T | V |
| 66 | D Vertical | -0,000362142 | -7,43238E-05 | 2,66214E-08 | -1,42334E-07 | -5,63556E-09 | 2,71372E-08 | -1,42334E-07 | -2,43739E-09 |
| 66 | D transversal | 0,002035741 | 1,57724E-06 | -2,00971E-09 | 5,1421E-07 | 2,9877E-10 | -6,73407E-09 | 5,1421E-07 | -7,77249E-09 |
| 66 | G Longitudinal | 0,000289002 | 4,19394E-06 | -5,44536E-10 | 1,12296E-07 | 4,00124E-10 | -7,00975E-09 | 1,123E-07 | -8,13698E-10 |
| 66 | G Vertical | -1,32846E-05 | 1,67813E-06 | -3,99029E-09 | -2,41132E-09 | -4,91447E-10 | -8,70245E-09 | -2,41823E-09 | -2,72634E-09 |
| 66 | G transversal | 2,12615E-05 | -3,35356E-06 | -1,09005E-07 | 4,71563E-09 | 8,9309E-10 | -1,265E-07 | 4,72634E-09 | 4,31477E-09 |
| 67 | D Longitudinal | -6,13609E-09 | -1,16065E-07 | 2,74615E-07 | 2,93994E-11 | -4,66584E-12 | 2,90966E-07 | 2,93988E-11 | -4,26952E-12 |
| 67 | D Vertical | 0,000317071 | -6,73172E-05 | -1,97635E-08 | 1,05237E-07 | -4,41639E-09 | -1,91897E-08 | 1,05237E-07 | -6,44239E-09 |
| 67 | D transversal | 0,001369002 | 1,10235E-06 | -4,66791E-10 | 2,77366E-07 | -1,87045E-11 | 3,05197E-09 | 2,77366E-07 | -3,30277E-09 |
| 67 | G Longitudinal | 0,000258518 | -8,43318E-06 | -3,40179E-10 | 8,56351E-08 | -4,11456E-10 | -2,98089E-10 | 8,56351E-08 | -2,03112E-09 |
| 67 | G Vertical | 4,25064E-07 | 2,50877E-07 | 1,72521E-09 | 3,78617E-11 | -4,61411E-12 | -1,12443E-08 | 3,78605E-11 | -4,25943E-12 |
| 67 | G transversal | -5,13157E-06 | 3,47328E-06 | -6,9401E-08 | -4,14695E-09 | 1,8103E-10 | -6,90135E-08 | -4,14697E-09 | 3,05635E-10 |
| 68 | D Longitudinal | 5,74338E-08 | -1,17113E-07 | 2,74616E-07 | 2,93586E-11 | -4,65988E-12 | 2,90965E-07 | 2,9358E-11 | -4,26382E-12 |
| 68 | D Vertical | 0,000317115 | -6,77827E-05 | 1,97661E-08 | 1,05237E-07 | -4,41626E-09 | 1,91921E-08 | 1,05237E-07 | -6,44234E-09 |
| 68 | D transversal | 0,00136906 | 9,61961E-07 | 4,65899E-10 | 2,77386E-07 | -2,14104E-11 | -3,05577E-09 | 2,77386E-07 | -3,30518E-09 |
| 68 | G Longitudinal | 0,000258526 | -8,61415E-06 | 3,35508E-10 | 8,56199E-08 | -4,07758E-10 | 2,95632E-10 | 8,56199E-08 | -2,02744E-09 |
| 68 | G Vertical | -3,68246E-07 | -4,81727E-07 | 1,72656E-09 | -3,62892E-11 | 5,32819E-12 | -1,1244E-08 | -3,62891E-11 | 5,01113E-12 |
| 68 | G transversal | 5,07392E-06 | -2,72568E-06 | -6,93826E-08 | 4,17565E-09 | -1,8846E-10 | -6,89945E-08 | 4,17567E-09 | -3,1304E-10 |
| 69 | D Longitudinal | 6,71379E-08 | -1,45518E-07 | 3,13506E-07 | 1,18014E-11 | -1,8992E-12 | 3,29981E-07 | 1,18011E-11 | -1,7541E-12 |
| 69 | D Vertical | 0,000317117 | -6,73816E-05 | 1,97688E-08 | 1,05238E-07 | -4,41635E-09 | 1,91928E-08 | 1,05238E-07 | -6,44246E-09 |
| 69 | D transversal | 0,001499445 | -2,64793E-06 | 2,47439E-09 | 3,21031E-07 | -2,65073E-10 | -1,20322E-09 | 3,21031E-07 | -4,38348E-09 |
| 69 | G Longitudinal | 0,000264093 | -4,9457E-06 | 7,5532E-10 | 8,28291E-08 | -7,78293E-11 | -1,64494E-09 | 8,28284E-08 | -1,14672E-09 |
| 69 | G Vertical | -2,02072E-05 | -2,23792E-06 | 2,63233E-09 | 3,9986E-10 | -1,99571E-10 | -5,57455E-09 | 4,01087E-10 | -1,08065E-09 |
| 69 | G transversal | -3,46165E-05 | -3,51211E-06 | -8,26386E-08 | -1,31731E-09 | -1,56223E-10 | -7,6422E-08 | -1,3154E-09 | -1,46637E-09 |
| 70 | D Longitudinal | -3,37017E-08 | -1,45652E-07 | 3,13506E-07 | 1,14404E-11 | -1,86391E-12 | 3,29981E-07 | 1,144E-11 | -1,70769E-12 |
| 70 | D Vertical | 0,000317073 | -6,70182E-05 | -1,97662E-08 | 1,05238E-07 | -4,41647E-09 | -1,91904E-08 | 1,05238E-07 | -6,4425E-09 |
| 70 | D transversal | 0,001499438 | -2,53686E-06 | -2,47572E-09 | 3,21023E-07 | -2,64346E-10 | 1,20216E-09 | 3,21023E-07 | -4,38286E-09 |
| 70 | G Longitudinal | 0,000264291 | -5,02313E-06 | -1,3904E-09 | 8,34349E-08 | -2,93447E-10 | 1,00837E-09 | 8,34342E-08 | -1,37211E-09 |
| 70 | G Vertical | 2,05607E-05 | 2,12254E-06 | 1,47491E-09 | 6,8383E-10 | -1,88687E-10 | -6,73943E-09 | 6,82571E-10 | 6,74378E-10 |
| 70 | G transversal | 3,51215E-05 | 3,2868E-06 | -8,44333E-08 | 3,01126E-09 | -4,48356E-10 | -7,82278E-08 | 3,00931E-09 | 8,34143E-10 |
| 71 | D Longitudinal | 5,74324E-08 | 1,17133E-07 | 2,74616E-07 | 2,93832E-11 | 4,65827E-12 | 2,58267E-07 | 2,93844E-11 | 5,03891E-12 |
| 71 | D Vertical | -0,000317115 | -6,76742E-05 | -1,97663E-08 | -1,05237E-07 | -4,41627E-09 | -2,03403E-08 | -1,05237E-07 | -2,39024E-09 |
| 71 | D transversal | 0,00136906 | -1,13782E-06 | 4,66595E-10 | 2,77386E-07 | 2,14034E-11 | 3,98826E-09 | 2,77386E-07 | -3,26242E-09 |
| 71 | G Longitudinal | 0,000258526 | 8,52741E-06 | 3,35917E-10 | 8,56201E-08 | 4,07752E-10 | 3,75797E-10 | 8,56201E-08 | -1,21204E-09 |
| 71 | G Vertical | 3,6824E-07 | -4,8171E-07 | -1,72908E-09 | 3,62669E-11 | 5,3266E-12 | -1,46996E-08 | 3,62678E-11 | 5,64024E-12 |
| 71 | G transversal | 5,07394E-06 | 2,71902E-06 | -6,93833E-08 | 4,17468E-09 | 1,88502E-10 | -6,97715E-08 | 4,17464E-09 | 6,44354E-11 |
| 72 | D Longitudinal | 6,71385E-08 | 1,45526E-07 | 3,13507E-07 | 1,18233E-11 | 1,89869E-12 | 2,97033E-07 | 1,18239E-11 | 2,03451E-12 |
| 72 | D Vertical | -0,000317117 | -6,72731E-05 | -1,97689E-08 | -1,05238E-07 | -4,41636E-09 | -2,03449E-08 | -1,05238E-07 | -2,3903E-09 |
| 72 | D transversal | 0,001499445 | 2,42737E-06 | 2,47556E-09 | 3,21031E-07 | 2,6507E-10 | 6,15316E-09 | 3,21031E-07 | -3,85335E-09 |
| 72 | G Longitudinal | 0,000264092 | 4,88797E-06 | 7,43074E-10 | 8,28617E-08 | 7,63909E-11 | 3,14375E-09 | 8,2863E-08 | -1,00993E-09 |
| 72 | G Vertical | 2,0206E-05 | -2,19162E-06 | -2,66006E-09 | -3,40476E-10 | -2,022E-10 | -1,08662E-08 | -3,38009E-10 | 6,4709E-10 |
| 72 | G transversal | -3,46147E-05 | 3,44332E-06 | -8,26021E-08 | -1,40952E-09 | 1,60299E-10 | -8,88198E-08 | -1,41335E-09 | -1,10052E-09 |
| 73 | D Longitudinal | -3,37011E-08 | 1,4566E-07 | 3,13507E-07 | 1,14622E-11 | 1,8634E-12 | 2,97033E-07 | 1,14628E-11 | 2,01037E-12 |
| 73 | D Vertical | -0,000317073 | -6,69097E-05 | 1,97663E-08 | -1,05238E-07 | -4,41647E-09 | 2,03421E-08 | -1,05238E-07 | -2,39049E-09 |
| 73 | D transversal | 0,001499438 | 2,3163E-06 | -2,47689E-09 | 3,21023E-07 | 2,64344E-10 | -6,15477E-09 | 3,21023E-07 | -3,85417E-09 |

APOYO 1

| DESPLAZAMIENTOS (metros) | | VIENTO | PESO | CT1 | | | CT2 | | |
|---|---|---|---|---|---|---|---|---|---|
| Nudo | Desplazamiento | | | L | T | V | L | T | V |
| 73 | G Longitudinal | 0,000264291 | 4,96472E-06 | -1,37676E-09 | 8,34686E-08 | 2,91865E-10 | -3,77584E-09 | 8,347E-08 | -8,04743E-10 |
| 73 | G Vertical | -2,05596E-05 | 2,07749E-06 | -1,50521E-09 | -7,45461E-10 | -1,85798E-10 | -9,71898E-09 | -7,47998E-10 | -1,01609E-09 |
| 73 | G transversal | 3,51198E-05 | -3,21992E-06 | -8,43928E-08 | 3,10669E-09 | 4,43876E-10 | -9,05992E-08 | 3,11062E-09 | 1,6756E-09 |
| 74 | D Longitudinal | -6,13744E-09 | 1,16086E-07 | 2,74615E-07 | 2,94241E-11 | 4,66423E-12 | 2,58264E-07 | 2,94253E-11 | 5,04511E-12 |
| 74 | D Vertical | -0,000317071 | -6,72087E-05 | 1,97636E-08 | -1,05237E-07 | -4,41639E-09 | 2,03375E-08 | -1,05237E-07 | -2,39044E-09 |
| 74 | D transversal | 0,001369002 | -1,27823E-06 | -4,67479E-10 | 2,77366E-07 | 1,86984E-11 | -3,98624E-09 | 2,77366E-07 | -3,2654E-09 |
| 74 | G Longitudinal | 0,000258518 | 8,34644E-06 | -3,40596E-10 | 8,56353E-08 | 4,11447E-10 | -3,8269E-10 | 8,56353E-08 | -1,20833E-09 |
| 74 | G Vertical | -4,25068E-07 | 2,50859E-07 | -1,72774E-09 | -3,79528E-11 | -4,61255E-12 | -1,46973E-08 | -3,79548E-11 | -4,93384E-12 |
| 74 | G transversal | -5,13159E-06 | -3,46663E-06 | -6,94017E-08 | -4,14597E-09 | -1,81077E-10 | -6,97893E-08 | -4,14593E-09 | -5,70001E-11 |
| 75 | D Longitudinal | -5,02472E-12 | -6,3121E-06 | 2,76619E-10 | -1,50126E-14 | 8,67009E-13 | 2,76619E-10 | -1,50138E-14 | 8,67265E-13 |
| 75 | D Vertical | -3,75304E-12 | -7,83756E-06 | -1,35807E-09 | 1,23338E-14 | -9,72999E-11 | -1,35807E-09 | 1,22076E-14 | -9,7299E-11 |
| 75 | D transversal | 3,11525E-05 | 1,652E-09 | 1,33953E-14 | 3,29227E-10 | 1,32827E-15 | 3,62062E-10 | 3,29227E-10 | 4,73111E-11 |
| 75 | G Longitudinal | 7,89367E-06 | -6,14598E-10 | -4,29163E-14 | 1,80561E-09 | 3,18408E-16 | 1,2377E-11 | 1,80561E-09 | -2,39513E-11 |
| 75 | G Vertical | 1,66049E-06 | 3,40749E-10 | -1,3358E-14 | 1,76665E-10 | -5,35848E-15 | -3,8524E-10 | 1,76665E-10 | -2,0521E-12 |
| 75 | G transversal | 3,98399E-11 | -2,13832E-06 | -6,3976E-10 | 1,34341E-13 | -7,96355E-11 | -6,39761E-10 | 1,33582E-13 | -7,96312E-11 |
| 76 | D Longitudinal | -5,04405E-12 | -3,26741E-10 | 2,762E-10 | -1,53242E-14 | 4,33961E-15 | 6,15707E-10 | -1,53315E-14 | 4,68536E-15 |
| 76 | D Vertical | -2,28082E-06 | -5,21944E-06 | 8,20429E-16 | -8,04628E-12 | -9,03796E-13 | 8,21053E-16 | -8,04628E-12 | -4,41033E-12 |
| 76 | D transversal | 3,35707E-05 | -6,09021E-06 | 2,01605E-15 | 3,29677E-10 | 8,29447E-13 | 2,03985E-15 | 3,29677E-10 | 4,81328E-11 |
| 76 | G Longitudinal | -6,39977E-06 | 2,12402E-06 | 3,25654E-13 | -8,77243E-10 | 7,75473E-11 | 3,25852E-13 | -8,77243E-10 | 8,47486E-11 |
| 76 | G Vertical | -3,17586E-12 | -2,96598E-10 | 1,94358E-10 | -2,70891E-15 | 1,57848E-16 | -7,46792E-11 | -2,71593E-15 | 2,96314E-16 |
| 76 | G transversal | -8,47894E-12 | 2,67704E-11 | -2,1024E-09 | -1,90741E-14 | 4,36623E-16 | -2,08998E-09 | -1,90711E-14 | 7,24383E-16 |
| 77 | D Longitudinal | 2,2064E-06 | 4,6082E-07 | 4,67315E-10 | 4,16336E-10 | 2,94736E-11 | -9,91603E-11 | 4,16337E-10 | 2,46497E-11 |
| 77 | D Vertical | -1,39013E-05 | -4,76395E-06 | -2,98026E-09 | -2,98365E-09 | -2,11377E-10 | -2,99889E-09 | -2,98365E-09 | -1,73092E-10 |
| 77 | D transversal | 3,31034E-05 | 8,78745E-08 | 4,58137E-10 | 6,79187E-10 | 3,23679E-11 | 8,17066E-10 | 6,79187E-10 | 7,49178E-11 |
| 77 | G Longitudinal | 4,2863E-05 | 2,6329E-06 | 1,00678E-09 | 3,46735E-09 | 1,32346E-10 | 2,22965E-09 | 3,46716E-09 | 8,6767E-11 |
| 77 | G Vertical | 0,000164306 | -3,15792E-05 | 5,74353E-09 | -1,82299E-08 | -4,63352E-10 | -3,56941E-09 | -1,82272E-08 | 9,37939E-10 |
| 77 | G transversal | -1,57963E-05 | 1,53753E-06 | -2,00294E-09 | 4,70994E-10 | -2,50202E-11 | -5,67903E-10 | 4,70799E-10 | -1,14175E-10 |
| 78 | D Longitudinal | -2,20642E-06 | -4,59211E-07 | 4,67432E-10 | -4,16386E-10 | -2,94904E-11 | -9,90442E-11 | -4,16386E-10 | -2,46661E-11 |
| 78 | D Vertical | -1,39013E-05 | -4,76387E-06 | 2,98025E-09 | -2,98364E-09 | -2,11376E-10 | 2,99888E-09 | -2,98364E-09 | -1,73091E-10 |
| 78 | D transversal | 3,31035E-05 | 8,70107E-08 | -4,58168E-10 | 6,79197E-10 | 3,23706E-11 | -8,17096E-10 | 6,79197E-10 | 7,49205E-11 |
| 78 | G Longitudinal | 4,28511E-05 | 2,60835E-06 | -9,16691E-10 | 3,43165E-09 | 1,19541E-10 | -2,13973E-09 | 3,43145E-09 | 7,45682E-11 |
| 78 | G Vertical | -0,000164476 | 3,12553E-05 | 7,02353E-09 | 1,77228E-08 | 2,81421E-10 | -2,29165E-09 | 1,772E-08 | -1,11126E-09 |
| 78 | G transversal | 1,58083E-05 | -1,51713E-06 | -2,09348E-09 | -4,35075E-10 | 3,79063E-11 | -6,58287E-10 | -4,34878E-10 | 1,26452E-10 |
| 79 | D Longitudinal | 2,2064E-06 | -4,61078E-07 | 4,67269E-10 | 4,16329E-10 | -2,94739E-11 | 1,03374E-09 | 4,16329E-10 | -3,42941E-11 |
| 79 | D Vertical | 1,39013E-05 | -4,766E-06 | 2,98024E-09 | 2,98365E-09 | -2,11377E-10 | 2,96161E-09 | 2,98365E-09 | -2,49662E-10 |
| 79 | D transversal | 3,31034E-05 | -8,55957E-08 | 4,58111E-10 | 6,79185E-10 | -3,2368E-11 | 9,91818E-11 | 6,79184E-10 | 1,01829E-11 |
| 79 | G Longitudinal | 4,28629E-05 | -2,63539E-06 | 1,00582E-09 | 3,47202E-09 | -1,32135E-10 | -2,17082E-10 | 3,47212E-09 | -1,80209E-10 |
| 79 | G Vertical | -0,000164307 | -3,1655E-05 | -5,75621E-09 | 1,82963E-08 | -4,60359E-10 | -1,50696E-08 | 1,82977E-08 | -1,8971E-09 |
| 79 | G transversal | -1,57964E-05 | -1,54236E-06 | -2,00376E-09 | 4,7569E-10 | 2,5232E-11 | -3,43883E-09 | 4,75787E-10 | -6,64306E-11 |
| 80 | D Longitudinal | 7,18986E-06 | 1,53793E-06 | 2,68571E-09 | 1,37207E-09 | 9,72294E-11 | 1,72937E-09 | 1,37207E-09 | 8,12064E-11 |
| 80 | D Vertical | -2,7187E-05 | -9,17999E-06 | -5,77733E-09 | -5,78593E-09 | -4,15046E-10 | -5,81268E-09 | -5,78593E-09 | -3,40779E-10 |
| 80 | D transversal | 7,15545E-05 | 1,00411E-06 | 1,83531E-09 | 3,29978E-09 | 1,29765E-10 | 2,54833E-09 | 3,29978E-09 | 1,89561E-10 |
| 80 | G Longitudinal | 5,36858E-05 | 3,07208E-06 | 8,52298E-10 | 6,30236E-09 | 1,20834E-10 | 2,07956E-09 | 6,30216E-09 | 3,9343E-11 |
| 80 | G Vertical | 0,000164907 | -3,16136E-05 | 5,51953E-09 | -1,80619E-08 | -4,66302E-10 | -3,8136E-09 | -1,80591E-08 | 9,32887E-10 |

APOYO 1

| DESPLAZAMIENTOS (metros) | | VIENTO | PESO | CT1 | | | CT2 | | |
|---|---|---|---|---|---|---|---|---|---|
| Nudo | Desplazamiento | | | L | T | V | L | T | V |
| 80 | G transversal | -1,78123E-05 | 6,77131E-07 | -5,03315E-09 | 6,21507E-11 | -5,32682E-11 | -3,86778E-09 | 6,19552E-11 | -1,37529E-10 |
| 81 | D Longitudinal | -7,18995E-06 | -1,5349E-06 | 2,68626E-09 | -1,37234E-09 | -9,73273E-11 | 1,72992E-09 | -1,37234E-09 | -8,13007E-11 |
| 81 | D Vertical | -2,7187E-05 | -9,1799E-06 | 5,77729E-09 | -5,78591E-09 | -4,1504E-10 | 5,81265E-09 | -5,78591E-09 | -3,40774E-10 |
| 81 | D transversal | 7,15545E-05 | 1,00184E-06 | -1,83525E-09 | 3,29974E-09 | 1,29756E-10 | -2,54827E-09 | 3,29974E-09 | 1,89553E-10 |
| 81 | G Longitudinal | 5,36737E-05 | 3,04672E-06 | -7,61753E-10 | 6,26647E-09 | 1,07966E-10 | -1,98917E-09 | 6,26628E-09 | 2,70848E-11 |
| 81 | G Vertical | -0,000165077 | 3,12898E-05 | 6,79957E-09 | 1,75547E-08 | 2,84366E-10 | -2,5358E-09 | 1,7552E-08 | -1,10622E-09 |
| 81 | G transversal | 1,78244E-05 | -6,56489E-07 | -5,12411E-09 | -2,60227E-11 | 6,62322E-11 | -3,95858E-09 | -2,5825E-11 | 1,49881E-10 |
| 82 | D Longitudinal | 7,18986E-06 | -1,53879E-06 | 2,68561E-09 | 1,37204E-09 | -9,72307E-11 | 3,64196E-09 | 1,37204E-09 | -1,13237E-10 |
| 82 | D Vertical | 2,7187E-05 | -9,18397E-06 | 5,7773E-09 | 5,78593E-09 | -4,15046E-10 | 5,74194E-09 | 5,78593E-09 | -4,89313E-10 |
| 82 | D transversal | 7,15545E-05 | -1,0009E-06 | 1,83523E-09 | 3,29978E-09 | -1,29765E-10 | 1,12221E-09 | 3,29978E-09 | -6,99697E-11 |
| 82 | G Longitudinal | 5,36857E-05 | -3,0765E-06 | 8,51308E-10 | 6,30705E-09 | -1,20623E-10 | -3,75986E-10 | 6,30715E-09 | -2,04621E-10 |
| 82 | G Vertical | -0,000164908 | -3,16894E-05 | -5,53221E-09 | 1,81282E-08 | -4,63309E-10 | -1,48658E-08 | 1,81296E-08 | -1,89795E-09 |
| 82 | G transversal | -1,78124E-05 | -6,81703E-07 | -5,03397E-09 | 6,68687E-11 | 5,34809E-11 | -6,19937E-09 | 6,69658E-11 | -3,33001E-11 |
| 83 | D Longitudinal | 1,04215E-05 | 2,57065E-06 | 6,62555E-09 | 2,0801E-09 | 1,46947E-10 | 5,38727E-09 | 2,0801E-09 | 1,211E-10 |
| 83 | D Vertical | -3,87293E-05 | -1,33939E-05 | -8,54615E-09 | -8,50932E-09 | -6,26966E-10 | -8,56982E-09 | -8,50932E-09 | -5,14784E-10 |
| 83 | D transversal | 0,000116093 | 1,6298E-06 | 2,06996E-09 | 7,24366E-09 | 1,45814E-10 | 3,13505E-09 | 7,24366E-09 | 2,07657E-10 |
| 83 | G Longitudinal | 5,98193E-05 | 2,95401E-06 | -1,15014E-09 | 8,49372E-09 | -1,95766E-11 | 8,98517E-11 | 8,49352E-09 | -1,28253E-10 |
| 83 | G Vertical | 0,000163852 | -3,13022E-05 | 5,90036E-09 | -1,80821E-08 | -4,4794E-10 | -3,42057E-09 | -1,80793E-08 | 9,51333E-10 |
| 83 | G transversal | -1,21254E-05 | 2,11422E-06 | -7,75398E-09 | 1,09148E-09 | 1,80462E-11 | -6,63854E-09 | 1,09128E-09 | -7,77856E-11 |
| 84 | D Longitudinal | -1,04215E-05 | -2,5659E-06 | 6,6253E-09 | -2,08008E-09 | -1,46944E-10 | 5,38703E-09 | -2,08008E-09 | -1,21099E-10 |
| 84 | D Vertical | -3,87293E-05 | -1,33939E-05 | 8,54611E-09 | -8,5093E-09 | -6,2696E-10 | 8,56979E-09 | -8,5093E-09 | -5,14778E-10 |
| 84 | D transversal | 0,000116093 | 1,62615E-06 | -2,0707E-09 | 7,24394E-09 | 1,45919E-10 | -3,13579E-09 | 7,24394E-09 | 2,07758E-10 |
| 84 | G Longitudinal | 5,98071E-05 | 2,92834E-06 | 1,24132E-09 | 8,45759E-09 | -3,25343E-11 | 1,16903E-12 | 8,4574E-09 | -1,40597E-10 |
| 84 | G Vertical | -0,000164022 | 3,09784E-05 | 7,18059E-09 | 1,75749E-08 | 2,65976E-10 | -2,14258E-09 | 1,75721E-08 | -1,12469E-09 |
| 84 | G transversal | 1,21374E-05 | -2,09378E-06 | -7,8447E-09 | -1,05556E-09 | -5,1577E-12 | -6,72911E-09 | -1,05537E-09 | 9,00655E-11 |
| 85 | D Longitudinal | 1,04215E-05 | -2,57203E-06 | 6,62538E-09 | 2,08011E-09 | -1,46947E-10 | 7,86366E-09 | 2,08011E-09 | -1,72799E-10 |
| 85 | D Vertical | 3,87293E-05 | -1,33999E-05 | 8,54611E-09 | 8,50932E-09 | -6,26966E-10 | 8,52243E-09 | 8,50932E-09 | -7,39149E-10 |
| 85 | D transversal | 0,000116093 | -1,62649E-06 | 2,06982E-09 | 7,24362E-09 | -1,45816E-10 | 1,00473E-09 | 7,24362E-09 | -8,39517E-11 |
| 85 | G Longitudinal | 5,98192E-05 | -2,95989E-06 | -1,15115E-09 | 8,49844E-09 | 1,97899E-11 | -2,39117E-09 | 8,49854E-09 | -9,14109E-11 |
| 85 | G Vertical | -0,000163854 | -3,1378E-05 | -5,91304E-09 | 1,81484E-08 | -4,44946E-10 | -1,52344E-08 | 1,81498E-08 | -1,87967E-09 |
| 85 | G transversal | -1,21255E-05 | -2,11941E-06 | -7,75477E-09 | 1,09618E-09 | -1,7834E-11 | -8,87024E-09 | 1,09628E-09 | -1,16179E-10 |
| 86 | D Longitudinal | 1,00088E-05 | 2,31069E-06 | 1,23106E-08 | 2,0742E-09 | 1,46821E-10 | 1,07716E-08 | 2,0742E-09 | 1,20308E-10 |
| 86 | D Vertical | -5,04332E-05 | -1,74801E-05 | -1,12337E-08 | -1,11801E-08 | -8,45795E-10 | -1,12676E-08 | -1,11801E-08 | -6,9659E-10 |
| 86 | D transversal | 0,000163881 | 2,40288E-06 | 1,79714E-09 | 1,29267E-08 | 1,27184E-10 | 3,22608E-09 | 1,29267E-08 | 1,67138E-10 |
| 86 | G Longitudinal | 6,99671E-05 | 2,30244E-06 | -1,01318E-09 | 1,1543E-08 | -1,1623E-11 | 2,14461E-10 | 1,15428E-08 | -1,61845E-10 |
| 86 | G Vertical | 0,000163968 | -3,04911E-05 | 6,01553E-09 | -1,7524E-08 | -4,12388E-10 | -3,28098E-09 | -1,75212E-08 | 9,79521E-10 |
| 86 | G transversal | -7,14102E-06 | 3,35655E-06 | -1,05755E-08 | 1,95952E-09 | 8,01264E-11 | -9,42236E-09 | 1,95933E-09 | -2,52626E-11 |
| 87 | D Longitudinal | -1,00088E-05 | -2,30437E-06 | 1,23106E-08 | -2,07422E-09 | -1,46833E-10 | 1,07716E-08 | -2,07422E-09 | -1,20322E-10 |
| 87 | D Vertical | -5,04332E-05 | -1,74803E-05 | 1,12337E-08 | -1,11801E-08 | -8,45796E-10 | 1,12676E-08 | -1,11801E-08 | -6,96591E-10 |
| 87 | D transversal | 0,000163881 | 2,39739E-06 | -1,79714E-09 | 1,29267E-08 | 1,27186E-10 | -3,22608E-09 | 1,29267E-08 | 1,67142E-10 |
| 87 | G Longitudinal | 6,9955E-05 | 2,27671E-06 | 1,10456E-09 | 1,15068E-08 | -2,46092E-11 | -1,23247E-10 | 1,15066E-08 | -1,74215E-10 |
| 87 | G Vertical | -0,000164138 | 3,01671E-05 | 7,296E-09 | 1,70166E-08 | 2,30378E-10 | -2,00275E-09 | 1,70138E-08 | -1,15292E-09 |
| 87 | G transversal | 7,15297E-06 | -3,33634E-06 | -1,0666E-08 | -1,92384E-09 | -6,73198E-11 | -9,51263E-09 | -1,92364E-09 | 3,74647E-11 |
| 88 | D Longitudinal | 1,00088E-05 | -2,31211E-06 | 1,23104E-08 | 2,07419E-09 | -1,46821E-10 | 1,38493E-08 | 2,07419E-09 | -1,73332E-10 |

APOYO 1

| DESPLAZAMIENTOS (metros) | | VIENTO | PESO | CT1 | | | CT2 | | |
|---|---|---|---|---|---|---|---|---|---|
| Nudo | Desplazamiento | | | L | T | V | L | T | V |
| 88 | D Vertical | 5,04332E-05 | -1,74881E-05 | 1,12337E-08 | 1,11801E-08 | -8,45795E-10 | 1,11999E-08 | 1,11801E-08 | -9,95E-10 |
| 88 | D transversal | 0,000163881 | -2,40074E-06 | 1,79692E-09 | 1,29267E-08 | -1,27184E-10 | 3,67985E-10 | 1,29267E-08 | -8,72296E-11 |
| 88 | G Longitudinal | 6,9967E-05 | -2,31054E-06 | -1,01421E-09 | 1,15477E-08 | 1,18367E-11 | -2,24189E-09 | 1,15478E-08 | -1,40914E-10 |
| 88 | G Vertical | -0,000163969 | -3,05665E-05 | -6,02822E-09 | 1,75903E-08 | -4,09393E-10 | -1,53252E-08 | 1,75917E-08 | -1,83676E-09 |
| 88 | G transversal | -7,14111E-06 | -3,36225E-06 | -1,05763E-08 | 1,96422E-09 | -7,99149E-11 | -1,17295E-08 | 1,96431E-09 | -1,8781E-10 |
| 89 | D Longitudinal | 8,05547E-06 | 1,9185E-06 | 1,97233E-08 | 1,80087E-09 | 1,27631E-10 | 1,7872E-08 | 1,80087E-09 | 1,03285E-10 |
| 89 | D Vertical | -6,03339E-05 | -2,14277E-05 | -1,37778E-08 | -1,37396E-08 | -1,06442E-09 | -1,37992E-08 | -1,37396E-08 | -8,76485E-10 |
| 89 | D transversal | 0,000219799 | 2,27231E-06 | 1,81466E-09 | 2,04686E-08 | 1,29018E-10 | 3,59863E-09 | 2,04686E-08 | 1,21384E-10 |
| 89 | G Longitudinal | 7,9254E-05 | 1,12151E-06 | -6,18331E-10 | 1,41678E-08 | 1,4363E-11 | 6,06996E-10 | 1,41676E-08 | -1,70637E-10 |
| 89 | G Vertical | 0,000163643 | -2,9818E-05 | 6,1555E-09 | -1,70628E-08 | -3,80358E-10 | -3,11925E-09 | -1,70601E-08 | 1,00538E-09 |
| 89 | G transversal | -7,56631E-06 | 3,16693E-06 | -1,33027E-08 | 1,87469E-09 | 7,41281E-11 | -1,21595E-08 | 1,87449E-09 | -3,06647E-11 |
| 90 | D Longitudinal | -8,05548E-06 | -1,9106E-06 | 1,97235E-08 | -1,8009E-09 | -1,27649E-10 | 1,78722E-08 | -1,8009E-09 | -1,03306E-10 |
| 90 | D Vertical | -6,03339E-05 | -2,14282E-05 | 1,37779E-08 | -1,37396E-08 | -1,06443E-09 | 1,37992E-08 | -1,37396E-08 | -8,76492E-10 |
| 90 | D transversal | 0,000219799 | 2,26502E-06 | -1,81394E-09 | 2,04683E-08 | 1,28917E-10 | -3,5979E-09 | 2,04683E-08 | 1,21292E-10 |
| 90 | G Longitudinal | 7,92421E-05 | 1,09584E-06 | 7,09538E-10 | 1,41317E-08 | 1,40082E-12 | -5,15953E-10 | 1,41315E-08 | -1,82984E-10 |
| 90 | G Vertical | -0,000163813 | 2,94939E-05 | 7,43621E-09 | 1,65554E-08 | 1,9831E-10 | -1,84078E-09 | 1,65526E-08 | -1,17881E-09 |
| 90 | G transversal | 7,57832E-06 | -3,14652E-06 | -1,33934E-08 | -1,83884E-09 | -6,12633E-11 | -1,225E-08 | -1,83864E-09 | 4,29223E-11 |
| 91 | D Longitudinal | 8,05547E-06 | -1,91981E-06 | 1,9723E-08 | 1,80085E-09 | -1,27632E-10 | 2,15743E-08 | 1,80085E-09 | -1,51969E-10 |
| 91 | D Vertical | 6,03339E-05 | -2,14378E-05 | 1,37778E-08 | 1,37396E-08 | -1,06442E-09 | 1,37564E-08 | 1,37396E-08 | -1,25236E-09 |
| 91 | D transversal | 0,000219799 | -2,27272E-06 | 1,81435E-09 | 2,04686E-08 | -1,29016E-10 | 3,03908E-11 | 2,04686E-08 | -1,36667E-10 |
| 91 | G Longitudinal | 7,92539E-05 | -1,13147E-06 | -6,19371E-10 | 1,41725E-08 | -1,41497E-11 | -1,84473E-09 | 1,41726E-08 | -2,01672E-10 |
| 91 | G Vertical | -0,000163644 | -2,98931E-05 | -6,16819E-09 | 1,71292E-08 | -3,77363E-10 | -1,54434E-08 | 1,71306E-08 | -1,79857E-09 |
| 91 | G transversal | -7,5664E-06 | -3,1726E-06 | -1,33035E-08 | 1,87939E-09 | -7,3916E-11 | -1,44468E-08 | 1,87949E-09 | -1,81222E-10 |
| 92 | D Longitudinal | 7,51099E-06 | 1,69926E-06 | 2,88478E-08 | 1,82216E-09 | 1,28589E-10 | 2,67061E-08 | 1,82216E-09 | 1,01997E-10 |
| 92 | D Vertical | -6,97433E-05 | -2,51482E-05 | -1,61797E-08 | -1,61561E-08 | -1,28073E-09 | -1,62113E-08 | -1,61561E-08 | -1,05569E-09 |
| 92 | D transversal | 0,000279479 | 1,971E-06 | 1,97145E-09 | 2,9485E-08 | 1,39519E-10 | 4,11671E-09 | 2,9485E-08 | 6,76522E-11 |
| 92 | G Longitudinal | 8,86951E-05 | 1,30936E-06 | -4,04789E-10 | 1,64957E-08 | 2,87449E-11 | 8,64328E-10 | 1,64955E-08 | -1,81651E-10 |
| 92 | G Vertical | 0,000163693 | -2,91736E-05 | 6,59885E-09 | -1,68615E-08 | -3,47545E-10 | -2,64951E-09 | -1,68588E-08 | 1,03573E-09 |
| 92 | G transversal | -1,12793E-05 | 2,21814E-06 | -1,6167E-08 | 1,13549E-09 | 2,02749E-11 | -1,50363E-08 | 1,1353E-09 | -7,53866E-11 |
| 93 | D Longitudinal | -7,51089E-06 | -1,68963E-06 | 2,88472E-08 | -1,82185E-09 | -1,28488E-10 | 2,67055E-08 | -1,82184E-09 | -1,01905E-10 |
| 93 | D Vertical | -6,97433E-05 | -2,5149E-05 | 1,61797E-08 | -1,61561E-08 | -1,28074E-09 | 1,62113E-08 | -1,61561E-08 | -1,0557E-09 |
| 93 | D transversal | 0,00027948 | 1,96229E-06 | -1,97149E-09 | 2,9485E-08 | 1,39529E-10 | -4,11675E-09 | 2,9485E-08 | 6,76656E-11 |
| 93 | G Longitudinal | 8,86834E-05 | 1,28376E-06 | 4,95525E-10 | 1,64598E-08 | 1,5849E-11 | -7,7374E-10 | 1,64596E-08 | -1,93939E-10 |
| 93 | G Vertical | -0,000163863 | 2,88494E-05 | 7,87982E-09 | 1,63539E-08 | 1,65448E-10 | -1,37078E-09 | 1,63511E-08 | -1,20921E-09 |
| 93 | G transversal | 1,12914E-05 | -2,19743E-06 | -1,6258E-08 | -1,09937E-09 | -7,3135E-12 | -1,51271E-08 | -1,09918E-09 | 8,77362E-11 |
| 94 | D Longitudinal | 7,51099E-06 | -1,70069E-06 | 2,88474E-08 | 1,82218E-09 | -1,28588E-10 | 3,0989E-08 | 1,82218E-09 | -1,55193E-10 |
| 94 | D Vertical | 6,97433E-05 | -2,51603E-05 | 1,61796E-08 | 1,61561E-08 | -1,28073E-09 | 1,6148E-08 | 1,61561E-08 | -1,50577E-09 |
| 94 | D transversal | 0,000279479 | -1,97485E-06 | 1,97106E-09 | 2,9485E-08 | -1,39519E-10 | -1,74204E-10 | 2,9485E-08 | -2,11379E-10 |
| 94 | G Longitudinal | 8,8695E-05 | -1,32069E-06 | -4,05837E-10 | 1,65004E-08 | -2,85326E-11 | -1,67498E-09 | 1,65005E-08 | -2,41436E-10 |
| 94 | G Vertical | -0,000163694 | -2,92485E-05 | -6,61154E-09 | 1,69279E-08 | -3,44549E-10 | -1,58603E-08 | 1,69293E-08 | -1,7633E-09 |
| 94 | G transversal | -1,12794E-05 | -2,22332E-06 | -1,61677E-08 | 1,14022E-09 | -2,0062E-11 | -1,72984E-08 | 1,14031E-09 | -1,18246E-10 |
| 95 | D Longitudinal | 9,93806E-06 | 2,5139E-06 | 4,05764E-08 | 2,4791E-09 | 1,75375E-10 | 3,81157E-08 | 2,4791E-09 | 1,38239E-10 |
| 95 | D Vertical | -8,0109E-05 | -2,94778E-05 | -1,91964E-08 | -1,91923E-08 | -1,54922E-09 | -1,92042E-08 | -1,91923E-08 | -1,27338E-09 |
| 95 | D transversal | 0,000351855 | 2,12182E-06 | 2,49006E-09 | 4,08374E-08 | 1,75989E-10 | 5,05634E-09 | 4,08374E-08 | 1,28878E-11 |

APOYO 1

| DESPLAZAMIENTOS (metros) | | VIENTO | PESO | CT1 | | | CT2 | | |
|---|---|---|---|---|---|---|---|---|---|
| Nudo | Desplazamiento | | | L | T | V | L | T | V |
| 95 | G Longitudinal | 0,00010947 | 2,5536E-06 | 7,0331E-11 | 2,11605E-08 | 5,96655E-11 | 1,4375E-09 | 2,11603E-08 | -2,03971E-10 |
| 95 | G Vertical | 0,000166996 | -2,85521E-05 | 6,71353E-09 | -1,62271E-08 | -3,08359E-10 | -2,4794E-09 | -1,62243E-08 | 1,06848E-09 |
| 95 | G transversal | -1,45255E-05 | 1,3661E-06 | -2,10617E-08 | 3,11259E-10 | -3,75207E-11 | -1,98605E-08 | 3,11063E-10 | -1,19529E-10 |
| 96 | D Longitudinal | -9,93806E-06 | -2,50304E-06 | 4,05763E-08 | -2,4791E-09 | -1,75387E-10 | 3,81157E-08 | -2,4791E-09 | -1,38255E-10 |
| 96 | D Vertical | -8,01089E-05 | -2,94791E-05 | 1,91964E-08 | -1,91922E-08 | -1,54922E-09 | 1,92042E-08 | -1,91922E-08 | -1,27338E-09 |
| 96 | D transversal | 0,000351855 | 2,11145E-06 | -2,49003E-09 | 4,08375E-08 | 1,75991E-10 | -5,05629E-09 | 4,08375E-08 | 1,28906E-11 |
| 96 | G Longitudinal | 0,000109458 | 2,52812E-06 | 1,97561E-11 | 2,11248E-08 | 4,68618E-11 | -1,34755E-09 | 2,11246E-08 | -2,16173E-10 |
| 96 | G Vertical | -0,000167166 | 2,82277E-05 | 7,99495E-09 | 1,57193E-08 | 1,26191E-10 | -1,20023E-09 | 1,57165E-08 | -1,24203E-09 |
| 96 | G transversal | 1,45376E-05 | -1,34523E-06 | -2,11527E-08 | -2,74973E-10 | 5,05433E-11 | -1,99514E-08 | -2,74776E-10 | 1,31937E-10 |
| 97 | D Longitudinal | 9,93806E-06 | -2,51589E-06 | 4,05759E-08 | 2,47909E-09 | -1,75375E-10 | 4,30365E-08 | 2,47909E-09 | -2,12508E-10 |
| 97 | D Vertical | 8,0109E-05 | -2,94925E-05 | 1,91964E-08 | 1,91923E-08 | -1,54922E-09 | 1,91886E-08 | 1,91923E-08 | -1,82506E-09 |
| 97 | D transversal | 0,000351855 | -2,13056E-06 | 2,48957E-09 | 4,08374E-08 | -1,75989E-10 | -7,6713E-11 | 4,08374E-08 | -3,39082E-10 |
| 97 | G Longitudinal | 0,00010947 | -2,56778E-06 | 6,92644E-11 | 2,11652E-08 | -5,94548E-11 | -1,29794E-09 | 2,11653E-08 | -3,25583E-10 |
| 97 | G Vertical | -0,000166997 | -2,86267E-05 | -6,72622E-09 | 1,62935E-08 | -3,05363E-10 | -1,59196E-08 | 1,62949E-08 | -1,71769E-09 |
| 97 | G transversal | -1,45256E-05 | -1,37055E-06 | -2,10624E-08 | 3,1598E-10 | 3,77335E-11 | -2,22636E-08 | 3,16078E-10 | -4,67962E-11 |
| 98 | D Longitudinal | 1,16538E-05 | 2,68166E-06 | 5,48122E-08 | 3,04003E-09 | 2,15228E-10 | 5,19768E-08 | 3,04003E-09 | 1,67427E-10 |
| 98 | D Vertical | -9,00196E-05 | -3,35868E-05 | -2,2043E-08 | -2,20476E-08 | -1,81858E-09 | -2,20656E-08 | -2,20476E-08 | -1,49436E-09 |
| 98 | D transversal | 0,000431351 | 2,83027E-06 | 2,95082E-09 | 5,48795E-08 | 2,08602E-10 | 5,97865E-09 | 5,48795E-08 | -8,061E-11 |
| 98 | G Longitudinal | 0,000121417 | 1,79415E-06 | -6,09637E-10 | 2,50074E-08 | 1,05959E-11 | 7,70916E-10 | 2,50072E-08 | -3,10338E-10 |
| 98 | G Vertical | 0,000170184 | -2,79298E-05 | 6,85249E-09 | -1,55281E-08 | -2,66151E-10 | -2,2904E-09 | -1,55254E-08 | 1,10211E-09 |
| 98 | G transversal | -1,05758E-05 | 2,52927E-06 | -2,44564E-08 | 1,22169E-09 | 2,76134E-11 | -2,31767E-08 | 1,2215E-09 | -6,71217E-11 |
| 99 | D Longitudinal | -1,16539E-05 | -2,6696E-06 | 5,48126E-08 | -3,04033E-09 | -2,15354E-10 | 5,19772E-08 | -3,04033E-09 | -1,67553E-10 |
| 99 | D Vertical | -9,00196E-05 | -3,35887E-05 | 2,2043E-08 | -2,20476E-08 | -1,81857E-09 | 2,20656E-08 | -2,20476E-08 | -1,49435E-09 |
| 99 | D transversal | 0,000431351 | 2,8183E-06 | -2,95076E-09 | 5,48795E-08 | 2,08602E-10 | -5,97858E-09 | 5,48795E-08 | -8,06066E-11 |
| 99 | G Longitudinal | 0,000121403 | 1,7687E-06 | 7,00291E-10 | 2,49712E-08 | -2,28986E-12 | -6,80449E-10 | 2,4971E-08 | -3,226E-10 |
| 99 | G Vertical | -0,000170354 | 2,76052E-05 | 8,13428E-09 | 1,50202E-08 | 8,39157E-11 | -1,01087E-09 | 1,50174E-08 | -1,27573E-09 |
| 99 | G transversal | 1,05879E-05 | -2,50836E-06 | -2,45474E-08 | -1,18551E-09 | -1,46287E-11 | -2,32676E-08 | -1,18532E-09 | 7,94938E-11 |
| 100 | D Longitudinal | 1,16538E-05 | -2,68422E-06 | 5,48116E-08 | 3,03999E-09 | -2,15229E-10 | 5,7647E-08 | 3,03999E-09 | -2,63013E-10 |
| 100 | D Vertical | 9,00196E-05 | -3,36041E-05 | 2,2043E-08 | 2,20476E-08 | -1,81858E-09 | 2,20204E-08 | 2,20476E-08 | -2,14279E-09 |
| 100 | D transversal | 0,000431351 | -2,84576E-06 | 2,95022E-09 | 5,48795E-08 | -2,08602E-10 | -7,76132E-11 | 5,48795E-08 | -4,97809E-10 |
| 100 | G Longitudinal | 0,000121417 | -1,8114E-06 | -6,10721E-10 | 2,50121E-08 | -1,03839E-11 | -1,9913E-09 | 2,50122E-08 | -3,33844E-10 |
| 100 | G Vertical | -0,000170185 | -2,80039E-05 | -6,86519E-09 | 1,55946E-08 | -2,63153E-10 | -1,60085E-08 | 1,55959E-08 | -1,66692E-09 |
| 100 | G transversal | -1,05759E-05 | -2,5344E-06 | -2,44571E-08 | 1,22641E-09 | -2,74006E-11 | -2,57369E-08 | 1,22651E-09 | -1,24657E-10 |
| 101 | D Longitudinal | 1,04362E-05 | 2,55838E-06 | 7,12286E-08 | 2,8995E-09 | 2,04603E-10 | 6,79986E-08 | 2,8995E-09 | 1,56515E-10 |
| 101 | D Vertical | -9,7623E-05 | -3,75832E-05 | -2,4751E-08 | -2,47555E-08 | -2,09441E-09 | -2,47475E-08 | -2,47555E-08 | -1,71811E-09 |
| 101 | D transversal | 0,00052097 | 2,45034E-06 | 2,93917E-09 | 7,13834E-08 | 2,07906E-10 | 6,40931E-09 | 7,13834E-08 | -2,46933E-10 |
| 101 | G Longitudinal | 0,000134061 | 1,01029E-06 | -1,053E-09 | 2,94591E-08 | -2,1007E-11 | 3,03329E-10 | 2,94589E-08 | -4,17523E-10 |
| 101 | G Vertical | 0,000171065 | -2,70645E-05 | 7,2802E-09 | -1,51789E-08 | -2,25411E-10 | -1,82172E-09 | -1,51761E-08 | 1,13923E-09 |
| 101 | G transversal | -8,09908E-06 | 2,96683E-06 | -2,85624E-08 | 2,0699E-09 | 8,64012E-11 | -2,72835E-08 | 2,0697E-09 | -2,62473E-11 |
| 102 | D Longitudinal | -1,04362E-05 | -2,54493E-06 | 7,12284E-08 | -2,89947E-09 | -2,04612E-10 | 6,79984E-08 | -2,89947E-09 | -1,56531E-10 |
| 102 | D Vertical | -9,76231E-05 | -3,75859E-05 | 2,47509E-08 | -2,47555E-08 | -2,0944E-09 | 2,47474E-08 | -2,47555E-08 | -1,71811E-09 |
| 102 | D transversal | 0,000520969 | 2,43726E-06 | -2,93987E-09 | 7,13835E-08 | 2,08015E-10 | -6,41003E-09 | 7,13835E-08 | -2,46813E-10 |
| 102 | G Longitudinal | 0,000134048 | 9,85532E-07 | 1,14439E-09 | 2,94226E-08 | -3,3998E-11 | -2,12161E-10 | 2,94224E-08 | -4,29879E-10 |
| 102 | G Vertical | -0,000171235 | 2,67397E-05 | 8,56241E-09 | 1,46707E-08 | 4,30992E-11 | -5,4178E-10 | 1,46679E-08 | -1,31292E-09 |

APOYO 1

| DESPLAZAMIENTOS (metros) | | VIENTO | PESO | CT1 | | | CT2 | | |
|---|---|---|---|---|---|---|---|---|---|
| Nudo | Desplazamiento | | | L | T | V | L | T | V |
| 102 | G transversal | 8,11116E-06 | -2,94545E-06 | -2,86541E-08 | -2,03401E-09 | -7,35221E-11 | -2,73749E-08 | -2,03381E-09 | 3,85185E-11 |
| 103 | D Longitudinal | 1,04362E-05 | -2,56095E-06 | 7,12279E-08 | 2,89949E-09 | -2,04602E-10 | 7,4458E-08 | 2,89949E-09 | -2,52691E-10 |
| 103 | D Vertical | 9,7623E-05 | -3,76033E-05 | 2,47509E-08 | 2,47555E-08 | -2,09441E-09 | 2,47544E-08 | 2,47555E-08 | -2,4707E-09 |
| 103 | D transversal | 0,00052097 | -2,4747E-06 | 2,93846E-09 | 7,13834E-08 | -2,07908E-10 | -5,31684E-10 | 7,13834E-08 | -6,62735E-10 |
| 103 | G Longitudinal | 0,000134061 | -1,03158E-06 | -1,05409E-09 | 2,94638E-08 | 2,12207E-11 | -2,41045E-09 | 2,94639E-08 | -3,77844E-10 |
| 103 | G Vertical | -0,000171066 | -2,71384E-05 | -7,29291E-09 | 1,52453E-08 | -2,22412E-10 | -1,63953E-08 | 1,52467E-08 | -1,62257E-09 |
| 103 | G transversal | -8,09917E-06 | -2,97292E-06 | -2,85631E-08 | 2,07466E-09 | -8,61866E-11 | -2,98421E-08 | 2,07476E-09 | -2,01378E-10 |
| 104 | D Longitudinal | 9,35519E-06 | 2,14293E-06 | 9,06341E-08 | 2,60814E-09 | 1,84304E-10 | 8,70125E-08 | 2,60814E-09 | 1,41968E-10 |
| 104 | D Vertical | -0,000104923 | -4,13574E-05 | -2,72757E-08 | -2,72733E-08 | -2,37068E-09 | -2,72914E-08 | -2,72733E-08 | -1,94558E-09 |
| 104 | D transversal | 0,000616486 | 2,38059E-06 | 2,87816E-09 | 9,10086E-08 | 2,03568E-10 | 6,79573E-09 | 9,10086E-08 | -4,70443E-10 |
| 104 | G Longitudinal | 0,00014847 | 9,47264E-07 | -1,23855E-09 | 3,44088E-08 | -4,01131E-11 | 1,14978E-10 | 3,44086E-08 | -5,1944E-10 |
| 104 | G Vertical | 0,000171846 | -2,59613E-05 | 7,29651E-09 | -1,4461E-08 | -1,87215E-10 | -1,7675E-09 | -1,44583E-08 | 1,16735E-09 |
| 104 | G transversal | -9,61977E-06 | 2,34229E-06 | -3,36897E-08 | 1,65824E-09 | 5,76905E-11 | -3,24229E-08 | 1,65804E-09 | -4,89972E-11 |
| 105 | D Longitudinal | -9,35521E-06 | -2,12889E-06 | 9,06349E-08 | -2,6081E-09 | -1,84313E-10 | 8,70132E-08 | -2,60811E-09 | -1,41985E-10 |
| 105 | D Vertical | -0,000104923 | -4,1361E-05 | 2,72757E-08 | -2,72733E-08 | -2,37068E-09 | 2,72914E-08 | -2,72733E-08 | -1,94558E-09 |
| 105 | D transversal | 0,000616485 | 2,36693E-06 | -2,87817E-09 | 9,10084E-08 | 2,03582E-10 | -6,79578E-09 | 9,10084E-08 | -4,70411E-10 |
| 105 | G Longitudinal | 0,000148464 | 9,24406E-07 | 1,32976E-09 | 3,4373E-08 | -5,30808E-11 | -2,39102E-11 | 3,43728E-08 | -5,31812E-10 |
| 105 | G Vertical | -0,000172017 | 2,56362E-05 | 8,57916E-09 | 1,39525E-08 | 4,81308E-12 | -4,87115E-10 | 1,39497E-08 | -1,34111E-09 |
| 105 | G transversal | 9,63186E-06 | -2,31996E-06 | -3,37812E-08 | -1,6225E-09 | -4,48649E-11 | -3,25141E-08 | -1,6223E-09 | 6,12168E-11 |
| 106 | D Longitudinal | 9,35519E-06 | -2,14519E-06 | 9,06333E-08 | 2,60808E-09 | -1,84306E-10 | 9,42549E-08 | 2,60807E-09 | -2,26613E-10 |
| 106 | D Vertical | 0,000104923 | -4,13801E-05 | 2,72757E-08 | 2,72733E-08 | -2,37068E-09 | 2,726E-08 | 2,72733E-08 | -2,79577E-09 |
| 106 | D transversal | 0,000616486 | -2,41669E-06 | 2,87733E-09 | 9,10086E-08 | -2,03568E-10 | -1,04024E-09 | 9,10086E-08 | -8,77584E-10 |
| 106 | G Longitudinal | 0,00014847 | -9,72992E-07 | -1,23962E-09 | 3,44134E-08 | 4,03264E-11 | -2,59317E-09 | 3,44135E-08 | -4,41493E-10 |
| 106 | G Vertical | -0,000171847 | -2,60347E-05 | -7,30922E-09 | 1,45276E-08 | -1,84216E-10 | -1,63737E-08 | 1,45289E-08 | -1,57431E-09 |
| 106 | G transversal | -9,61986E-06 | -2,34806E-06 | -3,36904E-08 | 1,663E-09 | -5,74762E-11 | -3,49572E-08 | 1,66309E-09 | -1,66703E-10 |
| 107 | D Longitudinal | 9,40935E-06 | 2,41854E-06 | 1,13232E-07 | 2,83455E-09 | 2,01008E-10 | 1,09206E-07 | 2,83455E-09 | 1,51883E-10 |
| 107 | D Vertical | -0,000109641 | -4,48866E-05 | -2,95757E-08 | -2,95456E-08 | -2,64443E-09 | -2,95577E-08 | -2,95456E-08 | -2,1676E-09 |
| 107 | D transversal | 0,000723171 | 1,89254E-06 | 2,6271E-09 | 1,13589E-07 | 1,83826E-10 | 6,99323E-09 | 1,13589E-07 | -7,59692E-10 |
| 107 | G Longitudinal | 0,000161288 | 1,06108E-06 | -1,17068E-09 | 3,90101E-08 | -3,82091E-11 | 1,90488E-10 | 3,90099E-08 | -5,97189E-10 |
| 107 | G Vertical | 0,000172432 | -2,4845E-05 | 7,33302E-09 | -1,38331E-08 | -1,52201E-10 | -1,68899E-09 | -1,38303E-08 | 1,19445E-09 |
| 107 | G transversal | -1,23067E-05 | 1,72765E-06 | -3,87835E-08 | 3,19027E-10 | -3,72156E-11 | -3,74811E-08 | 3,18836E-10 | -1,10336E-10 |
| 108 | D Longitudinal | -9,40937E-06 | -2,40459E-06 | 1,13233E-07 | -2,83455E-09 | -2,01033E-10 | 1,09207E-07 | -2,83455E-09 | -1,51916E-10 |
| 108 | D Vertical | -0,000109641 | -4,48912E-05 | 2,95757E-08 | -2,95456E-08 | -2,64443E-09 | 2,95577E-08 | -2,95456E-08 | -2,16761E-09 |
| 108 | D transversal | 0,000723176 | 1,87942E-06 | -2,62679E-09 | 1,13589E-07 | 1,83796E-10 | -6,99292E-09 | 1,13589E-07 | -7,59724E-10 |
| 108 | G Longitudinal | 0,000161283 | 1,03914E-06 | 1,26107E-09 | 3,89749E-08 | -5,10599E-11 | -1,00148E-10 | 3,89748E-08 | -6,09474E-10 |
| 108 | G Vertical | -0,000172605 | 2,45197E-05 | 8,61633E-09 | 1,33242E-08 | -3,02865E-11 | -4,07967E-10 | 1,33214E-08 | -1,36829E-09 |
| 108 | G transversal | 1,23189E-05 | -1,70409E-06 | -3,88724E-08 | -2,82952E-10 | 5,01585E-11 | -3,75699E-08 | -2,82759E-10 | 1,22667E-10 |
| 109 | D Longitudinal | 9,40935E-06 | -2,42117E-06 | 1,13231E-07 | 2,83448E-09 | -2,0101E-10 | 1,17258E-07 | 2,83448E-09 | -2,50102E-10 |
| 109 | D Vertical | 0,000109641 | -4,49121E-05 | 2,95757E-08 | 2,95456E-08 | -2,64443E-09 | 2,95937E-08 | 2,95456E-08 | -3,12125E-09 |
| 109 | D transversal | 0,000723171 | -1,94307E-06 | 2,62616E-09 | 1,13589E-07 | -1,83825E-10 | -1,73997E-09 | 1,13589E-07 | -1,12732E-09 |
| 109 | G Longitudinal | 0,000161288 | -1,09107E-06 | -1,17174E-09 | 3,90147E-08 | 3,84206E-11 | -2,53294E-09 | 3,90148E-08 | -5,23006E-10 |
| 109 | G Vertical | -0,000172434 | -2,4918E-05 | -7,34573E-09 | 1,38996E-08 | -1,492E-10 | -1,63682E-08 | 1,3901E-08 | -1,5314E-09 |
| 109 | G transversal | -1,23068E-05 | -1,73163E-06 | -3,87842E-08 | 3,23636E-10 | 3,74232E-11 | -4,00866E-08 | 3,23731E-10 | -3,81586E-11 |
| 110 | D Longitudinal | 1,07813E-05 | 2,50473E-06 | 1,38947E-07 | 3,76924E-09 | 2,67998E-10 | 1,34496E-07 | 3,76923E-09 | 1,93002E-10 |

APOYO 1

| DESPLAZAMIENTOS (metros) | | VIENTO | PESO | CT1 | | | CT2 | | |
|---|---|---|---|---|---|---|---|---|---|
| Nudo | Desplazamiento | | | L | T | V | L | T | V |
| 110 | D Vertical | -0,00011394 | -4,81629E-05 | -3,16141E-08 | -3,15771E-08 | -2,91281E-09 | -3,16202E-08 | -3,15771E-08 | -2,38885E-09 |
| 110 | D transversal | 0,000834799 | 2,24104E-06 | 2,96039E-09 | 1,39142E-07 | 2,08213E-10 | 7,78293E-09 | 1,39142E-07 | -1,05801E-09 |
| 110 | G Longitudinal | 0,000173247 | 2,34162E-06 | 6,16936E-10 | 4,3827E-08 | 9,50637E-11 | 1,97507E-09 | 4,38268E-08 | -5,53183E-10 |
| 110 | G Vertical | 0,000173123 | -2,35997E-05 | 7,51037E-09 | -1,31229E-08 | -1,03127E-10 | -1,47202E-09 | -1,31202E-08 | 1,23345E-09 |
| 110 | G transversal | -1,26484E-05 | 1,77831E-06 | -4,35963E-08 | -6,90543E-11 | -6,37805E-11 | -4,22816E-08 | -6,92433E-11 | -1,24316E-10 |
| 111 | D Longitudinal | -1,07814E-05 | -2,49176E-06 | 1,38947E-07 | -3,7695E-09 | -2,6812E-10 | 1,34496E-07 | -3,76949E-09 | -1,93128E-10 |
| 111 | D Vertical | -0,00011394 | -4,81686E-05 | 3,16141E-08 | -3,1577E-08 | -2,9128E-09 | 3,16202E-08 | -3,1577E-08 | -2,38884E-09 |
| 111 | D transversal | 0,000834803 | 2,22812E-06 | -2,96042E-09 | 1,39142E-07 | 2,08235E-10 | -7,78288E-09 | 1,39142E-07 | -1,05801E-09 |
| 111 | G Longitudinal | 0,000173221 | 2,31766E-06 | -5,27733E-10 | 4,37915E-08 | 8,23882E-11 | -1,88592E-09 | 4,37913E-08 | -5,65255E-10 |
| 111 | G Vertical | -0,000173295 | 2,32744E-05 | 8,79425E-09 | 1,26139E-08 | -7,94522E-11 | -1,90453E-10 | 1,26111E-08 | -1,40738E-09 |
| 111 | G transversal | 1,26606E-05 | -1,75308E-06 | -4,36844E-08 | 1,05366E-10 | 7,68067E-11 | -4,23699E-08 | 1,05558E-10 | 1,36726E-10 |
| 112 | D Longitudinal | 1,07813E-05 | -2,50874E-06 | 1,38946E-07 | 3,76924E-09 | -2,67997E-10 | 1,43398E-07 | 3,76924E-09 | -3,43005E-10 |
| 112 | D Vertical | 0,00011394 | -4,8191E-05 | 3,16142E-08 | 3,15771E-08 | -2,91281E-09 | 3,16081E-08 | 3,15771E-08 | -3,43677E-09 |
| 112 | D transversal | 0,000834799 | -2,30885E-06 | 2,95934E-09 | 1,39142E-07 | -2,08213E-10 | -1,8632E-09 | 1,39142E-07 | -1,47439E-09 |
| 112 | G Longitudinal | 0,000173246 | -2,3764E-06 | 6,1584E-10 | 4,38317E-08 | -9,48551E-11 | -7,42324E-10 | 4,38318E-08 | -7,45595E-10 |
| 112 | G Vertical | -0,000173125 | -2,36721E-05 | -7,52309E-09 | 1,31895E-08 | -1,00124E-10 | -1,65059E-08 | 1,31909E-08 | -1,47227E-09 |
| 112 | G transversal | -1,26485E-05 | -1,78161E-06 | -4,35971E-08 | -6,44942E-11 | 6,3986E-11 | -4,49117E-08 | -6,44004E-11 | 1,01522E-12 |
| 113 | D Longitudinal | 1,10015E-05 | 2,73219E-06 | 1,67802E-07 | 4,34761E-09 | 3,07962E-10 | 1,62947E-07 | 4,34761E-09 | 2,13152E-10 |
| 113 | D Vertical | -0,000115597 | -5,12183E-05 | -3,33426E-08 | -3,33605E-08 | -3,17981E-09 | -3,3304E-08 | -3,33605E-08 | -2,6039E-09 |
| 113 | D transversal | 0,000957128 | 3,01765E-06 | 4,45581E-09 | 1,67938E-07 | 3,1977E-10 | 9,72456E-09 | 1,67938E-07 | -1,3305E-09 |
| 113 | G Longitudinal | 0,000187202 | 2,87551E-06 | 1,63623E-09 | 4,95485E-08 | 1,68751E-10 | 3,0178E-09 | 4,95483E-08 | -5,91283E-10 |
| 113 | G Vertical | 0,000171966 | -2,23419E-05 | 7,70496E-09 | -1,27078E-08 | -7,26781E-11 | -1,23875E-09 | -1,2705E-08 | 1,25828E-09 |
| 113 | G transversal | -1,08847E-05 | 1,90901E-06 | -4,934E-08 | 9,57399E-10 | 1,12647E-11 | -4,80948E-08 | 9,57198E-10 | -7,71624E-11 |
| 114 | D Longitudinal | -1,10014E-05 | -2,72125E-06 | 1,678E-07 | -4,34755E-09 | -3,07971E-10 | 1,62945E-07 | -4,34755E-09 | -2,1317E-10 |
| 114 | D Vertical | -0,000115598 | -5,12253E-05 | 3,33426E-08 | -3,33604E-08 | -3,17979E-09 | 3,3304E-08 | -3,33604E-08 | -2,60388E-09 |
| 114 | D transversal | 0,000957118 | 3,00488E-06 | -4,45767E-09 | 1,67939E-07 | 3,20059E-10 | -9,72632E-09 | 1,67939E-07 | -1,33022E-09 |
| 114 | G Longitudinal | 0,000187168 | 2,85505E-06 | -1,54544E-09 | 4,95115E-08 | 1,5584E-10 | -2,92726E-09 | 4,95112E-08 | -6,03513E-10 |
| 114 | G Vertical | -0,00017214 | 2,20158E-05 | 8,98883E-09 | 1,21984E-08 | -1,09961E-10 | 4,28264E-11 | 1,21956E-08 | -1,43226E-09 |
| 114 | G transversal | 1,08971E-05 | -1,88094E-06 | -4,94334E-08 | -9,21507E-10 | 1,60429E-12 | -4,81882E-08 | -9,21304E-10 | 8,94212E-11 |
| 115 | D Longitudinal | 1,10015E-05 | -2,73727E-06 | 1,67801E-07 | 4,34769E-09 | -3,07956E-10 | 1,72655E-07 | 4,3477E-09 | -4,02819E-10 |
| 115 | D Vertical | 0,000115597 | -5,12492E-05 | 3,33427E-08 | 3,33605E-08 | -3,17981E-09 | 3,33813E-08 | 3,33605E-08 | -3,75571E-09 |
| 115 | D transversal | 0,000957128 | -3,10603E-06 | 4,45465E-09 | 1,67938E-07 | -3,19774E-10 | -8,14091E-10 | 1,67938E-07 | -1,96999E-09 |
| 115 | G Longitudinal | 0,000187202 | -2,91627E-06 | 1,63518E-09 | 4,95534E-08 | -1,68539E-10 | 2,53575E-10 | 4,95535E-08 | -9,31184E-10 |
| 115 | G Vertical | -0,000171967 | -2,2414E-05 | -7,7177E-09 | 1,27744E-08 | -6,96755E-11 | -1,66618E-08 | 1,27757E-08 | -1,43621E-09 |
| 115 | G transversal | -1,08848E-05 | -1,91381E-06 | -4,93408E-08 | 9,62244E-10 | -1,10463E-11 | -5,05861E-08 | 9,62343E-10 | -1,02061E-10 |
| 116 | D Longitudinal | 1,0341E-05 | 2,50456E-06 | 2,00547E-07 | 4,13053E-09 | 2,91179E-10 | 1,95299E-07 | 4,13053E-09 | 2,00206E-10 |
| 116 | D Vertical | -0,00011702 | -5,41097E-05 | -3,48953E-08 | -3,49451E-08 | -3,45232E-09 | -3,48814E-08 | -3,49451E-08 | -2,82846E-09 |
| 116 | D transversal | 0,0010855 | 3,48934E-06 | 5,26133E-09 | 2,00511E-07 | 3,7711E-10 | 1,1031E-08 | 2,00511E-07 | -1,73293E-09 |
| 116 | G Longitudinal | 0,000200759 | -3,43407E-07 | -1,99306E-09 | 5,53126E-08 | -1,14016E-10 | -5,08183E-10 | 5,53124E-08 | -9,8911E-10 |
| 116 | G Vertical | 0,00017107 | -2,11512E-05 | 6,98259E-09 | -1,16795E-08 | -6,28539E-11 | -1,90797E-09 | -1,16767E-08 | 1,24882E-09 |
| 116 | G transversal | -8,11332E-06 | 2,18102E-06 | -5,53004E-08 | 2,5179E-09 | 1,27213E-10 | -5,39535E-08 | 2,51769E-09 | -4,0034E-12 |
| 117 | D Longitudinal | -1,0341E-05 | -2,49772E-06 | 2,00548E-07 | -4,13037E-09 | -2,91154E-10 | 1,953E-07 | -4,13038E-09 | -2,00193E-10 |
| 117 | D Vertical | -0,000117021 | -5,41177E-05 | 3,48953E-08 | -3,49451E-08 | -3,45233E-09 | 3,48813E-08 | -3,49451E-08 | -2,82846E-09 |
| 117 | D transversal | 0,001085488 | 3,48293E-06 | -5,2609E-09 | 2,0051E-07 | 3,77063E-10 | -1,10306E-08 | 2,0051E-07 | -1,73291E-09 |

APOYO 1

| DESPLAZAMIENTOS (metros) | | VIENTO | PESO | CT1 | | | CT2 | | |
|---|---|---|---|---|---|---|---|---|---|
| Nudo | Desplazamiento | | | L | T | V | L | T | V |
| 117 | G Longitudinal | 0,000200765 | -3,46853E-07 | 2,0913E-09 | 5,52727E-08 | -1,28043E-10 | 6,0566E-10 | 5,52724E-08 | -1,00236E-09 |
| 117 | G Vertical | -0,000171251 | 2,0823E-05 | 8,26516E-09 | 1,11701E-08 | -1,19745E-10 | -6,27585E-10 | 1,11673E-08 | -1,42275E-09 |
| 117 | G transversal | 8,12612E-06 | -2,15082E-06 | -5,53975E-08 | -2,48217E-09 | -1,14404E-10 | -5,40502E-08 | -2,48196E-09 | 1,62055E-11 |
| 118 | D Longitudinal | 1,0341E-05 | -2,50943E-06 | 2,00546E-07 | 4,13042E-09 | -2,91182E-10 | 2,05794E-07 | 4,13042E-09 | -3,82105E-10 |
| 118 | D Vertical | 0,00011702 | -5,41431E-05 | 3,48955E-08 | 3,49451E-08 | -3,45232E-09 | 3,49094E-08 | 3,49451E-08 | -4,07617E-09 |
| 118 | D transversal | 0,0010855 | -3,60234E-06 | 5,26015E-09 | 2,00511E-07 | -3,77109E-10 | -5,0948E-10 | 2,00511E-07 | -2,48721E-09 |
| 118 | G Longitudinal | 0,000200759 | 2,96477E-07 | -1,99386E-09 | 5,53178E-08 | 1,14246E-10 | -3,47878E-09 | 5,53179E-08 | -7,63622E-10 |
| 118 | G Vertical | -0,000171071 | -2,12223E-05 | -6,99536E-09 | 1,1746E-08 | -5,98545E-11 | -1,58863E-08 | 1,17474E-08 | -1,40708E-09 |
| 118 | G transversal | -8,11342E-06 | -2,18811E-06 | -5,53012E-08 | 2,52296E-09 | -1,26985E-10 | -5,6648E-08 | 2,52306E-09 | -2,60906E-10 |
| 119 | D Longitudinal | 6,57366E-06 | 1,97886E-06 | 2,36466E-07 | 2,51159E-09 | 1,747E-10 | 2,30623E-07 | 2,5116E-09 | 1,21073E-10 |
| 119 | D Vertical | -0,000116036 | -5,69316E-05 | -3,63348E-08 | -3,63708E-08 | -3,7402E-09 | -3,62686E-08 | -3,63708E-08 | -3,05936E-09 |
| 119 | D transversal | 0,001224304 | 1,18502E-06 | 3,10371E-09 | 2,36666E-07 | 2,10459E-10 | 9,42221E-09 | 2,36666E-07 | -2,43425E-09 |
| 119 | G Longitudinal | 0,000213599 | -3,22318E-06 | -5,69903E-09 | 6,14369E-08 | -3,93061E-10 | -4,21967E-09 | 6,14367E-08 | -1,40221E-09 |
| 119 | G Vertical | 0,000170405 | -1,98447E-05 | 6,38469E-09 | -1,05403E-08 | -4,6834E-11 | -2,43171E-09 | -1,05376E-08 | 1,24267E-09 |
| 119 | G transversal | -1,34841E-06 | 3,75982E-06 | -5,9416E-08 | 5,29247E-09 | 3,27448E-10 | -5,75602E-08 | 5,29227E-09 | 1,3165E-10 |
| 120 | D Longitudinal | -6,5738E-06 | -1,97639E-06 | 2,3647E-07 | -2,51161E-09 | -1,74741E-10 | 2,30628E-07 | -2,51162E-09 | -1,21123E-10 |
| 120 | D Vertical | -0,000116036 | -5,69406E-05 | 3,63349E-08 | -3,6371E-08 | -3,74024E-09 | 3,62687E-08 | -3,6371E-08 | -3,05939E-09 |
| 120 | D transversal | 0,001224316 | 1,19262E-06 | -3,09826E-09 | 2,36663E-07 | 2,09668E-10 | -9,41725E-09 | 2,36663E-07 | -2,43489E-09 |
| 120 | G Longitudinal | 0,000213634 | -3,23101E-06 | 5,7923E-09 | 6,13997E-08 | -4,0636E-10 | 4,3125E-09 | 6,13994E-08 | -1,41488E-09 |
| 120 | G Vertical | -0,000170592 | 1,95155E-05 | 7,66745E-09 | 1,00306E-08 | -1,35824E-10 | -1,15104E-09 | 1,00278E-08 | -1,41665E-09 |
| 120 | G transversal | 1,36203E-06 | -3,73069E-06 | -5,9508E-08 | -5,25573E-09 | -3,1426E-10 | -5,7651E-08 | -5,25553E-09 | -1,19084E-10 |
| 121 | D Longitudinal | 6,57366E-06 | -1,98173E-06 | 2,36464E-07 | 2,5113E-09 | -1,74711E-10 | 2,42307E-07 | 2,5113E-09 | -2,28191E-10 |
| 121 | D Vertical | 0,000116036 | -5,69681E-05 | 3,63349E-08 | 3,63708E-08 | -3,7402E-09 | 3,6401E-08 | 3,63708E-08 | -4,42103E-09 |
| 121 | D transversal | 0,001224304 | -1,32666E-06 | 3,10262E-09 | 2,36666E-07 | -2,10446E-10 | -3,21588E-09 | 2,36666E-07 | -2,85535E-09 |
| 121 | G Longitudinal | 0,000213599 | 3,16907E-06 | -5,69988E-09 | 6,14417E-08 | 3,93279E-10 | -7,17927E-09 | 6,14418E-08 | -6,18426E-10 |
| 121 | G Vertical | -0,000170406 | -1,99146E-05 | -6,39747E-09 | 1,06069E-08 | -4,38343E-11 | -1,52143E-08 | 1,06083E-08 | -1,36892E-09 |
| 121 | G transversal | -1,3485E-06 | -3,77036E-06 | -5,94169E-08 | 5,29729E-09 | -3,27231E-10 | -6,12727E-08 | 5,29739E-09 | -5,25606E-10 |
| 122 | D Longitudinal | 3,85053E-06 | 9,15716E-07 | 3,58325E-07 | 2,26567E-09 | 1,80271E-10 | 3,50694E-07 | 2,26567E-09 | 1,15679E-10 |
| 122 | D Vertical | -0,00013017 | -6,43803E-05 | -4,61347E-08 | -4,61369E-08 | -4,65343E-09 | -4,6094E-08 | -4,61369E-08 | -3,686E-09 |
| 122 | D transversal | 0,001621016 | 2,00196E-06 | 2,02796E-09 | 3,59963E-07 | 1,75577E-10 | 9,6405E-09 | 3,59963E-07 | -4,64889E-09 |
| 122 | G Longitudinal | 0,000267981 | 5,07931E-07 | 1,92029E-09 | 9,17295E-08 | 1,21957E-10 | 2,93298E-09 | 9,17295E-08 | -1,66768E-09 |
| 122 | G Vertical | 0,000143332 | -1,85195E-05 | -2,90019E-09 | -7,7074E-09 | -1,38405E-09 | 1,34688E-08 | -7,68908E-09 | 5,06281E-09 |
| 122 | G transversal | -2,29357E-06 | -1,56216E-06 | -9,26056E-08 | -2,44982E-09 | -1,41894E-10 | -9,17289E-08 | -2,44979E-09 | -6,34279E-11 |
| 123 | D Longitudinal | -3,8541E-06 | -9,89668E-07 | 3,58326E-07 | -2,26486E-09 | -1,79787E-10 | 3,50695E-07 | -2,26486E-09 | -1,15266E-10 |
| 123 | D Vertical | -0,00013017 | -6,43841E-05 | 4,61345E-08 | -4,61371E-08 | -4,65343E-09 | 4,60938E-08 | -4,61371E-08 | -3,686E-09 |
| 123 | D transversal | 0,001621004 | 1,89026E-06 | -2,02803E-09 | 3,59962E-07 | 1,76101E-10 | -9,64089E-09 | 3,59962E-07 | -4,64823E-09 |
| 123 | G Longitudinal | 0,000267991 | 4,63867E-07 | -1,93626E-09 | 9,17355E-08 | 1,24705E-10 | -2,95904E-09 | 9,17355E-08 | -1,66276E-09 |
| 123 | G Vertical | -0,000145782 | 1,57879E-05 | 5,66747E-09 | -2,22008E-10 | -1,47284E-09 | 2,19651E-08 | -2,40828E-10 | -7,77621E-09 |
| 123 | G transversal | 2,29314E-06 | 1,6084E-06 | -9,2593E-08 | 2,44092E-09 | 1,39028E-10 | -9,17227E-08 | 2,44089E-09 | 6,10312E-11 |
| 124 | D Longitudinal | 3,85052E-06 | -9,19174E-07 | 3,58321E-07 | 2,26554E-09 | -1,80273E-10 | 3,65952E-07 | 2,26554E-09 | -2,44818E-10 |
| 124 | D Vertical | 0,00013017 | -6,44321E-05 | 4,61357E-08 | 4,61369E-08 | -4,65343E-09 | 4,61764E-08 | 4,61369E-08 | -5,62086E-09 |
| 124 | D transversal | 0,001621015 | -2,26033E-06 | 2,02473E-09 | 3,59963E-07 | -1,75577E-10 | -5,58783E-09 | 3,59963E-07 | -5,00005E-09 |
| 124 | G Longitudinal | 0,000267981 | -6,03763E-07 | 1,91989E-09 | 9,17287E-08 | -1,21993E-10 | 9,07144E-10 | 9,17287E-08 | -1,91119E-09 |
| 124 | G Vertical | -0,000143341 | -1,88709E-05 | 2,71705E-09 | 8,14877E-09 | -1,36453E-09 | 1,90803E-08 | 8,15788E-09 | -8,04748E-09 |

APOYO 1

| DESPLAZAMIENTOS (metros) | | VIENTO | PESO | CT1 | | | CT2 | | |
|---|---|---|---|---|---|---|---|---|---|
| Nudo | Desplazamiento | | | L | T | V | L | T | V |
| 124 | G transversal | -2,29355E-06 | 1,56637E-06 | -9,26039E-08 | -2,45054E-09 | 1,4186E-10 | -9,34806E-08 | -2,45055E-09 | 2,20711E-10 |
| 125 | D Longitudinal | 1,848E-06 | 8,99061E-07 | 4,55878E-07 | 1,64477E-09 | 1,01958E-10 | 4,47098E-07 | 1,64477E-09 | 4,44687E-11 |
| 125 | D Vertical | -0,000140839 | -6,83672E-05 | -5,36981E-08 | -5,37212E-08 | -5,28662E-09 | -5,36343E-08 | -5,37212E-08 | -4,07865E-09 |
| 125 | D transversal | 0,001893024 | -3,23013E-07 | 1,63196E-09 | 4,57506E-07 | 1,01663E-10 | 1,05074E-08 | 4,57506E-07 | -6,70178E-09 |
| 125 | G Longitudinal | 0,000276713 | -6,42234E-07 | -8,10539E-10 | 1,03908E-07 | -2,69895E-11 | 2,67371E-10 | 1,03908E-07 | -2,21966E-09 |
| 125 | G Vertical | 0,000118299 | -1,89125E-05 | -1,15771E-08 | -5,84821E-09 | -2,75505E-09 | 3,01164E-08 | -5,81424E-09 | 8,90264E-09 |
| 125 | G transversal | 2,48064E-06 | 8,74416E-07 | -1,03619E-07 | 1,18624E-09 | 3,63179E-11 | -1,02524E-07 | 1,18625E-09 | 1,90157E-11 |
| 126 | D Longitudinal | -1,85337E-06 | -9,9732E-07 | 4,55879E-07 | -1,64452E-09 | -1,01111E-10 | 4,47097E-07 | -1,64451E-09 | -4,36409E-11 |
| 126 | D Vertical | -0,000140841 | -6,83784E-05 | 5,3698E-08 | -5,37215E-08 | -5,28658E-09 | 5,36343E-08 | -5,37215E-08 | -4,07858E-09 |
| 126 | D transversal | 0,001893058 | -4,19044E-07 | -1,63192E-09 | 4,57508E-07 | 1,02642E-10 | -1,05074E-08 | 4,57508E-07 | -6,70104E-09 |
| 126 | G Longitudinal | 0,000276679 | -6,90421E-07 | 8,24144E-10 | 1,03912E-07 | -2,82066E-11 | -2,1536E-10 | 1,03912E-07 | -2,23018E-09 |
| 126 | G Vertical | -0,000123024 | 1,37479E-05 | 4,32071E-09 | -9,5436E-09 | -2,79172E-09 | 4,58734E-08 | -9,57854E-09 | -1,41703E-08 |
| 126 | G transversal | -2,47381E-06 | -8,25216E-07 | -1,03616E-07 | -1,17287E-09 | -3,49951E-11 | -1,02497E-07 | -1,17287E-09 | -1,9135E-11 |
| 127 | D Longitudinal | 1,848E-06 | -9,02139E-07 | 4,55875E-07 | 1,64473E-09 | -1,01957E-10 | 4,64655E-07 | 1,64473E-09 | -1,59445E-10 |
| 127 | D Vertical | 0,000140839 | -6,84319E-05 | 5,37012E-08 | 5,37213E-08 | -5,28662E-09 | 5,3765E-08 | 5,37213E-08 | -6,49462E-09 |
| 127 | D transversal | 0,001893024 | -4,13377E-08 | 1,62883E-09 | 4,57506E-07 | -1,01663E-10 | -7,24654E-09 | 4,57506E-07 | -6,9051E-09 |
| 127 | G Longitudinal | 0,000276713 | 5,248E-07 | -8,12882E-10 | 1,03909E-07 | 2,70157E-11 | -1,89051E-09 | 1,03909E-07 | -2,16594E-09 |
| 127 | G Vertical | -0,000118315 | -1,95482E-05 | 1,12226E-08 | 6,66665E-09 | -2,7189E-09 | 5,29051E-08 | 6,68355E-09 | -1,48144E-08 |
| 127 | G transversal | 2,48065E-06 | -8,75339E-07 | -1,0362E-07 | 1,18612E-09 | -3,63182E-11 | -1,04715E-07 | 1,18611E-09 | -5,3536E-11 |
| 128 | D Longitudinal | 1,20636E-06 | 2,54124E-07 | 5,6591E-07 | 1,39752E-09 | 1,69004E-10 | 5,56162E-07 | 1,39752E-09 | 1,11578E-10 |
| 128 | D Vertical | -0,000147493 | -7,13684E-05 | -6,00612E-08 | -6,00777E-08 | -5,91828E-09 | -5,99251E-08 | -6,00777E-08 | -4,47043E-09 |
| 128 | D transversal | 0,002174115 | 1,34574E-06 | 1,44744E-09 | 5,6766E-07 | 1,67911E-10 | 1,11656E-08 | 5,6766E-07 | -9,04793E-09 |
| 128 | G Longitudinal | 0,000284465 | 9,27713E-08 | -4,20162E-10 | 1,1573E-07 | -3,69779E-11 | 5,72578E-10 | 1,1573E-07 | -2,65077E-09 |
| 128 | G Vertical | 9,3265E-05 | -1,93055E-05 | -2,02541E-08 | -3,98902E-09 | -4,12604E-09 | 4,67641E-08 | -3,93939E-09 | 1,27425E-08 |
| 128 | G transversal | 3,01867E-07 | 4,80486E-08 | -1,15673E-07 | 3,07906E-10 | 3,03611E-11 | -1,14576E-07 | 3,07853E-10 | -3,50497E-13 |
| 129 | D Longitudinal | -1,22366E-06 | -4,24114E-07 | 5,65912E-07 | -1,39848E-09 | -1,67969E-10 | 5,5616E-07 | -1,39849E-09 | -1,10373E-10 |
| 129 | D Vertical | -0,000147496 | -7,13711E-05 | 6,00612E-08 | -6,00779E-08 | -5,91815E-09 | 5,99242E-08 | -6,00779E-08 | -4,47013E-09 |
| 129 | D transversal | 0,002174095 | 1,13643E-06 | -1,44859E-09 | 5,67657E-07 | 1,68999E-10 | -1,11594E-08 | 5,67657E-07 | -9,04797E-09 |
| 129 | G Longitudinal | 0,000284569 | 3,65649E-08 | 3,78501E-10 | 1,15702E-07 | -3,31684E-11 | -7,34863E-10 | 1,15702E-07 | -2,61572E-09 |
| 129 | G Vertical | -0,000100265 | 1,17079E-05 | 2,97394E-09 | -1,88652E-08 | -4,1106E-09 | 6,97818E-08 | -1,89163E-08 | -2,05645E-08 |
| 129 | G transversal | -2,87958E-07 | -3,49705E-09 | -1,15699E-07 | -3,47443E-10 | -3,44523E-11 | -1,14683E-07 | -3,47389E-10 | 8,46217E-13 |
| 130 | D Longitudinal | 1,20636E-06 | -2,57198E-07 | 5,65905E-07 | 1,39741E-09 | -1,69007E-10 | 5,75654E-07 | 1,39741E-09 | -2,26384E-10 |
| 130 | D Vertical | 0,000147493 | -7,1446E-05 | 6,00692E-08 | 6,00779E-08 | -5,91828E-09 | 6,02053E-08 | 6,00779E-08 | -7,36619E-09 |
| 130 | D transversal | 0,002174115 | -1,83928E-06 | 1,44115E-09 | 5,6766E-07 | -1,67912E-10 | -8,27709E-09 | 5,6766E-07 | -9,38366E-09 |
| 130 | G Longitudinal | 0,000284465 | -2,3272E-07 | -4,19568E-10 | 1,15728E-07 | 3,69062E-11 | -1,41365E-09 | 1,15728E-07 | -2,57594E-09 |
| 130 | G Vertical | -9,32886E-05 | -2,02255E-05 | 1,97282E-08 | 5,18453E-09 | -4,07327E-09 | 8,67299E-08 | 5,20922E-09 | -2,15814E-08 |
| 130 | G transversal | 3,01829E-07 | -4,97181E-08 | -1,1567E-07 | 3,09065E-10 | -3,03214E-11 | -1,16766E-07 | 3,09082E-10 | -6,17639E-11 |
| 131 | D Longitudinal | 4,31648E-07 | 5,44202E-07 | 6,86531E-07 | 8,84842E-10 | 7,77882E-11 | 6,75464E-07 | 8,84831E-10 | 3,0154E-11 |
| 131 | D Vertical | -0,000151161 | -7,34498E-05 | -6,5202E-08 | -6,52191E-08 | -6,54612E-09 | -6,49526E-08 | -6,52191E-08 | -4,85896E-09 |
| 131 | D transversal | 0,002459694 | -7,64478E-07 | 8,91207E-10 | 6,88298E-07 | 7,697E-11 | 1,16946E-08 | 6,88298E-07 | -1,20014E-08 |
| 131 | G Longitudinal | 0,000285431 | -1,05258E-06 | 2,68639E-10 | 1,25549E-07 | 1,00945E-10 | 1,00177E-09 | 1,25548E-07 | -3,07634E-09 |
| 131 | G Vertical | 6,87461E-05 | -1,98446E-05 | -2,88709E-08 | -2,16534E-09 | -5,52361E-09 | 6,39337E-08 | -2,09977E-09 | 1,6654E-08 |
| 131 | G transversal | 5,67586E-07 | -3,91706E-09 | -1,25644E-07 | -1,38534E-10 | -8,55943E-11 | -1,24262E-07 | -1,38292E-10 | 2,62547E-11 |
| 132 | D Longitudinal | -4,58605E-07 | -7,37748E-07 | 6,86527E-07 | -8,92331E-10 | -7,68323E-11 | 6,75498E-07 | -8,92326E-10 | -2,90269E-11 |

APOYO 1

| DESPLAZAMIENTOS (metros) | | VIENTO | PESO | CT1 | | | CT2 | | |
|---|---|---|---|---|---|---|---|---|---|
| Nudo | Desplazamiento | | | L | T | V | L | T | V |
| 132 | D Vertical | -0,000151169 | -7,34578E-05 | 6,52022E-08 | -6,52194E-08 | -6,54587E-09 | 6,49595E-08 | -6,52194E-08 | -4,85958E-09 |
| 132 | D transversal | 0,00245978 | -9,57945E-07 | -8,87426E-10 | 6,88304E-07 | 7,77917E-11 | -1,17578E-08 | 6,88304E-07 | -1,19871E-08 |
| 132 | G Longitudinal | 0,000285209 | -1,07217E-06 | -1,03761E-10 | 1,25668E-07 | 8,62273E-11 | -5,93367E-10 | 1,25668E-07 | -3,16577E-09 |
| 132 | G Vertical | -7,80985E-05 | 9,75045E-06 | 1,8221E-09 | -2,83081E-08 | -5,45198E-09 | 9,43469E-08 | -2,83756E-08 | -2,70762E-08 |
| 132 | G transversal | -5,6627E-07 | 6,15519E-08 | -1,25529E-07 | 3,04519E-10 | 9,96793E-11 | -1,23967E-07 | 3,04295E-10 | -2,9608E-11 |
| 133 | D Longitudinal | 4,31664E-07 | -5,46759E-07 | 6,86537E-07 | 8,8527E-10 | -7,77797E-11 | 6,97604E-07 | 8,85273E-10 | -1,25592E-10 |
| 133 | D Vertical | 0,000151161 | -7,35401E-05 | 6,52196E-08 | 6,52195E-08 | -6,54612E-09 | 6,5469E-08 | 6,52195E-08 | -8,2334E-09 |
| 133 | D transversal | 0,002459694 | 1,17628E-07 | 8,97362E-10 | 6,88299E-07 | -7,6964E-11 | -9,90579E-09 | 6,88299E-07 | -1,21556E-08 |
| 133 | G Longitudinal | 0,000285431 | 8,82284E-07 | 2,96452E-10 | 1,25556E-07 | -1,00665E-10 | -4,30837E-10 | 1,25556E-07 | -3,28232E-09 |
| 133 | G Vertical | -6,87774E-05 | -2,10543E-05 | 2,81708E-08 | 3,74486E-09 | -5,45391E-09 | 1,20954E-07 | 3,77748E-09 | -2,84766E-08 |
| 133 | G transversal | 5,6767E-07 | 1,00215E-08 | -1,25687E-07 | -1,44531E-10 | 8,54107E-11 | -1,27074E-07 | -1,44612E-10 | 2,00684E-10 |
| 134 | D Longitudinal | -3,41966E-06 | -1,52066E-06 | 1,23177E-06 | 1,7521E-08 | -3,45416E-09 | 1,34001E-06 | 1,75207E-08 | -1,03227E-08 |
| 134 | D Vertical | 2,86321E-05 | -7,8577E-05 | -2,42448E-08 | 3,05013E-08 | -1,51627E-08 | -2,31713E-08 | 3,0489E-08 | -2,58548E-08 |
| 134 | D transversal | 0,003418093 | -1,34957E-06 | -1,81218E-08 | 1,23609E-06 | -3,55691E-09 | 9,69853E-08 | 1,23615E-06 | -4,74851E-09 |
| 134 | G Longitudinal | 0,00028155 | -2,41816E-06 | 2,7472E-08 | 2,97386E-07 | -2,85961E-10 | 7,58981E-08 | 2,98116E-07 | -8,68932E-08 |
| 134 | G Vertical | 9,67363E-07 | 1,33312E-05 | 7,5217E-09 | 3,62602E-09 | 3,44022E-08 | -1,10302E-06 | 3,71044E-09 | 3,74941E-08 |
| 134 | G transversal | 1,14036E-05 | 3,44371E-08 | -2,82395E-07 | 3,15465E-08 | 5,78179E-10 | -4,02798E-07 | 3,15059E-08 | 2,71635E-09 |
| 135 | D Longitudinal | -3,42663E-06 | -1,50781E-06 | 1,23177E-06 | 1,75035E-08 | -3,45278E-09 | 1,34001E-06 | 1,75028E-08 | -1,03439E-08 |
| 135 | D Vertical | 2,63629E-05 | -7,85654E-05 | 3,11272E-08 | 2,36089E-08 | -1,51655E-08 | 4,39307E-08 | 2,35966E-08 | -2,58576E-08 |
| 135 | D transversal | 0,003418096 | 1,29222E-06 | -1,69484E-08 | 1,23609E-06 | 3,35844E-09 | -1,32091E-07 | 1,23615E-06 | 2,17231E-09 |
| 135 | G Longitudinal | 0,000281451 | -2,13944E-06 | 3,95324E-08 | 2,97557E-07 | 3,43573E-11 | -8,11911E-09 | 2,98287E-07 | -8,68123E-08 |
| 135 | G Vertical | -8,63604E-07 | 1,31558E-05 | 7,78623E-09 | -3,1987E-09 | 3,4654E-08 | -1,10271E-06 | -3,2871E-09 | 3,15767E-08 |
| 135 | G transversal | 1,09548E-05 | -1,33118E-07 | -2,82276E-07 | 3,53371E-08 | -1,92296E-10 | -4,03218E-07 | 3,53784E-08 | -2,07998E-09 |
| 136 | D Longitudinal | -3,41609E-06 | 1,15146E-06 | 1,23337E-06 | 1,75282E-08 | 3,4609E-09 | 1,12345E-06 | 1,75275E-08 | -3,40459E-09 |
| 136 | D Vertical | -2,86342E-05 | -7,80059E-05 | 2,36676E-08 | -3,05106E-08 | -1,52043E-08 | 2,52903E-08 | -3,0499E-08 | -4,55346E-09 |
| 136 | D transversal | 0,003418087 | 1,27624E-06 | -1,69018E-08 | 1,23609E-06 | 3,35538E-09 | -1,30975E-07 | 1,23615E-06 | 1,93963E-09 |
| 136 | G Longitudinal | 0,000281941 | -1,9579E-06 | 3,89292E-08 | 2,79471E-07 | -2,53774E-10 | -7,09357E-09 | 2,79095E-07 | -7,82104E-08 |
| 136 | G Vertical | -1,00727E-06 | 1,31363E-05 | 5,41073E-09 | -1,94053E-09 | 3,45634E-08 | -1,09089E-06 | -1,93395E-09 | 3,07583E-08 |
| 136 | G transversal | 1,14888E-05 | 6,65504E-08 | -2,84585E-07 | 3,19402E-08 | -7,26436E-10 | -1,61732E-07 | 3,19472E-08 | 1,80818E-09 |
| 137 | D Longitudinal | -5,0253E-12 | 6,3121E-06 | 2,76619E-10 | -1,49817E-14 | -8,67005E-13 | 2,76619E-10 | -1,4981E-14 | -8,66765E-13 |
| 137 | D Vertical | 3,83012E-12 | -7,83756E-06 | 1,35807E-09 | -1,64201E-14 | -9,72999E-11 | 1,35807E-09 | -1,65468E-14 | -9,72987E-11 |
| 137 | D transversal | 3,11525E-05 | 8,81633E-10 | -9,1492E-15 | 3,29227E-10 | -1,31814E-15 | -3,62057E-10 | 3,29227E-10 | 4,73087E-11 |
| 137 | G Longitudinal | 7,89367E-06 | -6,68117E-10 | -5,43151E-14 | 1,80561E-09 | -5,502E-16 | -1,24742E-11 | 1,80561E-09 | -2,39521E-11 |
| 137 | G Vertical | -1,66049E-06 | 4,5036E-10 | 3,62002E-14 | -1,76664E-10 | -5,24013E-15 | -3,85191E-10 | -1,76664E-10 | 2,04126E-12 |
| 137 | G transversal | 3,93758E-11 | 2,13832E-06 | -6,3976E-10 | 1,58955E-13 | 7,96354E-11 | -6,3976E-10 | 1,59719E-13 | 7,96265E-11 |
| 138 | D Longitudinal | -4,99161E-12 | 3,26757E-10 | 2,76218E-10 | -1,46418E-14 | -4,336E-15 | -6,32885E-11 | -1,4635E-14 | -4,18609E-15 |
| 138 | D Vertical | 2,28082E-06 | -5,21926E-06 | -8,1762E-16 | 8,04643E-12 | -9,038E-13 | -8,16873E-16 | 8,04644E-12 | 2,60265E-12 |
| 138 | D transversal | 3,35707E-05 | 6,09274E-06 | 2,01694E-15 | 3,29677E-10 | -8,29437E-13 | 1,99283E-15 | 3,29677E-10 | 4,64739E-11 |
| 138 | G Longitudinal | -6,39977E-06 | -2,12363E-06 | 3,252E-13 | -8,77267E-10 | -7,75458E-11 | 3,24953E-13 | -8,77269E-10 | -7,03315E-11 |
| 138 | G Vertical | 3,12656E-12 | -2,96601E-10 | -1,94376E-10 | 2,05846E-15 | 1,57273E-16 | -4,63414E-10 | 2,05152E-15 | 2,08391E-16 |
| 138 | G transversal | -8,5044E-12 | -2,67482E-11 | -2,10241E-09 | -1,93806E-14 | -4,31985E-16 | -2,11483E-09 | -1,93842E-14 | -5,859E-17 |

APOYO 1

| DESPLAZAMIENTOS (metros) | | C1 | | | C2 | | | C3 | | |
|---|---|---|---|---|---|---|---|---|---|---|
| Nudo | Desplazamiento | L | T | V | L | T | V | L | T | V |
| 1 | D Longitudinal | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 1 | D Vertical | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 1 | D transversal | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 1 | G Longitudinal | 1,40959E-08 | 2,24865E-09 | 5,10216E-10 | 1,43131E-08 | 2,77291E-09 | 6,48836E-10 | 1,42424E-08 | 2,88641E-09 | 2,4107E-10 |
| 1 | G Vertical | -1,15608E-07 | -9,57576E-09 | 4,79128E-09 | -1,18715E-07 | -5,44625E-09 | 2,82021E-09 | -1,17516E-07 | 4,51554E-09 | 8,60387E-09 |
| 1 | G transversal | 1,58766E-08 | 6,10596E-10 | -3,33573E-10 | 1,47251E-08 | 3,29043E-10 | -1,94712E-10 | 1,32344E-08 | -3,63524E-10 | -6,02437E-10 |
| 2 | D Longitudinal | 1,44694E-07 | -5,93055E-11 | -6,65981E-12 | 1,12932E-07 | -4,85417E-11 | 8,03745E-12 | 8,2394E-08 | 1,34444E-10 | 3,47375E-10 |
| 2 | D Vertical | -2,35511E-08 | -2,36539E-08 | 3,65024E-09 | -1,63015E-08 | -1,63344E-08 | 3,64977E-09 | -9,07964E-09 | -9,07354E-09 | 3,54731E-09 |
| 2 | D transversal | 7,0972E-08 | 2,1492E-07 | -3,448E-08 | 7,09182E-08 | 1,82036E-07 | -3,45251E-08 | 6,98515E-08 | 1,47857E-07 | -3,69047E-08 |
| 2 | G Longitudinal | 1,11256E-08 | 4,75272E-08 | -1,24215E-08 | 1,26124E-08 | 3,60311E-08 | -1,20512E-08 | 1,02951E-08 | 2,1092E-08 | -1,70135E-08 |
| 2 | G Vertical | -1,10673E-07 | -3,39298E-09 | 3,82154E-09 | -1,1391E-07 | -6,09889E-10 | 1,86846E-09 | -1,14202E-07 | 7,26431E-09 | 6,41212E-09 |
| 2 | G transversal | -2,78939E-08 | 1,9509E-09 | -6,67399E-10 | -1,78229E-08 | 1,18603E-09 | -5,21587E-10 | -8,40057E-09 | -5,78662E-11 | -1,10035E-09 |
| 3 | D Longitudinal | 4,0635E-07 | -5,27238E-11 | -1,65155E-10 | 2,65408E-07 | -1,04864E-12 | -1,72339E-11 | 1,56233E-07 | 3,0887E-12 | 4,49707E-12 |
| 3 | D Vertical | -3,33026E-08 | -3,30572E-08 | 1,21721E-08 | -1,77531E-08 | -1,8588E-08 | 8,28796E-09 | -8,28034E-09 | -9,01663E-09 | 4,32251E-09 |
| 3 | D transversal | 1,19745E-07 | 5,19476E-07 | -1,68046E-07 | 9,55909E-08 | 3,61957E-07 | -1,58271E-07 | 7,33988E-08 | 2,3137E-07 | -1,26473E-07 |
| 3 | G Longitudinal | 3,71272E-09 | 6,08468E-08 | -4,02424E-08 | -2,68596E-10 | 3,40626E-08 | -2,49094E-08 | -1,07536E-10 | 1,64235E-08 | -1,65091E-08 |
| 3 | G Vertical | -1,92375E-07 | -2,72592E-09 | 8,53982E-09 | -1,61654E-07 | -4,80038E-10 | -2,22995E-09 | -1,30076E-07 | 1,35835E-09 | 1,02204E-09 |
| 3 | G transversal | -6,28546E-08 | 2,68841E-10 | -8,10161E-12 | -3,27245E-08 | 3,89045E-11 | 1,97008E-10 | -1,51242E-08 | -1,2284E-11 | 1,24871E-11 |
| 4 | D Longitudinal | 9,58744E-07 | -5,55598E-11 | -8,70666E-11 | 6,9254E-07 | -1,40304E-11 | -1,80887E-11 | 4,95191E-07 | -1,25395E-11 | -1,78319E-11 |
| 4 | D Vertical | 8,70666E-11 | 1,09631E-07 | -1,75018E-07 | -8,11078E-12 | 7,12587E-08 | -6,11139E-08 | -1,41646E-12 | 3,45244E-08 | -3,96026E-08 |
| 4 | D transversal | -5,55598E-11 | 4,69692E-07 | -1,09631E-07 | -4,54254E-12 | 3,28062E-07 | -1,32013E-07 | 6,60271E-13 | 2,14943E-07 | -1,09892E-07 |
| 4 | G Longitudinal | 1,50914E-10 | 3,55465E-08 | -1,39478E-07 | -3,80973E-12 | 3,38958E-08 | -2,63604E-08 | -1,14134E-12 | 1,64312E-08 | -1,65727E-08 |
| 4 | G Vertical | -2,79689E-07 | -4,79957E-09 | -6,46777E-09 | -1,73903E-07 | 2,20585E-11 | 2,29707E-10 | -1,33539E-07 | 5,18104E-12 | 8,49658E-12 |
| 4 | G transversal | -2,76114E-08 | -1,69304E-09 | -2,3108E-09 | -3,28967E-08 | 4,78448E-12 | 7,5875E-11 | -1,55812E-08 | -9,34454E-13 | -1,06683E-12 |
| 5 | D Longitudinal | 1,91712E-08 | 5,03846E-12 | 2,59193E-11 | -3,69012E-08 | 1,02025E-11 | 1,45599E-11 | -6,5862E-08 | 1,0538E-11 | 1,48175E-11 |
| 5 | D Vertical | 2,59162E-11 | -1,28838E-07 | 7,28216E-08 | 2,16969E-12 | -7,12038E-08 | 4,78146E-08 | -1,4716E-12 | -3,44798E-08 | 3,00252E-08 |
| 5 | D transversal | 5,03818E-12 | 4,57705E-07 | -1,28838E-07 | -5,35018E-12 | 3,28015E-07 | -1,32758E-07 | 2,53423E-13 | 2,14945E-07 | -1,09887E-07 |
| 5 | G Longitudinal | -2,64998E-11 | 6,17523E-08 | -3,97802E-08 | -6,51455E-13 | 3,39454E-08 | -2,55109E-08 | 1,18793E-12 | 1,64283E-08 | -1,65817E-08 |
| 5 | G Vertical | -2,12569E-07 | 1,53402E-10 | -1,21988E-10 | -1,74131E-07 | 1,36764E-11 | 7,30517E-11 | -1,33541E-07 | 4,98027E-12 | 7,44193E-12 |
| 5 | G transversal | -7,2419E-08 | -4,25777E-11 | 9,09045E-11 | -3,16037E-08 | -2,86053E-12 | -2,23199E-11 | -1,48246E-08 | -7,59439E-13 | -1,4574E-12 |
| 6 | D Longitudinal | 6,9254E-07 | -4,54254E-12 | 8,11078E-12 | 6,75788E-07 | -5,27309E-11 | -7,2568E-11 | 4,65143E-07 | -1,31444E-11 | -1,73557E-11 |
| 6 | D Vertical | 1,80887E-11 | 1,32013E-07 | -6,11139E-08 | 7,2568E-11 | 5,45537E-08 | -1,5294E-07 | -3,22097E-13 | 3,45008E-08 | -4,01743E-08 |
| 6 | D transversal | -1,40304E-11 | 3,28062E-07 | -7,12587E-08 | -5,27309E-11 | 2,70862E-07 | -5,45537E-08 | 7,31097E-13 | 1,82102E-07 | -7,63895E-08 |
| 6 | G Longitudinal | 3,69866E-11 | 6,54598E-08 | -2,80846E-08 | 1,39341E-10 | 9,35029E-09 | -1,29303E-07 | -3,49206E-13 | 1,64169E-08 | -1,69356E-08 |
| 6 | G Vertical | -1,80264E-07 | -4,70489E-10 | 6,3352E-10 | -2,37947E-07 | -4,81371E-09 | -6,58963E-09 | -1,34136E-07 | 2,60407E-11 | 2,21263E-10 |
| 6 | G transversal | -3,15773E-08 | -1,65474E-10 | 2,20705E-10 | -4,77479E-09 | -1,69124E-09 | -2,31565E-09 | -1,55907E-08 | 6,39135E-12 | 7,37125E-11 |
| 7 | D Longitudinal | -3,69012E-08 | -5,35023E-12 | 2,16927E-12 | -9,31339E-08 | 2,98586E-12 | 7,93346E-12 | -9,70925E-08 | 1,03651E-11 | 1,43614E-11 |
| 7 | D Vertical | 1,45599E-11 | -1,32758E-07 | 4,78146E-08 | 7,93347E-12 | -7,34746E-08 | 5,55752E-08 | -5,08389E-13 | -3,45296E-08 | 2,93636E-08 |
| 7 | D transversal | 1,02025E-11 | 3,28015E-07 | -7,12038E-08 | 2,98586E-12 | 2,58922E-07 | -7,34746E-08 | 9,28944E-14 | 1,82055E-07 | -7,71138E-08 |
| 7 | G Longitudinal | -2,82575E-11 | 6,59437E-08 | -2,62225E-08 | -1,28499E-11 | 3,53722E-08 | -3,10983E-08 | 8,8962E-13 | 1,64601E-08 | -1,61645E-08 |
| 7 | G Vertical | -1,79975E-07 | 4,93573E-10 | -4,18192E-10 | -1,71064E-07 | 1,3909E-10 | -1,61278E-10 | -1,34364E-07 | 1,10253E-11 | 7,43417E-11 |
| 7 | G transversal | -7,71109E-08 | -1,73226E-10 | 1,43526E-10 | -4,281E-08 | -4,36286E-11 | 6,38469E-11 | -1,42373E-08 | -2,48524E-12 | -2,43138E-11 |
| 8 | D Longitudinal | 4,95191E-07 | 6,60271E-13 | 1,41646E-12 | 4,65143E-07 | 7,31097E-13 | 3,22097E-13 | 4,83469E-07 | -5,07424E-11 | -7,59648E-11 |
| 8 | D Vertical | 1,78319E-11 | 1,09892E-07 | -3,96026E-08 | 1,73557E-11 | 7,63895E-08 | -4,01743E-08 | 7,59648E-11 | 1,75799E-08 | -1,32177E-07 |

APOYO 1

| DESPLAZAMIENTOS (metros) | | C1 | | | C2 | | | C3 | | |
|---|---|---|---|---|---|---|---|---|---|---|
| Nudo | Desplazamiento | L | T | V | L | T | V | L | T | V |
| 8 | D transversal | -1,25395E-11 | 2,14943E-07 | -3,45244E-08 | -1,31444E-11 | 1,82102E-07 | -3,45008E-08 | -5,07424E-11 | 1,59994E-07 | -1,75799E-08 |
| 8 | G Longitudinal | 3,42841E-11 | 5,59598E-08 | -1,8227E-08 | 3,55859E-11 | 3,88804E-08 | -1,86028E-08 | 1,39875E-10 | -8,27136E-09 | -1,19955E-07 |
| 8 | G Vertical | -1,39328E-07 | 4,79609E-11 | -9,86748E-12 | -1,41216E-07 | 6,70246E-11 | 2,08894E-11 | -1,98816E-07 | -4,61921E-09 | -6,92597E-09 |
| 8 | G transversal | -2,19534E-08 | 1,69439E-11 | -1,53311E-12 | -5,97376E-09 | 2,33204E-11 | 7,13238E-12 | 1,24248E-08 | -1,6233E-09 | -2,43381E-09 |
| 9 | D Longitudinal | -6,5862E-08 | 2,53373E-13 | -1,47214E-12 | -9,70925E-08 | 9,28946E-14 | -5,08399E-13 | -1,18677E-07 | 3,2486E-12 | 3,50393E-12 |
| 9 | D Vertical | 1,48175E-11 | -1,09887E-07 | 3,00252E-08 | 1,43614E-11 | -7,71138E-08 | 2,93636E-08 | 3,50393E-12 | -3,70277E-08 | 3,62653E-08 |
| 9 | D transversal | 1,0538E-11 | 2,14945E-07 | -3,44798E-08 | 1,03651E-11 | 1,82055E-07 | -3,45296E-08 | 3,2486E-12 | 1,4781E-07 | -3,70277E-08 |
| 9 | G Longitudinal | -2,94012E-11 | 5,59561E-08 | -1,71607E-08 | -2,85837E-11 | 3,93518E-08 | -1,67323E-08 | -1,05462E-11 | 1,8031E-08 | -2,11783E-08 |
| 9 | G Vertical | -1,40674E-07 | -4,92452E-11 | -8,09894E-12 | -1,40066E-07 | -4,13764E-11 | 5,31185E-12 | -1,31583E-07 | 1,19023E-10 | 3,03767E-10 |
| 9 | G transversal | -6,56233E-08 | 1,68838E-11 | -1,18965E-13 | -5,17894E-08 | 1,39912E-11 | -2,56858E-12 | -2,58658E-08 | -3,7003E-11 | -9,9503E-11 |
| 10 | D Longitudinal | 6,83884E-07 | 1,58216E-12 | 2,25854E-11 | 4,51687E-07 | -1,51406E-12 | -1,61989E-12 | 2,72444E-07 | -6,25281E-13 | -1,25743E-12 |
| 10 | D Vertical | 1,70174E-12 | 5,03672E-11 | -7,53342E-09 | 9,41256E-13 | 6,65188E-11 | -5,98271E-09 | 9,2359E-13 | 2,03355E-11 | -4,79462E-09 |
| 10 | D transversal | -1,54969E-12 | 6,87988E-07 | -2,68414E-07 | -1,42497E-11 | 4,56927E-07 | -2,30934E-07 | 1,03707E-12 | 2,7738E-07 | -1,72883E-07 |
| 10 | G Longitudinal | 2,94883E-10 | 6,02757E-08 | -3,47417E-08 | 1,19019E-12 | 3,39165E-08 | -2,59355E-08 | -5,6672E-15 | 1,64195E-08 | -1,65973E-08 |
| 10 | G Vertical | -2,11282E-07 | -1,24559E-10 | -2,0012E-09 | -1,73771E-07 | 5,48628E-12 | -1,69673E-11 | -1,33868E-07 | 5,82309E-12 | 9,52984E-12 |
| 10 | G transversal | -5,87486E-08 | -2,76928E-11 | -2,68932E-10 | -3,25391E-08 | -2,52522E-13 | -5,08935E-12 | -1,51985E-08 | -2,99514E-13 | -3,64743E-13 |
| 11 | D Longitudinal | 7,26104E-07 | 2,72674E-11 | 4,30784E-10 | 4,86443E-07 | -2,60208E-12 | 1,94402E-12 | 2,9922E-07 | -1,79266E-12 | -3,1726E-12 |
| 11 | D Vertical | 6,11767E-11 | 1,21053E-08 | -1,44834E-08 | 1,18562E-12 | 6,84982E-09 | -1,11699E-08 | 9,16422E-13 | 3,30436E-09 | -8,11384E-09 |
| 11 | D transversal | -1,55456E-12 | 6,87988E-07 | -2,68414E-07 | -1,42498E-11 | 4,56927E-07 | -2,30934E-07 | 1,03756E-12 | 2,7738E-07 | -1,72883E-07 |
| 11 | G Longitudinal | 2,98861E-10 | 6,02731E-08 | -3,47608E-08 | 1,23973E-12 | 3,39165E-08 | -2,59367E-08 | -1,19444E-13 | 1,64204E-08 | -1,65952E-08 |
| 11 | G Vertical | -2,11043E-07 | -1,27703E-10 | -2,03325E-09 | -1,73781E-07 | 5,44032E-12 | -1,76515E-11 | -1,33882E-07 | 5,83857E-12 | 9,57539E-12 |
| 11 | G transversal | -5,7992E-08 | -3,38198E-11 | -3,28972E-10 | -3,25687E-08 | -3,59897E-13 | -6,40917E-12 | -1,52438E-08 | -2,78831E-13 | -2,93107E-13 |
| 12 | D Longitudinal | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 12 | D Vertical | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 12 | D transversal | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 12 | G Longitudinal | 1,4372E-08 | 2,19289E-09 | 2,94897E-10 | 1,40148E-08 | 2,48496E-09 | 2,2277E-11 | 1,35524E-08 | 1,7278E-09 | -2,82933E-09 |
| 12 | G Vertical | -1,16965E-07 | -8,78309E-09 | 8,08653E-09 | -1,1229E-07 | -1,35271E-09 | 1,19619E-08 | -1,05884E-07 | 2,09977E-08 | 5,25071E-08 |
| 12 | G transversal | -2,09317E-08 | -5,54756E-10 | 5,5403E-10 | -2,20397E-08 | -4,07352E-11 | 8,26895E-10 | -2,29899E-08 | 1,52387E-09 | 3,68203E-09 |
| 13 | D Longitudinal | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 13 | D Vertical | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 13 | D transversal | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 13 | G Longitudinal | -1,43697E-08 | 2,19294E-09 | 2,98763E-10 | -1,40235E-08 | 2,48486E-09 | 2,21634E-11 | -1,35701E-08 | 1,72837E-09 | -2,82848E-09 |
| 13 | G Vertical | -1,16932E-07 | 8,78391E-09 | -8,03107E-09 | -1,12414E-07 | 1,35145E-09 | -1,19633E-08 | -1,06136E-07 | -2,09887E-08 | -5,24937E-08 |
| 13 | G transversal | -2,09294E-08 | 5,54824E-10 | -5,50043E-10 | -2,20484E-08 | 4,066E-11 | -8,26978E-10 | -2,30076E-08 | -1,5231E-09 | -3,68089E-09 |
| 14 | D Longitudinal | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 14 | D Vertical | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 14 | D transversal | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 14 | G Longitudinal | -1,40821E-08 | 2,24931E-09 | 5,19896E-10 | -1,43088E-08 | 2,77285E-09 | 6,48862E-10 | -1,42409E-08 | 2,88662E-09 | 2,41375E-10 |
| 14 | G Vertical | -1,15412E-07 | 9,58513E-09 | -4,65318E-09 | -1,18655E-07 | 5,44551E-09 | -2,81971E-09 | -1,17496E-07 | -4,51165E-09 | -8,59831E-09 |
| 14 | G transversal | 1,58628E-08 | -6,11266E-10 | 3,23767E-10 | 1,47208E-08 | -3,29004E-10 | 1,94655E-10 | 1,32329E-08 | 3,63115E-10 | 6,01847E-10 |
| 15 | D Longitudinal | 2,85128E-07 | 5,82763E-11 | -1,23732E-11 | 2,53086E-07 | 7,87522E-11 | 2,22658E-11 | 2,19541E-07 | 1,18925E-09 | 2,05375E-09 |
| 15 | D Vertical | -2,34941E-08 | 2,3654E-08 | -1,17218E-08 | -1,59604E-08 | 1,63359E-08 | -1,17184E-08 | -8,6331E-09 | 9,04825E-09 | -1,16544E-08 |
| 15 | D transversal | 7,07458E-08 | 2,14918E-07 | -3,45167E-08 | 7,1092E-08 | 1,82072E-07 | -3,45059E-08 | 7,46336E-08 | 1,50271E-07 | -3,26392E-08 |
| 15 | G Longitudinal | 1,46712E-08 | 4,74445E-08 | -1,22063E-08 | 1,35147E-08 | 3,52755E-08 | -1,31811E-08 | 1,3967E-08 | 2,14176E-08 | -1,89516E-08 |

APOYO 1

| DESPLAZAMIENTOS (metros) | | C1 | | | C2 | | | C3 | | |
|---|---|---|---|---|---|---|---|---|---|---|
| Nudo | Desplazamiento | L | T | V | L | T | V | L | T | V |
| 15 | G Vertical | -1,11839E-07 | -2,60082E-09 | 6,22912E-09 | -1,0704E-07 | 3,47983E-09 | 1,00948E-08 | -9,92897E-08 | 2,54514E-08 | 5,23367E-08 |
| 15 | G transversal | -6,67206E-08 | -1,8905E-09 | 1,22465E-09 | -5,58313E-08 | -7,4839E-10 | 1,80784E-09 | -4,25248E-08 | 3,40939E-10 | 3,38115E-09 |
| 16 | D Longitudinal | 2,85116E-07 | -5,84692E-11 | 1,13066E-11 | 2,53073E-07 | -7,89795E-11 | -2,26182E-11 | 2,19491E-07 | -1,19027E-09 | -2,05526E-09 |
| 16 | D Vertical | 2,34947E-08 | 2,3654E-08 | -1,17215E-08 | 1,59611E-08 | 1,6336E-08 | -1,17183E-08 | 8,63607E-09 | 9,0489E-09 | -1,16534E-08 |
| 16 | D transversal | -7,07439E-08 | 2,14918E-07 | -3,45181E-08 | -7,10896E-08 | 1,82072E-07 | -3,45061E-08 | -7,46286E-08 | 1,50268E-07 | -3,26429E-08 |
| 16 | G Longitudinal | -1,46693E-08 | 4,74445E-08 | -1,22047E-08 | -1,35203E-08 | 3,52761E-08 | -1,31802E-08 | -1,3976E-08 | 2,1422E-08 | -1,89451E-08 |
| 16 | G Vertical | -1,11809E-07 | 2,6016E-09 | -6,17333E-09 | -1,07168E-07 | -3,48121E-09 | -1,00965E-08 | -9,95538E-08 | -2,54414E-08 | -5,23218E-08 |
| 16 | G transversal | -6,67173E-08 | 1,89064E-09 | -1,22134E-09 | -5,58412E-08 | 7,48555E-10 | -1,80754E-09 | -4,25155E-08 | -3,37826E-10 | -3,37649E-09 |
| 17 | D Longitudinal | 1,44684E-07 | 5,94753E-11 | 7,47188E-12 | 1,12923E-07 | 4,87533E-11 | -7,72186E-12 | 8,23946E-08 | -1,33875E-10 | -3,46562E-10 |
| 17 | D Vertical | 2,35516E-08 | -2,36539E-08 | 3,64997E-09 | 1,6302E-08 | -1,63345E-08 | 3,6497E-09 | 9,07939E-09 | -9,07395E-09 | 3,54672E-09 |
| 17 | D transversal | -7,09743E-08 | 2,1492E-07 | -3,44813E-08 | -7,09205E-08 | 1,82036E-07 | -3,45254E-08 | -6,98563E-08 | 1,47859E-07 | -3,69016E-08 |
| 17 | G Longitudinal | -1,11171E-08 | 4,75273E-08 | -1,2416E-08 | -1,26094E-08 | 3,60305E-08 | -1,20519E-08 | -1,02959E-08 | 2,10958E-08 | -1,70079E-08 |
| 17 | G Vertical | -1,10473E-07 | 3,40246E-09 | -3,68236E-09 | -1,13847E-07 | 6,09224E-10 | -1,86788E-09 | -1,14179E-07 | -7,2616E-09 | -6,40836E-09 |
| 17 | G transversal | -2,79007E-08 | -1,95151E-09 | 6,59871E-10 | -1,78218E-08 | -1,18616E-09 | 5,21352E-10 | -8,4019E-09 | 5,80035E-11 | 1,10065E-09 |
| 18 | D Longitudinal | 6,32592E-07 | -2,07317E-10 | -1,68621E-09 | 4,55761E-07 | -6,43254E-12 | -5,14983E-11 | 3,03506E-07 | -4,01497E-12 | -5,8042E-12 |
| 18 | D Vertical | -3,16759E-08 | 3,31979E-08 | -2,64933E-08 | -1,80433E-08 | 1,87206E-08 | -2,02474E-08 | -8,44459E-09 | 9,05674E-09 | -1,39131E-08 |
| 18 | D transversal | 1,2165E-07 | 5,19014E-07 | -1,73671E-07 | 9,56116E-08 | 3,61954E-07 | -1,58368E-07 | 7,33963E-08 | 2,3137E-07 | -1,26471E-07 |
| 18 | G Longitudinal | -1,52356E-09 | 5,65492E-08 | -5,37114E-08 | 2,95127E-10 | 3,35826E-08 | -2,84123E-08 | -9,88355E-11 | 1,63567E-08 | -1,68536E-08 |
| 18 | G Vertical | -1,93533E-07 | 1,21451E-08 | 6,60253E-08 | -1,61846E-07 | 1,7072E-09 | 9,52267E-09 | -1,2738E-07 | 4,82217E-09 | 1,02454E-08 |
| 18 | G transversal | -5,78038E-08 | 2,02103E-09 | 6,46465E-09 | -3,2423E-08 | 2,3523E-10 | 1,34345E-09 | -1,52452E-08 | 6,50255E-11 | 1,91742E-10 |
| 19 | D Longitudinal | 6,32582E-07 | 2,04918E-10 | 1,72965E-09 | 4,5576E-07 | -2,89445E-12 | 3,9847E-11 | 3,03506E-07 | -2,76339E-12 | -3,84499E-12 |
| 19 | D Vertical | 3,16693E-08 | 3,32015E-08 | -2,64712E-08 | 1,80384E-08 | 1,8721E-08 | -2,02466E-08 | 8,44467E-09 | 9,05719E-09 | -1,39125E-08 |
| 19 | D transversal | -1,21647E-07 | 5,19029E-07 | -1,73625E-07 | -9,56284E-08 | 3,61961E-07 | -1,58358E-07 | -7,33969E-08 | 2,31377E-07 | -1,26462E-07 |
| 19 | G Longitudinal | 1,46222E-09 | 5,6546E-08 | -5,39137E-08 | -3,05376E-10 | 3,35846E-08 | -2,84146E-08 | 9,59618E-11 | 1,63573E-08 | -1,68526E-08 |
| 19 | G Vertical | -1,90099E-07 | -1,20685E-08 | -6,17195E-08 | -1,61845E-07 | -1,74274E-09 | -9,55261E-09 | -1,27427E-07 | -4,82697E-09 | -1,02558E-08 |
| 19 | G transversal | -5,7819E-08 | -1,99602E-09 | -6,27815E-09 | -3,24297E-08 | -2,35973E-10 | -1,34106E-09 | -1,52461E-08 | -6,61287E-11 | -1,9347E-10 |
| 20 | D Longitudinal | 4,06335E-07 | 4,36059E-11 | 1,0652E-10 | 2,65406E-07 | 2,35837E-12 | 1,86433E-11 | 1,56233E-07 | 2,11799E-12 | 2,99911E-12 |
| 20 | D Vertical | 3,33022E-08 | -3,30605E-08 | 1,215E-08 | 1,77536E-08 | -1,85879E-08 | 8,28773E-09 | 8,28046E-09 | -9,01611E-09 | 4,32332E-09 |
| 20 | D transversal | -1,19763E-07 | 5,19486E-07 | -1,67999E-07 | -9,56036E-08 | 3,61963E-07 | -1,58261E-07 | -7,33964E-08 | 2,31376E-07 | -1,26465E-07 |
| 20 | G Longitudinal | -3,79143E-09 | 6,0838E-08 | -4,03795E-08 | 2,6717E-10 | 3,40616E-08 | -2,49138E-08 | 1,09928E-10 | 1,6423E-08 | -1,651E-08 |
| 20 | G Vertical | -1,88506E-07 | 3,45002E-09 | 1,98384E-09 | -1,61595E-07 | 4,86207E-10 | 2,363E-09 | -1,30076E-07 | -1,34944E-09 | -1,01366E-09 |
| 20 | G transversal | -6,28757E-08 | -2,7273E-10 | -5,65888E-11 | -3,27228E-08 | -3,8956E-11 | -1,98905E-10 | -1,51245E-08 | 1,13539E-11 | -1,39165E-11 |
| 21 | D Longitudinal | 7,8655E-09 | -3,23129E-10 | 8,07464E-11 | 8,63912E-09 | -2,74269E-10 | 8,04533E-11 | 9,38742E-09 | -2,26506E-10 | 7,73389E-11 |
| 21 | D Vertical | -2,02332E-09 | 2,25638E-09 | -6,13302E-10 | -1,62076E-09 | 1,87358E-09 | -6,1334E-10 | -1,20368E-09 | 1,49067E-09 | -6,13667E-10 |
| 21 | D transversal | 3,40355E-09 | 1,48723E-09 | 4,14251E-10 | 3,44688E-09 | 1,91258E-09 | 4,14326E-10 | 3,50602E-09 | 2,3387E-09 | 4,16007E-10 |
| 21 | G Longitudinal | 1,30901E-08 | 3,80511E-09 | -1,10619E-10 | 1,2909E-08 | 3,81351E-09 | -3,8348E-10 | 1,26428E-08 | 2,773E-09 | -3,23529E-09 |
| 21 | G Vertical | -1,17133E-07 | -8,70956E-09 | 8,06824E-09 | -1,12479E-07 | -1,29289E-09 | 1,19435E-08 | -1,06094E-07 | 2,10435E-08 | 5,24878E-08 |
| 21 | G transversal | -1,98237E-08 | 1,30827E-11 | 4,08302E-10 | -2,04527E-08 | 4,38061E-10 | 6,82444E-10 | -2,0916E-08 | 1,91823E-09 | 3,55021E-09 |
| 22 | D Longitudinal | 1,47734E-08 | -1,06034E-09 | 2,6846E-10 | 1,58648E-08 | -8,97325E-10 | 2,66766E-10 | 1,68978E-08 | -7,40654E-10 | 2,49298E-10 |
| 22 | D Vertical | -3,92854E-09 | 4,37535E-09 | -1,19463E-09 | -3,14705E-09 | 3,63287E-09 | -1,19475E-09 | -2,33878E-09 | 2,88996E-09 | -1,19592E-09 |
| 22 | D transversal | 6,04241E-09 | 4,43664E-09 | 4,9842E-10 | 6,23407E-09 | 5,03482E-09 | 4,98064E-10 | 6,47387E-09 | 5,63317E-09 | 4,97266E-10 |
| 22 | G Longitudinal | 1,32625E-08 | 5,96393E-09 | -4,73631E-10 | 1,30599E-08 | 5,61543E-09 | -7,48163E-10 | 1,27914E-08 | 4,21053E-09 | -3,61904E-09 |
| 22 | G Vertical | -1,17223E-07 | -8,58201E-09 | 8,04888E-09 | -1,12623E-07 | -1,18659E-09 | 1,19242E-08 | -1,06291E-07 | 2,11288E-08 | 5,24693E-08 |
| 22 | G transversal | -1,86365E-08 | 3,23452E-10 | 3,26387E-10 | -1,85277E-08 | 6,97477E-10 | 6,01988E-10 | -1,82394E-08 | 2,1327E-09 | 3,48553E-09 |

APOYO 1

| DESPLAZAMIENTOS (metros) | | C1 | | | C2 | | | C3 | | |
|---|---|---|---|---|---|---|---|---|---|---|
| Nudo | Desplazamiento | L | T | V | L | T | V | L | T | V |
| 23 | D Longitudinal | 2,16035E-08 | -1,5924E-09 | 4,16862E-10 | 2,26723E-08 | -1,33534E-09 | 4,17452E-10 | 2,36435E-08 | -1,07659E-09 | 4,22625E-10 |
| 23 | D Vertical | -6,12719E-09 | 6,37836E-09 | -1,80465E-09 | -4,97837E-09 | 5,25673E-09 | -1,80478E-09 | -3,79267E-09 | 4,13468E-09 | -1,80595E-09 |
| 23 | D transversal | 9,53908E-09 | 8,4088E-09 | 4,99474E-10 | 9,74811E-09 | 9,02325E-09 | 5,01302E-10 | 1,0044E-08 | 9,64525E-09 | 5,21838E-10 |
| 23 | G Longitudinal | 1,49631E-08 | 7,64729E-09 | -6,15067E-10 | 1,45265E-08 | 7,03036E-09 | -8,91222E-10 | 1,40292E-08 | 5,34654E-09 | -3,78671E-09 |
| 23 | G Vertical | -1,17353E-07 | -8,6031E-09 | 8,03037E-09 | -1,12685E-07 | -1,20777E-09 | 1,19063E-08 | -1,06285E-07 | 2,11103E-08 | 5,24584E-08 |
| 23 | G transversal | -2,00813E-08 | -4,82895E-10 | 5,20532E-10 | -1,95798E-08 | 8,04186E-12 | 7,95329E-10 | -1,88864E-08 | 1,55959E-09 | 3,67498E-09 |
| 24 | D Longitudinal | 3,00099E-08 | -1,57058E-09 | 4,25033E-10 | 3,0855E-08 | -1,30562E-09 | 4,24942E-10 | 3,15536E-08 | -1,04351E-09 | 4,19439E-10 |
| 24 | D Vertical | -7,97583E-09 | 8,34522E-09 | -2,41242E-09 | -6,438E-09 | 6,85316E-09 | -2,41247E-09 | -4,85531E-09 | 5,36109E-09 | -2,41262E-09 |
| 24 | D transversal | 1,35803E-08 | 1,36858E-08 | 2,92443E-10 | 1,37485E-08 | 1,40853E-08 | 2,9236E-10 | 1,40474E-08 | 1,44817E-08 | 2,86759E-10 |
| 24 | G Longitudinal | 1,47296E-08 | 9,90992E-09 | -1,05801E-09 | 1,4312E-08 | 8,87928E-09 | -1,33337E-09 | 1,38493E-08 | 6,78148E-09 | -4,22761E-09 |
| 24 | G Vertical | -1,17115E-07 | -8,18817E-09 | 7,91614E-09 | -1,12393E-07 | -8,67593E-10 | 1,17931E-08 | -1,05936E-07 | 2,13794E-08 | 5,23553E-08 |
| 24 | G transversal | -2,27257E-08 | -1,16551E-09 | 6,84583E-10 | -2,19259E-08 | -5,77774E-10 | 9,57942E-10 | -2,09213E-08 | 1,06466E-09 | 3,82248E-09 |
| 25 | D Longitudinal | 3,98687E-08 | -1,33542E-09 | 3,843E-10 | 4,02797E-08 | -1,09067E-09 | 3,84156E-10 | 4,04879E-08 | -8,48266E-10 | 3,78663E-10 |
| 25 | D Vertical | -9,95013E-09 | 1,01683E-08 | -3,03795E-09 | -8,03958E-09 | 8,28873E-09 | -3,03791E-09 | -6,07881E-09 | 6,40974E-09 | -3,03665E-09 |
| 25 | D transversal | 1,73022E-08 | 2,03333E-08 | -2,04861E-10 | 1,74654E-08 | 2,02613E-08 | -2,06114E-10 | 1,78159E-08 | 2,01785E-08 | -2,30038E-10 |
| 25 | G Longitudinal | 1,43814E-08 | 1,18717E-08 | -1,45011E-09 | 1,40051E-08 | 1,04924E-08 | -1,72495E-09 | 1,36097E-08 | 8,05616E-09 | -4,5995E-09 |
| 25 | G Vertical | -1,16937E-07 | -7,84741E-09 | 7,81801E-09 | -1,12164E-07 | -5,8963E-10 | 1,1696E-08 | -1,05655E-07 | 2,15992E-08 | 5,22697E-08 |
| 25 | G transversal | -2,46358E-08 | -1,09547E-09 | 6,70835E-10 | -2,34541E-08 | -5,15698E-10 | 9,4376E-10 | -2,20555E-08 | 1,109E-09 | 3,79071E-09 |
| 26 | D Longitudinal | 5,07185E-08 | -1,3251E-09 | 4,04226E-10 | 5,04439E-08 | -1,06158E-09 | 4,07728E-10 | 4,99045E-08 | -7,80558E-10 | 4,49402E-10 |
| 26 | D Vertical | -1,15112E-08 | 1,18798E-08 | -3,64386E-09 | -9,21061E-09 | 9,6292E-09 | -3,64371E-09 | -6,8581E-09 | 7,37935E-09 | -3,64185E-09 |
| 26 | D transversal | 2,09623E-08 | 2,81191E-08 | -8,93992E-10 | 2,11407E-08 | 2,74008E-08 | -8,93109E-10 | 2,1586E-08 | 2,66891E-08 | -8,78555E-10 |
| 26 | G Longitudinal | 1,46614E-08 | 1,37105E-08 | -1,73406E-09 | 1,43054E-08 | 1,2073E-08 | -2,01136E-09 | 1,39739E-08 | 9,39944E-09 | -4,85486E-09 |
| 26 | G Vertical | -1,16923E-07 | -7,69644E-09 | 7,75785E-09 | -1,12053E-07 | -4,64709E-10 | 1,16365E-08 | -1,05444E-07 | 2,16994E-08 | 5,22153E-08 |
| 26 | G transversal | -2,65827E-08 | -5,34422E-10 | 5,19159E-10 | -2,49782E-08 | -4,76391E-11 | 7,93488E-10 | -2,3145E-08 | 1,48528E-09 | 3,64734E-09 |
| 27 | D Longitudinal | 6,38335E-08 | -1,77441E-09 | 5,6467E-10 | 6,25191E-08 | -1,40332E-09 | 5,65139E-10 | 6,08657E-08 | -1,02609E-09 | 5,76975E-10 |
| 27 | D Vertical | -1,38748E-08 | 1,39512E-08 | -4,44555E-09 | -1,10936E-08 | 1,11929E-08 | -4,44539E-09 | -8,25986E-09 | 8,43341E-09 | -4,44679E-09 |
| 27 | D transversal | 2,49929E-08 | 3,77389E-08 | -1,88823E-09 | 2,52331E-08 | 3,61069E-08 | -1,89121E-09 | 2,5846E-08 | 3,44959E-08 | -1,86233E-09 |
| 27 | G Longitudinal | 1,53437E-08 | 1,7355E-08 | -2,32793E-09 | 1,50622E-08 | 1,51798E-08 | -2,60703E-09 | 1,4814E-08 | 1,1966E-08 | -5,45817E-09 |
| 27 | G Vertical | -1,16329E-07 | -7,1904E-09 | 7,64847E-09 | -1,11387E-07 | -2,62957E-11 | 1,15267E-08 | -1,04703E-07 | 2,20678E-08 | 5,21015E-08 |
| 27 | G transversal | -3,107E-08 | 3,12022E-11 | 3,18608E-10 | -2,88533E-08 | 3,85969E-10 | 6,00974E-10 | -2,63872E-08 | 1,84226E-09 | 3,57358E-09 |
| 28 | D Longitudinal | 7,94861E-08 | -2,12709E-09 | 7,18605E-10 | 7,68368E-08 | -1,65006E-09 | 7,12208E-10 | 7,37638E-08 | -1,20953E-09 | 6,29291E-10 |
| 28 | D Vertical | -1,5598E-08 | 1,58879E-08 | -5,2227E-09 | -1,23013E-08 | 1,26457E-08 | -5,22295E-09 | -8,95035E-09 | 9,40162E-09 | -5,22718E-09 |
| 28 | D transversal | 2,95213E-08 | 4,93852E-08 | -3,24492E-09 | 2,9837E-08 | 4,64916E-08 | -3,24909E-09 | 3,05752E-08 | 4,35971E-08 | -3,26178E-09 |
| 28 | G Longitudinal | 1,60327E-08 | 2,01212E-08 | -2,87655E-09 | 1,56937E-08 | 1,73814E-08 | -3,14536E-09 | 1,52005E-08 | 1,34901E-08 | -6,16678E-09 |
| 28 | G Vertical | -1,15807E-07 | -6,6593E-09 | 7,51416E-09 | -1,10788E-07 | 4,1702E-10 | 1,13934E-08 | -1,04037E-07 | 2,24163E-08 | 5,19597E-08 |
| 28 | G transversal | -3,45207E-08 | -6,37261E-10 | 5,17413E-10 | -3,1898E-08 | -1,55224E-10 | 7,99434E-10 | -2,90121E-08 | 1,43976E-09 | 3,79141E-09 |
| 29 | D Longitudinal | 9,69333E-08 | -1,98936E-09 | 7,07634E-10 | 9,26476E-08 | -1,51154E-09 | 7,05435E-10 | 8,78477E-08 | -1,06105E-09 | 6,51482E-10 |
| 29 | D Vertical | -1,76461E-08 | 1,76065E-08 | -6,04528E-09 | -1,38516E-08 | 1,38436E-08 | -6,04576E-09 | -9,99918E-09 | 1,00836E-08 | -6,04211E-09 |
| 29 | D transversal | 3,42102E-08 | 6,27324E-08 | -4,987E-09 | 3,45629E-08 | 5,81819E-08 | -4,98146E-09 | 3,52933E-08 | 5,35657E-08 | -5,07849E-09 |
| 29 | G Longitudinal | 1,61178E-08 | 2,3147E-08 | -3,63387E-09 | 1,57325E-08 | 1,96596E-08 | -3,8959E-09 | 1,52053E-08 | 1,50231E-08 | -6,89668E-09 |
| 29 | G Vertical | -1,15623E-07 | -6,38445E-09 | 7,43299E-09 | -1,10504E-07 | 6,53055E-10 | 1,13124E-08 | -1,03624E-07 | 2,26332E-08 | 5,19148E-08 |
| 29 | G transversal | -3,73685E-08 | -1,15638E-09 | 7,58695E-10 | -3,40857E-08 | -5,12203E-10 | 1,01815E-09 | -3,05261E-08 | 1,11616E-09 | 3,72635E-09 |
| 30 | D Longitudinal | 1,16385E-07 | -1,79316E-09 | 6,33365E-10 | 1,09947E-07 | -1,35912E-09 | 6,44504E-10 | 1,02897E-07 | -8,75492E-10 | 7,57786E-10 |
| 30 | D Vertical | -1,89697E-08 | 1,91972E-08 | -6,83392E-09 | -1,46415E-08 | 1,49466E-08 | -6,8338E-09 | -1,02685E-08 | 1,07001E-08 | -6,82655E-09 |

APOYO 1

| DESPLAZAMIENTOS (metros) | | C1 | | | C2 | | | C3 | | |
|---|---|---|---|---|---|---|---|---|---|---|
| Nudo | Desplazamiento | L | T | V | L | T | V | L | T | V |
| 30 | D transversal | 3,89806E-08 | 7,82026E-08 | -7,27976E-09 | 3,93485E-08 | 7,14671E-08 | -7,27027E-09 | 4,02438E-08 | 6,46954E-08 | -7,30644E-09 |
| 30 | G Longitudinal | 1,60832E-08 | 2,65204E-08 | -4,48612E-09 | 1,55919E-08 | 2,21991E-08 | -4,76095E-09 | 1,5566E-08 | 1,70707E-08 | -7,19878E-09 |
| 30 | G Vertical | -1,15217E-07 | -5,86409E-09 | 7,28637E-09 | -1,10083E-07 | 1,06999E-09 | 1,11658E-08 | -1,03095E-07 | 2,30144E-08 | 5,18876E-08 |
| 30 | G transversal | -4,06954E-08 | -8,56089E-10 | 6,68069E-10 | -3,65237E-08 | -2,73888E-10 | 9,21278E-10 | -3,20649E-08 | 1,233E-09 | 3,50719E-09 |
| 31 | D Longitudinal | 1,38137E-07 | -1,88967E-09 | 7,2157E-10 | 1,28996E-07 | -1,38704E-09 | 7,32898E-10 | 1,19145E-07 | -8,04557E-10 | 9,00141E-10 |
| 31 | D Vertical | -2,06896E-08 | 2,04863E-08 | -7,65097E-09 | -1,58618E-08 | 1,57183E-08 | -7,65067E-09 | -1,1022E-08 | 1,09428E-08 | -7,66305E-09 |
| 31 | D transversal | 4,38147E-08 | 9,56661E-08 | -1,00884E-08 | 4,41217E-08 | 8,62348E-08 | -1,0087E-08 | 4,54541E-08 | 7,69904E-08 | -9,75637E-09 |
| 31 | G Longitudinal | 1,60787E-08 | 2,95967E-08 | -5,33024E-09 | 1,55817E-08 | 2,44632E-08 | -5,62669E-09 | 1,56884E-08 | 1,85824E-08 | -8,01671E-09 |
| 31 | G Vertical | -1,14774E-07 | -5,39566E-09 | 7,16413E-09 | -1,09617E-07 | 1,45274E-09 | 1,10391E-08 | -1,02544E-07 | 2,33399E-08 | 5,18006E-08 |
| 31 | G transversal | -4,45291E-08 | -1,15446E-10 | 2,39378E-10 | -3,94816E-08 | 1,74535E-10 | 5,40675E-10 | -3,41477E-08 | 1,60481E-09 | 3,62285E-09 |
| 32 | D Longitudinal | 1,6217E-07 | -2,35524E-09 | 1,04928E-09 | 1,49766E-07 | -1,62051E-09 | 1,0295E-09 | 1,36555E-07 | -9,34831E-10 | 8,93675E-10 |
| 32 | D Vertical | -2,14765E-08 | 2,16214E-08 | -8,41464E-09 | -1,61148E-08 | 1,63815E-08 | -8,4147E-09 | -1,07496E-08 | 1,11327E-08 | -8,43028E-09 |
| 32 | D transversal | 4,84236E-08 | 1,15083E-07 | -1,35041E-08 | 4,88283E-08 | 1,02412E-07 | -1,35238E-08 | 5,0364E-08 | 8,9905E-08 | -1,32898E-08 |
| 32 | G Longitudinal | 1,51112E-08 | 3,27011E-08 | -6,40826E-09 | 1,51001E-08 | 2,66533E-08 | -6,72458E-09 | 1,42986E-08 | 1,90114E-08 | -1,06447E-08 |
| 32 | G Vertical | -1,14441E-07 | -4,88451E-09 | 7,00597E-09 | -1,0923E-07 | 1,85791E-09 | 1,08782E-08 | -1,0215E-07 | 2,36053E-08 | 5,15747E-08 |
| 32 | G transversal | -4,77518E-08 | 4,6554E-11 | 8,69441E-11 | -4,17801E-08 | 2,30394E-10 | 4,1389E-10 | -3,55123E-08 | 1,74714E-09 | 3,9007E-09 |
| 33 | D Longitudinal | 1,87855E-07 | -2,57707E-09 | 1,2886E-09 | 1,71519E-07 | -1,66067E-09 | 1,25662E-09 | 1,54266E-07 | -9,27132E-10 | 8,56468E-10 |
| 33 | D Vertical | -2,27964E-08 | 2,24186E-08 | -9,22673E-09 | -1,69651E-08 | 1,666E-08 | -9,22602E-09 | -1,11029E-08 | 1,09137E-08 | -9,20289E-09 |
| 33 | D transversal | 5,23197E-08 | 1,36557E-07 | -1,76591E-08 | 5,31555E-08 | 1,20024E-07 | -1,76933E-08 | 5,43423E-08 | 1,03131E-07 | -1,84089E-08 |
| 33 | G Longitudinal | 1,4903E-08 | 3,63218E-08 | -7,64358E-09 | 1,52316E-08 | 2,91902E-08 | -7,90833E-09 | 1,40733E-08 | 2,01356E-08 | -1,22678E-08 |
| 33 | G Vertical | -1,14171E-07 | -4,57551E-09 | 6,91709E-09 | -1,08927E-07 | 2,11592E-09 | 1,07984E-08 | -1,01646E-07 | 2,39404E-08 | 5,1743E-08 |
| 33 | G transversal | -5,02925E-08 | -5,26515E-10 | 4,18366E-10 | -4,29954E-08 | -1,37204E-10 | 6,71899E-10 | -3,53531E-08 | 1,4632E-09 | 3,7737E-09 |
| 34 | D Longitudinal | 2,15707E-07 | -2,38182E-09 | 1,25561E-09 | 1,94562E-07 | -1,4585E-09 | 1,2653E-09 | 1,7238E-07 | -6,8E-10 | 1,02626E-09 |
| 34 | D Vertical | -2,30939E-08 | 2,30921E-08 | -1,00028E-08 | -1,67307E-08 | 1,6853E-08 | -1,00044E-08 | -1,03502E-08 | 1,06243E-08 | -9,99109E-09 |
| 34 | D transversal | 5,72968E-08 | 1,60428E-07 | -2,25273E-08 | 5,8473E-08 | 1,3934E-07 | -2,2503E-08 | 5,9719E-08 | 1,17769E-07 | -2,32826E-08 |
| 34 | G Longitudinal | 1,82199E-08 | 4,00057E-08 | -8,51654E-09 | 1,78252E-08 | 3,18739E-08 | -8,59005E-09 | 1,82023E-08 | 2,34458E-08 | -9,60969E-09 |
| 34 | G Vertical | -1,13198E-07 | -3,89423E-09 | 6,71445E-09 | -1,08115E-07 | 2,6337E-09 | 1,06338E-08 | -1,00555E-07 | 2,46577E-08 | 5,2311E-08 |
| 34 | G transversal | -5,51543E-08 | -1,33224E-09 | 9,56026E-10 | -4,66997E-08 | -5,82449E-10 | 1,13377E-09 | -3,79108E-08 | 9,3763E-10 | 3,27242E-09 |
| 35 | D Longitudinal | 2,48062E-07 | -1,42325E-09 | 7,69985E-10 | 2,21692E-07 | -8,17194E-10 | 8,41328E-10 | 1,94237E-07 | 7,4136E-11 | 1,51228E-09 |
| 35 | D Vertical | -2,40919E-08 | 2,34332E-08 | -1,08901E-08 | -1,71992E-08 | 1,66211E-08 | -1,08962E-08 | -1,03695E-08 | 9,79995E-09 | -1,09286E-08 |
| 35 | D transversal | 6,45164E-08 | 1,86495E-07 | -2,79395E-08 | 6,53945E-08 | 1,60165E-07 | -2,77806E-08 | 6,77692E-08 | 1,34327E-07 | -2,65018E-08 |
| 35 | G Longitudinal | 2,01261E-08 | 4,35108E-08 | -9,68258E-09 | 1,88362E-08 | 3,39636E-08 | -9,85055E-09 | 2,03986E-08 | 2,50762E-08 | -9,43905E-09 |
| 35 | G Vertical | -1,12021E-07 | -3,17795E-09 | 6,46495E-09 | -1,07041E-07 | 3,13466E-09 | 1,03957E-08 | -9,91459E-08 | 2,52822E-08 | 5,26979E-08 |
| 35 | G transversal | -6,43198E-08 | -2,814E-09 | 1,86629E-09 | -5,57126E-08 | -1,38306E-09 | 2,05967E-09 | -4,69354E-08 | 5,04758E-11 | 2,85563E-09 |
| 36 | D Longitudinal | 2,80973E-07 | -9,23581E-14 | -5,24758E-13 | 2,48517E-07 | -1,05398E-13 | -1,63202E-13 | 2,14636E-07 | -4,27424E-13 | -6,27954E-13 |
| 36 | D Vertical | -1,99869E-12 | 2,28674E-08 | -1,12981E-08 | -4,02845E-12 | 1,58062E-08 | -1,14371E-08 | -1,04711E-11 | 8,13461E-09 | -1,29383E-08 |
| 36 | D transversal | -3,33679E-12 | 2,14111E-07 | -3,27586E-08 | 1,86148E-11 | 1,82977E-07 | -3,16749E-08 | 3,78623E-11 | 1,57209E-07 | -1,82755E-08 |
| 36 | G Longitudinal | 9,32345E-13 | 4,74445E-08 | -1,22055E-08 | -2,80012E-12 | 3,52758E-08 | -1,31806E-08 | -4,51822E-12 | 2,14198E-08 | -1,89484E-08 |
| 36 | G Vertical | -1,37028E-07 | -3,82826E-13 | -1,57277E-11 | -1,40332E-07 | 1,93649E-13 | 6,84147E-14 | -1,53829E-07 | -5,85118E-12 | -8,81302E-12 |
| 36 | G transversal | -3,07162E-08 | -7,96362E-14 | -1,22911E-12 | -1,56112E-08 | -9,97493E-14 | -1,73457E-13 | -2,28881E-09 | -1,65975E-12 | -2,46658E-12 |
| 37 | D Longitudinal | 1,46996E-07 | 8,37229E-14 | 4,297E-13 | 1,14835E-07 | 9,91753E-14 | 1,48822E-13 | 8,38715E-08 | 2,52288E-13 | 3,61002E-13 |
| 37 | D Vertical | -3,40468E-12 | -2,28829E-08 | 3,40592E-09 | -2,09949E-12 | -1,59227E-08 | 3,36018E-09 | -2,23229E-13 | -8,99669E-09 | 3,20489E-09 |
| 37 | D transversal | -2,84306E-11 | 2,13894E-07 | -3,34188E-08 | -9,70971E-12 | 1,81816E-07 | -3,3981E-08 | -5,64852E-12 | 1,49851E-07 | -3,5095E-08 |
| 37 | G Longitudinal | 4,23324E-12 | 4,75272E-08 | -1,24188E-08 | 1,49621E-12 | 3,60308E-08 | -1,20515E-08 | -3,84177E-13 | 2,10939E-08 | -1,70107E-08 |

APOYO 1

| DESPLAZAMIENTOS (metros) | | C1 | | | C2 | | | C3 | | |
|---|---|---|---|---|---|---|---|---|---|---|
| Nudo | Desplazamiento | L | T | V | L | T | V | L | T | V |
| 37 | G Vertical | -1,38277E-07 | -2,6956E-12 | -3,65848E-11 | -1,36477E-07 | -1,37526E-13 | -5,1787E-13 | -1,33415E-07 | 2,06329E-12 | 3,27069E-12 |
| 37 | G transversal | -5,02822E-08 | 2,0082E-13 | 2,25542E-12 | -3,55483E-08 | 1,01595E-13 | 1,63639E-13 | -2,05617E-08 | 5,17742E-13 | 7,24495E-13 |
| 38 | D Longitudinal | 3,4874E-07 | -1,02651E-09 | 8,63799E-10 | 3,00487E-07 | -5,28165E-10 | 5,95224E-10 | 2,40644E-07 | -1,98414E-10 | -1,32349E-09 |
| 38 | D Vertical | -2,7781E-08 | 2,77587E-08 | -1,48106E-08 | -1,78966E-08 | 1,80847E-08 | -1,48117E-08 | -8,38438E-09 | 9,05784E-09 | -1,38355E-08 |
| 38 | D transversal | 7,82743E-08 | 2,683E-07 | -5,08277E-08 | 7,91494E-08 | 2,19907E-07 | -5,10776E-08 | 7,61842E-08 | 1,65501E-07 | -6,22626E-08 |
| 38 | G Longitudinal | 9,74418E-09 | 5,76943E-08 | -1,87037E-08 | 1,24749E-08 | 4,12436E-08 | -1,54316E-08 | -3,88948E-09 | 1,42231E-08 | -2,49999E-08 |
| 38 | G Vertical | -1,27838E-07 | 3,20094E-10 | 1,80213E-08 | -1,17955E-07 | 3,0535E-09 | 9,77386E-09 | -1,05189E-07 | 2,11011E-08 | 4,33583E-08 |
| 38 | G transversal | -6,64523E-08 | 1,04183E-09 | -1,11674E-09 | -4,81962E-08 | -3,73139E-10 | -2,70129E-09 | -1,33684E-08 | 8,91894E-10 | 8,42628E-10 |
| 39 | D Longitudinal | 4,20273E-07 | -5,44169E-10 | 7,32218E-10 | 3,51267E-07 | 9,63923E-10 | 2,44364E-09 | 2,57186E-07 | 1,90242E-11 | 2,40133E-10 |
| 39 | D Vertical | -3,05679E-08 | 3,07719E-08 | -1,79707E-08 | -1,82274E-08 | 1,87071E-08 | -1,79449E-08 | -8,52209E-09 | 9,05643E-09 | -1,39204E-08 |
| 39 | D transversal | 9,23216E-08 | 3,28254E-07 | -7,1516E-08 | 9,61281E-08 | 2,61219E-07 | -6,9752E-08 | 7,38088E-08 | 1,8209E-07 | -7,64821E-08 |
| 39 | G Longitudinal | 1,10808E-08 | 6,17863E-08 | -2,39774E-08 | 1,16946E-08 | 3,71907E-08 | -3,08313E-08 | -8,84857E-10 | 1,71471E-08 | -1,25803E-08 |
| 39 | G Vertical | -1,44138E-07 | 3,25731E-09 | 2,99064E-08 | -1,29075E-07 | 2,64843E-09 | 9,49514E-09 | -1,1079E-07 | 1,69939E-08 | 3,50029E-08 |
| 39 | G transversal | -7,29018E-08 | -4,69701E-10 | 1,00735E-09 | -4,5924E-08 | -4,14839E-10 | 1,73267E-09 | -1,69422E-08 | -4,00962E-10 | -1,31883E-09 |
| 40 | D Longitudinal | 4,93676E-07 | -4,44178E-10 | 4,72135E-10 | 3,89097E-07 | -1,57005E-10 | -1,36602E-09 | 2,72725E-07 | -4,35702E-12 | -3,45427E-11 |
| 40 | D Vertical | -3,2242E-08 | 3,25664E-08 | -2,11261E-08 | -1,79086E-08 | 1,8723E-08 | -2,01766E-08 | -8,49935E-09 | 9,05667E-09 | -1,39127E-08 |
| 40 | D transversal | 1,00838E-07 | 3,92379E-07 | -9,72274E-08 | 9,78977E-08 | 2,93973E-07 | -1,08525E-07 | 7,3724E-08 | 1,98514E-07 | -9,3327E-08 |
| 40 | G Longitudinal | 1,36262E-08 | 6,73986E-08 | -2,45861E-08 | -3,00517E-09 | 3,21912E-08 | -3,35903E-08 | 4,85311E-11 | 1,62263E-08 | -1,78721E-08 |
| 40 | G Vertical | -1,60438E-07 | 6,19452E-09 | 4,17914E-08 | -1,40195E-07 | 2,24335E-09 | 9,21641E-09 | -1,16391E-07 | 1,28867E-08 | 2,66474E-08 |
| 40 | G transversal | -7,67402E-08 | -9,09613E-10 | -1,73825E-09 | -3,39288E-08 | 9,16211E-10 | 1,64456E-09 | -1,51064E-08 | 1,2982E-10 | 5,65804E-10 |
| 41 | D Longitudinal | 5,70411E-07 | 9,77122E-10 | 2,5682E-09 | 4,22949E-07 | 1,35929E-11 | 2,49117E-10 | 2,88141E-07 | -4,41476E-12 | -5,0147E-12 |
| 41 | D Vertical | -3,22482E-08 | 3,31806E-08 | -2,42561E-08 | -1,80454E-08 | 1,87201E-08 | -2,02549E-08 | -8,46741E-09 | 9,05662E-09 | -1,39134E-08 |
| 41 | D transversal | 1,18378E-07 | 4,60044E-07 | -1,24876E-07 | 9,56742E-08 | 3,28052E-07 | -1,32109E-07 | 7,3501E-08 | 2,1494E-07 | -1,09897E-07 |
| 41 | G Longitudinal | 1,25843E-08 | 6,39887E-08 | -3,77595E-08 | -1,03704E-09 | 3,45426E-08 | -2,1881E-08 | -2,33213E-10 | 1,64965E-08 | -1,61764E-08 |
| 41 | G Vertical | -1,76985E-07 | 9,16982E-09 | 5,39084E-08 | -1,5102E-07 | 1,97527E-09 | 9,36954E-09 | -1,21886E-07 | 8,85441E-09 | 1,84464E-08 |
| 41 | G transversal | -7,05485E-08 | -4,56213E-10 | 4,34712E-10 | -3,34104E-08 | -4,00778E-10 | -1,73288E-09 | -1,54974E-08 | -4,89663E-11 | -2,10936E-10 |
| 42 | D Longitudinal | 6,465E-07 | -1,29655E-10 | -1,04947E-09 | 4,54271E-07 | -4,37307E-12 | -3,25252E-11 | 2,93183E-07 | -1,63984E-12 | -1,81183E-12 |
| 42 | D Vertical | -2,22393E-08 | 2,20501E-08 | -2,08753E-08 | -1,19662E-08 | 1,24798E-08 | -1,54873E-08 | -5,53843E-09 | 6,03391E-09 | -1,08617E-08 |
| 42 | D transversal | 8,2654E-08 | 5,75434E-07 | -2,01483E-07 | 6,35444E-08 | 3,935E-07 | -1,82407E-07 | 4,86844E-08 | 2,46655E-07 | -1,41882E-07 |
| 42 | G Longitudinal | -1,85021E-12 | 5,93974E-08 | -3,78072E-08 | -1,99707E-09 | 3,37251E-08 | -2,68376E-08 | -1,13354E-09 | 1,57334E-08 | -1,80377E-08 |
| 42 | G Vertical | -2,03616E-07 | 7,6773E-09 | 4,12258E-08 | -1,67951E-07 | 9,87575E-10 | 5,71364E-09 | -1,30634E-07 | 2,37218E-09 | 5,08342E-09 |
| 42 | G transversal | -5,27125E-08 | 1,51608E-09 | 9,11073E-09 | -3,10921E-08 | 2,1792E-10 | 1,24094E-09 | -1,45008E-08 | 6,96177E-10 | 1,47481E-09 |
| 43 | D Longitudinal | 6,4645E-07 | -1,30182E-10 | -1,05831E-09 | 4,5427E-07 | -4,49105E-12 | -3,32E-11 | 2,93185E-07 | -2,63366E-12 | -3,86711E-12 |
| 43 | D Vertical | 2,24975E-08 | 2,21648E-08 | -1,96866E-08 | 1,19741E-08 | 1,24805E-08 | -1,54627E-08 | 5,54271E-09 | 6,03301E-09 | -1,08639E-08 |
| 43 | D transversal | -8,38678E-08 | 5,75151E-07 | -2,05076E-07 | -6,35816E-08 | 3,93504E-07 | -1,82463E-07 | -4,86862E-08 | 2,4666E-07 | -1,41873E-07 |
| 43 | G Longitudinal | -7,13444E-11 | 5,92034E-08 | -3,95998E-08 | 1,986E-09 | 3,37172E-08 | -2,68876E-08 | 1,12682E-09 | 1,57311E-08 | -1,80403E-08 |
| 43 | G Vertical | -2,01191E-07 | -7,67799E-09 | -3,94731E-08 | -1,67943E-07 | -9,98642E-10 | -5,72903E-09 | -1,30657E-07 | -2,36881E-09 | -5,08046E-09 |
| 43 | G transversal | -5,20187E-08 | -1,35089E-09 | -7,11688E-09 | -3,10896E-08 | -2,24086E-10 | -1,21203E-09 | -1,45095E-08 | -6,98131E-10 | -1,47817E-09 |
| 44 | D Longitudinal | 5,01726E-07 | 2,20445E-11 | 2,18483E-11 | 3,27415E-07 | 7,62607E-13 | 1,02699E-11 | 1,94838E-07 | 1,4963E-12 | 2,12908E-12 |
| 44 | D Vertical | -2,07327E-08 | -2,19714E-08 | 5,59319E-09 | -1,18437E-08 | -1,23468E-08 | 3,51841E-09 | -5,58717E-09 | -5,9925E-09 | 1,27393E-09 |
| 44 | D transversal | 8,2612E-08 | 5,75434E-07 | -2,01485E-07 | 6,35465E-08 | 3,935E-07 | -1,82406E-07 | 4,86873E-08 | 2,46655E-07 | -1,41882E-07 |
| 44 | G Longitudinal | -7,37195E-11 | 6,04854E-08 | -3,59037E-08 | -1,89778E-09 | 3,39595E-08 | -2,58239E-08 | -7,33225E-10 | 1,62294E-08 | -1,67461E-08 |
| 44 | G Vertical | -2,02627E-07 | -1,66877E-09 | 4,45756E-09 | -1,67665E-07 | -2,81668E-10 | -1,44382E-09 | -1,31947E-07 | 6,69344E-10 | 4,85698E-10 |
| 44 | G transversal | -6,41879E-08 | 3,34774E-10 | -1,54523E-09 | -3,40256E-08 | 6,92428E-11 | 3,25544E-10 | -1,55172E-08 | -1,96423E-10 | -1,48226E-10 |

APOYO 1

| DESPLAZAMIENTOS (metros) | | C1 | | | C2 | | | C3 | | |
|---|---|---|---|---|---|---|---|---|---|---|
| Nudo | Desplazamiento | L | T | V | L | T | V | L | T | V |
| 45 | D Longitudinal | 5,01677E-07 | 2,13807E-11 | 1,90091E-11 | 3,27414E-07 | 6,98276E-13 | 9,89505E-12 | 1,9484E-07 | 1,78303E-12 | 2,36898E-12 |
| 45 | D Vertical | 2,04972E-08 | -2,20416E-08 | 4,83318E-09 | 1,18492E-08 | -1,23474E-08 | 3,50132E-09 | 5,59071E-09 | -5,99307E-09 | 1,27322E-09 |
| 45 | D transversal | -8,39131E-08 | 5,75152E-07 | -2,0507E-07 | -6,35788E-08 | 3,93504E-07 | -1,82462E-07 | -4,86827E-08 | 2,46659E-07 | -1,41875E-07 |
| 45 | G Longitudinal | 1,38592E-11 | 6,04179E-08 | -3,65237E-08 | 1,89239E-09 | 3,39585E-08 | -2,58448E-08 | 7,34392E-10 | 1,62298E-08 | -1,67447E-08 |
| 45 | G Vertical | -1,99935E-07 | 2,10742E-09 | 1,64399E-09 | -1,67626E-07 | 2,89992E-10 | 1,53031E-09 | -1,31948E-07 | -6,59453E-10 | -4,74074E-10 |
| 45 | G transversal | -6,48797E-08 | -5,02722E-10 | -4,09422E-10 | -3,40377E-08 | -6,97151E-11 | -3,61963E-10 | -1,55187E-08 | 1,9751E-10 | 1,51125E-10 |
| 46 | D Longitudinal | 6,6376E-07 | -5,44864E-11 | -4,23473E-10 | 4,53194E-07 | -2,77797E-12 | -1,53138E-11 | 2,82987E-07 | -1,78859E-12 | -2,82182E-12 |
| 46 | D Vertical | -1,19867E-08 | 1,1053E-08 | -1,41797E-08 | -5,95752E-09 | 6,27324E-09 | -1,07346E-08 | -2,71974E-09 | 3,02705E-09 | -7,82831E-09 |
| 46 | D transversal | 4,30358E-08 | 6,32005E-07 | -2,35191E-07 | 3,16978E-08 | 4,25383E-07 | -2,06802E-07 | 2,42386E-08 | 2,62098E-07 | -1,57468E-07 |
| 46 | G Longitudinal | -1,06772E-08 | 5,95399E-08 | -3,99246E-08 | -1,02304E-10 | 3,3858E-08 | -2,63479E-08 | 4,37522E-10 | 1,63369E-08 | -1,67878E-08 |
| 46 | G Vertical | -2,09804E-07 | 2,29741E-09 | 1,14832E-08 | -1,71822E-07 | 3,09678E-10 | 1,75789E-09 | -1,3276E-07 | 7,48381E-10 | 1,59844E-09 |
| 46 | G transversal | -6,91979E-08 | 3,02994E-10 | 7,33926E-10 | -3,23081E-08 | 5,50786E-11 | 2,90918E-10 | -1,45697E-08 | 1,08502E-10 | 2,35432E-10 |
| 47 | D Longitudinal | 6,63732E-07 | -5,45817E-11 | -4,24021E-10 | 4,53195E-07 | -2,75067E-12 | -1,52168E-11 | 2,82988E-07 | -1,5785E-12 | -2,38664E-12 |
| 47 | D Vertical | 1,21139E-08 | 1,1104E-08 | -1,36411E-08 | 5,95993E-09 | 6,27343E-09 | -1,07235E-08 | 2,72154E-09 | 3,02702E-09 | -7,82863E-09 |
| 47 | D transversal | -4,36435E-08 | 6,31882E-07 | -2,36817E-07 | -3,17295E-08 | 4,25385E-07 | -2,06826E-07 | -2,4238E-08 | 2,62101E-07 | -1,57464E-07 |
| 47 | G Longitudinal | 1,17415E-08 | 5,98561E-08 | -3,6182E-08 | 1,11699E-10 | 3,38577E-08 | -2,62784E-08 | -4,34344E-10 | 1,63358E-08 | -1,67914E-08 |
| 47 | G Vertical | -2,09082E-07 | -2,41593E-09 | -1,32184E-08 | -1,71821E-07 | -3,05119E-10 | -1,77429E-09 | -1,32769E-07 | -7,39649E-10 | -1,58518E-09 |
| 47 | G transversal | -6,91662E-08 | -6,4435E-10 | -4,04589E-09 | -3,2308E-08 | -5,6842E-11 | -3,67264E-10 | -1,45675E-08 | -1,07578E-10 | -2,32442E-10 |
| 48 | D Longitudinal | 5,94835E-07 | 1,61505E-12 | -7,49904E-11 | 3,89658E-07 | -6,39396E-13 | 2,01455E-12 | 2,33617E-07 | 1,92446E-13 | -6,68936E-14 |
| 48 | D Vertical | -9,50506E-09 | -1,09632E-08 | -9,92138E-10 | -5,94895E-09 | -6,14029E-09 | -1,23287E-09 | -2,84332E-09 | -2,98646E-09 | -1,76101E-09 |
| 48 | D transversal | 4,30065E-08 | 6,32005E-07 | -2,35193E-07 | 3,16978E-08 | 4,25383E-07 | -2,06802E-07 | 2,424E-08 | 2,62098E-07 | -1,57468E-07 |
| 48 | G Longitudinal | -1,0637E-08 | 6,02296E-08 | -3,68005E-08 | -1,4333E-10 | 3,39372E-08 | -2,58509E-08 | 4,90098E-10 | 1,64137E-08 | -1,65724E-08 |
| 48 | G Vertical | -2,09483E-07 | -5,86354E-10 | 1,38576E-10 | -1,71733E-07 | -8,25571E-11 | -4,5113E-10 | -1,33177E-07 | 2,19564E-10 | 1,70822E-10 |
| 48 | G transversal | -4,83729E-08 | 1,80719E-10 | 6,72095E-10 | -3,27843E-08 | 1,52341E-11 | 1,01834E-10 | -1,5798E-08 | -3,0854E-11 | -2,27681E-11 |
| 49 | D Longitudinal | 5,94807E-07 | 1,5546E-12 | -7,66686E-11 | 3,89658E-07 | -6,24706E-13 | 2,04466E-12 | 2,33619E-07 | 1,32576E-13 | -1,16507E-13 |
| 49 | D Vertical | 9,38424E-09 | -1,09926E-08 | -1,32228E-09 | 5,95007E-09 | -6,14033E-09 | -1,24015E-09 | 2,84511E-09 | -2,98629E-09 | -1,76056E-09 |
| 49 | D transversal | -4,36725E-08 | 6,31882E-07 | -2,36821E-07 | -3,17296E-08 | 4,25385E-07 | -2,06826E-07 | -2,42367E-08 | 2,62101E-07 | -1,57464E-07 |
| 49 | G Longitudinal | 1,18473E-08 | 6,05586E-08 | -3,29216E-08 | 1,51483E-10 | 3,39376E-08 | -2,57781E-08 | -4,93459E-10 | 1,64132E-08 | -1,65751E-08 |
| 49 | G Vertical | -2,08768E-07 | 5,94856E-10 | -6,16674E-10 | -1,71722E-07 | 9,33001E-11 | 4,65045E-10 | -1,33175E-07 | -2,08517E-10 | -1,54368E-10 |
| 49 | G transversal | -4,85588E-08 | -3,49378E-11 | 7,21303E-10 | -3,27857E-08 | -1,4803E-11 | -6,0562E-11 | -1,57946E-08 | 3,09987E-11 | 2,24995E-11 |
| 50 | D Longitudinal | 6,32849E-07 | -1,97271E-11 | -2,59803E-10 | 4,17725E-07 | -1,0516E-12 | -4,70611E-12 | 2,51307E-07 | -2,13792E-13 | -5,44077E-13 |
| 50 | D Vertical | -5,98918E-09 | -5,97767E-09 | -4,0631E-09 | -3,24659E-09 | -3,32513E-09 | -3,38914E-09 | -1,51287E-09 | -1,62172E-09 | -3,13508E-09 |
| 50 | D transversal | 2,13081E-08 | 6,57257E-07 | -2,50521E-07 | 1,73477E-08 | 4,39629E-07 | -2,17706E-07 | 1,33673E-08 | 2,69005E-07 | -1,6442E-07 |
| 50 | G Longitudinal | -1,14145E-09 | 6,02318E-08 | -3,51773E-08 | -1,83839E-11 | 3,39164E-08 | -2,59475E-08 | 6,71643E-11 | 1,64245E-08 | -1,65867E-08 |
| 50 | G Vertical | -2,12771E-07 | -8,66752E-11 | -1,60405E-09 | -1,73645E-07 | 5,76784E-12 | -9,37757E-12 | -1,33757E-07 | 6,19079E-12 | 9,95344E-12 |
| 50 | G transversal | -5,73335E-08 | 6,18438E-12 | 6,23803E-11 | -3,25004E-08 | 3,34376E-13 | 4,11048E-12 | -1,52561E-08 | -2,42818E-12 | -2,51003E-12 |
| 51 | D Longitudinal | 7,44494E-07 | -2,74333E-09 | -3,70535E-09 | 5,57762E-07 | -3,65309E-13 | 1,12739E-10 | 3,91698E-07 | -8,41353E-12 | -1,13293E-11 |
| 51 | D Vertical | -6,85493E-09 | 7,8501E-08 | -7,67195E-08 | -9,0543E-09 | 4,49894E-08 | -4,06836E-08 | -4,28442E-09 | 2,17904E-08 | -2,67582E-08 |
| 51 | D transversal | 6,62736E-08 | 4,66004E-07 | -1,15501E-07 | 4,78285E-08 | 3,28057E-07 | -1,3206E-07 | 3,67394E-08 | 2,14941E-07 | -1,09895E-07 |
| 51 | G Longitudinal | 2,01084E-09 | 4,88929E-08 | -9,73468E-08 | -1,65815E-10 | 3,38701E-08 | -2,63649E-08 | -5,14243E-11 | 1,64265E-08 | -1,65851E-08 |
| 51 | G Vertical | -2,48251E-07 | 2,88264E-09 | 5,05477E-09 | -1,73932E-07 | 1,65385E-11 | 1,54792E-10 | -1,33582E-07 | 5,27838E-12 | 8,23028E-12 |
| 51 | G transversal | -4,7534E-08 | -7,64243E-10 | 2,15897E-09 | -3,32794E-08 | -7,41009E-11 | -3,2193E-11 | -1,55626E-08 | -1,16993E-11 | -3,13152E-11 |
| 52 | D Longitudinal | 7,44422E-07 | -2,75069E-09 | -3,71724E-09 | 5,57762E-07 | -3,74802E-13 | 1,12606E-10 | 3,91698E-07 | -8,413E-12 | -1,13291E-11 |
| 52 | D Vertical | 6,84335E-09 | 7,85333E-08 | -7,66616E-08 | 9,04394E-09 | 4,49897E-08 | -4,06841E-08 | 4,28327E-09 | 2,17908E-08 | -2,67576E-08 |

APOYO 1

| DESPLAZAMIENTOS (metros) | | C1 | | | C2 | | | C3 | | |
|---|---|---|---|---|---|---|---|---|---|---|
| Nudo | Desplazamiento | L | T | V | L | T | V | L | T | V |
| 52 | D transversal | -6,64105E-08 | 4,64069E-07 | -1,18109E-07 | -4,78376E-08 | 3,28066E-07 | -1,31966E-07 | -3,67381E-08 | 2,14944E-07 | -1,0989E-07 |
| 52 | G Longitudinal | -1,89288E-09 | 4,9716E-08 | -9,62197E-08 | 1,55863E-10 | 3,38673E-08 | -2,64022E-08 | 4,92861E-11 | 1,64267E-08 | -1,6585E-08 |
| 52 | G Vertical | -2,48292E-07 | -3,06667E-09 | -5,28101E-09 | -1,73933E-07 | -4,11054E-12 | -1,28613E-10 | -1,33582E-07 | 5,93697E-12 | 7,72936E-12 |
| 52 | G transversal | -4,75432E-08 | -6,42064E-10 | -4,12784E-09 | -3,32723E-08 | 7,79213E-11 | 9,36451E-11 | -1,55621E-08 | 1,05206E-11 | 2,98158E-11 |
| 53 | D Longitudinal | 7,78635E-07 | -1,14887E-09 | -1,5439E-09 | 5,74176E-07 | -5,47604E-12 | 3,97535E-11 | 3,99404E-07 | -8,00038E-12 | -1,10914E-11 |
| 53 | D Vertical | -6,82119E-09 | 7,85192E-08 | -7,66589E-08 | -9,0544E-09 | 4,49894E-08 | -4,06836E-08 | -4,28459E-09 | 2,17904E-08 | -2,67582E-08 |
| 53 | D transversal | 6,10062E-08 | 4,90106E-07 | -1,57043E-07 | 4,78133E-08 | 3,45006E-07 | -1,45215E-07 | 3,67185E-08 | 2,23156E-07 | -1,18182E-07 |
| 53 | G Longitudinal | -2,57491E-09 | 4,93988E-08 | -8,11313E-08 | 9,33026E-10 | 3,40387E-08 | -2,5549E-08 | 4,33019E-10 | 1,67924E-08 | -1,58037E-08 |
| 53 | G Vertical | -2,31578E-07 | 8,82282E-10 | 2,80964E-09 | -1,7221E-07 | 2,62883E-10 | 1,43259E-09 | -1,32769E-07 | 6,63523E-10 | 1,40873E-09 |
| 53 | G transversal | -4,52846E-08 | 7,75262E-10 | 1,39893E-08 | -3,01426E-08 | 4,01973E-10 | 2,27938E-09 | -1,40949E-08 | 1,01979E-09 | 2,17145E-09 |
| 54 | D Longitudinal | 7,78634E-07 | -1,14762E-09 | -1,54207E-09 | 5,74176E-07 | -5,47509E-12 | 3,97779E-11 | 3,99404E-07 | -8E-12 | -1,10908E-11 |
| 54 | D Vertical | 6,80938E-09 | 7,85498E-08 | -7,66033E-08 | 9,04404E-09 | 4,49897E-08 | -4,06841E-08 | 4,28344E-09 | 2,17908E-08 | -2,67576E-08 |
| 54 | D transversal | -6,09967E-08 | 4,89303E-07 | -1,58118E-07 | -4,78262E-08 | 3,45012E-07 | -1,45173E-07 | -3,67182E-08 | 2,2316E-07 | -1,18177E-07 |
| 54 | G Longitudinal | 2,43816E-09 | 5,09272E-08 | -7,94021E-08 | -9,3988E-10 | 3,40373E-08 | -2,56163E-08 | -4,31376E-10 | 1,67939E-08 | -1,58015E-08 |
| 54 | G Vertical | -2,31122E-07 | -2,11758E-09 | -3,83805E-09 | -1,72211E-07 | -2,53605E-10 | -1,36301E-09 | -1,32775E-07 | -6,54792E-10 | -1,3966E-09 |
| 54 | G transversal | -4,45698E-08 | -4,18772E-09 | -1,76777E-08 | -3,01438E-08 | -4,01616E-10 | -2,13212E-09 | -1,41049E-08 | -1,02467E-09 | -2,17849E-09 |
| 55 | D Longitudinal | 2,15653E-07 | -3,55973E-11 | 2,77437E-11 | 1,14094E-07 | 3,73183E-12 | -7,24055E-12 | 4,5129E-08 | 6,75935E-12 | 9,47528E-12 |
| 55 | D Vertical | 1,96445E-08 | -8,09783E-08 | 4,20356E-08 | 8,70458E-09 | -4,4896E-08 | 2,80447E-08 | 4,07838E-09 | -2,17477E-08 | 1,71747E-08 |
| 55 | D transversal | -5,89731E-08 | 4,88598E-07 | -1,48695E-07 | -4,78608E-08 | 3,4499E-07 | -1,45505E-07 | -3,67177E-08 | 2,23161E-07 | -1,18176E-07 |
| 55 | G Longitudinal | -4,07482E-09 | 6,14347E-08 | -3,94071E-08 | -8,64329E-10 | 3,39089E-08 | -2,56876E-08 | -2,27125E-10 | 1,65297E-08 | -1,65049E-08 |
| 55 | G Vertical | -2,04576E-07 | 5,9968E-10 | 3,56541E-10 | -1,72573E-07 | 7,08886E-11 | 3,26646E-10 | -1,33143E-07 | -1,79318E-10 | -1,32399E-10 |
| 55 | G transversal | -6,94839E-08 | -9,82669E-10 | -5,92116E-10 | -3,48478E-08 | -1,02862E-10 | -5,17042E-10 | -1,5735E-08 | 2,86365E-10 | 2,16969E-10 |
| 56 | D Longitudinal | 2,15653E-07 | -3,5618E-11 | 2,77607E-11 | 1,14094E-07 | 3,73092E-12 | -7,24906E-12 | 4,5129E-08 | 6,75962E-12 | 9,47565E-12 |
| 56 | D Vertical | -1,96285E-08 | -8,09742E-08 | 4,20611E-08 | -8,70151E-09 | -4,48961E-08 | 2,80444E-08 | -4,07957E-09 | -2,17482E-08 | 1,71739E-08 |
| 56 | D transversal | 5,896E-08 | 4,88569E-07 | -1,48689E-07 | 4,78493E-08 | 3,44985E-07 | -1,45521E-07 | 3,67193E-08 | 2,23158E-07 | -1,1818E-07 |
| 56 | G Longitudinal | 3,75032E-09 | 6,1534E-08 | -3,86668E-08 | 8,57899E-10 | 3,39109E-08 | -2,56582E-08 | 2,29121E-10 | 1,65296E-08 | -1,65052E-08 |
| 56 | G Vertical | -2,05113E-07 | -4,54051E-10 | 1,08913E-09 | -1,72581E-07 | -5,71737E-11 | -2,7519E-10 | -1,33143E-07 | 1,90004E-10 | 1,4704E-10 |
| 56 | G transversal | -6,8664E-08 | 7,3323E-10 | -1,49427E-09 | -3,48366E-08 | 9,85554E-11 | 4,46569E-10 | -1,57351E-08 | -2,86914E-10 | -2,17445E-10 |
| 57 | D Longitudinal | 1,83962E-07 | -8,23515E-11 | 9,00252E-11 | 9,80523E-08 | 1,19042E-12 | -2,83929E-11 | 3,76314E-08 | 6,59938E-12 | 9,03979E-12 |
| 57 | D Vertical | 1,96354E-08 | -8,09783E-08 | 4,20355E-08 | 8,70511E-09 | -4,4896E-08 | 2,80447E-08 | 4,07855E-09 | -2,17477E-08 | 1,71747E-08 |
| 57 | D transversal | -5,75955E-08 | 4,57736E-07 | -1,28863E-07 | -4,79418E-08 | 3,28018E-07 | -1,32743E-07 | -3,67386E-08 | 2,14946E-07 | -1,09885E-07 |
| 57 | G Longitudinal | -1,4602E-09 | 6,18173E-08 | -3,94654E-08 | 2,59326E-10 | 3,39374E-08 | -2,55743E-08 | 4,28124E-11 | 1,64277E-08 | -1,65837E-08 |
| 57 | G Vertical | -2,10198E-07 | 1,01942E-10 | -8,09527E-11 | -1,74274E-07 | 1,12077E-11 | 5,14086E-11 | -1,33583E-07 | 5,20118E-12 | 7,62807E-12 |
| 57 | G transversal | -6,63796E-08 | 1,85869E-10 | 6,34058E-10 | -3,1427E-08 | -2,21109E-11 | -1,76611E-10 | -1,48723E-08 | -1,46124E-12 | -6,12935E-12 |
| 58 | D Longitudinal | 1,83969E-07 | -8,22666E-11 | 8,99174E-11 | 9,80519E-08 | 1,19506E-12 | -2,83541E-11 | 3,76313E-08 | 6,59943E-12 | 9,04025E-12 |
| 58 | D Vertical | -1,96193E-08 | -8,09742E-08 | 4,2061E-08 | -8,70204E-09 | -4,48961E-08 | 2,80444E-08 | -4,07974E-09 | -2,17482E-08 | 1,71739E-08 |
| 58 | D transversal | 5,76081E-08 | 4,57675E-07 | -1,28812E-07 | 4,7931E-08 | 3,28012E-07 | -1,32773E-07 | 3,67391E-08 | 2,14944E-07 | -1,09889E-07 |
| 58 | G Longitudinal | 1,43113E-09 | 6,18397E-08 | -3,95049E-08 | -2,61649E-10 | 3,39387E-08 | -2,55635E-08 | -4,08876E-11 | 1,64278E-08 | -1,65835E-08 |
| 58 | G Vertical | -2,10199E-07 | -8,65764E-11 | 1,10845E-10 | -1,74274E-07 | 1,65944E-12 | -3,05251E-11 | -1,33583E-07 | 5,67104E-12 | 7,68106E-12 |
| 58 | G transversal | -6,6392E-08 | -2,14596E-10 | -5,11682E-10 | -3,14271E-08 | 1,95033E-11 | 1,58645E-10 | -1,4872E-08 | 1,53526E-13 | 3,85928E-12 |
| 59 | D Longitudinal | 5,51971E-07 | -2,68385E-10 | 3,62932E-10 | 4,93777E-07 | -2,75637E-09 | -3,7745E-09 | 3,61182E-07 | 2,68865E-12 | 1,08487E-10 |
| 59 | D Vertical | 8,39033E-09 | 8,13967E-08 | -3,95467E-08 | 4,56333E-10 | 4,37558E-08 | -6,24791E-08 | 4,2882E-09 | 2,17789E-08 | -2,70472E-08 |
| 59 | D transversal | -4,7752E-08 | 3,27966E-07 | -7,11304E-08 | -5,51375E-08 | 2,65235E-07 | -6,30556E-08 | -3,68971E-08 | 1,82107E-07 | -7,63445E-08 |
| 59 | G Longitudinal | -4,34726E-10 | 6,50561E-08 | -2,74634E-08 | -1,36755E-09 | 2,3492E-08 | -8,60299E-08 | 2,84877E-10 | 1,63912E-08 | -1,69213E-08 |

APOYO 1

| DESPLAZAMIENTOS (metros) | | C1 | | | C2 | | | C3 | | |
|---|---|---|---|---|---|---|---|---|---|---|
| Nudo | Desplazamiento | L | T | V | L | T | V | L | T | V |
| 59 | G Vertical | -1,75675E-07 | 2,90945E-10 | -3,94246E-10 | -2,07165E-07 | -3,06183E-09 | -5,23154E-09 | -1,34169E-07 | -6,96294E-12 | -1,2417E-10 |
| 59 | G transversal | -5,04394E-08 | 6,60624E-10 | -9,04465E-10 | -2,37818E-08 | -5,58069E-10 | -4,13805E-09 | -1,63135E-08 | 6,48577E-11 | -7,16869E-11 |
| 60 | D Longitudinal | 5,51991E-07 | -2,68669E-10 | 3,63312E-10 | 4,93848E-07 | -2,74902E-09 | -3,76266E-09 | 3,61182E-07 | 2,70087E-12 | 1,08616E-10 |
| 60 | D Vertical | -8,39864E-09 | 8,13935E-08 | -3,95459E-08 | -4,79822E-10 | 4,37263E-08 | -6,25196E-08 | -4,28834E-09 | 2,17786E-08 | -2,70465E-08 |
| 60 | D transversal | 4,7717E-08 | 3,28156E-07 | -7,1385E-08 | 5,50067E-08 | 2,67176E-07 | -6,03993E-08 | 3,68985E-08 | 1,82096E-07 | -7,64348E-08 |
| 60 | G Longitudinal | 4,61527E-10 | 6,49759E-08 | -2,7354E-08 | 1,46678E-09 | 2,26695E-08 | -8,71559E-08 | -2,88195E-10 | 1,63948E-08 | -1,68848E-08 |
| 60 | G Vertical | -1,75663E-07 | -3,10383E-10 | 4,15968E-10 | -2,07123E-07 | 2,87325E-09 | 4,97376E-09 | -1,34169E-07 | 1,91342E-11 | 1,49157E-10 |
| 60 | G transversal | -5,04308E-08 | -7,97621E-10 | 1,08348E-09 | -2,37703E-08 | -8,39782E-10 | 2,22394E-09 | -1,63213E-08 | -5,98912E-11 | 1,32137E-10 |
| 61 | D Longitudinal | 5,83469E-07 | -1,12264E-10 | 1,52387E-10 | 5,15868E-07 | -1,15255E-09 | -1,57794E-09 | 3,68956E-07 | -3,81305E-12 | 3,81222E-11 |
| 61 | D Vertical | -8,37407E-09 | 8,13938E-08 | -3,95464E-08 | -4,48061E-10 | 4,37445E-08 | -6,24589E-08 | -4,28844E-09 | 2,17786E-08 | -2,70465E-08 |
| 61 | D transversal | 4,88076E-08 | 3,60759E-07 | -8,52274E-08 | 4,92956E-08 | 2,7818E-07 | -9,68619E-08 | 3,68799E-08 | 1,90306E-07 | -8,4879E-08 |
| 61 | G Longitudinal | 2,28056E-09 | 6,47746E-08 | -2,30778E-08 | -2,36791E-09 | 2,24116E-08 | -7,53637E-08 | 1,33407E-09 | 1,73817E-08 | -1,49022E-08 |
| 61 | G Vertical | -1,63259E-07 | 7,23029E-10 | 5,50136E-09 | -1,89161E-07 | -5,30779E-10 | -5,01571E-09 | -1,31674E-07 | 1,75986E-09 | 3,66965E-09 |
| 61 | G transversal | -5,71195E-08 | 1,42959E-09 | 8,22154E-09 | -1,89618E-08 | -1,45647E-09 | 1,58934E-09 | -1,16777E-08 | 2,72193E-09 | 5,73188E-09 |
| 62 | D Longitudinal | 5,83469E-07 | -1,12206E-10 | 1,52453E-10 | 5,15868E-07 | -1,15133E-09 | -1,57631E-09 | 3,68956E-07 | -3,81279E-12 | 3,81375E-11 |
| 62 | D Vertical | 8,3657E-09 | 8,13968E-08 | -3,9547E-08 | 4,2434E-10 | 4,37722E-08 | -6,24208E-08 | 4,2883E-09 | 2,17789E-08 | -2,70472E-08 |
| 62 | D transversal | -4,88068E-08 | 3,6068E-07 | -8,51222E-08 | -4,92915E-08 | 2,77373E-07 | -9,79674E-08 | -3,68787E-08 | 1,90313E-07 | -8,48387E-08 |
| 62 | G Longitudinal | -2,41014E-09 | 6,49213E-08 | -2,34796E-08 | 2,4769E-09 | 2,396E-08 | -7,32448E-08 | -1,32413E-09 | 1,73784E-08 | -1,49656E-08 |
| 62 | G Vertical | -1,62975E-07 | -8,41753E-10 | -4,98508E-09 | -1,89179E-07 | -7,43445E-10 | 3,27302E-09 | -1,31693E-07 | -1,74907E-09 | -3,60587E-09 |
| 62 | G transversal | -5,66866E-08 | -1,75708E-09 | -7,22062E-09 | -1,89951E-08 | -2,00695E-09 | -6,32866E-09 | -1,17073E-08 | -2,71731E-09 | -5,59418E-09 |
| 63 | D Longitudinal | 1,02749E-07 | -2,82006E-10 | 2,37497E-10 | 3,95349E-08 | -7,57617E-11 | 9,72835E-11 | 7,04156E-09 | 2,89889E-12 | -2,91771E-11 |
| 63 | D Vertical | -2,09121E-08 | -8,17683E-08 | 2,76114E-08 | -1,15777E-08 | -4,60569E-08 | 3,15356E-08 | -3,93162E-09 | -2,17735E-08 | 1,68362E-08 |
| 63 | D transversal | 4,78392E-08 | 3,27915E-07 | -7,11185E-08 | 4,63627E-08 | 2,58894E-07 | -7,34418E-08 | 3,69999E-08 | 1,82052E-07 | -7,71294E-08 |
| 63 | G Longitudinal | 2,36566E-09 | 6,54923E-08 | -2,58633E-08 | 1,04401E-09 | 3,54244E-08 | -3,07765E-08 | -3,09591E-10 | 1,64594E-08 | -1,61765E-08 |
| 63 | G Vertical | -1,75399E-07 | -3,06263E-10 | 2,56134E-10 | -1,69201E-07 | -8,17358E-11 | 1,06491E-10 | -1,34505E-07 | 2,90209E-12 | -3,2076E-11 |
| 63 | G transversal | -6,51233E-08 | 7,88755E-10 | -5,09383E-10 | -3,76702E-08 | -1,17327E-10 | -6,46973E-10 | -1,39322E-08 | 8,63938E-13 | 4,17103E-11 |
| 64 | D Longitudinal | 1,02735E-07 | -2,82304E-10 | 2,37749E-10 | 3,95289E-08 | -7,58418E-11 | 9,73867E-11 | 7,04195E-09 | 2,8956E-12 | -2,92174E-11 |
| 64 | D Vertical | 2,09073E-08 | -8,17657E-08 | 2,76065E-08 | 1,15777E-08 | -4,60582E-08 | 3,15317E-08 | 3,93173E-09 | -2,17731E-08 | 1,68372E-08 |
| 64 | D transversal | -4,78137E-08 | 3,28114E-07 | -7,1288E-08 | -4,63546E-08 | 2,5895E-07 | -7,35068E-08 | -3,69999E-08 | 1,82058E-07 | -7,7098E-08 |
| 64 | G Longitudinal | -2,38478E-09 | 6,54076E-08 | -2,57957E-08 | -1,05393E-09 | 3,54022E-08 | -3,07469E-08 | 3,10209E-10 | 1,64583E-08 | -1,6188E-08 |
| 64 | G Vertical | -1,75391E-07 | 3,25278E-10 | -2,77455E-10 | -1,69199E-07 | 9,24818E-11 | -1,0554E-10 | -1,34506E-07 | 9,4034E-12 | 5,22757E-11 |
| 64 | G transversal | -6,5124E-08 | -9,31765E-10 | 6,3006E-10 | -3,76701E-08 | 8,24842E-11 | 7,01461E-10 | -1,39326E-08 | -3,57411E-12 | -6,28468E-11 |
| 65 | D Longitudinal | 1,32023E-07 | -1,18005E-10 | 9,92619E-11 | 5,69283E-08 | -3,11398E-11 | 4,15455E-11 | 1,43953E-08 | 4,8427E-12 | -6,93747E-12 |
| 65 | D Vertical | -2,09309E-08 | -8,17684E-08 | 2,76116E-08 | -1,15853E-08 | -4,60569E-08 | 3,15357E-08 | -3,93111E-09 | -2,17735E-08 | 1,68362E-08 |
| 65 | D transversal | 5,022E-08 | 3,60872E-07 | -8,42045E-08 | 4,73431E-08 | 2,76598E-07 | -8,89732E-08 | 3,69169E-08 | 1,90283E-07 | -8,52035E-08 |
| 65 | G Longitudinal | 3,92613E-09 | 6,47161E-08 | -2,47831E-08 | 3,61342E-09 | 3,5332E-08 | -3,05925E-08 | 6,86373E-10 | 1,67329E-08 | -1,59267E-08 |
| 65 | G Vertical | -1,67705E-07 | -2,90014E-10 | 7,3175E-10 | -1,63532E-07 | -1,43051E-10 | -1,06563E-10 | -1,33092E-07 | 5,01509E-10 | 4,20874E-10 |
| 65 | G transversal | -6,52553E-08 | 1,61091E-10 | -6,3746E-10 | -4,09549E-08 | 2,37424E-10 | 2,83794E-10 | -1,70244E-08 | -7,68889E-10 | -6,39783E-10 |
| 66 | D Longitudinal | 1,32023E-07 | -1,17954E-10 | 9,93477E-11 | 5,69283E-08 | -3,11253E-11 | 4,15054E-11 | 1,43953E-08 | 4,84284E-12 | -6,93266E-12 |
| 66 | D Vertical | 2,0926E-08 | -8,1766E-08 | 2,76068E-08 | 1,15854E-08 | -4,60582E-08 | 3,15318E-08 | 3,93121E-09 | -2,17731E-08 | 1,68372E-08 |
| 66 | D transversal | -5,02217E-08 | 3,60955E-07 | -8,42767E-08 | -4,73474E-08 | 2,76622E-07 | -8,89982E-08 | -3,6916E-08 | 1,90287E-07 | -8,51878E-08 |
| 66 | G Longitudinal | -4,1247E-09 | 6,45244E-08 | -2,51254E-08 | -3,62818E-09 | 3,52896E-08 | -3,05431E-08 | -6,862E-10 | 1,67314E-08 | -1,59474E-08 |
| 66 | G Vertical | -1,67379E-07 | 4,78611E-10 | 1,06386E-11 | -1,63523E-07 | 1,82319E-10 | 7,76554E-11 | -1,3309E-07 | -4,88665E-10 | -3,86957E-10 |
| 66 | G transversal | -6,57607E-08 | -6,06785E-10 | -3,90187E-10 | -4,09689E-08 | -3,32098E-10 | -1,76473E-10 | -1,70261E-08 | 7,65126E-10 | 5,92627E-10 |

APOYO 1

| DESPLAZAMIENTOS (metros) | | C1 | | | C2 | | | C3 | | |
|---|---|---|---|---|---|---|---|---|---|---|
| Nudo | Desplazamiento | L | T | V | L | T | V | L | T | V |
| 67 | D Longitudinal | 3,86258E-07 | 2,75497E-11 | -4,47637E-12 | 3,54838E-07 | 3,83479E-11 | 1,20279E-11 | 3,3183E-07 | -2,63789E-09 | -3,9549E-09 |
| 67 | D Vertical | -5,65986E-09 | 6,67806E-08 | -2,56675E-08 | -1,31142E-09 | 4,6366E-08 | -2,59517E-08 | 4,31232E-09 | 2,04108E-08 | -4,89942E-08 |
| 67 | D transversal | 3,67477E-08 | 2,14931E-07 | -3,45209E-08 | 3,70533E-08 | 1,82087E-07 | -3,45036E-08 | 4,42589E-08 | 1,56269E-07 | -2,33576E-08 |
| 67 | G Longitudinal | -7,99771E-10 | 5,48186E-08 | -1,74218E-08 | -1,02826E-09 | 3,84096E-08 | -1,77315E-08 | -6,74234E-10 | 5,28577E-09 | -7,74473E-08 |
| 67 | G Vertical | -1,35606E-07 | 3,40594E-11 | -8,77775E-12 | -1,36835E-07 | 4,52979E-11 | 1,19356E-11 | -1,68042E-07 | 3,00184E-09 | 4,75118E-09 |
| 67 | G transversal | -4,14442E-08 | -2,0426E-09 | 1,39401E-09 | -2,81336E-08 | -8,3506E-10 | 1,56023E-09 | -1,23079E-08 | -1,84383E-10 | 3,31019E-09 |
| 68 | D Longitudinal | 3,8624E-07 | 2,75164E-11 | -4,46862E-12 | 3,54819E-07 | 3,83056E-11 | 1,20184E-11 | 3,3176E-07 | -2,64537E-09 | -3,96654E-09 |
| 68 | D Vertical | 5,6542E-09 | 6,67803E-08 | -2,56676E-08 | 1,30365E-09 | 4,63657E-08 | -2,59517E-08 | -4,32983E-09 | 2,04393E-08 | -4,89516E-08 |
| 68 | D transversal | -3,67791E-08 | 2,1495E-07 | -3,45251E-08 | -3,70864E-08 | 1,82114E-07 | -3,44952E-08 | -4,43857E-08 | 1,54407E-07 | -2,61494E-08 |
| 68 | G Longitudinal | 8,23287E-10 | 5,48103E-08 | -1,74216E-08 | 1,053E-09 | 3,83982E-08 | -1,77351E-08 | 7,73302E-10 | 6,07514E-09 | -7,62638E-08 |
| 68 | G Vertical | -1,35617E-07 | -3,24697E-11 | 5,76576E-12 | -1,36847E-07 | -4,28128E-11 | -1,14506E-11 | -1,68087E-07 | -3,18293E-09 | -5,02283E-09 |
| 68 | G transversal | -4,14467E-08 | 2,05667E-09 | -1,39411E-09 | -2,81414E-08 | 8,54292E-10 | -1,55437E-09 | -1,23161E-08 | -1,15804E-09 | -5,32286E-09 |
| 69 | D Longitudinal | 4,12456E-07 | 1,1543E-11 | -2,19244E-12 | 3,73299E-07 | 1,60648E-11 | 4,9905E-12 | 3,45397E-07 | -1,10477E-09 | -1,65654E-09 |
| 69 | D Vertical | 5,63216E-09 | 6,67809E-08 | -2,5668E-08 | 1,27967E-09 | 4,6366E-08 | -2,59521E-08 | -4,36193E-09 | 2,04558E-08 | -4,88933E-08 |
| 69 | D transversal | -3,71549E-08 | 2,42763E-07 | -4,35176E-08 | -3,79745E-08 | 2,01478E-07 | -4,36764E-08 | -3,84431E-08 | 1,5771E-07 | -5,63532E-08 |
| 69 | G Longitudinal | -1,77163E-09 | 5,37822E-08 | -1,53218E-08 | -2,61579E-09 | 3,81462E-08 | -1,62459E-08 | 2,55475E-09 | 7,69058E-09 | -6,14791E-08 |
| 69 | G Vertical | -1,2416E-07 | -3,65889E-10 | -2,09391E-09 | -1,23526E-07 | -4,62686E-10 | -9,3407E-10 | -1,49765E-07 | -3,20629E-09 | -1,16841E-09 |
| 69 | G transversal | -4,89606E-08 | -1,4402E-09 | -2,50139E-09 | -2,97371E-08 | -1,15967E-09 | -9,3275E-10 | -1,81618E-09 | -5,83025E-09 | -1,32282E-08 |
| 70 | D Longitudinal | 4,12456E-07 | 1,14019E-11 | -2,03546E-12 | 3,73299E-07 | 1,59549E-11 | 4,9991E-12 | 3,45397E-07 | -1,10601E-09 | -1,65815E-09 |
| 70 | D Vertical | -5,63788E-09 | 6,67811E-08 | -2,56679E-08 | -1,28751E-09 | 4,63662E-08 | -2,59522E-08 | 4,34418E-09 | 2,0429E-08 | -4,89334E-08 |
| 70 | D transversal | 3,71567E-08 | 2,42755E-07 | -4,3515E-08 | 3,79759E-08 | 2,01467E-07 | -4,36798E-08 | 3,84517E-08 | 1,58485E-07 | -5,51911E-08 |
| 70 | G Longitudinal | 1,74349E-09 | 5,37988E-08 | -1,5256E-08 | 2,64473E-09 | 3,81647E-08 | -1,6243E-08 | -2,43102E-09 | 6,20918E-09 | -6,37001E-08 |
| 70 | G Vertical | -1,24255E-07 | 3,79889E-10 | 2,21086E-09 | -1,23518E-07 | 4,74324E-10 | 9,3179E-10 | -1,49723E-07 | 1,99161E-09 | -6,52819E-10 |
| 70 | G transversal | -4,91049E-08 | 1,47758E-09 | 2,68585E-09 | -2,97183E-08 | 1,19894E-09 | 9,36648E-10 | -1,74476E-09 | 2,51881E-09 | 8,26335E-09 |
| 71 | D Longitudinal | 4,32824E-08 | 2,79238E-11 | 3,51913E-12 | 1,16465E-08 | 2,33636E-11 | -3,38597E-12 | -1,65948E-08 | -6,42352E-11 | -1,67927E-10 |
| 71 | D Vertical | -1,77826E-08 | -6,67777E-08 | 1,68409E-08 | -1,39409E-08 | -4,67272E-08 | 1,65097E-08 | -6,94077E-09 | -2,30498E-08 | 1,99087E-08 |
| 71 | D transversal | 3,68737E-08 | 2,14953E-07 | -3,44772E-08 | 3,67969E-08 | 1,82062E-07 | -3,45299E-08 | 3,54805E-08 | 1,47786E-07 | -3,70883E-08 |
| 71 | G Longitudinal | 9,57501E-10 | 5,48024E-08 | -1,66238E-08 | 1,47584E-09 | 3,88151E-08 | -1,62232E-08 | 4,34546E-10 | 1,82253E-08 | -2,06664E-08 |
| 71 | G Vertical | -1,35621E-07 | 3,26302E-11 | 1,99739E-12 | -1,35312E-07 | 2,62482E-11 | -5,05148E-12 | -1,29656E-07 | -6,93075E-11 | -1,8235E-10 |
| 71 | G transversal | -4,83875E-08 | 2,06996E-09 | -9,84074E-10 | -3,65151E-08 | 9,98754E-10 | -9,11952E-10 | -1,88037E-08 | -5,21582E-10 | -1,15719E-09 |
| 72 | D Longitudinal | 6,64712E-08 | 1,18129E-11 | 1,76727E-12 | 2,77868E-08 | 9,84784E-12 | -1,3756E-12 | -7,89417E-09 | -2,61444E-11 | -6,91821E-11 |
| 72 | D Vertical | -1,7803E-08 | -6,67782E-08 | 1,68411E-08 | -1,39605E-08 | -4,67275E-08 | 1,651E-08 | -6,94877E-09 | -2,30498E-08 | 1,99089E-08 |
| 72 | D transversal | 3,95621E-08 | 2,42764E-07 | -4,29855E-08 | 3,92506E-08 | 2,01663E-07 | -4,28236E-08 | 3,64637E-08 | 1,56816E-07 | -4,76077E-08 |
| 72 | G Longitudinal | 3,51197E-09 | 5,35211E-08 | -1,58732E-08 | 4,05882E-09 | 3,83359E-08 | -1,57457E-08 | 2,67741E-09 | 1,84489E-08 | -2,02882E-08 |
| 72 | G Vertical | -1,27803E-07 | -1,03228E-10 | 4,15598E-10 | -1,27559E-07 | 7,05263E-11 | -7,56674E-11 | -1,25563E-07 | 6,85307E-10 | 5,98374E-10 |
| 72 | G transversal | -5,37518E-08 | -7,12968E-10 | -2,11395E-10 | -3,86697E-08 | -3,93083E-10 | 6,06294E-10 | -2,09199E-08 | -1,05019E-09 | -8,1612E-10 |
| 73 | D Longitudinal | 6,64712E-08 | 1,16725E-11 | 1,85438E-12 | 2,77868E-08 | 9,8439E-12 | -1,25085E-12 | -7,89417E-09 | -2,61347E-11 | -6,91783E-11 |
| 73 | D Vertical | 1,77974E-08 | -6,67785E-08 | 1,68411E-08 | 1,39549E-08 | -4,67275E-08 | 1,65102E-08 | 6,94368E-09 | -2,3051E-08 | 1,99078E-08 |
| 73 | D transversal | -3,95639E-08 | 2,42755E-07 | -4,29879E-08 | -3,92521E-08 | 2,01656E-07 | -4,2823E-08 | -3,6465E-08 | 1,56838E-07 | -4,75545E-08 |
| 73 | G Longitudinal | -3,60091E-09 | 5,35251E-08 | -1,60355E-08 | -4,08402E-09 | 3,83487E-08 | -1,57499E-08 | -2,68346E-09 | 1,84129E-08 | -2,03823E-08 |
| 73 | G Vertical | -1,27678E-07 | 1,10717E-10 | -1,23962E-10 | -1,27548E-07 | -8,16627E-11 | 7,98623E-11 | -1,2556E-07 | -6,51242E-10 | -5,14409E-10 |
| 73 | G transversal | -5,39485E-08 | 7,1546E-10 | -2,43959E-10 | -3,86883E-08 | 4,21757E-10 | -6,16327E-10 | -2,09245E-08 | 9,6936E-10 | 6,05243E-10 |
| 74 | D Longitudinal | 4,32671E-08 | 2,79575E-11 | 3,52088E-12 | 1,16315E-08 | 2,339E-11 | -3,39158E-12 | -1,66011E-08 | -6,43033E-11 | -1,68107E-10 |
| 74 | D Vertical | 1,77771E-08 | -6,67779E-08 | 1,68409E-08 | 1,39354E-08 | -4,67273E-08 | 1,651E-08 | 6,9357E-09 | -2,3051E-08 | 1,99077E-08 |

APOYO 1

| DESPLAZAMIENTOS (metros) | | C1 | | | C2 | | | C3 | | |
|---|---|---|---|---|---|---|---|---|---|---|
| Nudo | Desplazamiento | L | T | V | L | T | V | L | T | V |
| 74 | D transversal | -3,68472E-08 | 2,14933E-07 | -3,44807E-08 | -3,67708E-08 | 1,82046E-07 | -3,45278E-08 | -3,54717E-08 | 1,47834E-07 | -3,69658E-08 |
| 74 | G Longitudinal | -9,78052E-10 | 5,48105E-08 | -1,66249E-08 | -1,49487E-09 | 3,8822E-08 | -1,62245E-08 | -4,4012E-10 | 1,82064E-08 | -2,07161E-08 |
| 74 | G Vertical | -1,35612E-07 | -3,5027E-11 | -4,96388E-12 | -1,35303E-07 | -2,84331E-11 | 4,51807E-12 | -1,29655E-07 | 7,92413E-11 | 2,02176E-10 |
| 74 | G transversal | -4,83926E-08 | -2,05625E-09 | 9,81548E-10 | -3,65174E-08 | -9,87349E-10 | 9,09591E-10 | -1,88063E-08 | 4,92014E-10 | 1,07646E-09 |
| 75 | D Longitudinal | 1,12357E-09 | 1,46608E-16 | 8,68495E-13 | 1,56929E-09 | 2,93854E-15 | 8,71703E-13 | 2,01508E-09 | 1,43267E-13 | 1,12376E-12 |
| 75 | D Vertical | -9,92164E-10 | 3,07009E-14 | -9,72096E-11 | -7,99438E-10 | 1,86327E-13 | -9,69127E-11 | -6,08475E-10 | -2,25504E-13 | -9,6996E-11 |
| 75 | D transversal | 3,79353E-09 | 1,22818E-09 | 4,96794E-10 | 3,78385E-09 | 1,7013E-09 | 4,96782E-10 | 3,78602E-09 | 2,17441E-09 | 4,96733E-10 |
| 75 | G Longitudinal | 1,27784E-10 | 1,34916E-09 | -2,5213E-10 | 1,27677E-10 | 1,10901E-09 | -2,52057E-10 | 1,37251E-10 | 8,69654E-10 | -2,50284E-10 |
| 75 | G Vertical | -4,05469E-09 | 1,37084E-10 | -2,1802E-11 | -4,06487E-09 | 1,1629E-10 | -2,17825E-11 | -4,06229E-09 | 9,58643E-11 | -2,0968E-11 |
| 75 | G transversal | -4,69909E-10 | 1,50676E-13 | -7,91612E-11 | -3,79898E-10 | 8,03365E-13 | -7,79843E-11 | -2,92514E-10 | 2,44807E-12 | -7,25049E-11 |
| 76 | D Longitudinal | 4,69493E-09 | -1,35446E-15 | -1,22108E-14 | 5,14847E-09 | -1,75398E-15 | -2,78017E-15 | 5,59169E-09 | -1,77449E-14 | -2,60128E-14 |
| 76 | D Vertical | -4,69927E-17 | -7,46476E-11 | -3,7714E-11 | -1,55119E-16 | -1,09706E-10 | -3,77219E-11 | -2,90448E-16 | -1,44797E-10 | -3,78072E-11 |
| 76 | D transversal | 6,38106E-16 | 1,2285E-09 | 4,97541E-10 | 4,48472E-16 | 1,70156E-09 | 4,97543E-10 | 8,25931E-16 | 2,17473E-09 | 4,97726E-10 |
| 76 | G Longitudinal | 1,47659E-14 | -7,31324E-10 | 1,57055E-10 | -2,43869E-14 | -6,55634E-10 | 1,55394E-10 | -5,28636E-14 | -5,86174E-10 | 1,38246E-10 |
| 76 | G Vertical | -2,66724E-09 | -1,24965E-15 | -1,01728E-14 | -2,68259E-09 | -1,64237E-15 | -2,59702E-15 | -2,70816E-09 | -1,59582E-14 | -2,33966E-14 |
| 76 | G transversal | -1,42888E-09 | 9,47462E-16 | 6,6348E-15 | -1,14181E-09 | 8,93091E-16 | 1,39657E-15 | -8,45341E-10 | 3,72145E-15 | 5,41461E-15 |
| 77 | D Longitudinal | -4,06911E-09 | 3,23058E-10 | -2,20112E-11 | -3,33677E-09 | 2,73924E-10 | -2,22012E-11 | -2,57884E-09 | 2,25416E-10 | -2,14979E-11 |
| 77 | D Vertical | -2,40673E-09 | -2,25638E-09 | 1,90527E-10 | -2,00382E-09 | -1,87362E-09 | 1,90514E-10 | -1,61546E-09 | -1,49083E-09 | 1,90513E-10 |
| 77 | D transversal | 4,11395E-09 | 1,48722E-09 | 4,78937E-10 | 4,0489E-09 | 1,91248E-09 | 4,78885E-10 | 3,99821E-09 | 2,3375E-09 | 4,78348E-10 |
| 77 | G Longitudinal | 1,5174E-08 | 3,86092E-09 | 3,20266E-10 | 1,52015E-08 | 4,10172E-09 | 4,59063E-10 | 1,49581E-08 | 3,93103E-09 | 5,05162E-11 |
| 77 | G Vertical | -1,15734E-07 | -9,50222E-09 | 4,78088E-09 | -1,18821E-07 | -5,38632E-09 | 2,80987E-09 | -1,17601E-07 | 4,56169E-09 | 8,59335E-09 |
| 77 | G transversal | 1,30102E-08 | 4,29899E-11 | -2,91373E-10 | 1,23338E-08 | -1,4847E-10 | -1,51901E-10 | 1,1309E-08 | -7,52671E-10 | -5,61319E-10 |
| 78 | D Longitudinal | -4,0691E-09 | -3,2305E-10 | 2,20789E-11 | -3,33676E-09 | -2,73915E-10 | 2,22151E-11 | -2,57883E-09 | -2,2533E-10 | 2,16242E-11 |
| 78 | D Vertical | 2,40673E-09 | -2,25638E-09 | 1,90542E-10 | 2,00382E-09 | -1,87362E-09 | 1,90518E-10 | 1,61546E-09 | -1,49082E-09 | 1,9053E-10 |
| 78 | D transversal | -4,11395E-09 | 1,48721E-09 | 4,78904E-10 | -4,0489E-09 | 1,91248E-09 | 4,78877E-10 | -3,99821E-09 | 2,33745E-09 | 4,78281E-10 |
| 78 | G Longitudinal | -1,51603E-08 | 3,86157E-09 | 3,2992E-10 | -1,51972E-08 | 4,10166E-09 | 4,59082E-10 | -1,49567E-08 | 3,93121E-09 | 5,07698E-11 |
| 78 | G Vertical | -1,15538E-07 | 9,51159E-09 | -4,64278E-09 | -1,18761E-07 | 5,38558E-09 | -2,80936E-09 | -1,17581E-07 | -4,55779E-09 | -8,58778E-09 |
| 78 | G transversal | 1,29964E-08 | -4,36646E-11 | 2,81503E-10 | 1,23295E-08 | 1,48509E-10 | 1,51843E-10 | 1,13076E-08 | 7,5226E-10 | 5,60726E-10 |
| 79 | D Longitudinal | 7,86549E-09 | 3,23122E-10 | -8,08058E-11 | 8,63913E-09 | 2,7426E-10 | -8,0467E-11 | 9,38743E-09 | 2,26419E-10 | -7,7466E-11 |
| 79 | D Vertical | 2,02332E-09 | 2,25637E-09 | -6,13318E-10 | 1,62076E-09 | 1,87358E-09 | -6,13344E-10 | 1,20368E-09 | 1,49066E-09 | -6,13684E-10 |
| 79 | D transversal | -3,40355E-09 | 1,48723E-09 | 4,1422E-10 | -3,44688E-09 | 1,91257E-09 | 4,14318E-10 | -3,50601E-09 | 2,33865E-09 | 4,15938E-10 |
| 79 | G Longitudinal | -1,30877E-08 | 3,80516E-09 | -1,06782E-10 | -1,29177E-08 | 3,81341E-09 | -3,83601E-10 | -1,26605E-08 | 2,77353E-09 | -3,2345E-09 |
| 79 | G Vertical | -1,171E-07 | 8,71038E-09 | -8,01278E-09 | -1,12603E-07 | 1,29163E-09 | -1,19449E-08 | -1,06346E-07 | -2,10345E-08 | -5,24744E-08 |
| 79 | G transversal | -1,98214E-08 | -1,30134E-11 | -4,04286E-10 | -2,04615E-08 | -4,38136E-10 | -6,82527E-10 | -2,09338E-08 | -1,91745E-09 | -3,54906E-09 |
| 80 | D Longitudinal | -5,40252E-09 | 1,06E-09 | -7,49953E-11 | -4,39011E-09 | 8,95521E-10 | -7,59055E-11 | -3,31783E-09 | 7,33743E-10 | -7,31227E-11 |
| 80 | D Vertical | -4,65796E-09 | -4,37537E-09 | 3,64469E-10 | -3,87736E-09 | -3,63299E-09 | 3,64427E-10 | -3,12358E-09 | -2,89047E-09 | 3,64539E-10 |
| 80 | D transversal | 8,8788E-09 | 4,4367E-09 | 7,58114E-10 | 8,63175E-09 | 5,03517E-09 | 7,58325E-10 | 8,42942E-09 | 5,6327E-09 | 7,57307E-10 |
| 80 | G Longitudinal | 1,50856E-08 | 6,02003E-09 | -6,48825E-11 | 1,5118E-08 | 5,90542E-09 | 7,48832E-11 | 1,49051E-08 | 5,37947E-09 | -3,31029E-10 |
| 80 | G Vertical | -1,1607E-07 | -9,37469E-09 | 4,75555E-09 | -1,19105E-07 | -5,28013E-09 | 2,7845E-09 | -1,17832E-07 | 4,6469E-09 | 8,56853E-09 |
| 80 | G transversal | 8,55516E-09 | -2,67116E-10 | -2,65199E-10 | 8,61161E-09 | -4,06417E-10 | -1,25029E-10 | 8,30499E-09 | -9,60195E-10 | -5,35957E-10 |
| 81 | D Longitudinal | -5,40244E-09 | -1,05998E-09 | 7,51847E-11 | -4,39008E-09 | -8,95503E-10 | 7,59349E-11 | -3,31782E-09 | -7,33568E-10 | 7,33785E-11 |
| 81 | D Vertical | 4,65796E-09 | -4,37537E-09 | 3,64493E-10 | 3,87736E-09 | -3,63298E-09 | 3,64434E-10 | 3,12358E-09 | -2,89045E-09 | 3,64568E-10 |
| 81 | D transversal | -8,87879E-09 | 4,43669E-09 | 7,58034E-10 | -8,63174E-09 | 5,03516E-09 | 7,58303E-10 | -8,42942E-09 | 5,63258E-09 | 7,57126E-10 |
| 81 | G Longitudinal | -1,50718E-08 | 6,02068E-09 | -5,52158E-11 | -1,51137E-08 | 5,90535E-09 | 7,48929E-11 | -1,49036E-08 | 5,3796E-09 | -3,30845E-10 |

APOYO 1

| DESPLAZAMIENTOS (metros) | | C1 | | | C2 | | | C3 | | |
|---|---|---|---|---|---|---|---|---|---|---|
| Nudo | Desplazamiento | L | T | V | L | T | V | L | T | V |
| 81 | G Vertical | -1,15874E-07 | 9,38406E-09 | -4,61745E-09 | -1,19045E-07 | 5,27939E-09 | -2,78399E-09 | -1,17811E-07 | -4,643E-09 | -8,56295E-09 |
| 81 | G transversal | 8,54126E-09 | 2,66436E-10 | 2,5526E-10 | 8,60732E-09 | 4,06454E-10 | 1,24968E-10 | 8,30353E-09 | 9,59778E-10 | 5,35358E-10 |
| 82 | D Longitudinal | 1,47734E-08 | 1,06033E-09 | -2,68605E-10 | 1,58649E-08 | 8,97308E-10 | -2,66794E-10 | 1,68979E-08 | 7,40476E-10 | -2,49558E-10 |
| 82 | D Vertical | 3,92854E-09 | 4,37535E-09 | -1,19465E-09 | 3,14704E-09 | 3,63287E-09 | -1,19475E-09 | 2,33877E-09 | 2,88994E-09 | -1,19594E-09 |
| 82 | D transversal | -6,04241E-09 | 4,43663E-09 | 4,98336E-10 | -6,23408E-09 | 5,0348E-09 | 4,98042E-10 | -6,47388E-09 | 5,63304E-09 | 4,97082E-10 |
| 82 | G Longitudinal | -1,32602E-08 | 5,96397E-09 | -4,69811E-10 | -1,30687E-08 | 5,61533E-09 | -7,48293E-10 | -1,28092E-08 | 4,21103E-09 | -3,61829E-09 |
| 82 | G Vertical | -1,1719E-07 | 8,58284E-09 | -7,99342E-09 | -1,12747E-07 | 1,18534E-09 | -1,19257E-08 | -1,06543E-07 | -2,11198E-08 | -5,2456E-08 |
| 82 | G transversal | -1,86342E-08 | -3,23381E-10 | -3,22335E-10 | -1,85365E-08 | -6,9755E-10 | -6,02068E-10 | -1,82573E-08 | -2,13192E-09 | -3,48437E-09 |
| 83 | D Longitudinal | -4,51337E-09 | 1,59255E-09 | -1,22483E-10 | -3,56136E-09 | 1,33598E-09 | -1,22233E-10 | -2,51179E-09 | 1,0783E-09 | -1,23454E-10 |
| 83 | D Vertical | -6,60787E-09 | -6,37838E-09 | 5,5065E-10 | -5,46349E-09 | -5,25685E-09 | 5,50616E-10 | -4,35571E-09 | -4,1351E-09 | 5,50892E-10 |
| 83 | D transversal | 1,27101E-08 | 8,40838E-09 | 7,89827E-10 | 1,24083E-08 | 9,02129E-09 | 7,88989E-10 | 1,2198E-08 | 9,63887E-09 | 7,9561E-10 |
| 83 | G Longitudinal | 1,36625E-08 | 7,70374E-09 | -4,8609E-10 | 1,39254E-08 | 7,32204E-09 | -3,45664E-10 | 1,39589E-08 | 6,52916E-09 | -7,5003E-10 |
| 83 | G Vertical | -1,1569E-07 | -9,3959E-09 | 4,77341E-09 | -1,18791E-07 | -5,30196E-09 | 2,80202E-09 | -1,17584E-07 | 4,62481E-09 | 8,58589E-09 |
| 83 | G transversal | 6,05356E-09 | 5,39074E-10 | -3,17122E-10 | 6,50347E-09 | 2,82215E-10 | -1,77336E-10 | 6,57895E-09 | -3,87262E-10 | -5,85822E-10 |
| 84 | D Longitudinal | -4,5134E-09 | -1,59252E-09 | 1,22663E-10 | -3,56136E-09 | -1,33595E-09 | 1,22279E-10 | -2,5118E-09 | -1,07804E-09 | 1,23839E-10 |
| 84 | D Vertical | 6,60786E-09 | -6,37838E-09 | 5,50681E-10 | 5,46349E-09 | -5,25684E-09 | 5,50625E-10 | 4,35571E-09 | -4,13508E-09 | 5,50923E-10 |
| 84 | D transversal | -1,27103E-08 | 8,40835E-09 | 7,89592E-10 | -1,24084E-08 | 9,02126E-09 | 7,88949E-10 | -1,2198E-08 | 9,63865E-09 | 7,95283E-10 |
| 84 | G Longitudinal | -1,36486E-08 | 7,7044E-09 | -4,76371E-10 | -1,39211E-08 | 7,32197E-09 | -3,45658E-10 | -1,39574E-08 | 6,52928E-09 | -7,49871E-10 |
| 84 | G Vertical | -1,15494E-07 | 9,40527E-09 | -4,6353E-09 | -1,18731E-07 | 5,30123E-09 | -2,80151E-09 | -1,17563E-07 | -4,62091E-09 | -8,58032E-09 |
| 84 | G transversal | 6,03968E-09 | -5,39753E-10 | 3,07226E-10 | 6,49917E-09 | -2,82181E-10 | 1,77272E-10 | 6,57748E-09 | 3,86837E-10 | 5,85209E-10 |
| 85 | D Longitudinal | 2,16035E-08 | 1,59238E-09 | -4,17044E-10 | 2,26723E-08 | 1,33531E-09 | -4,17498E-10 | 2,36435E-08 | 1,07633E-09 | -4,23009E-10 |
| 85 | D Vertical | 6,12719E-09 | 6,37835E-09 | -1,80469E-09 | 4,97837E-09 | 5,25673E-09 | -1,80479E-09 | 3,79266E-09 | 4,13466E-09 | -1,80598E-09 |
| 85 | D transversal | -9,53911E-09 | 8,40878E-09 | 4,99284E-10 | -9,74804E-09 | 9,02322E-09 | 5,01264E-10 | -1,00439E-08 | 9,64503E-09 | 5,21515E-10 |
| 85 | G Longitudinal | -1,49608E-08 | 7,64734E-09 | -6,11234E-10 | -1,45354E-08 | 7,03026E-09 | -8,91357E-10 | -1,40471E-08 | 5,34703E-09 | -3,78597E-09 |
| 85 | G Vertical | -1,1732E-07 | 8,60392E-09 | -7,9749E-09 | -1,12809E-07 | 1,20651E-09 | -1,19078E-08 | -1,06537E-07 | -2,11013E-08 | -5,24451E-08 |
| 85 | G transversal | -2,00789E-08 | 4,82968E-10 | -5,16489E-10 | -1,95886E-08 | -8,11246E-12 | -7,95405E-10 | -1,89044E-08 | -1,5588E-09 | -3,67382E-09 |
| 86 | D Longitudinal | -2,47054E-09 | 1,57058E-09 | -1,3137E-10 | -1,77964E-09 | 1,30548E-09 | -1,31516E-10 | -9,42093E-10 | 1,03988E-09 | -1,32528E-10 |
| 86 | D Vertical | -8,66698E-09 | -8,34522E-09 | 7,20815E-10 | -7,13926E-09 | -6,8532E-09 | 7,20805E-10 | -5,6557E-09 | -5,36105E-09 | 7,20961E-10 |
| 86 | D transversal | 1,6284E-08 | 1,36858E-08 | 5,4681E-10 | 1,59835E-08 | 1,40854E-08 | 5,46717E-10 | 1,58256E-08 | 1,44884E-08 | 5,52742E-10 |
| 86 | G Longitudinal | 1,36359E-08 | 9,96638E-09 | -9,12998E-10 | 1,38811E-08 | 9,17004E-09 | -7,73731E-10 | 1,39079E-08 | 7,95912E-09 | -1,18742E-09 |
| 86 | G Vertical | -1,15424E-07 | -8,98114E-09 | 4,72981E-09 | -1,18578E-07 | -4,96288E-09 | 2,75778E-09 | -1,17423E-07 | 4,88853E-09 | 8,54066E-09 |
| 86 | G transversal | 4,19255E-09 | 1,22149E-09 | -3,57539E-10 | 4,94196E-09 | 8,66732E-10 | -2,18324E-10 | 5,30529E-09 | 1,00522E-10 | -6,2598E-10 |
| 87 | D Longitudinal | -2,47051E-09 | -1,57055E-09 | 1,31639E-10 | -1,77961E-09 | -1,30544E-09 | 1,31582E-10 | -9,42093E-10 | -1,03952E-09 | 1,33057E-10 |
| 87 | D Vertical | 8,66698E-09 | -8,34522E-09 | 7,20856E-10 | 7,13926E-09 | -6,85319E-09 | 7,20816E-10 | 5,65571E-09 | -5,36103E-09 | 7,20987E-10 |
| 87 | D transversal | -1,6284E-08 | 1,36858E-08 | 5,46574E-10 | -1,59835E-08 | 1,40853E-08 | 5,46657E-10 | -1,58256E-08 | 1,44881E-08 | 5,52267E-10 |
| 87 | G Longitudinal | -1,3622E-08 | 9,96703E-09 | -9,03272E-10 | -1,38768E-08 | 9,16996E-09 | -7,73726E-10 | -1,39064E-08 | 7,95924E-09 | -1,18726E-09 |
| 87 | G Vertical | -1,15228E-07 | 8,99051E-09 | -4,59166E-09 | -1,18517E-07 | 4,96214E-09 | -2,75727E-09 | -1,17403E-07 | -4,88464E-09 | -8,53509E-09 |
| 87 | G transversal | 4,17874E-09 | -1,22216E-09 | 3,47689E-10 | 4,9377E-09 | -8,66701E-10 | 2,18255E-10 | 5,30383E-09 | -1,00956E-10 | 6,25353E-10 |
| 88 | D Longitudinal | 3,001E-08 | 1,57055E-09 | -4,25298E-10 | 3,0855E-08 | 1,30557E-09 | -4,25008E-10 | 3,15537E-08 | 1,04315E-09 | -4,19968E-10 |
| 88 | D Vertical | 7,97583E-09 | 8,34521E-09 | -2,41246E-09 | 6,438E-09 | 6,85315E-09 | -2,41248E-09 | 4,85531E-09 | 5,36107E-09 | -2,41265E-09 |
| 88 | D transversal | -1,35803E-08 | 1,36858E-08 | 2,92207E-10 | -1,37485E-08 | 1,40853E-08 | 2,92301E-10 | -1,40475E-08 | 1,44814E-08 | 2,86302E-10 |
| 88 | G Longitudinal | -1,47272E-08 | 9,90997E-09 | -1,05418E-09 | -1,43209E-08 | 8,87917E-09 | -1,33351E-09 | -1,38673E-08 | 6,78196E-09 | -4,22689E-09 |
| 88 | G Vertical | -1,17082E-07 | 8,189E-09 | -7,86066E-09 | -1,12517E-07 | 8,66337E-10 | -1,17946E-08 | -1,06188E-07 | -2,13704E-08 | -5,23419E-08 |
| 88 | G transversal | -2,27234E-08 | 1,16558E-09 | -6,80549E-10 | -2,19347E-08 | 5,77706E-10 | -9,58014E-10 | -2,0939E-08 | -1,06387E-09 | -3,8213E-09 |

APOYO 1

| DESPLAZAMIENTOS (metros) | | C1 | | | C2 | | | C3 | | |
|---|---|---|---|---|---|---|---|---|---|---|
| Nudo | Desplazamiento | L | T | V | L | T | V | L | T | V |
| 89 | D Longitudinal | 7,77956E-10 | 1,3353E-09 | -1,29419E-10 | 9,98484E-10 | 1,09023E-09 | -1,29797E-10 | 1,42201E-09 | 8,46076E-10 | -1,28851E-10 |
| 89 | D Vertical | -1,03793E-08 | -1,01683E-08 | 9,09141E-10 | -8,48665E-09 | -8,28869E-09 | 9,09136E-10 | -6,64355E-09 | -6,40911E-09 | 9,08991E-10 |
| 89 | D transversal | 1,99883E-08 | 2,03337E-08 | 5,43163E-11 | 1,96551E-08 | 2,02624E-08 | 5,42144E-11 | 1,95187E-08 | 2,01902E-08 | 5,18361E-11 |
| 89 | G Longitudinal | 1,39253E-08 | 1,19281E-08 | -1,25344E-09 | 1,41315E-08 | 1,07826E-08 | -1,11442E-09 | 1,41172E-08 | 9,21543E-09 | -1,5411E-09 |
| 89 | G Vertical | -1,15152E-07 | -8,64053E-09 | 4,6953E-09 | -1,18355E-07 | -4,6859E-09 | 2,72274E-09 | -1,1725E-07 | 5,1016E-09 | 8,50387E-09 |
| 89 | G transversal | 2,09048E-09 | 1,15158E-09 | -3,55385E-10 | 3,21774E-09 | 8,04637E-10 | -2,16042E-10 | 3,94701E-09 | 4,24622E-11 | -6,29989E-10 |
| 90 | D Longitudinal | 7,77979E-10 | -1,33525E-09 | 1,29777E-10 | 9,98486E-10 | -1,09017E-09 | 1,29885E-10 | 1,42201E-09 | -8,45613E-10 | 1,29529E-10 |
| 90 | D Vertical | 1,03793E-08 | -1,01683E-08 | 9,09188E-10 | 8,48665E-09 | -8,28868E-09 | 9,09146E-10 | 6,64355E-09 | -6,4091E-09 | 9,09006E-10 |
| 90 | D transversal | -1,99882E-08 | 2,03336E-08 | 5,40716E-11 | -1,96551E-08 | 2,02624E-08 | 5,41351E-11 | -1,95187E-08 | 2,01898E-08 | 5,1222E-11 |
| 90 | G Longitudinal | -1,39114E-08 | 1,19287E-08 | -1,24374E-09 | -1,41272E-08 | 1,07825E-08 | -1,11441E-09 | -1,41158E-08 | 9,21555E-09 | -1,54092E-09 |
| 90 | G Vertical | -1,14957E-07 | 8,64991E-09 | -4,55712E-09 | -1,18295E-07 | 4,68516E-09 | -2,72223E-09 | -1,1723E-07 | -5,09771E-09 | -8,49831E-09 |
| 90 | G transversal | 2,07675E-09 | -1,15226E-09 | 3,45482E-10 | 3,21358E-09 | -8,04607E-10 | 2,15971E-10 | 3,94554E-09 | -4,29006E-11 | 6,29357E-10 |
| 91 | D Longitudinal | 3,98687E-08 | 1,33537E-09 | -3,84651E-10 | 4,02797E-08 | 1,09062E-09 | -3,84243E-10 | 4,04879E-08 | 8,47802E-10 | -3,79342E-10 |
| 91 | D Vertical | 9,95013E-09 | 1,01683E-08 | -3,03799E-09 | 8,03958E-09 | 8,28872E-09 | -3,03792E-09 | 6,07882E-09 | 6,40973E-09 | -3,03667E-09 |
| 91 | D transversal | -1,73021E-08 | 2,03333E-08 | -2,05151E-10 | -1,74655E-08 | 2,02612E-08 | -2,06198E-10 | -1,7816E-08 | 2,01781E-08 | -2,30647E-10 |
| 91 | G Longitudinal | -1,43791E-08 | 1,18717E-08 | -1,4463E-09 | -1,40139E-08 | 1,04923E-08 | -1,72509E-09 | -1,36276E-08 | 8,05662E-09 | -4,59881E-09 |
| 91 | G Vertical | -1,16904E-07 | 7,84823E-09 | -7,76251E-09 | -1,12289E-07 | 5,88373E-10 | -1,16974E-08 | -1,05907E-07 | -2,15902E-08 | -5,22563E-08 |
| 91 | G transversal | -2,46333E-08 | 1,09554E-09 | -6,66775E-10 | -2,34627E-08 | 5,15631E-10 | -9,4383E-10 | -2,20727E-08 | -1,1082E-09 | -3,78952E-09 |
| 92 | D Longitudinal | 5,50325E-09 | 1,32552E-09 | -1,45851E-10 | 5,00377E-09 | 1,06456E-09 | -1,44726E-10 | 4,76701E-09 | 8,02764E-10 | -1,43456E-10 |
| 92 | D Vertical | -1,21591E-08 | -1,18798E-08 | 1,08246E-09 | -9,88642E-09 | -9,62906E-09 | 1,08251E-09 | -7,66711E-09 | -7,37881E-09 | 1,08178E-09 |
| 92 | D transversal | 2,38391E-08 | 2,8119E-08 | -6,15237E-10 | 2,34554E-08 | 2,73996E-08 | -6,16349E-10 | 2,33208E-08 | 2,66749E-08 | -6,28429E-10 |
| 92 | G Longitudinal | 1,45445E-08 | 1,3767E-08 | -1,5089E-09 | 1,47301E-08 | 1,23659E-08 | -1,36646E-09 | 1,46779E-08 | 1,05319E-08 | -1,80278E-09 |
| 92 | G Vertical | -1,14621E-07 | -8,48973E-09 | 4,70029E-09 | -1,1792E-07 | -4,56181E-09 | 2,72726E-09 | -1,16911E-07 | 5,20033E-09 | 8,50965E-09 |
| 92 | G transversal | -9,76895E-11 | 5,9078E-10 | -3,10773E-10 | 1,44659E-09 | 3,37919E-10 | -1,70796E-10 | 2,57972E-09 | -3,3296E-10 | -5,88297E-10 |
| 93 | D Longitudinal | 5,50305E-09 | -1,32547E-09 | 1,46207E-10 | 5,00364E-09 | -1,06449E-09 | 1,44836E-10 | 4,767E-09 | -8,02201E-10 | 1,44281E-10 |
| 93 | D Vertical | 1,21591E-08 | -1,18798E-08 | 1,0825E-09 | 9,88643E-09 | -9,62906E-09 | 1,08252E-09 | 7,66711E-09 | -7,37882E-09 | 1,08177E-09 |
| 93 | D transversal | -2,38391E-08 | 2,8119E-08 | -6,1566E-10 | -2,34555E-08 | 2,73995E-08 | -6,16453E-10 | -2,33208E-08 | 2,66744E-08 | -6,29185E-10 |
| 93 | G Longitudinal | -1,45307E-08 | 1,37676E-08 | -1,49927E-09 | -1,47258E-08 | 1,23658E-08 | -1,36647E-09 | -1,46766E-08 | 1,0532E-08 | -1,80261E-09 |
| 93 | G Vertical | -1,14425E-07 | 8,49911E-09 | -4,56207E-09 | -1,1786E-07 | 4,56107E-09 | -2,72675E-09 | -1,16891E-07 | -5,19644E-09 | -8,50409E-09 |
| 93 | G transversal | -1,11459E-10 | -5,91468E-10 | 3,00788E-10 | 1,44242E-09 | -3,3789E-10 | 1,70723E-10 | 2,57825E-09 | 3,32519E-10 | 5,87662E-10 |
| 94 | D Longitudinal | 5,07184E-08 | 1,32504E-09 | -4,04631E-10 | 5,04437E-08 | 1,06151E-09 | -4,07839E-10 | 4,99039E-08 | 7,79998E-10 | -4,50223E-10 |
| 94 | D Vertical | 1,15112E-08 | 1,18798E-08 | -3,6439E-09 | 9,21062E-09 | 9,62919E-09 | -3,64372E-09 | 6,85814E-09 | 7,37936E-09 | -3,64184E-09 |
| 94 | D transversal | -2,09623E-08 | 2,81191E-08 | -8,94408E-10 | -2,11406E-08 | 2,74007E-08 | -8,93214E-10 | -2,15859E-08 | 2,66885E-08 | -8,79351E-10 |
| 94 | G Longitudinal | -1,46591E-08 | 1,37106E-08 | -1,73028E-09 | -1,43141E-08 | 1,20729E-08 | -2,0115E-09 | -1,39916E-08 | 9,39987E-09 | -4,85421E-09 |
| 94 | G Vertical | -1,1689E-07 | 7,69727E-09 | -7,70235E-09 | -1,12177E-07 | 4,63452E-10 | -1,1638E-08 | -1,05696E-07 | -2,16904E-08 | -5,22019E-08 |
| 94 | G transversal | -2,65802E-08 | 5,34501E-10 | -5,1506E-10 | -2,49868E-08 | 4,75734E-11 | -7,93556E-10 | -2,31622E-08 | -1,48447E-09 | -3,64614E-09 |
| 95 | D Longitudinal | 1,18417E-08 | 1,77443E-09 | -2,1381E-10 | 1,02736E-08 | 1,4036E-09 | -2,13873E-10 | 9,04431E-09 | 1,03436E-09 | -2,10795E-10 |
| 95 | D Vertical | -1,40303E-08 | -1,39512E-08 | 1,34714E-09 | -1,12915E-08 | -1,11927E-08 | 1,34733E-09 | -8,61021E-09 | -8,43535E-09 | 1,34572E-09 |
| 95 | D transversal | 2,85916E-08 | 3,77392E-08 | -1,53589E-09 | 2,81098E-08 | 3,61098E-08 | -1,53312E-09 | 2,79218E-08 | 3,44613E-08 | -1,55853E-09 |
| 95 | G Longitudinal | 1,58915E-08 | 1,74113E-08 | -2,0415E-09 | 1,6005E-08 | 1,54746E-08 | -1,89633E-09 | 1,59179E-08 | 1,31182E-08 | -2,30157E-09 |
| 95 | G Vertical | -1,14066E-07 | -7,98388E-09 | 4,66862E-09 | -1,17435E-07 | -4,12333E-09 | 2,69586E-09 | -1,16496E-07 | 5,57411E-09 | 8,48387E-09 |
| 95 | G transversal | -3,08356E-09 | 2,53805E-11 | -2,25484E-10 | -9,32015E-10 | -9,02883E-11 | -8,37846E-11 | 7,84587E-10 | -6,14857E-10 | -4,82169E-10 |
| 96 | D Longitudinal | 1,18417E-08 | -1,77436E-09 | 2,14351E-10 | 1,02735E-08 | -1,40351E-09 | 2,14008E-10 | 9,0443E-09 | -1,03369E-09 | 2,11777E-10 |
| 96 | D Vertical | 1,40303E-08 | -1,39512E-08 | 1,34717E-09 | 1,12915E-08 | -1,11927E-08 | 1,34733E-09 | 8,6102E-09 | -8,43537E-09 | 1,34569E-09 |

APOYO 1

| DESPLAZAMIENTOS (metros) | | C1 | | | C2 | | | C3 | | |
|---|---|---|---|---|---|---|---|---|---|---|
| Nudo | Desplazamiento | L | T | V | L | T | V | L | T | V |
| 96 | D transversal | -2,85917E-08 | 3,77391E-08 | -1,53641E-09 | -2,81099E-08 | 3,61097E-08 | -1,53325E-09 | -2,79219E-08 | 3,44606E-08 | -1,55944E-09 |
| 96 | G Longitudinal | -1,58777E-08 | 1,74119E-08 | -2,03196E-09 | -1,60008E-08 | 1,54745E-08 | -1,89635E-09 | -1,59164E-08 | 1,31182E-08 | -2,30147E-09 |
| 96 | G Vertical | -1,1387E-07 | 7,99326E-09 | -4,53035E-09 | -1,17374E-07 | 4,12259E-09 | -2,69535E-09 | -1,16476E-07 | -5,57022E-09 | -8,47831E-09 |
| 96 | G transversal | -3,09788E-09 | -2,60744E-11 | 2,15433E-10 | -9,36681E-10 | 9,03143E-11 | 8,37064E-11 | 7,83141E-10 | 6,14404E-10 | 4,81516E-10 |
| 97 | D Longitudinal | 6,38335E-08 | 1,77434E-09 | -5,65209E-10 | 6,2519E-08 | 1,40323E-09 | -5,65274E-10 | 6,08655E-08 | 1,02542E-09 | -5,77957E-10 |
| 97 | D Vertical | 1,38748E-08 | 1,39512E-08 | -4,44558E-09 | 1,10936E-08 | 1,11928E-08 | -4,4454E-09 | 8,25986E-09 | 8,43344E-09 | -4,44675E-09 |
| 97 | D transversal | -2,49929E-08 | 3,77389E-08 | -1,88875E-09 | -2,52331E-08 | 3,61068E-08 | -1,89133E-09 | -2,5846E-08 | 3,44952E-08 | -1,86331E-09 |
| 97 | G Longitudinal | -1,53414E-08 | 1,7355E-08 | -2,32421E-09 | -1,50709E-08 | 1,51797E-08 | -2,60717E-09 | -1,48317E-08 | 1,19664E-08 | -5,4575E-09 |
| 97 | G Vertical | -1,16296E-07 | 7,19123E-09 | -7,59294E-09 | -1,11511E-07 | 2,50374E-11 | -1,15282E-08 | -1,04954E-07 | -2,20588E-08 | -5,20881E-08 |
| 97 | G transversal | -3,10681E-08 | -3,11199E-11 | -3,14471E-10 | -2,88628E-08 | -3,86032E-10 | -6,01038E-10 | -2,64072E-08 | -1,84144E-09 | -3,57237E-09 |
| 98 | D Longitudinal | 1,95398E-08 | 2,12667E-09 | -2,89117E-10 | 1,66101E-08 | 1,64516E-09 | -2,91126E-10 | 1,41069E-08 | 1,16137E-09 | -2,98645E-10 |
| 98 | D Vertical | -1,60751E-08 | -1,58879E-08 | 1,5855E-09 | -1,28385E-08 | -1,26459E-08 | 1,58556E-09 | -9,65556E-09 | -9,40376E-09 | 1,58596E-09 |
| 98 | D transversal | 3,36928E-08 | 4,93855E-08 | -2,82708E-09 | 3,31037E-08 | 4,64957E-08 | -2,82355E-09 | 3,29282E-08 | 4,36058E-08 | -2,81328E-09 |
| 98 | G Longitudinal | 1,54986E-08 | 2,01767E-08 | -2,68883E-09 | 1,56805E-08 | 1,76653E-08 | -2,55634E-09 | 1,5865E-08 | 1,48256E-08 | -2,83696E-09 |
| 98 | G Vertical | -1,13549E-07 | -7,45304E-09 | 4,61804E-09 | -1,16993E-07 | -3,68125E-09 | 2,64434E-09 | -1,16117E-07 | 5,93523E-09 | 8,44366E-09 |
| 98 | G transversal | -4,88645E-09 | 6,93785E-10 | -2,94106E-10 | -2,33296E-09 | 4,50739E-10 | -1,52421E-10 | -2,27556E-10 | -1,97687E-10 | -5,44515E-10 |
| 99 | D Longitudinal | 1,95402E-08 | -2,12658E-09 | 2,89852E-10 | 1,66104E-08 | -1,64505E-09 | 2,91289E-10 | 1,41069E-08 | -1,16058E-09 | 2,99792E-10 |
| 99 | D Vertical | 1,60751E-08 | -1,58879E-08 | 1,58551E-09 | 1,28385E-08 | -1,26459E-08 | 1,58556E-09 | 9,65557E-09 | -9,40382E-09 | 1,58587E-09 |
| 99 | D transversal | -3,36928E-08 | 4,93854E-08 | -2,82771E-09 | -3,31037E-08 | 4,64956E-08 | -2,82371E-09 | -3,29282E-08 | 4,36051E-08 | -2,81442E-09 |
| 99 | G Longitudinal | -1,54846E-08 | 2,01774E-08 | -2,67922E-09 | -1,5676E-08 | 1,76653E-08 | -2,55633E-09 | -1,58631E-08 | 1,48255E-08 | -2,83703E-09 |
| 99 | G Vertical | -1,13354E-07 | 7,46243E-09 | -4,47972E-09 | -1,16933E-07 | 3,68051E-09 | -2,64383E-09 | -1,16096E-07 | -5,93134E-09 | -8,43809E-09 |
| 99 | G transversal | -4,90085E-09 | -6,94479E-10 | 2,84072E-10 | -2,33771E-09 | -4,50715E-10 | 1,5234E-10 | -2,29006E-10 | 1,97231E-10 | 5,43857E-10 |
| 100 | D Longitudinal | 7,94865E-08 | 2,127E-09 | -7,19288E-10 | 7,68373E-08 | 1,64995E-09 | -7,12369E-10 | 7,37655E-08 | 1,20875E-09 | -6,3044E-10 |
| 100 | D Vertical | 1,55979E-08 | 1,58878E-08 | -5,22271E-09 | 1,23013E-08 | 1,26457E-08 | -5,22296E-09 | 8,95025E-09 | 9,40167E-09 | -5,2271E-09 |
| 100 | D transversal | -2,95213E-08 | 4,93851E-08 | -3,24555E-09 | -2,9837E-08 | 4,64915E-08 | -3,24924E-09 | -3,05752E-08 | 4,35963E-08 | -3,26287E-09 |
| 100 | G Longitudinal | -1,60305E-08 | 2,01212E-08 | -2,87282E-09 | -1,57027E-08 | 1,73812E-08 | -3,14553E-09 | -1,52187E-08 | 1,34907E-08 | -6,16589E-09 |
| 100 | G Vertical | -1,15774E-07 | 6,66013E-09 | -7,45861E-09 | -1,10913E-07 | -4,18278E-10 | -1,13949E-08 | -1,04288E-07 | -2,24073E-08 | -5,19463E-08 |
| 100 | G transversal | -3,45189E-08 | 6,37346E-10 | -5,13275E-10 | -3,19076E-08 | 1,55164E-10 | -7,99495E-10 | -2,90324E-08 | -1,43895E-09 | -3,79019E-09 |
| 101 | D Longitudinal | 2,86628E-08 | 1,98943E-09 | -2,98062E-10 | 2,40749E-08 | 1,51008E-09 | -2,98747E-10 | 2,0001E-08 | 1,02441E-09 | -3,10624E-10 |
| 101 | D Vertical | -1,75891E-08 | -1,76065E-08 | 1,85635E-09 | -1,38754E-08 | -1,38441E-08 | 1,85595E-09 | -1,02029E-08 | -1,00774E-08 | 1,86215E-09 |
| 101 | D transversal | 3,82088E-08 | 6,27316E-08 | -4,57288E-09 | 3,75627E-08 | 5,81758E-08 | -4,57898E-09 | 3,75575E-08 | 5,36897E-08 | -4,47266E-09 |
| 101 | G Longitudinal | 1,49343E-08 | 2,32023E-08 | -3,50917E-09 | 1,5184E-08 | 1,99367E-08 | -3,38382E-09 | 1,54409E-08 | 1,63344E-08 | -3,69953E-09 |
| 101 | G Vertical | -1,12889E-07 | -7,17832E-09 | 4,61778E-09 | -1,16431E-07 | -3,44528E-09 | 2,64498E-09 | -1,15677E-07 | 6,12193E-09 | 8,42876E-09 |
| 101 | G transversal | -7,7752E-09 | 1,21252E-09 | -4,17793E-10 | -4,57921E-09 | 7,93485E-10 | -2,80243E-10 | -1,83276E-09 | -5,2507E-11 | -7,17063E-10 |
| 102 | D Longitudinal | 2,86631E-08 | -1,98933E-09 | 2,98821E-10 | 2,40751E-08 | -1,50996E-09 | 2,98937E-10 | 2,0001E-08 | -1,02352E-09 | 3,1192E-10 |
| 102 | D Vertical | 1,75891E-08 | -1,76065E-08 | 1,85635E-09 | 1,38754E-08 | -1,38441E-08 | 1,85595E-09 | 1,02029E-08 | -1,00775E-08 | 1,862E-09 |
| 102 | D transversal | -3,82088E-08 | 6,27315E-08 | -4,57369E-09 | -3,75625E-08 | 5,81757E-08 | -4,57915E-09 | -3,75572E-08 | 5,36887E-08 | -4,47408E-09 |
| 102 | G Longitudinal | -1,49202E-08 | 2,3203E-08 | -3,49947E-09 | -1,51796E-08 | 1,99366E-08 | -3,3838E-09 | -1,54391E-08 | 1,63344E-08 | -3,69947E-09 |
| 102 | G Vertical | -1,12693E-07 | 7,18771E-09 | -4,4794E-09 | -1,1637E-07 | 3,44455E-09 | -2,64447E-09 | -1,15656E-07 | -6,11805E-09 | -8,42322E-09 |
| 102 | G transversal | -7,78826E-09 | -1,21321E-09 | 4,0784E-10 | -4,58269E-09 | -7,93462E-10 | 2,80163E-10 | -1,8343E-09 | 5,20791E-11 | 7,16447E-10 |
| 103 | D Longitudinal | 9,69336E-08 | 1,98925E-09 | -7,08394E-10 | 9,2648E-08 | 1,51142E-09 | -7,05625E-10 | 8,7849E-08 | 1,06016E-09 | -6,52777E-10 |
| 103 | D Vertical | 1,76461E-08 | 1,76065E-08 | -6,04528E-09 | 1,38515E-08 | 1,38436E-08 | -6,04576E-09 | 9,99914E-09 | 1,00837E-08 | -6,04198E-09 |
| 103 | D transversal | -3,42104E-08 | 6,27323E-08 | -4,9878E-09 | -3,4563E-08 | 5,81818E-08 | -4,98166E-09 | -3,52935E-08 | 5,35649E-08 | -5,0796E-09 |
| 103 | G Longitudinal | -1,61156E-08 | 2,3147E-08 | -3,63011E-09 | -1,57415E-08 | 1,96595E-08 | -3,89608E-09 | -1,52235E-08 | 1,50237E-08 | -6,89582E-09 |

APOYO 1

| DESPLAZAMIENTOS (metros) | | C1 | | | C2 | | | C3 | | |
|---|---|---|---|---|---|---|---|---|---|---|
| Nudo | Desplazamiento | L | T | V | L | T | V | L | T | V |
| 103 | G Vertical | -1,15589E-07 | 6,38527E-09 | -7,37742E-09 | -1,10628E-07 | -6,54316E-10 | -1,13139E-08 | -1,03876E-07 | -2,26242E-08 | -5,19014E-08 |
| 103 | G transversal | -3,7365E-08 | 1,15646E-09 | -7,54591E-10 | -3,40931E-08 | 5,12143E-10 | -1,01821E-09 | -3,05396E-08 | -1,11536E-09 | -3,72517E-09 |
| 104 | D Longitudinal | 3,98356E-08 | 1,79319E-09 | -2,65322E-10 | 3,30905E-08 | 1,36535E-09 | -2,64202E-10 | 2,69535E-08 | 9,47571E-10 | -2,44901E-10 |
| 104 | D Vertical | -1,93299E-08 | -1,91972E-08 | 2,09245E-09 | -1,51054E-08 | -1,49468E-08 | 2,09202E-09 | -1,09198E-08 | -1,06942E-08 | 2,09447E-09 |
| 104 | D transversal | 4,28006E-08 | 7,82019E-08 | -6,8737E-09 | 4,21344E-08 | 7,14573E-08 | -6,88347E-09 | 4,21548E-08 | 6,47527E-08 | -6,83975E-09 |
| 104 | G Longitudinal | 1,4921E-08 | 2,65775E-08 | -4,39789E-09 | 1,53051E-08 | 2,24906E-08 | -4,25291E-09 | 1,51312E-08 | 1,77804E-08 | -5,01696E-09 |
| 104 | G Vertical | -1,12516E-07 | -6,65794E-09 | 4,54714E-09 | -1,16071E-07 | -3,02756E-09 | 2,57731E-09 | -1,15417E-07 | 6,39352E-09 | 8,29384E-09 |
| 104 | G transversal | -1,13782E-08 | 9,12012E-10 | -3,85052E-10 | -7,32214E-09 | 5,50515E-10 | -2,49402E-10 | -3,71645E-09 | -2,46413E-10 | -7,05214E-10 |
| 105 | D Longitudinal | 3,98351E-08 | -1,79307E-09 | 2,66187E-10 | 3,30899E-08 | -1,36521E-09 | 2,6442E-10 | 2,69536E-08 | -9,46605E-10 | 2,46315E-10 |
| 105 | D Vertical | 1,93299E-08 | -1,91972E-08 | 2,09243E-09 | 1,51055E-08 | -1,49468E-08 | 2,09202E-09 | 1,09198E-08 | -1,06943E-08 | 2,09427E-09 |
| 105 | D transversal | -4,28005E-08 | 7,82017E-08 | -6,87454E-09 | -4,21343E-08 | 7,14571E-08 | -6,88367E-09 | -4,21546E-08 | 6,47517E-08 | -6,84118E-09 |
| 105 | G Longitudinal | -1,49076E-08 | 2,65781E-08 | -4,38824E-09 | -1,53014E-08 | 2,24905E-08 | -4,25293E-09 | -1,51308E-08 | 1,7781E-08 | -5,01617E-09 |
| 105 | G Vertical | -1,1232E-07 | 6,66734E-09 | -4,40868E-09 | -1,16011E-07 | 3,02683E-09 | -2,5768E-09 | -1,15396E-07 | -6,3897E-09 | -8,28839E-09 |
| 105 | G transversal | -1,13907E-08 | -9,12698E-10 | 3,75151E-10 | -7,3251E-09 | -5,5049E-10 | 2,49324E-10 | -3,71802E-09 | 2,46031E-10 | 7,04666E-10 |
| 106 | D Longitudinal | 1,16384E-07 | 1,79305E-09 | -6,34232E-10 | 1,09946E-07 | 1,35899E-09 | -6,44722E-10 | 1,02894E-07 | 8,7452E-10 | -7,59209E-10 |
| 106 | D Vertical | 1,89698E-08 | 1,91972E-08 | -6,83389E-09 | 1,46415E-08 | 1,49466E-08 | -6,83379E-09 | 1,02686E-08 | 1,07003E-08 | -6,82635E-09 |
| 106 | D transversal | -3,89807E-08 | 7,82025E-08 | -7,28063E-09 | -3,93485E-08 | 7,14669E-08 | -7,2705E-09 | -4,0244E-08 | 6,46945E-08 | -7,30779E-09 |
| 106 | G Longitudinal | -1,60803E-08 | 2,65205E-08 | -4,48229E-09 | -1,56002E-08 | 2,2199E-08 | -4,76108E-09 | -1,55828E-08 | 1,70708E-08 | -7,19866E-09 |
| 106 | G Vertical | -1,15184E-07 | 5,86492E-09 | -7,23078E-09 | -1,10208E-07 | -1,07126E-09 | -1,11673E-08 | -1,03347E-07 | -2,30053E-08 | -5,18741E-08 |
| 106 | G transversal | -4,06913E-08 | 8,56172E-10 | -6,63994E-10 | -3,65303E-08 | 2,73826E-10 | -9,21341E-10 | -3,20756E-08 | -1,23224E-09 | -3,50607E-09 |
| 107 | D Longitudinal | 5,30351E-08 | 1,88957E-09 | -3,20411E-10 | 4,3601E-08 | 1,39351E-09 | -3,19073E-10 | 3,48753E-08 | 9,15038E-10 | -2,85716E-10 |
| 107 | D Vertical | -2,03618E-08 | -2,04863E-08 | 2,36209E-09 | -1,56631E-08 | -1,57182E-08 | 2,36221E-09 | -1,10134E-08 | -1,09583E-08 | 2,3479E-09 |
| 107 | D transversal | 4,73514E-08 | 9,56666E-08 | -9,72017E-09 | 4,67602E-08 | 8,62339E-08 | -9,71835E-09 | 4,65724E-08 | 7,66458E-08 | -9,98537E-09 |
| 107 | G Longitudinal | 1,5072E-08 | 2,96549E-08 | -5,23721E-09 | 1,54945E-08 | 2,47751E-08 | -5,07257E-09 | 1,52194E-08 | 1,91991E-08 | -5,90881E-09 |
| 107 | G Vertical | -1,12095E-07 | -6,18947E-09 | 4,49437E-09 | -1,15671E-07 | -2,64128E-09 | 2,52813E-09 | -1,15095E-07 | 6,6727E-09 | 8,21092E-09 |
| 107 | G transversal | -1,44583E-08 | 1,71791E-10 | -1,47692E-10 | -9,55741E-09 | 1,30316E-10 | -5,47857E-12 | -5,11642E-09 | -3,05088E-10 | -3,80426E-10 |
| 108 | D Longitudinal | 5,30343E-08 | -1,88943E-09 | 3,21385E-10 | 4,36002E-08 | -1,39336E-09 | 3,19315E-10 | 3,48754E-08 | -9,14016E-10 | 2,87211E-10 |
| 108 | D Vertical | 2,03618E-08 | -2,04863E-08 | 2,36203E-09 | 1,56631E-08 | -1,57182E-08 | 2,36219E-09 | 1,10133E-08 | -1,09585E-08 | 2,34766E-09 |
| 108 | D transversal | -4,73517E-08 | 9,56665E-08 | -9,7211E-09 | -4,67606E-08 | 8,62337E-08 | -9,7186E-09 | -4,65732E-08 | 7,66451E-08 | -9,98641E-09 |
| 108 | G Longitudinal | -1,50588E-08 | 2,96555E-08 | -5,22765E-09 | -1,54908E-08 | 2,4775E-08 | -5,07263E-09 | -1,52192E-08 | 1,91997E-08 | -5,90791E-09 |
| 108 | G Vertical | -1,11899E-07 | 6,19888E-09 | -4,35585E-09 | -1,15611E-07 | 2,64056E-09 | -2,5276E-09 | -1,15074E-07 | -6,66892E-09 | -8,20552E-09 |
| 108 | G transversal | -1,44731E-08 | -1,72481E-10 | 1,37719E-10 | -9,56269E-09 | -1,30289E-10 | 5,40399E-12 | -5,11778E-09 | 3,04748E-10 | 3,79938E-10 |
| 109 | D Longitudinal | 1,38136E-07 | 1,88954E-09 | -7,2254E-10 | 1,28994E-07 | 1,38689E-09 | -7,33139E-10 | 1,19141E-07 | 8,03534E-10 | -9,01638E-10 |
| 109 | D Vertical | 2,06896E-08 | 2,04863E-08 | -7,65092E-09 | 1,58618E-08 | 1,57183E-08 | -7,65066E-09 | 1,10221E-08 | 1,0943E-08 | -7,66275E-09 |
| 109 | D transversal | -4,38143E-08 | 9,5666E-08 | -1,00893E-08 | -4,41213E-08 | 8,62347E-08 | -1,00872E-08 | -4,54534E-08 | 7,69891E-08 | -9,75834E-09 |
| 109 | G Longitudinal | -1,60758E-08 | 2,95968E-08 | -5,32641E-09 | -1,55899E-08 | 2,44631E-08 | -5,62678E-09 | -1,57048E-08 | 1,85825E-08 | -8,01652E-09 |
| 109 | G Vertical | -1,1474E-07 | 5,39648E-09 | -7,10852E-09 | -1,09741E-07 | -1,45401E-09 | -1,10406E-08 | -1,02796E-07 | -2,33307E-08 | -5,1787E-08 |
| 109 | G transversal | -4,45284E-08 | 1,15527E-10 | -2,35285E-10 | -3,94925E-08 | -1,74603E-10 | -5,40746E-10 | -3,4171E-08 | -1,60412E-09 | -3,62182E-09 |
| 110 | D Longitudinal | 6,80979E-08 | 2,35472E-09 | -5,1359E-10 | 5,54368E-08 | 1,60846E-09 | -5,16777E-10 | 4,35902E-08 | 8,57503E-10 | -5,2835E-10 |
| 110 | D Vertical | -2,1679E-08 | -2,16214E-08 | 2,58909E-09 | -1,64743E-08 | -1,63812E-08 | 2,58981E-09 | -1,12998E-08 | -1,11487E-08 | 2,57879E-09 |
| 110 | D transversal | 5,22739E-08 | 1,15084E-07 | -1,30858E-08 | 5,16225E-08 | 1,0243E-07 | -1,30683E-08 | 5,14492E-08 | 8,96001E-08 | -1,33261E-08 |
| 110 | G Longitudinal | 1,59323E-08 | 3,27576E-08 | -6,05072E-09 | 1,59096E-08 | 2,69767E-08 | -5,89319E-09 | 1,64757E-08 | 2,11338E-08 | -5,63386E-09 |
| 110 | G Vertical | -1,11616E-07 | -5,6785E-09 | 4,43369E-09 | -1,15245E-07 | -2,23404E-09 | 2,46901E-09 | -1,14677E-07 | 7,00061E-09 | 8,19945E-09 |
| 110 | G transversal | -1,74279E-08 | 1,00626E-11 | -4,87153E-11 | -1,16448E-08 | 9,07981E-11 | 9,82917E-11 | -6,32656E-09 | -1,87615E-10 | -2,07372E-10 |

APOYO 1

| DESPLAZAMIENTOS (metros) | | C1 | | | C2 | | | C3 | | |
|---|---|---|---|---|---|---|---|---|---|---|
| Nudo | Desplazamiento | L | T | V | L | T | V | L | T | V |
| 111 | D Longitudinal | 6,80985E-08 | -2,35457E-09 | 5,14722E-10 | 5,54374E-08 | -1,60829E-09 | 5,17041E-10 | 4,35901E-08 | -8,56456E-10 | 5,29882E-10 |
| 111 | D Vertical | 2,16789E-08 | -2,16214E-08 | 2,58899E-09 | 1,64743E-08 | -1,63812E-08 | 2,58978E-09 | 1,12998E-08 | -1,11489E-08 | 2,57845E-09 |
| 111 | D transversal | -5,22742E-08 | 1,15084E-07 | -1,30869E-08 | -5,16228E-08 | 1,0243E-07 | -1,30686E-08 | -5,14499E-08 | 8,95993E-08 | -1,33272E-08 |
| 111 | G Longitudinal | -1,59177E-08 | 3,27582E-08 | -6,04125E-09 | -1,59043E-08 | 2,69766E-08 | -5,8932E-09 | -1,64722E-08 | 2,11333E-08 | -5,63468E-09 |
| 111 | G Vertical | -1,1142E-07 | 5,68791E-09 | -4,29509E-09 | -1,15185E-07 | 2,23332E-09 | -2,46848E-09 | -1,14656E-07 | -6,99677E-09 | -8,19398E-09 |
| 111 | G transversal | -1,74446E-08 | -1,07553E-11 | 3,87033E-11 | -1,16519E-08 | -9,0767E-11 | -9,83608E-11 | -6,32781E-09 | 1,87334E-10 | 2,06972E-10 |
| 112 | D Longitudinal | 1,62171E-07 | 2,35509E-09 | -1,05037E-09 | 1,49767E-07 | 1,62034E-09 | -1,02977E-09 | 1,36558E-07 | 9,33795E-10 | -8,95189E-10 |
| 112 | D Vertical | 2,14764E-08 | 2,16214E-08 | -8,41456E-09 | 1,61147E-08 | 1,63815E-08 | -8,41468E-09 | 1,07494E-08 | 1,11329E-08 | -8,42992E-09 |
| 112 | D transversal | -4,84232E-08 | 1,15083E-07 | -1,35052E-08 | -4,8828E-08 | 1,02412E-07 | -1,35241E-08 | -5,03633E-08 | 8,99038E-08 | -1,32916E-08 |
| 112 | G Longitudinal | -1,51098E-08 | 3,27012E-08 | -6,40458E-09 | -1,51098E-08 | 2,66531E-08 | -6,72468E-09 | -1,43181E-08 | 1,90131E-08 | -1,06421E-08 |
| 112 | G Vertical | -1,14408E-07 | 4,88533E-09 | -6,95033E-09 | -1,09354E-07 | -1,85919E-09 | -1,08797E-08 | -1,02401E-07 | -2,35962E-08 | -5,15612E-08 |
| 112 | G transversal | -4,77536E-08 | -4,6474E-11 | -8,28494E-11 | -4,17939E-08 | -2,30465E-10 | -4,13967E-10 | -3,55454E-08 | -1,74649E-09 | -3,89974E-09 |
| 113 | D Longitudinal | 8,53159E-08 | 2,57706E-09 | -6,70911E-10 | 6,87949E-08 | 1,64171E-09 | -6,7594E-10 | 5,31872E-08 | 6,71605E-10 | -7,43281E-10 |
| 113 | D Vertical | -2,20883E-08 | -2,24186E-08 | 2,86713E-09 | -1,64435E-08 | -1,66592E-08 | 2,86795E-09 | -1,0768E-08 | -1,08879E-08 | 2,89177E-09 |
| 113 | D transversal | 5,76553E-08 | 1,36558E-07 | -1,70205E-08 | 5,66415E-08 | 1,20052E-07 | -1,70035E-08 | 5,70247E-08 | 1,03782E-07 | -1,65379E-08 |
| 113 | G Longitudinal | 1,6727E-08 | 3,6375E-08 | -7,14188E-09 | 1,64176E-08 | 2,94696E-08 | -7,02424E-09 | 1,74371E-08 | 2,292E-08 | -6,14746E-09 |
| 113 | G Vertical | -1,11081E-07 | -5,3696E-09 | 4,40536E-09 | -1,14744E-07 | -1,98161E-09 | 2,4407E-09 | -1,14355E-07 | 7,12501E-09 | 8,04642E-09 |
| 113 | G transversal | -2,14919E-08 | 5,82448E-10 | -2,2695E-10 | -1,44599E-08 | 4,18161E-10 | -8,72427E-11 | -7,87026E-09 | -1,29712E-10 | -4,3951E-10 |
| 114 | D Longitudinal | 8,53178E-08 | -2,5769E-09 | 6,72021E-10 | 6,87968E-08 | -1,64153E-09 | 6,76219E-10 | 5,3187E-08 | -6,70593E-10 | 7,44759E-10 |
| 114 | D Vertical | 2,20883E-08 | -2,24186E-08 | 2,86699E-09 | 1,64434E-08 | -1,66592E-08 | 2,86792E-09 | 1,07681E-08 | -1,08882E-08 | 2,89128E-09 |
| 114 | D transversal | -5,7655E-08 | 1,36557E-07 | -1,70218E-08 | -5,66409E-08 | 1,20051E-07 | -1,70038E-08 | -5,70233E-08 | 1,0378E-07 | -1,65402E-08 |
| 114 | G Longitudinal | -1,67115E-08 | 3,63757E-08 | -7,1321E-09 | -1,64116E-08 | 2,94696E-08 | -7,02415E-09 | -1,7432E-08 | 2,29191E-08 | -6,14893E-09 |
| 114 | G Vertical | -1,10885E-07 | 5,37901E-09 | -4,26672E-09 | -1,14683E-07 | 1,98089E-09 | -2,44017E-09 | -1,14333E-07 | -7,12131E-09 | -8,04115E-09 |
| 114 | G transversal | -2,15067E-08 | -5,8313E-10 | 2,171E-10 | -1,4465E-08 | -4,18125E-10 | 8,71845E-11 | -7,87183E-09 | 1,29565E-10 | 4,39309E-10 |
| 115 | D Longitudinal | 1,87857E-07 | 2,57691E-09 | -1,28971E-09 | 1,71522E-07 | 1,66049E-09 | -1,2569E-09 | 1,54277E-07 | 9,2612E-10 | -8,57946E-10 |
| 115 | D Vertical | 2,27963E-08 | 2,24186E-08 | -9,22659E-09 | 1,69649E-08 | 1,66601E-08 | -9,22599E-09 | 1,11025E-08 | 1,0914E-08 | -9,20252E-09 |
| 115 | D transversal | -5,23204E-08 | 1,36557E-07 | -1,76603E-08 | -5,3156E-08 | 1,20024E-07 | -1,76935E-08 | -5,43433E-08 | 1,03131E-07 | -1,84092E-08 |
| 115 | G Longitudinal | -1,49023E-08 | 3,63218E-08 | -7,63983E-09 | -1,52421E-08 | 2,919E-08 | -7,90853E-09 | -1,40947E-08 | 2,01377E-08 | -1,22645E-08 |
| 115 | G Vertical | -1,14138E-07 | 4,57633E-09 | -6,86144E-09 | -1,09052E-07 | -2,1172E-09 | -1,07999E-08 | -1,01899E-07 | -2,39312E-08 | -5,17292E-08 |
| 115 | G transversal | -5,02907E-08 | 5,2659E-10 | -4,14365E-10 | -4,30046E-08 | 1,3713E-10 | -6,7198E-10 | -3,53748E-08 | -1,46259E-09 | -3,77279E-09 |
| 116 | D Longitudinal | 1,04913E-07 | 2,38201E-09 | -6,73955E-10 | 8,37037E-08 | 1,46134E-09 | -6,75941E-10 | 6,35022E-08 | 5,19205E-10 | -7,20927E-10 |
| 116 | D Vertical | -2,29244E-08 | -2,30923E-08 | 3,09793E-09 | -1,67788E-08 | -1,68544E-08 | 3,09652E-09 | -1,05641E-08 | -1,05918E-08 | 3,13593E-09 |
| 116 | D transversal | 6,32951E-08 | 1,60425E-07 | -2,17764E-08 | 6,20438E-08 | 1,39321E-07 | -2,17949E-08 | 6,27605E-08 | 1,18755E-07 | -2,09055E-08 |
| 116 | G Longitudinal | 1,59713E-08 | 4,00556E-08 | -8,58289E-09 | 1,64407E-08 | 3,20086E-08 | -8,54324E-09 | 1,64352E-08 | 2,35819E-08 | -9,19419E-09 |
| 116 | G Vertical | -1,10912E-07 | -4,68874E-09 | 4,22219E-09 | -1,14414E-07 | -1,48947E-09 | 2,24901E-09 | -1,14232E-07 | 7,25373E-09 | 7,52541E-09 |
| 116 | G transversal | -2,42669E-08 | 1,38771E-09 | -5,30178E-10 | -1,61331E-08 | 8,17905E-10 | -4,01987E-10 | -8,40184E-09 | -2,08046E-10 | -8,97663E-10 |
| 117 | D Longitudinal | 1,04914E-07 | -2,38185E-09 | 6,75068E-10 | 8,37047E-08 | -1,46115E-09 | 6,76228E-10 | 6,35022E-08 | -5,18309E-10 | 7,22235E-10 |
| 117 | D Vertical | 2,29243E-08 | -2,30923E-08 | 3,09777E-09 | 1,67788E-08 | -1,68545E-08 | 3,09648E-09 | 1,05642E-08 | -1,05922E-08 | 3,13534E-09 |
| 117 | D transversal | -6,32941E-08 | 1,60425E-07 | -2,17774E-08 | -6,20427E-08 | 1,39321E-07 | -2,17951E-08 | -6,27582E-08 | 1,18754E-07 | -2,09081E-08 |
| 117 | G Longitudinal | -1,59573E-08 | 4,00564E-08 | -8,57204E-09 | -1,64374E-08 | 3,20087E-08 | -8,54299E-09 | -1,6436E-08 | 2,35831E-08 | -9,19235E-09 |
| 117 | G Vertical | -1,10714E-07 | 4,69816E-09 | -4,08359E-09 | -1,14352E-07 | 1,48876E-09 | -2,24849E-09 | -1,1421E-07 | -7,2504E-09 | -7,5207E-09 |
| 117 | G transversal | -2,4277E-08 | -1,38838E-09 | 5,20431E-10 | -1,61336E-08 | -8,1786E-10 | 4,01945E-10 | -8,40385E-09 | 2,08032E-10 | 8,97659E-10 |
| 118 | D Longitudinal | 2,15708E-07 | 2,38165E-09 | -1,25675E-09 | 1,94563E-07 | 1,45832E-09 | -1,26559E-09 | 1,72385E-07 | 6,79059E-10 | -1,02763E-09 |
| 118 | D Vertical | 2,30939E-08 | 2,30921E-08 | -1,00026E-08 | 1,67307E-08 | 1,6853E-08 | -1,00043E-08 | 1,03499E-08 | 1,06246E-08 | -9,99059E-09 |

APOYO 1

| DESPLAZAMIENTOS (metros) | | C1 | | | C2 | | | C3 | | |
|---|---|---|---|---|---|---|---|---|---|---|
| Nudo | Desplazamiento | L | T | V | L | T | V | L | T | V |
| 118 | D transversal | -5,72978E-08 | 1,60427E-07 | -2,25285E-08 | -5,8474E-08 | 1,3934E-07 | -2,25034E-08 | -5,97213E-08 | 1,17769E-07 | -2,32827E-08 |
| 118 | G Longitudinal | -1,82164E-08 | 4,00058E-08 | -8,51215E-09 | -1,78336E-08 | 3,18737E-08 | -8,59043E-09 | -1,822E-08 | 2,34446E-08 | -9,61159E-09 |
| 118 | G Vertical | -1,13167E-07 | 3,89503E-09 | -6,65887E-09 | -1,08242E-07 | -2,63498E-09 | -1,06353E-08 | -1,00813E-07 | -2,46479E-08 | -5,22963E-08 |
| 118 | G transversal | -5,51458E-08 | 1,33231E-09 | -9,52101E-10 | -4,67009E-08 | 5,82366E-10 | -1,13386E-09 | -3,79075E-08 | -9,37121E-10 | -3,27166E-09 |
| 119 | D Longitudinal | 1,24795E-07 | 1,42353E-09 | -4,2391E-10 | 9,84901E-08 | 8,57281E-10 | -4,16278E-10 | 7,32728E-08 | 3,4602E-10 | -3,12727E-10 |
| 119 | D Vertical | -2,2846E-08 | -2,34336E-08 | 3,40917E-09 | -1,6207E-08 | -1,66266E-08 | 3,40461E-09 | -9,51541E-09 | -9,80414E-09 | 3,41743E-09 |
| 119 | D transversal | 6,78614E-08 | 1,8649E-07 | -2,75236E-08 | 6,70518E-08 | 1,6004E-07 | -2,76073E-08 | 6,72482E-08 | 1,33695E-07 | -2,76705E-08 |
| 119 | G Longitudinal | 1,37877E-08 | 4,35672E-08 | -1,02996E-08 | 1,52405E-08 | 3,41558E-08 | -1,02259E-08 | 1,38468E-08 | 2,29416E-08 | -1,32568E-08 |
| 119 | G Vertical | -1,10536E-07 | -3,97209E-09 | 4,00492E-09 | -1,13928E-07 | -9,96805E-10 | 2,03132E-09 | -1,14042E-07 | 7,29695E-09 | 6,9131E-09 |
| 119 | G transversal | -2,26833E-08 | 2,87033E-09 | -1,04196E-09 | -1,4362E-08 | 1,61715E-09 | -9,22573E-10 | -6,3918E-09 | -1,9892E-10 | -1,63678E-09 |
| 120 | D Longitudinal | 1,24792E-07 | -1,42336E-09 | 4,25068E-10 | 9,84868E-08 | -8,57098E-10 | 4,16562E-10 | 7,32732E-08 | -3,45279E-10 | 3,13807E-10 |
| 120 | D Vertical | 2,28462E-08 | -2,34336E-08 | 3,40899E-09 | 1,62071E-08 | -1,66266E-08 | 3,40456E-09 | 9,51533E-09 | -9,80456E-09 | 3,4168E-09 |
| 120 | D transversal | -6,78612E-08 | 1,8649E-07 | -2,75239E-08 | -6,70524E-08 | 1,6004E-07 | -2,76074E-08 | -6,72495E-08 | 1,33695E-07 | -2,76709E-08 |
| 120 | G Longitudinal | -1,37765E-08 | 4,35678E-08 | -1,02894E-08 | -1,52395E-08 | 3,41557E-08 | -1,02258E-08 | -1,38524E-08 | 2,29452E-08 | -1,32514E-08 |
| 120 | G Vertical | -1,10337E-07 | 3,98153E-09 | -3,86628E-09 | -1,13864E-07 | 9,96109E-10 | -2,03078E-09 | -1,14018E-07 | -7,294E-09 | -6,90899E-09 |
| 120 | G transversal | -2,26868E-08 | -2,87101E-09 | 1,03198E-09 | -1,43564E-08 | -1,61709E-09 | 9,22548E-10 | -6,39411E-09 | 1,98945E-10 | 1,63683E-09 |
| 121 | D Longitudinal | 2,48056E-07 | 1,42307E-09 | -7,71135E-10 | 2,21685E-07 | 8,17011E-10 | -8,41613E-10 | 1,94219E-07 | -7,48803E-11 | -1,51337E-09 |
| 121 | D Vertical | 2,40921E-08 | 2,34332E-08 | -1,08899E-08 | 1,71995E-08 | 1,66211E-08 | -1,08961E-08 | 1,03706E-08 | 9,80048E-09 | -1,09278E-08 |
| 121 | D transversal | -6,45157E-08 | 1,86495E-07 | -2,79403E-08 | -6,53943E-08 | 1,60164E-07 | -2,77811E-08 | -6,77693E-08 | 1,34325E-07 | -2,6505E-08 |
| 121 | G Longitudinal | -2,01208E-08 | 4,35109E-08 | -9,6784E-09 | -1,88421E-08 | 3,39635E-08 | -9,85072E-09 | -2,04109E-08 | 2,50737E-08 | -9,44292E-09 |
| 121 | G Vertical | -1,11991E-07 | 3,17874E-09 | -6,40937E-09 | -1,0717E-07 | -3,13597E-09 | -1,03972E-08 | -9,94089E-08 | -2,52719E-08 | -5,26825E-08 |
| 121 | G transversal | -6,43046E-08 | 2,81406E-09 | -1,86229E-09 | -5,57064E-08 | 1,38295E-09 | -2,0598E-09 | -4,69001E-08 | -5,01978E-11 | -2,85521E-09 |
| 122 | D Longitudinal | 1,87347E-07 | 1,02556E-09 | -5,04821E-10 | 1,40708E-07 | 3,37451E-10 | -5,71484E-10 | 9,74794E-08 | -3,00432E-11 | -1,76369E-10 |
| 122 | D Vertical | -2,75077E-08 | -2,77585E-08 | 5,50414E-09 | -1,79648E-08 | -1,8095E-08 | 5,4883E-09 | -8,43557E-09 | -9,0074E-09 | 4,45188E-09 |
| 122 | D transversal | 8,0333E-08 | 2,68299E-07 | -5,04799E-08 | 8,07301E-08 | 2,20253E-07 | -5,01371E-08 | 7,45521E-08 | 1,65874E-07 | -5,76196E-08 |
| 122 | G Longitudinal | 1,10346E-08 | 5,74536E-08 | -1,89371E-08 | 1,02076E-08 | 3,94011E-08 | -1,92891E-08 | 7,87212E-10 | 1,6305E-08 | -2,1553E-08 |
| 122 | G Vertical | -1,26962E-07 | -3,24798E-09 | 4,73707E-09 | -1,23438E-07 | -5,82198E-10 | 1,05328E-09 | -1,17403E-07 | 6,05272E-09 | 5,30992E-09 |
| 122 | G transversal | -4,82286E-08 | -1,17746E-09 | 5,48001E-10 | -3,0229E-08 | -5,55058E-10 | 3,88302E-10 | -1,62175E-08 | 1,25094E-10 | 5,52258E-10 |
| 123 | D Longitudinal | 1,8735E-07 | -1,02497E-09 | 5,07558E-10 | 1,40709E-07 | -3,36818E-10 | 5,72315E-10 | 9,74794E-08 | 3,06782E-11 | 1,7705E-10 |
| 123 | D Vertical | 2,75078E-08 | -2,77587E-08 | 5,50313E-09 | 1,79647E-08 | -1,80952E-08 | 5,48806E-09 | 8,43581E-09 | -9,0076E-09 | 4,45162E-09 |
| 123 | D transversal | -8,03322E-08 | 2,68298E-07 | -5,04828E-08 | -8,07286E-08 | 2,20252E-07 | -5,01382E-08 | -7,455E-08 | 1,65879E-07 | -5,76125E-08 |
| 123 | G Longitudinal | -1,10366E-08 | 5,74539E-08 | -1,89403E-08 | -1,02094E-08 | 3,9402E-08 | -1,92881E-08 | -7,82323E-10 | 1,63075E-08 | -2,15495E-08 |
| 123 | G Vertical | -1,26038E-07 | 3,40148E-09 | -2,54884E-09 | -1,23376E-07 | 5,83256E-10 | -1,02762E-09 | -1,17384E-07 | -6,04712E-09 | -5,30055E-09 |
| 123 | G transversal | -4,82295E-08 | 1,1772E-09 | -5,47457E-10 | -3,02372E-08 | 5,54781E-10 | -3,88547E-10 | -1,62169E-08 | -1,25924E-10 | -5,53357E-10 |
| 124 | D Longitudinal | 3,48743E-07 | 1,0261E-09 | -8,66668E-10 | 3,00495E-07 | 5,27862E-10 | -5,95847E-10 | 2,40651E-07 | 1,89476E-10 | 1,31014E-09 |
| 124 | D Vertical | 2,77811E-08 | 2,77589E-08 | -1,48096E-08 | 1,7897E-08 | 1,80848E-08 | -1,48114E-08 | 8,38411E-09 | 9,05871E-09 | -1,38342E-08 |
| 124 | D transversal | -7,82751E-08 | 2,683E-07 | -5,08308E-08 | -7,91503E-08 | 2,19906E-07 | -5,1078E-08 | -7,61841E-08 | 1,65511E-07 | -6,22489E-08 |
| 124 | G Longitudinal | -9,74507E-09 | 5,76934E-08 | -1,87056E-08 | -1,24725E-08 | 4,12399E-08 | -1,54364E-08 | 3,88863E-09 | 1,42296E-08 | -2,49901E-08 |
| 124 | G Vertical | -1,27135E-07 | -3,06981E-10 | -1,71214E-08 | -1,18057E-07 | -3,09473E-09 | -9,8274E-09 | -1,05409E-07 | -2,11597E-08 | -4,34456E-08 |
| 124 | G transversal | -6,64505E-08 | -1,04182E-09 | 1,11779E-09 | -4,81719E-08 | 3,71975E-10 | 2,69982E-09 | -1,34122E-08 | -8,8643E-10 | -8,34423E-10 |
| 125 | D Longitudinal | 2,35252E-07 | 5,71522E-10 | -4,8175E-10 | 1,69232E-07 | 1,57568E-10 | -1,91648E-10 | 1,11379E-07 | 6,91821E-12 | 7,76243E-11 |
| 125 | D Vertical | -3,07199E-08 | -3,07707E-08 | 7,39936E-09 | -1,85454E-08 | -1,86408E-08 | 7,48973E-09 | -8,17879E-09 | -9,01721E-09 | 4,30925E-09 |
| 125 | D transversal | 9,31121E-08 | 3,28217E-07 | -7,13726E-08 | 9,16596E-08 | 2,58977E-07 | -7,35434E-08 | 7,40725E-08 | 1,82054E-07 | -7,70916E-08 |
| 125 | G Longitudinal | 1,11566E-08 | 6,25488E-08 | -2,2508E-08 | 8,78169E-09 | 3,7187E-08 | -2,78474E-08 | -7,8109E-10 | 1,62789E-08 | -1,73351E-08 |

APOYO 1

| DESPLAZAMIENTOS (metros) | | C1 | | | C2 | | | C3 | | |
|---|---|---|---|---|---|---|---|---|---|---|
| Nudo | Desplazamiento | L | T | V | L | T | V | L | T | V |
| 125 | G Vertical | -1,43292E-07 | -3,10602E-09 | 5,66951E-09 | -1,33031E-07 | -5,52374E-10 | 2,32517E-10 | -1,20606E-07 | 4,86854E-09 | 4,22966E-09 |
| 125 | G transversal | -5,08658E-08 | 8,66415E-10 | -9,91183E-11 | -3,01598E-08 | 4,159E-10 | -4,32634E-10 | -1,36843E-08 | -5,95823E-11 | -2,9915E-10 |
| 126 | D Longitudinal | 2,35244E-07 | -5,71015E-10 | 4,83834E-10 | 1,69232E-07 | -1,57139E-10 | 1,92222E-10 | 1,11379E-07 | -4,82408E-12 | -7,47577E-11 |
| 126 | D Vertical | 3,07196E-08 | -3,07711E-08 | 7,39655E-09 | 1,85457E-08 | -1,86414E-08 | 7,48883E-09 | 8,17895E-09 | -9,01684E-09 | 4,30984E-09 |
| 126 | D transversal | -9,31141E-08 | 3,28217E-07 | -7,13758E-08 | -9,16643E-08 | 2,58979E-07 | -7,35409E-08 | -7,40717E-08 | 1,8206E-07 | -7,70816E-08 |
| 126 | G Longitudinal | -1,11557E-08 | 6,25478E-08 | -2,25062E-08 | -8,78478E-09 | 3,71904E-08 | -2,78422E-08 | 7,78939E-10 | 1,62795E-08 | -1,73343E-08 |
| 126 | G Vertical | -1,41639E-07 | 3,40529E-09 | -1,41945E-09 | -1,32969E-07 | 5,55891E-10 | -1,81735E-10 | -1,20592E-07 | -4,86205E-09 | -4,21993E-09 |
| 126 | G transversal | -5,08609E-08 | -8,65743E-10 | 1,00819E-10 | -3,01563E-08 | -4,15307E-10 | 4,33078E-10 | -1,36845E-08 | 5,8159E-11 | 2,97018E-10 |
| 127 | D Longitudinal | 4,20261E-07 | 5,43734E-10 | -7,34292E-10 | 3,51223E-07 | -9,64482E-10 | -2,44457E-09 | 2,57186E-07 | -2,81343E-11 | -2,53697E-10 |
| 127 | D Vertical | 3,05673E-08 | 3,07722E-08 | -1,79678E-08 | 1,82251E-08 | 1,87074E-08 | -1,79443E-08 | 8,52231E-09 | 9,05705E-09 | -1,39195E-08 |
| 127 | D transversal | -9,23198E-08 | 3,28253E-07 | -7,15183E-08 | -9,61249E-08 | 2,61216E-07 | -6,97552E-08 | -7,38077E-08 | 1,82096E-07 | -7,64729E-08 |
| 127 | G Longitudinal | -1,10794E-08 | 6,17877E-08 | -2,3974E-08 | -1,16966E-08 | 3,71975E-08 | -3,08217E-08 | 8,8573E-10 | 1,7143E-08 | -1,25867E-08 |
| 127 | G Vertical | -1,42759E-07 | -3,23264E-09 | -2,81569E-08 | -1,29151E-07 | -2,73094E-09 | -9,60127E-09 | -1,10966E-07 | -1,70387E-08 | -3,50688E-08 |
| 127 | G transversal | -7,29112E-08 | 4,70244E-10 | -1,01191E-09 | -4,59192E-08 | 4,20345E-10 | -1,72531E-09 | -1,69243E-08 | 3,99197E-10 | 1,31594E-09 |
| 128 | D Longitudinal | 2,89641E-07 | 2,46383E-10 | -5,05733E-10 | 2,01868E-07 | -3,79679E-11 | -1,01265E-10 | 1,26197E-07 | 1,12572E-12 | -9,33205E-12 |
| 128 | D Vertical | -3,27305E-08 | -3,25773E-08 | 9,27143E-09 | -1,79802E-08 | -1,85794E-08 | 8,42098E-09 | -8,22688E-09 | -9,01665E-09 | 4,32358E-09 |
| 128 | D transversal | 1,02366E-07 | 3,92737E-07 | -9,62517E-08 | 9,62397E-08 | 2,94322E-07 | -1,03938E-07 | 7,37082E-08 | 1,98512E-07 | -9,3277E-08 |
| 128 | G Longitudinal | 1,04383E-08 | 6,5667E-08 | -2,83467E-08 | 1,19514E-09 | 3,40576E-08 | -3,07227E-08 | -1,94453E-10 | 1,64927E-08 | -1,60787E-08 |
| 128 | G Vertical | -1,59623E-07 | -2,96406E-09 | 6,60194E-09 | -1,42623E-07 | -5,2255E-10 | -5,88245E-10 | -1,23809E-07 | 3,68436E-09 | 3,14941E-09 |
| 128 | G transversal | -5,51943E-08 | 4,87691E-11 | -1,48397E-10 | -3,26146E-08 | 1,77618E-11 | -6,80082E-11 | -1,51994E-08 | 1,9726E-11 | 1,43195E-10 |
| 129 | D Longitudinal | 2,89642E-07 | -2,46544E-10 | 5,08463E-10 | 2,01868E-07 | 3,80441E-11 | 1,02008E-10 | 1,26197E-07 | 2,0028E-12 | 1,3667E-11 |
| 129 | D Vertical | 3,27297E-08 | -3,25784E-08 | 9,26432E-09 | 1,7981E-08 | -1,85798E-08 | 8,42021E-09 | 8,22708E-09 | -9,01619E-09 | 4,32431E-09 |
| 129 | D transversal | -1,02365E-07 | 3,92736E-07 | -9,62565E-08 | -9,62435E-08 | 2,94327E-07 | -1,0393E-07 | -7,37072E-08 | 1,98518E-07 | -9,3268E-08 |
| 129 | G Longitudinal | -1,04409E-08 | 6,56668E-08 | -2,83562E-08 | -1,19703E-09 | 3,40603E-08 | -3,07188E-08 | 1,94866E-10 | 1,64921E-08 | -1,60798E-08 |
| 129 | G Vertical | -1,5724E-07 | 3,4091E-09 | -2,90056E-10 | -1,42563E-07 | 5,28527E-10 | 6,64148E-10 | -1,23799E-07 | -3,67699E-09 | -3,13931E-09 |
| 129 | G transversal | -5,52079E-08 | -4,90132E-11 | 1,41146E-10 | -3,26159E-08 | -1,82097E-11 | 6,67741E-11 | -1,51991E-08 | -2,06851E-11 | -1,44544E-10 |
| 130 | D Longitudinal | 4,93684E-07 | 4,4271E-10 | -4,7292E-10 | 3,89103E-07 | 1,47508E-10 | 1,35291E-09 | 2,72725E-07 | -3,88743E-12 | 2,26406E-11 |
| 130 | D Vertical | 3,22413E-08 | 3,25676E-08 | -2,1119E-08 | 1,79035E-08 | 1,87236E-08 | -2,01755E-08 | 8,49952E-09 | 9,05714E-09 | -1,3912E-08 |
| 130 | D transversal | -1,00839E-07 | 3,92379E-07 | -9,72327E-08 | -9,79032E-08 | 2,93982E-07 | -1,08512E-07 | -7,37231E-08 | 1,9852E-07 | -9,33181E-08 |
| 130 | G Longitudinal | -1,36323E-08 | 6,73947E-08 | -2,46044E-08 | 2,99727E-09 | 3,21972E-08 | -3,3582E-08 | -4,8655E-11 | 1,62273E-08 | -1,78709E-08 |
| 130 | G Vertical | -1,58382E-07 | -6,15829E-09 | -3,91925E-08 | -1,40246E-07 | -2,36715E-09 | -9,37515E-09 | -1,16524E-07 | -1,29177E-08 | -2,66921E-08 |
| 130 | G transversal | -7,67185E-08 | 9,10521E-10 | 1,74928E-09 | -3,39667E-08 | -9,10339E-10 | -1,63618E-09 | -1,51118E-08 | -1,30301E-10 | -5,66783E-10 |
| 131 | D Longitudinal | 3,45139E-07 | 1,69275E-10 | -1,78617E-10 | 2,33211E-07 | 9,16801E-12 | 7,50064E-11 | 1,41188E-07 | 1,6795E-12 | 2,91681E-12 |
| 131 | D Vertical | -3,3633E-08 | -3,31143E-08 | 1,12795E-08 | -1,77268E-08 | -1,85884E-08 | 8,27443E-09 | -8,25725E-09 | -9,01644E-09 | 4,32303E-09 |
| 131 | D transversal | 1,13914E-07 | 4,57764E-07 | -1,28904E-07 | 9,59411E-08 | 3,28015E-07 | -1,32737E-07 | 7,35008E-08 | 2,14942E-07 | -1,09892E-07 |
| 131 | G Longitudinal | 9,49695E-09 | 6,34252E-08 | -3,66987E-08 | -7,18187E-10 | 3,36962E-08 | -2,68418E-08 | -1,5657E-10 | 1,6415E-08 | -1,67501E-08 |
| 131 | G Vertical | -1,75999E-07 | -2,84499E-09 | 7,57088E-09 | -1,52139E-07 | -5,01294E-10 | -1,4091E-09 | -1,26942E-07 | 2,52135E-09 | 2,08572E-09 |
| 131 | G transversal | -5,80201E-08 | 1,44953E-10 | -2,16221E-10 | -3,13198E-08 | -4,18591E-11 | -9,52983E-11 | -1,49455E-08 | -3,33289E-12 | -4,9293E-11 |
| 132 | D Longitudinal | 3,45141E-07 | -1,71275E-10 | 1,68653E-10 | 2,33212E-07 | -8,08287E-12 | -7,30138E-11 | 1,41188E-07 | 2,52947E-12 | 3,0132E-12 |
| 132 | D Vertical | 3,36327E-08 | -3,31168E-08 | 1,12646E-08 | 1,77275E-08 | -1,85883E-08 | 8,27427E-09 | 8,25746E-09 | -9,01595E-09 | 4,32379E-09 |
| 132 | D transversal | -1,13917E-07 | 4,57768E-07 | -1,28894E-07 | -9,59512E-08 | 3,28022E-07 | -1,32727E-07 | -7,35E-08 | 2,14948E-07 | -1,09883E-07 |
| 132 | G Longitudinal | -9,49083E-09 | 6,34365E-08 | -3,66226E-08 | 7,1238E-10 | 3,36971E-08 | -2,68397E-08 | 1,56932E-10 | 1,64148E-08 | -1,67504E-08 |
| 132 | G Vertical | -1,72873E-07 | 3,42956E-09 | 8,46892E-10 | -1,52079E-07 | 5,07367E-10 | 1,51357E-09 | -1,26938E-07 | -2,51321E-09 | -2,07648E-09 |
| 132 | G transversal | -5,79994E-08 | -1,37208E-10 | 2,80236E-10 | -3,13189E-08 | 4,10585E-11 | 9,55782E-11 | -1,49457E-08 | 2,24653E-12 | 4,76168E-11 |

APOYO 1

| DESPLAZAMIENTOS (metros) | | C1 | | | C2 | | | C3 | | |
|---|---|---|---|---|---|---|---|---|---|---|
| Nudo | Desplazamiento | L | T | V | L | T | V | L | T | V |
| 133 | D Longitudinal | 5,7037E-07 | -9,76988E-10 | -2,55587E-09 | 4,22948E-07 | -2,3714E-11 | -2,62909E-10 | 2,88141E-07 | -3,22873E-12 | -5,92768E-12 |
| 133 | D Vertical | 3,22448E-08 | 3,31829E-08 | -2,42416E-08 | 1,80408E-08 | 1,87206E-08 | -2,0254E-08 | 8,46759E-09 | 9,05705E-09 | -1,39128E-08 |
| 133 | D transversal | -1,18377E-07 | 4,60043E-07 | -1,2487E-07 | -9,56835E-08 | 3,28058E-07 | -1,321E-07 | -7,34999E-08 | 2,14946E-07 | -1,09888E-07 |
| 133 | G Longitudinal | -1,25646E-08 | 6,40019E-08 | -3,76658E-08 | 1,03306E-09 | 3,45386E-08 | -2,18851E-08 | 2,32822E-10 | 1,64962E-08 | -1,61767E-08 |
| 133 | G Vertical | -1,74241E-07 | -9,11339E-09 | -5,0456E-08 | -1,51045E-07 | -2,05494E-09 | -9,46388E-09 | -1,21975E-07 | -8,87236E-09 | -1,84739E-08 |
| 133 | G transversal | -7,05366E-08 | 4,5022E-10 | -5,17548E-10 | -3,33933E-08 | 3,99369E-10 | 1,7291E-09 | -1,54957E-08 | 4,82627E-11 | 2,09923E-10 |
| 134 | D Longitudinal | 6,75033E-07 | -4,90166E-12 | 3,57041E-11 | 4,52459E-07 | -2,22153E-12 | -3,57544E-12 | 2,78077E-07 | -1,31075E-12 | -2,27541E-12 |
| 134 | D Vertical | -5,75737E-09 | 6,0732E-09 | -1,10541E-08 | -3,25866E-09 | 3,45812E-09 | -8,57722E-09 | -1,52488E-09 | 1,66233E-09 | -6,45424E-09 |
| 134 | D transversal | 2,13087E-08 | 6,57257E-07 | -2,50521E-07 | 1,73478E-08 | 4,39629E-07 | -2,17706E-07 | 1,33673E-08 | 2,69005E-07 | -1,6442E-07 |
| 134 | G Longitudinal | -1,01668E-09 | 6,02557E-08 | -3,49742E-08 | -1,28204E-11 | 3,39165E-08 | -2,59378E-08 | 5,94607E-11 | 1,642E-08 | -1,65975E-08 |
| 134 | G Vertical | -2,12727E-07 | -7,94473E-11 | -1,5648E-09 | -1,73645E-07 | 6,21823E-12 | -5,63477E-12 | -1,33759E-07 | 5,56523E-12 | 8,8367E-12 |
| 134 | G transversal | -5,99227E-08 | -5,69216E-11 | -5,63516E-10 | -3,25745E-08 | 3,28528E-13 | -8,49738E-12 | -1,51547E-08 | 5,02323E-12 | 1,07319E-11 |
| 135 | D Longitudinal | 6,75033E-07 | -4,88184E-12 | 3,56749E-11 | 4,52459E-07 | -2,22806E-12 | -3,60176E-12 | 2,78077E-07 | -1,36848E-12 | -2,39494E-12 |
| 135 | D Vertical | 5,8202E-09 | 6,08245E-09 | -1,09628E-08 | 3,26078E-09 | 3,45822E-09 | -8,57538E-09 | 1,52671E-09 | 1,66237E-09 | -6,45421E-09 |
| 135 | D transversal | -2,16155E-08 | 6,57238E-07 | -2,50862E-07 | -1,73775E-08 | 4,3963E-07 | -2,17708E-07 | -1,33652E-08 | 2,69006E-07 | -1,64418E-07 |
| 135 | G Longitudinal | 1,60737E-09 | 6,03035E-08 | -3,44533E-08 | 1,51678E-11 | 3,39167E-08 | -2,59269E-08 | -5,88443E-11 | 1,64199E-08 | -1,65978E-08 |
| 135 | G Vertical | -2,12724E-07 | -8,67323E-11 | -1,59706E-09 | -1,73645E-07 | 5,63368E-12 | -9,86075E-12 | -1,33759E-07 | 5,81E-12 | 9,30691E-12 |
| 135 | G transversal | -5,99343E-08 | -5,63759E-11 | -5,84985E-10 | -3,25739E-08 | -1,06888E-12 | -1,47377E-11 | -1,51537E-08 | -5,38202E-12 | -1,07491E-11 |
| 136 | D Longitudinal | 6,32849E-07 | -1,97545E-11 | -2,59836E-10 | 4,17725E-07 | -1,05561E-12 | -4,72603E-12 | 2,51307E-07 | -1,97697E-13 | -5,29168E-13 |
| 136 | D Vertical | 5,93313E-09 | -5,97647E-09 | -4,05341E-09 | 3,24823E-09 | -3,32513E-09 | -3,38908E-09 | 1,51473E-09 | -1,62165E-09 | -3,13496E-09 |
| 136 | D transversal | -2,1615E-08 | 6,57239E-07 | -2,50861E-07 | -1,73775E-08 | 4,3963E-07 | -2,17708E-07 | -1,33652E-08 | 2,69006E-07 | -1,64418E-07 |
| 136 | G Longitudinal | 1,77449E-09 | 6,02956E-08 | -3,44902E-08 | 2,1357E-11 | 3,39167E-08 | -2,59331E-08 | -6,80209E-11 | 1,64242E-08 | -1,65876E-08 |
| 136 | G Vertical | -2,12778E-07 | -8,12873E-11 | -1,57654E-09 | -1,73645E-07 | 6,0858E-12 | -6,4896E-12 | -1,33757E-07 | 5,22093E-12 | 8,2618E-12 |
| 136 | G transversal | -5,73585E-08 | 1,76266E-12 | 7,07085E-11 | -3,24998E-08 | -5,21577E-13 | 2,75423E-13 | -1,52548E-08 | 1,71373E-12 | 1,24394E-12 |
| 137 | D Longitudinal | 1,12357E-09 | 1,06505E-16 | -8,66048E-13 | 1,56929E-09 | -2,92275E-15 | -8,71643E-13 | 2,01508E-09 | -1,43418E-13 | -1,12399E-12 |
| 137 | D Vertical | 9,92167E-10 | 3,08786E-14 | -9,72072E-11 | 7,99442E-10 | 1,86159E-13 | -9,69128E-11 | 6,0848E-10 | -2,24581E-13 | -9,69946E-11 |
| 137 | D transversal | -3,79353E-09 | 1,22817E-09 | 4,9677E-10 | -3,78385E-09 | 1,7013E-09 | 4,96775E-10 | -3,78602E-09 | 2,17437E-09 | 4,96674E-10 |
| 137 | G Longitudinal | -1,27793E-10 | 1,34916E-09 | -2,5214E-10 | -1,27674E-10 | 1,10901E-09 | -2,5206E-10 | -1,37242E-10 | 8,69646E-10 | -2,50296E-10 |
| 137 | G Vertical | -4,05469E-09 | -1,3708E-10 | 2,18347E-11 | -4,06487E-09 | -1,16286E-10 | 2,17893E-11 | -4,06229E-09 | -9,58214E-11 | 2,10309E-11 |
| 137 | G transversal | -4,69938E-10 | -1,53078E-13 | 7,91373E-11 | -3,79931E-10 | -8,0331E-13 | 7,7984E-11 | -2,92562E-10 | -2,44777E-12 | 7,25053E-11 |
| 138 | D Longitudinal | -2,45084E-09 | 1,60733E-15 | 1,46548E-14 | -2,01413E-09 | 1,76976E-15 | 2,83953E-15 | -1,56695E-09 | 1,75944E-14 | 2,57823E-14 |
| 138 | D Vertical | -1,93103E-16 | 7,46459E-11 | 3,59007E-11 | -1,1435E-16 | 1,09696E-10 | 3,58953E-11 | -1,43718E-16 | 1,4474E-10 | 3,58693E-11 |
| 138 | D transversal | -2,77288E-16 | 1,2285E-09 | 4,95882E-10 | -5,4542E-16 | 1,70155E-09 | 4,95874E-10 | -1,16696E-15 | 2,17444E-09 | 4,95548E-10 |
| 138 | G Longitudinal | 4,32695E-14 | -7,31024E-10 | 2,92288E-12 | 8,15399E-15 | -6,54046E-10 | 3,56646E-12 | -5,93322E-15 | -5,81378E-10 | -2,82422E-12 |
| 138 | G Vertical | -2,96936E-09 | -1,29836E-15 | -1,05617E-14 | -2,93911E-09 | -1,65851E-15 | -2,61593E-15 | -2,91847E-09 | -1,56228E-14 | -2,28846E-14 |
| 138 | G transversal | -1,68445E-09 | -6,08594E-16 | -3,50117E-15 | -1,39716E-09 | -8,335E-16 | -1,27615E-15 | -1,11983E-09 | -4,17135E-15 | -6,10289E-15 |

| DESPLAZAMIENTOS (metros) | | C4 | | | C5 | | | C6 | | |
|---|---|---|---|---|---|---|---|---|---|---|
| Nudo | Desplazamiento | L | T | V | L | T | V | L | T | V |
| 1 | D Longitudinal | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 1 | D Vertical | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 1 | D transversal | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 1 | G Longitudinal | -1,43696E-08 | 2,19294E-09 | -2,98769E-10 | -1,40235E-08 | 2,48486E-09 | -2,21632E-11 | -1,35701E-08 | 1,72837E-09 | 2,82848E-09 |
| 1 | G Vertical | 1,16932E-07 | -8,78392E-09 | -8,031E-09 | 1,12414E-07 | -1,35145E-09 | -1,19633E-08 | 1,06136E-07 | 2,09887E-08 | -5,24937E-08 |
| 1 | G transversal | -2,09294E-08 | 5,54825E-10 | 5,50037E-10 | -2,20484E-08 | 4,066E-11 | 8,26979E-10 | -2,30076E-08 | -1,5231E-09 | 3,68089E-09 |
| 2 | D Longitudinal | 2,85116E-07 | -5,84692E-11 | -1,13071E-11 | 2,53073E-07 | -7,89795E-11 | 2,26182E-11 | 2,19491E-07 | -1,19027E-09 | 2,05526E-09 |
| 2 | D Vertical | -2,34947E-08 | -2,3654E-08 | -1,17215E-08 | -1,59611E-08 | -1,6336E-08 | -1,17183E-08 | -8,63607E-09 | -9,0489E-09 | -1,16534E-08 |
| 2 | D transversal | -7,07439E-08 | 2,14918E-07 | 3,45181E-08 | -7,10896E-08 | 1,82072E-07 | 3,45061E-08 | -7,46286E-08 | 1,50268E-07 | 3,26429E-08 |
| 2 | G Longitudinal | -1,46693E-08 | 4,74445E-08 | 1,22047E-08 | -1,35203E-08 | 3,52761E-08 | 1,31802E-08 | -1,3976E-08 | 2,1422E-08 | 1,89451E-08 |
| 2 | G Vertical | 1,11809E-07 | -2,6016E-09 | -6,17326E-09 | 1,07168E-07 | 3,48121E-09 | -1,00965E-08 | 9,95538E-08 | 2,54414E-08 | -5,23218E-08 |
| 2 | G transversal | -6,67173E-08 | 1,89064E-09 | 1,22133E-09 | -5,58412E-08 | 7,48555E-10 | 1,80754E-09 | -4,25155E-08 | -3,37827E-10 | 3,37649E-09 |
| 3 | D Longitudinal | 6,32582E-07 | 2,04917E-10 | -1,72964E-09 | 4,5576E-07 | -2,89445E-12 | -3,98468E-11 | 3,03506E-07 | -2,76351E-12 | 3,84523E-12 |
| 3 | D Vertical | -3,16693E-08 | -3,32015E-08 | -2,64712E-08 | -1,80384E-08 | -1,8721E-08 | -2,02466E-08 | -8,44467E-09 | -9,05719E-09 | -1,39125E-08 |
| 3 | D transversal | -1,21647E-07 | 5,19029E-07 | 1,73625E-07 | -9,56284E-08 | 3,61961E-07 | 1,58358E-07 | -7,33969E-08 | 2,31377E-07 | 1,26462E-07 |
| 3 | G Longitudinal | 1,46214E-09 | 5,6546E-08 | 5,39139E-08 | -3,05395E-10 | 3,35846E-08 | 2,84146E-08 | 9,59586E-11 | 1,63573E-08 | 1,68526E-08 |
| 3 | G Vertical | 1,90066E-07 | 1,20677E-08 | -6,17114E-08 | 1,61844E-07 | 1,74276E-09 | -9,55256E-09 | 1,27428E-07 | 4,82707E-09 | -1,0256E-08 |
| 3 | G transversal | -5,78191E-08 | -1,99602E-09 | 6,27807E-09 | -3,24297E-08 | -2,35972E-10 | 1,34106E-09 | -1,52461E-08 | -6,61256E-11 | 1,93464E-10 |
| 4 | D Longitudinal | 1,91712E-08 | 5,03818E-12 | -2,59162E-11 | -3,69012E-08 | 1,02025E-11 | -1,45599E-11 | -6,5862E-08 | 1,0538E-11 | -1,48175E-11 |
| 4 | D Vertical | -2,59193E-11 | 1,28838E-07 | 7,28216E-08 | -2,16927E-12 | 7,12038E-08 | 4,78146E-08 | 1,47214E-12 | 3,44798E-08 | 3,00252E-08 |
| 4 | D transversal | 5,03846E-12 | 4,57705E-07 | 1,28838E-07 | -5,35023E-12 | 3,28015E-07 | 1,32758E-07 | 2,53373E-13 | 2,14945E-07 | 1,09887E-07 |
| 4 | G Longitudinal | -2,65017E-11 | 6,17523E-08 | 3,97802E-08 | -6,5118E-13 | 3,39454E-08 | 2,55109E-08 | 1,18827E-12 | 1,64283E-08 | 1,65817E-08 |
| 4 | G Vertical | 2,1257E-07 | -1,53401E-10 | -1,21994E-10 | 1,74131E-07 | -1,36764E-11 | 7,30517E-11 | 1,33541E-07 | -4,98024E-12 | 7,44189E-12 |
| 4 | G transversal | -7,2419E-08 | -4,25756E-11 | -9,09264E-11 | -3,16037E-08 | -2,86049E-12 | 2,23194E-11 | -1,48246E-08 | -7,5948E-13 | 1,45751E-12 |
| 5 | D Longitudinal | 9,58744E-07 | -5,55594E-11 | 8,7062E-11 | 6,9254E-07 | -1,40304E-11 | 1,80887E-11 | 4,95191E-07 | -1,25395E-11 | 1,78319E-11 |
| 5 | D Vertical | -8,7062E-11 | -1,09631E-07 | -1,75018E-07 | 8,11099E-12 | -7,12587E-08 | -6,11139E-08 | 1,41657E-12 | -3,45244E-08 | -3,96026E-08 |
| 5 | D transversal | -5,55594E-11 | 4,69692E-07 | 1,09631E-07 | -4,54252E-12 | 3,28062E-07 | 1,32013E-07 | 6,60282E-13 | 2,14943E-07 | 1,09892E-07 |
| 5 | G Longitudinal | 1,50911E-10 | 3,55465E-08 | 1,39478E-07 | -3,80986E-12 | 3,38958E-08 | 2,63604E-08 | -1,14141E-12 | 1,64312E-08 | 1,65727E-08 |
| 5 | G Vertical | 2,79689E-07 | 4,79957E-09 | -6,46777E-09 | 1,73903E-07 | -2,20585E-11 | 2,29707E-10 | 1,33539E-07 | -5,18101E-12 | 8,49653E-12 |
| 5 | G transversal | -2,76113E-08 | -1,69304E-09 | 2,31076E-09 | -3,28967E-08 | 4,78448E-12 | -7,58758E-11 | -1,55812E-08 | -9,34499E-13 | 1,06695E-12 |
| 6 | D Longitudinal | -3,69012E-08 | -5,35018E-12 | -2,16969E-12 | -9,31339E-08 | 2,98586E-12 | -7,93347E-12 | -9,70925E-08 | 1,03651E-11 | -1,43614E-11 |
| 6 | D Vertical | -1,45599E-11 | 1,32758E-07 | 4,78146E-08 | -7,93346E-12 | 7,34746E-08 | 5,55752E-08 | 5,08399E-13 | 3,45296E-08 | 2,93636E-08 |
| 6 | D transversal | 1,02025E-11 | 3,28015E-07 | 7,12038E-08 | 2,98586E-12 | 2,58922E-07 | 7,34746E-08 | 9,28946E-14 | 1,82055E-07 | 7,71138E-08 |
| 6 | G Longitudinal | -2,82575E-11 | 6,59437E-08 | 2,62225E-08 | -1,28499E-11 | 3,53722E-08 | 3,10983E-08 | 8,89626E-13 | 1,64601E-08 | 1,61645E-08 |
| 6 | G Vertical | 1,79975E-07 | -4,93573E-10 | -4,18194E-10 | 1,71064E-07 | -1,3909E-10 | -1,61278E-10 | 1,34364E-07 | -1,10253E-11 | 7,43417E-11 |
| 6 | G transversal | -7,71109E-08 | -1,73225E-10 | -1,43538E-10 | -4,281E-08 | -4,36286E-11 | -6,38472E-11 | -1,42373E-08 | -2,48524E-12 | 2,43138E-11 |
| 7 | D Longitudinal | 6,9254E-07 | -4,54252E-12 | -8,11099E-12 | 6,75788E-07 | -5,27309E-11 | 7,2568E-11 | 4,65143E-07 | -1,31444E-11 | 1,73557E-11 |
| 7 | D Vertical | -1,80887E-11 | -1,32013E-07 | -6,11139E-08 | -7,2568E-11 | -5,45537E-08 | -1,5294E-07 | 3,22101E-13 | -3,45008E-08 | -4,01743E-08 |
| 7 | D transversal | -1,40304E-11 | 3,28062E-07 | 7,12587E-08 | -5,27309E-11 | 2,70862E-07 | 5,45537E-08 | 7,31098E-13 | 1,82102E-07 | 7,63895E-08 |
| 7 | G Longitudinal | 3,69866E-11 | 6,54598E-08 | 2,80846E-08 | 1,39341E-10 | 9,35029E-09 | 1,29303E-07 | -3,4921E-13 | 1,64169E-08 | 1,69356E-08 |
| 7 | G Vertical | 1,80264E-07 | 4,70489E-10 | 6,33522E-10 | 2,37947E-07 | 4,81371E-09 | -6,58963E-09 | 1,34136E-07 | -2,60407E-11 | 2,21263E-10 |
| 7 | G transversal | -3,15773E-08 | -1,65473E-10 | -2,20719E-10 | -4,77478E-09 | -1,69124E-09 | 2,31565E-09 | -1,55907E-08 | 6,39135E-12 | -7,37124E-11 |
| 8 | D Longitudinal | -6,5862E-08 | 2,53423E-13 | 1,4716E-12 | -9,70925E-08 | 9,28944E-14 | 5,08389E-13 | -1,18677E-07 | 3,2486E-12 | -3,50393E-12 |

APOYO 1

| DESPLAZAMIENTOS (metros) | | C4 | | | C5 | | | C6 | | |
|---|---|---|---|---|---|---|---|---|---|---|
| Nudo | Desplazamiento | L | T | V | L | T | V | L | T | V |
| 8 | D Vertical | -1,48175E-11 | 1,09887E-07 | 3,00252E-08 | -1,43614E-11 | 7,71138E-08 | 2,93636E-08 | -3,50393E-12 | 3,70277E-08 | 3,62653E-08 |
| 8 | D transversal | 1,0538E-11 | 2,14945E-07 | 3,44798E-08 | 1,03651E-11 | 1,82055E-07 | 3,45296E-08 | 3,2486E-12 | 1,4781E-07 | 3,70277E-08 |
| 8 | G Longitudinal | -2,94012E-11 | 5,59561E-08 | 1,71607E-08 | -2,85837E-11 | 3,93518E-08 | 1,67323E-08 | -1,05462E-11 | 1,8031E-08 | 2,11783E-08 |
| 8 | G Vertical | 1,40674E-07 | 4,92453E-11 | -8,09946E-12 | 1,40066E-07 | 4,13764E-11 | 5,31184E-12 | 1,31583E-07 | -1,19023E-10 | 3,03767E-10 |
| 8 | G transversal | -6,56233E-08 | 1,68841E-11 | 1,14811E-13 | -5,17894E-08 | 1,39912E-11 | 2,56849E-12 | -2,58658E-08 | -3,7003E-11 | 9,9503E-11 |
| 9 | D Longitudinal | 4,95191E-07 | 6,60282E-13 | -1,41657E-12 | 4,65143E-07 | 7,31098E-13 | -3,22101E-13 | 4,83469E-07 | -5,07424E-11 | 7,59648E-11 |
| 9 | D Vertical | -1,78319E-11 | -1,09892E-07 | -3,96026E-08 | -1,73557E-11 | -7,63895E-08 | -4,01743E-08 | -7,59648E-11 | -1,75799E-08 | -1,32177E-07 |
| 9 | D transversal | -1,25395E-11 | 2,14943E-07 | 3,45244E-08 | -1,31444E-11 | 1,82102E-07 | 3,45008E-08 | -5,07424E-11 | 1,59994E-07 | 1,75799E-08 |
| 9 | G Longitudinal | 3,42841E-11 | 5,59598E-08 | 1,8227E-08 | 3,55859E-11 | 3,88804E-08 | 1,86028E-08 | 1,39875E-10 | -8,27136E-09 | 1,19955E-07 |
| 9 | G Vertical | 1,39328E-07 | -4,7961E-11 | -9,86642E-12 | 1,41216E-07 | -6,70246E-11 | 2,08894E-11 | 1,98816E-07 | 4,61921E-09 | -6,92597E-09 |
| 9 | G transversal | -2,19534E-08 | 1,69443E-11 | 1,52901E-12 | -5,97376E-09 | 2,33204E-11 | -7,13247E-12 | 1,24248E-08 | -1,6233E-09 | 2,43381E-09 |
| 10 | D Longitudinal | 6,8392E-07 | 4,6656E-13 | -1,10737E-11 | 4,51684E-07 | -1,52591E-12 | 1,86865E-12 | 2,72442E-07 | -6,2114E-13 | 1,24346E-12 |
| 10 | D Vertical | -1,67866E-12 | -5,03737E-11 | -7,53336E-09 | -9,4077E-13 | -6,65184E-11 | -5,98271E-09 | -9,23412E-13 | -2,03289E-11 | -4,79464E-09 |
| 10 | D transversal | -4,43688E-13 | 6,87988E-07 | 2,68416E-07 | -1,42527E-11 | 4,56927E-07 | 2,30934E-07 | 9,85071E-13 | 2,7738E-07 | 1,72883E-07 |
| 10 | G Longitudinal | 2,98166E-10 | 6,02735E-08 | 3,47577E-08 | 1,23528E-12 | 3,39165E-08 | 2,59367E-08 | -1,36329E-13 | 1,64201E-08 | 1,6596E-08 |
| 10 | G Vertical | 2,11282E-07 | 1,24706E-10 | -2,00257E-09 | 1,73771E-07 | -5,48429E-12 | -1,69929E-11 | 1,33867E-07 | -5,82953E-12 | 9,54156E-12 |
| 10 | G transversal | -5,86542E-08 | -2,35612E-11 | 2,25303E-10 | -3,25332E-08 | -2,26845E-13 | 4,15418E-12 | -1,52014E-08 | -3,11257E-13 | 4,06951E-13 |
| 11 | D Longitudinal | 6,41701E-07 | -2,52391E-11 | 3,97323E-10 | 4,16927E-07 | -4,37954E-13 | 5,43611E-12 | 2,45666E-07 | 5,46495E-13 | -6,72172E-13 |
| 11 | D Vertical | 5,81132E-11 | 1,20044E-08 | -5,8206E-10 | -6,91687E-13 | 6,71678E-09 | -7,95446E-10 | -9,43347E-13 | 3,26374E-09 | -1,47552E-09 |
| 11 | D transversal | -4,24581E-13 | 6,87988E-07 | 2,68416E-07 | -1,42525E-11 | 4,56927E-07 | 2,30934E-07 | 9,84611E-13 | 2,7738E-07 | 1,72883E-07 |
| 11 | G Longitudinal | 2,96268E-10 | 6,02755E-08 | 3,47431E-08 | 1,21217E-12 | 3,39165E-08 | 2,59355E-08 | -1,84351E-14 | 1,64198E-08 | 1,65968E-08 |
| 11 | G Vertical | 2,11044E-07 | 1,27749E-10 | -2,0338E-09 | 1,73781E-07 | -5,44267E-12 | -1,76591E-11 | 1,33882E-07 | -5,83227E-12 | 9,564E-12 |
| 11 | G transversal | -5,94114E-08 | -1,74963E-11 | 1,65912E-10 | -3,25037E-08 | -1,17477E-13 | 2,84316E-12 | -1,51564E-08 | -3,30114E-13 | 4,75442E-13 |
| 12 | D Longitudinal | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 12 | D Vertical | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 12 | D transversal | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 12 | G Longitudinal | -1,40822E-08 | 2,24931E-09 | -5,19887E-10 | -1,43088E-08 | 2,77285E-09 | -6,48862E-10 | -1,42409E-08 | 2,88663E-09 | -2,41375E-10 |
| 12 | G Vertical | 1,15413E-07 | -9,58511E-09 | -4,65332E-09 | 1,18655E-07 | -5,44551E-09 | -2,81972E-09 | 1,17495E-07 | 4,51165E-09 | -8,59831E-09 |
| 12 | G transversal | 1,58628E-08 | -6,11265E-10 | -3,23776E-10 | 1,47208E-08 | -3,29004E-10 | -1,94656E-10 | 1,32329E-08 | 3,63115E-10 | -6,01847E-10 |
| 13 | D Longitudinal | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 13 | D Vertical | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 13 | D transversal | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 13 | G Longitudinal | 1,40959E-08 | 2,24865E-09 | -5,10224E-10 | 1,43131E-08 | 2,77291E-09 | -6,48836E-10 | 1,42424E-08 | 2,88641E-09 | -2,4107E-10 |
| 13 | G Vertical | 1,15608E-07 | 9,57577E-09 | 4,79116E-09 | 1,18715E-07 | 5,44625E-09 | 2,82022E-09 | 1,17516E-07 | -4,51554E-09 | 8,60387E-09 |
| 13 | G transversal | 1,58766E-08 | 6,10597E-10 | 3,33565E-10 | 1,47251E-08 | 3,29043E-10 | 1,94712E-10 | 1,32344E-08 | -3,63524E-10 | 6,02437E-10 |
| 14 | D Longitudinal | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 14 | D Vertical | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 14 | D transversal | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 14 | G Longitudinal | 1,4372E-08 | 2,19289E-09 | -2,94884E-10 | 1,40148E-08 | 2,48496E-09 | -2,22764E-11 | 1,35524E-08 | 1,7278E-09 | 2,82933E-09 |
| 14 | G Vertical | 1,16965E-07 | 8,78307E-09 | 8,08671E-09 | 1,12289E-07 | 1,35271E-09 | 1,19619E-08 | 1,05884E-07 | -2,09977E-08 | 5,25071E-08 |
| 14 | G transversal | -2,09317E-08 | -5,54755E-10 | -5,54043E-10 | -2,20397E-08 | -4,07351E-11 | -8,26896E-10 | -2,29899E-08 | 1,52387E-09 | -3,68203E-09 |
| 15 | D Longitudinal | 1,44684E-07 | 5,94753E-11 | -7,47217E-12 | 1,12923E-07 | 4,87533E-11 | 7,72185E-12 | 8,23946E-08 | -1,33875E-10 | 3,46562E-10 |
| 15 | D Vertical | -2,35516E-08 | 2,36539E-08 | 3,64997E-09 | -1,6302E-08 | 1,63345E-08 | 3,6497E-09 | -9,07939E-09 | 9,07395E-09 | 3,54672E-09 |
| 15 | D transversal | -7,09743E-08 | 2,1492E-07 | 3,44813E-08 | -7,09205E-08 | 1,82036E-07 | 3,45254E-08 | -6,98563E-08 | 1,47859E-07 | 3,69016E-08 |

APOYO 1

| DESPLAZAMIENTOS (metros) | | C4 | | | C5 | | | C6 | | |
|---|---|---|---|---|---|---|---|---|---|---|
| Nudo | Desplazamiento | L | T | V | L | T | V | L | T | V |
| 15 | G Longitudinal | -1,11171E-08 | 4,75273E-08 | 1,2416E-08 | -1,26094E-08 | 3,60305E-08 | 1,20519E-08 | -1,02959E-08 | 2,10958E-08 | 1,70079E-08 |
| 15 | G Vertical | 1,10474E-07 | -3,40245E-09 | -3,6825E-09 | 1,13847E-07 | -6,09223E-10 | -1,86788E-09 | 1,14179E-07 | 7,2616E-09 | -6,40836E-09 |
| 15 | G transversal | -2,79006E-08 | -1,95151E-09 | -6,59878E-10 | -1,78218E-08 | -1,18616E-09 | -5,21352E-10 | -8,4019E-09 | 5,80035E-11 | -1,10065E-09 |
| 16 | D Longitudinal | 1,44694E-07 | -5,93055E-11 | 6,65953E-12 | 1,12932E-07 | -4,85417E-11 | -8,03745E-12 | 8,2394E-08 | 1,34444E-10 | -3,47375E-10 |
| 16 | D Vertical | 2,35511E-08 | 2,36539E-08 | 3,65024E-09 | 1,63015E-08 | 1,63344E-08 | 3,64977E-09 | 9,07964E-09 | 9,07354E-09 | 3,54731E-09 |
| 16 | D transversal | 7,0972E-08 | 2,1492E-07 | 3,448E-08 | 7,09182E-08 | 1,82036E-07 | 3,45251E-08 | 6,98515E-08 | 1,47857E-07 | 3,69047E-08 |
| 16 | G Longitudinal | 1,11256E-08 | 4,75272E-08 | 1,24215E-08 | 1,26124E-08 | 3,60311E-08 | 1,20512E-08 | 1,02951E-08 | 2,1092E-08 | 1,70135E-08 |
| 16 | G Vertical | 1,10673E-07 | 3,39299E-09 | 3,82142E-09 | 1,1391E-07 | 6,09889E-10 | 1,86846E-09 | 1,14202E-07 | -7,26431E-09 | 6,41212E-09 |
| 16 | G transversal | -2,78939E-08 | 1,9509E-09 | 6,67393E-10 | -1,78229E-08 | 1,18603E-09 | 5,21587E-10 | -8,40057E-09 | -5,78662E-11 | 1,10035E-09 |
| 17 | D Longitudinal | 2,85128E-07 | 5,82764E-11 | 1,23726E-11 | 2,53086E-07 | 7,87522E-11 | -2,22658E-11 | 2,19541E-07 | 1,18925E-09 | -2,05375E-09 |
| 17 | D Vertical | 2,34941E-08 | -2,3654E-08 | -1,17218E-08 | 1,59604E-08 | -1,63359E-08 | -1,17184E-08 | 8,6331E-09 | -9,04825E-09 | -1,16544E-08 |
| 17 | D transversal | 7,07458E-08 | 2,14918E-07 | 3,45167E-08 | 7,1092E-08 | 1,82072E-07 | 3,45059E-08 | 7,46336E-08 | 1,50271E-07 | 3,26392E-08 |
| 17 | G Longitudinal | 1,46712E-08 | 4,74445E-08 | 1,22064E-08 | 1,35147E-08 | 3,52755E-08 | 1,31811E-08 | 1,3967E-08 | 2,14176E-08 | 1,89516E-08 |
| 17 | G Vertical | 1,11839E-07 | 2,60081E-09 | 6,22931E-09 | 1,0704E-07 | -3,47983E-09 | 1,00949E-08 | 9,92898E-08 | -2,54514E-08 | 5,23367E-08 |
| 17 | G transversal | -6,67206E-08 | -1,8905E-09 | -1,22466E-09 | -5,58313E-08 | -7,4839E-10 | -1,80784E-09 | -4,25248E-08 | 3,4094E-10 | -3,38115E-09 |
| 18 | D Longitudinal | 4,06335E-07 | 4,36062E-11 | -1,06523E-10 | 2,65406E-07 | 2,35836E-12 | -1,86433E-11 | 1,56233E-07 | 2,11798E-12 | -2,99911E-12 |
| 18 | D Vertical | -3,33022E-08 | 3,30605E-08 | 1,215E-08 | -1,77536E-08 | 1,85879E-08 | 8,28773E-09 | -8,28046E-09 | 9,01611E-09 | 4,32332E-09 |
| 18 | D transversal | -1,19763E-07 | 5,19486E-07 | 1,67999E-07 | -9,56036E-08 | 3,61963E-07 | 1,58261E-07 | -7,33964E-08 | 2,31376E-07 | 1,26465E-07 |
| 18 | G Longitudinal | -3,79137E-09 | 6,08381E-08 | 4,03793E-08 | 2,67187E-10 | 3,40616E-08 | 2,49138E-08 | 1,09929E-10 | 1,6423E-08 | 1,651E-08 |
| 18 | G Vertical | 1,8854E-07 | -3,44901E-09 | 1,97391E-09 | 1,61596E-07 | -4,86187E-10 | 2,36269E-09 | 1,30075E-07 | 1,34941E-09 | -1,01363E-09 |
| 18 | G transversal | -6,28758E-08 | -2,72723E-10 | 5,651E-11 | -3,27228E-08 | -3,8956E-11 | 1,98903E-10 | -1,51245E-08 | 1,13546E-11 | 1,3916E-11 |
| 19 | D Longitudinal | 4,0635E-07 | -5,27235E-11 | 1,65152E-10 | 2,65408E-07 | -1,04866E-12 | 1,72339E-11 | 1,56233E-07 | 3,08875E-12 | -4,49713E-12 |
| 19 | D Vertical | 3,33026E-08 | 3,30572E-08 | 1,21721E-08 | 1,77531E-08 | 1,8588E-08 | 8,28796E-09 | 8,28034E-09 | 9,01663E-09 | 4,32251E-09 |
| 19 | D transversal | 1,19745E-07 | 5,19476E-07 | 1,68046E-07 | 9,55909E-08 | 3,61957E-07 | 1,58271E-07 | 7,33988E-08 | 2,3137E-07 | 1,26473E-07 |
| 19 | G Longitudinal | 3,71265E-09 | 6,08468E-08 | 4,02426E-08 | -2,68612E-10 | 3,40626E-08 | 2,49094E-08 | -1,07536E-10 | 1,64235E-08 | 1,65091E-08 |
| 19 | G Vertical | 1,92408E-07 | 2,7267E-09 | 8,53048E-09 | 1,61655E-07 | 4,80027E-10 | -2,23005E-09 | 1,30074E-07 | -1,35832E-09 | 1,02203E-09 |
| 19 | G transversal | -6,28547E-08 | 2,68848E-10 | 8,03545E-12 | -3,27245E-08 | 3,89047E-11 | -1,9701E-10 | -1,51242E-08 | -1,22849E-11 | -1,24862E-11 |
| 20 | D Longitudinal | 6,32592E-07 | -2,07318E-10 | 1,68622E-09 | 4,55761E-07 | -6,43251E-12 | 5,14985E-11 | 3,03506E-07 | -4,01487E-12 | 5,80399E-12 |
| 20 | D Vertical | 3,16759E-08 | -3,31979E-08 | -2,64933E-08 | 1,80433E-08 | -1,87206E-08 | -2,02474E-08 | 8,44459E-09 | -9,05674E-09 | -1,39131E-08 |
| 20 | D transversal | 1,2165E-07 | 5,19014E-07 | 1,73671E-07 | 9,56116E-08 | 3,61954E-07 | 1,58368E-07 | 7,33963E-08 | 2,3137E-07 | 1,26471E-07 |
| 20 | G Longitudinal | -1,5235E-09 | 5,65492E-08 | 5,37113E-08 | 2,95147E-10 | 3,35826E-08 | 2,84123E-08 | -9,88322E-11 | 1,63567E-08 | 1,68537E-08 |
| 20 | G Vertical | 1,93499E-07 | -1,21462E-08 | 6,60367E-08 | 1,61845E-07 | -1,70723E-09 | 9,52304E-09 | 1,27381E-07 | -4,82227E-09 | 1,02456E-08 |
| 20 | G transversal | -5,78039E-08 | 2,02104E-09 | -6,46474E-09 | -3,2423E-08 | 2,3523E-10 | -1,34345E-09 | -1,52452E-08 | 6,50225E-11 | -1,91736E-10 |
| 21 | D Longitudinal | -4,0691E-09 | -3,2305E-10 | -2,20788E-11 | -3,33676E-09 | -2,73915E-10 | -2,22151E-11 | -2,57883E-09 | -2,2533E-10 | -2,16242E-11 |
| 21 | D Vertical | -2,40673E-09 | 2,25638E-09 | 1,90542E-10 | -2,00382E-09 | 1,87362E-09 | 1,90518E-10 | -1,61546E-09 | 1,49082E-09 | 1,9053E-10 |
| 21 | D transversal | -4,11395E-09 | 1,48721E-09 | -4,78904E-10 | -4,0489E-09 | 1,91248E-09 | -4,78877E-10 | -3,99821E-09 | 2,33745E-09 | -4,78281E-10 |
| 21 | G Longitudinal | -1,51603E-08 | 3,86157E-09 | -3,29911E-10 | -1,51972E-08 | 4,10166E-09 | -4,59081E-10 | -1,49567E-08 | 3,93121E-09 | -5,07699E-11 |
| 21 | G Vertical | 1,15539E-07 | -9,51157E-09 | -4,64292E-09 | 1,18761E-07 | -5,38558E-09 | -2,80937E-09 | 1,17581E-07 | 4,55779E-09 | -8,58778E-09 |
| 21 | G transversal | 1,29964E-08 | -4,36635E-11 | -2,81513E-10 | 1,23295E-08 | 1,48509E-10 | -1,51843E-10 | 1,13076E-08 | 7,5226E-10 | -5,60726E-10 |
| 22 | D Longitudinal | -5,40244E-09 | -1,05998E-09 | -7,51846E-11 | -4,39008E-09 | -8,95503E-10 | -7,59349E-11 | -3,31782E-09 | -7,33568E-10 | -7,33785E-11 |
| 22 | D Vertical | -4,65796E-09 | 4,37537E-09 | 3,64493E-10 | -3,87736E-09 | 3,63298E-09 | 3,64434E-10 | -3,12358E-09 | 2,89045E-09 | 3,64568E-10 |
| 22 | D transversal | -8,87879E-09 | 4,43669E-09 | -7,58034E-10 | -8,63174E-09 | 5,03516E-09 | -7,58303E-10 | -8,42942E-09 | 5,63258E-09 | -7,57126E-10 |
| 22 | G Longitudinal | -1,50718E-08 | 6,02068E-09 | 5,52255E-11 | -1,51137E-08 | 5,90535E-09 | -7,48924E-11 | -1,49036E-08 | 5,3796E-09 | 3,30845E-10 |
| 22 | G Vertical | 1,15875E-07 | -9,38404E-09 | -4,61759E-09 | 1,19045E-07 | -5,27939E-09 | -2,784E-09 | 1,17811E-07 | 4,643E-09 | -8,56295E-09 |

APOYO 1

| DESPLAZAMIENTOS (metros) | | C4 | | | C5 | | | C6 | | |
|---|---|---|---|---|---|---|---|---|---|---|
| Nudo | Desplazamiento | L | T | V | L | T | V | L | T | V |
| 22 | G transversal | 8,54129E-09 | 2,66437E-10 | -2,55269E-10 | 8,60732E-09 | 4,06454E-10 | -1,24968E-10 | 8,30353E-09 | 9,59778E-10 | -5,35357E-10 |
| 23 | D Longitudinal | -4,5134E-09 | -1,59252E-09 | -1,22663E-10 | -3,56136E-09 | -1,33595E-09 | -1,22279E-10 | -2,5118E-09 | -1,07804E-09 | -1,23839E-10 |
| 23 | D Vertical | -6,60786E-09 | 6,37838E-09 | 5,50681E-10 | -5,46349E-09 | 5,25684E-09 | 5,50625E-10 | -4,35571E-09 | 4,13508E-09 | 5,50923E-10 |
| 23 | D transversal | -1,27102E-08 | 8,40835E-09 | -7,89592E-10 | -1,24084E-08 | 9,02126E-09 | -7,88949E-10 | -1,2198E-08 | 9,63865E-09 | -7,95283E-10 |
| 23 | G Longitudinal | -1,36486E-08 | 7,70439E-09 | 4,76381E-10 | -1,39211E-08 | 7,32197E-09 | 3,45658E-10 | -1,39574E-08 | 6,52928E-09 | 7,49871E-10 |
| 23 | G Vertical | 1,15495E-07 | -9,40525E-09 | -4,63543E-09 | 1,18731E-07 | -5,30123E-09 | -2,80152E-09 | 1,17563E-07 | 4,62091E-09 | -8,58032E-09 |
| 23 | G transversal | 6,03971E-09 | -5,39752E-10 | -3,07236E-10 | 6,49917E-09 | -2,82181E-10 | -1,77272E-10 | 6,57748E-09 | 3,86837E-10 | -5,85209E-10 |
| 24 | D Longitudinal | -2,47051E-09 | -1,57055E-09 | -1,31639E-10 | -1,77961E-09 | -1,30544E-09 | -1,31582E-10 | -9,42093E-10 | -1,03952E-09 | -1,33057E-10 |
| 24 | D Vertical | -8,66698E-09 | 8,34522E-09 | 7,20856E-10 | -7,13926E-09 | 6,85319E-09 | 7,20816E-10 | -5,65571E-09 | 5,36103E-09 | 7,20987E-10 |
| 24 | D transversal | -1,6284E-08 | 1,36858E-08 | -5,46574E-10 | -1,59835E-08 | 1,40853E-08 | -5,46657E-10 | -1,58256E-08 | 1,44881E-08 | -5,52267E-10 |
| 24 | G Longitudinal | -1,3622E-08 | 9,96703E-09 | 9,03282E-10 | -1,38768E-08 | 9,16996E-09 | 7,73727E-10 | -1,39064E-08 | 7,95924E-09 | 1,18726E-09 |
| 24 | G Vertical | 1,15229E-07 | -8,9905E-09 | -4,5918E-09 | 1,18517E-07 | -4,96214E-09 | -2,75728E-09 | 1,17403E-07 | 4,88464E-09 | -8,53509E-09 |
| 24 | G transversal | 4,17877E-09 | -1,22216E-09 | -3,47699E-10 | 4,9377E-09 | -8,66701E-10 | -2,18256E-10 | 5,30382E-09 | -1,00956E-10 | -6,25353E-10 |
| 25 | D Longitudinal | 7,77979E-10 | -1,33525E-09 | -1,29777E-10 | 9,98486E-10 | -1,09017E-09 | -1,29885E-10 | 1,42201E-09 | -8,45613E-10 | -1,29529E-10 |
| 25 | D Vertical | -1,03793E-08 | 1,01683E-08 | 9,09188E-10 | -8,48665E-09 | 8,28868E-09 | 9,09146E-10 | -6,64355E-09 | 6,4091E-09 | 9,09006E-10 |
| 25 | D transversal | -1,99882E-08 | 2,03336E-08 | -5,40715E-11 | -1,96551E-08 | 2,02624E-08 | -5,41351E-11 | -1,95187E-08 | 2,01898E-08 | -5,1222E-11 |
| 25 | G Longitudinal | -1,39114E-08 | 1,19287E-08 | 1,24375E-09 | -1,41272E-08 | 1,07825E-08 | 1,11442E-09 | -1,41158E-08 | 9,21555E-09 | 1,54092E-09 |
| 25 | G Vertical | 1,14957E-07 | -8,64989E-09 | -4,55725E-09 | 1,18295E-07 | -4,68516E-09 | -2,72224E-09 | 1,1723E-07 | 5,09771E-09 | -8,49831E-09 |
| 25 | G transversal | 2,07679E-09 | -1,15226E-09 | -3,45491E-10 | 3,21358E-09 | -8,04607E-10 | -2,15972E-10 | 3,94554E-09 | -4,29007E-11 | -6,29357E-10 |
| 26 | D Longitudinal | 5,50305E-09 | -1,32547E-09 | -1,46207E-10 | 5,00364E-09 | -1,06449E-09 | -1,44836E-10 | 4,767E-09 | -8,02201E-10 | -1,44281E-10 |
| 26 | D Vertical | -1,21591E-08 | 1,18798E-08 | 1,0825E-09 | -9,88643E-09 | 9,62906E-09 | 1,08252E-09 | -7,66711E-09 | 7,37882E-09 | 1,08177E-09 |
| 26 | D transversal | -2,38391E-08 | 2,8119E-08 | 6,1566E-10 | -2,34555E-08 | 2,73995E-08 | 6,16453E-10 | -2,33208E-08 | 2,66744E-08 | 6,29185E-10 |
| 26 | G Longitudinal | -1,45307E-08 | 1,37676E-08 | 1,49928E-09 | -1,47258E-08 | 1,23658E-08 | 1,36647E-09 | -1,46766E-08 | 1,0532E-08 | 1,80261E-09 |
| 26 | G Vertical | 1,14426E-07 | -8,49909E-09 | -4,56221E-09 | 1,1786E-07 | -4,56107E-09 | -2,72676E-09 | 1,16891E-07 | 5,19644E-09 | -8,50409E-09 |
| 26 | G transversal | -1,11426E-10 | -5,91467E-10 | -3,00798E-10 | 1,44242E-09 | -3,3789E-10 | -1,70724E-10 | 2,57825E-09 | 3,32519E-10 | -5,87661E-10 |
| 27 | D Longitudinal | 1,18417E-08 | -1,77436E-09 | -2,1435E-10 | 1,02735E-08 | -1,40351E-09 | -2,14008E-10 | 9,0443E-09 | -1,03369E-09 | -2,11777E-10 |
| 27 | D Vertical | -1,40303E-08 | 1,39512E-08 | 1,34717E-09 | -1,12915E-08 | 1,11927E-08 | 1,34733E-09 | -8,6102E-09 | 8,43537E-09 | 1,34569E-09 |
| 27 | D transversal | -2,85917E-08 | 3,77391E-08 | 1,53641E-09 | -2,81099E-08 | 3,61097E-08 | 1,53325E-09 | -2,79219E-08 | 3,44606E-08 | 1,55944E-09 |
| 27 | G Longitudinal | -1,58777E-08 | 1,74119E-08 | 2,03197E-09 | -1,60008E-08 | 1,54745E-08 | 1,89635E-09 | -1,59164E-08 | 1,31182E-08 | 2,30147E-09 |
| 27 | G Vertical | 1,1387E-07 | -7,99325E-09 | -4,53049E-09 | 1,17374E-07 | -4,12259E-09 | -2,69536E-09 | 1,16476E-07 | 5,57022E-09 | -8,47831E-09 |
| 27 | G transversal | -3,09784E-09 | -2,60733E-11 | -2,15443E-10 | -9,3668E-10 | 9,03143E-11 | -8,37068E-11 | 7,83139E-10 | 6,14404E-10 | -4,81516E-10 |
| 28 | D Longitudinal | 1,95402E-08 | -2,12658E-09 | -2,89852E-10 | 1,66104E-08 | -1,64505E-09 | -2,91289E-10 | 1,41069E-08 | -1,16058E-09 | -2,99792E-10 |
| 28 | D Vertical | -1,60751E-08 | 1,58879E-08 | 1,58551E-09 | -1,28385E-08 | 1,26459E-08 | 1,58556E-09 | -9,65557E-09 | 9,40382E-09 | 1,58587E-09 |
| 28 | D transversal | -3,36928E-08 | 4,93854E-08 | 2,82771E-09 | -3,31037E-08 | 4,64956E-08 | 2,82371E-09 | -3,29282E-08 | 4,36051E-08 | 2,81442E-09 |
| 28 | G Longitudinal | -1,54847E-08 | 2,01774E-08 | 2,67923E-09 | -1,5676E-08 | 1,76653E-08 | 2,55633E-09 | -1,58631E-08 | 1,48255E-08 | 2,83703E-09 |
| 28 | G Vertical | 1,13354E-07 | -7,46241E-09 | -4,47986E-09 | 1,16933E-07 | -3,68051E-09 | -2,64384E-09 | 1,16096E-07 | 5,93133E-09 | -8,43809E-09 |
| 28 | G transversal | -4,90082E-09 | -6,94477E-10 | -2,84082E-10 | -2,33771E-09 | -4,50715E-10 | -1,5234E-10 | -2,29008E-10 | 1,97231E-10 | -5,43857E-10 |
| 29 | D Longitudinal | 2,86631E-08 | -1,98933E-09 | -2,98821E-10 | 2,40751E-08 | -1,50996E-09 | -2,98937E-10 | 2,0001E-08 | -1,02352E-09 | -3,1192E-10 |
| 29 | D Vertical | -1,75891E-08 | 1,76065E-08 | 1,85635E-09 | -1,38754E-08 | 1,38441E-08 | 1,85595E-09 | -1,02029E-08 | 1,00775E-08 | 1,862E-09 |
| 29 | D transversal | -3,82088E-08 | 6,27315E-08 | 4,57369E-09 | -3,75625E-08 | 5,81757E-08 | 4,57915E-09 | -3,75572E-08 | 5,36887E-08 | 4,47408E-09 |
| 29 | G Longitudinal | -1,49203E-08 | 2,3203E-08 | 3,49948E-09 | -1,51796E-08 | 1,99366E-08 | 3,3838E-09 | -1,54391E-08 | 1,63344E-08 | 3,69947E-09 |
| 29 | G Vertical | 1,12694E-07 | -7,18769E-09 | -4,47954E-09 | 1,1637E-07 | -3,44455E-09 | -2,64447E-09 | 1,15656E-07 | 6,11805E-09 | -8,42321E-09 |
| 29 | G transversal | -7,78823E-09 | -1,21321E-09 | -4,0785E-10 | -4,58269E-09 | -7,93462E-10 | -2,80163E-10 | -1,8343E-09 | 5,2079E-11 | -7,16447E-10 |
| 30 | D Longitudinal | 3,98351E-08 | -1,79307E-09 | -2,66187E-10 | 3,30899E-08 | -1,36521E-09 | -2,6442E-10 | 2,69536E-08 | -9,46605E-10 | -2,46315E-10 |

APOYO 1

| DESPLAZAMIENTOS (metros) | | C4 | | | C5 | | | C6 | | |
|---|---|---|---|---|---|---|---|---|---|---|
| Nudo | Desplazamiento | L | T | V | L | T | V | L | T | V |
| 30 | D Vertical | -1,93299E-08 | 1,91972E-08 | 2,09243E-09 | -1,51055E-08 | 1,49468E-08 | 2,09202E-09 | -1,09198E-08 | 1,06943E-08 | 2,09427E-09 |
| 30 | D transversal | -4,28005E-08 | 7,82017E-08 | 6,87454E-09 | -4,21343E-08 | 7,14571E-08 | 6,88367E-09 | -4,21546E-08 | 6,47517E-08 | 6,84118E-09 |
| 30 | G Longitudinal | -1,49076E-08 | 2,65781E-08 | 4,38825E-09 | -1,53014E-08 | 2,24905E-08 | 4,25293E-09 | -1,51308E-08 | 1,7781E-08 | 5,01617E-09 |
| 30 | G Vertical | 1,1232E-07 | -6,66732E-09 | -4,40882E-09 | 1,16011E-07 | -3,02683E-09 | -2,5768E-09 | 1,15396E-07 | 6,3897E-09 | -8,28839E-09 |
| 30 | G transversal | -1,13907E-08 | -9,12697E-10 | -3,75161E-10 | -7,3251E-09 | -5,5049E-10 | -2,49324E-10 | -3,71802E-09 | 2,46031E-10 | -7,04666E-10 |
| 31 | D Longitudinal | 5,30343E-08 | -1,88943E-09 | -3,21385E-10 | 4,36002E-08 | -1,39336E-09 | -3,19315E-10 | 3,48754E-08 | -9,14016E-10 | -2,87211E-10 |
| 31 | D Vertical | -2,03618E-08 | 2,04863E-08 | 2,36203E-09 | -1,56631E-08 | 1,57182E-08 | 2,36219E-09 | -1,10133E-08 | 1,09585E-08 | 2,34766E-09 |
| 31 | D transversal | -4,73517E-08 | 9,56665E-08 | 9,7211E-09 | -4,67606E-08 | 8,62337E-08 | 9,7186E-09 | -4,65732E-08 | 7,66451E-08 | 9,98641E-09 |
| 31 | G Longitudinal | -1,50588E-08 | 2,96555E-08 | 5,22766E-09 | -1,54908E-08 | 2,4775E-08 | 5,07263E-09 | -1,52192E-08 | 1,91997E-08 | 5,90791E-09 |
| 31 | G Vertical | 1,11899E-07 | -6,19886E-09 | -4,35599E-09 | 1,15611E-07 | -2,64056E-09 | -2,52761E-09 | 1,15074E-07 | 6,66891E-09 | -8,20552E-09 |
| 31 | G transversal | -1,44731E-08 | -1,7248E-10 | -1,37729E-10 | -9,56269E-09 | -1,30289E-10 | -5,40442E-12 | -5,11778E-09 | 3,04748E-10 | -3,79938E-10 |
| 32 | D Longitudinal | 6,80985E-08 | -2,35457E-09 | -5,14721E-10 | 5,54374E-08 | -1,60829E-09 | -5,17041E-10 | 4,35901E-08 | -8,56456E-10 | -5,29882E-10 |
| 32 | D Vertical | -2,16789E-08 | 2,16214E-08 | 2,58899E-09 | -1,64743E-08 | 1,63812E-08 | 2,58978E-09 | -1,12998E-08 | 1,11489E-08 | 2,57845E-09 |
| 32 | D transversal | -5,22742E-08 | 1,15084E-07 | 1,30869E-08 | -5,16228E-08 | 1,0243E-07 | 1,30686E-08 | -5,14499E-08 | 8,95993E-08 | 1,33272E-08 |
| 32 | G Longitudinal | -1,59178E-08 | 3,27582E-08 | 6,04126E-09 | -1,59043E-08 | 2,69766E-08 | 5,8932E-09 | -1,64722E-08 | 2,11333E-08 | 5,63468E-09 |
| 32 | G Vertical | 1,1142E-07 | -5,68789E-09 | -4,29523E-09 | 1,15185E-07 | -2,23332E-09 | -2,46849E-09 | 1,14656E-07 | 6,99677E-09 | -8,19398E-09 |
| 32 | G transversal | -1,74446E-08 | -1,07542E-11 | -3,87132E-11 | -1,16519E-08 | -9,07669E-11 | 9,83604E-11 | -6,32781E-09 | 1,87334E-10 | -2,06971E-10 |
| 33 | D Longitudinal | 8,53178E-08 | -2,5769E-09 | -6,7202E-10 | 6,87968E-08 | -1,64153E-09 | -6,76219E-10 | 5,3187E-08 | -6,70593E-10 | -7,44759E-10 |
| 33 | D Vertical | -2,20883E-08 | 2,24186E-08 | 2,86699E-09 | -1,64434E-08 | 1,66592E-08 | 2,86792E-09 | -1,07681E-08 | 1,08882E-08 | 2,89128E-09 |
| 33 | D transversal | -5,7655E-08 | 1,36557E-07 | 1,70218E-08 | -5,66409E-08 | 1,20051E-07 | 1,70038E-08 | -5,70233E-08 | 1,0378E-07 | 1,65402E-08 |
| 33 | G Longitudinal | -1,67115E-08 | 3,63757E-08 | 7,13211E-09 | -1,64116E-08 | 2,94696E-08 | 7,02415E-09 | -1,7432E-08 | 2,29191E-08 | 6,14893E-09 |
| 33 | G Vertical | 1,10885E-07 | -5,379E-09 | -4,26686E-09 | 1,14683E-07 | -1,98089E-09 | -2,44017E-09 | 1,14333E-07 | 7,12131E-09 | -8,04115E-09 |
| 33 | G transversal | -2,15067E-08 | -5,83128E-10 | -2,1711E-10 | -1,4465E-08 | -4,18125E-10 | -8,71849E-11 | -7,87183E-09 | 1,29565E-10 | -4,39309E-10 |
| 34 | D Longitudinal | 1,04914E-07 | -2,38185E-09 | -6,75068E-10 | 8,37047E-08 | -1,46115E-09 | -6,76228E-10 | 6,35022E-08 | -5,18309E-10 | -7,22235E-10 |
| 34 | D Vertical | -2,29243E-08 | 2,30923E-08 | 3,09777E-09 | -1,67788E-08 | 1,68545E-08 | 3,09648E-09 | -1,05642E-08 | 1,05922E-08 | 3,13534E-09 |
| 34 | D transversal | -6,32941E-08 | 1,60425E-07 | 2,17774E-08 | -6,20427E-08 | 1,39321E-07 | 2,17951E-08 | -6,27582E-08 | 1,18754E-07 | 2,09081E-08 |
| 34 | G Longitudinal | -1,59574E-08 | 4,00564E-08 | 8,57205E-09 | -1,64374E-08 | 3,20087E-08 | 8,54299E-09 | -1,6436E-08 | 2,35831E-08 | 9,19235E-09 |
| 34 | G Vertical | 1,10715E-07 | -4,69814E-09 | -4,08373E-09 | 1,14352E-07 | -1,48876E-09 | -2,2485E-09 | 1,1421E-07 | 7,2504E-09 | -7,5207E-09 |
| 34 | G transversal | -2,4277E-08 | -1,38838E-09 | -5,20441E-10 | -1,61336E-08 | -8,1786E-10 | -4,01945E-10 | -8,40385E-09 | 2,08032E-10 | -8,97659E-10 |
| 35 | D Longitudinal | 1,24792E-07 | -1,42336E-09 | -4,25067E-10 | 9,84868E-08 | -8,57098E-10 | -4,16562E-10 | 7,32732E-08 | -3,45279E-10 | -3,13807E-10 |
| 35 | D Vertical | -2,28462E-08 | 2,34336E-08 | 3,40899E-09 | -1,62071E-08 | 1,66266E-08 | 3,40456E-09 | -9,51533E-09 | 9,80456E-09 | 3,4168E-09 |
| 35 | D transversal | -6,78612E-08 | 1,8649E-07 | 2,75239E-08 | -6,70524E-08 | 1,6004E-07 | 2,76074E-08 | -6,72495E-08 | 1,33695E-07 | 2,76709E-08 |
| 35 | G Longitudinal | -1,37765E-08 | 4,35678E-08 | 1,02894E-08 | -1,52395E-08 | 3,41557E-08 | 1,02258E-08 | -1,38524E-08 | 2,29452E-08 | 1,32514E-08 |
| 35 | G Vertical | 1,10338E-07 | -3,98151E-09 | -3,86641E-09 | 1,13864E-07 | -9,96108E-10 | -2,03078E-09 | 1,14018E-07 | 7,294E-09 | -6,90899E-09 |
| 35 | G transversal | -2,26868E-08 | -2,87101E-09 | -1,03199E-09 | -1,43564E-08 | -1,61709E-09 | -9,22548E-10 | -6,39411E-09 | 1,98945E-10 | -1,63683E-09 |
| 36 | D Longitudinal | 1,46996E-07 | 8,37403E-14 | -4,29889E-13 | 1,14835E-07 | 9,91757E-14 | -1,48827E-13 | 8,38715E-08 | 2,52288E-13 | -3,61002E-13 |
| 36 | D Vertical | 3,40447E-12 | 2,28829E-08 | 3,40592E-09 | 2,09949E-12 | 1,59227E-08 | 3,36018E-09 | 2,23233E-13 | 8,99669E-09 | 3,20489E-09 |
| 36 | D transversal | -2,8427E-11 | 2,13894E-07 | 3,34188E-08 | -9,70962E-12 | 1,81816E-07 | 3,3981E-08 | -5,64858E-12 | 1,49851E-07 | 3,5095E-08 |
| 36 | G Longitudinal | 4,23268E-12 | 4,75272E-08 | 1,24188E-08 | 1,4962E-12 | 3,60308E-08 | 1,20515E-08 | -3,84167E-13 | 2,10939E-08 | 1,70107E-08 |
| 36 | G Vertical | 1,38276E-07 | 2,68955E-12 | -3,65199E-11 | 1,36477E-07 | 1,37497E-13 | -5,16496E-13 | 1,33415E-07 | -2,06328E-12 | 3,27064E-12 |
| 36 | G transversal | -5,02822E-08 | 2,00519E-13 | -2,25219E-12 | -3,55483E-08 | 1,01594E-13 | -1,63572E-13 | -2,05617E-08 | 5,17742E-13 | -7,24496E-13 |
| 37 | D Longitudinal | 2,80973E-07 | -9,2317E-14 | 5,2432E-13 | 2,48517E-07 | -1,05398E-13 | 1,63193E-13 | 2,14636E-07 | -4,27424E-13 | 6,27955E-13 |
| 37 | D Vertical | 1,99864E-12 | -2,28674E-08 | -1,12981E-08 | 4,02846E-12 | -1,58062E-08 | -1,14371E-08 | 1,04711E-11 | -8,13461E-09 | -1,29383E-08 |
| 37 | D transversal | -3,33778E-12 | 2,14111E-07 | 3,27586E-08 | 1,86148E-11 | 1,82977E-07 | 3,16749E-08 | 3,78623E-11 | 1,57209E-07 | 1,82755E-08 |

APOYO 1

| DESPLAZAMIENTOS (metros) | | C4 | | | C5 | | | C6 | | |
|---|---|---|---|---|---|---|---|---|---|---|
| Nudo | Desplazamiento | L | T | V | L | T | V | L | T | V |
| 37 | G Longitudinal | 9,32501E-13 | 4,74445E-08 | 1,22055E-08 | -2,80012E-12 | 3,52758E-08 | 1,31806E-08 | -4,51821E-12 | 2,14198E-08 | 1,89484E-08 |
| 37 | G Vertical | 1,37029E-07 | 3,88961E-13 | -1,57932E-11 | 1,40332E-07 | -1,9362E-13 | 6,70339E-14 | 1,53829E-07 | 5,85114E-12 | -8,8129E-12 |
| 37 | G transversal | -3,07162E-08 | -7,99215E-14 | 1,23215E-12 | -1,56112E-08 | -9,9751E-14 | 1,73521E-13 | -2,28881E-09 | -1,65975E-12 | 2,46657E-12 |
| 38 | D Longitudinal | 1,8735E-07 | -1,02497E-09 | -5,07557E-10 | 1,40709E-07 | -3,36818E-10 | -5,72315E-10 | 9,74794E-08 | 3,06782E-11 | -1,7705E-10 |
| 38 | D Vertical | -2,75078E-08 | 2,77587E-08 | 5,50313E-09 | -1,79647E-08 | 1,80952E-08 | 5,48806E-09 | -8,43581E-09 | 9,0076E-09 | 4,45162E-09 |
| 38 | D transversal | -8,03322E-08 | 2,68298E-07 | 5,04828E-08 | -8,07286E-08 | 2,20252E-07 | 5,01382E-08 | -7,455E-08 | 1,65879E-07 | 5,76125E-08 |
| 38 | G Longitudinal | -1,10366E-08 | 5,74539E-08 | 1,89403E-08 | -1,02094E-08 | 3,9402E-08 | 1,92881E-08 | -7,82324E-10 | 1,63075E-08 | 2,15495E-08 |
| 38 | G Vertical | 1,26045E-07 | -3,40127E-09 | -2,55091E-09 | 1,23376E-07 | -5,83252E-10 | -1,02768E-09 | 1,17384E-07 | 6,04711E-09 | -5,30054E-09 |
| 38 | G transversal | -4,82295E-08 | 1,1772E-09 | 5,47458E-10 | -3,02372E-08 | 5,54781E-10 | 3,88547E-10 | -1,62169E-08 | -1,25924E-10 | 5,53357E-10 |
| 39 | D Longitudinal | 2,35244E-07 | -5,71015E-10 | -4,83833E-10 | 1,69232E-07 | -1,57139E-10 | -1,92222E-10 | 1,11379E-07 | -4,82408E-12 | 7,47577E-11 |
| 39 | D Vertical | -3,07196E-08 | 3,07711E-08 | 7,39656E-09 | -1,85457E-08 | 1,86414E-08 | 7,48883E-09 | -8,17895E-09 | 9,01684E-09 | 4,30984E-09 |
| 39 | D transversal | -9,31141E-08 | 3,28217E-07 | 7,13758E-08 | -9,16643E-08 | 2,58979E-07 | 7,35409E-08 | -7,40717E-08 | 1,8206E-07 | 7,70816E-08 |
| 39 | G Longitudinal | -1,11557E-08 | 6,25478E-08 | 2,25062E-08 | -8,78478E-09 | 3,71904E-08 | 2,78422E-08 | 7,78939E-10 | 1,62795E-08 | 1,73343E-08 |
| 39 | G Vertical | 1,41653E-07 | -3,40488E-09 | -1,42347E-09 | 1,3297E-07 | -5,55883E-10 | -1,81861E-10 | 1,20591E-07 | 4,86204E-09 | -4,21992E-09 |
| 39 | G transversal | -5,08609E-08 | -8,65743E-10 | -1,00818E-10 | -3,01563E-08 | -4,15307E-10 | -4,33078E-10 | -1,36845E-08 | 5,8159E-11 | -2,97018E-10 |
| 40 | D Longitudinal | 2,89642E-07 | -2,46544E-10 | -5,08462E-10 | 2,01868E-07 | 3,80441E-11 | -1,02008E-10 | 1,26197E-07 | 2,0028E-12 | -1,3667E-11 |
| 40 | D Vertical | -3,27297E-08 | 3,25784E-08 | 9,26432E-09 | -1,7981E-08 | 1,85798E-08 | 8,42021E-09 | -8,22708E-09 | 9,01619E-09 | 4,32431E-09 |
| 40 | D transversal | -1,02365E-07 | 3,92736E-07 | 9,62565E-08 | -9,62435E-08 | 2,94327E-07 | 1,0393E-07 | -7,37072E-08 | 1,98518E-07 | 9,3268E-08 |
| 40 | G Longitudinal | -1,04409E-08 | 6,56668E-08 | 2,83562E-08 | -1,19702E-09 | 3,40603E-08 | 3,07188E-08 | 1,94866E-10 | 1,64921E-08 | 1,60798E-08 |
| 40 | G Vertical | 1,57261E-07 | -3,40849E-09 | -2,96022E-10 | 1,42563E-07 | -5,28515E-10 | 6,63961E-10 | 1,23799E-07 | 3,67697E-09 | -3,13929E-09 |
| 40 | G transversal | -5,52079E-08 | -4,90128E-11 | -1,41151E-10 | -3,26159E-08 | -1,82097E-11 | -6,67742E-11 | -1,51991E-08 | -2,06851E-11 | 1,44544E-10 |
| 41 | D Longitudinal | 3,45141E-07 | -1,71275E-10 | -1,68655E-10 | 2,33212E-07 | -8,08287E-12 | 7,30138E-11 | 1,41188E-07 | 2,52948E-12 | -3,0132E-12 |
| 41 | D Vertical | -3,36327E-08 | 3,31168E-08 | 1,12646E-08 | -1,77275E-08 | 1,85883E-08 | 8,27427E-09 | -8,25746E-09 | 9,01595E-09 | 4,32379E-09 |
| 41 | D transversal | -1,13917E-07 | 4,57768E-07 | 1,28894E-07 | -9,59512E-08 | 3,28022E-07 | 1,32727E-07 | -7,35E-08 | 2,14948E-07 | 1,09883E-07 |
| 41 | G Longitudinal | -9,49084E-09 | 6,34365E-08 | 3,66227E-08 | 7,12376E-10 | 3,36971E-08 | 2,68397E-08 | 1,56931E-10 | 1,64148E-08 | 1,67504E-08 |
| 41 | G Vertical | 1,729E-07 | -3,42875E-09 | 8,38945E-10 | 1,52079E-07 | -5,07351E-10 | 1,51333E-09 | 1,26937E-07 | 2,51319E-09 | -2,07646E-09 |
| 41 | G transversal | -5,79994E-08 | -1,3721E-10 | -2,80212E-10 | -3,13189E-08 | 4,10585E-11 | -9,55778E-11 | -1,49457E-08 | 2,24633E-12 | -4,76167E-11 |
| 42 | D Longitudinal | 5,01677E-07 | 2,13821E-11 | -1,90255E-11 | 3,27414E-07 | 6,98208E-13 | -9,89521E-12 | 1,9484E-07 | 1,78319E-12 | -2,36909E-12 |
| 42 | D Vertical | -2,04973E-08 | 2,20416E-08 | 4,83318E-09 | -1,18492E-08 | 1,23474E-08 | 3,50132E-09 | -5,59071E-09 | 5,99307E-09 | 1,27322E-09 |
| 42 | D transversal | -8,39132E-08 | 5,75152E-07 | 2,0507E-07 | -6,35788E-08 | 3,93504E-07 | 1,82462E-07 | -4,86827E-08 | 2,46659E-07 | 1,41875E-07 |
| 42 | G Longitudinal | -6,07904E-12 | 6,04168E-08 | 3,65344E-08 | 1,89116E-09 | 3,39584E-08 | 2,58451E-08 | 7,35036E-10 | 1,62298E-08 | 1,67447E-08 |
| 42 | G Vertical | 1,99957E-07 | -2,10586E-09 | 1,62984E-09 | 1,67628E-07 | -2,89952E-10 | 1,52983E-09 | 1,31947E-07 | 6,59297E-10 | -4,73885E-10 |
| 42 | G transversal | -6,48576E-08 | -5,02236E-10 | 4,05241E-10 | -3,40374E-08 | -6,96983E-11 | 3,61794E-10 | -1,55197E-08 | 1,97442E-10 | -1,51058E-10 |
| 43 | D Longitudinal | 5,01726E-07 | 2,20458E-11 | -2,18617E-11 | 3,27415E-07 | 7,62582E-13 | -1,02702E-11 | 1,94838E-07 | 1,49628E-12 | -2,12903E-12 |
| 43 | D Vertical | 2,07328E-08 | 2,19714E-08 | 5,59319E-09 | 1,18437E-08 | 1,23468E-08 | 3,51841E-09 | 5,58717E-09 | 5,9925E-09 | 1,27393E-09 |
| 43 | D transversal | 8,2612E-08 | 5,75434E-07 | 2,01485E-07 | 6,35465E-08 | 3,935E-07 | 1,82406E-07 | 4,86873E-08 | 2,46655E-07 | 1,41882E-07 |
| 43 | G Longitudinal | -5,42507E-11 | 6,04862E-08 | 3,58936E-08 | -1,89657E-09 | 3,39595E-08 | 2,58238E-08 | -7,33871E-10 | 1,62294E-08 | 1,67461E-08 |
| 43 | G Vertical | 2,02647E-07 | 1,66989E-09 | 4,44335E-09 | 1,67666E-07 | 2,81647E-10 | -1,44394E-09 | 1,31946E-07 | -6,69198E-10 | 4,85541E-10 |
| 43 | G transversal | -6,41665E-08 | 3,3508E-10 | 1,54087E-09 | -3,40254E-08 | 6,92287E-11 | -3,25556E-10 | -1,55182E-08 | -1,96356E-10 | 1,48165E-10 |
| 44 | D Longitudinal | 6,4645E-07 | -1,30183E-10 | 1,05832E-09 | 4,5427E-07 | -4,491E-12 | 3,32002E-11 | 2,93185E-07 | -2,63368E-12 | 3,86716E-12 |
| 44 | D Vertical | -2,24975E-08 | -2,21648E-08 | -1,96866E-08 | -1,19741E-08 | -1,24805E-08 | -1,54627E-08 | -5,54271E-09 | -6,03301E-09 | -1,08639E-08 |
| 44 | D transversal | -8,38678E-08 | 5,75151E-07 | 2,05076E-07 | -6,35816E-08 | 3,93504E-07 | 1,82463E-07 | -4,86862E-08 | 2,4666E-07 | 1,41873E-07 |
| 44 | G Longitudinal | -5,13952E-11 | 5,92042E-08 | 3,95912E-08 | 1,98727E-09 | 3,37172E-08 | 2,68875E-08 | 1,12621E-09 | 1,57311E-08 | 1,80404E-08 |
| 44 | G Vertical | 2,0117E-07 | 7,67696E-09 | -3,94626E-08 | 1,67942E-07 | 9,98697E-10 | -5,72911E-09 | 1,30658E-07 | 2,36921E-09 | -5,08128E-09 |

APOYO 1

| DESPLAZAMIENTOS (metros) | | C4 | | | C5 | | | C6 | | |
|---|---|---|---|---|---|---|---|---|---|---|
| Nudo | Desplazamiento | L | T | V | L | T | V | L | T | V |
| 44 | G transversal | -5,19971E-08 | -1,35055E-09 | 7,11356E-09 | -3,10894E-08 | -2,24117E-10 | 1,21211E-09 | -1,45105E-08 | -6,98344E-10 | 1,47861E-09 |
| 45 | D Longitudinal | 6,465E-07 | -1,29656E-10 | 1,04949E-09 | 4,54271E-07 | -4,3731E-12 | 3,25256E-11 | 2,93183E-07 | -1,64046E-12 | 1,81314E-12 |
| 45 | D Vertical | 2,22393E-08 | -2,20501E-08 | -2,08753E-08 | 1,19662E-08 | -1,24798E-08 | -1,54873E-08 | 5,53843E-09 | -6,03391E-09 | -1,08617E-08 |
| 45 | D transversal | 8,2654E-08 | 5,75434E-07 | 2,01483E-07 | 6,35444E-08 | 3,935E-07 | 1,82407E-07 | 4,86844E-08 | 2,46655E-07 | 1,41882E-07 |
| 45 | G Longitudinal | -2,12511E-11 | 5,93963E-08 | 3,7819E-08 | -1,99834E-09 | 3,3725E-08 | 2,68379E-08 | -1,13294E-09 | 1,57334E-08 | 1,80378E-08 |
| 45 | G Vertical | 2,03595E-07 | -7,67875E-09 | 4,12418E-08 | 1,67949E-07 | -9,87646E-10 | 5,71428E-09 | 1,30635E-07 | -2,37257E-09 | 5,0842E-09 |
| 45 | G transversal | -5,26907E-08 | 1,51653E-09 | -9,11592E-09 | -3,10919E-08 | 2,17953E-10 | -1,24119E-09 | -1,45018E-08 | 6,96383E-10 | -1,47523E-09 |
| 46 | D Longitudinal | 5,94807E-07 | 1,56004E-12 | 7,66153E-11 | 3,89658E-07 | -6,2462E-13 | -2,04583E-12 | 2,33619E-07 | 1,32076E-13 | 1,16392E-13 |
| 46 | D Vertical | -9,38389E-09 | 1,09926E-08 | -1,32228E-09 | -5,95007E-09 | 6,14033E-09 | -1,24015E-09 | -2,84513E-09 | 2,98629E-09 | -1,76056E-09 |
| 46 | D transversal | -4,36722E-08 | 6,31882E-07 | 2,36821E-07 | -3,17296E-08 | 4,25385E-07 | 2,06826E-07 | -2,42367E-08 | 2,62101E-07 | 1,57464E-07 |
| 46 | G Longitudinal | 1,18985E-08 | 6,0561E-08 | 3,28961E-08 | 1,54388E-10 | 3,39376E-08 | 2,57775E-08 | -4,95168E-10 | 1,64133E-08 | 1,6575E-08 |
| 46 | G Vertical | 2,08795E-07 | -5,92299E-10 | -6,3945E-10 | 1,71724E-07 | -9,32318E-11 | 4,64258E-10 | 1,33174E-07 | 2,0822E-10 | -1,54002E-10 |
| 46 | G transversal | -4,86205E-08 | -3,49865E-11 | -7,21842E-10 | -3,27847E-08 | -1,48222E-11 | 6,06531E-11 | -1,57915E-08 | 3,10842E-11 | -2,25421E-11 |
| 47 | D Longitudinal | 5,94836E-07 | 1,61934E-12 | 7,4937E-11 | 3,89658E-07 | -6,39507E-13 | -2,01479E-12 | 2,33617E-07 | 1,92805E-13 | 6,60772E-14 |
| 47 | D Vertical | 9,50494E-09 | 1,09632E-08 | -9,9215E-10 | 5,94895E-09 | 6,14029E-09 | -1,23287E-09 | 2,84332E-09 | 2,98646E-09 | -1,76101E-09 |
| 47 | D transversal | 4,30066E-08 | 6,32005E-07 | 2,35193E-07 | 3,16978E-08 | 4,25383E-07 | 2,06802E-07 | 2,424E-08 | 2,62098E-07 | 1,57468E-07 |
| 47 | G Longitudinal | -1,06875E-08 | 6,02275E-08 | 3,68235E-08 | -1,4624E-10 | 3,39372E-08 | 2,58513E-08 | 4,91815E-10 | 1,64138E-08 | 1,65722E-08 |
| 47 | G Vertical | 2,09507E-07 | 5,88165E-10 | 1,15257E-10 | 1,71736E-07 | 8,25208E-11 | -4,51315E-10 | 1,33176E-07 | -2,19286E-10 | 1,70512E-10 |
| 47 | G transversal | -4,84334E-08 | 1,80863E-10 | -6,71944E-10 | -3,27833E-08 | 1,52651E-11 | -1,01933E-10 | -1,57949E-08 | -3,09485E-11 | 2,28285E-11 |
| 48 | D Longitudinal | 6,63732E-07 | -5,45832E-11 | 4,24028E-10 | 4,53195E-07 | -2,75072E-12 | 1,52176E-11 | 2,82988E-07 | -1,57823E-12 | 2,38599E-12 |
| 48 | D Vertical | -1,21138E-08 | -1,1104E-08 | -1,36411E-08 | -5,95994E-09 | -6,27343E-09 | -1,07235E-08 | -2,72155E-09 | -3,02702E-09 | -7,82863E-09 |
| 48 | D transversal | -4,36435E-08 | 6,31882E-07 | 2,36817E-07 | -3,17296E-08 | 4,25385E-07 | 2,06826E-07 | -2,4238E-08 | 2,62101E-07 | 1,57464E-07 |
| 48 | G Longitudinal | 1,16898E-08 | 5,98542E-08 | 3,62037E-08 | 1,08824E-10 | 3,38577E-08 | 2,62788E-08 | -4,32637E-10 | 1,63355E-08 | 1,67921E-08 |
| 48 | G Vertical | 2,09057E-07 | 2,41429E-09 | -1,32019E-08 | 1,71817E-07 | 3,05219E-10 | -1,77448E-09 | 1,32769E-07 | 7,40378E-10 | -1,58668E-09 |
| 48 | G transversal | -6,92268E-08 | -6,44441E-10 | 4,04624E-09 | -3,23067E-08 | -5,67855E-11 | 3,67063E-10 | -1,45642E-08 | -1,072E-10 | 2,31657E-10 |
| 49 | D Longitudinal | 6,6376E-07 | -5,44875E-11 | 4,2347E-10 | 4,53194E-07 | -2,77758E-12 | 1,53125E-11 | 2,82987E-07 | -1,78532E-12 | 2,81494E-12 |
| 49 | D Vertical | 1,19863E-08 | -1,1053E-08 | -1,41797E-08 | 5,95753E-09 | -6,27324E-09 | -1,07346E-08 | 2,71977E-09 | -3,02706E-09 | -7,82831E-09 |
| 49 | D transversal | 4,30361E-08 | 6,32005E-07 | 2,35191E-07 | 3,16977E-08 | 4,25383E-07 | 2,06802E-07 | 2,42386E-08 | 2,62098E-07 | 1,57468E-07 |
| 49 | G Longitudinal | -1,06267E-08 | 5,95427E-08 | 3,98967E-08 | -9,94554E-11 | 3,3858E-08 | 2,63473E-08 | 4,35822E-10 | 1,63365E-08 | 1,67886E-08 |
| 49 | G Vertical | 2,09779E-07 | -2,29971E-09 | 1,15088E-08 | 1,71818E-07 | -3,09805E-10 | 1,75897E-09 | 1,3276E-07 | -7,49104E-10 | 1,59991E-09 |
| 49 | G transversal | -6,92595E-08 | 3,02977E-10 | -7,32824E-10 | -3,23068E-08 | 5,50296E-11 | -2,90689E-10 | -1,45663E-08 | 1,0813E-10 | -2,34656E-10 |
| 50 | D Longitudinal | 6,75078E-07 | -4,65748E-12 | -3,82072E-11 | 4,52458E-07 | -2,22911E-12 | 3,54695E-12 | 2,78075E-07 | -1,36547E-12 | 2,38857E-12 |
| 50 | D Vertical | -5,81107E-09 | -6,08235E-09 | -1,09637E-08 | -3,2609E-09 | -3,45821E-09 | -8,57542E-09 | -1,52719E-09 | -1,66238E-09 | -6,45419E-09 |
| 50 | D transversal | -2,16149E-08 | 6,57239E-07 | 2,5086E-07 | -1,73775E-08 | 4,3963E-07 | 2,17708E-07 | -1,33652E-08 | 2,69006E-07 | 1,64418E-07 |
| 50 | G Longitudinal | 1,75949E-09 | 6,03112E-08 | 3,43735E-08 | 2,50561E-11 | 3,39168E-08 | 2,59249E-08 | -6,33033E-11 | 1,642E-08 | 1,65979E-08 |
| 50 | G Vertical | 2,12773E-07 | 8,76586E-11 | -1,6077E-09 | 1,73645E-07 | -5,57116E-12 | -1,03832E-11 | 1,33757E-07 | -5,35144E-12 | 8,42882E-12 |
| 50 | G transversal | -6,00787E-08 | -5,70427E-11 | 5,9549E-10 | -3,2572E-08 | -1,28596E-12 | 1,59037E-11 | -1,51463E-08 | -6,93949E-12 | 1,39682E-11 |
| 51 | D Longitudinal | 1,83962E-07 | -8,23516E-11 | -9,00237E-11 | 9,80523E-08 | 1,19042E-12 | 2,83929E-11 | 3,76314E-08 | 6,59938E-12 | -9,03979E-12 |
| 51 | D Vertical | -1,96354E-08 | 8,09783E-08 | 4,20355E-08 | -8,70511E-09 | 4,4896E-08 | 2,80447E-08 | -4,07855E-09 | 2,17477E-08 | 1,71747E-08 |
| 51 | D transversal | -5,75955E-08 | 4,57736E-07 | 1,28863E-07 | -4,79418E-08 | 3,28018E-07 | 1,32743E-07 | -3,67386E-08 | 2,14946E-07 | 1,09885E-07 |
| 51 | G Longitudinal | -1,46018E-09 | 6,18173E-08 | 3,94654E-08 | 2,59326E-10 | 3,39374E-08 | 2,55743E-08 | 4,28112E-11 | 1,64277E-08 | 1,65837E-08 |
| 51 | G Vertical | 2,10198E-07 | -1,01942E-10 | -8,09548E-11 | 1,74274E-07 | -1,12077E-11 | 5,14086E-11 | 1,33583E-07 | -5,20117E-12 | 7,62805E-12 |
| 51 | G transversal | -6,63796E-08 | 1,85868E-10 | -6,34051E-10 | -3,14271E-08 | -2,21109E-11 | 1,76611E-10 | -1,48723E-08 | -1,46138E-12 | 6,12951E-12 |
| 52 | D Longitudinal | 1,83969E-07 | -8,22667E-11 | -8,99159E-11 | 9,80519E-08 | 1,19506E-12 | 2,83541E-11 | 3,76313E-08 | 6,59944E-12 | -9,04025E-12 |

APOYO 1

| DESPLAZAMIENTOS (metros) | | C4 | | | C5 | | | C6 | | |
|---|---|---|---|---|---|---|---|---|---|---|
| Nudo | Desplazamiento | L | T | V | L | T | V | L | T | V |
| 52 | D Vertical | 1,96193E-08 | 8,09742E-08 | 4,2061E-08 | 8,70204E-09 | 4,48961E-08 | 2,80444E-08 | 4,07974E-09 | 2,17482E-08 | 1,71739E-08 |
| 52 | D transversal | 5,76081E-08 | 4,57675E-07 | 1,28812E-07 | 4,7931E-08 | 3,28012E-07 | 1,32773E-07 | 3,67391E-08 | 2,14944E-07 | 1,09889E-07 |
| 52 | G Longitudinal | 1,43111E-09 | 6,18397E-08 | 3,95049E-08 | -2,61649E-10 | 3,39387E-08 | 2,55635E-08 | -4,08859E-11 | 1,64278E-08 | 1,65835E-08 |
| 52 | G Vertical | 2,10199E-07 | 8,65766E-11 | 1,10843E-10 | 1,74274E-07 | -1,65945E-12 | -3,05251E-11 | 1,33583E-07 | -5,67103E-12 | 7,68103E-12 |
| 52 | G transversal | -6,6392E-08 | -2,14596E-10 | 5,11687E-10 | -3,14271E-08 | 1,95033E-11 | -1,58645E-10 | -1,4872E-08 | 1,53638E-13 | -3,85935E-12 |
| 53 | D Longitudinal | 2,15653E-07 | -3,55976E-11 | -2,77403E-11 | 1,14094E-07 | 3,73182E-12 | 7,24064E-12 | 4,5129E-08 | 6,75936E-12 | -9,4753E-12 |
| 53 | D Vertical | -1,96445E-08 | 8,09783E-08 | 4,20356E-08 | -8,70458E-09 | 4,4896E-08 | 2,80447E-08 | -4,07838E-09 | 2,17477E-08 | 1,71747E-08 |
| 53 | D transversal | -5,89731E-08 | 4,88598E-07 | 1,48695E-07 | -4,78608E-08 | 3,4499E-07 | 1,45505E-07 | -3,67177E-08 | 2,23161E-07 | 1,18176E-07 |
| 53 | G Longitudinal | -4,0723E-09 | 6,14348E-08 | 3,94064E-08 | -8,64259E-10 | 3,39089E-08 | 2,56876E-08 | -2,27228E-10 | 1,65297E-08 | 1,65049E-08 |
| 53 | G Vertical | 2,0458E-07 | -5,9954E-10 | 3,55166E-10 | 1,72573E-07 | -7,0886E-11 | 3,26604E-10 | 1,33143E-07 | 1,79314E-10 | -1,32395E-10 |
| 53 | G transversal | -6,94768E-08 | -9,82452E-10 | 5,89994E-10 | -3,48476E-08 | -1,02858E-10 | 5,16976E-10 | -1,57353E-08 | 2,86359E-10 | -2,16964E-10 |
| 54 | D Longitudinal | 2,15653E-07 | -3,56183E-11 | -2,77572E-11 | 1,14094E-07 | 3,73091E-12 | 7,24915E-12 | 4,5129E-08 | 6,75963E-12 | -9,47567E-12 |
| 54 | D Vertical | 1,96285E-08 | 8,09742E-08 | 4,20611E-08 | 8,70151E-09 | 4,48961E-08 | 2,80444E-08 | 4,07957E-09 | 2,17482E-08 | 1,71739E-08 |
| 54 | D transversal | 5,896E-08 | 4,88569E-07 | 1,48689E-07 | 4,78493E-08 | 3,44985E-07 | 1,45521E-07 | 3,67193E-08 | 2,23158E-07 | 1,1818E-07 |
| 54 | G Longitudinal | 3,74785E-09 | 6,15339E-08 | 3,86675E-08 | 8,57831E-10 | 3,39109E-08 | 2,56583E-08 | 2,29224E-10 | 1,65296E-08 | 1,65052E-08 |
| 54 | G Vertical | 2,05118E-07 | 4,5416E-10 | 1,08784E-09 | 1,72581E-07 | 5,71723E-11 | -2,75204E-10 | 1,33143E-07 | -1,9E-10 | 1,47039E-10 |
| 54 | G transversal | -6,86571E-08 | 7,33398E-10 | 1,49228E-09 | -3,48364E-08 | 9,85532E-11 | -4,4659E-10 | -1,57353E-08 | -2,86909E-10 | 2,17443E-10 |
| 55 | D Longitudinal | 7,78634E-07 | -1,14887E-09 | 1,54391E-09 | 5,74176E-07 | -5,47604E-12 | -3,97533E-11 | 3,99404E-07 | -8,00039E-12 | 1,10914E-11 |
| 55 | D Vertical | 6,82118E-09 | -7,85192E-08 | -7,66588E-08 | 9,0544E-09 | -4,49894E-08 | -4,06836E-08 | 4,28459E-09 | -2,17904E-08 | -2,67582E-08 |
| 55 | D transversal | 6,10062E-08 | 4,90106E-07 | 1,57043E-07 | 4,78133E-08 | 3,45006E-07 | 1,45215E-07 | 3,67185E-08 | 2,23156E-07 | 1,18182E-07 |
| 55 | G Longitudinal | -2,57241E-09 | 4,93989E-08 | 8,11304E-08 | 9,33093E-10 | 3,40387E-08 | 2,5549E-08 | 4,32915E-10 | 1,67924E-08 | 1,58036E-08 |
| 55 | G Vertical | 2,31574E-07 | -8,82432E-10 | 2,81121E-09 | 1,7221E-07 | -2,62887E-10 | 1,43264E-09 | 1,32769E-07 | -6,63535E-10 | 1,40875E-09 |
| 55 | G transversal | -4,52776E-08 | 7,75494E-10 | -1,39917E-08 | -3,01424E-08 | 4,01979E-10 | -2,27946E-09 | -1,40952E-08 | 1,01981E-09 | -2,17149E-09 |
| 56 | D Longitudinal | 7,78634E-07 | -1,14762E-09 | 1,54208E-09 | 5,74176E-07 | -5,47509E-12 | -3,97778E-11 | 3,99404E-07 | -8E-12 | 1,10908E-11 |
| 56 | D Vertical | -6,80937E-09 | -7,85498E-08 | -7,66033E-08 | -9,04404E-09 | -4,49897E-08 | -4,06841E-08 | -4,28344E-09 | -2,17908E-08 | -2,67576E-08 |
| 56 | D transversal | -6,09967E-08 | 4,89303E-07 | 1,58118E-07 | -4,78262E-08 | 3,45012E-07 | 1,45173E-07 | -3,67182E-08 | 2,2316E-07 | 1,18177E-07 |
| 56 | G Longitudinal | 2,43564E-09 | 5,09271E-08 | 7,94027E-08 | -9,39947E-10 | 3,40373E-08 | 2,56163E-08 | -4,31273E-10 | 1,67939E-08 | 1,58015E-08 |
| 56 | G Vertical | 2,31118E-07 | 2,11748E-09 | -3,83693E-09 | 1,72211E-07 | 2,53607E-10 | -1,36301E-09 | 1,32775E-07 | 6,54806E-10 | -1,39663E-09 |
| 56 | G transversal | -4,45628E-08 | -4,18756E-09 | 1,76759E-08 | -3,01436E-08 | -4,0162E-10 | 2,13211E-09 | -1,41052E-08 | -1,02469E-09 | 2,17853E-09 |
| 57 | D Longitudinal | 7,44494E-07 | -2,74333E-09 | 3,70535E-09 | 5,57762E-07 | -3,65313E-13 | -1,12739E-10 | 3,91698E-07 | -8,41355E-12 | 1,13293E-11 |
| 57 | D Vertical | 6,85492E-09 | -7,8501E-08 | -7,67195E-08 | 9,0543E-09 | -4,49894E-08 | -4,06836E-08 | 4,28442E-09 | -2,17904E-08 | -2,67582E-08 |
| 57 | D transversal | 6,62736E-08 | 4,66004E-07 | 1,15501E-07 | 4,78285E-08 | 3,28057E-07 | 1,3206E-07 | 3,67394E-08 | 2,14941E-07 | 1,09895E-07 |
| 57 | G Longitudinal | 2,01086E-09 | 4,88929E-08 | 9,73468E-08 | -1,65815E-10 | 3,38701E-08 | 2,63649E-08 | -5,14253E-11 | 1,64265E-08 | 1,65851E-08 |
| 57 | G Vertical | 2,48251E-07 | -2,88264E-09 | 5,05477E-09 | 1,73932E-07 | -1,65385E-11 | 1,54792E-10 | 1,33582E-07 | -5,27836E-12 | 8,23024E-12 |
| 57 | G transversal | -4,75339E-08 | -7,64242E-10 | -2,15897E-09 | -3,32794E-08 | -7,41008E-11 | 3,21928E-11 | -1,55626E-08 | -1,16989E-11 | 3,13143E-11 |
| 58 | D Longitudinal | 7,44422E-07 | -2,75069E-09 | 3,71724E-09 | 5,57762E-07 | -3,74807E-13 | -1,12606E-10 | 3,91698E-07 | -8,41301E-12 | 1,13291E-11 |
| 58 | D Vertical | -6,84334E-09 | -7,85333E-08 | -7,66616E-08 | -9,04394E-09 | -4,49897E-08 | -4,06841E-08 | -4,28327E-09 | -2,17908E-08 | -2,67576E-08 |
| 58 | D transversal | -6,64105E-08 | 4,64069E-07 | 1,18109E-07 | -4,78376E-08 | 3,28066E-07 | 1,31966E-07 | -3,67381E-08 | 2,14944E-07 | 1,0989E-07 |
| 58 | G Longitudinal | -1,89291E-09 | 4,9716E-08 | 9,62197E-08 | 1,55863E-10 | 3,38673E-08 | 2,64022E-08 | 4,92869E-11 | 1,64267E-08 | 1,6585E-08 |
| 58 | G Vertical | 2,48292E-07 | 3,06667E-09 | -5,28102E-09 | 1,73933E-07 | 4,11053E-12 | -1,28613E-10 | 1,33582E-07 | -5,93699E-12 | 7,7294E-12 |
| 58 | G transversal | -4,75432E-08 | -6,42063E-10 | 4,12783E-09 | -3,32723E-08 | 7,79212E-11 | -9,36451E-11 | -1,55621E-08 | 1,05201E-11 | -2,98149E-11 |
| 59 | D Longitudinal | 1,02749E-07 | -2,82006E-10 | -2,37498E-10 | 3,95349E-08 | -7,57617E-11 | -9,72835E-11 | 7,04156E-09 | 2,89889E-12 | 2,91771E-11 |
| 59 | D Vertical | 2,09121E-08 | 8,17683E-08 | 2,76114E-08 | 1,15777E-08 | 4,60569E-08 | 3,15356E-08 | 3,93162E-09 | 2,17735E-08 | 1,68362E-08 |
| 59 | D transversal | 4,78392E-08 | 3,27915E-07 | 7,11185E-08 | 4,63627E-08 | 2,58894E-07 | 7,34418E-08 | 3,69999E-08 | 1,82052E-07 | 7,71294E-08 |

APOYO 1

| DESPLAZAMIENTOS (metros) | | C4 | | | C5 | | | C6 | | |
|---|---|---|---|---|---|---|---|---|---|---|
| Nudo | Desplazamiento | L | T | V | L | T | V | L | T | V |
| 59 | G Longitudinal | 2,36565E-09 | 6,54923E-08 | 2,58634E-08 | 1,04401E-09 | 3,54244E-08 | 3,07765E-08 | -3,09591E-10 | 1,64594E-08 | 1,61765E-08 |
| 59 | G Vertical | 1,75399E-07 | 3,06263E-10 | 2,56135E-10 | 1,69201E-07 | 8,17358E-11 | 1,06491E-10 | 1,34505E-07 | -2,90209E-12 | -3,2076E-11 |
| 59 | G transversal | -6,51233E-08 | 7,88755E-10 | 5,09379E-10 | -3,76702E-08 | -1,17327E-10 | 6,46973E-10 | -1,39322E-08 | 8,63945E-13 | -4,17103E-11 |
| 60 | D Longitudinal | 1,02735E-07 | -2,82304E-10 | -2,37749E-10 | 3,95289E-08 | -7,58418E-11 | -9,73867E-11 | 7,04195E-09 | 2,8956E-12 | 2,92174E-11 |
| 60 | D Vertical | -2,09073E-08 | 8,17657E-08 | 2,76065E-08 | -1,15777E-08 | 4,60582E-08 | 3,15317E-08 | -3,93173E-09 | 2,17731E-08 | 1,68372E-08 |
| 60 | D transversal | -4,78137E-08 | 3,28114E-07 | 7,1288E-08 | -4,63546E-08 | 2,5895E-07 | 7,35068E-08 | -3,69999E-08 | 1,82058E-07 | 7,7098E-08 |
| 60 | G Longitudinal | -2,38477E-09 | 6,54076E-08 | 2,57957E-08 | -1,05393E-09 | 3,54022E-08 | 3,07469E-08 | 3,10209E-10 | 1,64583E-08 | 1,6188E-08 |
| 60 | G Vertical | 1,75391E-07 | -3,25279E-10 | -2,77454E-10 | 1,69199E-07 | -9,24818E-11 | -1,0554E-10 | 1,34506E-07 | -9,4034E-12 | 5,22757E-11 |
| 60 | G transversal | -6,51239E-08 | -9,31765E-10 | -6,30064E-10 | -3,76701E-08 | 8,24842E-11 | -7,01462E-10 | -1,39326E-08 | -3,57412E-12 | 6,28468E-11 |
| 61 | D Longitudinal | 1,32023E-07 | -1,17955E-10 | -9,93463E-11 | 5,69283E-08 | -3,11253E-11 | -4,15054E-11 | 1,43953E-08 | 4,84284E-12 | 6,93266E-12 |
| 61 | D Vertical | -2,0926E-08 | 8,1766E-08 | 2,76068E-08 | -1,15854E-08 | 4,60582E-08 | 3,15318E-08 | -3,93121E-09 | 2,17731E-08 | 1,68372E-08 |
| 61 | D transversal | -5,02216E-08 | 3,60955E-07 | 8,42767E-08 | -4,73474E-08 | 2,76622E-07 | 8,89982E-08 | -3,6916E-08 | 1,90287E-07 | 8,51878E-08 |
| 61 | G Longitudinal | -4,12317E-09 | 6,45245E-08 | 2,51249E-08 | -3,62814E-09 | 3,52896E-08 | 3,05431E-08 | -6,86263E-10 | 1,67314E-08 | 1,59474E-08 |
| 61 | G Vertical | 1,67382E-07 | -4,78529E-10 | 9,82937E-12 | 1,63523E-07 | -1,82317E-10 | 7,76301E-11 | 1,3309E-07 | 4,88663E-10 | -3,86955E-10 |
| 61 | G transversal | -6,57564E-08 | -6,06657E-10 | 3,88933E-10 | -4,09688E-08 | -3,32096E-10 | 1,76433E-10 | -1,70263E-08 | 7,65122E-10 | -5,92624E-10 |
| 62 | D Longitudinal | 1,32023E-07 | -1,18005E-10 | -9,92605E-11 | 5,69283E-08 | -3,11398E-11 | -4,15455E-11 | 1,43953E-08 | 4,8427E-12 | 6,93747E-12 |
| 62 | D Vertical | 2,09309E-08 | 8,17684E-08 | 2,76116E-08 | 1,15853E-08 | 4,60569E-08 | 3,15357E-08 | 3,93111E-09 | 2,17735E-08 | 1,68362E-08 |
| 62 | D transversal | 5,022E-08 | 3,60872E-07 | 8,42045E-08 | 4,73431E-08 | 2,76598E-07 | 8,89732E-08 | 3,69169E-08 | 1,90283E-07 | 8,52035E-08 |
| 62 | G Longitudinal | 3,92464E-09 | 6,4716E-08 | 2,47835E-08 | 3,61338E-09 | 3,5332E-08 | 3,05925E-08 | 6,86434E-10 | 1,67329E-08 | 1,59267E-08 |
| 62 | G Vertical | 1,67707E-07 | 2,90078E-10 | 7,30989E-10 | 1,63532E-07 | 1,4305E-10 | -1,06571E-10 | 1,33092E-07 | -5,01507E-10 | 4,20873E-10 |
| 62 | G transversal | -6,52511E-08 | 1,6119E-10 | 6,36281E-10 | -4,09548E-08 | 2,37423E-10 | -2,83806E-10 | -1,70246E-08 | -7,68886E-10 | 6,39782E-10 |
| 63 | D Longitudinal | 5,51971E-07 | -2,68385E-10 | -3,62932E-10 | 4,93777E-07 | -2,75637E-09 | 3,7745E-09 | 3,61182E-07 | 2,68865E-12 | -1,08487E-10 |
| 63 | D Vertical | -8,39033E-09 | -8,13967E-08 | -3,95467E-08 | -4,56333E-10 | -4,37558E-08 | -6,24791E-08 | -4,2882E-09 | -2,17789E-08 | -2,70472E-08 |
| 63 | D transversal | -4,7752E-08 | 3,27966E-07 | 7,11304E-08 | -5,51375E-08 | 2,65235E-07 | 6,30556E-08 | -3,68971E-08 | 1,82107E-07 | 7,63445E-08 |
| 63 | G Longitudinal | -4,34737E-10 | 6,50561E-08 | 2,74634E-08 | -1,36755E-09 | 2,3492E-08 | 8,60299E-08 | 2,84877E-10 | 1,63912E-08 | 1,69213E-08 |
| 63 | G Vertical | 1,75675E-07 | -2,90945E-10 | -3,94246E-10 | 2,07165E-07 | 3,06183E-09 | -5,23154E-09 | 1,34169E-07 | 6,96294E-12 | -1,2417E-10 |
| 63 | G transversal | -5,04394E-08 | 6,60625E-10 | 9,04459E-10 | -2,37818E-08 | -5,58069E-10 | 4,13805E-09 | -1,63135E-08 | 6,48577E-11 | 7,1687E-11 |
| 64 | D Longitudinal | 5,51991E-07 | -2,68669E-10 | -3,63312E-10 | 4,93848E-07 | -2,74902E-09 | 3,76266E-09 | 3,61182E-07 | 2,70087E-12 | -1,08616E-10 |
| 64 | D Vertical | 8,39864E-09 | -8,13935E-08 | -3,95458E-08 | 4,79822E-10 | -4,37263E-08 | -6,25196E-08 | 4,28834E-09 | -2,17786E-08 | -2,70465E-08 |
| 64 | D transversal | 4,7717E-08 | 3,28156E-07 | 7,1385E-08 | 5,50067E-08 | 2,67176E-07 | 6,03993E-08 | 3,68985E-08 | 1,82096E-07 | 7,64348E-08 |
| 64 | G Longitudinal | 4,61538E-10 | 6,49759E-08 | 2,7354E-08 | 1,46678E-09 | 2,26695E-08 | 8,71559E-08 | -2,88196E-10 | 1,63948E-08 | 1,68848E-08 |
| 64 | G Vertical | 1,75663E-07 | 3,10383E-10 | 4,15967E-10 | 2,07123E-07 | -2,87325E-09 | 4,97376E-09 | 1,34169E-07 | -1,91342E-11 | 1,49157E-10 |
| 64 | G transversal | -5,04308E-08 | -7,9762E-10 | -1,08348E-09 | -2,37703E-08 | -8,39782E-10 | -2,22394E-09 | -1,63213E-08 | -5,98912E-11 | -1,32137E-10 |
| 65 | D Longitudinal | 5,83469E-07 | -1,12206E-10 | -1,52451E-10 | 5,15868E-07 | -1,15133E-09 | 1,57631E-09 | 3,68956E-07 | -3,81279E-12 | -3,81375E-11 |
| 65 | D Vertical | -8,3657E-09 | -8,13968E-08 | -3,9547E-08 | -4,2434E-10 | -4,37722E-08 | -6,24208E-08 | -4,2883E-09 | -2,17789E-08 | -2,70472E-08 |
| 65 | D transversal | -4,88068E-08 | 3,6068E-07 | 8,51222E-08 | -4,92915E-08 | 2,77373E-07 | 9,79674E-08 | -3,68787E-08 | 1,90313E-07 | 8,48387E-08 |
| 65 | G Longitudinal | -2,41166E-09 | 6,49213E-08 | 2,348E-08 | 2,47686E-09 | 2,396E-08 | 7,32448E-08 | -1,32406E-09 | 1,73784E-08 | 1,49656E-08 |
| 65 | G Vertical | 1,62973E-07 | 8,41691E-10 | -4,98441E-09 | 1,89179E-07 | 7,43447E-10 | 3,27302E-09 | 1,31693E-07 | 1,74908E-09 | -3,60589E-09 |
| 65 | G transversal | -5,66824E-08 | -1,75699E-09 | 7,21959E-09 | -1,8995E-08 | -2,00695E-09 | 6,32865E-09 | -1,17074E-08 | -2,71732E-09 | 5,59421E-09 |
| 66 | D Longitudinal | 5,83469E-07 | -1,12264E-10 | -1,52386E-10 | 5,15868E-07 | -1,15255E-09 | 1,57794E-09 | 3,68956E-07 | -3,81305E-12 | -3,81222E-11 |
| 66 | D Vertical | 8,37407E-09 | -8,13938E-08 | -3,95464E-08 | 4,48061E-10 | -4,37445E-08 | -6,24589E-08 | 4,28844E-09 | -2,17786E-08 | -2,70465E-08 |
| 66 | D transversal | 4,88076E-08 | 3,60759E-07 | 8,52274E-08 | 4,92956E-08 | 2,7818E-07 | 9,68619E-08 | 3,68799E-08 | 1,90306E-07 | 8,4879E-08 |
| 66 | G Longitudinal | 2,28206E-09 | 6,47746E-08 | 2,30773E-08 | -2,36787E-09 | 2,24116E-08 | 7,53637E-08 | 1,334E-09 | 1,73817E-08 | 1,49022E-08 |
| 66 | G Vertical | 1,63256E-07 | -7,23117E-10 | 5,50229E-09 | 1,89161E-07 | 5,30777E-10 | -5,01568E-09 | 1,31674E-07 | -1,75987E-09 | 3,66967E-09 |

APOYO 1

| DESPLAZAMIENTOS (metros) | | C4 | | | C5 | | | C6 | | |
|---|---|---|---|---|---|---|---|---|---|---|
| Nudo | Desplazamiento | L | T | V | L | T | V | L | T | V |
| 66 | G transversal | -5,71153E-08 | 1,42972E-09 | -8,22298E-09 | -1,89617E-08 | -1,45646E-09 | -1,58939E-09 | -1,16779E-08 | 2,72194E-09 | -5,73191E-09 |
| 67 | D Longitudinal | 4,32671E-08 | 2,79575E-11 | -3,52132E-12 | 1,16315E-08 | 2,339E-11 | 3,39157E-12 | -1,66011E-08 | -6,43033E-11 | 1,68107E-10 |
| 67 | D Vertical | -1,77771E-08 | 6,67779E-08 | 1,68409E-08 | -1,39354E-08 | 4,67273E-08 | 1,651E-08 | -6,9357E-09 | 2,3051E-08 | 1,99077E-08 |
| 67 | D transversal | -3,68472E-08 | 2,14933E-07 | 3,44807E-08 | -3,67708E-08 | 1,82046E-07 | 3,45278E-08 | -3,54717E-08 | 1,47834E-07 | 3,69658E-08 |
| 67 | G Longitudinal | -9,78046E-10 | 5,48105E-08 | 1,66249E-08 | -1,49487E-09 | 3,8822E-08 | 1,62245E-08 | -4,40121E-10 | 1,82064E-08 | 2,07161E-08 |
| 67 | G Vertical | 1,35612E-07 | 3,5027E-11 | -4,96354E-12 | 1,35303E-07 | 2,84331E-11 | 4,51808E-12 | 1,29655E-07 | -7,92413E-11 | 2,02176E-10 |
| 67 | G transversal | -4,83925E-08 | -2,05625E-09 | -9,81552E-10 | -3,65174E-08 | -9,87349E-10 | -9,09591E-10 | -1,88063E-08 | 4,92014E-10 | -1,07646E-09 |
| 68 | D Longitudinal | 4,32824E-08 | 2,79238E-11 | -3,51958E-12 | 1,16465E-08 | 2,33636E-11 | 3,38596E-12 | -1,65948E-08 | -6,42352E-11 | 1,67927E-10 |
| 68 | D Vertical | 1,77826E-08 | 6,67777E-08 | 1,68409E-08 | 1,39409E-08 | 4,67272E-08 | 1,65097E-08 | 6,94077E-09 | 2,30498E-08 | 1,99087E-08 |
| 68 | D transversal | 3,68737E-08 | 2,14953E-07 | 3,44772E-08 | 3,67969E-08 | 1,82062E-07 | 3,45299E-08 | 3,54805E-08 | 1,47786E-07 | 3,70883E-08 |
| 68 | G Longitudinal | 9,57495E-10 | 5,48024E-08 | 1,66238E-08 | 1,47584E-09 | 3,88151E-08 | 1,62232E-08 | 4,34546E-10 | 1,82253E-08 | 2,06664E-08 |
| 68 | G Vertical | 1,35621E-07 | -3,26302E-11 | 1,99774E-12 | 1,35312E-07 | -2,62482E-11 | -5,05147E-12 | 1,29656E-07 | 6,93075E-11 | -1,8235E-10 |
| 68 | G transversal | -4,83875E-08 | 2,06996E-09 | 9,8407E-10 | -3,65151E-08 | 9,98754E-10 | 9,11952E-10 | -1,88037E-08 | -5,21582E-10 | 1,15719E-09 |
| 69 | D Longitudinal | 6,64712E-08 | 1,18129E-11 | -1,76704E-12 | 2,77868E-08 | 9,84784E-12 | 1,3756E-12 | -7,89417E-09 | -2,61444E-11 | 6,91821E-11 |
| 69 | D Vertical | 1,7803E-08 | 6,67782E-08 | 1,68411E-08 | 1,39605E-08 | 4,67275E-08 | 1,651E-08 | 6,94877E-09 | 2,30498E-08 | 1,99089E-08 |
| 69 | D transversal | 3,95621E-08 | 2,42764E-07 | 4,29855E-08 | 3,92506E-08 | 2,01663E-07 | 4,28236E-08 | 3,64637E-08 | 1,56816E-07 | 4,76077E-08 |
| 69 | G Longitudinal | 3,51145E-09 | 5,35211E-08 | 1,58734E-08 | 4,0588E-09 | 3,83359E-08 | 1,57457E-08 | 2,67743E-09 | 1,84489E-08 | 2,02882E-08 |
| 69 | G Vertical | 1,27804E-07 | 1,0325E-10 | 4,15335E-10 | 1,27559E-07 | -7,05266E-11 | -7,567E-11 | 1,25563E-07 | -6,85306E-10 | 5,98374E-10 |
| 69 | G transversal | -5,37503E-08 | -7,12934E-10 | 2,10988E-10 | -3,86697E-08 | -3,93083E-10 | -6,06298E-10 | -2,09199E-08 | -1,05019E-09 | 8,16119E-10 |
| 70 | D Longitudinal | 6,64712E-08 | 1,16724E-11 | -1,85415E-12 | 2,77868E-08 | 9,8439E-12 | 1,25085E-12 | -7,89417E-09 | -2,61347E-11 | 6,91783E-11 |
| 70 | D Vertical | -1,77974E-08 | 6,67785E-08 | 1,68411E-08 | -1,39549E-08 | 4,67275E-08 | 1,65102E-08 | -6,94368E-09 | 2,3051E-08 | 1,99078E-08 |
| 70 | D transversal | -3,95639E-08 | 2,42755E-07 | 4,29879E-08 | -3,92521E-08 | 2,01656E-07 | 4,2823E-08 | -3,6465E-08 | 1,56838E-07 | 4,75545E-08 |
| 70 | G Longitudinal | -3,60038E-09 | 5,35251E-08 | 1,60353E-08 | -4,084E-09 | 3,83487E-08 | 1,57499E-08 | -2,68349E-09 | 1,84129E-08 | 2,03823E-08 |
| 70 | G Vertical | 1,27679E-07 | -1,10689E-10 | -1,24243E-10 | 1,27548E-07 | 8,16633E-11 | 7,98534E-11 | 1,2556E-07 | 6,51241E-10 | -5,14408E-10 |
| 70 | G transversal | -5,3947E-08 | 7,15505E-10 | 2,43524E-10 | -3,86882E-08 | 4,21758E-10 | 6,16313E-10 | -2,09245E-08 | 9,69359E-10 | -6,05242E-10 |
| 71 | D Longitudinal | 3,8624E-07 | 2,75164E-11 | 4,46821E-12 | 3,54819E-07 | 3,83056E-11 | -1,20184E-11 | 3,3176E-07 | -2,64537E-09 | 3,96654E-09 |
| 71 | D Vertical | -5,6542E-09 | -6,67803E-08 | -2,56676E-08 | -1,30365E-09 | -4,63657E-08 | -2,59517E-08 | 4,32983E-09 | -2,04393E-08 | -4,89516E-08 |
| 71 | D transversal | -3,67791E-08 | 2,1495E-07 | 3,45251E-08 | -3,70864E-08 | 1,82114E-07 | 3,44952E-08 | -4,43857E-08 | 1,54407E-07 | 2,61494E-08 |
| 71 | G Longitudinal | 8,23281E-10 | 5,48103E-08 | 1,74216E-08 | 1,053E-09 | 3,83982E-08 | 1,77351E-08 | 7,73302E-10 | 6,07514E-09 | 7,62638E-08 |
| 71 | G Vertical | 1,35617E-07 | 3,24697E-11 | 5,76582E-12 | 1,36847E-07 | 4,28128E-11 | -1,14506E-11 | 1,68087E-07 | 3,18293E-09 | -5,02283E-09 |
| 71 | G transversal | -4,14467E-08 | 2,05667E-09 | 1,39411E-09 | -2,81414E-08 | 8,54292E-10 | 1,55437E-09 | -1,23161E-08 | -1,15804E-09 | 5,32286E-09 |
| 72 | D Longitudinal | 4,12456E-07 | 1,1543E-11 | 2,19259E-12 | 3,73299E-07 | 1,60648E-11 | -4,9905E-12 | 3,45397E-07 | -1,10477E-09 | 1,65654E-09 |
| 72 | D Vertical | -5,63216E-09 | -6,67809E-08 | -2,5668E-08 | -1,27967E-09 | -4,6366E-08 | -2,59521E-08 | 4,36193E-09 | -2,04558E-08 | -4,88933E-08 |
| 72 | D transversal | -3,71549E-08 | 2,42763E-07 | 4,35176E-08 | -3,79745E-08 | 2,01478E-07 | 4,36764E-08 | -3,84431E-08 | 1,5771E-07 | 5,63532E-08 |
| 72 | G Longitudinal | -1,77215E-09 | 5,37822E-08 | 1,5322E-08 | -2,6158E-09 | 3,81462E-08 | 1,62459E-08 | 2,55477E-09 | 7,69058E-09 | 6,14791E-08 |
| 72 | G Vertical | 1,24159E-07 | 3,65868E-10 | -2,09368E-09 | 1,23526E-07 | 4,62686E-10 | -9,34069E-10 | 1,49765E-07 | 3,2063E-09 | -1,16842E-09 |
| 72 | G transversal | -4,89591E-08 | -1,44017E-09 | 2,50104E-09 | -2,97371E-08 | -1,15968E-09 | 9,32749E-10 | -1,81624E-09 | -5,83026E-09 | 1,32282E-08 |
| 73 | D Longitudinal | 4,12456E-07 | 1,14019E-11 | 2,0356E-12 | 3,73299E-07 | 1,59549E-11 | -4,9991E-12 | 3,45397E-07 | -1,10601E-09 | 1,65815E-09 |
| 73 | D Vertical | 5,63788E-09 | -6,67811E-08 | -2,56679E-08 | 1,28751E-09 | -4,63662E-08 | -2,59522E-08 | -4,34418E-09 | -2,0429E-08 | -4,89334E-08 |
| 73 | D transversal | 3,71567E-08 | 2,42755E-07 | 4,3515E-08 | 3,79759E-08 | 2,01467E-07 | 4,36798E-08 | 3,84517E-08 | 1,58485E-07 | 5,51911E-08 |
| 73 | G Longitudinal | 1,74401E-09 | 5,37988E-08 | 1,52559E-08 | 2,64474E-09 | 3,81647E-08 | 1,6243E-08 | -2,43104E-09 | 6,20918E-09 | 6,37001E-08 |
| 73 | G Vertical | 1,24254E-07 | -3,7992E-10 | 2,21119E-09 | 1,23518E-07 | -4,74325E-10 | 9,31801E-10 | 1,49723E-07 | -1,99162E-09 | -6,52813E-10 |
| 73 | G transversal | -4,91034E-08 | 1,47763E-09 | -2,68636E-09 | -2,97182E-08 | 1,19894E-09 | -9,36664E-10 | -1,74482E-09 | 2,51882E-09 | -8,26336E-09 |
| 74 | D Longitudinal | 3,86258E-07 | 2,75497E-11 | 4,47596E-12 | 3,54838E-07 | 3,83479E-11 | -1,20279E-11 | 3,3183E-07 | -2,63789E-09 | 3,9549E-09 |

APOYO 1

| DESPLAZAMIENTOS (metros) | | C4 | | | C5 | | | C6 | | |
|---|---|---|---|---|---|---|---|---|---|---|
| Nudo | Desplazamiento | L | T | V | L | T | V | L | T | V |
| 74 | D Vertical | 5,65986E-09 | -6,67806E-08 | -2,56675E-08 | 1,31142E-09 | -4,6366E-08 | -2,59517E-08 | -4,31232E-09 | -2,04108E-08 | -4,89942E-08 |
| 74 | D transversal | 3,67477E-08 | 2,14931E-07 | 3,45209E-08 | 3,70533E-08 | 1,82087E-07 | 3,45036E-08 | 4,42589E-08 | 1,56269E-07 | 2,33576E-08 |
| 74 | G Longitudinal | -7,99765E-10 | 5,48186E-08 | 1,74218E-08 | -1,02826E-09 | 3,84096E-08 | 1,77315E-08 | -6,74235E-10 | 5,28577E-09 | 7,74473E-08 |
| 74 | G Vertical | 1,35606E-07 | -3,40594E-11 | -8,77763E-12 | 1,36835E-07 | -4,52979E-11 | 1,19356E-11 | 1,68042E-07 | -3,00184E-09 | 4,75118E-09 |
| 74 | G transversal | -4,14442E-08 | -2,0426E-09 | -1,39402E-09 | -2,81336E-08 | -8,3506E-10 | -1,56023E-09 | -1,23079E-08 | -1,84383E-10 | -3,31019E-09 |
| 75 | D Longitudinal | 1,12357E-09 | 1,0579E-16 | 8,66056E-13 | 1,56929E-09 | -2,92275E-15 | 8,71644E-13 | 2,01508E-09 | -1,43418E-13 | 1,12399E-12 |
| 75 | D Vertical | -9,92167E-10 | -3,0878E-14 | -9,72072E-11 | -7,99442E-10 | -1,86159E-13 | -9,69128E-11 | -6,0848E-10 | 2,2458E-13 | -9,69946E-11 |
| 75 | D transversal | -3,79353E-09 | 1,22817E-09 | -4,9677E-10 | -3,78385E-09 | 1,7013E-09 | -4,96775E-10 | -3,78602E-09 | 2,17437E-09 | -4,96674E-10 |
| 75 | G Longitudinal | -1,27793E-10 | 1,34916E-09 | 2,5214E-10 | -1,27674E-10 | 1,10901E-09 | 2,5206E-10 | -1,37242E-10 | 8,69646E-10 | 2,50296E-10 |
| 75 | G Vertical | 4,05469E-09 | 1,3708E-10 | 2,18347E-11 | 4,06487E-09 | 1,16286E-10 | 2,17893E-11 | 4,06229E-09 | 9,58214E-11 | 2,10309E-11 |
| 75 | G transversal | -4,69938E-10 | -1,53071E-13 | -7,91374E-11 | -3,79931E-10 | -8,0331E-13 | -7,7984E-11 | -2,92562E-10 | -2,44777E-12 | -7,25053E-11 |
| 76 | D Longitudinal | -2,45084E-09 | 1,60641E-15 | -1,46448E-14 | -2,01413E-09 | 1,76976E-15 | -2,83934E-15 | -1,56695E-09 | 1,75944E-14 | -2,57823E-14 |
| 76 | D Vertical | 1,93079E-16 | -7,46459E-11 | 3,59007E-11 | 1,14349E-16 | -1,09696E-10 | 3,58953E-11 | 1,43718E-16 | -1,4474E-10 | 3,58693E-11 |
| 76 | D transversal | -2,77298E-16 | 1,2285E-09 | -4,95882E-10 | -5,45421E-16 | 1,70155E-09 | -4,95874E-10 | -1,16696E-15 | 2,17444E-09 | -4,95548E-10 |
| 76 | G Longitudinal | 4,32642E-14 | -7,31024E-10 | -2,92287E-12 | 8,15385E-15 | -6,54046E-10 | -3,56645E-12 | -5,93311E-15 | -5,81378E-10 | 2,82422E-12 |
| 76 | G Vertical | 2,96936E-09 | 1,29805E-15 | -1,05583E-14 | 2,93911E-09 | 1,65852E-15 | -2,61587E-15 | 2,91847E-09 | 1,56228E-14 | -2,28846E-14 |
| 76 | G transversal | -1,68445E-09 | -6,09407E-16 | 3,50987E-15 | -1,39716E-09 | -8,33507E-16 | 1,27634E-15 | -1,11983E-09 | -4,17134E-15 | 6,10288E-15 |
| 77 | D Longitudinal | 7,86549E-09 | 3,23122E-10 | 8,08058E-11 | 8,63913E-09 | 2,7426E-10 | 8,0467E-11 | 9,38743E-09 | 2,26419E-10 | 7,7466E-11 |
| 77 | D Vertical | -2,02332E-09 | -2,25637E-09 | -6,13318E-10 | -1,62076E-09 | -1,87358E-09 | -6,13344E-10 | -1,20368E-09 | -1,49066E-09 | -6,13684E-10 |
| 77 | D transversal | -3,40355E-09 | 1,48723E-09 | -4,1422E-10 | -3,44688E-09 | 1,91257E-09 | -4,14318E-10 | -3,50601E-09 | 2,33865E-09 | -4,15938E-10 |
| 77 | G Longitudinal | -1,30877E-08 | 3,80516E-09 | 1,06777E-10 | -1,29177E-08 | 3,81341E-09 | 3,83601E-10 | -1,26605E-08 | 2,77353E-09 | 3,2345E-09 |
| 77 | G Vertical | 1,171E-07 | -8,71039E-09 | -8,01271E-09 | 1,12603E-07 | -1,29163E-09 | -1,19449E-08 | 1,06346E-07 | 2,10345E-08 | -5,24744E-08 |
| 77 | G transversal | -1,98213E-08 | -1,30129E-11 | 4,0428E-10 | -2,04615E-08 | -4,38136E-10 | 6,82527E-10 | -2,09338E-08 | -1,91745E-09 | 3,54907E-09 |
| 78 | D Longitudinal | 7,8655E-09 | -3,23129E-10 | -8,07464E-11 | 8,63912E-09 | -2,74269E-10 | -8,04533E-11 | 9,38742E-09 | -2,26506E-10 | -7,73389E-11 |
| 78 | D Vertical | 2,02332E-09 | -2,25638E-09 | -6,13302E-10 | 1,62076E-09 | -1,87358E-09 | -6,1334E-10 | 1,20368E-09 | -1,49067E-09 | -6,13667E-10 |
| 78 | D transversal | 3,40355E-09 | 1,48723E-09 | -4,14251E-10 | 3,44688E-09 | 1,91258E-09 | -4,14326E-10 | 3,50602E-09 | 2,3387E-09 | -4,16007E-10 |
| 78 | G Longitudinal | 1,309E-08 | 3,80511E-09 | 1,10632E-10 | 1,2909E-08 | 3,81351E-09 | 3,8348E-10 | 1,26428E-08 | 2,773E-09 | 3,23529E-09 |
| 78 | G Vertical | 1,17133E-07 | 8,70954E-09 | 8,06842E-09 | 1,12479E-07 | 1,29289E-09 | 1,19435E-08 | 1,06094E-07 | -2,10435E-08 | 5,24878E-08 |
| 78 | G transversal | -1,98237E-08 | 1,30839E-11 | -4,08315E-10 | -2,04527E-08 | 4,38061E-10 | -6,82445E-10 | -2,0916E-08 | 1,91823E-09 | -3,55021E-09 |
| 79 | D Longitudinal | -4,06911E-09 | 3,23058E-10 | 2,20112E-11 | -3,33677E-09 | 2,73924E-10 | 2,22012E-11 | -2,57884E-09 | 2,25416E-10 | 2,14979E-11 |
| 79 | D Vertical | 2,40673E-09 | 2,25638E-09 | 1,90527E-10 | 2,00382E-09 | 1,87362E-09 | 1,90514E-10 | 1,61546E-09 | 1,49083E-09 | 1,90513E-10 |
| 79 | D transversal | 4,11395E-09 | 1,48722E-09 | -4,78937E-10 | 4,0489E-09 | 1,91248E-09 | -4,78885E-10 | 3,99821E-09 | 2,3375E-09 | -4,78348E-10 |
| 79 | G Longitudinal | 1,51741E-08 | 3,86092E-09 | -3,20275E-10 | 1,52015E-08 | 4,10172E-09 | -4,59063E-10 | 1,49581E-08 | 3,93103E-09 | -5,05163E-11 |
| 79 | G Vertical | 1,15734E-07 | 9,50222E-09 | 4,78076E-09 | 1,18821E-07 | 5,38632E-09 | 2,80987E-09 | 1,17601E-07 | -4,56169E-09 | 8,59335E-09 |
| 79 | G transversal | 1,30102E-08 | 4,29905E-11 | 2,91365E-10 | 1,23338E-08 | -1,48471E-10 | 1,51901E-10 | 1,1309E-08 | -7,52671E-10 | 5,61319E-10 |
| 80 | D Longitudinal | 1,47734E-08 | 1,06033E-09 | 2,68605E-10 | 1,58649E-08 | 8,97308E-10 | 2,66794E-10 | 1,68979E-08 | 7,40476E-10 | 2,49558E-10 |
| 80 | D Vertical | -3,92854E-09 | -4,37535E-09 | -1,19465E-09 | -3,14704E-09 | -3,63287E-09 | -1,19475E-09 | -2,33877E-09 | -2,88994E-09 | -1,19594E-09 |
| 80 | D transversal | -6,04241E-09 | 4,43663E-09 | -4,98336E-10 | -6,23408E-09 | 5,0348E-09 | -4,98042E-10 | -6,47388E-09 | 5,63304E-09 | -4,97082E-10 |
| 80 | G Longitudinal | -1,32601E-08 | 5,96397E-09 | 4,69806E-10 | -1,30687E-08 | 5,61533E-09 | 7,48293E-10 | -1,28092E-08 | 4,21103E-09 | 3,61829E-09 |
| 80 | G Vertical | 1,1719E-07 | -8,58284E-09 | -7,99334E-09 | 1,12747E-07 | -1,18534E-09 | -1,19257E-08 | 1,06543E-07 | 2,11198E-08 | -5,2456E-08 |
| 80 | G transversal | -1,86341E-08 | -3,2338E-10 | 3,2233E-10 | -1,85365E-08 | -6,9755E-10 | 6,02069E-10 | -1,82573E-08 | -2,13192E-09 | 3,48437E-09 |
| 81 | D Longitudinal | 1,47734E-08 | -1,06034E-09 | -2,6846E-10 | 1,58648E-08 | -8,97325E-10 | -2,66766E-10 | 1,68978E-08 | -7,40654E-10 | -2,49298E-10 |
| 81 | D Vertical | 3,92854E-09 | -4,37535E-09 | -1,19463E-09 | 3,14705E-09 | -3,63287E-09 | -1,19475E-09 | 2,33878E-09 | -2,88996E-09 | -1,19592E-09 |
| 81 | D transversal | 6,04241E-09 | 4,43664E-09 | -4,9842E-10 | 6,23407E-09 | 5,03482E-09 | -4,98064E-10 | 6,47387E-09 | 5,63317E-09 | -4,97266E-10 |

APOYO 1

| DESPLAZAMIENTOS (metros) | | C4 | | | C5 | | | C6 | | |
|---|---|---|---|---|---|---|---|---|---|---|
| Nudo | Desplazamiento | L | T | V | L | T | V | L | T | V |
| 81 | G Longitudinal | 1,32625E-08 | 5,96393E-09 | 4,73644E-10 | 1,30599E-08 | 5,61543E-09 | 7,48163E-10 | 1,27914E-08 | 4,21053E-09 | 3,61904E-09 |
| 81 | G Vertical | 1,17223E-07 | 8,58199E-09 | 8,04906E-09 | 1,12623E-07 | 1,18659E-09 | 1,19242E-08 | 1,06291E-07 | -2,11288E-08 | 5,24693E-08 |
| 81 | G transversal | -1,86365E-08 | 3,23454E-10 | -3,264E-10 | -1,85277E-08 | 6,97477E-10 | -6,01989E-10 | -1,82394E-08 | 2,1327E-09 | -3,48553E-09 |
| 82 | D Longitudinal | -5,40252E-09 | 1,06E-09 | 7,49953E-11 | -4,39011E-09 | 8,95521E-10 | 7,59055E-11 | -3,31783E-09 | 7,33743E-10 | 7,31227E-11 |
| 82 | D Vertical | 4,65796E-09 | 4,37537E-09 | 3,64469E-10 | 3,87736E-09 | 3,63299E-09 | 3,64427E-10 | 3,12358E-09 | 2,89047E-09 | 3,64539E-10 |
| 82 | D transversal | 8,8788E-09 | 4,4367E-09 | -7,58114E-10 | 8,63175E-09 | 5,03517E-09 | -7,58325E-10 | 8,42942E-09 | 5,6327E-09 | -7,57307E-10 |
| 82 | G Longitudinal | 1,50856E-08 | 6,02004E-09 | 6,48741E-11 | 1,5118E-08 | 5,90542E-09 | -7,48832E-11 | 1,49051E-08 | 5,37947E-09 | 3,31029E-10 |
| 82 | G Vertical | 1,1607E-07 | 9,3747E-09 | 4,75543E-09 | 1,19105E-07 | 5,28013E-09 | 2,7845E-09 | 1,17832E-07 | -4,6469E-09 | 8,56852E-09 |
| 82 | G transversal | 8,5552E-09 | -2,67116E-10 | 2,65191E-10 | 8,61161E-09 | -4,06417E-10 | 1,25029E-10 | 8,30499E-09 | -9,60195E-10 | 5,35957E-10 |
| 83 | D Longitudinal | 2,16035E-08 | 1,59238E-09 | 4,17044E-10 | 2,26723E-08 | 1,33531E-09 | 4,17498E-10 | 2,36435E-08 | 1,07633E-09 | 4,23009E-10 |
| 83 | D Vertical | -6,12719E-09 | -6,37835E-09 | -1,80469E-09 | -4,97837E-09 | -5,25673E-09 | -1,80479E-09 | -3,79266E-09 | -4,13466E-09 | -1,80598E-09 |
| 83 | D transversal | -9,53911E-09 | 8,40878E-09 | -4,99284E-10 | -9,74804E-09 | 9,02322E-09 | -5,01264E-10 | -1,00439E-08 | 9,64503E-09 | -5,21515E-10 |
| 83 | G Longitudinal | -1,49608E-08 | 7,64734E-09 | 6,11229E-10 | -1,45354E-08 | 7,03026E-09 | 8,91357E-10 | -1,40471E-08 | 5,34703E-09 | 3,78597E-09 |
| 83 | G Vertical | 1,17319E-07 | -8,60393E-09 | -7,97483E-09 | 1,12809E-07 | -1,20651E-09 | -1,19078E-08 | 1,06537E-07 | 2,11013E-08 | -5,24451E-08 |
| 83 | G transversal | -2,00789E-08 | 4,82969E-10 | 5,16484E-10 | -1,95886E-08 | -8,11251E-12 | 7,95405E-10 | -1,89044E-08 | -1,5588E-09 | 3,67382E-09 |
| 84 | D Longitudinal | 2,16035E-08 | -1,5924E-09 | -4,16862E-10 | 2,26723E-08 | -1,33534E-09 | -4,17452E-10 | 2,36435E-08 | -1,07659E-09 | -4,22625E-10 |
| 84 | D Vertical | 6,12719E-09 | -6,37836E-09 | -1,80465E-09 | 4,97837E-09 | -5,25673E-09 | -1,80478E-09 | 3,79267E-09 | -4,13468E-09 | -1,80595E-09 |
| 84 | D transversal | 9,53908E-09 | 8,4088E-09 | -4,99474E-10 | 9,74811E-09 | 9,02325E-09 | -5,01302E-10 | 1,0044E-08 | 9,64525E-09 | -5,21838E-10 |
| 84 | G Longitudinal | 1,49631E-08 | 7,64729E-09 | 6,1508E-10 | 1,45265E-08 | 7,03036E-09 | 8,91223E-10 | 1,40292E-08 | 5,34654E-09 | 3,78671E-09 |
| 84 | G Vertical | 1,17352E-07 | 8,60308E-09 | 8,03055E-09 | 1,12685E-07 | 1,20776E-09 | 1,19063E-08 | 1,06285E-07 | -2,11103E-08 | 5,24585E-08 |
| 84 | G transversal | -2,00812E-08 | -4,82894E-10 | -5,20545E-10 | -1,95798E-08 | 8,04192E-12 | -7,95329E-10 | -1,88864E-08 | 1,55959E-09 | -3,67498E-09 |
| 85 | D Longitudinal | -4,51337E-09 | 1,59255E-09 | 1,22483E-10 | -3,56136E-09 | 1,33598E-09 | 1,22233E-10 | -2,51179E-09 | 1,0783E-09 | 1,23454E-10 |
| 85 | D Vertical | 6,60787E-09 | 6,37838E-09 | 5,5065E-10 | 5,46349E-09 | 5,25685E-09 | 5,50616E-10 | 4,35571E-09 | 4,1351E-09 | 5,50892E-10 |
| 85 | D transversal | 1,27101E-08 | 8,40838E-09 | -7,89827E-10 | 1,24083E-08 | 9,02129E-09 | -7,88989E-10 | 1,2198E-08 | 9,63887E-09 | -7,9561E-10 |
| 85 | G Longitudinal | 1,36625E-08 | 7,70374E-09 | 4,86082E-10 | 1,39254E-08 | 7,32204E-09 | 3,45664E-10 | 1,39589E-08 | 6,52916E-09 | 7,5003E-10 |
| 85 | G Vertical | 1,1569E-07 | 9,3959E-09 | 4,7733E-09 | 1,18791E-07 | 5,30196E-09 | 2,80202E-09 | 1,17584E-07 | -4,62481E-09 | 8,58589E-09 |
| 85 | G transversal | 6,05359E-09 | 5,39075E-10 | 3,17114E-10 | 6,50347E-09 | 2,82215E-10 | 1,77336E-10 | 6,57894E-09 | -3,87262E-10 | 5,85822E-10 |
| 86 | D Longitudinal | 3,001E-08 | 1,57055E-09 | 4,25298E-10 | 3,0855E-08 | 1,30557E-09 | 4,25008E-10 | 3,15537E-08 | 1,04315E-09 | 4,19968E-10 |
| 86 | D Vertical | -7,97583E-09 | -8,34521E-09 | -2,41246E-09 | -6,438E-09 | -6,85315E-09 | -2,41248E-09 | -4,85531E-09 | -5,36107E-09 | -2,41265E-09 |
| 86 | D transversal | -1,35803E-08 | 1,36858E-08 | -2,92207E-10 | -1,37485E-08 | 1,40853E-08 | -2,92301E-10 | -1,40475E-08 | 1,44814E-08 | -2,86302E-10 |
| 86 | G Longitudinal | -1,47272E-08 | 9,90997E-09 | 1,05418E-09 | -1,43209E-08 | 8,87917E-09 | 1,33351E-09 | -1,38673E-08 | 6,78196E-09 | 4,22689E-09 |
| 86 | G Vertical | 1,17081E-07 | -8,189E-09 | -7,86058E-09 | 1,12517E-07 | -8,66336E-10 | -1,17946E-08 | 1,06188E-07 | 2,13704E-08 | -5,23419E-08 |
| 86 | G transversal | -2,27234E-08 | 1,16558E-09 | 6,80544E-10 | -2,19347E-08 | 5,77706E-10 | 9,58014E-10 | -2,0939E-08 | -1,06387E-09 | 3,8213E-09 |
| 87 | D Longitudinal | 3,00099E-08 | -1,57058E-09 | -4,25034E-10 | 3,0855E-08 | -1,30562E-09 | -4,24942E-10 | 3,15536E-08 | -1,04351E-09 | -4,19439E-10 |
| 87 | D Vertical | 7,97583E-09 | -8,34522E-09 | -2,41242E-09 | 6,438E-09 | -6,85316E-09 | -2,41247E-09 | 4,85531E-09 | -5,36109E-09 | -2,41262E-09 |
| 87 | D transversal | 1,35803E-08 | 1,36858E-08 | -2,92443E-10 | 1,37485E-08 | 1,40853E-08 | -2,9236E-10 | 1,40474E-08 | 1,44817E-08 | -2,86759E-10 |
| 87 | G Longitudinal | 1,47295E-08 | 9,90992E-09 | 1,05803E-09 | 1,4312E-08 | 8,87928E-09 | 1,33337E-09 | 1,38493E-08 | 6,78148E-09 | 4,22761E-09 |
| 87 | G Vertical | 1,17114E-07 | 8,18815E-09 | 7,91632E-09 | 1,12393E-07 | 8,67592E-10 | 1,17931E-08 | 1,05936E-07 | -2,13794E-08 | 5,23553E-08 |
| 87 | G transversal | -2,27257E-08 | -1,16551E-09 | -6,84596E-10 | -2,19259E-08 | -5,77774E-10 | -9,57943E-10 | -2,09213E-08 | 1,06466E-09 | -3,82248E-09 |
| 88 | D Longitudinal | -2,47054E-09 | 1,57058E-09 | 1,3137E-10 | -1,77964E-09 | 1,30548E-09 | 1,31516E-10 | -9,42093E-10 | 1,03988E-09 | 1,32528E-10 |
| 88 | D Vertical | 8,66698E-09 | 8,34522E-09 | 7,20815E-10 | 7,13926E-09 | 6,8532E-09 | 7,20805E-10 | 5,6557E-09 | 5,36105E-09 | 7,20961E-10 |
| 88 | D transversal | 1,6284E-08 | 1,36858E-08 | -5,4681E-10 | 1,59835E-08 | 1,40854E-08 | -5,46717E-10 | 1,58256E-08 | 1,44884E-08 | -5,52742E-10 |
| 88 | G Longitudinal | 1,3636E-08 | 9,96638E-09 | 9,1299E-10 | 1,38811E-08 | 9,17004E-09 | 7,73731E-10 | 1,39079E-08 | 7,95912E-09 | 1,18742E-09 |
| 88 | G Vertical | 1,15424E-07 | 8,98115E-09 | 4,7297E-09 | 1,18578E-07 | 4,96288E-09 | 2,75778E-09 | 1,17423E-07 | -4,88853E-09 | 8,54066E-09 |

APOYO 1

| DESPLAZAMIENTOS (metros) | | C4 | | | C5 | | | C6 | | |
|---|---|---|---|---|---|---|---|---|---|---|
| Nudo | Desplazamiento | L | T | V | L | T | V | L | T | V |
| 88 | G transversal | 4,19258E-09 | 1,22149E-09 | 3,5753E-10 | 4,94196E-09 | 8,66732E-10 | 2,18324E-10 | 5,30529E-09 | 1,00522E-10 | 6,2598E-10 |
| 89 | D Longitudinal | 3,98687E-08 | 1,33537E-09 | 3,84651E-10 | 4,02797E-08 | 1,09062E-09 | 3,84243E-10 | 4,04879E-08 | 8,47802E-10 | 3,79342E-10 |
| 89 | D Vertical | -9,95013E-09 | -1,01683E-08 | -3,03799E-09 | -8,03958E-09 | -8,28872E-09 | -3,03792E-09 | -6,07882E-09 | -6,40973E-09 | -3,03667E-09 |
| 89 | D transversal | -1,73021E-08 | 2,03333E-08 | 2,05151E-10 | -1,74655E-08 | 2,02612E-08 | 2,06198E-10 | -1,7816E-08 | 2,01781E-08 | 2,30647E-10 |
| 89 | G Longitudinal | -1,4379E-08 | 1,18717E-08 | 1,44629E-09 | -1,40139E-08 | 1,04923E-08 | 1,72509E-09 | -1,36276E-08 | 8,05662E-09 | 4,59881E-09 |
| 89 | G Vertical | 1,16903E-07 | -7,84824E-09 | -7,76244E-09 | 1,12289E-07 | -5,88372E-10 | -1,16974E-08 | 1,05907E-07 | 2,15902E-08 | -5,22563E-08 |
| 89 | G transversal | -2,46333E-08 | 1,09554E-09 | 6,66769E-10 | -2,34627E-08 | 5,15631E-10 | 9,4383E-10 | -2,20727E-08 | -1,1082E-09 | 3,78952E-09 |
| 90 | D Longitudinal | 3,98687E-08 | -1,33542E-09 | -3,843E-10 | 4,02797E-08 | -1,09067E-09 | -3,84156E-10 | 4,04879E-08 | -8,48266E-10 | -3,78663E-10 |
| 90 | D Vertical | 9,95013E-09 | -1,01683E-08 | -3,03795E-09 | 8,03958E-09 | -8,28873E-09 | -3,03791E-09 | 6,07881E-09 | -6,40974E-09 | -3,03665E-09 |
| 90 | D transversal | 1,73022E-08 | 2,03333E-08 | 2,04861E-10 | 1,74654E-08 | 2,02613E-08 | 2,06114E-10 | 1,78159E-08 | 2,01785E-08 | 2,30038E-10 |
| 90 | G Longitudinal | 1,43814E-08 | 1,18717E-08 | 1,45012E-09 | 1,40051E-08 | 1,04924E-08 | 1,72495E-09 | 1,36097E-08 | 8,05616E-09 | 4,5995E-09 |
| 90 | G Vertical | 1,16936E-07 | 7,84739E-09 | 7,81819E-09 | 1,12164E-07 | 5,89629E-10 | 1,1696E-08 | 1,05655E-07 | -2,15992E-08 | 5,22697E-08 |
| 90 | G transversal | -2,46358E-08 | -1,09547E-09 | -6,70848E-10 | -2,34541E-08 | -5,15697E-10 | -9,43761E-10 | -2,20555E-08 | 1,109E-09 | -3,79071E-09 |
| 91 | D Longitudinal | 7,77956E-10 | 1,3353E-09 | 1,29419E-10 | 9,98484E-10 | 1,09023E-09 | 1,29797E-10 | 1,42201E-09 | 8,46076E-10 | 1,28851E-10 |
| 91 | D Vertical | 1,03793E-08 | 1,01683E-08 | 9,09141E-10 | 8,48665E-09 | 8,28869E-09 | 9,09136E-10 | 6,64355E-09 | 6,40911E-09 | 9,08991E-10 |
| 91 | D transversal | 1,99883E-08 | 2,03337E-08 | -5,43163E-11 | 1,96551E-08 | 2,02624E-08 | -5,42144E-11 | 1,95187E-08 | 2,01902E-08 | -5,18361E-11 |
| 91 | G Longitudinal | 1,39253E-08 | 1,19281E-08 | 1,25343E-09 | 1,41315E-08 | 1,07826E-08 | 1,11442E-09 | 1,41172E-08 | 9,21543E-09 | 1,5411E-09 |
| 91 | G Vertical | 1,15153E-07 | 8,64054E-09 | 4,69518E-09 | 1,18355E-07 | 4,6859E-09 | 2,72274E-09 | 1,1725E-07 | -5,1016E-09 | 8,50387E-09 |
| 91 | G transversal | 2,09052E-09 | 1,15158E-09 | 3,55376E-10 | 3,21774E-09 | 8,04637E-10 | 2,16042E-10 | 3,94701E-09 | 4,24623E-11 | 6,29989E-10 |
| 92 | D Longitudinal | 5,07184E-08 | 1,32504E-09 | 4,0463E-10 | 5,04437E-08 | 1,06151E-09 | 4,07839E-10 | 4,99039E-08 | 7,79998E-10 | 4,50223E-10 |
| 92 | D Vertical | -1,15112E-08 | -1,18798E-08 | -3,6439E-09 | -9,21062E-09 | -9,62919E-09 | -3,64372E-09 | -6,85814E-09 | -7,37936E-09 | -3,64184E-09 |
| 92 | D transversal | -2,09623E-08 | 2,81191E-08 | 8,94408E-10 | -2,11406E-08 | 2,74007E-08 | 8,93214E-10 | -2,15859E-08 | 2,66885E-08 | 8,79351E-10 |
| 92 | G Longitudinal | -1,4659E-08 | 1,37106E-08 | 1,73027E-09 | -1,43141E-08 | 1,20729E-08 | 2,0115E-09 | -1,39916E-08 | 9,39987E-09 | 4,85422E-09 |
| 92 | G Vertical | 1,1689E-07 | -7,69727E-09 | -7,70227E-09 | 1,12177E-07 | -4,63451E-10 | -1,1638E-08 | 1,05696E-07 | 2,16904E-08 | -5,22019E-08 |
| 92 | G transversal | -2,65801E-08 | 5,34502E-10 | 5,15055E-10 | -2,49868E-08 | 4,75733E-11 | 7,93556E-10 | -2,31622E-08 | -1,48448E-09 | 3,64614E-09 |
| 93 | D Longitudinal | 5,07185E-08 | -1,3251E-09 | -4,04226E-10 | 5,04439E-08 | -1,06158E-09 | -4,07728E-10 | 4,99045E-08 | -7,80558E-10 | -4,49402E-10 |
| 93 | D Vertical | 1,15112E-08 | -1,18798E-08 | -3,64386E-09 | 9,21061E-09 | -9,6292E-09 | -3,64371E-09 | 6,8581E-09 | -7,37935E-09 | -3,64185E-09 |
| 93 | D transversal | 2,09623E-08 | 2,81191E-08 | 8,93992E-10 | 2,11407E-08 | 2,74008E-08 | 8,93109E-10 | 2,1586E-08 | 2,66891E-08 | 8,78555E-10 |
| 93 | G Longitudinal | 1,46614E-08 | 1,37105E-08 | 1,73407E-09 | 1,43054E-08 | 1,2073E-08 | 2,01137E-09 | 1,39739E-08 | 9,39944E-09 | 4,85486E-09 |
| 93 | G Vertical | 1,16923E-07 | 7,69642E-09 | 7,75804E-09 | 1,12053E-07 | 4,64708E-10 | 1,16365E-08 | 1,05444E-07 | -2,16994E-08 | 5,22153E-08 |
| 93 | G transversal | -2,65826E-08 | -5,34421E-10 | -5,19172E-10 | -2,49782E-08 | -4,76391E-11 | -7,93488E-10 | -2,3145E-08 | 1,48528E-09 | -3,64734E-09 |
| 94 | D Longitudinal | 5,50325E-09 | 1,32552E-09 | 1,45851E-10 | 5,00377E-09 | 1,06456E-09 | 1,44726E-10 | 4,76701E-09 | 8,02764E-10 | 1,43456E-10 |
| 94 | D Vertical | 1,21591E-08 | 1,18798E-08 | 1,08246E-09 | 9,88642E-09 | 9,62906E-09 | 1,08251E-09 | 7,66711E-09 | 7,37881E-09 | 1,08178E-09 |
| 94 | D transversal | 2,38391E-08 | 2,8119E-08 | 6,15237E-10 | 2,34554E-08 | 2,73996E-08 | 6,16349E-10 | 2,33208E-08 | 2,66749E-08 | 6,28429E-10 |
| 94 | G Longitudinal | 1,45445E-08 | 1,3767E-08 | 1,50889E-09 | 1,47301E-08 | 1,23659E-08 | 1,36646E-09 | 1,46779E-08 | 1,05319E-08 | 1,80278E-09 |
| 94 | G Vertical | 1,14621E-07 | 8,48974E-09 | 4,70017E-09 | 1,17921E-07 | 4,56181E-09 | 2,72726E-09 | 1,16911E-07 | -5,20033E-09 | 8,50965E-09 |
| 94 | G transversal | -9,76585E-11 | 5,90781E-10 | 3,10764E-10 | 1,44659E-09 | 3,37919E-10 | 1,70796E-10 | 2,57972E-09 | -3,32959E-10 | 5,88297E-10 |
| 95 | D Longitudinal | 6,38335E-08 | 1,77434E-09 | 5,65209E-10 | 6,2519E-08 | 1,40323E-09 | 5,65274E-10 | 6,08655E-08 | 1,02542E-09 | 5,77957E-10 |
| 95 | D Vertical | -1,38748E-08 | -1,39512E-08 | -4,44558E-09 | -1,10936E-08 | -1,11928E-08 | -4,4454E-09 | -8,25986E-09 | -8,43344E-09 | -4,44675E-09 |
| 95 | D transversal | -2,49929E-08 | 3,77389E-08 | 1,88875E-09 | -2,52331E-08 | 3,61068E-08 | 1,89133E-09 | -2,5846E-08 | 3,44952E-08 | 1,86331E-09 |
| 95 | G Longitudinal | -1,53413E-08 | 1,7355E-08 | 2,3242E-09 | -1,50709E-08 | 1,51797E-08 | 2,60717E-09 | -1,48317E-08 | 1,19664E-08 | 5,4575E-09 |
| 95 | G Vertical | 1,16295E-07 | -7,19123E-09 | -7,59286E-09 | 1,11511E-07 | -2,50366E-11 | -1,15282E-08 | 1,04954E-07 | 2,20588E-08 | -5,20881E-08 |
| 95 | G transversal | -3,10681E-08 | -3,11194E-11 | 3,14466E-10 | -2,88628E-08 | -3,86032E-10 | 6,01038E-10 | -2,64072E-08 | -1,84144E-09 | 3,57237E-09 |
| 96 | D Longitudinal | 6,38335E-08 | -1,77441E-09 | -5,6467E-10 | 6,25191E-08 | -1,40332E-09 | -5,65139E-10 | 6,08657E-08 | -1,02609E-09 | -5,76975E-10 |

APOYO 1

| DESPLAZAMIENTOS (metros) | | C4 | | | C5 | | | C6 | | |
|---|---|---|---|---|---|---|---|---|---|---|
| Nudo | Desplazamiento | L | T | V | L | T | V | L | T | V |
| 96 | D Vertical | 1,38748E-08 | -1,39512E-08 | -4,44555E-09 | 1,10936E-08 | -1,11929E-08 | -4,44539E-09 | 8,25986E-09 | -8,43341E-09 | -4,44679E-09 |
| 96 | D transversal | 2,49929E-08 | 3,77389E-08 | 1,88823E-09 | 2,52331E-08 | 3,61069E-08 | 1,89121E-09 | 2,5846E-08 | 3,44959E-08 | 1,86233E-09 |
| 96 | G Longitudinal | 1,53437E-08 | 1,7355E-08 | 2,32795E-09 | 1,50622E-08 | 1,51798E-08 | 2,60703E-09 | 1,4814E-08 | 1,1966E-08 | 5,45817E-09 |
| 96 | G Vertical | 1,16329E-07 | 7,19038E-09 | 7,64865E-09 | 1,11387E-07 | 2,62949E-11 | 1,15267E-08 | 1,04703E-07 | -2,20678E-08 | 5,21015E-08 |
| 96 | G transversal | -3,10699E-08 | 3,12035E-11 | -3,18621E-10 | -2,88533E-08 | 3,85969E-10 | -6,00975E-10 | -2,63872E-08 | 1,84226E-09 | -3,57358E-09 |
| 97 | D Longitudinal | 1,18417E-08 | 1,77443E-09 | 2,1381E-10 | 1,02736E-08 | 1,4036E-09 | 2,13873E-10 | 9,04431E-09 | 1,03436E-09 | 2,10795E-10 |
| 97 | D Vertical | 1,40303E-08 | 1,39512E-08 | 1,34714E-09 | 1,12915E-08 | 1,11927E-08 | 1,34733E-09 | 8,61021E-09 | 8,43535E-09 | 1,34572E-09 |
| 97 | D transversal | 2,85916E-08 | 3,77392E-08 | 1,53589E-09 | 2,81098E-08 | 3,61098E-08 | 1,53312E-09 | 2,79218E-08 | 3,44613E-08 | 1,55853E-09 |
| 97 | G Longitudinal | 1,58915E-08 | 1,74113E-08 | 2,04149E-09 | 1,6005E-08 | 1,54746E-08 | 1,89633E-09 | 1,59179E-08 | 1,31182E-08 | 2,30157E-09 |
| 97 | G Vertical | 1,14066E-07 | 7,98389E-09 | 4,6685E-09 | 1,17435E-07 | 4,12333E-09 | 2,69586E-09 | 1,16496E-07 | -5,57411E-09 | 8,48387E-09 |
| 97 | G transversal | -3,08353E-09 | 2,53811E-11 | 2,25475E-10 | -9,32014E-10 | -9,02884E-11 | 8,37847E-11 | 7,84586E-10 | -6,14857E-10 | 4,82169E-10 |
| 98 | D Longitudinal | 7,94865E-08 | 2,127E-09 | 7,19288E-10 | 7,68373E-08 | 1,64995E-09 | 7,12369E-10 | 7,37655E-08 | 1,20875E-09 | 6,3044E-10 |
| 98 | D Vertical | -1,55979E-08 | -1,58878E-08 | -5,22271E-09 | -1,23013E-08 | -1,26457E-08 | -5,22296E-09 | -8,95025E-09 | -9,40167E-09 | -5,2271E-09 |
| 98 | D transversal | -2,95213E-08 | 4,93851E-08 | 3,24555E-09 | -2,9837E-08 | 4,64915E-08 | 3,24924E-09 | -3,05752E-08 | 4,35963E-08 | 3,26287E-09 |
| 98 | G Longitudinal | -1,60305E-08 | 2,01212E-08 | 2,87282E-09 | -1,57027E-08 | 1,73812E-08 | 3,14553E-09 | -1,52187E-08 | 1,34907E-08 | 6,16589E-09 |
| 98 | G Vertical | 1,15773E-07 | -6,66014E-09 | -7,45853E-09 | 1,10913E-07 | 4,18278E-10 | -1,13949E-08 | 1,04288E-07 | 2,24073E-08 | -5,19463E-08 |
| 98 | G transversal | -3,45189E-08 | 6,37346E-10 | 5,1327E-10 | -3,19076E-08 | 1,55164E-10 | 7,99495E-10 | -2,90324E-08 | -1,43895E-09 | 3,7902E-09 |
| 99 | D Longitudinal | 7,94861E-08 | -2,12709E-09 | -7,18605E-10 | 7,68368E-08 | -1,65006E-09 | -7,12208E-10 | 7,37638E-08 | -1,20953E-09 | -6,29291E-10 |
| 99 | D Vertical | 1,5598E-08 | -1,58879E-08 | -5,2227E-09 | 1,23013E-08 | -1,26457E-08 | -5,22295E-09 | 8,95035E-09 | -9,40162E-09 | -5,22718E-09 |
| 99 | D transversal | 2,95213E-08 | 4,93852E-08 | 3,24492E-09 | 2,9837E-08 | 4,64916E-08 | 3,24909E-09 | 3,05752E-08 | 4,35971E-08 | 3,26178E-09 |
| 99 | G Longitudinal | 1,60327E-08 | 2,01212E-08 | 2,87656E-09 | 1,56937E-08 | 1,73814E-08 | 3,14536E-09 | 1,52005E-08 | 1,34901E-08 | 6,16678E-09 |
| 99 | G Vertical | 1,15807E-07 | 6,65929E-09 | 7,51434E-09 | 1,10788E-07 | -4,1702E-10 | 1,13934E-08 | 1,04037E-07 | -2,24163E-08 | 5,19597E-08 |
| 99 | G transversal | -3,45206E-08 | -6,3726E-10 | -5,17426E-10 | -3,1898E-08 | -1,55224E-10 | -7,99435E-10 | -2,90121E-08 | 1,43976E-09 | -3,79141E-09 |
| 100 | D Longitudinal | 1,95398E-08 | 2,12667E-09 | 2,89117E-10 | 1,66101E-08 | 1,64516E-09 | 2,91126E-10 | 1,41069E-08 | 1,16137E-09 | 2,98645E-10 |
| 100 | D Vertical | 1,60751E-08 | 1,58879E-08 | 1,5855E-09 | 1,28385E-08 | 1,26459E-08 | 1,58556E-09 | 9,65556E-09 | 9,40376E-09 | 1,58596E-09 |
| 100 | D transversal | 3,36928E-08 | 4,93855E-08 | 2,82708E-09 | 3,31037E-08 | 4,64957E-08 | 2,82355E-09 | 3,29282E-08 | 4,36058E-08 | 2,81328E-09 |
| 100 | G Longitudinal | 1,54987E-08 | 2,01767E-08 | 2,68882E-09 | 1,56805E-08 | 1,76653E-08 | 2,55634E-09 | 1,5865E-08 | 1,48256E-08 | 2,83696E-09 |
| 100 | G Vertical | 1,1355E-07 | 7,45305E-09 | 4,61792E-09 | 1,16993E-07 | 3,68125E-09 | 2,64434E-09 | 1,16117E-07 | -5,93523E-09 | 8,44366E-09 |
| 100 | G transversal | -4,88642E-09 | 6,93785E-10 | 2,94097E-10 | -2,33296E-09 | 4,50738E-10 | 1,52421E-10 | -2,27557E-10 | -1,97687E-10 | 5,44515E-10 |
| 101 | D Longitudinal | 9,69336E-08 | 1,98925E-09 | 7,08394E-10 | 9,2648E-08 | 1,51142E-09 | 7,05625E-10 | 8,7849E-08 | 1,06016E-09 | 6,52777E-10 |
| 101 | D Vertical | -1,76461E-08 | -1,76065E-08 | -6,04528E-09 | -1,38515E-08 | -1,38436E-08 | -6,04576E-09 | -9,99914E-09 | -1,00837E-08 | -6,04198E-09 |
| 101 | D transversal | -3,42104E-08 | 6,27323E-08 | 4,9878E-09 | -3,4563E-08 | 5,81818E-08 | 4,98166E-09 | -3,52935E-08 | 5,35649E-08 | 5,0796E-09 |
| 101 | G Longitudinal | -1,61155E-08 | 2,3147E-08 | 3,6301E-09 | -1,57415E-08 | 1,96595E-08 | 3,89608E-09 | -1,52235E-08 | 1,50237E-08 | 6,89582E-09 |
| 101 | G Vertical | 1,15589E-07 | -6,38528E-09 | -7,37734E-09 | 1,10628E-07 | 6,54317E-10 | -1,13139E-08 | 1,03876E-07 | 2,26242E-08 | -5,19014E-08 |
| 101 | G transversal | -3,7365E-08 | 1,15646E-09 | 7,54586E-10 | -3,40931E-08 | 5,12143E-10 | 1,01821E-09 | -3,05396E-08 | -1,11536E-09 | 3,72517E-09 |
| 102 | D Longitudinal | 9,69333E-08 | -1,98936E-09 | -7,07635E-10 | 9,26476E-08 | -1,51154E-09 | -7,05435E-10 | 8,78477E-08 | -1,06105E-09 | -6,51482E-10 |
| 102 | D Vertical | 1,76461E-08 | -1,76065E-08 | -6,04528E-09 | 1,38516E-08 | -1,38436E-08 | -6,04576E-09 | 9,99918E-09 | -1,00836E-08 | -6,04211E-09 |
| 102 | D transversal | 3,42102E-08 | 6,27324E-08 | 4,987E-09 | 3,45629E-08 | 5,81819E-08 | 4,98146E-09 | 3,52933E-08 | 5,35657E-08 | 5,07849E-09 |
| 102 | G Longitudinal | 1,61178E-08 | 2,3147E-08 | 3,63389E-09 | 1,57325E-08 | 1,96596E-08 | 3,8959E-09 | 1,52053E-08 | 1,50231E-08 | 6,89668E-09 |
| 102 | G Vertical | 1,15622E-07 | 6,38443E-09 | 7,43317E-09 | 1,10504E-07 | -6,53056E-10 | 1,13124E-08 | 1,03625E-07 | -2,26332E-08 | 5,19148E-08 |
| 102 | G transversal | -3,73685E-08 | -1,15638E-09 | -7,58708E-10 | -3,40857E-08 | -5,12203E-10 | -1,01815E-09 | -3,05261E-08 | 1,11616E-09 | -3,72635E-09 |
| 103 | D Longitudinal | 2,86628E-08 | 1,98943E-09 | 2,98062E-10 | 2,40749E-08 | 1,51008E-09 | 2,98747E-10 | 2,0001E-08 | 1,02441E-09 | 3,10624E-10 |
| 103 | D Vertical | 1,75891E-08 | 1,76065E-08 | 1,85635E-09 | 1,38754E-08 | 1,38441E-08 | 1,85595E-09 | 1,02029E-08 | 1,00774E-08 | 1,86215E-09 |
| 103 | D transversal | 3,82088E-08 | 6,27316E-08 | 4,57288E-09 | 3,75627E-08 | 5,81758E-08 | 4,57898E-09 | 3,75575E-08 | 5,36897E-08 | 4,47266E-09 |

APOYO 1

| DESPLAZAMIENTOS (metros) | | C4 | | | C5 | | | C6 | | |
|---|---|---|---|---|---|---|---|---|---|---|
| Nudo | Desplazamiento | L | T | V | L | T | V | L | T | V |
| 103 | G Longitudinal | 1,49344E-08 | 2,32023E-08 | 3,50916E-09 | 1,5184E-08 | 1,99367E-08 | 3,38382E-09 | 1,54409E-08 | 1,63344E-08 | 3,69953E-09 |
| 103 | G Vertical | 1,12889E-07 | 7,17833E-09 | 4,61766E-09 | 1,16431E-07 | 3,44528E-09 | 2,64498E-09 | 1,15677E-07 | -6,12193E-09 | 8,42876E-09 |
| 103 | G transversal | -7,77517E-09 | 1,21252E-09 | 4,17784E-10 | -4,57921E-09 | 7,93485E-10 | 2,80243E-10 | -1,83276E-09 | -5,25069E-11 | 7,17063E-10 |
| 104 | D Longitudinal | 1,16384E-07 | 1,79305E-09 | 6,34231E-10 | 1,09946E-07 | 1,35899E-09 | 6,44722E-10 | 1,02894E-07 | 8,7452E-10 | 7,59209E-10 |
| 104 | D Vertical | -1,89698E-08 | -1,91972E-08 | -6,83389E-09 | -1,46415E-08 | -1,49466E-08 | -6,83379E-09 | -1,02686E-08 | -1,07003E-08 | -6,82635E-09 |
| 104 | D transversal | -3,89807E-08 | 7,82025E-08 | 7,28063E-09 | -3,93485E-08 | 7,14669E-08 | 7,2705E-09 | -4,0244E-08 | 6,46945E-08 | 7,30779E-09 |
| 104 | G Longitudinal | -1,60803E-08 | 2,65205E-08 | 4,48228E-09 | -1,56002E-08 | 2,2199E-08 | 4,76108E-09 | -1,55828E-08 | 1,70708E-08 | 7,19866E-09 |
| 104 | G Vertical | 1,15184E-07 | -5,86492E-09 | -7,23071E-09 | 1,10208E-07 | 1,07126E-09 | -1,11673E-08 | 1,03347E-07 | 2,30053E-08 | -5,18741E-08 |
| 104 | G transversal | -4,06912E-08 | 8,56173E-10 | 6,63989E-10 | -3,65303E-08 | 2,73825E-10 | 9,21341E-10 | -3,20756E-08 | -1,23224E-09 | 3,50607E-09 |
| 105 | D Longitudinal | 1,16385E-07 | -1,79316E-09 | -6,33365E-10 | 1,09947E-07 | -1,35912E-09 | -6,44504E-10 | 1,02897E-07 | -8,75492E-10 | -7,57786E-10 |
| 105 | D Vertical | 1,89697E-08 | -1,91972E-08 | -6,83392E-09 | 1,46415E-08 | -1,49466E-08 | -6,8338E-09 | 1,02685E-08 | -1,07001E-08 | -6,82655E-09 |
| 105 | D transversal | 3,89806E-08 | 7,82026E-08 | 7,27976E-09 | 3,93485E-08 | 7,14671E-08 | 7,27027E-09 | 4,02438E-08 | 6,46954E-08 | 7,30644E-09 |
| 105 | G Longitudinal | 1,60831E-08 | 2,65204E-08 | 4,48613E-09 | 1,55919E-08 | 2,21991E-08 | 4,76095E-09 | 1,5566E-08 | 1,70707E-08 | 7,19878E-09 |
| 105 | G Vertical | 1,15217E-07 | 5,86408E-09 | 7,28656E-09 | 1,10083E-07 | -1,06999E-09 | 1,11658E-08 | 1,03095E-07 | -2,30144E-08 | 5,18876E-08 |
| 105 | G transversal | -4,06954E-08 | -8,56088E-10 | -6,68083E-10 | -3,65237E-08 | -2,73888E-10 | -9,21279E-10 | -3,20649E-08 | 1,233E-09 | -3,50719E-09 |
| 106 | D Longitudinal | 3,98356E-08 | 1,79319E-09 | 2,65322E-10 | 3,30905E-08 | 1,36535E-09 | 2,64202E-10 | 2,69535E-08 | 9,47571E-10 | 2,44901E-10 |
| 106 | D Vertical | 1,93299E-08 | 1,91972E-08 | 2,09245E-09 | 1,51054E-08 | 1,49468E-08 | 2,09202E-09 | 1,09198E-08 | 1,06942E-08 | 2,09447E-09 |
| 106 | D transversal | 4,28006E-08 | 7,82019E-08 | 6,8737E-09 | 4,21344E-08 | 7,14573E-08 | 6,88347E-09 | 4,21548E-08 | 6,47527E-08 | 6,83975E-09 |
| 106 | G Longitudinal | 1,49211E-08 | 2,65775E-08 | 4,39789E-09 | 1,53051E-08 | 2,24906E-08 | 4,25291E-09 | 1,51312E-08 | 1,77804E-08 | 5,01696E-09 |
| 106 | G Vertical | 1,12516E-07 | 6,65795E-09 | 4,54702E-09 | 1,16071E-07 | 3,02756E-09 | 2,57731E-09 | 1,15417E-07 | -6,39352E-09 | 8,29384E-09 |
| 106 | G transversal | -1,13782E-08 | 9,12013E-10 | 3,85043E-10 | -7,32214E-09 | 5,50515E-10 | 2,49402E-10 | -3,71645E-09 | -2,46413E-10 | 7,05214E-10 |
| 107 | D Longitudinal | 1,38136E-07 | 1,88954E-09 | 7,2254E-10 | 1,28994E-07 | 1,38689E-09 | 7,33139E-10 | 1,19141E-07 | 8,03534E-10 | 9,01638E-10 |
| 107 | D Vertical | -2,06896E-08 | -2,04863E-08 | -7,65092E-09 | -1,58618E-08 | -1,57183E-08 | -7,65066E-09 | -1,10221E-08 | -1,0943E-08 | -7,66275E-09 |
| 107 | D transversal | -4,38143E-08 | 9,5666E-08 | 1,00893E-08 | -4,41213E-08 | 8,62347E-08 | 1,00872E-08 | -4,54534E-08 | 7,69891E-08 | 9,75834E-09 |
| 107 | G Longitudinal | -1,60758E-08 | 2,95968E-08 | 5,32641E-09 | -1,55899E-08 | 2,44631E-08 | 5,62678E-09 | -1,57048E-08 | 1,85825E-08 | 8,01652E-09 |
| 107 | G Vertical | 1,1474E-07 | -5,39649E-09 | -7,10844E-09 | 1,09741E-07 | 1,45401E-09 | -1,10406E-08 | 1,02796E-07 | 2,33307E-08 | -5,1787E-08 |
| 107 | G transversal | -4,45284E-08 | 1,15528E-10 | 2,35279E-10 | -3,94925E-08 | -1,74603E-10 | 5,40746E-10 | -3,4171E-08 | -1,60412E-09 | 3,62182E-09 |
| 108 | D Longitudinal | 1,38137E-07 | -1,88967E-09 | -7,2157E-10 | 1,28996E-07 | -1,38704E-09 | -7,32898E-10 | 1,19145E-07 | -8,04557E-10 | -9,00141E-10 |
| 108 | D Vertical | 2,06896E-08 | -2,04863E-08 | -7,65097E-09 | 1,58618E-08 | -1,57183E-08 | -7,65067E-09 | 1,1022E-08 | -1,09428E-08 | -7,66305E-09 |
| 108 | D transversal | 4,38147E-08 | 9,56661E-08 | 1,00884E-08 | 4,41217E-08 | 8,62348E-08 | 1,0087E-08 | 4,54541E-08 | 7,69904E-08 | 9,75637E-09 |
| 108 | G Longitudinal | 1,60787E-08 | 2,95967E-08 | 5,33025E-09 | 1,55817E-08 | 2,44632E-08 | 5,62669E-09 | 1,56884E-08 | 1,85823E-08 | 8,01671E-09 |
| 108 | G Vertical | 1,14773E-07 | 5,39564E-09 | 7,16431E-09 | 1,09617E-07 | -1,45274E-09 | 1,10391E-08 | 1,02544E-07 | -2,33399E-08 | 5,18006E-08 |
| 108 | G transversal | -4,45291E-08 | -1,15444E-10 | -2,39391E-10 | -3,94816E-08 | 1,74536E-10 | -5,40676E-10 | -3,41477E-08 | 1,60481E-09 | -3,62285E-09 |
| 109 | D Longitudinal | 5,30351E-08 | 1,88957E-09 | 3,20411E-10 | 4,3601E-08 | 1,39351E-09 | 3,19073E-10 | 3,48753E-08 | 9,15038E-10 | 2,85716E-10 |
| 109 | D Vertical | 2,03618E-08 | 2,04863E-08 | 2,36209E-09 | 1,56631E-08 | 1,57182E-08 | 2,36221E-09 | 1,10134E-08 | 1,09583E-08 | 2,3479E-09 |
| 109 | D transversal | 4,73514E-08 | 9,56666E-08 | 9,72017E-09 | 4,67602E-08 | 8,62339E-08 | 9,71835E-09 | 4,65724E-08 | 7,66458E-08 | 9,98537E-09 |
| 109 | G Longitudinal | 1,50721E-08 | 2,96549E-08 | 5,2372E-09 | 1,54945E-08 | 2,47751E-08 | 5,07257E-09 | 1,52194E-08 | 1,91991E-08 | 5,90881E-09 |
| 109 | G Vertical | 1,12095E-07 | 6,18948E-09 | 4,49426E-09 | 1,15671E-07 | 2,64128E-09 | 2,52813E-09 | 1,15095E-07 | -6,6727E-09 | 8,21092E-09 |
| 109 | G transversal | -1,44582E-08 | 1,71791E-10 | 1,47684E-10 | -9,55741E-09 | 1,30316E-10 | 5,47862E-12 | -5,11642E-09 | -3,05088E-10 | 3,80426E-10 |
| 110 | D Longitudinal | 1,62171E-07 | 2,35509E-09 | 1,05037E-09 | 1,49767E-07 | 1,62034E-09 | 1,02977E-09 | 1,36558E-07 | 9,33795E-10 | 8,95189E-10 |
| 110 | D Vertical | -2,14764E-08 | -2,16214E-08 | -8,41456E-09 | -1,61147E-08 | -1,63815E-08 | -8,41468E-09 | -1,07494E-08 | -1,11329E-08 | -8,42992E-09 |
| 110 | D transversal | -4,84232E-08 | 1,15083E-07 | 1,35052E-08 | -4,8828E-08 | 1,02412E-07 | 1,35241E-08 | -5,03633E-08 | 8,99038E-08 | 1,32916E-08 |
| 110 | G Longitudinal | -1,51098E-08 | 3,27012E-08 | 6,40458E-09 | -1,51098E-08 | 2,66531E-08 | 6,72468E-09 | -1,43181E-08 | 1,90131E-08 | 1,06421E-08 |
| 110 | G Vertical | 1,14407E-07 | -4,88534E-09 | -6,95025E-09 | 1,09354E-07 | 1,85919E-09 | -1,08797E-08 | 1,02401E-07 | 2,35962E-08 | -5,15612E-08 |

APOYO 1

| DESPLAZAMIENTOS (metros) | | C4 | | | C5 | | | C6 | | |
|---|---|---|---|---|---|---|---|---|---|---|
| Nudo | Desplazamiento | L | T | V | L | T | V | L | T | V |
| 110 | G transversal | -4,77536E-08 | -4,64735E-11 | 8,28438E-11 | -4,17939E-08 | -2,30465E-10 | 4,13967E-10 | -3,55454E-08 | -1,74649E-09 | 3,89974E-09 |
| 111 | D Longitudinal | 1,6217E-07 | -2,35524E-09 | -1,04928E-09 | 1,49766E-07 | -1,62051E-09 | -1,0295E-09 | 1,36555E-07 | -9,34831E-10 | -8,93675E-10 |
| 111 | D Vertical | 2,14765E-08 | -2,16214E-08 | -8,41464E-09 | 1,61148E-08 | -1,63815E-08 | -8,4147E-09 | 1,07496E-08 | -1,11327E-08 | -8,43028E-09 |
| 111 | D transversal | 4,84236E-08 | 1,15083E-07 | 1,35041E-08 | 4,88283E-08 | 1,02412E-07 | 1,35238E-08 | 5,0364E-08 | 8,9905E-08 | 1,32898E-08 |
| 111 | G Longitudinal | 1,51112E-08 | 3,27011E-08 | 6,40827E-09 | 1,51001E-08 | 2,66533E-08 | 6,72458E-09 | 1,42986E-08 | 1,90114E-08 | 1,06447E-08 |
| 111 | G Vertical | 1,14441E-07 | 4,88449E-09 | 7,00615E-09 | 1,0923E-07 | -1,85791E-09 | 1,08782E-08 | 1,0215E-07 | -2,36053E-08 | 5,15747E-08 |
| 111 | G transversal | -4,77518E-08 | 4,65552E-11 | -8,69572E-11 | -4,17801E-08 | 2,30394E-10 | -4,13891E-10 | -3,55123E-08 | 1,74714E-09 | -3,9007E-09 |
| 112 | D Longitudinal | 6,80979E-08 | 2,35472E-09 | 5,1359E-10 | 5,54368E-08 | 1,60846E-09 | 5,16777E-10 | 4,35902E-08 | 8,57503E-10 | 5,2835E-10 |
| 112 | D Vertical | 2,1679E-08 | 2,16214E-08 | 2,58909E-09 | 1,64743E-08 | 1,63812E-08 | 2,58981E-09 | 1,12998E-08 | 1,11487E-08 | 2,57879E-09 |
| 112 | D transversal | 5,22739E-08 | 1,15084E-07 | 1,30858E-08 | 5,16225E-08 | 1,0243E-07 | 1,30683E-08 | 5,14492E-08 | 8,96001E-08 | 1,33261E-08 |
| 112 | G Longitudinal | 1,59323E-08 | 3,27576E-08 | 6,05071E-09 | 1,59096E-08 | 2,69767E-08 | 5,89319E-09 | 1,64757E-08 | 2,11338E-08 | 5,63386E-09 |
| 112 | G Vertical | 1,11616E-07 | 5,67851E-09 | 4,43357E-09 | 1,15245E-07 | 2,23404E-09 | 2,46901E-09 | 1,14677E-07 | -7,00061E-09 | 8,19945E-09 |
| 112 | G transversal | -1,74278E-08 | 1,00632E-11 | 4,87068E-11 | -1,16448E-08 | 9,07981E-11 | -9,82917E-11 | -6,32657E-09 | -1,87615E-10 | 2,07372E-10 |
| 113 | D Longitudinal | 1,87857E-07 | 2,57691E-09 | 1,28971E-09 | 1,71522E-07 | 1,66049E-09 | 1,2569E-09 | 1,54277E-07 | 9,2612E-10 | 8,57947E-10 |
| 113 | D Vertical | -2,27963E-08 | -2,24186E-08 | -9,22659E-09 | -1,69649E-08 | -1,66601E-08 | -9,22599E-09 | -1,11025E-08 | -1,0914E-08 | -9,20252E-09 |
| 113 | D transversal | -5,23204E-08 | 1,36557E-07 | 1,76603E-08 | -5,3156E-08 | 1,20024E-07 | 1,76935E-08 | -5,43433E-08 | 1,03131E-07 | 1,84092E-08 |
| 113 | G Longitudinal | -1,49022E-08 | 3,63218E-08 | 7,63983E-09 | -1,52421E-08 | 2,919E-08 | 7,90853E-09 | -1,40947E-08 | 2,01377E-08 | 1,22645E-08 |
| 113 | G Vertical | 1,14138E-07 | -4,57633E-09 | -6,86137E-09 | 1,09052E-07 | 2,1172E-09 | -1,07999E-08 | 1,01899E-07 | 2,39312E-08 | -5,17292E-08 |
| 113 | G transversal | -5,02907E-08 | 5,26591E-10 | 4,1436E-10 | -4,30046E-08 | 1,3713E-10 | 6,71981E-10 | -3,53748E-08 | -1,46259E-09 | 3,77279E-09 |
| 114 | D Longitudinal | 1,87855E-07 | -2,57707E-09 | -1,2886E-09 | 1,71519E-07 | -1,66067E-09 | -1,25662E-09 | 1,54266E-07 | -9,27132E-10 | -8,56468E-10 |
| 114 | D Vertical | 2,27964E-08 | -2,24186E-08 | -9,22673E-09 | 1,69651E-08 | -1,666E-08 | -9,22602E-09 | 1,11029E-08 | -1,09137E-08 | -9,20289E-09 |
| 114 | D transversal | 5,23197E-08 | 1,36557E-07 | 1,76591E-08 | 5,31555E-08 | 1,20024E-07 | 1,76933E-08 | 5,43423E-08 | 1,03131E-07 | 1,84089E-08 |
| 114 | G Longitudinal | 1,49029E-08 | 3,63218E-08 | 7,64359E-09 | 1,52316E-08 | 2,91902E-08 | 7,90833E-09 | 1,40733E-08 | 2,01356E-08 | 1,22678E-08 |
| 114 | G Vertical | 1,1417E-07 | 4,5755E-09 | 6,91727E-09 | 1,08927E-07 | -2,11592E-09 | 1,07984E-08 | 1,01646E-07 | -2,39404E-08 | 5,1743E-08 |
| 114 | G transversal | -5,02925E-08 | -5,26514E-10 | -4,18379E-10 | -4,29954E-08 | -1,37204E-10 | -6,719E-10 | -3,53531E-08 | 1,4632E-09 | -3,7737E-09 |
| 115 | D Longitudinal | 8,53159E-08 | 2,57706E-09 | 6,70912E-10 | 6,87949E-08 | 1,64171E-09 | 6,7594E-10 | 5,31872E-08 | 6,71605E-10 | 7,43281E-10 |
| 115 | D Vertical | 2,20883E-08 | 2,24186E-08 | 2,86713E-09 | 1,64435E-08 | 1,66592E-08 | 2,86795E-09 | 1,0768E-08 | 1,08879E-08 | 2,89177E-09 |
| 115 | D transversal | 5,76553E-08 | 1,36558E-07 | 1,70205E-08 | 5,66415E-08 | 1,20052E-07 | 1,70035E-08 | 5,70247E-08 | 1,03782E-07 | 1,65379E-08 |
| 115 | G Longitudinal | 1,6727E-08 | 3,6375E-08 | 7,14187E-09 | 1,64176E-08 | 2,94696E-08 | 7,02424E-09 | 1,74371E-08 | 2,292E-08 | 6,14746E-09 |
| 115 | G Vertical | 1,11082E-07 | 5,36961E-09 | 4,40524E-09 | 1,14744E-07 | 1,98161E-09 | 2,4407E-09 | 1,14355E-07 | -7,12501E-09 | 8,04642E-09 |
| 115 | G transversal | -2,14918E-08 | 5,82449E-10 | 2,26941E-10 | -1,44599E-08 | 4,18161E-10 | 8,72427E-11 | -7,87026E-09 | -1,29712E-10 | 4,3951E-10 |
| 116 | D Longitudinal | 2,15708E-07 | 2,38165E-09 | 1,25675E-09 | 1,94563E-07 | 1,45832E-09 | 1,26559E-09 | 1,72385E-07 | 6,79059E-10 | 1,02763E-09 |
| 116 | D Vertical | -2,30939E-08 | -2,30921E-08 | -1,00026E-08 | -1,67307E-08 | -1,6853E-08 | -1,00043E-08 | -1,03499E-08 | -1,06246E-08 | -9,99059E-09 |
| 116 | D transversal | -5,72978E-08 | 1,60427E-07 | 2,25285E-08 | -5,8474E-08 | 1,3934E-07 | 2,25034E-08 | -5,97213E-08 | 1,17769E-07 | 2,32827E-08 |
| 116 | G Longitudinal | -1,82164E-08 | 4,00058E-08 | 8,51215E-09 | -1,78336E-08 | 3,18737E-08 | 8,59043E-09 | -1,822E-08 | 2,34446E-08 | 9,61159E-09 |
| 116 | G Vertical | 1,13166E-07 | -3,89504E-09 | -6,65879E-09 | 1,08242E-07 | 2,63498E-09 | -1,06353E-08 | 1,00813E-07 | 2,46479E-08 | -5,22963E-08 |
| 116 | G transversal | -5,51458E-08 | 1,33231E-09 | 9,52096E-10 | -4,67009E-08 | 5,82366E-10 | 1,13386E-09 | -3,79075E-08 | -9,37121E-10 | 3,27166E-09 |
| 117 | D Longitudinal | 2,15707E-07 | -2,38182E-09 | -1,25561E-09 | 1,94562E-07 | -1,4585E-09 | -1,2653E-09 | 1,7238E-07 | -6,8E-10 | -1,02626E-09 |
| 117 | D Vertical | 2,30939E-08 | -2,30921E-08 | -1,00028E-08 | 1,67307E-08 | -1,6853E-08 | -1,00044E-08 | 1,03502E-08 | -1,06243E-08 | -9,99109E-09 |
| 117 | D transversal | 5,72968E-08 | 1,60428E-07 | 2,25273E-08 | 5,8473E-08 | 1,3934E-07 | 2,2503E-08 | 5,9719E-08 | 1,17769E-07 | 2,32826E-08 |
| 117 | G Longitudinal | 1,82199E-08 | 4,00057E-08 | 8,51656E-09 | 1,78252E-08 | 3,18739E-08 | 8,59006E-09 | 1,82023E-08 | 2,34458E-08 | 9,60969E-09 |
| 117 | G Vertical | 1,13197E-07 | 3,89421E-09 | 6,71464E-09 | 1,08115E-07 | -2,6337E-09 | 1,06338E-08 | 1,00555E-07 | -2,46577E-08 | 5,2311E-08 |
| 117 | G transversal | -5,51543E-08 | -1,33224E-09 | -9,56039E-10 | -4,66997E-08 | -5,82449E-10 | -1,13377E-09 | -3,79108E-08 | 9,3763E-10 | -3,27242E-09 |
| 118 | D Longitudinal | 1,04913E-07 | 2,38201E-09 | 6,73955E-10 | 8,37037E-08 | 1,46134E-09 | 6,75941E-10 | 6,35022E-08 | 5,19205E-10 | 7,20927E-10 |

APOYO 1

| DESPLAZAMIENTOS (metros) | | C4 | | | C5 | | | C6 | | |
|---|---|---|---|---|---|---|---|---|---|---|
| Nudo | Desplazamiento | L | T | V | L | T | V | L | T | V |
| 118 | D Vertical | 2,29244E-08 | 2,30923E-08 | 3,09793E-09 | 1,67788E-08 | 1,68544E-08 | 3,09652E-09 | 1,05641E-08 | 1,05918E-08 | 3,13593E-09 |
| 118 | D transversal | 6,32951E-08 | 1,60425E-07 | 2,17764E-08 | 6,20438E-08 | 1,39321E-07 | 2,17949E-08 | 6,27605E-08 | 1,18755E-07 | 2,09055E-08 |
| 118 | G Longitudinal | 1,59714E-08 | 4,00556E-08 | 8,58288E-09 | 1,64407E-08 | 3,20086E-08 | 8,54324E-09 | 1,64352E-08 | 2,35819E-08 | 9,19419E-09 |
| 118 | G Vertical | 1,10912E-07 | 4,68875E-09 | 4,22207E-09 | 1,14414E-07 | 1,48947E-09 | 2,24902E-09 | 1,14232E-07 | -7,25373E-09 | 7,52541E-09 |
| 118 | G transversal | -2,42669E-08 | 1,38771E-09 | 5,30169E-10 | -1,61331E-08 | 8,17905E-10 | 4,01987E-10 | -8,40184E-09 | -2,08045E-10 | 8,97663E-10 |
| 119 | D Longitudinal | 2,48056E-07 | 1,42307E-09 | 7,71135E-10 | 2,21685E-07 | 8,17011E-10 | 8,41613E-10 | 1,94219E-07 | -7,48803E-11 | 1,51337E-09 |
| 119 | D Vertical | -2,40921E-08 | -2,34332E-08 | -1,08899E-08 | -1,71995E-08 | -1,66211E-08 | -1,08961E-08 | -1,03706E-08 | -9,80048E-09 | -1,09278E-08 |
| 119 | D transversal | -6,45157E-08 | 1,86495E-07 | 2,79403E-08 | -6,53943E-08 | 1,60164E-07 | 2,77811E-08 | -6,77693E-08 | 1,34325E-07 | 2,6505E-08 |
| 119 | G Longitudinal | -2,01207E-08 | 4,35109E-08 | 9,6784E-09 | -1,88421E-08 | 3,39635E-08 | 9,85072E-09 | -2,04109E-08 | 2,50737E-08 | 9,44292E-09 |
| 119 | G Vertical | 1,11991E-07 | -3,17875E-09 | -6,4093E-09 | 1,0717E-07 | 3,13597E-09 | -1,03972E-08 | 9,94089E-08 | 2,52719E-08 | -5,26825E-08 |
| 119 | G transversal | -6,43045E-08 | 2,81406E-09 | 1,86229E-09 | -5,57064E-08 | 1,38295E-09 | 2,0598E-09 | -4,69001E-08 | -5,01981E-11 | 2,85522E-09 |
| 120 | D Longitudinal | 2,48062E-07 | -1,42325E-09 | -7,69985E-10 | 2,21692E-07 | -8,17194E-10 | -8,41328E-10 | 1,94237E-07 | 7,4136E-11 | -1,51228E-09 |
| 120 | D Vertical | 2,40919E-08 | -2,34332E-08 | -1,08901E-08 | 1,71992E-08 | -1,66211E-08 | -1,08962E-08 | 1,03695E-08 | -9,79995E-09 | -1,09286E-08 |
| 120 | D transversal | 6,45164E-08 | 1,86495E-07 | 2,79395E-08 | 6,53945E-08 | 1,60165E-07 | 2,77806E-08 | 6,77692E-08 | 1,34327E-07 | 2,65018E-08 |
| 120 | G Longitudinal | 2,01261E-08 | 4,35108E-08 | 9,68259E-09 | 1,88362E-08 | 3,39636E-08 | 9,85055E-09 | 2,03986E-08 | 2,50762E-08 | 9,43905E-09 |
| 120 | G Vertical | 1,12021E-07 | 3,17794E-09 | 6,46514E-09 | 1,07041E-07 | -3,13467E-09 | 1,03957E-08 | 9,91459E-08 | -2,52822E-08 | 5,26979E-08 |
| 120 | G transversal | -6,43198E-08 | -2,81399E-09 | -1,8663E-09 | -5,57126E-08 | -1,38306E-09 | -2,05967E-09 | -4,69354E-08 | 5,04761E-11 | -2,85563E-09 |
| 121 | D Longitudinal | 1,24795E-07 | 1,42353E-09 | 4,2391E-10 | 9,84901E-08 | 8,57281E-10 | 4,16278E-10 | 7,32728E-08 | 3,4602E-10 | 3,12727E-10 |
| 121 | D Vertical | 2,2846E-08 | 2,34336E-08 | 3,40917E-09 | 1,6207E-08 | 1,66266E-08 | 3,40461E-09 | 9,51541E-09 | 9,80414E-09 | 3,41743E-09 |
| 121 | D transversal | 6,78614E-08 | 1,8649E-07 | 2,75236E-08 | 6,70518E-08 | 1,6004E-07 | 2,76073E-08 | 6,72482E-08 | 1,33695E-07 | 2,76705E-08 |
| 121 | G Longitudinal | 1,37877E-08 | 4,35672E-08 | 1,02996E-08 | 1,52406E-08 | 3,41558E-08 | 1,02259E-08 | 1,38468E-08 | 2,29416E-08 | 1,32568E-08 |
| 121 | G Vertical | 1,10537E-07 | 3,9721E-09 | 4,0048E-09 | 1,13928E-07 | 9,96805E-10 | 2,03132E-09 | 1,14042E-07 | -7,29694E-09 | 6,9131E-09 |
| 121 | G transversal | -2,26833E-08 | 2,87033E-09 | 1,04195E-09 | -1,4362E-08 | 1,61715E-09 | 9,22573E-10 | -6,3918E-09 | -1,9892E-10 | 1,63678E-09 |
| 122 | D Longitudinal | 3,48743E-07 | 1,0261E-09 | 8,66668E-10 | 3,00495E-07 | 5,27862E-10 | 5,95847E-10 | 2,40651E-07 | 1,89476E-10 | -1,31014E-09 |
| 122 | D Vertical | -2,77811E-08 | -2,77589E-08 | -1,48096E-08 | -1,7897E-08 | -1,80848E-08 | -1,48114E-08 | -8,38411E-09 | -9,05871E-09 | -1,38342E-08 |
| 122 | D transversal | -7,82751E-08 | 2,683E-07 | 5,08308E-08 | -7,91503E-08 | 2,19906E-07 | 5,1078E-08 | -7,61841E-08 | 1,65511E-07 | 6,22489E-08 |
| 122 | G Longitudinal | -9,74507E-09 | 5,76934E-08 | 1,87056E-08 | -1,24725E-08 | 4,12399E-08 | 1,54364E-08 | 3,88863E-09 | 1,42296E-08 | 2,49901E-08 |
| 122 | G Vertical | 1,27128E-07 | 3,06827E-10 | -1,71197E-08 | 1,18057E-07 | 3,09473E-09 | -9,82739E-09 | 1,05409E-07 | 2,11597E-08 | -4,34456E-08 |
| 122 | G transversal | -6,64505E-08 | -1,04182E-09 | -1,11779E-09 | -4,81719E-08 | 3,71975E-10 | -2,69982E-09 | -1,34122E-08 | -8,8643E-10 | 8,34423E-10 |
| 123 | D Longitudinal | 3,4874E-07 | -1,02651E-09 | -8,638E-10 | 3,00487E-07 | -5,28165E-10 | -5,95224E-10 | 2,40644E-07 | -1,98414E-10 | 1,32349E-09 |
| 123 | D Vertical | 2,7781E-08 | -2,77587E-08 | -1,48106E-08 | 1,78966E-08 | -1,80847E-08 | -1,48117E-08 | 8,38438E-09 | -9,05784E-09 | -1,38355E-08 |
| 123 | D transversal | 7,82743E-08 | 2,683E-07 | 5,08277E-08 | 7,91494E-08 | 2,19907E-07 | 5,10776E-08 | 7,61842E-08 | 1,65501E-07 | 6,22626E-08 |
| 123 | G Longitudinal | 9,74418E-09 | 5,76943E-08 | 1,87037E-08 | 1,24749E-08 | 4,12436E-08 | 1,54316E-08 | -3,88948E-09 | 1,42231E-08 | 2,49999E-08 |
| 123 | G Vertical | 1,27831E-07 | -3,20322E-10 | 1,80237E-08 | 1,17955E-07 | -3,05351E-09 | 9,77394E-09 | 1,05189E-07 | -2,11011E-08 | 4,33584E-08 |
| 123 | G transversal | -6,64523E-08 | 1,04183E-09 | 1,11675E-09 | -4,81962E-08 | -3,73139E-10 | 2,70129E-09 | -1,33684E-08 | 8,91894E-10 | -8,42628E-10 |
| 124 | D Longitudinal | 1,87347E-07 | 1,02556E-09 | 5,04821E-10 | 1,40708E-07 | 3,37451E-10 | 5,71484E-10 | 9,74794E-08 | -3,00432E-11 | 1,76369E-10 |
| 124 | D Vertical | 2,75077E-08 | 2,77585E-08 | 5,50414E-09 | 1,79648E-08 | 1,8095E-08 | 5,4883E-09 | 8,43557E-09 | 9,0074E-09 | 4,45188E-09 |
| 124 | D transversal | 8,0333E-08 | 2,68299E-07 | 5,04799E-08 | 8,07301E-08 | 2,20253E-07 | 5,01371E-08 | 7,45521E-08 | 1,65874E-07 | 5,76196E-08 |
| 124 | G Longitudinal | 1,10346E-08 | 5,74536E-08 | 1,89371E-08 | 1,02076E-08 | 3,94011E-08 | 1,92891E-08 | 7,87212E-10 | 1,6305E-08 | 2,1553E-08 |
| 124 | G Vertical | 1,26968E-07 | 3,24815E-09 | 4,73513E-09 | 1,23438E-07 | 5,82195E-10 | 1,05326E-09 | 1,17403E-07 | -6,05272E-09 | 5,30992E-09 |
| 124 | G transversal | -4,82286E-08 | -1,17746E-09 | -5,48E-10 | -3,0229E-08 | -5,55058E-10 | -3,88302E-10 | -1,62175E-08 | 1,25094E-10 | -5,52258E-10 |
| 125 | D Longitudinal | 4,20261E-07 | 5,43734E-10 | 7,34292E-10 | 3,51223E-07 | -9,64482E-10 | 2,44457E-09 | 2,57186E-07 | -2,81343E-11 | 2,53697E-10 |
| 125 | D Vertical | -3,05673E-08 | -3,07722E-08 | -1,79678E-08 | -1,82251E-08 | -1,87074E-08 | -1,79443E-08 | -8,52231E-09 | -9,05705E-09 | -1,39195E-08 |
| 125 | D transversal | -9,23198E-08 | 3,28253E-07 | 7,15183E-08 | -9,61249E-08 | 2,61216E-07 | 6,97552E-08 | -7,38077E-08 | 1,82096E-07 | 7,64729E-08 |

APOYO 1

| DESPLAZAMIENTOS (metros) | | C4 | | | C5 | | | C6 | | |
|---|---|---|---|---|---|---|---|---|---|---|
| Nudo | Desplazamiento | L | T | V | L | T | V | L | T | V |
| 125 | G Longitudinal | -1,10794E-08 | 6,17877E-08 | 2,3974E-08 | -1,16966E-08 | 3,71975E-08 | 3,08217E-08 | 8,8573E-10 | 1,7143E-08 | 1,25867E-08 |
| 125 | G Vertical | 1,42745E-07 | 3,23233E-09 | -2,81537E-08 | 1,29151E-07 | 2,73095E-09 | -9,60126E-09 | 1,10967E-07 | 1,70387E-08 | -3,50689E-08 |
| 125 | G transversal | -7,29112E-08 | 4,70244E-10 | 1,01191E-09 | -4,59192E-08 | 4,20345E-10 | 1,72531E-09 | -1,69243E-08 | 3,99197E-10 | -1,31594E-09 |
| 126 | D Longitudinal | 4,20273E-07 | -5,44169E-10 | -7,32218E-10 | 3,51267E-07 | 9,63923E-10 | -2,44364E-09 | 2,57186E-07 | 1,90242E-11 | -2,40133E-10 |
| 126 | D Vertical | 3,05679E-08 | -3,07719E-08 | -1,79707E-08 | 1,82274E-08 | -1,87071E-08 | -1,79449E-08 | 8,52209E-09 | -9,05643E-09 | -1,39204E-08 |
| 126 | D transversal | 9,23216E-08 | 3,28254E-07 | 7,1516E-08 | 9,61281E-08 | 2,61219E-07 | 6,9752E-08 | 7,38088E-08 | 1,8209E-07 | 7,64821E-08 |
| 126 | G Longitudinal | 1,10808E-08 | 6,17863E-08 | 2,39774E-08 | 1,16946E-08 | 3,71907E-08 | 3,08313E-08 | -8,84857E-10 | 1,71471E-08 | 1,25803E-08 |
| 126 | G Vertical | 1,44124E-07 | -3,25775E-09 | 2,9911E-08 | 1,29075E-07 | -2,64844E-09 | 9,49529E-09 | 1,10791E-07 | -1,69939E-08 | 3,5003E-08 |
| 126 | G transversal | -7,29018E-08 | -4,69701E-10 | -1,00735E-09 | -4,5924E-08 | -4,14839E-10 | -1,73267E-09 | -1,69422E-08 | -4,00962E-10 | 1,31883E-09 |
| 127 | D Longitudinal | 2,35252E-07 | 5,71522E-10 | 4,8175E-10 | 1,69232E-07 | 1,57568E-10 | 1,91648E-10 | 1,11379E-07 | 6,91821E-12 | -7,76243E-11 |
| 127 | D Vertical | 3,07199E-08 | 3,07707E-08 | 7,39936E-09 | 1,85454E-08 | 1,86408E-08 | 7,48973E-09 | 8,17879E-09 | 9,01721E-09 | 4,30925E-09 |
| 127 | D transversal | 9,31121E-08 | 3,28217E-07 | 7,13726E-08 | 9,16596E-08 | 2,58977E-07 | 7,35434E-08 | 7,40725E-08 | 1,82054E-07 | 7,70916E-08 |
| 127 | G Longitudinal | 1,11567E-08 | 6,25488E-08 | 2,2508E-08 | 8,78169E-09 | 3,7187E-08 | 2,78474E-08 | -7,8109E-10 | 1,62789E-08 | 1,73351E-08 |
| 127 | G Vertical | 1,43305E-07 | 3,10634E-09 | 5,66573E-09 | 1,33031E-07 | 5,52369E-10 | 2,32478E-10 | 1,20605E-07 | -4,86853E-09 | 4,22966E-09 |
| 127 | G transversal | -5,08658E-08 | 8,66415E-10 | 9,91188E-11 | -3,01598E-08 | 4,159E-10 | 4,32634E-10 | -1,36843E-08 | -5,95823E-11 | 2,9915E-10 |
| 128 | D Longitudinal | 4,93684E-07 | 4,4271E-10 | 4,7292E-10 | 3,89103E-07 | 1,47508E-10 | -1,35291E-09 | 2,72725E-07 | -3,88745E-12 | -2,26406E-11 |
| 128 | D Vertical | -3,22413E-08 | -3,25676E-08 | -2,1119E-08 | -1,79035E-08 | -1,87236E-08 | -2,01755E-08 | -8,49952E-09 | -9,05714E-09 | -1,3912E-08 |
| 128 | D transversal | -1,00839E-07 | 3,92379E-07 | 9,72327E-08 | -9,79032E-08 | 2,93982E-07 | 1,08512E-07 | -7,37231E-08 | 1,9852E-07 | 9,33181E-08 |
| 128 | G Longitudinal | -1,36323E-08 | 6,73947E-08 | 2,46044E-08 | 2,99727E-09 | 3,21972E-08 | 3,3582E-08 | -4,86552E-11 | 1,62273E-08 | 1,78709E-08 |
| 128 | G Vertical | 1,58362E-07 | 6,15784E-09 | -3,91876E-08 | 1,40245E-07 | 2,36716E-09 | -9,37512E-09 | 1,16525E-07 | 1,29178E-08 | -2,66922E-08 |
| 128 | G transversal | -7,67185E-08 | 9,10521E-10 | -1,74929E-09 | -3,39667E-08 | -9,10338E-10 | 1,63618E-09 | -1,51118E-08 | -1,303E-10 | 5,66783E-10 |
| 129 | D Longitudinal | 4,93676E-07 | -4,44178E-10 | -4,72135E-10 | 3,89097E-07 | -1,57005E-10 | 1,36602E-09 | 2,72725E-07 | -4,35701E-12 | 3,45427E-11 |
| 129 | D Vertical | 3,2242E-08 | -3,25664E-08 | -2,11261E-08 | 1,79086E-08 | -1,8723E-08 | -2,01766E-08 | 8,49935E-09 | -9,05667E-09 | -1,39127E-08 |
| 129 | D transversal | 1,00838E-07 | 3,92379E-07 | 9,72274E-08 | 9,78977E-08 | 2,93973E-07 | 1,08525E-07 | 7,3724E-08 | 1,98514E-07 | 9,3327E-08 |
| 129 | G Longitudinal | 1,36262E-08 | 6,73986E-08 | 2,45861E-08 | -3,00517E-09 | 3,21912E-08 | 3,35903E-08 | 4,85314E-11 | 1,62263E-08 | 1,78721E-08 |
| 129 | G Vertical | 1,60418E-07 | -6,19517E-09 | 4,17983E-08 | 1,40194E-07 | -2,24337E-09 | 9,21664E-09 | 1,16392E-07 | -1,28867E-08 | 2,66475E-08 |
| 129 | G transversal | -7,67402E-08 | -9,09612E-10 | 1,73824E-09 | -3,39288E-08 | 9,16211E-10 | -1,64456E-09 | -1,51064E-08 | 1,2982E-10 | -5,65804E-10 |
| 130 | D Longitudinal | 2,89641E-07 | 2,46382E-10 | 5,05734E-10 | 2,01868E-07 | -3,79679E-11 | 1,01265E-10 | 1,26197E-07 | 1,12572E-12 | 9,33204E-12 |
| 130 | D Vertical | 3,27305E-08 | 3,25773E-08 | 9,27143E-09 | 1,79802E-08 | 1,85794E-08 | 8,42098E-09 | 8,22688E-09 | 9,01665E-09 | 4,32358E-09 |
| 130 | D transversal | 1,02366E-07 | 3,92737E-07 | 9,62517E-08 | 9,62397E-08 | 2,94322E-07 | 1,03938E-07 | 7,37082E-08 | 1,98512E-07 | 9,3277E-08 |
| 130 | G Longitudinal | 1,04383E-08 | 6,5667E-08 | 2,83467E-08 | 1,19514E-09 | 3,40576E-08 | 3,07227E-08 | -1,94453E-10 | 1,64927E-08 | 1,60787E-08 |
| 130 | G Vertical | 1,59642E-07 | 2,96453E-09 | 6,59633E-09 | 1,42624E-07 | 5,22543E-10 | -5,88304E-10 | 1,23808E-07 | -3,68434E-09 | 3,1494E-09 |
| 130 | G transversal | -5,51943E-08 | 4,87695E-11 | 1,48393E-10 | -3,26146E-08 | 1,77618E-11 | 6,80081E-11 | -1,51994E-08 | 1,9726E-11 | -1,43195E-10 |
| 131 | D Longitudinal | 5,7037E-07 | -9,76989E-10 | 2,55587E-09 | 4,22948E-07 | -2,3714E-11 | 2,62909E-10 | 2,88141E-07 | -3,22869E-12 | 5,92761E-12 |
| 131 | D Vertical | -3,22448E-08 | -3,31829E-08 | -2,42416E-08 | -1,80408E-08 | -1,87206E-08 | -2,0254E-08 | -8,46759E-09 | -9,05705E-09 | -1,39128E-08 |
| 131 | D transversal | -1,18377E-07 | 4,60043E-07 | 1,2487E-07 | -9,56835E-08 | 3,28058E-07 | 1,321E-07 | -7,34999E-08 | 2,14946E-07 | 1,09888E-07 |
| 131 | G Longitudinal | -1,25645E-08 | 6,40019E-08 | 3,76658E-08 | 1,03306E-09 | 3,45386E-08 | 2,18851E-08 | 2,32822E-10 | 1,64962E-08 | 1,61767E-08 |
| 131 | G Vertical | 1,74214E-07 | 9,11279E-09 | -5,04495E-08 | 1,51045E-07 | 2,05496E-09 | -9,46384E-09 | 1,21977E-07 | 8,87244E-09 | -1,84741E-08 |
| 131 | G transversal | -7,05365E-08 | 4,50219E-10 | 5,1756E-10 | -3,33933E-08 | 3,99369E-10 | -1,7291E-09 | -1,54957E-08 | 4,82619E-11 | -2,09922E-10 |
| 132 | D Longitudinal | 5,70411E-07 | 9,77122E-10 | -2,5682E-09 | 4,22949E-07 | 1,35929E-11 | -2,49117E-10 | 2,88141E-07 | -4,4148E-12 | 5,01479E-12 |
| 132 | D Vertical | 3,22482E-08 | -3,31806E-08 | -2,42561E-08 | 1,80454E-08 | -1,87201E-08 | -2,02549E-08 | 8,4674E-09 | -9,05662E-09 | -1,39134E-08 |
| 132 | D transversal | 1,18378E-07 | 4,60044E-07 | 1,24876E-07 | 9,56742E-08 | 3,28052E-07 | 1,32109E-07 | 7,3501E-08 | 2,1494E-07 | 1,09897E-07 |
| 132 | G Longitudinal | 1,25843E-08 | 6,39887E-08 | 3,77595E-08 | -1,03705E-09 | 3,45426E-08 | 2,1881E-08 | -2,33213E-10 | 1,64965E-08 | 1,61764E-08 |
| 132 | G Vertical | 1,76959E-07 | -9,17069E-09 | 5,39175E-08 | 1,5102E-07 | -1,9753E-09 | 9,36984E-09 | 1,21887E-07 | -8,85449E-09 | 1,84466E-08 |

APOYO 1

| DESPLAZAMIENTOS (metros) | | C4 | | | C5 | | | C6 | | |
|---|---|---|---|---|---|---|---|---|---|---|
| Nudo | Desplazamiento | L | T | V | L | T | V | L | T | V |
| 132 | G transversal | -7,05485E-08 | -4,56214E-10 | -4,34695E-10 | -3,34104E-08 | -4,00778E-10 | 1,73288E-09 | -1,54974E-08 | -4,89655E-11 | 2,10935E-10 |
| 133 | D Longitudinal | 3,45139E-07 | 1,69275E-10 | 1,78616E-10 | 2,33211E-07 | 9,16801E-12 | -7,50065E-11 | 1,41188E-07 | 1,6795E-12 | -2,91683E-12 |
| 133 | D Vertical | 3,3633E-08 | 3,31143E-08 | 1,12795E-08 | 1,77268E-08 | 1,85884E-08 | 8,27443E-09 | 8,25725E-09 | 9,01644E-09 | 4,32303E-09 |
| 133 | D transversal | 1,13914E-07 | 4,57764E-07 | 1,28904E-07 | 9,59411E-08 | 3,28015E-07 | 1,32737E-07 | 7,35008E-08 | 2,14942E-07 | 1,09892E-07 |
| 133 | G Longitudinal | 9,49696E-09 | 6,34252E-08 | 3,66987E-08 | -7,18183E-10 | 3,36962E-08 | 2,68418E-08 | -1,56569E-10 | 1,6415E-08 | 1,67501E-08 |
| 133 | G Vertical | 1,76025E-07 | 2,84561E-09 | 7,56341E-09 | 1,52139E-07 | 5,01285E-10 | -1,40918E-09 | 1,26941E-07 | -2,52133E-09 | 2,08571E-09 |
| 133 | G transversal | -5,80201E-08 | 1,44951E-10 | 2,16241E-10 | -3,13199E-08 | -4,18592E-11 | 9,52987E-11 | -1,49455E-08 | -3,33269E-12 | 4,92929E-11 |
| 134 | D Longitudinal | 6,32893E-07 | -1,95597E-11 | 2,57575E-10 | 4,17724E-07 | -1,05799E-12 | 4,6801E-12 | 2,51304E-07 | -1,96762E-13 | 5,29044E-13 |
| 134 | D Vertical | -5,92376E-09 | 5,97646E-09 | -4,05355E-09 | -3,24832E-09 | 3,32513E-09 | -3,38907E-09 | -1,5152E-09 | 1,62166E-09 | -3,13499E-09 |
| 134 | D transversal | -2,16154E-08 | 6,57239E-07 | 2,50859E-07 | -1,73775E-08 | 4,3963E-07 | 2,17708E-07 | -1,33651E-08 | 2,69006E-07 | 1,64418E-07 |
| 134 | G Longitudinal | 1,62215E-09 | 6,02893E-08 | 3,45605E-08 | 1,21498E-11 | 3,39166E-08 | 2,59344E-08 | -6,29147E-11 | 1,64237E-08 | 1,65885E-08 |
| 134 | G Vertical | 2,1273E-07 | 8,11171E-11 | -1,57167E-09 | 1,73645E-07 | -6,07412E-12 | -6,50158E-12 | 1,33759E-07 | -5,55673E-12 | 8,80062E-12 |
| 134 | G transversal | -5,74972E-08 | 1,88399E-12 | -6,46686E-11 | -3,24979E-08 | -4,11228E-13 | -6,34374E-13 | -1,52475E-08 | 1,23736E-12 | -8,17973E-13 |
| 135 | D Longitudinal | 6,32893E-07 | -1,95306E-11 | 2,57547E-10 | 4,17724E-07 | -1,05325E-12 | 4,65724E-12 | 2,51304E-07 | -2,12743E-13 | 5,41194E-13 |
| 135 | D Vertical | 5,98005E-09 | 5,97758E-09 | -4,06225E-09 | 3,24669E-09 | 3,32513E-09 | -3,3891E-09 | 1,51334E-09 | 1,62173E-09 | -3,13511E-09 |
| 135 | D transversal | 2,13088E-08 | 6,57258E-07 | 2,50519E-07 | 1,73477E-08 | 4,39629E-07 | 2,17706E-07 | 1,33672E-08 | 2,69005E-07 | 1,6442E-07 |
| 135 | G Longitudinal | -9,93348E-10 | 6,02404E-08 | 3,50884E-08 | -9,22323E-12 | 3,39164E-08 | 2,59455E-08 | 6,20785E-11 | 1,64239E-08 | 1,65879E-08 |
| 135 | G Vertical | 2,12723E-07 | 8,57771E-11 | -1,597E-09 | 1,73645E-07 | -5,77914E-12 | -9,10626E-12 | 1,33759E-07 | -5,86211E-12 | 9,42093E-12 |
| 135 | G transversal | -5,74779E-08 | 5,1986E-12 | -5,81531E-11 | -3,24984E-08 | 2,37105E-13 | -3,53047E-12 | -1,52485E-08 | -1,95348E-12 | 2,08255E-12 |
| 136 | D Longitudinal | 6,75078E-07 | -4,67758E-12 | -3,82264E-11 | 4,52458E-07 | -2,2237E-12 | 3,52533E-12 | 2,78075E-07 | -1,31422E-12 | 2,28322E-12 |
| 136 | D Vertical | 5,748E-09 | -6,0732E-09 | -1,10539E-08 | 3,25877E-09 | -3,45812E-09 | -8,57724E-09 | 1,52536E-09 | -1,66234E-09 | -6,45422E-09 |
| 136 | D transversal | 2,13083E-08 | 6,57257E-07 | 2,50519E-07 | 1,73477E-08 | 4,39629E-07 | 2,17706E-07 | 1,33673E-08 | 2,69005E-07 | 1,6442E-07 |
| 136 | G Longitudinal | -1,16611E-09 | 6,02486E-08 | 3,50512E-08 | -2,26666E-11 | 3,39165E-08 | 2,59391E-08 | 6,39542E-11 | 1,64201E-08 | 1,65974E-08 |
| 136 | G Vertical | 2,12775E-07 | 8,01385E-11 | -1,57128E-09 | 1,73645E-07 | -6,27419E-12 | -5,46881E-12 | 1,33756E-07 | -6,03845E-12 | 9,74816E-12 |
| 136 | G transversal | -6,00637E-08 | -5,73868E-11 | 5,65991E-10 | -3,25727E-08 | 5,62764E-13 | 7,59417E-12 | -1,51475E-08 | 6,58824E-12 | -1,39689E-11 |
| 137 | D Longitudinal | 1,12357E-09 | 1,45894E-16 | -8,68487E-13 | 1,56929E-09 | 2,93853E-15 | -8,71703E-13 | 2,01508E-09 | 1,43267E-13 | -1,12376E-12 |
| 137 | D Vertical | 9,92164E-10 | -3,07017E-14 | -9,72096E-11 | 7,99438E-10 | -1,86327E-13 | -9,69127E-11 | 6,08475E-10 | 2,25504E-13 | -9,6996E-11 |
| 137 | D transversal | 3,79353E-09 | 1,22818E-09 | -4,96794E-10 | 3,78385E-09 | 1,7013E-09 | -4,96782E-10 | 3,78602E-09 | 2,17441E-09 | -4,96733E-10 |
| 137 | G Longitudinal | 1,27784E-10 | 1,34916E-09 | 2,5213E-10 | 1,27677E-10 | 1,10901E-09 | 2,52057E-10 | 1,37251E-10 | 8,69654E-10 | 2,50284E-10 |
| 137 | G Vertical | 4,05469E-09 | -1,37084E-10 | -2,1802E-11 | 4,06487E-09 | -1,1629E-10 | -2,17825E-11 | 4,06229E-09 | -9,58643E-11 | -2,0968E-11 |
| 137 | G transversal | -4,69909E-10 | 1,50683E-13 | 7,91611E-11 | -3,79898E-10 | 8,03365E-13 | 7,79843E-11 | -2,92514E-10 | 2,44807E-12 | 7,25049E-11 |
| 138 | D Longitudinal | 4,69493E-09 | -1,35496E-15 | 1,22161E-14 | 5,14847E-09 | -1,75399E-15 | 2,78029E-15 | 5,59169E-09 | -1,77449E-14 | 2,60128E-14 |
| 138 | D Vertical | 4,69804E-17 | 7,46476E-11 | -3,7714E-11 | 1,55119E-16 | 1,09706E-10 | -3,77219E-11 | 2,90447E-16 | 1,44797E-10 | -3,78072E-11 |
| 138 | D transversal | 6,38087E-16 | 1,2285E-09 | -4,97541E-10 | 4,48471E-16 | 1,70156E-09 | -4,97543E-10 | 8,25931E-16 | 2,17473E-09 | -4,97726E-10 |
| 138 | G Longitudinal | 1,47665E-14 | -7,31324E-10 | -1,57055E-10 | -2,4387E-14 | -6,55634E-10 | -1,55394E-10 | -5,28635E-14 | -5,86174E-10 | -1,38246E-10 |
| 138 | G Vertical | 2,66724E-09 | 1,24957E-15 | -1,01718E-14 | 2,68259E-09 | 1,64238E-15 | -2,59702E-15 | 2,70816E-09 | 1,59582E-14 | -2,33966E-14 |
| 138 | G transversal | -1,42888E-09 | 9,46441E-16 | -6,62388E-15 | -1,14181E-09 | 8,93089E-16 | -1,39634E-15 | -8,45341E-10 | 3,72145E-15 | -5,41462E-15 |

## 2.2 ESFUERZOS AXILES EN BARRAS

| Newton | VIENTO | PESO | CT1 | | | CT2 | | |
|---|---|---|---|---|---|---|---|---|
| Barra | | | L | T | V | L | T | V |
| 1 | 18973,08225 | -5562,352066 | -3,525962754 | 3,543772956 | -0,249774106 | -3,521308061 | 3,543772966 | -0,2910254 |
| 2 | -18973,08248 | -5560,437413 | -3,525988549 | -3,54377427 | -0,249774026 | -3,530643245 | -3,543774276 | -0,208522746 |
| 3 | -18973,08219 | -5560,142904 | 3,525988512 | -3,543772144 | -0,249774107 | 3,530643204 | -3,543772134 | -0,208523059 |
| 4 | 18973,08241 | -5562,646575 | 3,525962794 | 3,543773586 | -0,249774026 | 3,521308097 | 3,54377358 | -0,29102513 |
| 5 | 18922,5184 | -5277,345729 | -3,531500536 | 3,535992688 | -0,249270377 | -3,515053123 | 3,5359927 | -0,290437297 |
| 6 | -18922,51816 | -5275,390569 | -3,531526771 | -3,535992718 | -0,24926988 | -3,547974172 | -3,53599272 | -0,208103041 |
| 7 | -18922,51834 | -5275,141087 | 3,53152505 | -3,535991832 | -0,249270381 | 3,547972464 | -3,535991819 | -0,208103741 |
| 8 | 18922,5181 | -5277,595211 | 3,531502262 | 3,535992171 | -0,249269876 | 3,515054861 | 3,535992167 | -0,2904366 |
| 9 | 17338,08864 | -5017,125406 | -3,552116244 | 3,53934492 | -0,250731468 | -3,559787667 | 3,539344932 | -0,29525842 |
| 10 | -17338,09003 | -5014,901564 | -3,552139638 | -3,539345154 | -0,250730953 | -3,544468202 | -3,539345154 | -0,206204093 |
| 11 | -17338,0886 | -5014,740821 | 3,552138293 | -3,539344123 | -0,250731471 | 3,54446687 | -3,53934411 | -0,20620479 |
| 12 | 17338,08997 | -5017,28615 | 3,552117596 | 3,539344731 | -0,25073095 | 3,559789033 | 3,539344729 | -0,295257739 |
| 13 | 17412,36426 | -4775,145014 | -3,552818615 | 3,554962593 | -0,251833187 | -3,535921801 | 3,554962601 | -0,29653727 |
| 14 | -17412,36572 | -4772,815559 | -3,552837638 | -3,554963134 | -0,251832789 | -3,569734443 | -3,554963136 | -0,207128746 |
| 15 | -17412,36422 | -4772,750941 | 3,55283798 | -3,554961984 | -0,251833186 | 3,569734793 | -3,554961976 | -0,207129297 |
| 16 | 17412,36568 | -4775,209633 | 3,552818276 | 3,55496272 | -0,251832789 | 3,535921471 | 3,554962717 | -0,296536742 |
| 17 | 15861,68895 | -4530,586834 | -3,5511945 | 3,555837607 | -0,251713771 | -3,562141867 | 3,555837609 | -0,300261986 |
| 18 | -15861,68675 | -4527,94748 | -3,551212271 | -3,55583704 | -0,251713663 | -3,540264842 | -3,555837046 | -0,203165413 |
| 19 | -15861,68891 | -4527,986889 | 3,551210962 | -3,555837275 | -0,251713774 | 3,540263594 | -3,555837273 | -0,203165632 |
| 20 | 15861,68672 | -4530,547424 | 3,551195807 | 3,555836564 | -0,25171366 | 3,562143236 | 3,555836557 | -0,300261762 |
| 21 | 15816,83077 | -4265,010922 | -3,552916265 | 3,549631378 | -0,251285313 | -3,53515075 | 3,549631374 | -0,299762057 |
| 22 | -15816,82865 | -4262,261968 | -3,552927783 | -3,549631269 | -0,25128536 | -3,57069336 | -3,54963128 | -0,20280849 |
| 23 | -15816,83074 | -4262,414801 | 3,552929563 | -3,549631323 | -0,251285309 | 3,570695078 | -3,549631328 | -0,202808517 |
| 24 | 15816,82863 | -4264,858089 | 3,552914477 | 3,549630748 | -0,251285365 | 3,5351489 | 3,549630739 | -0,299762035 |
| 25 | 14301,95131 | -4026,563877 | -3,548986273 | 3,551432843 | -0,251010473 | -3,564193704 | 3,551432839 | -0,304042483 |
| 26 | -14301,95141 | -4023,446778 | -3,548993246 | -3,551432893 | -0,251010426 | -3,533786124 | -3,551432903 | -0,197978342 |
| 27 | -14301,95129 | -4023,723803 | 3,548996101 | -3,551432904 | -0,251010466 | 3,53378867 | -3,55143291 | -0,197978377 |
| 28 | 14301,9514 | -4026,28685 | 3,548983405 | 3,551432514 | -0,251010433 | 3,564190529 | 3,551432507 | -0,304042361 |
| 29 | 14298,48954 | -3819,157126 | -3,551057828 | 3,553053743 | -0,251108741 | -3,531948658 | 3,553053747 | -0,304181178 |
| 30 | -14298,48949 | -3815,901787 | -3,551068932 | -3,553052688 | -0,251108534 | -3,570177883 | -3,553052679 | -0,198036261 |
| 31 | -14298,48954 | -3816,314892 | 3,55106386 | -3,553053518 | -0,251108753 | 3,570173033 | -3,553053508 | -0,198036424 |
| 32 | 14298,48948 | -3818,744018 | 3,551062904 | 3,553052877 | -0,251108521 | 3,531953954 | 3,55305288 | -0,304180907 |
| 33 | 12774,27574 | -3625,346335 | -3,556621998 | 3,55387806 | -0,251509293 | -3,57731581 | 3,553878078 | -0,310060144 |
| 34 | -12774,28979 | -3621,649598 | -3,556628954 | -3,553880156 | -0,25150916 | -3,535934221 | -3,553880128 | -0,192958535 |
| 35 | -12774,27576 | -3622,210718 | 3,556623902 | -3,553877447 | -0,251509306 | 3,535930086 | -3,553877423 | -0,192958807 |
| 36 | 12774,28978 | -3624,785225 | 3,556627093 | 3,553881038 | -0,251509147 | 3,57732182 | 3,55388106 | -0,310060218 |
| 37 | 12761,58273 | -3425,709735 | -3,556006515 | 3,548923035 | -0,251178594 | -3,534871487 | 3,548923033 | -0,309576666 |
| 38 | -12761,59678 | -3421,856458 | -3,555992068 | -3,548926607 | -0,251178693 | -3,577127751 | -3,548926617 | -0,192780339 |
| 39 | -12761,58274 | -3422,582283 | 3,5560038 | -3,548923527 | -0,251178564 | 3,577138822 | -3,548923542 | -0,192780295 |
| 40 | 12761,5968 | -3424,98392 | 3,555994781 | 3,548926726 | -0,251178723 | 3,534859094 | 3,54892673 | -0,309577074 |
| 41 | 11192,07589 | -3219,721527 | -3,543714339 | 3,548004522 | -0,250267934 | -3,571686865 | 3,548004468 | -0,315389377 |
| 42 | -11192,00887 | -3215,320389 | -3,543696586 | -3,547999183 | -0,25026841 | -3,51572618 | -3,547999238 | -0,185146439 |

APOYO 1

| Newton | VIENTO | PESO | CT1 | | | CT2 | | |
|---|---|---|---|---|---|---|---|---|
| Barra | | | L | T | V | L | T | V |
| 43 | -11192,07589 | -3216,233988 | 3,543706374 | -3,548006787 | -0,250267908 | 3,515733859 | -3,548006853 | -0,185145369 |
| 44 | 11192,00894 | -3218,807905 | 3,543704442 | 3,547997909 | -0,250268435 | 3,571674861 | 3,547997866 | -0,315389616 |
| 45 | 11211,38572 | -3030,226652 | -3,542822091 | 3,564774241 | -0,25143694 | -3,518751846 | 3,564774233 | -0,317018437 |
| 46 | -11211,31878 | -3025,596648 | -3,542840388 | -3,564765997 | -0,251437414 | -3,566909069 | -3,564765953 | -0,185856645 |
| 47 | -11211,38578 | -3026,714512 | 3,54280842 | -3,564774382 | -0,25143702 | 3,566878681 | -3,564774354 | -0,185855611 |
| 48 | 11211,31881 | -3029,108763 | 3,542854077 | 3,564767273 | -0,251437333 | 3,518785405 | 3,56476728 | -0,317018621 |
| 49 | 9584,753886 | -2865,635787 | -3,579126782 | 3,565120788 | -0,254150685 | -3,617197022 | 3,565120866 | -0,328247406 |
| 50 | -9584,974765 | -2860,339929 | -3,579127449 | -3,565125678 | -0,254149546 | -3,541053937 | -3,565125555 | -0,180053946 |
| 51 | -9584,754013 | -2861,66766 | 3,57910702 | -3,565118472 | -0,254150739 | 3,541036764 | -3,565118369 | -0,180055471 |
| 52 | 9584,97477 | -2864,308091 | 3,579147415 | 3,565129878 | -0,254149493 | 3,617220905 | 3,565129977 | -0,328247115 |
| 53 | 9527,806384 | -2666,653829 | -3,581777982 | 3,533840389 | -0,251942124 | -3,552309055 | 3,533840351 | -0,325178513 |
| 54 | -9528,027772 | -2661,134753 | -3,581670772 | -3,533852271 | -0,251941419 | -3,611142134 | -3,533852373 | -0,178703182 |
| 55 | -9527,806427 | -2662,731682 | 3,58175079 | -3,533843866 | -0,251941928 | 3,611219689 | -3,533843994 | -0,178703964 |
| 56 | 9528,027901 | -2665,056937 | 3,581697857 | 3,533851219 | -0,251941617 | 3,552226484 | 3,533851207 | -0,325179007 |
| 57 | 7798,276701 | -2406,109499 | -3,491619399 | 3,528916824 | -0,24514534 | -3,542283007 | 3,528916752 | -0,329313643 |
| 58 | -7797,723159 | -2399,597187 | -3,491563442 | -3,528940426 | -0,245153995 | -3,440898764 | -3,528940489 | -0,160984115 |
| 59 | -7798,276773 | -2401,601913 | 3,491582396 | -3,528920553 | -0,245145292 | 3,440918774 | -3,528920649 | -0,160975368 |
| 60 | 7797,723314 | -2404,1048 | 3,491600297 | 3,528939791 | -0,245154049 | 3,542264971 | 3,528939752 | -0,32932322 |
| 61 | 7811,818379 | -2228,158306 | -3,471939587 | 3,544008179 | -0,246224142 | -3,441044108 | 3,544008177 | -0,330823964 |
| 62 | -7811,248177 | -2221,376367 | -3,471936284 | -3,543970689 | -0,24621161 | -3,50282838 | -3,543970593 | -0,161612964 |
| 63 | -7811,818558 | -2223,627662 | 3,471886985 | -3,54400872 | -0,246224254 | 3,502782455 | -3,54400867 | -0,161624628 |
| 64 | 7811,248299 | -2225,906983 | 3,471988951 | 3,543974258 | -0,246211488 | 3,44109684 | 3,543974301 | -0,330811553 |
| 65 | -9,769326987 | -29,01550536 | 0,028527658 | -0,003182213 | -0,00021111 | -0,030952211 | -0,003182218 | -0,000138972 |
| 66 | -9,791904905 | -29,14928637 | -0,028521861 | -0,003259831 | -0,000239888 | 0,030958877 | -0,003259849 | -0,000166548 |
| 67 | 9,791875549 | -29,15321638 | 0,02850635 | 0,00325908 | -0,00023991 | 0,087987093 | 0,003259069 | -0,000312956 |
| 68 | 9,769366746 | -29,01935985 | -0,028512166 | 0,003182415 | -0,000211113 | -0,087992039 | 0,003182415 | -0,000283253 |
| 69 | -1242,3964 | -88,51231919 | -0,085269826 | -0,008038031 | -0,006438116 | -0,147478266 | -0,008038145 | -0,014880725 |
| 70 | -1241,647593 | -88,10956829 | 0,08536225 | -0,008063371 | -0,006451964 | 0,147565213 | -0,00806348 | -0,014894195 |
| 71 | 1241,647654 | -87,65744323 | -0,085353525 | 0,008061664 | -0,006452188 | -0,023150566 | 0,008061655 | 0,001991029 |
| 72 | 1242,396414 | -88,06016386 | 0,08526102 | 0,008035763 | -0,006438334 | 0,023052596 | 0,008035749 | 0,002005411 |
| 73 | -1227,841516 | 11,47624084 | 0,03893217 | 0,002088213 | 0,002913112 | -0,01259822 | 0,002088148 | -0,00416972 |
| 74 | -1228,157354 | 11,63170511 | -0,038948865 | 0,002075594 | 0,002915492 | 0,012580388 | 0,002075533 | -0,004166476 |
| 75 | 1228,157411 | 12,0110048 | 0,038953633 | -0,002077737 | 0,00291553 | 0,090482857 | -0,002077816 | 0,009998684 |
| 76 | 1227,841546 | 11,8555928 | -0,038937102 | -0,002090732 | 0,002913154 | -0,090467465 | -0,002090815 | 0,009997284 |
| 77 | -1268,278673 | -28,32652486 | -0,013925851 | -0,002029412 | -0,001035225 | -0,056932779 | -0,002029361 | -0,006900661 |
| 78 | -1268,17731 | -28,15777531 | 0,013926984 | -0,002017882 | -0,001035477 | 0,05693539 | -0,002017827 | -0,00690161 |
| 79 | 1268,177291 | -27,84364581 | -0,013922293 | 0,002019785 | -0,001035478 | 0,029086133 | 0,002019841 | 0,004829681 |
| 80 | 1268,278628 | -28,01243272 | 0,013921276 | 0,002030977 | -0,001035229 | -0,029085672 | 0,00203103 | 0,004829332 |
| 81 | -1312,307834 | -12,65714741 | 0,005228739 | 0,000869928 | 0,000382153 | -0,031892048 | 0,000869903 | -0,00472992 |
| 82 | -1312,329998 | -12,52072311 | -0,005226588 | 0,000864931 | 0,000381775 | 0,031893376 | 0,000864908 | -0,004730051 |
| 83 | 1312,330022 | -12,24695618 | 0,005230386 | -0,000865538 | 0,000381769 | 0,042350342 | -0,000865558 | 0,005493952 |
| 84 | 1312,307838 | -12,38336377 | -0,005232588 | -0,000870819 | 0,000382149 | -0,042353366 | -0,000870842 | 0,005494662 |
| 85 | -1368,987762 | -24,48483727 | -0,004469985 | 0,000546413 | -0,000314615 | -0,036790825 | 0,000546417 | -0,004759302 |
| 86 | -1368,988195 | -24,36252446 | 0,004467127 | 0,000547309 | -0,000314267 | 0,036788303 | 0,000547315 | -0,004759074 |

APOYO 1

| Newton | VIENTO | PESO | CT1 | | | CT2 | | |
|---|---|---|---|---|---|---|---|---|
| Barra | | | L | T | V | L | T | V |
| 87 | 1368,988202 | -24,12448987 | -0,004463696 | -0,000547066 | -0,00031426 | 0,027857482 | -0,000547062 | 0,004130446 |
| 88 | 1368,98775 | -24,24680727 | 0,004466565 | -0,000546423 | -0,000314609 | -0,027854278 | -0,000546422 | 0,004130053 |
| 89 | 41,75396856 | -24,95276615 | 0,003696542 | 0,027044171 | -0,001914847 | -0,051206711 | 0,027044284 | -0,002665719 |
| 90 | -41,75302871 | -25,13341781 | 0,003592356 | -0,027035465 | -0,001913746 | 0,058500203 | -0,027035246 | -0,001165789 |
| 91 | 41,7529109 | -25,17353444 | -0,003597962 | 0,027040617 | -0,001913502 | 0,051309875 | 0,027040725 | -0,002664261 |
| 92 | -41,75405375 | -24,91264602 | -0,00369063 | -0,027038588 | -0,001915091 | -0,058593871 | -0,027038364 | -0,001167147 |
| 93 | -30,84123807 | -12,0990618 | -0,000221459 | -0,018418965 | 0,001292281 | -0,044371466 | -0,018419014 | 0,001789975 |
| 94 | 30,84125165 | -12,29913557 | -0,00018148 | 0,018414723 | 0,001291851 | 0,043964743 | 0,018414617 | 0,000795525 |
| 95 | -30,84121787 | -12,27252483 | 0,000176462 | -0,018417414 | 0,001291737 | 0,044322689 | -0,018417468 | 0,001789456 |
| 96 | 30,84129915 | -12,12567447 | 0,000226337 | 0,018416638 | 0,001292395 | -0,043923676 | 0,018416536 | 0,000795987 |
| 97 | 9,046296942 | -19,09253627 | -0,001314225 | 0,006866301 | -0,000468456 | -0,039210451 | 0,006866324 | -0,00066655 |
| 98 | -9,046226017 | -19,23047204 | -0,001336761 | -0,006864089 | -0,000468004 | 0,036561304 | -0,006864048 | -0,000270479 |
| 99 | 9,046195021 | -19,24106097 | 0,001332654 | 0,006864967 | -0,000467957 | 0,039230719 | 0,006864986 | -0,000665987 |
| 100 | -9,046304878 | -19,08194604 | 0,001318385 | -0,006865118 | -0,000468503 | -0,036577839 | -0,006865074 | -0,000271003 |
| 101 | 2,154200525 | -17,13273218 | 0,00048756 | -0,000785192 | 3,91131E-05 | -0,03216768 | -0,000785201 | 8,08608E-05 |
| 102 | -2,154207636 | -17,26443759 | 0,000492918 | 0,000784235 | 3,90264E-05 | 0,033147464 | 0,000784213 | -2,45332E-06 |
| 103 | 2,154206797 | -17,26220952 | -0,000496557 | -0,000784857 | 3,90037E-05 | 0,03215799 | -0,000784869 | 8,07834E-05 |
| 104 | -2,154181247 | -17,13496077 | -0,000483943 | 0,000784838 | 3,91356E-05 | -0,033139184 | 0,000784819 | -2,39078E-06 |
| 105 | 1480,936825 | -7,917267219 | 0,002655628 | -0,003229815 | 0,000182597 | 0,03182967 | -0,003229807 | 0,004240499 |
| 106 | 1480,941103 | -8,026385971 | -0,002657083 | -0,003228524 | 0,000182859 | -0,031831216 | -0,003228519 | 0,004240785 |
| 107 | -1480,941115 | -8,2437052 | 0,002654054 | 0,003228597 | 0,000182863 | -0,026520078 | 0,003228601 | -0,003875129 |
| 108 | -1480,93682 | -8,134587265 | -0,002652594 | 0,003230112 | 0,0001826 | 0,026521447 | 0,003230118 | -0,003875434 |
| 109 | 1628,349212 | -41,46375369 | 0,007438775 | 0,002324958 | 0,000529363 | 0,033474488 | 0,002324955 | 0,00408289 |
| 110 | 1628,346403 | -41,56085966 | -0,007440686 | 0,002323751 | 0,000529681 | -0,033476395 | 0,002323746 | 0,004083258 |
| 111 | -1628,346408 | -41,75116459 | 0,007437963 | -0,002323999 | 0,000529686 | -0,018597747 | -0,002324006 | -0,003023783 |
| 112 | -1628,349201 | -41,65405725 | -0,007436057 | -0,002325005 | 0,000529368 | 0,018599657 | -0,00232501 | -0,00302411 |
| 113 | 13,54492086 | -22,73621781 | 0,003736923 | 0,00238547 | -0,000155657 | -0,02557517 | 0,002385477 | -0,000185875 |
| 114 | -13,54525118 | -22,85086093 | 0,003728803 | -0,002386027 | -0,000155904 | 0,033041094 | -0,002386018 | -0,000125808 |
| 115 | 13,54523737 | -22,85247476 | -0,003732039 | 0,002386163 | -0,000155892 | 0,025580251 | 0,002386167 | -0,000186088 |
| 116 | -13,5449167 | -22,7346049 | -0,003733677 | -0,002385095 | -0,000155669 | -0,03304577 | -0,002385083 | -0,000125623 |
| 117 | -60,43401181 | -6,389909767 | -0,001122005 | -0,010913556 | 0,0007649 | -0,026978912 | -0,010913556 | 0,000886905 |
| 118 | 60,43462318 | -6,497956926 | -0,001124369 | 0,010915304 | 0,000765587 | 0,024732521 | 0,010915302 | 0,000643564 |
| 119 | -60,43463069 | -6,491420842 | 0,00112154 | -0,01091543 | 0,000765586 | 0,026978431 | -0,010915432 | 0,000887651 |
| 120 | 60,43402015 | -6,396443861 | 0,001124834 | 0,010913639 | 0,000764901 | -0,024732072 | 0,010913639 | 0,000642877 |
| 121 | 124,7969821 | -53,92755683 | 0,003221765 | 0,023206288 | -0,00164206 | -0,021374053 | 0,023206284 | -0,001907639 |
| 122 | -124,7976153 | -54,00907624 | 0,003223855 | -0,023208436 | -0,001642694 | 0,02781964 | -0,023208447 | -0,00137695 |
| 123 | 124,7976127 | -54,0233044 | -0,003226538 | 0,023208087 | -0,001642706 | 0,021369245 | 0,02320808 | -0,001908287 |
| 124 | -124,79697 | -53,9133308 | -0,003219092 | -0,023206439 | -0,001642048 | -0,027814912 | -0,023206448 | -0,001376365 |
| 125 | -158,956571 | 7,038091849 | 0,037327867 | -0,028513563 | 0,002637493 | 0,037582035 | -0,028513561 | 0,003025257 |
| 126 | 158,9553585 | 7,024930899 | 0,037325411 | 0,028512769 | 0,002637052 | 0,037071247 | 0,028512775 | 0,002249241 |
| 127 | 158,9565678 | 7,01732345 | -0,037328215 | 0,028513673 | 0,002637486 | -0,037074047 | 0,028513678 | 0,002249661 |
| 128 | -158,9553598 | 7,045698184 | -0,037325057 | -0,028512637 | 0,002637059 | -0,037579222 | -0,028512635 | 0,003024802 |
| 129 | -179,7666303 | 37,46160843 | 0,015576781 | -0,033923179 | 0,002402385 | 0,034068968 | -0,03392317 | 0,002795187 |
| 130 | 179,7660552 | 37,51841782 | 0,015569513 | 0,033921986 | 0,0024017 | -0,002922636 | 0,033922007 | 0,002008661 |

APOYO 1

| Newton | VIENTO | PESO | CT1 | | | CT2 | | |
|---|---|---|---|---|---|---|---|---|
| Barra | | | L | T | V | L | T | V |
| 131 | 179,7666147 | 37,44056439 | -0,015579014 | 0,033923593 | 0,002402362 | 0,002913173 | 0,033923613 | 0,002009319 |
| 132 | -179,7660583 | 37,53945997 | -0,01556726 | -0,033921408 | 0,002401722 | -0,034059411 | -0,033921397 | 0,002794472 |
| 133 | -98,51320696 | -8,958747805 | 1,75421E-05 | -1,82969E-05 | 1,4075E-06 | 0,000935816 | -1,82962E-05 | 1,66511E-06 |
| 134 | 98,51320637 | -9,016766212 | 1,58528E-05 | 1,82961E-05 | 1,65309E-06 | -0,000902421 | 1,82954E-05 | 1,39533E-06 |
| 135 | 98,51321161 | -8,958762084 | -1,58615E-05 | 1,83585E-05 | 1,40747E-06 | 0,000902413 | 1,83592E-05 | 1,13188E-06 |
| 136 | -98,51321103 | -9,016751934 | -1,75334E-05 | -1,83571E-05 | 1,65311E-06 | -0,000935808 | -1,83577E-05 | 1,92852E-06 |
| 137 | 1962,539807 | -231,292905 | -0,043114435 | 0,020741061 | -0,003047184 | -0,020306136 | 0,020741057 | -6,67404E-05 |
| 138 | -1962,54002 | -231,5010496 | -0,043116123 | -0,020740223 | -0,003047351 | -0,065924414 | -0,020740227 | -0,006027739 |
| 139 | -1962,5398 | -231,452518 | 0,043115853 | -0,020741137 | -0,003047184 | 0,065924153 | -0,02074114 | -0,006027575 |
| 140 | 1962,540018 | -231,3414358 | 0,0431147 | 0,020740043 | -0,00304735 | 0,020306409 | 0,020740038 | -6,68795E-05 |
| 141 | 2,58428856 | -176,7602925 | -0,017399978 | 0,000475546 | -2,67334E-05 | -0,038788213 | 0,000475546 | -3,22756E-05 |
| 142 | -2,58365642 | -176,8011659 | -0,017401217 | -0,000473653 | -2,6187E-05 | 0,003987016 | -0,000473654 | -2,06784E-05 |
| 143 | -2,584285342 | -176,7599959 | 0,017401157 | -0,000475498 | -2,67333E-05 | -0,003987076 | -0,000475498 | -2,12058E-05 |
| 144 | 2,58365303 | -176,8014604 | 0,017400039 | 0,000473615 | -2,61866E-05 | 0,038788273 | 0,000473615 | -3,16852E-05 |
| 145 | -1682,445213 | -0,921208981 | -0,040476994 | 0,011289812 | -0,002864675 | -0,064657111 | 0,01128981 | -0,006330928 |
| 146 | 1682,445004 | -0,648383935 | -0,040471142 | -0,011289034 | -0,002864202 | -0,016291018 | -0,011289039 | 0,000602102 |
| 147 | 1682,445209 | -0,735574609 | 0,0404746 | -0,011290018 | -0,002864667 | 0,016294484 | -0,011290025 | 0,000601675 |
| 148 | -1682,444995 | -0,834017489 | 0,040473532 | 0,011289006 | -0,00286421 | 0,064653657 | 0,011289005 | -0,006330478 |
| 149 | 5537,5319 | -1734,032657 | -3,113525083 | 3,115512718 | -0,224359293 | -3,125873634 | 3,115512602 | -0,309880875 |
| 150 | -5537,009911 | -1732,16666 | -3,113324247 | -3,115501497 | -0,2243657 | -3,100980087 | -3,115501396 | -0,138842513 |
| 151 | -5537,532526 | -1729,452586 | 3,113246178 | -3,115520627 | -0,224359416 | 3,100897569 | -3,115520688 | -0,138835542 |
| 152 | 5537,010553 | -1736,746805 | 3,113603151 | 3,115508887 | -0,224365574 | 3,125947254 | 3,115508933 | -0,309890736 |
| 153 | 3876,756592 | -1455,797019 | -2,748586144 | 2,75541688 | -0,230022592 | -2,756978477 | 2,75541671 | -0,31741724 |
| 154 | -3876,074584 | -1448,43037 | -2,747793308 | -2,755387101 | -0,230040635 | -2,739406417 | -2,755386891 | -0,142649477 |
| 155 | -3876,758214 | -1451,116563 | 2,747849995 | -2,755435032 | -0,230022544 | 2,739457913 | -2,755435219 | -0,142623133 |
| 156 | 3876,076162 | -1453,110664 | 2,748529542 | 2,755406612 | -0,230040686 | 2,756916711 | 2,75540684 | -0,317437447 |
| 157 | 2417,475672 | -1091,910183 | -2,313538719 | 2,309233425 | -0,229451637 | -2,340124819 | 2,309232873 | -0,316638186 |
| 158 | -2417,229122 | -1090,362837 | -2,311695211 | -2,309290908 | -0,22948191 | -2,28544177 | -2,309290612 | -0,142332684 |
| 159 | -2417,479207 | -1087,240637 | 2,311725049 | -2,309279025 | -0,22945162 | 2,285138126 | -2,309279601 | -0,142251352 |
| 160 | 2417,232926 | -1095,030235 | 2,31350843 | 2,309327833 | -0,229481904 | 2,339760621 | 2,309328143 | -0,316639549 |
| 161 | 1334,63928 | -762,7257736 | -1,871204554 | 1,867831112 | -0,228048668 | -1,909661127 | 1,867830559 | -0,314597848 |
| 162 | -1332,533637 | -756,1456177 | -1,867675349 | -1,867874592 | -0,228091851 | -1,826490822 | -1,867873553 | -0,141151943 |
| 163 | -1334,646298 | -758,0903372 | 1,86775131 | -1,867896603 | -0,228048723 | 1,829296042 | -1,867897087 | -0,141485229 |
| 164 | 1332,540112 | -760,8022904 | 1,871132002 | 1,867957831 | -0,228091968 | 1,912321039 | 1,867958893 | -0,315057018 |
| 165 | 645,217868 | -417,4545019 | -1,473624345 | 1,472850368 | -0,241490093 | -1,538513847 | 1,472848679 | -0,333253699 |
| 166 | -659,722129 | -416,6157374 | -1,46990464 | -1,472202524 | -0,241533471 | -1,431023851 | -1,472202372 | -0,153785467 |
| 167 | -645,2241219 | -412,5392445 | 1,469166434 | -1,472952858 | -0,241490157 | 1,404290192 | -1,472954599 | -0,149689602 |
| 168 | 659,7304057 | -421,3148258 | 1,474336709 | 1,472237702 | -0,241531876 | 1,513211529 | 1,472236949 | -0,32927585 |
| 169 | -2,235788261 | -82,45165904 | 0,064057232 | 4,98829E-06 | 0,002222629 | 0,064052393 | 5,2238E-06 | 0,002222842 |
| 170 | -72,63931631 | 37,57990475 | 0,019757088 | -0,008428037 | -0,001152163 | -0,021092726 | -0,008428378 | -0,001242466 |
| 171 | -72,65485007 | 37,48786253 | -0,01949336 | -0,008481439 | -0,001171962 | 0,021502513 | -0,008481788 | -0,001261438 |
| 172 | 2,235646671 | -82,4517786 | -0,064056847 | 2,62557E-06 | 0,002222628 | -0,064061833 | 2,8616E-06 | 0,002218366 |
| 173 | 72,63949835 | 37,58484261 | -0,01974681 | 0,008420057 | -0,001152536 | -0,060596592 | 0,008419892 | -0,001057893 |
| 174 | 72,65498456 | 37,49274843 | 0,019482307 | 0,008472803 | -0,001172349 | 0,060478217 | 0,00847263 | -0,001078328 |

APOYO 1

| Newton | VIENTO | PESO | CT1 | | | CT2 | | |
|---|---|---|---|---|---|---|---|---|
| Barra | | | L | T | V | L | T | V |
| 175 | 0,795687926 | 276,5425591 | 0,270023579 | 2,43215E-05 | 0,023431386 | 0,270002536 | 2,41979E-05 | 0,023424478 |
| 176 | 513,3382684 | 126,9505335 | -5,40267E-05 | 0,301856829 | 0,023989638 | -9,14526E-05 | 0,301857077 | 0,015387257 |
| 177 | -0,795622307 | 276,5429853 | -0,27002406 | -2,83275E-05 | 0,023431389 | -0,270044387 | -2,84533E-05 | 0,023440374 |
| 178 | -513,3383876 | 127,4111513 | 5,4513E-05 | -0,301850956 | 0,023989905 | 1,70328E-05 | -0,301850841 | 0,032589098 |
| 179 | -2,264589953 | -25,16461455 | 0,217254568 | -0,000116317 | 0,013612234 | 0,217247836 | -0,000116364 | 0,013629546 |
| 180 | 246,6121463 | 126,3506498 | -3,14161E-05 | 0,219156286 | 0,013529937 | 4,66783E-05 | 0,21915611 | 0,005870504 |
| 181 | 2,264650449 | -25,16550857 | -0,217255392 | 0,000114824 | 0,013612237 | -0,217264696 | 0,000114783 | 0,013595921 |
| 182 | -246,6120528 | 126,7609 | 3,20396E-05 | -0,219159796 | 0,01352973 | 0,000110153 | -0,219159834 | 0,021191218 |
| 183 | 1,284799295 | 198,2678019 | 0,192550644 | 0,000212877 | 0,022447482 | 0,193032841 | 0,000213338 | 0,022519024 |
| 184 | 161,9057931 | 45,18915124 | -0,000104432 | 0,186289914 | 0,022451548 | 0,000106641 | 0,186290384 | 0,014788026 |
| 185 | -1,285246049 | 198,2636872 | -0,192535732 | -0,000197431 | 0,022447408 | -0,192041467 | -0,000196956 | 0,022366629 |
| 186 | -161,9061185 | 45,59937304 | 9,07626E-05 | -0,186280401 | 0,022452012 | 0,000302662 | -0,186280308 | 0,030109522 |
| 187 | -5,777565079 | -71,71068852 | 0,118806969 | -0,000365071 | 0,010310465 | 0,114363193 | -0,000366415 | 0,009426623 |
| 188 | 59,31517042 | 85,41281556 | 0,000235292 | 0,118408152 | 0,010301944 | -0,002300171 | 0,118407077 | 0,00394306 |
| 189 | 5,778842488 | -71,66249181 | -0,118915588 | 0,000317846 | 0,010310949 | -0,123396501 | 0,000316307 | 0,011222608 |
| 190 | -59,31442333 | 85,75380232 | -0,000135783 | -0,118426842 | 0,010300746 | -0,002678685 | -0,118426839 | 0,016672049 |
| 191 | 44,19284957 | 166,1581446 | 0,275412754 | -0,000191353 | 0,053511302 | 0,314240944 | -0,00018765 | 0,064984527 |
| 192 | -91,79109695 | 3,447850129 | -0,000647382 | -0,276575774 | 0,053509261 | 0,027515582 | -0,276575038 | 0,07181673 |
| 193 | -44,19706541 | 165,5407539 | -0,274775917 | 0,00035539 | 0,053506504 | -0,235859304 | 0,000361759 | 0,041937263 |
| 194 | 91,78862245 | 2,466721026 | 7,93994E-05 | 0,276632883 | 0,053508095 | 0,028194646 | 0,276635325 | 0,035161894 |
| 195 | -529,1315234 | -153,9751009 | -0,337147986 | -0,280657255 | -0,019571591 | -0,290860088 | -0,280657332 | -0,012106144 |
| 196 | 529,3821859 | -157,1563057 | -0,337024982 | 0,280686924 | -0,019574366 | -0,383286504 | 0,280686942 | -0,027038329 |
| 197 | -529,3818112 | -156,7565901 | 0,337196799 | -0,280683752 | -0,019574334 | 0,290935151 | -0,280683743 | -0,012110998 |
| 198 | 529,1311802 | -154,3748587 | 0,336976244 | 0,280652184 | -0,019571613 | 0,383264004 | 0,280652116 | -0,027035449 |
| 199 | -1493,619029 | -147,695303 | -0,265221554 | -0,327277619 | -0,018505421 | -0,309340302 | -0,327277564 | -0,018739057 |
| 200 | -1492,599824 | -141,329316 | 0,265119666 | -0,327295846 | -0,018512356 | 0,309218585 | -0,327295709 | -0,01874295 |
| 201 | 1492,600132 | -141,3170008 | -0,264963516 | 0,327301099 | -0,018512111 | -0,220864809 | 0,327301126 | -0,018283315 |
| 202 | 1493,618665 | -147,6827661 | 0,265065332 | 0,327275018 | -0,018505174 | 0,220946785 | 0,327274962 | -0,018271186 |
| 203 | -1287,843838 | -87,60861281 | -0,161644086 | -0,33941516 | -0,01491975 | -0,229773878 | -0,33941527 | -0,014840122 |
| 204 | -200,5417203 | -86,90833229 | 0,340966534 | -0,149765594 | -0,014744838 | 0,288002513 | -0,149765519 | -0,009894869 |
| 205 | 1287,843505 | -87,61281801 | 0,161463682 | 0,339408855 | -0,014919779 | 0,093333217 | 0,339408752 | -0,014997137 |
| 206 | 200,5420823 | -87,16810428 | -0,340785931 | 0,149770916 | -0,014744818 | -0,3937504 | 0,149770996 | -0,019596459 |
| 207 | 1286,823343 | -87,71183819 | -0,161472123 | 0,339349624 | -0,014944604 | -0,09336393 | 0,339349611 | -0,015016836 |
| 208 | -200,5343635 | -86,37626096 | -0,341023758 | -0,14976059 | -0,014761106 | -0,288029764 | -0,149760608 | -0,009912357 |
| 209 | -1286,82292 | -87,70796508 | 0,161651555 | -0,339347289 | -0,014944572 | 0,229759091 | -0,339347307 | -0,014872401 |
| 210 | 200,5339768 | -86,63590913 | 0,340844001 | 0,149757217 | -0,014761092 | 0,393838419 | 0,149757203 | -0,019609127 |
| 211 | 949,9712337 | -68,65257287 | -0,135748588 | 0,33604925 | -0,015238557 | -0,084356304 | 0,336049574 | -0,015125333 |
| 212 | -149,4775218 | -70,62483532 | -0,331945068 | -0,137248886 | -0,015261841 | -0,292380813 | -0,137248908 | -0,010087047 |
| 213 | -949,9700984 | -68,65881975 | 0,136411281 | -0,336030878 | -0,015238467 | 0,187806969 | -0,336030632 | -0,015358036 |
| 214 | 149,4763904 | -70,90192275 | 0,331356182 | 0,137239586 | -0,015261735 | 0,370918108 | 0,137239478 | -0,020434872 |
| 215 | -950,6780864 | -74,972182 | -0,136337782 | -0,335983755 | -0,015224874 | -0,187413793 | -0,335983799 | -0,015275874 |
| 216 | -149,8768668 | -73,59094438 | 0,331846517 | -0,137283286 | -0,015260498 | 0,292458145 | -0,137283077 | -0,010084967 |
| 217 | 950,676694 | -74,96943722 | 0,13568564 | 0,335974801 | -0,015225015 | 0,084613116 | 0,335974847 | -0,015173209 |
| 218 | 149,8778571 | -73,86823771 | -0,331267512 | 0,137296018 | -0,015260412 | -0,370652971 | 0,137296137 | -0,020439915 |

APOYO 1

| Newton | VIENTO | PESO | CT1 | | | CT2 | | |
|---|---|---|---|---|---|---|---|---|
| Barra | | | L | T | V | L | T | V |
| 219 | 707,0465846 | -47,8471175 | -0,117024709 | 0,337923337 | -0,016301138 | -0,044588588 | 0,337922976 | -0,016868226 |
| 220 | -84,14066252 | -45,53141776 | -0,338216878 | -0,119633588 | -0,016290592 | -0,291241566 | -0,119633897 | -0,010694941 |
| 221 | -707,0452146 | -47,81662341 | 0,11757804 | -0,337922441 | -0,016301525 | 0,190005248 | -0,337922495 | -0,015731197 |
| 222 | 84,13974754 | -45,83095571 | 0,337683235 | 0,119620027 | -0,016290898 | 0,384664027 | 0,119619968 | -0,021881869 |
| 223 | -710,1653907 | -47,54053824 | -0,117916883 | -0,338043401 | -0,016297952 | -0,192993685 | -0,338043644 | -0,01629349 |
| 224 | -84,12836536 | -46,2284052 | 0,338324955 | -0,119932518 | -0,016311859 | 0,28994197 | -0,119932594 | -0,010684063 |
| 225 | 710,164578 | -47,54050367 | 0,117293416 | 0,338020804 | -0,016297278 | 0,04220738 | 0,338020128 | -0,016292346 |
| 226 | 84,12952971 | -46,52977613 | -0,337726246 | 0,119941396 | -0,016312114 | -0,386119288 | 0,119941591 | -0,021941124 |
| 227 | 394,6087571 | -13,60338219 | -0,036649847 | 0,332992951 | -0,006331836 | 0,022270649 | 0,332994453 | -0,001463208 |
| 228 | 367,5007257 | -20,12962836 | 0,035600561 | 0,333373535 | -0,006254218 | -0,000672574 | 0,333376007 | -0,008880625 |
| 229 | -367,5020718 | -19,98957956 | -0,036041453 | -0,333330617 | -0,006250506 | -0,072334944 | -0,333330536 | -0,003649215 |
| 230 | -394,6093697 | -13,86481104 | 0,037485255 | -0,332956357 | -0,00633118 | 0,09642493 | -0,332955505 | -0,011220901 |
| 231 | -27,79724731 | -17,60647763 | -0,333653267 | -0,036676683 | -0,006347732 | -0,269947836 | -0,036675883 | -0,005109839 |
| 232 | 22,24646686 | -20,45996178 | -0,334298188 | 0,035582507 | -0,006243789 | -0,381953335 | 0,035582392 | -0,008942427 |
| 233 | -22,24872143 | -20,31519529 | 0,333797558 | -0,035600337 | -0,006243449 | 0,286090698 | -0,035600306 | -0,003543266 |
| 234 | 27,79845504 | -17,67316855 | 0,33379788 | 0,036714992 | -0,006347207 | 0,397479513 | 0,036715357 | -0,007601316 |
| 235 | -7,743692507 | -49,14020156 | 0,002652379 | -2,62071E-06 | 2,48682E-05 | -0,010017849 | -2,65017E-06 | 0,001609937 |
| 236 | -33,56865587 | -49,08502216 | 0,002691731 | -2,24173E-05 | 2,6397E-05 | -0,009928213 | -2,24466E-05 | 0,001607516 |
| 237 | -19,49915286 | -42,48240907 | -0,002654347 | -0,000284099 | 2,91237E-05 | 0,010017795 | -0,000284073 | -0,001535147 |
| 238 | -54,18151713 | -42,4069052 | -0,002517117 | -0,000141752 | 1,60586E-05 | 0,010334599 | -0,000141726 | -0,001573328 |
| 239 | 7,744924937 | -49,22524712 | -0,002087547 | 1,71862E-05 | 2,42121E-05 | -0,014745907 | 1,75256E-05 | -0,001564883 |
| 240 | 33,56988465 | -49,16985555 | -0,002128656 | 3,69345E-05 | 2,57433E-05 | -0,014736767 | 3,72726E-05 | -0,001559388 |
| 241 | 19,49792343 | -42,39847438 | 0,002089516 | 0,000269363 | 2,97877E-05 | 0,014749788 | 0,000269017 | 0,001598175 |
| 242 | 54,18027365 | -42,32162353 | 0,001945993 | 0,000126881 | 1,67289E-05 | 0,014785707 | 0,000126533 | 0,001610261 |
| 243 | -13,49936463 | -49,10759391 | -0,008031659 | 0,000185056 | 3,91312E-06 | -0,027345564 | 0,000185072 | 8,4657E-06 |
| 244 | -39,3381992 | -49,04530676 | -0,007948649 | 0,000147152 | 6,13573E-06 | -0,027193684 | 0,000147169 | 1,19886E-05 |
| 245 | -14,08060404 | -42,36060698 | 0,008029986 | -0,000640473 | 4,79048E-05 | 0,027343384 | -0,000640492 | 6,26207E-05 |
| 246 | -48,47718257 | -42,33353452 | 0,008318894 | -0,000381492 | 3,14987E-05 | 0,027871894 | -0,000381511 | 3,70734E-05 |
| 247 | 13,49949316 | -49,10785468 | 0,00807926 | -0,000183415 | 3,90631E-06 | -0,011233014 | -0,000183398 | -1,11525E-06 |
| 248 | 39,33832727 | -49,04563701 | 0,007996047 | -0,000145519 | 6,12906E-06 | -0,011247362 | -0,000145502 | -1,90395E-07 |
| 249 | 14,08047757 | -42,36137623 | -0,008077587 | 0,000638721 | 4,79167E-05 | 0,01123418 | 0,0006387 | 3,37288E-05 |
| 250 | 48,47705429 | -42,33381377 | -0,008367201 | 0,000379722 | 3,15107E-05 | 0,011184151 | 0,0003797 | 2,64686E-05 |
| 251 | -14,67264425 | -48,81742728 | 0,034471278 | -0,000442718 | 3,43575E-05 | 0,01414018 | -0,000442719 | 4,49653E-05 |
| 252 | -40,45529144 | -48,77075841 | 0,034426284 | -0,000440897 | 3,40917E-05 | 0,014166224 | -0,000440898 | 4,47112E-05 |
| 253 | -14,0329354 | -42,39864342 | -0,034471293 | -0,000427585 | 2,8429E-05 | -0,014140725 | -0,000427585 | 4,20052E-05 |
| 254 | -48,80269256 | -42,26696242 | -0,034627686 | -0,000435961 | 2,95515E-05 | -0,014049959 | -0,000435961 | 4,29906E-05 |
| 255 | 14,03294881 | -42,39937117 | 0,03448031 | 0,00042765 | 2,84293E-05 | 0,054810779 | 0,000427649 | 1,4852E-05 |
| 256 | 48,80270581 | -42,26768289 | 0,034636743 | 0,000436036 | 2,95515E-05 | 0,055214371 | 0,000436036 | 1,61066E-05 |
| 257 | 14,67263153 | -48,81799407 | -0,034480296 | 0,000442617 | 3,43588E-05 | -0,054811295 | 0,000442616 | 2,37714E-05 |
| 258 | 40,45527875 | -48,77132576 | -0,034435291 | 0,000440795 | 3,40931E-05 | -0,054695252 | 0,000440793 | 2,34949E-05 |
| 259 | -6,655067782 | 57,58287961 | -0,002795119 | 0,000293977 | -5,05505E-05 | 0,012301386 | 0,000294012 | -0,001945693 |
| 260 | -30,14402189 | 150,8199907 | -0,002565125 | 0,000223199 | -3,53669E-05 | 0,012725952 | 0,000223234 | -0,001948305 |
| 261 | 6,703706818 | 49,70692814 | 0,002797709 | 5,31667E-06 | 5,16509E-07 | -0,012303247 | 5,28572E-06 | 0,001874249 |
| 262 | -16,6323817 | 157,3458312 | 0,002565988 | -0,000107696 | 1,77259E-05 | -0,012721631 | -0,000107729 | 0,001922512 |

APOYO 1

| Newton | VIENTO | PESO | CT1 | | | CT2 | | |
|---|---|---|---|---|---|---|---|---|
| Barra | | | L | T | V | L | T | V |
| 263 | 6,653605105 | 57,68456065 | 0,002125257 | -0,0003112 | -4,97746E-05 | 0,017207678 | -0,0003116 | 0,001850112 |
| 264 | 30,14254295 | 150,9226268 | 0,001887457 | -0,000240659 | -3,45801E-05 | 0,017164277 | -0,000241065 | 0,001883176 |
| 265 | -6,70224763 | 49,60639041 | -0,002127815 | 1,2098E-05 | -2,68726E-07 | -0,017214682 | 1,25059E-05 | -0,001878847 |
| 266 | 16,63385856 | 157,24363 | -0,001888418 | 0,000125255 | 1,69346E-05 | -0,017161788 | 0,000125665 | -0,001892723 |
| 267 | 0,624149221 | 57,46478122 | 0,009985322 | 0,000305756 | -3,22511E-05 | 0,032938642 | 0,000305736 | -5,55331E-05 |
| 268 | -22,81546417 | 150,7238643 | 0,010456836 | 0,000235015 | -2,25947E-05 | 0,033700759 | 0,000234994 | -4,27085E-05 |
| 269 | -0,243621178 | 49,69545661 | -0,009983079 | 0,000142125 | -1,25809E-05 | -0,032935548 | 0,000142147 | -8,02477E-06 |
| 270 | -23,77847382 | 157,3741822 | -0,010456193 | -1,02884E-05 | 9,43121E-07 | -0,033700019 | -1,02665E-05 | 1,18762E-05 |
| 271 | -0,624302043 | 57,46604865 | -0,010041945 | -0,000307702 | -3,22428E-05 | 0,012909443 | -0,000307722 | -8,40538E-06 |
| 272 | 22,81531008 | 150,7249623 | -0,010514121 | -0,000237013 | -2,25854E-05 | 0,012727844 | -0,000237035 | -1,89407E-06 |
| 273 | 0,243771731 | 49,69518996 | 0,010039702 | -0,000140058 | -1,25948E-05 | -0,012910835 | -0,000140033 | -1,77709E-05 |
| 274 | 23,77862681 | 157,3735749 | 0,010513477 | 1,23444E-05 | 9,31207E-07 | -0,012728392 | 1,23685E-05 | -1,061E-05 |
| 275 | 0,161047166 | 49,59531212 | 0,040341939 | 0,000314718 | -2,11019E-05 | 0,016190586 | 0,000314717 | -3,1256E-05 |
| 276 | -23,47279374 | 157,2917456 | 0,040428555 | 0,000160351 | -1,00097E-05 | 0,015958682 | 0,00016035 | -1,56473E-05 |
| 277 | 0,824887537 | 57,43789989 | -0,040342082 | 0,000293934 | -2,287E-05 | -0,016189799 | 0,000293935 | -3,0119E-05 |
| 278 | -22,8371519 | 150,7487293 | -0,04042839 | 0,000134815 | -1,08251E-05 | -0,015958444 | 0,000134816 | -1,3539E-05 |
| 279 | -0,824873004 | 57,43828635 | 0,040352704 | -0,000293793 | -2,28724E-05 | 0,064504871 | -0,000293791 | -1,56589E-05 |
| 280 | 22,83716678 | 150,7488729 | 0,040439143 | -0,000134682 | -1,08272E-05 | 0,06490897 | -0,00013468 | -8,14425E-06 |
| 281 | -0,161062554 | 49,5958569 | -0,04035256 | -0,000314813 | -2,11015E-05 | -0,064503796 | -0,000314813 | -1,0936E-05 |
| 282 | 23,47277844 | 157,2920489 | -0,040439307 | -0,000160461 | -1,00085E-05 | -0,064909061 | -0,000160462 | -4,35164E-06 |
| 283 | 0,003972028 | 43,8906245 | 6,1464E-05 | 9,69832E-05 | -1,34852E-05 | 0,000230862 | 9,69826E-05 | -4,00335E-05 |
| 284 | -8,597511492 | 0,165005296 | 0,000117676 | -5,91984E-05 | 4,57158E-06 | 0,000268041 | -5,91981E-05 | -7,23861E-06 |
| 285 | 0,145926894 | 58,87126326 | -6,28336E-05 | 5,90779E-05 | -1,16633E-05 | -0,000232936 | 5,90763E-05 | 6,94663E-06 |
| 286 | -13,39009204 | -0,036184464 | -3,0043E-07 | -9,62229E-05 | 2,02506E-05 | 1,46783E-05 | -9,62225E-05 | 2,68658E-05 |
| 287 | -0,145909625 | 58,87026629 | 7,03752E-05 | -5,89466E-05 | -1,1669E-05 | -9,95749E-05 | -5,89445E-05 | -3,02996E-05 |
| 288 | 8,597500571 | 0,165639763 | -0,000122929 | 5,9054E-05 | 4,57884E-06 | 2,73339E-05 | 5,90502E-05 | 1,64331E-05 |
| 289 | -0,003987361 | 43,89204831 | -6,90166E-05 | -9,72151E-05 | -1,34751E-05 | 0,000100229 | -9,72213E-05 | 1,31475E-05 |
| 290 | 13,39009066 | -0,036539147 | -1,22274E-08 | 9,6256E-05 | 2,02498E-05 | 1,49407E-05 | 9,62574E-05 | 1,36125E-05 |
| 291 | 0,217761132 | 43,84499911 | 0,000199294 | 0,000164218 | -1,43473E-05 | 0,000463153 | 0,000164217 | -2,01618E-05 |
| 292 | -8,638991183 | 0,186259913 | 0,000248229 | -0,000113346 | 6,64636E-06 | 0,000454172 | -0,000113346 | 1,05346E-05 |
| 293 | 0,132333784 | 58,84170076 | -0,000200759 | 9,11571E-05 | -1,08865E-05 | -0,000465371 | 9,11567E-05 | -1,38212E-05 |
| 294 | -13,36202775 | -0,038485574 | 9,31594E-08 | -1,50888E-05 | 3,66356E-06 | 2,25299E-07 | -1,50887E-05 | 4,5506E-06 |
| 295 | 8,63898977 | 0,186052147 | -0,000248834 | 0,000113324 | 6,64679E-06 | -4,29042E-05 | 0,000113324 | 2,76563E-06 |
| 296 | -0,132331154 | 58,84185868 | 0,000201543 | -9,11642E-05 | -1,08848E-05 | -6,30441E-05 | -9,11653E-05 | -7,93985E-06 |
| 297 | 13,36202754 | -0,038533179 | -1,00694E-07 | 1,50957E-05 | 3,66323E-06 | 3,10011E-08 | 1,5096E-05 | 2,77203E-06 |
| 298 | -0,217762621 | 43,84531077 | -0,000200077 | -0,000164271 | -1,43463E-05 | 6,37582E-05 | -0,000164273 | -8,50995E-06 |
| 299 | -13,43733584 | -0,017796745 | 2,34408E-08 | -4,81153E-05 | 4,70193E-06 | 2,56179E-08 | -4,81152E-05 | 6,18472E-06 |
| 300 | 0,335777716 | 43,82514436 | -0,000391861 | 0,000169445 | -1,18952E-05 | -0,000102052 | 0,000169444 | -1,64251E-05 |
| 301 | -8,470971627 | 0,13955592 | -0,000134549 | 5,44419E-06 | -7,94689E-07 | 7,78797E-05 | 5,44409E-06 | -7,59841E-07 |
| 302 | 0,360746874 | 58,79143076 | 0,000392135 | 0,000173699 | -1,27471E-05 | 0,00010156 | 0,000173699 | -1,72948E-05 |
| 303 | 13,43733576 | -0,017876219 | -2,31562E-08 | 4,81192E-05 | 4,70174E-06 | -2,09484E-08 | 4,81193E-05 | 3,21684E-06 |
| 304 | -0,360746721 | 58,79167471 | -0,000392229 | -0,000173713 | -1,27463E-05 | -0,000682802 | -0,000173714 | -8,19143E-06 |
| 305 | 8,470971735 | 0,139554208 | 0,000134582 | -5,44908E-06 | -7,94422E-07 | 0,000347009 | -5,44928E-06 | -8,26614E-07 |
| 306 | -0,335777448 | 43,82538693 | 0,000391954 | -0,000169453 | -1,1895E-05 | 0,00068176 | -0,000169454 | -7,36035E-06 |

APOYO 1

| Newton | VIENTO | PESO | CT1 | | | CT2 | | |
|---|---|---|---|---|---|---|---|---|
| Barra | | | L | T | V | L | T | V |
| 307 | -4,382300995 | -0,050618419 | -0,000243768 | -0,000403822 | 3,63463E-05 | -0,000565768 | -0,000403822 | 8,90624E-05 |
| 308 | 4,382326882 | -0,053444687 | 0,000255065 | 0,000404037 | 3,63367E-05 | -6,6692E-05 | 0,00040404 | -1,64153E-05 |
| 309 | -5,128601492 | 0,087702745 | -0,000512794 | -0,000739397 | 4,6395E-05 | -0,000938004 | -0,000739396 | 7,23997E-05 |
| 310 | 5,128604829 | 0,086309368 | 0,000514047 | 0,000739426 | 4,6395E-05 | 8,88647E-05 | 0,000739425 | 2,03849E-05 |
| 311 | -4,059258447 | -0,211724084 | 0,000277441 | 2,53969E-05 | -3,45763E-06 | -0,000161192 | 2,53964E-05 | -3,0869E-06 |
| 312 | 4,059258927 | -0,211743635 | -0,000277511 | -2,54237E-05 | -3,4565E-06 | -0,000716143 | -2,54248E-05 | -3,81297E-06 |
| 313 | -23,26250869 | -93,34818288 | -0,000430579 | 0,000203543 | -3,56445E-05 | -0,000652848 | 0,000203543 | -2,28367E-05 |
| 314 | -23,43443065 | -107,7313745 | 0,000432415 | 0,000252528 | -3,79896E-05 | 0,000655301 | 0,00025253 | -8,03526E-05 |
| 315 | 23,26252587 | -93,34887117 | 0,000438822 | -0,000203271 | -3,56572E-05 | 0,000216741 | -0,000203263 | -4,8554E-05 |
| 316 | 23,43441089 | -107,7291056 | -0,000440771 | -0,000252672 | -3,79833E-05 | -0,000218076 | -0,000252674 | 4,39982E-06 |
| 317 | -23,00043235 | -107,8527128 | 0,0008015 | 0,00042474 | -3,94035E-05 | 0,001135977 | 0,00042474 | -5,6023E-05 |
| 318 | -23,11094709 | -93,44886559 | -0,000799562 | 0,000329744 | -3,4906E-05 | -0,001133086 | 0,000329745 | -4,78039E-05 |
| 319 | 23,11094804 | -93,44817513 | 0,000800111 | -0,000329686 | -3,49074E-05 | 0,000466616 | -0,000329684 | -2,20352E-05 |
| 320 | 23,00042989 | -107,8518238 | -0,000802053 | -0,000424719 | -3,94059E-05 | -0,000467606 | -0,000424717 | -2,2803E-05 |
| 321 | -22,57422476 | -107,9350979 | 0,000254493 | 0,000501662 | -3,55748E-05 | 0,000618603 | 0,000501663 | -4,96026E-05 |
| 322 | -22,54113739 | -93,57088027 | -0,000254823 | 0,000507186 | -3,66833E-05 | -0,000617935 | 0,000507186 | -5,07314E-05 |
| 323 | 22,54113689 | -93,57012791 | 0,000254643 | -0,000507176 | -3,66836E-05 | -0,000108466 | -0,000507175 | -2,26416E-05 |
| 324 | 22,57422469 | -107,9343472 | -0,000254312 | -0,000501642 | -3,55758E-05 | 0,000109795 | -0,000501641 | -2,15582E-05 |
| 325 | -0,000185949 | -22,25292666 | -9,08154E-05 | -2,37795E-06 | 0,000523671 | -0,007499516 | -2,43567E-06 | 0,000524373 |
| 326 | 0,000194288 | -22,66245258 | 9,08147E-05 | 2,03102E-06 | 0,000536705 | 0,007567649 | 2,06753E-06 | 0,0005362 |
| 327 | 0,000432769 | 50,62089528 | 0,000226123 | 2,72021E-06 | 0,013566667 | 0,006535773 | 2,72762E-06 | 0,013566436 |
| 328 | -0,000355767 | 50,76981809 | -0,000226223 | -5,22208E-06 | 0,013575402 | -0,006465787 | -5,37978E-06 | 0,013577159 |
| 329 | -0,000764319 | 6,957705173 | -0,000404497 | -3,39341E-05 | 0,010310632 | -0,01800278 | -3,52915E-05 | 0,010325862 |
| 330 | 0,001776568 | 6,939013601 | 0,000399943 | 9,76446E-07 | 0,010301419 | 0,010996698 | 3,56287E-07 | 0,010306308 |
| 331 | 416,021659 | -174,2771894 | -1,327040153 | 1,322316867 | -0,25966276 | -1,276255604 | 1,322314902 | -0,35493631 |
| 332 | 250,3517112 | -90,13335189 | -1,312247414 | 1,314383404 | -0,257542184 | -1,001085189 | 1,314389183 | -0,395222847 |
| 333 | 106,9342981 | -47,28341065 | -1,325446503 | 1,296324594 | -0,259415188 | -1,543182878 | 1,296258531 | -0,56249911 |
| 334 | -252,2692698 | -166,7453157 | -1,318778249 | -1,32366608 | -0,25966204 | -1,154054991 | -1,323671077 | -0,122964149 |
| 335 | -105,4301934 | -77,59168484 | -1,305842266 | -1,302087126 | -0,257641098 | -0,689512019 | -1,302052457 | 0,059450503 |
| 336 | -109,4092192 | -31,0779943 | -1,285258818 | -1,313036027 | -0,259598851 | -1,067641162 | -1,313048942 | 0,046152688 |
| 337 | -416,0285173 | -169,1740195 | 1,320029747 | -1,322400293 | -0,259663471 | 1,370664968 | -1,322401469 | -0,164361837 |
| 338 | -250,3705998 | -82,76253198 | 1,293866836 | -1,314283709 | -0,257535806 | 1,605992221 | -1,31428286 | -0,119944259 |
| 339 | -106,9142836 | -31,0347379 | 1,300650735 | -1,297588878 | -0,259520372 | 1,083456895 | -1,297600039 | 0,044247949 |
| 340 | 252,2787335 | -174,0658431 | 1,325997511 | 1,323683454 | -0,259676966 | 1,490729374 | 1,32368751 | -0,39636121 |
| 341 | 105,4392157 | -94,57269487 | 1,322679458 | 1,302176762 | -0,257533794 | 1,938982589 | 1,302147648 | -0,57466135 |
| 342 | 109,4653911 | -47,42446694 | 1,310017817 | 1,311684448 | -0,259491198 | 1,528196309 | 1,311616564 | -0,564457558 |
| 343 | 64,91631817 | -11,22242094 | -1,162208156 | 1,128499006 | -0,247825481 | 0,596566619 | 1,126188671 | -0,189700136 |
| 344 | -66,22176653 | -6,384370129 | -1,231779361 | -1,204559792 | -0,262025249 | -0,814790305 | -1,202766989 | 0,198622373 |
| 345 | -65,79554436 | -5,030581437 | 1,235092798 | -1,202128298 | -0,26204946 | 0,817638814 | -1,200332525 | 0,19834678 |
| 346 | 65,20009273 | -12,23980442 | 1,157963758 | 1,130496061 | -0,247306872 | -0,600435006 | 1,12818306 | -0,189498611 |
| 347 | -16,45761672 | 3,272301334 | 0,000386104 | 0,029572471 | -0,00079584 | 0,000200473 | -0,967581485 | 0,180242337 |
| 348 | 0,827750047 | -10,10333967 | -0,106889355 | 0,066112755 | -0,008209944 | -2,335478716 | 0,066253181 | -0,524918437 |
| 349 | 1,146141026 | -10,46242861 | 0,107686887 | 0,067906413 | -0,008969612 | 2,336141502 | 0,068046628 | -0,525853521 |
| 350 | -3,631820617 | -6,489989115 | -0,019115816 | -0,000765819 | -0,001201285 | -0,454483783 | -0,001420412 | -0,094368453 |

APOYO 1

| Newton | VIENTO | PESO | CT1 | | | CT2 | | |
|---|---|---|---|---|---|---|---|---|
| Barra | | | L | T | V | L | T | V |
| 351 | 2,844319492 | -5,251399746 | -0,000376383 | 0,007149718 | -0,000562153 | 0,000395747 | 0,007302187 | 0,008660764 |
| 352 | -3,709444139 | -6,527352029 | 0,019019295 | -5,50781E-06 | -0,00124963 | 0,45605413 | -0,000660237 | -0,095038616 |
| 353 | -2,694407789 | -4,253352277 | 0,000343287 | -0,006638843 | -0,00052823 | 0,000956651 | -0,006747606 | -0,008930121 |
| 354 | 122,2240327 | -14,45085276 | -0,000433014 | 0,001472345 | -0,000299316 | 0,172579312 | 0,00145387 | 0,057331927 |
| 355 | -1,077875803 | -15,71604402 | -0,003134298 | -0,001835545 | -0,000293278 | 0,121242787 | -0,001837989 | -0,000902305 |
| 356 | -122,204426 | -17,52393325 | 0,003024969 | -0,002208852 | -0,000284457 | 0,175686198 | -0,002234687 | -0,057492312 |
| 357 | 1,081434003 | -15,68100283 | 0,000360255 | 0,001811472 | -0,000292104 | 0,124642393 | 0,001812619 | 0,000357303 |
| 358 | -223,7983796 | -1,2869542 | -0,001147967 | 0,003775755 | 0,000167981 | -0,172023625 | 0,003782407 | -0,05701055 |
| 359 | -0,713470011 | -0,435942585 | -0,002272486 | 0,000251537 | 0,000168003 | -0,125363735 | 0,00025132 | -0,000398058 |
| 360 | 223,7969901 | 1,77525915 | -0,001673624 | -0,003766854 | 0,000189766 | -0,172551995 | -0,003773515 | 0,057362508 |
| 361 | 0,71432462 | -0,405163593 | 0,004807517 | -0,000267648 | 0,000168527 | -0,118497508 | -0,0002677 | 0,000742928 |
| 362 | 55,83697399 | -7,222969734 | 0,006869807 | 0,011248457 | 0,001051241 | 0,208014825 | 0,011490081 | 0,066015405 |
| 363 | 1,372629738 | -8,644657959 | -0,008856643 | 0,006285233 | 0,001213491 | 0,136286798 | 0,006291747 | 0,002233676 |
| 364 | -56,01101067 | -10,82433241 | -0,003931486 | -0,00379022 | 0,001074582 | 0,19901494 | -0,003574333 | -0,067834568 |
| 365 | -1,417679927 | -8,718522819 | 0,005442886 | -0,006309244 | 0,001176535 | 0,150184845 | -0,006324052 | -0,000106365 |
| 366 | -165,9262813 | -5,67806771 | -0,014350792 | -0,022588189 | -0,001916108 | -0,626011534 | -0,022626097 | -0,204368621 |
| 367 | -1,159810479 | -0,821594939 | 0,026664207 | -0,010068878 | -0,002018677 | -0,412970302 | -0,010069438 | -0,000435226 |
| 368 | 165,9226534 | 5,160882765 | 0,005759355 | 0,022653489 | -0,00204823 | -0,605904826 | 0,02269345 | 0,20036942 |
| 369 | 1,167071324 | -0,905958987 | -0,016321739 | 0,01003218 | -0,00202171 | -0,454829279 | 0,010031489 | -0,003577143 |

| Newton | C1 | | | C2 | | | C3 | | |
|---|---|---|---|---|---|---|---|---|---|
| Barra | L | T | V | L | T | V | L | T | V |
| 1 | -2,706302246 | 2,760002665 | -0,68289988 | -2,299734047 | 2,347488975 | -0,682913951 | -1,873014947 | 1,93499193 | -0,682901509 |
| 2 | -2,790171712 | -2,760003597 | 0,183349033 | -2,378074971 | -2,347494622 | 0,183354103 | -1,98607644 | -1,934988037 | 0,183339185 |
| 3 | 2,790171645 | -2,760000008 | 0,183374313 | 2,378074898 | -2,347490515 | 0,183360501 | 1,986076359 | -1,934963492 | 0,18337507 |
| 4 | 2,706302185 | 2,759999054 | -0,682925385 | 2,299733969 | 2,347484872 | -0,68292035 | 1,873014841 | 1,93496737 | -0,682937417 |
| 5 | -2,553832792 | 2,753848659 | -0,681500687 | -2,128925287 | 2,342189605 | -0,681516072 | -1,684473475 | 1,93054207 | -0,681522478 |
| 6 | -2,886182405 | -2,753850543 | 0,182954389 | -2,456876307 | -2,342198419 | 0,182957304 | -2,047058641 | -1,930536924 | 0,182958186 |
| 7 | 2,886182242 | -2,753847102 | 0,182978581 | 2,456876298 | -2,34219454 | 0,182963346 | 2,047058529 | -1,930514657 | 0,182990732 |
| 8 | 2,553832976 | 2,753845217 | -0,681524909 | 2,12892531 | 2,342185731 | -0,681522109 | 1,684473803 | 1,930519766 | -0,68155508 |
| 9 | -2,822212257 | 2,693354785 | -0,718246462 | -2,393779485 | 2,248091885 | -0,718261683 | -1,947169823 | 1,802781965 | -0,718372266 |
| 10 | -2,64991915 | -2,693356804 | 0,216777253 | -2,219341403 | -2,248102764 | 0,216777526 | -1,807091452 | -1,802900686 | 0,216665127 |
| 11 | 2,649918857 | -2,693353713 | 0,216798579 | 2,219341208 | -2,248099348 | 0,21678284 | 1,807090957 | -1,802882904 | 0,216691105 |
| 12 | 2,822212244 | 2,693351683 | -0,718267857 | 2,393779342 | 2,248088465 | -0,718266999 | 1,947169842 | 1,802764353 | -0,718397985 |
| 13 | -2,496173456 | 2,70558273 | -0,721220136 | -2,030861331 | 2,258536074 | -0,721235212 | -1,548762434 | 1,811460809 | -0,721309833 |
| 14 | -2,841861014 | -2,705584022 | 0,21755018 | -2,376848953 | -2,258545619 | 0,21755038 | -1,928775063 | -1,811558687 | 0,217441609 |
| 15 | 2,841860875 | -2,705581314 | 0,217568307 | 2,376848761 | -2,258542702 | 0,217554903 | 1,928774628 | -1,8115459 | 0,217460265 |
| 16 | 2,496173257 | 2,705580008 | -0,721238368 | 2,03086111 | 2,258533153 | -0,721239739 | 1,548762335 | 1,811448196 | -0,721328223 |
| 17 | -2,786058351 | 2,633442128 | -0,761451534 | -2,319550324 | 2,147977147 | -0,761442464 | -1,83763177 | 1,662567503 | -0,761305891 |
| 18 | -2,549272261 | -2,633440429 | 0,25802842 | -2,085717314 | -2,147957818 | 0,258053172 | -1,637452037 | -1,662407308 | 0,258230546 |
| 19 | 2,549272448 | -2,633438128 | 0,258043118 | 2,085717702 | -2,147955452 | 0,258056821 | 1,637452665 | -1,662400187 | 0,258240885 |
| 20 | 2,786058772 | 2,633439835 | -0,761466125 | 2,319550597 | 2,147974757 | -0,76144615 | 1,837632418 | 1,662560093 | -0,761316668 |
| 21 | -2,405649133 | 2,628549196 | -0,76029289 | -1,895891772 | 2,143777821 | -0,76027893 | -1,372360393 | 1,658953767 | -0,760314244 |
| 22 | -2,774253923 | -2,62854541 | 0,25773316 | -2,270335778 | -2,14375297 | 0,257759703 | -1,780066956 | -1,658940763 | 0,25785968 |
| 23 | 2,774253442 | -2,628543561 | 0,257744074 | 2,270335224 | -2,143751193 | 0,25776242 | 1,780067614 | -1,658939538 | 0,257861376 |
| 24 | 2,405648103 | 2,628547351 | -0,760303743 | 1,895890785 | 2,143776019 | -0,760281685 | 1,37235595 | 1,658952254 | -0,760316379 |
| 25 | -2,747724644 | 2,543782555 | -0,807863146 | -2,237016124 | 2,013416791 | -0,807917417 | -1,714132461 | 1,483054461 | -0,808047037 |
| 26 | -2,426481452 | -2,543784779 | 0,305841469 | -1,9247566 | -2,013468209 | 0,305793378 | -1,434728827 | -1,483101596 | 0,305739459 |
| 27 | 2,426480822 | -2,543783398 | 0,305848404 | 1,92475568 | -2,013466999 | 0,305795183 | 1,434729009 | -1,483106585 | 0,305732057 |
| 28 | 2,747723273 | 2,543781209 | -0,807870067 | 2,237014829 | 2,013415707 | -0,807919054 | 1,714127766 | 1,483059537 | -0,808039505 |
| 29 | -2,29304509 | 2,544752049 | -0,808337483 | -1,730599418 | 2,014063169 | -0,808347508 | -1,157927278 | 1,483873885 | -0,80751325 |
| 30 | -2,69525964 | -2,544757749 | 0,306105917 | -2,145246554 | -2,014094543 | 0,306058834 | -1,604989447 | -1,48322668 | 0,306275102 |
| 31 | 2,695263318 | -2,54475689 | 0,306108615 | 2,145250362 | -2,014094038 | 0,306059526 | 1,604989362 | -1,483238698 | 0,306257396 |
| 32 | 2,293050682 | 2,544751235 | -0,808340055 | 1,730605587 | 2,01406279 | -0,80834803 | 1,157948123 | 1,483885996 | -0,807495407 |
| 33 | -2,713105512 | 2,441494199 | -0,866255926 | -2,147643868 | 1,856098817 | -0,866096291 | -1,575857329 | 1,270317286 | -0,866348986 |
| 34 | -2,282590804 | -2,441487319 | 0,363239179 | -1,733347617 | -1,855958368 | 0,363365942 | -1,193427485 | -1,271041284 | 0,3626343 |
| 35 | 2,282593077 | -2,441487156 | 0,363236745 | 1,733350089 | -1,855958898 | 0,363365086 | 1,1934241 | -1,271060334 | 0,36260634 |
| 36 | 2,7131097 | 2,44149386 | -0,866253925 | 2,147648704 | 1,856098953 | -0,866095912 | 1,575874903 | 1,270337931 | -0,866318584 |
| 37 | -2,156713706 | 2,439182971 | -0,864442235 | -1,528737026 | 1,855072948 | -0,864500388 | -0,896830296 | 1,268996708 | -0,868060266 |
| 38 | -2,608142439 | -2,439173613 | 0,362106051 | -2,000571673 | -1,855059779 | 0,362200088 | -1,399917864 | -1,271920244 | 0,360789321 |
| 39 | 2,608129533 | -2,43917411 | 0,362098083 | 2,00055878 | -1,855061165 | 0,362197876 | 1,399915493 | -1,271947867 | 0,360748794 |
| 40 | 2,156695556 | 2,439183284 | -0,864434787 | 1,528715985 | 1,855073939 | -0,864498657 | 0,896764866 | 1,269025893 | -0,868017346 |
| 41 | -2,663242522 | 2,310526013 | -0,934133358 | -2,035972253 | 1,659059778 | -0,934501814 | -1,400406033 | 1,009402218 | -0,932318563 |

APOYO 1

| Newton | C1 | | | C2 | | | C3 | | |
|---|---|---|---|---|---|---|---|---|---|
| Barra | L | T | V | L | T | V | L | T | V |
| 42 | -2,087398917 | -2,310544362 | 0,433588474 | -1,485188001 | -1,659359814 | 0,43333284 | -0,880359198 | -1,005639733 | 0,437119562 |
| 43 | 2,087392819 | -2,31054526 | 0,433575111 | 1,485182298 | -1,659361479 | 0,433329877 | 0,880372777 | -1,005681601 | 0,437057846 |
| 44 | 2,663231506 | 2,310527408 | -0,934118889 | 2,035958268 | 1,659062386 | -0,934497829 | 1,400355976 | 1,009435746 | -0,93226959 |
| 45 | -1,971133927 | 2,319201925 | -0,939830264 | -1,266198309 | 1,663803397 | -0,93951366 | -0,555937213 | 1,013931045 | -0,929134288 |
| 46 | -2,492451856 | -2,319218876 | 0,436914166 | -1,81776607 | -1,663703381 | 0,436751618 | -1,137516722 | -1,00486187 | 0,442050413 |
| 47 | 2,492484022 | -2,319220576 | 0,436894252 | 1,817798487 | -1,663706115 | 0,436746968 | 1,137527355 | -1,004914353 | 0,441973141 |
| 48 | 1,971179492 | 2,319204129 | -0,939809153 | 1,26625187 | 1,663807079 | -0,939507976 | 0,556093835 | 1,013975299 | -0,929069593 |
| 49 | -2,641705194 | 2,157629488 | -1,032007174 | -1,924988448 | 1,417059539 | -1,031453866 | -1,227364883 | 0,670131736 | -1,041182617 |
| 50 | -1,862421934 | -2,157598116 | 0,523719263 | -1,181851617 | -1,416708779 | 0,523957026 | -0,512734558 | -0,683038294 | 0,511865453 |
| 51 | 1,862433455 | -2,157601379 | 0,523691748 | 1,181860921 | -1,416713987 | 0,5239493 | 0,512695307 | -0,683085355 | 0,511797258 |
| 52 | 2,641728138 | 2,157631759 | -1,031980972 | 1,925019694 | 1,417063207 | -1,031447397 | 1,227474801 | 0,67020768 | -1,04107033 |
| 53 | -1,745661552 | 2,141161292 | -1,021504401 | -0,927293682 | 1,407660351 | -1,022497825 | -0,131663936 | 0,662064991 | -1,046006688 |
| 54 | -2,39044524 | -2,141139413 | 0,51769823 | -1,615059362 | -1,408192911 | 0,517744442 | -0,847311001 | -0,683711173 | 0,503270981 |
| 55 | 2,390392236 | -2,141143736 | 0,517661691 | 1,615003399 | -1,408199477 | 0,517734556 | 0,847277867 | -0,683772053 | 0,50318252 |
| 56 | 1,745581447 | 2,1411646 | -1,021469411 | 0,927199148 | 1,407665362 | -1,02248923 | 0,131417363 | 0,66215436 | -1,045874736 |
| 57 | -2,532018216 | 1,929398271 | -1,129104334 | -1,730256442 | 1,087870965 | -1,128571427 | -0,907047602 | 0,26381313 | -1,096421919 |
| 58 | -1,503045802 | -1,929397408 | 0,638833954 | -0,751755532 | -1,087121316 | 0,639535227 | 0,041117613 | -0,230490622 | 0,666997697 |
| 59 | 1,503037097 | -1,929402504 | 0,638780467 | 0,751755076 | -1,087128573 | 0,639522571 | -0,041033184 | -0,230613636 | 0,666815059 |
| 60 | 2,531993095 | 1,929404183 | -1,129053971 | 1,730213578 | 1,087878102 | -1,128560997 | 0,906904572 | 0,263859954 | -1,096355487 |
| 61 | -1,439311219 | 1,937294575 | -1,134209515 | -0,521772343 | 1,092442152 | -1,132702045 | 0,401013286 | 0,267347862 | -1,094247425 |
| 62 | -2,127137368 | -1,937286341 | 0,641757998 | -1,265819515 | -1,091152611 | 0,642564898 | -0,356488485 | -0,230093523 | 0,671102363 |
| 63 | 2,127158127 | -1,937292364 | 0,641706482 | 1,265849759 | -1,091162551 | 0,642548432 | 0,356569474 | -0,230233428 | 0,670895424 |
| 64 | 1,439338726 | 1,937302252 | -1,134151844 | 0,521795093 | 1,092452438 | -1,132686642 | -0,400987107 | 0,267426556 | -1,094133858 |
| 65 | -0,44677383 | -0,001765704 | 0,000571702 | -0,369332141 | -0,000995302 | 0,000586496 | -0,28609764 | -7,6342E-05 | 0,000879614 |
| 66 | 0,446781208 | -0,00176616 | 0,000580869 | 0,369338892 | -0,000997867 | 0,000583021 | 0,286097412 | -8,87504E-05 | 0,000862034 |
| 67 | 0,80357201 | 0,001763732 | -0,001027972 | 0,883718844 | 0,000991894 | -0,001053822 | 0,945048875 | 0,001092179 | 0,000455672 |
| 68 | -0,803564516 | 0,001765315 | -0,001024667 | -0,883710701 | 0,000995084 | -0,001048788 | -0,945013124 | 0,001124544 | 0,000503672 |
| 69 | -0,69653069 | -0,167151357 | -0,094449988 | -0,674868452 | -0,251468685 | -0,095329051 | -0,696540999 | -0,354782897 | -0,131304879 |
| 70 | 0,696493087 | -0,167150255 | -0,09443078 | 0,674815749 | -0,251467714 | -0,095326008 | 0,696428364 | -0,354728555 | -0,131222225 |
| 71 | 0,60067319 | 0,167143685 | 0,081581997 | 0,616588707 | 0,249725389 | 0,079348629 | 0,590274406 | 0,302761581 | 0,021908073 |
| 72 | -0,600726944 | 0,167141385 | 0,081566489 | -0,616635501 | 0,24972439 | 0,079348325 | -0,590365107 | 0,302809621 | 0,021981577 |
| 73 | -0,517745215 | -0,132753755 | -0,071601141 | -0,524675052 | -0,203800402 | -0,071919099 | -0,513020005 | -0,264010729 | -0,053769704 |
| 74 | 0,517766851 | -0,132752425 | -0,071595685 | 0,524699993 | -0,203798228 | -0,07191653 | 0,513073791 | -0,264019482 | -0,053783777 |
| 75 | 0,561129687 | 0,132710514 | 0,077379724 | 0,549300553 | 0,203697959 | 0,077341714 | 0,562768826 | 0,287769281 | 0,100067018 |
| 76 | -0,561105186 | 0,132710638 | 0,077376326 | -0,549276777 | 0,203698055 | 0,07734104 | -0,562719719 | 0,287736897 | 0,10001829 |
| 77 | -0,457681205 | -0,11343521 | -0,062600006 | -0,452133657 | -0,171925825 | -0,062235967 | -0,457091189 | -0,234552337 | -0,068491143 |
| 78 | 0,45767279 | -0,113434937 | -0,062595439 | 0,452124849 | -0,171925726 | -0,062235451 | 0,457071895 | -0,234538139 | -0,068469943 |
| 79 | 0,441987957 | 0,113464646 | 0,060560123 | 0,443466387 | 0,172232892 | 0,060855007 | 0,438834223 | 0,226352367 | 0,053541299 |
| 80 | -0,441996547 | 0,113463606 | 0,060553787 | -0,443475089 | 0,172231336 | 0,0608529 | -0,438853012 | 0,226350727 | 0,05353929 |
| 81 | -0,384987416 | -0,096240137 | -0,053291949 | -0,384414834 | -0,147441429 | -0,053496751 | -0,383485476 | -0,197517419 | -0,052094973 |
| 82 | 0,384989792 | -0,096239439 | -0,053286881 | 0,38441692 | -0,147440386 | -0,053495218 | 0,383490242 | -0,197511351 | -0,05208616 |
| 83 | 0,391557173 | 0,096225849 | 0,054039718 | 0,388603989 | 0,147246842 | 0,053849785 | 0,390085335 | 0,199554097 | 0,055586459 |
| 84 | -0,391555183 | 0,096225443 | 0,054035437 | -0,388601787 | 0,147246443 | 0,053849036 | -0,390080133 | 0,199545546 | 0,055573844 |
| 85 | -0,341347378 | -0,083939707 | -0,046998999 | -0,33908124 | -0,128361004 | -0,046903046 | -0,338936429 | -0,172897141 | -0,046836634 |

APOYO 1

| Newton | C1 | | | C2 | | | C3 | | |
|---|---|---|---|---|---|---|---|---|---|
| Barra | L | T | V | L | T | V | L | T | V |
| 86 | 0,341347121 | -0,083939273 | -0,046995305 | 0,339081405 | -0,128360481 | -0,046902194 | 0,338936557 | -0,17289099 | -0,046827621 |
| 87 | 0,334914389 | 0,083946558 | 0,046381486 | 0,334099696 | 0,128455299 | 0,046466535 | 0,334636924 | 0,172779396 | 0,046377649 |
| 88 | -0,334914139 | 0,083946058 | 0,046377689 | -0,334099684 | 0,12845456 | 0,046465395 | -0,334637383 | 0,172773042 | 0,046368334 |
| 89 | -0,727616103 | 0,014268572 | -0,009078365 | -0,810641831 | 0,008228722 | -0,007611012 | -0,890952315 | 0,006795218 | 0,003965454 |
| 90 | 0,430156074 | -0,01425827 | 0,005188893 | 0,352753216 | -0,007400139 | 0,005360346 | 0,272279435 | 0,000495034 | 0,007333974 |
| 91 | 0,727706115 | 0,014267737 | -0,009085694 | 0,810752625 | 0,008227665 | -0,007612686 | 0,891255586 | 0,006784615 | 0,003949931 |
| 92 | -0,430101895 | -0,014257382 | 0,005196762 | -0,352697879 | -0,007399053 | 0,005362084 | -0,272285006 | 0,000506298 | 0,007350504 |
| 93 | -0,586722142 | -0,009657606 | 0,006189857 | -0,652690797 | -0,005405871 | 0,005437364 | -0,716084046 | -0,004975578 | -0,003104827 |
| 94 | 0,343953279 | 0,009654668 | -0,003572939 | 0,282381874 | 0,004966579 | -0,003674792 | 0,218333646 | -0,000519034 | -0,00520713 |
| 95 | 0,586662608 | -0,009658293 | 0,006184348 | 0,6526193 | -0,005406793 | 0,005435908 | 0,71586797 | -0,004984762 | -0,003118293 |
| 96 | -0,343993288 | 0,009655327 | -0,003567711 | -0,282421679 | 0,004967491 | -0,003673358 | -0,218330436 | -0,000510053 | -0,005193973 |
| 97 | -0,504511863 | 0,003388406 | -0,002412984 | -0,560959417 | 0,001693023 | -0,002136397 | -0,615251666 | 0,001859924 | 0,001815536 |
| 98 | 0,294560532 | -0,003389644 | 0,00145804 | 0,241895859 | -0,001529125 | 0,001500606 | 0,187038437 | 0,000738329 | 0,002273254 |
| 99 | 0,504538359 | 0,003387815 | -0,002417982 | 0,560990502 | 0,001692253 | -0,002137615 | 0,615350212 | 0,001852222 | 0,001804249 |
| 100 | -0,294542295 | -0,003389034 | 0,001463231 | -0,241877622 | -0,001528354 | 0,001501831 | -0,187039675 | 0,000746092 | 0,002284633 |
| 101 | -0,433814314 | -0,000126001 | 0,000420678 | -0,482865531 | 0,000188515 | 0,000350754 | -0,530048058 | -0,000166399 | -0,000982653 |
| 102 | 0,254635985 | 0,000129265 | -0,000328492 | 0,208868474 | -0,000224572 | -0,000334051 | 0,161249893 | -0,000766689 | -0,000670803 |
| 103 | 0,433805012 | -0,00012651 | 0,00041651 | 0,482855263 | 0,000187842 | 0,00034969 | 0,530013614 | -0,000173116 | -0,0009925 |
| 104 | -0,254642005 | 0,000129766 | -0,000324401 | -0,208874856 | -0,000223899 | -0,000332989 | -0,161249524 | -0,000759992 | -0,000660988 |
| 105 | 0,307102011 | 0,073849821 | 0,042778301 | 0,305318137 | 0,114401579 | 0,042742721 | 0,304984338 | 0,154866369 | 0,042493778 |
| 106 | -0,307102685 | 0,073849375 | 0,042774507 | -0,305318724 | 0,114401034 | 0,042741856 | -0,304985213 | 0,154860951 | 0,042485853 |
| 107 | -0,303202095 | -0,073853853 | -0,042423377 | -0,302201753 | -0,114442979 | -0,042459506 | -0,302903571 | -0,155155901 | -0,042785703 |
| 108 | 0,303201678 | -0,073853427 | -0,042419819 | 0,302201087 | -0,114442392 | -0,042458577 | 0,302902386 | -0,155149929 | -0,042776933 |
| 109 | 0,278150967 | 0,069815364 | 0,037833073 | 0,276073434 | 0,105343146 | 0,037841897 | 0,275571397 | 0,140984274 | 0,038073611 |
| 110 | -0,278150762 | 0,069814983 | 0,037829821 | -0,276072973 | 0,105342643 | 0,037841097 | -0,275570498 | 0,140979027 | 0,03806591 |
| 111 | -0,266476182 | -0,069813789 | -0,03676876 | -0,266079107 | -0,105331292 | -0,036760148 | -0,266957891 | -0,140768957 | -0,036600249 |
| 112 | 0,266476728 | -0,069813382 | -0,036765328 | 0,266079476 | -0,10533078 | -0,036759341 | 0,266958465 | -0,140764045 | -0,03659306 |
| 113 | -0,386855 | 0,001882214 | -0,000442092 | -0,43128734 | 0,001615681 | -0,000443824 | -0,474067728 | 0,001517223 | -0,000163215 |
| 114 | 0,231078607 | -0,001885229 | 0,000120693 | 0,189590539 | -0,001621024 | 0,000118065 | 0,146447621 | -0,001284421 | 0,000235659 |
| 115 | 0,386857408 | 0,001881762 | -0,000445767 | 0,431289528 | 0,00161508 | -0,000444773 | 0,474076131 | 0,001511245 | -0,000171976 |
| 116 | -0,231077466 | -0,00188479 | 0,000124235 | -0,189588991 | -0,001620424 | 0,000119011 | -0,146447696 | -0,001278426 | 0,000244446 |
| 117 | -0,34458534 | -0,008601924 | 0,002046275 | -0,383153378 | -0,007381168 | 0,002052347 | -0,420223192 | -0,006174639 | 0,002046994 |
| 118 | 0,200711828 | 0,008602581 | -0,000514259 | 0,164745379 | 0,007386509 | -0,000510777 | 0,127275057 | 0,006153844 | -0,000535391 |
| 119 | 0,344585284 | -0,008602332 | 0,002042722 | 0,383153461 | -0,007381698 | 0,002051507 | 0,420222942 | -0,006180005 | 0,002039129 |
| 120 | -0,20071181 | 0,00860302 | -0,000510417 | -0,164745434 | 0,007387041 | -0,00050993 | -0,127275089 | 0,006159189 | -0,000527558 |
| 121 | -0,324444334 | 0,018094264 | -0,004457554 | -0,361697261 | 0,0154091 | -0,004450964 | -0,397607808 | 0,012753609 | -0,004364186 |
| 122 | 0,193916037 | -0,018091553 | 0,001182068 | 0,159070841 | -0,015398526 | 0,001188427 | 0,122892093 | -0,012731372 | 0,001156959 |
| 123 | 0,324443802 | 0,018093897 | -0,004460412 | 0,361697186 | 0,015408607 | -0,004451742 | 0,397607176 | 0,012748747 | -0,004371312 |
| 124 | -0,193915637 | -0,018091218 | 0,001184616 | -0,159070908 | -0,015398035 | 0,001189198 | -0,122891993 | -0,01272649 | 0,001164115 |
| 125 | 0,031773868 | -0,02110651 | 0,006725132 | 0,027454807 | -0,017213352 | 0,00671807 | 0,022813124 | -0,013385113 | 0,00657706 |
| 126 | 0,026105835 | 0,021105228 | -0,001454891 | 0,021594606 | 0,017205929 | -0,001458149 | 0,017288212 | 0,013287155 | -0,001497929 |
| 127 | -0,026106306 | 0,021105153 | -0,001455602 | -0,021594782 | 0,017205862 | -0,001458254 | -0,017288373 | 0,013286691 | -0,001498605 |
| 128 | -0,031773838 | -0,021106454 | 0,006725695 | -0,027455122 | -0,017213291 | 0,006718168 | -0,022813788 | -0,01338452 | 0,006577933 |
| 129 | 0,258320487 | -0,026326625 | 0,006579765 | 0,28439872 | -0,022345788 | 0,006555118 | 0,309254799 | -0,018452979 | 0,006303266 |

APOYO 1

| Newton | C1 | | | C2 | | | C3 | | |
|---|---|---|---|---|---|---|---|---|---|
| Barra | L | T | V | L | T | V | L | T | V |
| 130 | -0,1318483 | 0,026320824 | -0,001794546 | -0,107760796 | 0,022317678 | -0,00180906 | -0,082442632 | 0,018364198 | -0,001753631 |
| 131 | 0,131847085 | 0,026320469 | -0,001797669 | 0,107760566 | 0,022317259 | -0,001809729 | 0,082442475 | 0,018360041 | -0,001759722 |
| 132 | -0,258319953 | -0,026326299 | 0,006582613 | -0,284399286 | -0,02234537 | 0,00655578 | -0,30925552 | -0,018448806 | 0,006309383 |
| 133 | 0,009050977 | -1,3019E-05 | 5,42155E-06 | 0,008337795 | -1,02702E-05 | 4,60892E-06 | 0,00853064 | -6,26868E-06 | 6,3734E-06 |
| 134 | -0,008926337 | 1,30154E-05 | -2,37274E-06 | -0,008165135 | 1,02519E-05 | -1,58581E-06 | -0,008309975 | 6,1793E-06 | -3,53297E-06 |
| 135 | 0,008926336 | 1,32608E-05 | -2,92077E-07 | 0,008165135 | 1,05636E-05 | -1,09195E-06 | 0,008309975 | 9,25212E-06 | 9,70619E-07 |
| 136 | -0,009050977 | -1,32644E-05 | 3,34069E-06 | -0,008337795 | -1,05819E-05 | 4,11505E-06 | -0,008530641 | -9,34147E-06 | 1,86987E-06 |
| 137 | 0,205455526 | 0,077373466 | 0,028252534 | 0,209895873 | 0,107184349 | 0,028261061 | 0,215026906 | 0,136976152 | 0,028254817 |
| 138 | -0,272513716 | -0,077371545 | -0,034341418 | -0,266854124 | -0,107172699 | -0,034331374 | -0,26199592 | -0,1369909 | -0,034331458 |
| 139 | 0,272513805 | -0,077371346 | -0,034339814 | 0,266854266 | -0,107172444 | -0,034330969 | 0,261996098 | -0,136988346 | -0,034327713 |
| 140 | -0,205455389 | 0,07737328 | 0,028251088 | -0,209895744 | 0,107184084 | 0,028260647 | -0,215026772 | 0,136973655 | 0,02825116 |
| 141 | -0,295770621 | 0,000370616 | -8,33323E-05 | -0,324342943 | 0,00031573 | -8,41706E-05 | -0,352264913 | 0,000261032 | -8,49738E-05 |
| 142 | 0,154397649 | -0,000370686 | 3,00822E-05 | 0,126886174 | -0,00031601 | 3,0676E-05 | 0,098714839 | -0,000262144 | 2,91328E-05 |
| 143 | -0,15439766 | -0,000370483 | 3,19287E-05 | -0,126886178 | -0,000315787 | 3,10338E-05 | -0,098714842 | -0,000259927 | 3,23812E-05 |
| 144 | 0,295770621 | 0,000370445 | -8,48708E-05 | 0,324342935 | 0,000315509 | -8,45209E-05 | 0,352264899 | 0,000258796 | -8,82513E-05 |
| 145 | -0,284524131 | -0,054617904 | -0,03928205 | -0,278684409 | -0,089299018 | -0,039269861 | -0,274082481 | -0,123971781 | -0,039214932 |
| 146 | 0,221564651 | 0,054619675 | 0,033558371 | 0,225201318 | 0,089309809 | 0,033563425 | 0,229970828 | 0,123956772 | 0,033500332 |
| 147 | -0,22156424 | 0,054619363 | 0,033555949 | -0,225201281 | 0,089309361 | 0,033562724 | -0,229970997 | 0,123952369 | 0,033493879 |
| 148 | 0,284523925 | -0,05461758 | -0,039279481 | 0,278684618 | -0,089298581 | -0,039269168 | 0,274082929 | -0,123967323 | -0,039208396 |
| 149 | -1,557423057 | 1,491261352 | -1,122164151 | -0,703429876 | 0,63531869 | -1,123805228 | 0,090360679 | 0,003483263 | -0,792376279 |
| 150 | -1,437459712 | -1,49122524 | 0,673522405 | -0,60426173 | -0,639635452 | 0,667934986 | 0,233990773 | 0,024028291 | 0,328630826 |
| 151 | 1,437287236 | -1,491264377 | 0,67325576 | 0,604060918 | -0,639673957 | 0,667876467 | -0,233811628 | 0,024103581 | 0,328748096 |
| 152 | 1,557225472 | 1,491300209 | -1,121898426 | 0,703325893 | 0,635368305 | -1,123728122 | -0,0915371 | 0,003564049 | -0,792255773 |
| 153 | -1,01247402 | 1,094668114 | -1,148068445 | -0,120182265 | 0,226133418 | -1,138264425 | -0,050028396 | -0,000514393 | -0,030850188 |
| 154 | -1,166987854 | -1,094316794 | 0,688534036 | -0,210916831 | -0,198267898 | 0,72712087 | 0,093289042 | -0,003563249 | -0,051819528 |
| 155 | 1,166873391 | -1,094431635 | 0,687880302 | 0,211078682 | -0,198435336 | 0,726879595 | -0,093316286 | -0,003358675 | -0,051508024 |
| 156 | 1,012249288 | 1,094757508 | -1,14739161 | 0,119197531 | 0,226182319 | -1,138173999 | 0,050208765 | -0,000604777 | -0,030984553 |
| 157 | -0,608216662 | 0,651965421 | -1,146361517 | 0,115830921 | 0,005765472 | -0,810778876 | 0,008260491 | 8,93588E-05 | 0,002778933 |
| 158 | -0,730445518 | -0,656341732 | 0,680120949 | 0,205320873 | 0,022312726 | 0,338323929 | -0,017472175 | 0,000203005 | 0,005207331 |
| 159 | 0,730269409 | -0,656570784 | 0,678559003 | -0,205188661 | 0,022370222 | 0,338372397 | 0,017484099 | 0,000237543 | 0,005257807 |
| 160 | 0,608135177 | 0,652243163 | -1,144818876 | -0,116863177 | 0,005879282 | -0,810605994 | -0,008279157 | 3,51746E-05 | 0,002694246 |
| 161 | -0,002269669 | 0,223144443 | -1,137111416 | -0,049715173 | -0,001030137 | -0,028448336 | 0,01160572 | -1,9736E-05 | -0,000250156 |
| 162 | -0,327874017 | -0,195089554 | 0,729527787 | 0,092056346 | -0,003273459 | -0,053242975 | -0,011032592 | 7,65713E-05 | -0,000201285 |
| 163 | 0,328034481 | -0,195607892 | 0,726711455 | -0,092065702 | -0,003089876 | -0,053020384 | 0,011035537 | 8,91888E-05 | -0,000189344 |
| 164 | 0,001271954 | 0,223567835 | -1,134457648 | 0,049883122 | -0,001094651 | -0,028512721 | -0,011600486 | -3,42727E-05 | -0,00026842 |
| 165 | 0,207918676 | 0,006278357 | -0,81278762 | 0,000771328 | 0,000179653 | 0,002713043 | 0,008287048 | 4,32588E-05 | 9,62746E-05 |
| 166 | 0,120039373 | 0,020744176 | 0,324276563 | -0,009562688 | 0,000131216 | 0,004915533 | -0,008388475 | -7,04483E-05 | -0,000188542 |
| 167 | -0,120069795 | 0,020441781 | 0,32164393 | 0,009484929 | 0,000144588 | 0,004890689 | 0,008356903 | -6,15034E-05 | -0,000172146 |
| 168 | -0,209059688 | 0,006754352 | -0,81001827 | -0,000874355 | 0,00014636 | 0,002706067 | -0,008326788 | 5,28008E-05 | 0,000112991 |
| 169 | 0,01506457 | 0,000138169 | 0,00244943 | -0,011581802 | -0,002398505 | -0,001279958 | -0,318618164 | -0,160847868 | -0,284201629 |
| 170 | -0,306722915 | -0,007913883 | -0,000944709 | -0,25348353 | -0,006481616 | 0,001051195 | -0,196876242 | 0,017881605 | 0,046241146 |
| 171 | 0,308048877 | -0,007914196 | -0,000938402 | 0,25472704 | -0,006483381 | 0,001048804 | 0,196797749 | 0,017873068 | 0,046229051 |
| 172 | -0,015355288 | 0,00013153 | 0,002448958 | 0,011270451 | -0,002405996 | -0,001281805 | 0,317968904 | -0,160549844 | -0,28374688 |
| 173 | -0,552089279 | 0,00777898 | -0,001576581 | -0,607126517 | 0,010510331 | 0,002992228 | -0,646853621 | 0,158552594 | 0,273788588 |

APOYO 1

| Newton | C1 | | | C2 | | | C3 | | |
|---|---|---|---|---|---|---|---|---|---|
| Barra | L | T | V | L | T | V | L | T | V |
| 174 | 0,553631309 | 0,007777891 | -0,001578855 | 0,608876732 | 0,010508136 | 0,002988764 | 0,653521569 | 0,158530327 | 0,273755563 |
| 175 | 0,137166264 | -8,05323E-05 | 0,023173234 | 0,105323537 | 0,023074136 | 0,062664262 | -0,108739579 | 0,02482404 | 0,30935229 |
| 176 | -0,000182478 | 0,136620982 | -0,067452006 | -9,42778E-05 | 0,044924768 | -0,076208228 | 3,54459E-06 | -0,004045707 | -0,02354735 |
| 177 | -0,137057603 | -8,08428E-05 | 0,023185013 | -0,105157485 | 0,023042584 | 0,06261565 | 0,108874019 | 0,024533283 | 0,308909609 |
| 178 | -0,00022106 | -0,136759525 | 0,115296353 | -0,00055961 | -0,07036016 | 0,079357859 | -0,000495103 | -0,025844083 | -0,175471685 |
| 179 | 0,052665353 | -0,002479723 | 0,00956061 | -0,297721257 | -0,14938055 | -0,252613461 | 0,017567592 | -0,00243644 | -0,040606986 |
| 180 | 0,00053278 | 0,076124086 | -0,064334204 | -9,8311E-06 | 0,020968016 | -0,025576205 | -1,68406E-05 | 0,000782356 | 0,0101528 |
| 181 | -0,052921504 | -0,002423157 | 0,009493978 | 0,297200528 | -0,149086076 | -0,252230348 | -0,017590764 | -0,002399642 | -0,040558247 |
| 182 | 0,000800983 | -0,072483998 | 0,097709533 | 0,002917301 | 0,128484369 | 0,325688315 | 4,37761E-05 | 0,003142038 | 0,032902531 |
| 183 | 0,101788034 | 0,02385068 | 0,065003077 | -0,110468152 | 0,02325441 | 0,305680425 | -0,001051046 | -0,000151519 | 0,003331484 |
| 184 | -7,49273E-05 | 0,032842352 | -0,067573131 | 3,55565E-06 | -0,00506447 | -0,013543494 | 1,91121E-06 | -5,84375E-05 | -0,001532366 |
| 185 | -0,101668951 | 0,023752816 | 0,065037877 | 0,110577582 | 0,02294968 | 0,305286478 | 0,001056184 | -0,000150697 | 0,003340285 |
| 186 | -0,000533003 | -0,059090941 | 0,062966467 | -0,000435731 | -0,020288891 | -0,181154855 | 4,82491E-06 | -3,12874E-05 | -0,003809968 |
| 187 | -0,297402851 | -0,151902864 | -0,268345047 | 0,017784574 | -0,002469451 | -0,041813437 | -1,53872E-05 | 0,000133425 | 0,000354982 |
| 188 | -0,000106605 | 0,022689954 | -0,023137663 | -2,59838E-05 | 0,001149379 | 0,009862187 | 1,35837E-06 | -5,66313E-05 | -6,42214E-06 |
| 189 | 0,297141336 | -0,15160041 | -0,268059232 | -0,017835549 | -0,002428895 | -0,041771109 | -1,06463E-05 | 0,000136288 | 0,000359282 |
| 190 | 0,002789031 | 0,130197074 | 0,341402566 | 3,37312E-05 | 0,002485659 | 0,034114874 | -6,07169E-06 | -7,90222E-05 | 6,08295E-05 |
| 191 | -0,126936401 | 0,030750851 | 0,374777209 | -0,001376056 | 0,000170339 | 0,006468441 | 0,000168087 | 9,41E-06 | -0,000148689 |
| 192 | 0,000671454 | -0,027466099 | -0,227588931 | 8,9953E-05 | -0,000235733 | -0,006086092 | 9,96126E-06 | -8,33894E-05 | -0,000130537 |
| 193 | 0,125534522 | 0,030455574 | 0,374904903 | 0,001653258 | 0,000167005 | 0,006480445 | 3,28212E-05 | -4,17448E-05 | -0,000239318 |
| 194 | 0,000999015 | -0,006418184 | -0,018100919 | 9,33443E-05 | -0,000227 | -0,002390398 | -1,55019E-05 | 6,46753E-05 | 9,98051E-05 |
| 195 | 0,188700901 | -0,138774815 | 0,058712779 | 0,169285743 | -0,065847444 | 0,055534811 | 0,04203489 | 0,008213754 | 0,049791797 |
| 196 | -0,852995275 | 0,138670709 | -0,097974834 | -0,834341924 | 0,057237215 | -0,110064309 | -0,282991965 | 0,050637671 | -0,062112469 |
| 197 | -0,188360725 | -0,138745373 | 0,058867821 | -0,168913751 | -0,065816771 | 0,055575004 | -0,042039284 | 0,008244561 | 0,049823916 |
| 198 | 0,853384598 | 0,138652073 | -0,098125355 | 0,834566447 | 0,057223254 | -0,1100942 | 0,284982008 | 0,050171422 | -0,062809169 |
| 199 | -0,559304422 | -0,333192101 | -0,021817172 | -0,485727225 | -0,330156028 | -0,011572414 | -0,286008927 | -0,05828626 | 0,479410572 |
| 200 | 0,559203918 | -0,333172785 | -0,021670595 | 0,485657188 | -0,330143364 | -0,011550354 | 0,285765684 | -0,058589159 | 0,478964507 |
| 201 | 0,297942382 | 0,333240036 | -0,015213517 | 0,392141572 | 0,345183325 | 0,000563595 | 0,004919249 | -0,040689003 | -0,518692901 |
| 202 | -0,298025431 | 0,333215453 | -0,015351695 | -0,392219215 | 0,345142656 | 0,000505872 | -0,005188882 | -0,040361037 | -0,518207896 |
| 203 | -0,741066843 | -0,33846064 | -0,015282641 | -0,784522885 | -0,376764552 | -0,084687985 | 0,033345471 | 0,01030818 | 0,108396318 |
| 204 | -0,252489418 | -0,05728167 | 0,036853165 | -0,234242174 | -8,02492E-05 | 0,052968455 | -0,060432928 | -0,001630425 | -0,011482073 |
| 205 | -0,610468974 | 0,336571352 | -0,017945083 | -0,59826017 | 0,285226915 | -0,109874598 | 0,096624922 | 0,005892928 | 0,083376508 |
| 206 | -0,927046202 | 0,058666648 | -0,063824351 | -0,897998862 | 0,050295374 | 0,00963225 | -0,058800804 | -0,008579564 | -0,057504972 |
| 207 | 0,610391928 | 0,336576812 | -0,017760688 | 0,598074589 | 0,285151175 | -0,109965778 | -0,096568979 | 0,006038292 | 0,083596537 |
| 208 | 0,252738834 | -0,057304753 | 0,036711943 | 0,234184097 | -0,000105395 | 0,052929342 | 0,060419495 | -0,001695976 | -0,011576707 |
| 209 | 0,740990241 | -0,338416013 | -0,015136652 | 0,784338076 | -0,376657187 | -0,084546215 | -0,033298402 | 0,010276643 | 0,108341938 |
| 210 | 0,927454683 | 0,058641542 | -0,063962887 | 0,899650632 | 0,050259988 | 0,009579578 | 0,058483588 | -0,008656131 | -0,057616149 |
| 211 | 0,405281574 | 0,345834046 | 0,001498723 | 0,016877178 | -0,039828275 | -0,512586378 | 0,008416742 | -0,000427907 | -0,010509267 |
| 212 | 0,165137743 | -0,041406833 | 0,035381415 | 0,028561537 | 0,008777018 | 0,027706855 | 0,004821243 | 0,000293109 | 0,003896042 |
| 213 | 0,456977685 | -0,330207339 | -0,003328417 | 0,283722072 | -0,051943953 | 0,492775403 | -0,00287005 | -0,001456734 | -0,016499947 |
| 214 | 0,818592861 | 0,032268645 | -0,083524 | 0,252107388 | 0,041222198 | -0,047701529 | 0,00328137 | 0,001175891 | 0,011302465 |
| 215 | -0,457038117 | -0,330290628 | -0,003885101 | -0,283934342 | -0,05162265 | 0,493232257 | 0,002864126 | -0,001484183 | -0,016557442 |
| 216 | -0,164815079 | -0,041369715 | 0,035866001 | -0,028549664 | 0,008808501 | 0,027791579 | -0,004830989 | 0,000307329 | 0,003909209 |
| 217 | -0,405356697 | 0,345725772 | 0,000915645 | -0,017087624 | -0,039493188 | -0,512109893 | -0,008425245 | -0,000429494 | -0,010527729 |

APOYO 1

| Newton | C1 | | | C2 | | | C3 | | |
|---|---|---|---|---|---|---|---|---|---|
| Barra | L | T | V | L | T | V | L | T | V |
| 218 | -0,818401296 | 0,032390412 | -0,083131612 | -0,250368302 | 0,041713563 | -0,047019661 | -0,003247115 | 0,001182214 | 0,011292073 |
| 219 | 0,592628199 | 0,284735522 | -0,11121358 | -0,089875662 | 0,00614462 | 0,082944517 | -0,000156346 | -0,000109661 | 0,000669381 |
| 220 | 0,242329582 | -0,003652789 | 0,057076287 | 0,056094572 | -0,001908295 | -0,008108964 | -0,000267456 | -3,82254E-05 | -0,000609735 |
| 221 | 0,781244622 | -0,377502363 | -0,092620286 | -0,025367706 | 0,008936 | 0,10546779 | 0,000566969 | 0,000114402 | 0,002065767 |
| 222 | 0,90812135 | 0,054775002 | 0,009493581 | 0,058430753 | -0,00687674 | -0,058996944 | -0,000441805 | -5,04111E-05 | -0,001450116 |
| 223 | -0,781379099 | -0,37763973 | -0,093078327 | 0,025398454 | 0,008966657 | 0,105497681 | -0,00057475 | 0,000103171 | 0,002049941 |
| 224 | -0,242446135 | -0,003580543 | 0,057441298 | -0,056112635 | -0,001838754 | -0,008004088 | 0,000270288 | -2,76136E-05 | -0,000598051 |
| 225 | -0,59270609 | 0,284740296 | -0,1114506 | 0,089908843 | 0,005991295 | 0,082729493 | 0,000149419 | -0,000118358 | 0,000662625 |
| 226 | -0,906547765 | 0,054852572 | 0,009819671 | -0,058712384 | -0,006796282 | -0,058878946 | 0,000441523 | -3,94353E-05 | -0,001438181 |
| 227 | 0,020488113 | -0,039377096 | -0,504416676 | 0,009157849 | -0,000574999 | -0,010705618 | 0,003403988 | 1,57733E-05 | 0,000100583 |
| 228 | -0,021307915 | -0,039044195 | -0,50397173 | -0,009086089 | -0,000573883 | -0,010725844 | -0,00334311 | -7,16843E-07 | 7,14122E-05 |
| 229 | -0,298852 | -0,048460725 | 0,523232059 | 0,002094442 | -0,00111726 | -0,014952281 | -0,003301735 | 8,83717E-05 | 4,31765E-05 |
| 230 | 0,298272158 | -0,048766428 | 0,523115658 | -0,002018544 | -0,001092848 | -0,014895136 | 0,003363589 | 7,08179E-05 | 1,14969E-05 |
| 231 | -0,017317997 | 0,008756684 | 0,025397525 | 0,003013571 | 0,00036187 | 0,003434738 | -0,00050484 | -7,13112E-06 | 9,17928E-06 |
| 232 | -0,203896226 | 0,039696538 | -0,0589643 | -0,000388102 | 0,000866099 | 0,010877178 | 0,00050238 | -5,65721E-05 | -1,56046E-05 |
| 233 | 0,017986183 | 0,008667083 | 0,024641557 | -0,002972609 | 0,00036733 | 0,003422832 | 0,000490225 | -3,37756E-06 | 1,58574E-05 |
| 234 | 0,206358805 | 0,039298572 | -0,059068063 | 0,000468304 | 0,000869079 | 0,010909519 | -0,00050444 | -5,36679E-05 | -1,06144E-05 |
| 235 | -1,098987985 | -0,526200477 | -0,810885956 | 0,000973419 | -2,00607E-06 | -6,96627E-05 | 0,001766362 | 3,4442E-06 | 5,61516E-06 |
| 236 | -1,095769898 | -0,525872396 | -0,810356186 | 0,000970643 | -1,58302E-06 | -6,37099E-05 | 0,001760678 | 3,42033E-06 | 5,60837E-06 |
| 237 | 1,098964238 | -0,529013972 | -0,814989281 | -0,000973428 | -1,6377E-08 | 4,13479E-05 | -0,001766312 | -2,93089E-06 | -4,7309E-06 |
| 238 | 1,110161698 | -0,527685813 | -0,81310942 | -0,000983151 | -2,97468E-06 | 1,25683E-06 | -0,001786087 | -2,87329E-06 | -4,86335E-06 |
| 239 | -0,099014899 | 1,08764E-05 | 0,00031057 | 0,005639438 | -4,37254E-06 | -2,22528E-05 | 0,001745872 | -3,77348E-06 | -6,85423E-06 |
| 240 | -0,098694005 | 1,4659E-05 | 0,000305764 | 0,005621694 | -4,16584E-06 | -2,05243E-05 | 0,001740178 | -3,77117E-06 | -6,83369E-06 |
| 241 | 0,099012924 | -3,52156E-05 | -0,000382274 | -0,005639296 | 3,43593E-06 | 1,30204E-05 | -0,001745829 | 3,7053E-06 | 6,80549E-06 |
| 242 | 0,100130174 | -6,2493E-05 | -0,00035772 | -0,005701017 | 2,10656E-06 | 1,4575E-06 | -0,001765651 | 3,81433E-06 | 6,88847E-06 |
| 243 | -0,242740128 | 7,71798E-05 | -3,18257E-05 | -1,076832705 | -0,526232427 | -0,811051603 | 0,000960509 | -5,14189E-06 | -7,19651E-05 |
| 244 | -0,241871876 | 6,45231E-05 | -1,48633E-05 | -1,073680764 | -0,525904543 | -0,81052406 | 0,000958086 | -4,59761E-06 | -6,62082E-05 |
| 245 | 0,242733686 | -0,000195595 | 0,00027494 | 1,076809578 | -0,528982307 | -0,814821551 | -0,000960525 | 3,60487E-06 | 4,60539E-05 |
| 246 | 0,245754716 | -0,000110373 | 0,000159681 | 1,08777655 | -0,527651777 | -0,812921425 | -0,000969038 | -1,01904E-07 | 7,44125E-06 |
| 247 | -0,195475138 | -7,70903E-05 | 6,9987E-05 | -0,081196911 | -1,90762E-05 | 5,39287E-05 | 0,005559526 | -5,09922E-06 | -2,98314E-05 |
| 248 | -0,194835028 | -6,3813E-05 | 5,87931E-05 | -0,080928361 | -1,5505E-05 | 4,93312E-05 | 0,005542047 | -4,95286E-06 | -2,80341E-05 |
| 249 | 0,195470597 | 0,000197954 | -0,000202828 | 0,081195126 | -4,64904E-06 | -0,000128336 | -0,005559397 | 4,03122E-06 | 1,95732E-05 |
| 250 | 0,197697922 | 0,000108401 | -0,000127038 | 0,082129988 | -2,95924E-05 | -9,871E-05 | -0,005620211 | 3,14625E-06 | 7,73233E-06 |
| 251 | -0,21462931 | -0,000224101 | 0,000154635 | -0,235121754 | -0,000109136 | 0,000152486 | -1,076605924 | -0,526297923 | -0,810936253 |
| 252 | -0,213838318 | -0,000222619 | 0,00015429 | -0,234275692 | -0,000107251 | 0,000152911 | -1,073451741 | -0,525964775 | -0,810417799 |
| 253 | 0,214623444 | -0,000196517 | 0,000158138 | 0,235115503 | -7,44257E-05 | 0,000160815 | 1,076582461 | -0,528939023 | -0,814894583 |
| 254 | 0,217375582 | -0,000205059 | 0,000159625 | 0,238059155 | -8,65288E-05 | 0,000156838 | 1,087556493 | -0,527643754 | -0,81293355 |
| 255 | 0,211457428 | 0,000197843 | -9,2678E-05 | 0,203844168 | 8,43205E-05 | -8,62555E-05 | 0,084496232 | -7,87017E-06 | -2,54628E-05 |
| 256 | 0,213842618 | 0,000206561 | -9,11962E-05 | 0,206171127 | 9,17063E-05 | -8,71848E-05 | 0,085472043 | -2,91656E-05 | -8,00622E-05 |
| 257 | -0,211462435 | 0,000223241 | -9,30377E-05 | -0,203849077 | 0,000100716 | -9,81546E-05 | -0,084498077 | -1,46999E-05 | -0,000107183 |
| 258 | -0,210776909 | 0,00022174 | -9,31154E-05 | -0,203180301 | 9,9539E-05 | -9,79047E-05 | -0,084217778 | -1,16635E-05 | -9,92021E-05 |
| 259 | -0,447969663 | -0,002816103 | 0,95225336 | -0,001152842 | -5,3207E-06 | -2,2675E-05 | -0,002096057 | -3,81141E-06 | -6,79409E-06 |
| 260 | -0,44231578 | 0,00013527 | 0,961933492 | -0,001169132 | -5,85104E-06 | -2,99963E-05 | -0,002124513 | -3,72087E-06 | -6,6241E-06 |
| 261 | 0,448011529 | -0,003326209 | 0,95192177 | 0,001152789 | 5,21943E-06 | 2,25056E-05 | 0,002095976 | 3,34522E-06 | 5,80146E-06 |

APOYO 1

| Newton | C1 | | | C2 | | | C3 | | |
|---|---|---|---|---|---|---|---|---|---|
| Barra | L | T | V | L | T | V | L | T | V |
| 262 | 0,442319486 | -0,000664834 | 0,961215096 | 0,001169139 | 5,76546E-06 | 2,87749E-05 | 0,002124506 | 3,49088E-06 | 6,14527E-06 |
| 263 | 0,117496139 | -8,40516E-05 | -0,000318382 | -0,006688874 | 1,63712E-06 | -4,2724E-06 | -0,002072243 | 4,64203E-06 | 8,14623E-06 |
| 264 | 0,118975884 | -9,09875E-05 | -0,000333755 | -0,006774694 | 1,42282E-06 | -6,59524E-06 | -0,002099923 | 4,68322E-06 | 8,24098E-06 |
| 265 | -0,117492257 | 8,80653E-05 | 0,000380759 | 0,006688624 | -1,66218E-06 | 4,98186E-06 | 0,002072167 | -4,52267E-06 | -8,0885E-06 |
| 266 | -0,118975447 | 9,20453E-05 | 0,00036681 | 0,006774684 | -1,47636E-06 | 6,56105E-06 | 0,002099912 | -4,61665E-06 | -8,1979E-06 |
| 267 | 0,288490919 | 8,99396E-05 | -0,000183534 | -0,474222493 | -0,002773841 | 0,952491815 | -0,001136233 | -3,60484E-06 | -1,63922E-05 |
| 268 | 0,292491521 | 7,17984E-05 | -0,000150922 | -0,468874386 | 0,000179062 | 0,962182818 | -0,001152544 | -3,89527E-06 | -2,26071E-05 |
| 269 | -0,288479476 | 3,69725E-05 | -3,99158E-05 | 0,474263436 | -0,003368184 | 0,951684585 | 0,001136195 | 2,3321E-06 | 1,42162E-05 |
| 270 | -0,292490605 | -9,57262E-06 | 3,24627E-05 | 0,468877753 | -0,000706968 | 0,960976359 | 0,001152539 | 3,31777E-06 | 2,09578E-05 |
| 271 | 0,231925992 | -9,76255E-05 | 7,26108E-05 | 0,09638786 | -4,3597E-05 | -9,35997E-06 | -0,006594612 | 3,58736E-06 | 3,63238E-06 |
| 272 | 0,234835349 | -8,34314E-05 | 4,97249E-05 | 0,097626756 | -4,96096E-05 | -1,95636E-05 | -0,006678733 | 3,36337E-06 | 1,29102E-06 |
| 273 | -0,231917794 | -2,85254E-05 | 6,08346E-05 | -0,096384355 | 4,80115E-05 | 7,38994E-05 | 0,006594385 | -3,17897E-06 | -2,33333E-06 |
| 274 | -0,234834716 | 1,57744E-05 | 1,43954E-05 | -0,097626451 | 5,11839E-05 | 5,49878E-05 | 0,006678715 | -3,18131E-06 | -8,60798E-07 |
| 275 | -0,255262822 | 0,000148101 | -0,000116272 | -0,279460492 | 6,85758E-05 | -0,000105244 | 0,474515537 | -0,003356021 | 0,951661285 |
| 276 | -0,258962312 | 7,56387E-05 | -5,87245E-05 | -0,283376887 | 3,76043E-05 | -5,17857E-05 | 0,469110512 | -0,000688807 | 0,960943885 |
| 277 | 0,25527315 | 0,000142269 | -0,00010515 | 0,279471538 | 5,60058E-05 | -0,000112236 | -0,474474584 | -0,002788465 | 0,952514212 |
| 278 | 0,258963158 | 6,68847E-05 | -4,7164E-05 | 0,283377723 | 2,09212E-05 | -6,01034E-05 | -0,469107165 | 0,000158603 | 0,96221644 |
| 279 | 0,250814768 | -0,000140787 | 6,92652E-05 | 0,241878987 | -5,49743E-05 | 7,05228E-05 | 0,100312547 | -3,95009E-05 | -3,92159E-05 |
| 280 | 0,253910224 | -6,52975E-05 | 3,50235E-05 | 0,244931481 | -2,37958E-05 | 3,52556E-05 | 0,101613536 | -4,50698E-05 | -6,4458E-05 |
| 281 | -0,250805896 | -0,000149931 | 6,28155E-05 | -0,241870301 | -6,83558E-05 | 6,10694E-05 | -0,100308884 | 4,50912E-05 | 0,000103203 |
| 282 | -0,253909525 | -7,74141E-05 | 2,85284E-05 | -0,244930767 | -3,97589E-05 | 2,60411E-05 | -0,101613214 | 4,74382E-05 | 9,74228E-05 |
| 283 | 0,004945412 | 0,002667699 | 0,008894102 | -1,48313E-05 | -4,36235E-07 | -5,71821E-06 | -2,52432E-05 | 9,29948E-08 | 1,73879E-07 |
| 284 | 0,009623183 | 0,000981073 | 0,001584192 | -8,30045E-06 | 1,26505E-06 | 1,78009E-05 | -1,69965E-05 | -7,13723E-08 | -2,03082E-08 |
| 285 | -0,004980113 | 0,002408312 | 0,008548435 | 1,48589E-05 | 5,25944E-07 | 6,44544E-06 | 2,53036E-05 | 1,45268E-07 | 3,34555E-07 |
| 286 | 1,38145E-06 | -0,000166319 | -0,000243714 | 4,65438E-08 | -1,25664E-07 | -3,25837E-06 | 2,86091E-09 | -5,10524E-08 | -8,27723E-08 |
| 287 | -0,001348546 | 6,08469E-06 | 1,88021E-05 | 7,79429E-05 | 1,99521E-07 | 2,09018E-06 | 2,45913E-05 | -9,83277E-08 | -1,2716E-07 |
| 288 | 0,000959584 | 1,13113E-05 | -1,43692E-05 | -5,30597E-05 | 6,18092E-07 | 5,16884E-06 | -1,70256E-05 | 6,90047E-09 | 6,14254E-08 |
| 289 | 0,001345237 | -3,7544E-06 | 1,70704E-05 | -7,77508E-05 | -1,55971E-07 | -1,40367E-06 | -2,45326E-05 | 2,60538E-08 | 6,16612E-08 |
| 290 | 6,47677E-07 | -2,75307E-06 | 2,2591E-06 | 4,40166E-08 | -1,20508E-07 | -1,13379E-06 | -1,09289E-08 | 3,50339E-08 | 4,94485E-08 |
| 291 | 0,003601217 | 4,86253E-05 | -8,09327E-05 | 0,004655569 | 0,002668342 | 0,008899608 | -1,41087E-05 | -2,46072E-07 | -4,93483E-06 |
| 292 | 0,00259637 | -3,78478E-05 | 5,07234E-05 | 0,009425383 | 0,000980486 | 0,001577533 | -7,24582E-06 | 1,62756E-06 | 1,7215E-05 |
| 293 | -0,003610629 | 2,32414E-05 | -4,51862E-05 | -0,004689518 | 0,002407386 | 0,008542444 | 1,41364E-05 | 8,91329E-07 | 6,65002E-06 |
| 294 | -1,40089E-08 | -7,82281E-06 | -8,7295E-06 | 7,52156E-07 | -0,00016239 | -0,000218125 | 1,44559E-09 | -3,40215E-08 | -2,03478E-06 |
| 295 | 0,001914147 | 3,97036E-05 | -3,34735E-05 | 0,000803055 | 1,06792E-05 | -1,37482E-05 | -5,22661E-05 | 4,37674E-07 | 5,37474E-06 |
| 296 | -0,002746238 | -2,30936E-05 | 2,66893E-05 | -0,00111848 | 5,36155E-06 | 1,51049E-05 | 7,56075E-05 | 1,99824E-08 | 1,93497E-06 |
| 297 | 1,5908E-07 | -6,75789E-06 | -1,14407E-05 | 9,05845E-08 | -1,94119E-06 | 5,33649E-06 | -4,34042E-09 | -1,84886E-08 | -6,41603E-07 |
| 298 | 0,002739405 | -5,00532E-05 | 4,75994E-05 | 0,001115601 | -2,87158E-06 | 2,28713E-05 | -7,54186E-05 | -1,7287E-07 | -1,46835E-06 |
| 299 | 1,29162E-07 | -1,87958E-05 | 2,09189E-05 | -3,77681E-08 | -1,46491E-05 | 1,1461E-06 | 7,17364E-07 | -0,000165565 | -0,000214365 |
| 300 | 0,003221499 | 8,10618E-05 | -6,10568E-05 | 0,003504926 | 3,30412E-05 | -6,29918E-05 | 0,00467029 | 0,002663454 | 0,008910784 |
| 301 | 0,002365339 | 4,43244E-06 | -1,03253E-06 | 0,002530015 | 5,63641E-06 | 1,27033E-06 | 0,009432087 | 0,000996224 | 0,001550354 |
| 302 | -0,003230039 | 8,36797E-05 | -6,14268E-05 | -0,003514049 | 3,67271E-05 | -6,17977E-05 | -0,004704267 | 0,002413083 | 0,008535363 |
| 303 | 1,15757E-07 | 1,87157E-05 | -1,16073E-05 | 1,58893E-07 | 5,24361E-07 | -1,66232E-05 | 9,52591E-08 | -1,30289E-06 | -5,18251E-07 |
| 304 | -0,002987439 | -8,36103E-05 | 3,69419E-05 | -0,002865181 | -3,67935E-05 | 3,66127E-05 | -0,00117247 | 4,67799E-06 | 2,69354E-05 |
| 305 | 0,002049957 | -4,4888E-06 | -2,32392E-07 | 0,001999871 | -3,52095E-06 | 7,47029E-07 | 0,000838187 | 9,07969E-06 | 2,38656E-05 |

APOYO 1

| Newton | C1 | | | C2 | | | C3 | | |
|---|---|---|---|---|---|---|---|---|---|
| Barra | L | T | V | L | T | V | L | T | V |
| 306 | 0,002980077 | -8,09539E-05 | 3,69583E-05 | 0,00285798 | -3,44852E-05 | 3,63961E-05 | 0,001169466 | -2,41676E-06 | 9,50489E-06 |
| 307 | -0,019872759 | -0,002490711 | -0,003362427 | 1,73016E-05 | 8,4213E-06 | 0,000114673 | 3,50942E-05 | -2,02903E-07 | 3,12946E-07 |
| 308 | -0,001983337 | 7,73555E-05 | -7,31195E-05 | 0,000109526 | 3,82559E-06 | 3,31024E-05 | 3,51874E-05 | -2,65793E-07 | -1,55493E-07 |
| 309 | -0,005361528 | -0,000243769 | 0,000329298 | -0,019463461 | -0,002497105 | -0,003418442 | 1,5167E-05 | 1,05873E-05 | 0,000110503 |
| 310 | -0,003952987 | 0,0002561 | -0,000216633 | -0,00165946 | 7,10161E-05 | -8,52336E-05 | 0,000107927 | 2,56854E-06 | 3,39663E-05 |
| 311 | -0,004884263 | 2,49652E-05 | -4,56341E-06 | -0,005224084 | 3,48373E-05 | 1,09633E-05 | -0,019475463 | -0,002396181 | -0,003592768 |
| 312 | -0,004233043 | -2,54505E-05 | -3,88401E-06 | -0,00412973 | -2,13268E-05 | 2,93677E-06 | -0,001732187 | 6,05986E-05 | 0,000155857 |
| 313 | -0,006702088 | -0,003505 | -0,011145569 | 1,86833E-05 | 5,81929E-07 | 7,43071E-06 | 3,33399E-05 | -1,23465E-07 | -2,24497E-07 |
| 314 | 0,006747551 | -0,003167658 | -0,010695267 | -1,87254E-05 | -6,70796E-07 | -8,37E-06 | -3,34268E-05 | -1,84206E-07 | -4,208E-07 |
| 315 | -0,001696425 | 9,12389E-06 | 5,408E-05 | 9,87382E-05 | 2,14778E-07 | 2,75892E-06 | 3,24456E-05 | -3,8339E-08 | -1,05568E-07 |
| 316 | 0,001700981 | -3,48895E-06 | 5,29409E-05 | -9,89896E-05 | -2,53374E-07 | -1,7759E-06 | -3,25338E-05 | 1,14979E-07 | 1,24881E-07 |
| 317 | 0,004640085 | 0,000122524 | -0,000213713 | 0,006409498 | -0,003165921 | -0,010682771 | -1,9557E-05 | -1,15675E-06 | -8,40559E-06 |
| 318 | -0,004627852 | 8,94589E-05 | -0,000167655 | -0,006365235 | -0,00350516 | -0,011147089 | 1,95172E-05 | 3,32206E-07 | 6,67045E-06 |
| 319 | -0,003229379 | -9,15469E-05 | 9,63646E-05 | -0,001432648 | 8,61829E-06 | 5,13064E-05 | 9,76518E-05 | 2,80083E-07 | 3,03175E-06 |
| 320 | 0,003238299 | -0,000126532 | 0,00012394 | 0,001436464 | -2,04617E-06 | 6,14613E-05 | -9,78967E-05 | 1,61582E-08 | -1,41376E-06 |
| 321 | 0,004392638 | 0,000240261 | -0,000181409 | 0,004543243 | 9,96685E-05 | -0,000185219 | 0,006434854 | -0,003174495 | -0,010668496 |
| 322 | -0,004381513 | 0,000243655 | -0,000181946 | -0,004531402 | 0,000104445 | -0,000183688 | -0,006390603 | -0,003499969 | -0,01115653 |
| 323 | -0,003362099 | -0,00024381 | 0,000108925 | -0,003406554 | -0,000106358 | 0,000107404 | -0,001506762 | 8,56406E-06 | 6,52601E-05 |
| 324 | 0,003371691 | -0,00024035 | 0,000109004 | 0,003415947 | -0,000103354 | 0,000107129 | 0,001510752 | -6,27969E-07 | 4,26469E-05 |
| 325 | -0,042512766 | 2,12004E-05 | 0,00051987 | -0,061618233 | -0,000207304 | 0,000349916 | -0,244647682 | -0,036278784 | -0,062034733 |
| 326 | 0,043084405 | 4,58474E-05 | 0,000669687 | 0,062210988 | -0,000181579 | 0,00038945 | 0,245970416 | -0,036210673 | -0,061935934 |
| 327 | 0,01407018 | -0,000284829 | 0,013268214 | 0,192990864 | -0,037229097 | -0,051145848 | 0,069076023 | -0,000257456 | -0,009572277 |
| 328 | -0,013531374 | -0,000346567 | 0,012946745 | -0,191797493 | -0,037278023 | -0,051220002 | -0,069074141 | -0,000198388 | -0,009482673 |
| 329 | 0,235235018 | -0,037720528 | -0,055166619 | 0,062886914 | -0,000351546 | -0,00996586 | 0,001602471 | 2,78433E-05 | 0,000186021 |
| 330 | -0,234024562 | -0,037587595 | -0,053903069 | -0,062908527 | -0,000280108 | -0,009837882 | -0,001617845 | 3,91869E-05 | 0,000198315 |
| 331 | -0,083932913 | -3,8473E-05 | -0,000855424 | 0,002239807 | 1,14727E-05 | 1,51582E-05 | 0,00482794 | 6,7044E-05 | 0,000119934 |
| 332 | -0,066271067 | 0,000125873 | 0,000920697 | 0,001480276 | 4,31207E-06 | 1,32684E-05 | 0,003604893 | -2,72518E-05 | -4,93015E-05 |
| 333 | -0,052719213 | 0,000120371 | 0,000964507 | 0,001512483 | 6,57238E-06 | 3,11458E-05 | 0,002997511 | 1,54406E-05 | 2,68327E-05 |
| 334 | 0,085240682 | -3,83895E-05 | -3,87866E-06 | -0,001516361 | -3,63622E-06 | 1,72919E-05 | -0,004536035 | 2,66382E-05 | 4,81635E-05 |
| 335 | 0,065558721 | -7,47227E-05 | -0,00033287 | -0,00181805 | -7,2326E-06 | -2,03695E-05 | -0,003741509 | -1,32046E-05 | -2,31209E-05 |
| 336 | 0,052613531 | -0,000119134 | -0,000984418 | -0,001515967 | -5,59347E-06 | -2,40623E-05 | -0,00300972 | -1,49428E-05 | -2,54911E-05 |
| 337 | -0,084257008 | 8,38699E-05 | 3,25633E-05 | 0,00224737 | 5,00239E-06 | 1,04138E-05 | 0,004805761 | -6,69858E-05 | -0,000117742 |
| 338 | -0,065966155 | 8,01934E-05 | 0,000584262 | 0,00147994 | 7,13542E-06 | 1,67912E-05 | 0,003615105 | 2,67233E-05 | 4,64446E-05 |
| 339 | -0,052725105 | 0,000163275 | 0,001318562 | 0,001514175 | 4,81302E-06 | 3,19118E-05 | 0,003009344 | -1,62154E-05 | -2,93518E-05 |
| 340 | 0,085255719 | 4,90855E-05 | 0,000853591 | -0,001508913 | -7,19736E-06 | 2,21382E-05 | -0,004478124 | -2,67396E-05 | -4,59783E-05 |
| 341 | 0,065568946 | -0,00012746 | -0,000830826 | -0,001819583 | -5,58874E-06 | -2,43859E-05 | -0,0037646 | 1,37897E-05 | 2,45562E-05 |
| 342 | 0,052829354 | -0,000142178 | -0,001136767 | -0,001511475 | -4,09718E-06 | -2,16366E-05 | -0,002997457 | 1,60148E-05 | 2,94439E-05 |
| 343 | -0,023038509 | 0,000226415 | 0,002208237 | 0,00100119 | 3,84235E-06 | 5,14725E-05 | 0,001413295 | 1,53764E-06 | 6,13767E-07 |
| 344 | 0,02414741 | -0,000260357 | -0,002556395 | -0,001083532 | -4,20307E-06 | -5,89834E-05 | -0,001492043 | -8,80124E-07 | 4,30528E-07 |
| 345 | -0,024162843 | 0,000257984 | 0,002548732 | 0,001083398 | 3,73564E-06 | 5,41725E-05 | 0,001491657 | -2,53357E-06 | -5,29283E-06 |
| 346 | 0,023057343 | -0,000225668 | -0,002213785 | -0,001000876 | -3,44799E-06 | -4,71693E-05 | -0,001412695 | 2,90721E-06 | 5,4862E-06 |
| 347 | 1,99007E-06 | -3,12182E-06 | -2,16912E-05 | 2,26386E-08 | -6,69991E-08 | -1,96682E-06 | -1,99157E-07 | 3,88621E-07 | 1,33786E-06 |
| 348 | -0,002502517 | 2,26118E-05 | 0,000227425 | 9,50141E-05 | 2,86087E-07 | 4,19042E-06 | 0,000146487 | -8,61962E-07 | -1,60241E-06 |
| 349 | 0,002498442 | -2,31791E-05 | -0,000231518 | -9,50159E-05 | -4,94917E-07 | -5,79284E-06 | -0,00014653 | -7,82837E-07 | -1,19376E-06 |

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| Newton | C1 | | | C2 | | | C3 | | |
|---|---|---|---|---|---|---|---|---|---|
| Barra | L | T | V | L | T | V | L | T | V |
| 350 | -0,000260288 | 3,44825E-05 | 0,000253127 | -7,9091E-07 | 5,72874E-07 | 1,75892E-05 | 7,44968E-06 | -7,61802E-06 | -1,83224E-05 |
| 351 | 1,111E-05 | -8,09349E-06 | 1,193E-05 | -9,4809E-07 | 2,66775E-06 | 1,07521E-05 | -1,25437E-06 | 2,35799E-05 | 4,88209E-05 |
| 352 | 0,000225777 | 3,00158E-05 | 0,00021417 | -2,4222E-07 | 3,90128E-07 | 1,66744E-05 | -6,39724E-06 | -7,37162E-06 | -1,78563E-05 |
| 353 | 1,943E-05 | 1,11916E-05 | 1,35326E-05 | -5,75422E-07 | 1,63448E-06 | 8,13774E-06 | -8,98718E-07 | -6,5739E-06 | -6,08966E-06 |
| 354 | -0,004208573 | 3,09577E-05 | -0,000191722 | 0,000216122 | 5,26511E-06 | 6,79928E-05 | 0,000289732 | 1,09979E-05 | -2,03351E-06 |
| 355 | 0,004844019 | 6,64559E-05 | 0,000284265 | 0,000103687 | 6,44094E-06 | 3,75329E-05 | -0,000190335 | -2,87087E-05 | -2,40192E-05 |
| 356 | -0,004534729 | 0,000132554 | 0,000662983 | 0,000280343 | -6,00444E-08 | 6,77498E-05 | 0,000349786 | -8,0563E-05 | -0,000164103 |
| 357 | 0,004997882 | 5,27596E-05 | 0,000884205 | 0,000103403 | 1,18123E-05 | 6,75712E-05 | -0,000150713 | 9,95051E-05 | 0,000205781 |
| 358 | 0,003217541 | 0,000251744 | 0,002395595 | -0,000604877 | -5,6911E-06 | 2,44577E-05 | -0,000444388 | -0,000127998 | -0,000227255 |
| 359 | -0,004687187 | -5,8853E-05 | -0,000584041 | -0,00039517 | -3,54559E-07 | -1,49004E-05 | 7,54688E-05 | 2,32736E-08 | 2,8936E-07 |
| 360 | 0,003711629 | -5,63007E-05 | -0,000191342 | -0,000598107 | 7,55245E-06 | 2,02313E-05 | -0,00044341 | 0,000128007 | 0,000226099 |
| 361 | -0,005392941 | -9,82477E-05 | -0,00099011 | -0,000397903 | 5,68873E-07 | -2,08644E-05 | -3,35225E-05 | 6,07013E-07 | 1,2956E-06 |
| 362 | -0,00585355 | -5,81341E-05 | -0,000448319 | 1,18419E-05 | -1,53686E-06 | -3,68795E-05 | 0,000281378 | -6,06248E-07 | 8,17307E-06 |
| 363 | 0,005653634 | 1,21056E-05 | 0,00033605 | -0,000122534 | -2,94156E-06 | -6,02945E-06 | -0,00031662 | 1,19887E-05 | 9,93481E-06 |
| 364 | -0,005815497 | -9,21325E-05 | -0,000741502 | -1,85017E-05 | 3,31438E-07 | -3,66152E-05 | 0,000258197 | 2,96283E-05 | 6,17175E-05 |
| 365 | 0,005605065 | 1,90886E-05 | 0,000109771 | -0,000122107 | -5,46538E-06 | -1,94189E-05 | -0,000329145 | -4,20695E-05 | -8,71422E-05 |
| 366 | 0,017832965 | -1,6846E-05 | -2,50146E-05 | 1,48298E-05 | 1,23576E-06 | 9,58467E-06 | -0,000814045 | 4,56723E-05 | 8,07338E-05 |
| 367 | -0,017144156 | -7,01875E-05 | -0,000888933 | 0,000371139 | 1,04773E-06 | -1,55896E-05 | 0,000957496 | 5,58772E-07 | 1,41358E-06 |
| 368 | 0,017444456 | 8,97586E-05 | 0,000868811 | 9,83216E-06 | -3,71368E-06 | 9,34852E-06 | -0,00081457 | -4,62625E-05 | -8,21154E-05 |
| 369 | -0,016875853 | -3,77269E-05 | -0,000562297 | 0,000371624 | 6,87896E-07 | -1,03654E-05 | 0,000995231 | -1,80376E-07 | 8,50905E-08 |

| Newton | C4 | | | C5 | | | C6 | | |
|---|---|---|---|---|---|---|---|---|---|
| Barra | L | T | V | L | T | V | L | T | V |
| 1 | -2,790171644 | 2,760000008 | 0,183374311 | -2,378074898 | 2,347490515 | 0,183360501 | -1,986076358 | 1,934963492 | 0,18337507 |
| 2 | -2,706302189 | -2,759999054 | -0,682925382 | -2,299733969 | -2,347484872 | -0,68292035 | -1,873014842 | -1,93496737 | -0,682937417 |
| 3 | 2,70630225 | -2,760002664 | -0,682899883 | 2,299734047 | -2,347488975 | -0,682913951 | 1,873014947 | -1,93499193 | -0,682901509 |
| 4 | 2,79017171 | 2,760003597 | 0,183349035 | 2,378074971 | 2,347494622 | 0,183354103 | 1,986076439 | 1,934988037 | 0,183339185 |
| 5 | -2,88618224 | 2,753847103 | 0,182978578 | -2,456876298 | 2,34219454 | 0,182963346 | -2,047058528 | 1,930514657 | 0,182990732 |
| 6 | -2,553832978 | -2,753845217 | -0,681524907 | -2,128925311 | -2,342185731 | -0,681522109 | -1,684473804 | -1,930519766 | -0,68155508 |
| 7 | 2,553832794 | -2,753848659 | -0,681500689 | 2,128925287 | -2,342189605 | -0,681516072 | 1,684473476 | -1,93054207 | -0,681522478 |
| 8 | 2,886182402 | 2,753850543 | 0,182954391 | 2,456876306 | 2,342198419 | 0,182957304 | 2,04705864 | 1,930536924 | 0,182958186 |
| 9 | -2,649918856 | 2,693353713 | 0,216798577 | -2,219341207 | 2,248099348 | 0,21678284 | -1,807090957 | 1,802882904 | 0,216691105 |
| 10 | -2,822212246 | -2,693351683 | -0,718267855 | -2,393779342 | -2,248088465 | -0,718266999 | -1,947169843 | -1,802764353 | -0,718397985 |
| 11 | 2,822212259 | -2,693354784 | -0,718246465 | 2,393779485 | -2,248091885 | -0,718261683 | 1,947169823 | -1,802781965 | -0,718372266 |
| 12 | 2,649919148 | 2,693356804 | 0,216777255 | 2,219341403 | 2,248102764 | 0,216777526 | 1,807091452 | 1,802900686 | 0,216665127 |
| 13 | -2,841860873 | 2,705581314 | 0,217568305 | -2,376848761 | 2,258542702 | 0,217554903 | -1,928774627 | 1,8115459 | 0,217460265 |
| 14 | -2,496173259 | -2,705580008 | -0,721238366 | -2,03086111 | -2,258533153 | -0,721239739 | -1,548762336 | -1,811448196 | -0,721328223 |
| 15 | 2,496173458 | -2,70558273 | -0,721220138 | 2,030861332 | -2,258536074 | -0,721235212 | 1,548762434 | -1,811460809 | -0,721309833 |
| 16 | 2,841861012 | 2,705584022 | 0,217550181 | 2,376848953 | 2,258545619 | 0,21755038 | 1,928775063 | 1,811558687 | 0,217441609 |
| 17 | -2,549272446 | 2,633438128 | 0,258043117 | -2,085717702 | 2,147955452 | 0,258056821 | -1,637452665 | 1,662400187 | 0,258240885 |
| 18 | -2,786058773 | -2,633439835 | -0,761466124 | -2,319550597 | -2,147974757 | -0,76144615 | -1,837632418 | -1,662560093 | -0,761316668 |
| 19 | 2,786058352 | -2,633442128 | -0,761451536 | 2,319550324 | -2,147977147 | -0,761442464 | 1,83763177 | -1,662567503 | -0,761305891 |
| 20 | 2,549272259 | 2,633440429 | 0,258028421 | 2,085717314 | 2,147957818 | 0,258053172 | 1,637452037 | 1,662407308 | 0,258230546 |
| 21 | -2,774253441 | 2,628543562 | 0,257744072 | -2,270335224 | 2,143751193 | 0,25776242 | -1,780067614 | 1,658939538 | 0,257861376 |
| 22 | -2,405648103 | -2,628547351 | -0,760303742 | -1,895890785 | -2,143776019 | -0,760281685 | -1,37235595 | -1,658952254 | -0,760316379 |
| 23 | 2,405649134 | -2,628549196 | -0,76029289 | 1,895891772 | -2,143777821 | -0,76027893 | 1,372360393 | -1,658953767 | -0,760314244 |
| 24 | 2,774253922 | 2,62854541 | 0,257733161 | 2,270335778 | 2,14375297 | 0,257759703 | 1,780066955 | 1,658940763 | 0,25785968 |
| 25 | -2,426480821 | 2,543783398 | 0,305848404 | -1,92475568 | 2,013466999 | 0,305795183 | -1,434729009 | 1,483106585 | 0,305732057 |
| 26 | -2,747723273 | -2,543781209 | -0,807870066 | -2,237014829 | -2,013415707 | -0,807919054 | -1,714127766 | -1,483059537 | -0,808039505 |
| 27 | 2,747724644 | -2,543782555 | -0,807863147 | 2,237016124 | -2,013416791 | -0,807917417 | 1,714132461 | -1,483054461 | -0,808047037 |
| 28 | 2,426481452 | 2,543784779 | 0,30584147 | 1,9247566 | 2,013468209 | 0,305793378 | 1,434728827 | 1,483101596 | 0,305739459 |
| 29 | -2,695263317 | 2,54475689 | 0,306108614 | -2,145250362 | 2,014094038 | 0,306059526 | -1,604989362 | 1,483238698 | 0,306257396 |
| 30 | -2,293050681 | -2,544751235 | -0,808340055 | -1,730605586 | -2,01406279 | -0,80834803 | -1,157948123 | -1,483885996 | -0,807495408 |
| 31 | 2,293045089 | -2,544752049 | -0,808337483 | 1,730599418 | -2,014063169 | -0,808347508 | 1,157927278 | -1,483873885 | -0,80751325 |
| 32 | 2,695259639 | 2,544757749 | 0,306105918 | 2,145246554 | 2,014094543 | 0,306058834 | 1,604989447 | 1,48322668 | 0,306275102 |
| 33 | -2,28259308 | 2,441487156 | 0,363236746 | -1,733350089 | 1,855958898 | 0,363365086 | -1,1934241 | 1,271060334 | 0,36260634 |
| 34 | -2,713109702 | -2,44149386 | -0,866253925 | -2,147648703 | -1,856098953 | -0,866095912 | -1,575874902 | -1,270337931 | -0,866318584 |
| 35 | 2,713105514 | -2,441494199 | -0,866255927 | 2,147643868 | -1,856098817 | -0,866096291 | 1,575857329 | -1,270317286 | -0,866348986 |
| 36 | 2,282590807 | 2,44148732 | 0,363239178 | 1,733347617 | 1,855958368 | 0,363365942 | 1,193427485 | 1,271041284 | 0,3626343 |
| 37 | -2,608129537 | 2,43917411 | 0,362098084 | -2,000558781 | 1,855061165 | 0,362197876 | -1,399915494 | 1,271947867 | 0,360748794 |
| 38 | -2,156695558 | -2,439183284 | -0,864434786 | -1,528715985 | -1,855073939 | -0,864498657 | -0,896764866 | -1,269025893 | -0,868017346 |
| 39 | 2,156713707 | -2,439182971 | -0,864442234 | 1,528737026 | -1,855072948 | -0,864500388 | 0,896830295 | -1,268996708 | -0,868060266 |
| 40 | 2,608142443 | 2,439173614 | 0,362106049 | 2,000571673 | 1,855059779 | 0,362200088 | 1,399917865 | 1,271920244 | 0,360789321 |
| 41 | -2,087392815 | 2,310545261 | 0,433575111 | -1,485182299 | 1,659361479 | 0,433329877 | -0,880372778 | 1,005681601 | 0,437057846 |

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| Newton | C4 | | | C5 | | | C6 | | |
|---|---|---|---|---|---|---|---|---|---|
| Barra | L | T | V | L | T | V | L | T | V |
| 42 | -2,663231497 | -2,310527407 | -0,934118892 | -2,035958268 | -1,659062386 | -0,934497829 | -1,400355976 | -1,009435746 | -0,93226959 |
| 43 | 2,663242514 | -2,310526014 | -0,934133354 | 2,035972253 | -1,659059778 | -0,934501814 | 1,400406033 | -1,009402218 | -0,932318563 |
| 44 | 2,087398913 | 2,310544361 | 0,433588475 | 1,485188002 | 1,659359814 | 0,43333284 | 0,880359199 | 1,005639733 | 0,437119562 |
| 45 | -2,492484018 | 2,319220576 | 0,436894253 | -1,817798488 | 1,663706115 | 0,436746968 | -1,137527356 | 1,004914353 | 0,441973141 |
| 46 | -1,971179483 | -2,319204129 | -0,939809158 | -1,266251869 | -1,663807079 | -0,939507976 | -0,556093835 | -1,013975299 | -0,929069593 |
| 47 | 1,971133917 | -2,319201925 | -0,939830261 | 1,266198308 | -1,663803397 | -0,93951366 | 0,555937212 | -1,013931045 | -0,929134289 |
| 48 | 2,492451851 | 2,319218876 | 0,436914166 | 1,817766071 | 1,663703381 | 0,436751618 | 1,137516723 | 1,00486187 | 0,442050413 |
| 49 | -1,862433467 | 2,157601379 | 0,523691753 | -1,181860922 | 1,416713987 | 0,5239493 | -0,512695308 | 0,683085355 | 0,511797258 |
| 50 | -2,641728142 | -2,157631759 | -1,031980975 | -1,925019694 | -1,417063207 | -1,031447397 | -1,227474799 | -0,67020768 | -1,041070331 |
| 51 | 2,641705197 | -2,157629488 | -1,032007175 | 1,924988448 | -1,417059539 | -1,031453866 | 1,227364882 | -0,670131736 | -1,041182617 |
| 52 | 1,862421945 | 2,157598116 | 0,523719257 | 1,181851618 | 1,416708779 | 0,523957026 | 0,512734559 | 0,683038294 | 0,511865453 |
| 53 | -2,390392249 | 2,141143735 | 0,517661696 | -1,6150034 | 1,408199477 | 0,517734556 | -0,847277869 | 0,683772053 | 0,50318252 |
| 54 | -1,745581451 | -2,1411646 | -1,02146941 | -0,927199147 | -1,407665362 | -1,02248923 | -0,131417361 | -0,66215436 | -1,045874735 |
| 55 | 1,745661556 | -2,141161292 | -1,021504397 | 0,927293681 | -1,407660351 | -1,022497824 | 0,131663934 | -0,662064992 | -1,046006688 |
| 56 | 2,390445254 | 2,141139414 | 0,517698222 | 1,615059363 | 1,408192911 | 0,517744442 | 0,847311002 | 0,683711173 | 0,503270981 |
| 57 | -1,503037122 | 1,929402503 | 0,638780478 | -0,751755077 | 1,087128573 | 0,639522571 | 0,041033183 | 0,230613635 | 0,666815059 |
| 58 | -2,531993107 | -1,929404183 | -1,12905397 | -1,730213577 | -1,087878102 | -1,128560997 | -0,906904569 | -0,263859954 | -1,096355487 |
| 59 | 2,532018229 | -1,929398271 | -1,129104333 | 1,730256442 | -1,087870965 | -1,128571427 | 0,9070476 | -0,26381313 | -1,096421918 |
| 60 | 1,503045827 | 1,929397409 | 0,638833943 | 0,751755534 | 1,087121316 | 0,639535226 | -0,041117612 | 0,230490621 | 0,666997697 |
| 61 | -2,127158102 | 1,937292365 | 0,64170648 | -1,265849759 | 1,091162551 | 0,642548432 | -0,356569478 | 0,230233428 | 0,670895424 |
| 62 | -1,439338686 | -1,93730225 | -1,134151862 | -0,52179509 | -1,092452438 | -1,132686643 | 0,400987108 | -0,267426556 | -1,094133858 |
| 63 | 1,439311178 | -1,937294576 | -1,1342095 | 0,521772341 | -1,092442152 | -1,132702045 | -0,401013287 | -0,267347862 | -1,094247425 |
| 64 | 2,127137342 | 1,93728634 | 0,641758001 | 1,265819516 | 1,091152611 | 0,642564899 | 0,356488489 | 0,230093523 | 0,671102363 |
| 65 | 0,803564587 | -0,001765313 | -0,001024689 | 0,883710703 | -0,000995084 | -0,001048788 | 0,945013121 | -0,001124544 | 0,000503672 |
| 66 | -0,803572081 | -0,001763734 | -0,00102795 | -0,883718846 | -0,000991894 | -0,001053822 | -0,945048872 | -0,001092179 | 0,000455672 |
| 67 | -0,446781139 | 0,001766161 | 0,00058085 | -0,369338891 | 0,000997867 | 0,000583021 | -0,286097415 | 8,87504E-05 | 0,000862034 |
| 68 | 0,446773762 | 0,001765702 | 0,000571721 | 0,36933214 | 0,000995302 | 0,000586497 | 0,286097644 | 7,6342E-05 | 0,000879614 |
| 69 | 0,600726965 | -0,167141385 | 0,081566487 | 0,616635501 | -0,24972439 | 0,079348326 | 0,590365106 | -0,302809621 | 0,021981578 |
| 70 | -0,600673211 | -0,167143686 | 0,081582006 | -0,616588707 | -0,249725389 | 0,07934863 | -0,590274405 | -0,302761581 | 0,021908073 |
| 71 | -0,696493063 | 0,167150256 | -0,094430789 | -0,674815748 | 0,251467714 | -0,095326009 | -0,696428365 | 0,354728555 | -0,131222225 |
| 72 | 0,696530667 | 0,167151357 | -0,094449982 | 0,674868451 | 0,251468685 | -0,095329051 | 0,696541 | 0,354782897 | -0,131304879 |
| 73 | 0,561105197 | -0,132710638 | 0,077376324 | 0,549276777 | -0,203698055 | 0,07734104 | 0,562719719 | -0,287736897 | 0,10001829 |
| 74 | -0,561129698 | -0,132710514 | 0,077379727 | -0,549300554 | -0,203697959 | 0,077341714 | -0,562768825 | -0,287769281 | 0,100067018 |
| 75 | -0,517766838 | 0,132752425 | -0,071595687 | -0,524699993 | 0,203798228 | -0,07191653 | -0,513073792 | 0,264019482 | -0,053783777 |
| 76 | 0,517745203 | 0,132753754 | -0,071601136 | 0,524675052 | 0,203800402 | -0,071919099 | 0,513020005 | 0,264010729 | -0,053769704 |
| 77 | 0,441996536 | -0,113463606 | 0,06055379 | 0,443475089 | -0,172231336 | 0,0608529 | 0,438853012 | -0,226350727 | 0,05353929 |
| 78 | -0,441987946 | -0,113464646 | 0,060560118 | -0,443466387 | -0,172232892 | 0,060855007 | -0,438834223 | -0,226352367 | 0,053541299 |
| 79 | -0,4576728 | 0,113434937 | -0,062595437 | -0,452124849 | 0,171925726 | -0,062235451 | -0,457071894 | 0,234538139 | -0,068469943 |
| 80 | 0,457681214 | 0,113435211 | -0,062600009 | 0,452133657 | 0,171925825 | -0,062235968 | 0,457091188 | 0,234552337 | -0,068491143 |
| 81 | 0,391555187 | -0,096225443 | 0,054035436 | 0,388601787 | -0,147246443 | 0,053849036 | 0,390080133 | -0,199545546 | 0,055573844 |
| 82 | -0,391557177 | -0,096225849 | 0,054039719 | -0,388603989 | -0,147246842 | 0,053849785 | -0,390085335 | -0,199554097 | 0,055586459 |
| 83 | -0,384989787 | 0,096239439 | -0,053286883 | -0,38441692 | 0,147440386 | -0,053495218 | -0,383490242 | 0,197511351 | -0,05208616 |
| 84 | 0,384987411 | 0,096240137 | -0,053291947 | 0,384414834 | 0,147441429 | -0,053496751 | 0,383485476 | 0,197517419 | -0,052094973 |
| 85 | 0,334914138 | -0,083946058 | 0,04637769 | 0,334099684 | -0,12845456 | 0,046465395 | 0,334637382 | -0,172773042 | 0,046368334 |

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| Newton | C4 | | | C5 | | | C6 | | |
|---|---|---|---|---|---|---|---|---|---|
| Barra | L | T | V | L | T | V | L | T | V |
| 86 | -0,334914388 | -0,083946558 | 0,046381485 | -0,334099696 | -0,128455299 | 0,046466535 | -0,334636924 | -0,172779396 | 0,046377649 |
| 87 | -0,341347121 | 0,083939273 | -0,046995306 | -0,339081405 | 0,128360481 | -0,046902194 | -0,338936557 | 0,17289099 | -0,046827621 |
| 88 | 0,341347378 | 0,083939707 | -0,046998999 | 0,33908124 | 0,128361004 | -0,046903046 | 0,338936429 | 0,172897141 | -0,046836634 |
| 89 | 0,430101897 | 0,014257382 | 0,005196761 | 0,352697879 | 0,007399053 | 0,005362084 | 0,272285006 | -0,000506298 | 0,007350504 |
| 90 | -0,727706113 | -0,014267736 | -0,009085698 | -0,810752625 | -0,008227665 | -0,007612687 | -0,891255587 | -0,006784614 | 0,003949931 |
| 91 | -0,430156078 | 0,01425827 | 0,005188895 | -0,352753216 | 0,007400139 | 0,005360347 | -0,272279435 | -0,000495034 | 0,007333974 |
| 92 | 0,7276161 | -0,014268572 | -0,00907837 | 0,810641831 | -0,008228722 | -0,007611013 | 0,890952315 | -0,006795217 | 0,003965453 |
| 93 | 0,343993288 | -0,009655327 | -0,003567711 | 0,282421679 | -0,004967491 | -0,003673358 | 0,218330436 | 0,000510053 | -0,005193973 |
| 94 | -0,58666261 | 0,009658293 | 0,006184351 | -0,6526193 | 0,005406793 | 0,005435908 | -0,71586797 | 0,004984762 | -0,003118293 |
| 95 | -0,343953278 | -0,009654668 | -0,003572939 | -0,282381874 | -0,004966579 | -0,003674792 | -0,218333647 | 0,000519033 | -0,00520713 |
| 96 | 0,586722144 | 0,009657606 | 0,006189858 | 0,652690797 | 0,005405871 | 0,005437364 | 0,716084046 | 0,004975578 | -0,003104827 |
| 97 | 0,294542296 | 0,003389034 | 0,00146323 | 0,241877622 | 0,001528354 | 0,001501831 | 0,187039675 | -0,000746092 | 0,002284633 |
| 98 | -0,504538359 | -0,003387815 | -0,002417983 | -0,560990502 | -0,001692253 | -0,002137615 | -0,615350212 | -0,001852222 | 0,001804249 |
| 99 | -0,294560534 | 0,003389643 | 0,001458041 | -0,241895859 | 0,001529125 | 0,001500606 | -0,187038437 | -0,000738329 | 0,002273254 |
| 100 | 0,504511863 | -0,003388405 | -0,002412985 | 0,560959417 | -0,001693023 | -0,002136398 | 0,615251666 | -0,001859924 | 0,001815536 |
| 101 | 0,254642005 | -0,000129766 | -0,000324401 | 0,208874856 | 0,000223899 | -0,000332989 | 0,161249524 | 0,000759992 | -0,000660988 |
| 102 | -0,433805013 | 0,00012651 | 0,000416511 | -0,482855263 | -0,000187842 | 0,00034969 | -0,530013614 | 0,000173116 | -0,0009925 |
| 103 | -0,254635985 | -0,000129265 | -0,000328492 | -0,208868474 | 0,000224572 | -0,000334051 | -0,161249893 | 0,000766689 | -0,000670803 |
| 104 | 0,433814315 | 0,000126001 | 0,000420678 | 0,482865531 | -0,000188515 | 0,000350754 | 0,530048058 | 0,000166399 | -0,000982653 |
| 105 | -0,303201679 | 0,073853427 | -0,042419819 | -0,302201087 | 0,114442392 | -0,042458577 | -0,302902386 | 0,155149929 | -0,042776933 |
| 106 | 0,303202096 | 0,073853853 | -0,042423377 | 0,302201753 | 0,114442979 | -0,042459506 | 0,30290357 | 0,155155901 | -0,042785703 |
| 107 | 0,307102683 | -0,073849375 | 0,042774507 | 0,305318723 | -0,114401034 | 0,042741856 | 0,304985212 | -0,154860951 | 0,042485853 |
| 108 | -0,307102009 | -0,073849821 | 0,0427783 | -0,305318137 | -0,114401579 | 0,042742721 | -0,304984338 | -0,154866369 | 0,042493778 |
| 109 | -0,266476727 | 0,069813382 | -0,036765328 | -0,266079476 | 0,10533078 | -0,036759341 | -0,266958465 | 0,140764045 | -0,03659306 |
| 110 | 0,266476181 | 0,069813789 | -0,03676876 | 0,266079107 | 0,105331292 | -0,036760148 | 0,266957891 | 0,140768957 | -0,036600249 |
| 111 | 0,278150763 | -0,069814983 | 0,037829821 | 0,276072973 | -0,105342643 | 0,037841097 | 0,275570498 | -0,140979027 | 0,03806591 |
| 112 | -0,278150967 | -0,069815364 | 0,037833073 | -0,276073434 | -0,105343146 | 0,037841897 | -0,275571397 | -0,140984274 | 0,038073611 |
| 113 | 0,231077466 | 0,00188479 | 0,000124235 | 0,189588991 | 0,001620424 | 0,000119011 | 0,146447696 | 0,001278426 | 0,000244446 |
| 114 | -0,386857409 | -0,001881762 | -0,000445766 | -0,431289528 | -0,00161508 | -0,000444773 | -0,474076131 | -0,001511245 | -0,000171976 |
| 115 | -0,231078607 | 0,001885229 | 0,000120693 | -0,189590539 | 0,001621024 | 0,000118065 | -0,146447621 | 0,001284421 | 0,000235659 |
| 116 | 0,386855001 | -0,001882214 | -0,000442092 | 0,43128734 | -0,001615681 | -0,000443824 | 0,474067728 | -0,001517223 | -0,000163215 |
| 117 | 0,200711812 | -0,008603019 | -0,000510418 | 0,164745434 | -0,007387041 | -0,00050993 | 0,127275089 | -0,006159189 | -0,000527558 |
| 118 | -0,344585283 | 0,008602332 | 0,002042722 | -0,383153461 | 0,007381698 | 0,002051507 | -0,420222942 | 0,006180005 | 0,002039129 |
| 119 | -0,20071183 | -0,008602581 | -0,000514258 | -0,164745379 | -0,007386509 | -0,000510777 | -0,127275057 | -0,006153844 | -0,000535391 |
| 120 | 0,344585339 | 0,008601924 | 0,002046275 | 0,383153378 | 0,007381168 | 0,002052347 | 0,420223192 | 0,006174639 | 0,002046994 |
| 121 | 0,193915636 | 0,018091218 | 0,001184616 | 0,159070908 | 0,015398035 | 0,001189198 | 0,122891993 | 0,01272649 | 0,001164115 |
| 122 | -0,324443804 | -0,018093897 | -0,004460411 | -0,361697186 | -0,015408607 | -0,004451742 | -0,397607176 | -0,012748747 | -0,004371312 |
| 123 | -0,193916036 | 0,018091553 | 0,001182068 | -0,159070841 | 0,015398526 | 0,001188427 | -0,122892094 | 0,012731372 | 0,001156959 |
| 124 | 0,324444336 | -0,018094263 | -0,004457555 | 0,361697262 | -0,0154091 | -0,004450964 | 0,397607809 | -0,012753609 | -0,004364186 |
| 125 | 0,026106305 | -0,021105153 | -0,001455602 | 0,021594782 | -0,017205862 | -0,001458254 | 0,017288373 | -0,013286691 | -0,001498605 |
| 126 | 0,031773837 | 0,021106454 | 0,006725695 | 0,027455122 | 0,017213291 | 0,006718168 | 0,022813788 | 0,01338452 | 0,006577933 |
| 127 | -0,031773867 | 0,02110651 | 0,006725132 | -0,027454807 | 0,017213352 | 0,00671807 | -0,022813124 | 0,013385113 | 0,00657706 |
| 128 | -0,026105834 | -0,021105228 | -0,001454891 | -0,021594606 | -0,017205929 | -0,001458149 | -0,017288212 | -0,013287155 | -0,001497929 |
| 129 | -0,131847087 | -0,02632047 | -0,001797669 | -0,107760566 | -0,022317259 | -0,001809729 | -0,082442475 | -0,018360041 | -0,001759722 |

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| Newton | C4 | | | C5 | | | C6 | | |
|---|---|---|---|---|---|---|---|---|---|
| Barra | L | T | V | L | T | V | L | T | V |
| 130 | 0,258319952 | 0,026326299 | 0,006582613 | 0,284399286 | 0,02234537 | 0,00655578 | 0,30925552 | 0,018448806 | 0,006309383 |
| 131 | -0,258320486 | 0,026326626 | 0,006579764 | -0,28439872 | 0,022345788 | 0,006555118 | -0,309254799 | 0,018452979 | 0,006303266 |
| 132 | 0,131848302 | -0,026320824 | -0,001794546 | 0,107760796 | -0,022317678 | -0,00180906 | 0,082442632 | -0,018364198 | -0,001753631 |
| 133 | -0,008926336 | -1,32607E-05 | -2,92282E-07 | -0,008165135 | -1,05636E-05 | -1,09195E-06 | -0,008309975 | -9,25212E-06 | 9,70618E-07 |
| 134 | 0,009050977 | 1,32644E-05 | 3,3409E-06 | 0,008337795 | 1,05819E-05 | 4,11505E-06 | 0,008530641 | 9,34147E-06 | 1,86987E-06 |
| 135 | -0,009050977 | 1,30191E-05 | 5,42134E-06 | -0,008337795 | 1,02702E-05 | 4,60892E-06 | -0,00853064 | 6,26868E-06 | 6,3734E-06 |
| 136 | 0,008926337 | -1,30154E-05 | -2,37254E-06 | 0,008165135 | -1,02519E-05 | -1,58581E-06 | 0,008309975 | -6,1793E-06 | -3,53297E-06 |
| 137 | -0,272513804 | 0,077371346 | -0,034339814 | -0,266854266 | 0,107172444 | -0,034330969 | -0,261996098 | 0,136988346 | -0,034327713 |
| 138 | 0,20545539 | -0,07737328 | 0,028251088 | 0,209895744 | -0,107184084 | 0,028260647 | 0,215026772 | -0,136973655 | 0,02825116 |
| 139 | -0,205455527 | -0,077373466 | 0,028252534 | -0,209895873 | -0,107184349 | 0,028261061 | -0,215026906 | -0,136976152 | 0,028254817 |
| 140 | 0,272513715 | 0,077371545 | -0,034341418 | 0,266854124 | 0,107172699 | -0,034331374 | 0,26199592 | 0,1369909 | -0,034331458 |
| 141 | 0,154397662 | 0,000370483 | 3,1928E-05 | 0,126886178 | 0,000315787 | 3,10338E-05 | 0,098714842 | 0,000259927 | 3,23812E-05 |
| 142 | -0,295770619 | -0,000370445 | -8,48711E-05 | -0,324342935 | -0,000315509 | -8,45209E-05 | -0,352264899 | -0,000258796 | -8,82513E-05 |
| 143 | 0,295770619 | -0,000370616 | -8,3332E-05 | 0,324342943 | -0,00031573 | -8,41706E-05 | 0,352264914 | -0,000261032 | -8,49738E-05 |
| 144 | -0,154397651 | 0,000370686 | 3,00828E-05 | -0,126886174 | 0,00031601 | 3,0676E-05 | -0,098714839 | 0,000262144 | 2,91328E-05 |
| 145 | 0,22156424 | -0,054619363 | 0,033555949 | 0,225201281 | -0,089309361 | 0,033562724 | 0,229970997 | -0,123952369 | 0,033493879 |
| 146 | -0,284523924 | 0,05461758 | -0,039279482 | -0,278684618 | 0,089298581 | -0,039269168 | -0,274082929 | 0,123967323 | -0,039208396 |
| 147 | 0,28452413 | 0,054617904 | -0,03928205 | 0,278684409 | 0,089299018 | -0,039269861 | 0,274082481 | 0,123971781 | -0,039214931 |
| 148 | -0,221564651 | -0,054619675 | 0,033558371 | -0,225201318 | -0,089309809 | 0,033563425 | -0,229970828 | -0,123956772 | 0,033500332 |
| 149 | -1,437287249 | 1,491264375 | 0,673255784 | -0,604060921 | 0,639673957 | 0,667876468 | 0,233811621 | -0,024103581 | 0,328748096 |
| 150 | -1,557225432 | -1,491300206 | -1,121898459 | -0,703325888 | -0,635368305 | -1,123728123 | 0,091537107 | -0,003564048 | -0,792255773 |
| 151 | 1,557423017 | -1,491261355 | -1,122164121 | 0,703429872 | -0,63531869 | -1,123805228 | -0,090360686 | -0,003483263 | -0,792376279 |
| 152 | 1,437459725 | 1,491225242 | 0,673522383 | 0,604261734 | 0,639635452 | 0,667934986 | -0,233990765 | -0,024028291 | 0,328630827 |
| 153 | -1,166873465 | 1,094431628 | 0,687880374 | -0,211078691 | 0,198435336 | 0,726879596 | 0,09331627 | 0,003358675 | -0,051508023 |
| 154 | -1,012249232 | -1,094757502 | -1,147391675 | -0,119197522 | -0,22618232 | -1,138174 | -0,050208748 | 0,000604777 | -0,030984553 |
| 155 | 1,012473965 | -1,09466812 | -1,148068379 | 0,120182256 | -0,226133417 | -1,138264424 | 0,050028379 | 0,000514393 | -0,030850188 |
| 156 | 1,166987926 | 1,094316801 | 0,688533963 | 0,21091684 | 0,198267898 | 0,727120869 | -0,093289025 | 0,003563249 | -0,051819528 |
| 157 | -0,73026953 | 0,656570769 | 0,678559155 | 0,205188647 | -0,022370221 | 0,3383724 | -0,017484133 | -0,000237543 | 0,005257807 |
| 158 | -0,608135033 | -0,652243148 | -1,14481904 | 0,116863193 | -0,005879282 | -0,810605997 | 0,00827919 | -3,51741E-05 | 0,002694245 |
| 159 | 0,608216511 | -0,651965437 | -1,146361353 | -0,115830937 | -0,005765472 | -0,810778874 | -0,008260524 | -8,93584E-05 | 0,002778932 |
| 160 | 0,730445649 | 0,656341746 | 0,680120798 | -0,205320859 | -0,022312726 | 0,338323926 | 0,017472209 | -0,000203005 | 0,005207331 |
| 161 | -0,328034799 | 0,195607863 | 0,726711762 | 0,092065677 | 0,003089877 | -0,05302038 | -0,011035589 | -8,91892E-05 | -0,000189344 |
| 162 | -0,001271722 | -0,223567809 | -1,134457917 | -0,049883101 | 0,001094651 | -0,028512724 | 0,011600542 | 3,42719E-05 | -0,000268419 |
| 163 | 0,002269501 | -0,223144469 | -1,137111147 | 0,049715151 | 0,001030137 | -0,028448331 | -0,011605779 | 1,97351E-05 | -0,000250154 |
| 164 | 0,327874269 | 0,195089584 | 0,729527476 | -0,09205632 | 0,003273458 | -0,05324298 | 0,011032648 | -7,65718E-05 | -0,000201284 |
| 165 | 0,120069991 | -0,020441811 | 0,321644226 | -0,009484932 | -0,000144588 | 0,004890693 | -0,008356953 | 6,15062E-05 | -0,000172151 |
| 166 | 0,209059904 | -0,006754319 | -0,810018608 | 0,000874356 | -0,00014636 | 0,002706059 | 0,008326818 | -5,27992E-05 | 0,000112988 |
| 167 | -0,20791927 | -0,006278389 | -0,8127873 | -0,000771319 | -0,000179652 | 0,002713048 | -0,008287057 | -4,32554E-05 | 9,62683E-05 |
| 168 | -0,120039183 | -0,020744151 | 0,324276301 | 0,009562683 | -0,000131216 | 0,00491553 | 0,008388504 | 7,04506E-05 | -0,000188547 |
| 169 | 0,015355286 | -0,00013153 | 0,002448955 | -0,011270451 | 0,002405996 | -0,001281805 | -0,317968904 | 0,160549844 | -0,28374688 |
| 170 | 0,552089329 | -0,007778979 | -0,001576589 | 0,607126518 | -0,010510331 | 0,002992228 | 0,646853619 | -0,158552595 | 0,273788589 |
| 171 | -0,553631358 | -0,007777893 | -0,001578833 | -0,608876733 | -0,010508136 | 0,002988765 | -0,653521567 | -0,158530328 | 0,273755564 |
| 172 | -0,01506457 | -0,000138169 | 0,002449428 | 0,011581802 | 0,002398505 | -0,001279958 | 0,318618164 | 0,160847869 | -0,284201629 |
| 173 | 0,30672287 | 0,007913882 | -0,000944697 | 0,253483529 | 0,006481616 | 0,001051195 | 0,196876244 | -0,017881605 | 0,046241146 |

APOYO 1

| Newton | C4 | | | C5 | | | C6 | | |
|---|---|---|---|---|---|---|---|---|---|
| Barra | L | T | V | L | T | V | L | T | V |
| 174 | -0,308048828 | 0,007914198 | -0,000938417 | -0,254727039 | 0,006483381 | 0,001048803 | -0,196797751 | -0,017873068 | 0,046229051 |
| 175 | 0,137057622 | 8,08429E-05 | 0,023185012 | 0,105157485 | -0,023042584 | 0,06261565 | -0,10887402 | -0,024533284 | 0,30890961 |
| 176 | 0,000221059 | 0,136759525 | 0,115296348 | 0,00055961 | 0,07036016 | 0,079357858 | 0,000495103 | 0,025844083 | -0,175471685 |
| 177 | -0,137166282 | 8,05321E-05 | 0,023173238 | -0,105323537 | -0,023074136 | 0,062664262 | 0,10873958 | -0,02482404 | 0,309352291 |
| 178 | 0,000182478 | -0,136620983 | -0,067452005 | 9,42778E-05 | -0,044924768 | -0,076208228 | -3,54464E-06 | 0,004045707 | -0,023547351 |
| 179 | 0,052921501 | 0,002423158 | 0,009493967 | -0,297200526 | 0,149086076 | -0,252230349 | 0,017590765 | 0,002399642 | -0,040558247 |
| 180 | -0,000800983 | 0,072483998 | 0,097709536 | -0,002917301 | -0,128484369 | 0,325688315 | -4,37762E-05 | -0,003142038 | 0,03290253 |
| 181 | -0,05266535 | 0,002479722 | 0,00956062 | 0,297721255 | 0,14938055 | -0,252613461 | -0,017567593 | 0,00243644 | -0,040606986 |
| 182 | -0,000532779 | -0,076124086 | -0,064334206 | 9,83113E-06 | -0,020968016 | -0,025576205 | 1,68406E-05 | -0,000782356 | 0,0101528 |
| 183 | 0,101668923 | -0,023752821 | 0,065037936 | -0,110577591 | -0,02294968 | 0,305286479 | -0,001056185 | 0,000150696 | 0,003340286 |
| 184 | 0,00053302 | 0,059090941 | 0,062966463 | 0,000435731 | 0,02028889 | -0,181154855 | -4,82539E-06 | 3,12858E-05 | -0,003809965 |
| 185 | -0,101788009 | -0,023850674 | 0,065003014 | 0,110468161 | -0,02325441 | 0,305680423 | 0,001051047 | 0,000151518 | 0,003331486 |
| 186 | 7,49106E-05 | -0,032842352 | -0,067573127 | -3,55497E-06 | 0,00506447 | -0,013543494 | -1,9099E-06 | 5,84372E-05 | -0,001532366 |
| 187 | -0,297141215 | 0,151600427 | -0,268059424 | 0,017835581 | 0,002428896 | -0,041771114 | 1,06516E-05 | -0,000136286 | 0,000359279 |
| 188 | -0,002789186 | -0,130197076 | 0,341402572 | -3,37308E-05 | -0,002485658 | 0,034114872 | 6,07678E-06 | 7,90271E-05 | 6,08191E-05 |
| 189 | 0,297402747 | 0,151902843 | -0,268344837 | -0,0177846 | 0,002469451 | -0,041813433 | 1,53882E-05 | -0,000133423 | 0,000354977 |
| 190 | 0,000106751 | -0,022689954 | -0,023137674 | 2,59777E-05 | -0,001149379 | 0,009862188 | -1,36948E-06 | 5,66318E-05 | -6,42137E-06 |
| 191 | -0,125535369 | -0,03045563 | 0,374905519 | -0,001653357 | -0,000167006 | 0,006480461 | -3,28214E-05 | 4,17394E-05 | -0,00023931 |
| 192 | -0,000999939 | 0,006418189 | -0,018100919 | -9,33061E-05 | 0,000227 | -0,0023904 | 1,55706E-05 | -6,46795E-05 | 9,98087E-05 |
| 193 | 0,126937164 | -0,030750782 | 0,374776518 | 0,00137612 | -0,000170339 | 0,006468427 | -0,000168122 | -9,41925E-06 | -0,000148671 |
| 194 | -0,000670473 | 0,027466099 | -0,227588906 | -8,99593E-05 | 0,000235731 | -0,006086085 | -9,99613E-06 | 8,3375E-05 | -0,000130507 |
| 195 | -0,853384575 | -0,138652073 | -0,09812535 | -0,834566448 | -0,057223254 | -0,1100942 | -0,284982013 | -0,050171422 | -0,062809168 |
| 196 | 0,188360776 | 0,138745375 | 0,058867794 | 0,168913754 | 0,065816771 | 0,055575004 | 0,042039286 | -0,008244561 | 0,049823916 |
| 197 | 0,852995252 | -0,138670708 | -0,097974837 | 0,834341925 | -0,057237215 | -0,110064309 | 0,28299197 | -0,050637671 | -0,062112469 |
| 198 | -0,188700951 | 0,138774812 | 0,058712806 | -0,169285746 | 0,065847444 | 0,055534811 | -0,042034892 | -0,008213754 | 0,049791797 |
| 199 | 0,298025426 | -0,333215453 | -0,015351685 | 0,392219213 | -0,345142655 | 0,000505871 | 0,005188878 | 0,040361037 | -0,518207896 |
| 200 | -0,297942377 | -0,333240035 | -0,015213533 | -0,392141571 | -0,345183325 | 0,000563594 | -0,004919245 | 0,040689003 | -0,518692901 |
| 201 | -0,559203897 | 0,333172786 | -0,021670609 | -0,485657186 | 0,330143364 | -0,011550354 | -0,285765681 | 0,058589159 | 0,478964507 |
| 202 | 0,5593044 | 0,333192099 | -0,021817154 | 0,485727223 | 0,330156028 | -0,011572414 | 0,286008924 | 0,05828626 | 0,479410573 |
| 203 | 0,610468964 | -0,336571353 | -0,01794507 | 0,598260169 | -0,285226915 | -0,109874597 | -0,096624926 | -0,005892928 | 0,083376508 |
| 204 | 0,927046223 | -0,058666646 | -0,063824373 | 0,897998865 | -0,050295374 | 0,009632249 | 0,058800807 | 0,008579564 | -0,057504972 |
| 205 | 0,741066824 | 0,338460638 | -0,01528262 | 0,784522882 | 0,376764552 | -0,084687984 | -0,033345475 | -0,01030818 | 0,108396318 |
| 206 | 0,252489426 | 0,057281671 | 0,036853153 | 0,234242175 | 8,02492E-05 | 0,052968455 | 0,060432932 | 0,001630425 | -0,011482073 |
| 207 | -0,740990221 | 0,338416015 | -0,015136672 | -0,784338073 | 0,376657187 | -0,084546216 | 0,033298406 | -0,010276643 | 0,108341937 |
| 208 | -0,927454705 | -0,058641544 | -0,063962866 | -0,899650634 | -0,050259988 | 0,009579578 | -0,058483592 | 0,008656131 | -0,057616149 |
| 209 | -0,610391918 | -0,336576811 | -0,0177607 | -0,598074588 | -0,285151175 | -0,109965778 | 0,096568983 | -0,006038292 | 0,083596537 |
| 210 | -0,252738841 | 0,057304752 | 0,036711954 | -0,234184098 | 0,000105395 | 0,052929342 | -0,060419499 | 0,001695976 | -0,011576707 |
| 211 | -0,456977652 | 0,330207343 | -0,003328455 | -0,28372207 | 0,051943953 | 0,492775403 | 0,002870059 | 0,001456734 | -0,016499946 |
| 212 | -0,8185929 | -0,032268648 | -0,083523967 | -0,252107388 | -0,041222198 | -0,047701528 | -0,003281376 | -0,001175891 | 0,011302466 |
| 213 | -0,405281519 | -0,345834039 | 0,001498651 | -0,016877172 | 0,039828275 | -0,51258638 | -0,008416732 | 0,000427907 | -0,010509267 |
| 214 | -0,165137772 | 0,041406827 | 0,035381473 | -0,028561541 | -0,008777018 | 0,027706856 | -0,004821251 | -0,000293109 | 0,003896042 |
| 215 | 0,405356643 | -0,345725779 | 0,000915717 | 0,017087617 | 0,039493188 | -0,512109891 | 0,008425235 | 0,000429494 | -0,010527729 |
| 216 | 0,818401347 | -0,032390408 | -0,083131645 | 0,250368302 | -0,041713563 | -0,047019661 | 0,003247121 | -0,001182215 | 0,011292074 |
| 217 | 0,457038081 | 0,330290625 | -0,003885068 | 0,28393434 | 0,05162265 | 0,493232258 | -0,002864136 | 0,001484183 | -0,016557442 |

APOYO 1

| Newton | C4 | | | C5 | | | C6 | | |
|---|---|---|---|---|---|---|---|---|---|
| Barra | L | T | V | L | T | V | L | T | V |
| 218 | 0,164815097 | 0,04136972 | 0,035865945 | 0,028549669 | -0,008808501 | 0,027791578 | 0,004830997 | -0,000307329 | 0,003909209 |
| 219 | -0,781244553 | 0,377502371 | -0,092620375 | 0,025367717 | -0,008936 | 0,105467788 | -0,00056696 | -0,000114402 | 0,002065766 |
| 220 | -0,908121377 | -0,05477501 | 0,00949366 | -0,058430762 | 0,00687674 | -0,058996943 | 0,000441795 | 5,04123E-05 | -0,001450119 |
| 221 | -0,59262819 | -0,284735522 | -0,111213579 | 0,089875659 | -0,00614462 | 0,082944517 | 0,000156354 | 0,000109661 | 0,000669381 |
| 222 | -0,242329629 | 0,003652788 | 0,057076294 | -0,05609457 | 0,001908295 | -0,008108964 | 0,00026745 | 3,82254E-05 | -0,000609735 |
| 223 | 0,59270608 | -0,284740295 | -0,111450606 | -0,089908837 | -0,005991295 | 0,082729493 | -0,000149425 | 0,000118358 | 0,000662626 |
| 224 | 0,906547696 | -0,054852564 | 0,009819593 | 0,058712393 | 0,006796282 | -0,058878948 | -0,00044151 | 3,94364E-05 | -0,001438183 |
| 225 | 0,78137904 | 0,37763972 | -0,093078222 | -0,025398463 | -0,008966657 | 0,105497683 | 0,000574742 | -0,00010317 | 0,002049939 |
| 226 | 0,242446271 | 0,003580544 | 0,057441285 | 0,056112629 | 0,001838754 | -0,008004087 | -0,000270288 | 2,76136E-05 | -0,000598051 |
| 227 | -0,298272439 | 0,048766417 | 0,523115783 | 0,002018504 | 0,001092848 | -0,014895132 | -0,003363604 | -7,08211E-05 | 1,15035E-05 |
| 228 | 0,298852237 | 0,048460744 | 0,52323187 | -0,002094411 | 0,00111726 | -0,014952284 | 0,00330174 | -8,83754E-05 | 4,31849E-05 |
| 229 | 0,021307701 | 0,039044176 | -0,50397154 | 0,009086079 | 0,000573883 | -0,01072584 | 0,003343126 | 7,18109E-07 | 7,14081E-05 |
| 230 | -0,020487904 | 0,039377113 | -0,504416843 | -0,009157851 | 0,000574999 | -0,010705622 | -0,003404016 | -1,5774E-05 | 0,000100583 |
| 231 | -0,206358571 | -0,039298549 | -0,059068317 | -0,000468246 | -0,00086908 | 0,010909516 | 0,000504485 | 5,3665E-05 | -1,06082E-05 |
| 232 | -0,017986725 | -0,008667071 | 0,024641451 | 0,002972625 | -0,000367329 | 0,003422828 | -0,000490228 | 3,37586E-06 | 1,58598E-05 |
| 233 | 0,203896567 | -0,039696563 | -0,058964025 | 0,00038804 | -0,000866099 | 0,010877185 | -0,000502445 | 5,65684E-05 | -1,55973E-05 |
| 234 | 0,017318001 | -0,008756693 | 0,025397627 | -0,003013563 | -0,00036187 | 0,00343474 | 0,000504883 | 7,13068E-06 | 9,17906E-06 |
| 235 | 0,099014805 | -1,088E-05 | 0,000310606 | -0,005639442 | 4,37238E-06 | -2,22515E-05 | -0,001745855 | 3,7738E-06 | -6,85503E-06 |
| 236 | 0,098693912 | -1,46626E-05 | 0,000305801 | -0,005621698 | 4,16569E-06 | -2,0523E-05 | -0,001740161 | 3,77149E-06 | -6,83448E-06 |
| 237 | -0,09901283 | 3,52192E-05 | -0,00038231 | 0,0056393 | -3,43577E-06 | 1,30191E-05 | 0,001745811 | -3,70563E-06 | 6,80629E-06 |
| 238 | -0,100130076 | 6,24968E-05 | -0,000357758 | 0,005701021 | -2,1064E-06 | 1,45618E-06 | 0,001765633 | -3,81466E-06 | 6,88927E-06 |
| 239 | 1,098988178 | 0,52620049 | -0,810886099 | -0,000973402 | 2,006E-06 | -6,96656E-05 | -0,001766353 | -3,44443E-06 | 5,61577E-06 |
| 240 | 1,09577009 | 0,52587241 | -0,810356329 | -0,000970626 | 1,58295E-06 | -6,37128E-05 | -0,001760669 | -3,42056E-06 | 5,60897E-06 |
| 241 | -1,098964431 | 0,529013958 | -0,814989138 | 0,000973411 | 1,64478E-08 | 4,13509E-05 | 0,001766304 | 2,93111E-06 | -4,73149E-06 |
| 242 | -1,110161897 | 0,527685799 | -0,813109273 | 0,000983134 | 2,97475E-06 | 1,25982E-06 | 0,001786079 | 2,8735E-06 | -4,86393E-06 |
| 243 | 0,19547514 | 7,70901E-05 | 6,99891E-05 | 0,08119691 | 1,90762E-05 | 5,39288E-05 | -0,005559524 | 5,09924E-06 | -2,98315E-05 |
| 244 | 0,194835031 | 6,38128E-05 | 5,8795E-05 | 0,080928361 | 1,55049E-05 | 4,93313E-05 | -0,005542046 | 4,95288E-06 | -2,80341E-05 |
| 245 | -0,195470599 | -0,000197954 | -0,00020283 | -0,081195126 | 4,64907E-06 | -0,000128336 | 0,005559395 | -4,03124E-06 | 1,95733E-05 |
| 246 | -0,197697922 | -0,000108401 | -0,000127041 | -0,082129988 | 2,95924E-05 | -9,87101E-05 | 0,005620209 | -3,14627E-06 | 7,73237E-06 |
| 247 | 0,242740138 | -7,71785E-05 | -3,1839E-05 | 1,076832707 | 0,526232427 | -0,811051603 | -0,000960507 | 5,1419E-06 | -7,19651E-05 |
| 248 | 0,241871885 | -6,45219E-05 | -1,48764E-05 | 1,073680766 | 0,525904543 | -0,81052406 | -0,000958084 | 4,59762E-06 | -6,62082E-05 |
| 249 | -0,242733696 | 0,000195593 | 0,000274953 | -1,076809581 | 0,528982307 | -0,814821551 | 0,000960523 | -3,60488E-06 | 4,60539E-05 |
| 250 | -0,245754727 | 0,000110371 | 0,000159696 | -1,087776552 | 0,527651777 | -0,812921425 | 0,000969036 | 1,01891E-07 | 7,44127E-06 |
| 251 | 0,211462442 | -0,000223241 | -9,30389E-05 | 0,203849078 | -0,000100716 | -9,81546E-05 | 0,084498076 | 1,46999E-05 | -0,000107183 |
| 252 | 0,210776916 | -0,00022174 | -9,31167E-05 | 0,203180301 | -9,9539E-05 | -9,79048E-05 | 0,084217778 | 1,16635E-05 | -9,92021E-05 |
| 253 | -0,211457435 | -0,000197843 | -9,26768E-05 | -0,203844168 | -8,43205E-05 | -8,62554E-05 | -0,084496232 | 7,87017E-06 | -2,54628E-05 |
| 254 | -0,213842625 | -0,000206561 | -9,11952E-05 | -0,206171127 | -9,17063E-05 | -8,71848E-05 | -0,085472043 | 2,91656E-05 | -8,00622E-05 |
| 255 | -0,214623437 | 0,000196517 | 0,000158136 | -0,235115503 | 7,44257E-05 | 0,000160815 | -1,076582461 | 0,528939023 | -0,814894583 |
| 256 | -0,217375575 | 0,000205059 | 0,000159623 | -0,238059155 | 8,65288E-05 | 0,000156838 | -1,087556494 | 0,527643754 | -0,81293355 |
| 257 | 0,214629303 | 0,000224101 | 0,000154638 | 0,235121754 | 0,000109136 | 0,000152486 | 1,076605924 | 0,526297923 | -0,810936253 |
| 258 | 0,21383831 | 0,000222619 | 0,000154292 | 0,234275692 | 0,000107251 | 0,000152911 | 1,073451741 | 0,525964775 | -0,810417799 |
| 259 | -0,117496022 | 8,40562E-05 | -0,000318428 | 0,006688879 | -1,63694E-06 | -4,27396E-06 | 0,002072222 | -4,64241E-06 | 8,14717E-06 |
| 260 | -0,118975771 | 9,09919E-05 | -0,000333799 | 0,006774698 | -1,42263E-06 | -6,59678E-06 | 0,002099902 | -4,6836E-06 | 8,24193E-06 |
| 261 | 0,117492139 | -8,80698E-05 | 0,000380804 | -0,006688629 | 1,66199E-06 | 4,98343E-06 | -0,002072147 | 4,52305E-06 | -8,08944E-06 |

APOYO 1

| Newton | C4 | | | C5 | | | C6 | | |
|---|---|---|---|---|---|---|---|---|---|
| Barra | L | T | V | L | T | V | L | T | V |
| 262 | 0,118975334 | -9,20497E-05 | 0,000366854 | -0,006774689 | 1,47617E-06 | 6,56259E-06 | -0,002099891 | 4,61704E-06 | -8,19885E-06 |
| 263 | 0,447969428 | 0,002816087 | 0,952253532 | 0,001152821 | 5,32079E-06 | -2,26715E-05 | 0,002096047 | 3,81167E-06 | -6,79479E-06 |
| 264 | 0,442315549 | -0,000135286 | 0,961933664 | 0,001169111 | 5,85113E-06 | -2,99928E-05 | 0,002124503 | 3,72112E-06 | -6,62479E-06 |
| 265 | -0,448011294 | 0,003326225 | 0,951921598 | -0,001152769 | -5,21951E-06 | 2,25021E-05 | -0,002095966 | -3,34547E-06 | 5,80213E-06 |
| 266 | -0,442319254 | 0,000664851 | 0,961214923 | -0,001169119 | -5,76554E-06 | 2,87714E-05 | -0,002124495 | -3,49113E-06 | 6,14595E-06 |
| 267 | -0,231925992 | 9,76258E-05 | 7,26073E-05 | -0,09638786 | 4,3597E-05 | -9,36009E-06 | 0,00659461 | -3,58738E-06 | 3,63242E-06 |
| 268 | -0,234835353 | 8,34317E-05 | 4,97225E-05 | -0,097626756 | 4,96096E-05 | -1,95637E-05 | 0,006678731 | -3,36339E-06 | 1,29107E-06 |
| 269 | 0,231917794 | 2,8525E-05 | 6,08381E-05 | 0,096384355 | -4,80115E-05 | 7,38995E-05 | -0,006594383 | 3,17899E-06 | -2,33337E-06 |
| 270 | 0,234834719 | -1,57747E-05 | 1,43978E-05 | 0,097626451 | -5,1184E-05 | 5,49879E-05 | -0,006678713 | 3,18133E-06 | -8,60841E-07 |
| 271 | -0,288490934 | -8,99412E-05 | -0,000183517 | 0,47422249 | 0,002773841 | 0,952491815 | 0,001136231 | 3,60483E-06 | -1,63922E-05 |
| 272 | -0,292491532 | -7,17998E-05 | -0,000150906 | 0,468874383 | -0,000179062 | 0,962182818 | 0,001152542 | 3,89526E-06 | -2,26071E-05 |
| 273 | 0,28847949 | -3,69709E-05 | -3,99328E-05 | -0,474263434 | 0,003368184 | 0,951684585 | -0,001136192 | -2,33209E-06 | 1,42162E-05 |
| 274 | 0,292490616 | 9,57411E-06 | 3,24467E-05 | -0,46887775 | 0,000706968 | 0,960976358 | -0,001152537 | -3,31775E-06 | 2,09578E-05 |
| 275 | 0,250805903 | 0,000149931 | 6,28144E-05 | 0,241870301 | 6,83558E-05 | 6,10694E-05 | 0,100308883 | -4,50912E-05 | 0,000103203 |
| 276 | 0,253909534 | 7,74143E-05 | 2,85269E-05 | 0,244930768 | 3,97589E-05 | 2,60411E-05 | 0,101613214 | -4,74382E-05 | 9,74228E-05 |
| 277 | -0,250814775 | 0,000140786 | 6,92663E-05 | -0,241878987 | 5,49743E-05 | 7,05228E-05 | -0,100312547 | 3,95009E-05 | -3,92159E-05 |
| 278 | -0,253910233 | 6,52973E-05 | 3,5025E-05 | -0,244931481 | 2,37958E-05 | 3,52556E-05 | -0,101613535 | 4,50698E-05 | -6,4458E-05 |
| 279 | -0,255273142 | -0,000142269 | -0,000105153 | -0,279471538 | -5,60058E-05 | -0,000112236 | 0,474474584 | 0,002788465 | 0,952514212 |
| 280 | -0,258963149 | -6,68845E-05 | -4,71667E-05 | -0,283377723 | -2,09212E-05 | -6,01035E-05 | 0,469107164 | -0,000158603 | 0,96221644 |
| 281 | 0,255262814 | -0,000148101 | -0,000116269 | 0,279460492 | -6,85758E-05 | -0,000105243 | -0,474515537 | 0,003356021 | 0,951661285 |
| 282 | 0,258962303 | -7,5639E-05 | -5,87218E-05 | 0,283376887 | -3,76043E-05 | -5,17857E-05 | -0,469110512 | 0,000688807 | 0,960943885 |
| 283 | -0,001345242 | 3,75429E-06 | 1,70716E-05 | 7,77507E-05 | 1,55973E-07 | -1,40366E-06 | 2,45326E-05 | -2,60586E-08 | 6,16706E-08 |
| 284 | -0,00095958 | -1,13112E-05 | -1,43704E-05 | 5,30598E-05 | -6,1809E-07 | 5,16881E-06 | 1,70253E-05 | -6,90325E-09 | 6,14338E-08 |
| 285 | 0,001348551 | -6,08458E-06 | 1,88009E-05 | -7,79428E-05 | -1,99521E-07 | 2,09016E-06 | -2,45913E-05 | 9,83312E-08 | -1,27169E-07 |
| 286 | -6,48177E-07 | 2,75308E-06 | 2,2591E-06 | -4,39958E-08 | 1,20508E-07 | -1,13379E-06 | 1,09662E-08 | -3,50361E-08 | 4,94503E-08 |
| 287 | 0,00498011 | -0,002408312 | 0,008548435 | -1,48588E-05 | -5,25947E-07 | 6,44544E-06 | -2,53033E-05 | -1,45272E-07 | 3,34564E-07 |
| 288 | -0,009623187 | -0,000981073 | 0,001584194 | 8,30023E-06 | -1,26505E-06 | 1,7801E-05 | 1,69965E-05 | 7,13776E-08 | -2,03208E-08 |
| 289 | -0,004945409 | -0,002667699 | 0,008894102 | 1,48313E-05 | 4,36236E-07 | -5,7182E-06 | 2,52429E-05 | -9,29963E-08 | 1,73881E-07 |
| 290 | -1,38092E-06 | 0,000166319 | -0,000243714 | -4,65471E-08 | 1,25662E-07 | -3,25837E-06 | -2,87964E-09 | 5,10447E-08 | -8,27565E-08 |
| 291 | -0,002739408 | 5,00531E-05 | 4,76004E-05 | -0,001115601 | 2,87158E-06 | 2,28713E-05 | 7,54187E-05 | 1,7287E-07 | -1,46835E-06 |
| 292 | -0,001914145 | -3,97036E-05 | -3,34741E-05 | -0,000803055 | -1,06792E-05 | -1,37482E-05 | 5,2266E-05 | -4,37674E-07 | 5,37474E-06 |
| 293 | 0,002746242 | 2,30937E-05 | 2,66883E-05 | 0,00111848 | -5,36154E-06 | 1,51049E-05 | -7,56076E-05 | -1,99826E-08 | 1,93497E-06 |
| 294 | -1,59089E-07 | 6,75788E-06 | -1,14407E-05 | -9,05842E-08 | 1,94119E-06 | 5,33649E-06 | 4,34112E-09 | 1,84885E-08 | -6,41603E-07 |
| 295 | -0,002596372 | 3,78477E-05 | 5,07241E-05 | -0,009425383 | -0,000980486 | 0,001577533 | 7,24588E-06 | -1,62756E-06 | 1,7215E-05 |
| 296 | 0,003610625 | -2,32414E-05 | -4,51854E-05 | 0,004689518 | -0,002407386 | 0,008542444 | -1,41362E-05 | -8,91329E-07 | 6,65003E-06 |
| 297 | 1,4018E-08 | 7,82281E-06 | -8,7295E-06 | -7,52156E-07 | 0,00016239 | -0,000218125 | -1,44585E-09 | 3,40208E-08 | -2,03477E-06 |
| 298 | -0,003601213 | -4,86252E-05 | -8,09334E-05 | -0,004655569 | -0,002668342 | 0,008899608 | 1,41086E-05 | 2,4607E-07 | -4,93482E-06 |
| 299 | -1,15757E-07 | -1,87157E-05 | -1,16073E-05 | -1,58893E-07 | -5,24361E-07 | -1,66232E-05 | -9,52591E-08 | 1,30289E-06 | -5,18251E-07 |
| 300 | -0,002980079 | 8,09539E-05 | 3,69587E-05 | -0,00285798 | 3,44852E-05 | 3,63962E-05 | -0,001169466 | 2,41676E-06 | 9,50489E-06 |
| 301 | -0,002049956 | 4,48882E-06 | -2,32548E-07 | -0,001999871 | 3,52095E-06 | 7,47026E-07 | -0,000838187 | -9,07969E-06 | 2,38656E-05 |
| 302 | 0,002987441 | 8,36104E-05 | 3,69415E-05 | 0,002865181 | 3,67935E-05 | 3,66127E-05 | 0,001172469 | -4,67799E-06 | 2,69354E-05 |
| 303 | -1,29163E-07 | 1,87958E-05 | 2,09189E-05 | 3,77681E-08 | 1,46491E-05 | 1,1461E-06 | -7,17364E-07 | 0,000165565 | -0,000214365 |
| 304 | 0,003230038 | -8,36798E-05 | -6,14264E-05 | 0,003514049 | -3,67271E-05 | -6,17977E-05 | 0,004704267 | -0,002413083 | 0,008535363 |
| 305 | -0,002365339 | -4,43246E-06 | -1,03237E-06 | -0,002530015 | -5,63641E-06 | 1,27033E-06 | -0,009432087 | -0,000996224 | 0,001550354 |

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| Newton | C4 | | | C5 | | | C6 | | |
|---|---|---|---|---|---|---|---|---|---|
| Barra | L | T | V | L | T | V | L | T | V |
| 306 | -0,003221498 | -8,10617E-05 | -6,10572E-05 | -0,003504926 | -3,30412E-05 | -6,29918E-05 | -0,00467029 | -0,002663454 | 0,008910784 |
| 307 | 0,001983329 | -7,73558E-05 | -7,31171E-05 | -0,000109526 | -3,8256E-06 | 3,31024E-05 | -3,51869E-05 | 2,65801E-07 | -1,55507E-07 |
| 308 | 0,019872768 | 0,002490712 | -0,003362431 | -1,73012E-05 | -8,4213E-06 | 0,000114673 | -3,50943E-05 | 2,02914E-07 | 3,12926E-07 |
| 309 | 0,003952983 | -0,0002561 | -0,000216632 | 0,00165946 | -7,10161E-05 | -8,52336E-05 | -0,000107927 | -2,56854E-06 | 3,39663E-05 |
| 310 | 0,005361532 | 0,000243769 | 0,000329296 | 0,019463461 | 0,002497105 | -0,003418442 | -1,51671E-05 | -1,05873E-05 | 0,000110503 |
| 311 | 0,004233042 | 2,54504E-05 | -3,88369E-06 | 0,00412973 | 2,13268E-05 | 2,93677E-06 | 0,001732187 | -6,05986E-05 | 0,000155857 |
| 312 | 0,004884264 | -2,49652E-05 | -4,56371E-06 | 0,005224084 | -3,48373E-05 | 1,09633E-05 | 0,019475463 | 0,002396181 | -0,003592768 |
| 313 | 0,001696431 | -9,12376E-06 | 5,40785E-05 | -9,87381E-05 | -2,1478E-07 | 2,7589E-06 | -3,24456E-05 | 3,83452E-08 | -1,0558E-07 |
| 314 | -0,001700986 | 3,48881E-06 | 5,29424E-05 | 9,89895E-05 | 2,53375E-07 | -1,77587E-06 | 3,25338E-05 | -1,14983E-07 | 1,24891E-07 |
| 315 | 0,006702084 | 0,003505 | -0,01114557 | -1,86832E-05 | -5,8193E-07 | 7,4307E-06 | -3,33395E-05 | 1,23467E-07 | -2,24499E-07 |
| 316 | -0,006747546 | 0,003167658 | -0,010695267 | 1,87253E-05 | 6,70798E-07 | -8,37E-06 | 3,34264E-05 | 1,8421E-07 | -4,20809E-07 |
| 317 | -0,003238304 | 0,000126532 | 0,000123941 | -0,001436464 | 2,04617E-06 | 6,14613E-05 | 9,78969E-05 | -1,61578E-08 | -1,41376E-06 |
| 318 | 0,003229383 | 9,1547E-05 | 9,63633E-05 | 0,001432648 | -8,61829E-06 | 5,13063E-05 | -9,7652E-05 | -2,80082E-07 | 3,03175E-06 |
| 319 | 0,004627847 | -8,9459E-05 | -0,000167654 | 0,006365235 | 0,00350516 | -0,011147089 | -1,9517E-05 | -3,32203E-07 | 6,67044E-06 |
| 320 | -0,00464008 | -0,000122524 | -0,000213714 | -0,006409498 | 0,003165921 | -0,010682771 | 1,95568E-05 | 1,15675E-06 | -8,40559E-06 |
| 321 | -0,003371693 | 0,00024035 | 0,000109005 | -0,003415947 | 0,000103354 | 0,000107129 | -0,001510752 | 6,27969E-07 | 4,26469E-05 |
| 322 | 0,003362101 | 0,00024381 | 0,000108924 | 0,003406554 | 0,000106358 | 0,000107404 | 0,001506761 | -8,56406E-06 | 6,52601E-05 |
| 323 | 0,004381511 | -0,000243655 | -0,000181946 | 0,004531402 | -0,000104445 | -0,000183688 | 0,006390603 | 0,003499969 | -0,01115653 |
| 324 | -0,004392636 | -0,000240261 | -0,00018141 | -0,004543243 | -9,96685E-05 | -0,000185219 | -0,006434854 | 0,003174495 | -0,010668496 |
| 325 | 0,042512751 | -2,12019E-05 | 0,000519887 | 0,061618231 | 0,000207304 | 0,000349916 | 0,244647678 | 0,036278784 | -0,062034733 |
| 326 | -0,04308439 | -4,58459E-05 | 0,000669671 | -0,062210986 | 0,000181579 | 0,00038945 | -0,245970412 | 0,036210673 | -0,061935935 |
| 327 | -0,014070156 | 0,000284832 | 0,013268181 | -0,192990863 | 0,037229097 | -0,051145848 | -0,069076019 | 0,000257456 | -0,009572278 |
| 328 | 0,01353135 | 0,000346564 | 0,012946778 | 0,191797492 | 0,037278023 | -0,051220002 | 0,069074137 | 0,000198388 | -0,009482674 |
| 329 | -0,235235147 | 0,037720516 | -0,055166503 | -0,062886941 | 0,000351547 | -0,009965859 | -0,001602513 | -2,78412E-05 | 0,000186017 |
| 330 | 0,234024696 | 0,037587604 | -0,053903179 | 0,062908555 | 0,000280108 | -0,009837884 | 0,001617887 | -3,9184E-05 | 0,00019831 |
| 331 | 0,084254032 | -8,39001E-05 | 3,28383E-05 | -0,002247223 | -5,00233E-06 | 1,04183E-05 | -0,004805548 | 6,69912E-05 | -0,000117753 |
| 332 | 0,065989535 | -8,01803E-05 | 0,00058395 | -0,001479907 | -7,13934E-06 | 1,67798E-05 | -0,003615964 | -2,67222E-05 | 4,64425E-05 |
| 333 | 0,052759184 | -0,000162901 | 0,001313352 | -0,001513202 | -4,82226E-06 | 3,18753E-05 | -0,003010326 | 1,63158E-05 | -2,95163E-05 |
| 334 | -0,085255417 | -4,90723E-05 | 0,000853428 | 0,001508819 | 7,19815E-06 | 2,21402E-05 | 0,004478053 | 2,67457E-05 | -4,59931E-05 |
| 335 | -0,065572143 | 0,000127606 | -0,00083176 | 0,001819227 | 5,59198E-06 | -2,44509E-05 | 0,003764412 | -1,38392E-05 | 2,46665E-05 |
| 336 | -0,052796391 | 0,000143001 | -0,001145235 | 0,00151138 | 4,12299E-06 | -2,19339E-05 | 0,002995436 | -1,59219E-05 | 2,92695E-05 |
| 337 | 0,083935785 | 3,84331E-05 | -0,000855061 | -0,002239794 | -1,14734E-05 | 1,51645E-05 | -0,004828045 | -6,70401E-05 | 0,000119928 |
| 338 | 0,066248372 | -0,000126016 | 0,000922115 | -0,001479573 | -4,31504E-06 | 1,33074E-05 | -0,003603351 | 2,72537E-05 | -4,93051E-05 |
| 339 | 0,052686574 | -0,000121 | 0,000971174 | -0,001512392 | -6,56044E-06 | 3,11712E-05 | -0,002995503 | -1,53179E-05 | 2,65974E-05 |
| 340 | -0,085240864 | 3,84454E-05 | -4,37835E-06 | 0,001516286 | 3,63674E-06 | 1,72765E-05 | 0,004535992 | -2,66438E-05 | 4,81775E-05 |
| 341 | -0,065556281 | 7,46922E-05 | -0,000332811 | 0,00181774 | 7,23405E-06 | -2,03209E-05 | 0,003741063 | 1,32231E-05 | -2,31752E-05 |
| 342 | -0,052647594 | 0,000118374 | -0,000976955 | 0,001515003 | 5,58834E-06 | -2,38339E-05 | 0,003010715 | 1,50217E-05 | -2,56234E-05 |
| 343 | 0,023059479 | -0,000235599 | 0,002289835 | -0,001002222 | -3,40531E-06 | 5,15074E-05 | -0,001416124 | 5,58144E-06 | -1,19972E-05 |
| 344 | -0,024181897 | 0,00026502 | -0,002596023 | 0,001084104 | 3,90658E-06 | -5,86878E-05 | 0,001491064 | -4,34815E-06 | 9,68572E-06 |
| 345 | 0,02414767 | -0,000250034 | 0,002476712 | -0,001084603 | -4,05234E-06 | 5,39427E-05 | -0,001490777 | -2,8537E-06 | 4,24728E-06 |
| 346 | -0,023015114 | 0,000218551 | -0,00215385 | 0,001002711 | 3,83044E-06 | -4,74458E-05 | 0,001415648 | 4,17296E-06 | -7,05744E-06 |
| 347 | -7,80441E-06 | 4,5946E-06 | -3,48045E-05 | -9,6542E-08 | -3,11755E-09 | -1,96676E-06 | 1,87699E-07 | -1,6085E-06 | 3,49716E-06 |
| 348 | 0,002489612 | -2,22027E-05 | 0,000227935 | -9,44605E-05 | -3,89743E-07 | 4,57269E-06 | -0,000147147 | -9,9028E-07 | 1,691E-06 |
| 349 | -0,002496591 | 2,60788E-05 | -0,000255554 | 9,4322E-05 | 3,76647E-07 | -5,80962E-06 | 0,000147168 | -1,18875E-06 | 2,31372E-06 |

APOYO 1

| Newton | C4 | | | C5 | | | C6 | | |
|---|---|---|---|---|---|---|---|---|---|
| Barra | L | T | V | L | T | V | L | T | V |
| 350 | 0,000240256 | -3,29902E-05 | 0,000242847 | -1,50117E-05 | -4,40889E-07 | 1,72695E-05 | -2,03799E-05 | 7,5273E-06 | -1,81478E-05 |
| 351 | -2,57459E-05 | -1,18954E-05 | 1,15009E-05 | 7,32495E-07 | -1,93506E-06 | 9,33974E-06 | 1,23536E-06 | 6,52743E-06 | -4,96284E-06 |
| 352 | -0,000204163 | -3,18951E-05 | 0,000228049 | 1,60646E-05 | -5,05159E-07 | 1,70026E-05 | 1,93302E-05 | 7,75657E-06 | -1,85508E-05 |
| 353 | -6,24142E-06 | 8,21191E-06 | 7,8365E-06 | 7,72566E-07 | -2,2112E-06 | 8,82953E-06 | 9,15185E-07 | -2,09343E-05 | 4,30305E-05 |
| 354 | 0,004540235 | -0,000132254 | 0,000659819 | -0,00028002 | 6,42191E-08 | 6,7671E-05 | -0,000350023 | 8,05769E-05 | -0,000164125 |
| 355 | -0,005000758 | -5,27951E-05 | 0,00088444 | -0,000103318 | -1,18046E-05 | 6,75432E-05 | 0,000150933 | -9,94441E-05 | 0,000205655 |
| 356 | 0,00420297 | -3,12837E-05 | -0,000188337 | -0,00021658 | -5,26582E-06 | 6,80669E-05 | -0,000289637 | -1,09768E-05 | -2,07392E-06 |
| 357 | -0,004840953 | -6,64539E-05 | 0,000283971 | -0,000103628 | -6,44538E-06 | 3,75433E-05 | 0,000190262 | 2,87271E-05 | -2,40357E-05 |
| 358 | -0,003711554 | 5,63215E-05 | -0,000191511 | 0,000598188 | -7,55347E-06 | 2,0221E-05 | 0,000443493 | -0,000128014 | 0,000226117 |
| 359 | 0,005388529 | 9,82635E-05 | -0,000990236 | 0,000397934 | -5,67713E-07 | -2,08677E-05 | 3,36809E-05 | -6,08057E-07 | 1,29742E-06 |
| 360 | -0,003217367 | -0,00025178 | 0,002395856 | 0,000604951 | 5,69073E-06 | 2,44708E-05 | 0,000444465 | 0,000128009 | -0,00022728 |
| 361 | 0,004691341 | 5,8846E-05 | -0,000583957 | 0,000394997 | 3,54763E-07 | -1,48991E-05 | -7,57777E-05 | -2,47177E-08 | 2,92081E-07 |
| 362 | 0,005750393 | 8,92774E-05 | -0,000710495 | 1,44668E-05 | -3,59714E-07 | -3,59395E-05 | -0,000256201 | -2,98067E-05 | 6,20257E-05 |
| 363 | -0,005615267 | -1,91623E-05 | 0,000111709 | 0,00012234 | 5,37799E-06 | -1,90161E-05 | 0,000329782 | 4,14678E-05 | -8,58944E-05 |
| 364 | 0,005917014 | 6,13702E-05 | -0,000482468 | -7,96927E-06 | 1,54653E-06 | -3,75442E-05 | -0,000283528 | 4,36037E-07 | 8,48335E-06 |
| 365 | -0,005642777 | -1,18744E-05 | 0,000336068 | 0,000122478 | 2,98096E-06 | -6,21428E-06 | 0,000316154 | -1,21608E-05 | 1,00753E-05 |
| 366 | -0,017443965 | -8,99418E-05 | 0,000870133 | -9,61812E-06 | 3,70944E-06 | 9,43862E-06 | 0,000814793 | 4,63058E-05 | -8,22172E-05 |
| 367 | 0,016904683 | 3,78858E-05 | -0,000563974 | -0,000372234 | -6,87123E-07 | -1,04012E-05 | -0,000996989 | 1,72745E-07 | 9,97906E-08 |
| 368 | -0,017832705 | 1,69977E-05 | -2,61705E-05 | -1,46069E-05 | -1,23558E-06 | 9,50103E-06 | 0,000814279 | -4,57066E-05 | 8,0819E-05 |
| 369 | 0,017114625 | 7,00941E-05 | -0,000887726 | -0,000371045 | -1,0441E-06 | -1,55653E-05 | -0,000956251 | -5,64869E-07 | 1,4238E-06 |

## 2.3 REACCIONES

| REACCIONES EMPOTRAMIENTOS (Ri (N) Mi(N*m)) | | VIENTO | PESO | CT1 | | | CT2 | | |
|---|---|---|---|---|---|---|---|---|---|
| Nudo | Reacción | | | L | T | V | L | T | V |
| 1 | R longitudinal | -1363,32355 | -549,37239 | -0,250002907 | -0,243621481 | -0,017212209 | -0,230407132 | -0,243621475 | -0,014478095 |
| 1 | R vertical | 19758,45778 | 5850,85813 | 3,537374291 | 3,537361284 | 0,249999855 | 3,542737132 | 3,537361292 | 0,210254116 |
| 1 | R transversal | -3112,907524 | -592,8692296 | -0,274237835 | -0,249999614 | -0,019383655 | -0,294387685 | -0,249999619 | -0,019383613 |
| 1 | M longitudinal | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 1 | M vertical | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 1 | M transversal | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 12 | R longitudinal | 1363,323547 | -549,4580679 | -0,24999709 | 0,243621634 | -0,017212092 | -0,269592864 | 0,243621638 | -0,019946287 |
| 12 | R vertical | -19758,45778 | 5852,653511 | 3,53734749 | -3,537361284 | 0,250000145 | 3,531984649 | -3,537361292 | 0,289745884 |
| 12 | R transversal | -3112,907279 | 592,808484 | 0,27423494 | -0,250000479 | 0,019383545 | 0,254085082 | -0,250000476 | 0,01938353 |
| 12 | M longitudinal | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 12 | M vertical | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 12 | M transversal | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 13 | R longitudinal | -1363,323539 | 549,5188136 | -0,250000014 | -0,243621541 | 0,017212202 | -0,269595789 | -0,243621543 | 0,01994637 |
| 13 | R vertical | -19758,45771 | 5852,986664 | -3,53734749 | -3,537360497 | 0,249999855 | -3,531984649 | -3,537360488 | 0,289745372 |
| 13 | R transversal | -3112,907519 | 592,8692292 | -0,274234938 | -0,249999389 | 0,019383655 | -0,254085089 | -0,249999384 | 0,0193836 |
| 13 | M longitudinal | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 13 | M vertical | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 13 | M transversal | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 14 | R longitudinal | 1363,323542 | 549,3116444 | -0,249999988 | 0,243621388 | 0,017212099 | -0,230404215 | 0,24362138 | 0,014478012 |
| 14 | R vertical | 19758,45771 | 5850,524977 | -3,537374291 | 3,537360497 | 0,250000145 | -3,542737132 | 3,537360488 | 0,210254628 |
| 14 | R transversal | -3112,907269 | -592,8084835 | 0,274237833 | -0,250000518 | -0,019383545 | 0,294387692 | -0,250000521 | -0,019383517 |
| 14 | M longitudinal | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 14 | M vertical | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 14 | M transversal | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |

| REACCIONES EMPOTRAMIENTOS (Ri (N) Mi(N*m)) | | C1 | | | C2 | | | C3 | | |
|---|---|---|---|---|---|---|---|---|---|---|
| Nudo | Reacción | L | T | V | L | T | V | L | T | V |
| 1 | R longitudinal | -0,043358472 | -0,191714918 | 0,011472538 | -0,042655786 | -0,164396578 | 0,011468945 | -0,043905888 | -0,137066099 | 0,01147982 |
| 1 | R vertical | 2,831139569 | 2,782195836 | -0,167315724 | 2,430422928 | 2,38473983 | -0,167325738 | 2,05036989 | 1,987294682 | -0,167309669 |
| 1 | R transversal | -0,426219802 | -0,249999203 | -0,019382162 | -0,394615646 | -0,24999419 | -0,019371389 | -0,365023408 | -0,250010534 | -0,019378744 |
| 1 | M longitudinal | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 1 | M vertical | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 1 | M transversal | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 12 | R longitudinal | -0,456641768 | 0,191713024 | -0,045902899 | -0,457344488 | 0,164386231 | -0,045914386 | -0,456094531 | 0,1370241 | -0,046013456 |
| 12 | R vertical | 2,733248349 | -2,782195836 | 0,667315724 | 2,339052429 | -2,38473983 | 0,667325738 | 1,924192908 | -1,987294682 | 0,667309669 |
| 12 | R transversal | 0,004845164 | -0,250001198 | 0,019379184 | -0,025353935 | -0,2500063 | 0,019370621 | -0,057446515 | -0,249993233 | 0,019373229 |
| 12 | M longitudinal | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 12 | M vertical | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 12 | M transversal | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 13 | R longitudinal | -0,456641781 | -0,191712623 | 0,045905877 | -0,457344118 | -0,16438574 | 0,045915154 | -0,456093735 | -0,137020333 | 0,046018971 |
| 13 | R vertical | -2,733248349 | -2,782192081 | 0,667342464 | -2,339052429 | -2,384735528 | 0,667332449 | -1,924192908 | -1,987268116 | 0,667348518 |
| 13 | R transversal | -0,004845278 | -0,250000803 | 0,019382081 | 0,025353798 | -0,250005804 | 0,019371394 | 0,057446359 | -0,249989497 | 0,019378696 |
| 13 | M longitudinal | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 13 | M vertical | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 13 | M transversal | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 14 | R longitudinal | -0,043357978 | 0,191714517 | -0,011475516 | -0,042655607 | 0,164396087 | -0,011469714 | -0,043905846 | 0,137062332 | -0,011485335 |
| 14 | R vertical | -2,831139569 | 2,782192081 | -0,167342464 | -2,430422928 | 2,384735528 | -0,167332449 | -2,05036989 | 1,987268116 | -0,167348518 |
| 14 | R transversal | 0,426219917 | -0,249998796 | -0,019379102 | 0,394615783 | -0,249993706 | -0,019370626 | 0,365023563 | -0,250006736 | -0,019373182 |
| 14 | M longitudinal | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 14 | M vertical | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 14 | M transversal | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |

| REACCIONES EMPOTRAMIENTOS (Ri (N) Mi(N*m)) | | C4 | | | C5 | | | C6 | | |
|---|---|---|---|---|---|---|---|---|---|---|
| Nudo | Reacción | L | T | V | L | T | V | L | T | V |
| 1 | R longitudinal | -0,456641782 | -0,191712623 | -0,045905877 | -0,457344118 | -0,16438574 | -0,045915154 | -0,456093735 | -0,137020333 | -0,046018971 |
| 1 | R vertical | 2,733248352 | 2,782192081 | 0,667342461 | 2,33905243 | 2,384735528 | 0,667332449 | 1,924192909 | 1,987268116 | 0,667348518 |
| 1 | R transversal | -0,004845278 | -0,250000803 | -0,01938208 | 0,025353798 | -0,250005804 | -0,019371394 | 0,057446359 | -0,249989497 | -0,019378696 |
| 1 | M longitudinal | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 1 | M vertical | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 1 | M transversal | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 12 | R longitudinal | -0,043357978 | 0,191714517 | 0,011475516 | -0,042655607 | 0,164396087 | 0,011469714 | -0,043905846 | 0,137062332 | 0,011485335 |
| 12 | R vertical | 2,831139566 | -2,782192081 | -0,167342461 | 2,430422928 | -2,384735528 | -0,167332449 | 2,050369889 | -1,987268116 | -0,167348518 |
| 12 | R transversal | 0,426219916 | -0,249998796 | 0,019379103 | 0,394615783 | -0,249993705 | 0,019370626 | 0,365023563 | -0,250006736 | 0,019373182 |
| 12 | M longitudinal | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 12 | M vertical | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 12 | M transversal | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 13 | R longitudinal | -0,043358472 | -0,191714918 | -0,011472538 | -0,042655786 | -0,164396578 | -0,011468945 | -0,043905888 | -0,137066099 | -0,01147982 |
| 13 | R vertical | -2,831139566 | -2,782195836 | -0,167315727 | -2,430422928 | -2,38473983 | -0,167325738 | -2,050369889 | -1,987294682 | -0,167309669 |
| 13 | R transversal | -0,426219801 | -0,249999203 | 0,019382162 | -0,394615646 | -0,24999419 | 0,019371389 | -0,365023407 | -0,250010534 | 0,019378744 |
| 13 | M longitudinal | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 13 | M vertical | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 13 | M transversal | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 14 | R longitudinal | -0,456641768 | 0,191713024 | 0,045902899 | -0,457344488 | 0,164386231 | 0,045914386 | -0,456094531 | 0,1370241 | 0,046013456 |
| 14 | R vertical | -2,733248352 | 2,782195836 | 0,667315727 | -2,33905243 | 2,38473983 | 0,667325738 | -1,924192909 | 1,987294682 | 0,667309669 |
| 14 | R transversal | 0,004845163 | -0,250001198 | -0,019379184 | -0,025353935 | -0,2500063 | -0,019370621 | -0,057446514 | -0,249993233 | -0,019373229 |
| 14 | M longitudinal | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 14 | M vertical | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 14 | M transversal | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |

# 3 APOYO 2

## 3.1 DESPLAZAMIENTOS

| DESPLAZAMIENTOS (metros) | | VIENTO | PESO | CT1 | | | CT2 | | |
|---|---|---|---|---|---|---|---|---|---|
| Nudo | Desplazamiento | | | L | T | V | L | T | V |
| 1 | D Longitudinal | -8,60325E-06 | -4,11352E-07 | 1,08629E-05 | -5,58143E-11 | -3,24561E-10 | 1,08328E-05 | -1,00869E-10 | 2,83244E-09 |
| 1 | D Vertical | 0,000172697 | -0,000350358 | 4,27333E-08 | 4,22471E-08 | -2,92406E-08 | 3,90052E-08 | 4,22403E-08 | -2,4158E-08 |
| 1 | D transversal | 0,071642923 | 8,89572E-06 | -1,93567E-10 | 1,0865E-05 | 3,87075E-10 | 2,94759E-08 | 1,08648E-05 | 2,36375E-07 |
| 1 | G Longitudinal | 0,002889241 | 1,57824E-07 | 2,07011E-08 | 7,30346E-07 | -2,24208E-09 | -3,31892E-08 | 7,29989E-07 | 9,72333E-08 |
| 1 | G Vertical | 1,50679E-05 | -1,36534E-05 | 8,97335E-08 | -4,04118E-08 | -4,21456E-09 | 1,83914E-07 | -3,79793E-08 | -5,7973E-08 |
| 1 | G transversal | 9,81252E-06 | -3,91998E-06 | -7,18068E-07 | 2,0523E-09 | -4,56398E-09 | -6,9756E-07 | 2,04507E-09 | -1,15981E-08 |
| 2 | D Longitudinal | -8,60738E-06 | 6,32811E-07 | 1,08622E-05 | 6,13245E-11 | 4,35287E-10 | 1,08882E-05 | 1,54809E-10 | 3,61475E-09 |
| 2 | D Vertical | -0,000173571 | -0,000350714 | 4,22501E-08 | -4,2836E-08 | -2,92915E-08 | 4,16904E-08 | -4,2785E-08 | -3,2957E-08 |
| 2 | D transversal | 0,071642958 | 8,93009E-06 | -2,33215E-10 | 1,08654E-05 | 3,74526E-10 | 3,01635E-08 | 1,08656E-05 | 2,37743E-07 |
| 2 | G Longitudinal | 0,002884079 | 3,41909E-06 | 1,68292E-10 | 7,19879E-07 | -3,01557E-09 | -5,16855E-08 | 7,213E-07 | 1,00542E-07 |
| 2 | G Vertical | -1,62531E-05 | 2,23996E-06 | -2,87698E-08 | -8,93043E-08 | -7,21391E-09 | 1,89654E-07 | -9,61789E-08 | -1,83192E-07 |
| 2 | G transversal | 1,01823E-05 | 1,37908E-06 | -7,31127E-07 | 2,33801E-08 | 3,76601E-09 | -7,53616E-07 | 2,42602E-08 | 2,64622E-08 |
| 3 | D Longitudinal | -8,62028E-06 | 9,5642E-08 | 1,08626E-05 | -1,74816E-10 | 2,41327E-11 | 1,08605E-05 | -2,27873E-10 | 2,77184E-09 |
| 3 | D Vertical | -6,46846E-10 | -0,00035057 | -3,38146E-11 | 6,54631E-12 | -2,92644E-08 | -2,41327E-09 | 1,9379E-11 | -2,89562E-08 |
| 3 | D transversal | 0,071642944 | 8,39139E-06 | 1,72831E-10 | 1,08651E-05 | -4,60177E-12 | 1,29067E-09 | 1,08651E-05 | 2,3668E-07 |
| 3 | G Longitudinal | 0,002885606 | 2,71698E-06 | 5,19468E-09 | 7,08856E-07 | -3,42697E-11 | 4,24888E-09 | 7,08993E-07 | 7,27946E-08 |
| 3 | G Vertical | -5,35672E-08 | 8,63657E-06 | -3,51238E-09 | 6,79977E-10 | 6,41223E-09 | 4,69704E-07 | 1,02172E-09 | 4,66581E-09 |
| 3 | G transversal | 7,31328E-06 | -1,92118E-07 | -7,08796E-07 | 5,10738E-09 | 2,64987E-11 | -7,12672E-07 | 4,95407E-09 | -6,5458E-09 |
| 4 | D Longitudinal | -8,56747E-06 | 2,95133E-06 | 1,08608E-05 | 1,22696E-09 | 2,41327E-09 | 1,10222E-05 | 1,17642E-09 | 6,04601E-09 |
| 4 | D Vertical | -0,000938254 | -0,000352021 | -3,06092E-09 | -2,36779E-07 | -2,89562E-08 | -6,04601E-09 | -2,39236E-07 | -7,47719E-08 |
| 4 | D transversal | 0,071642954 | 8,46529E-06 | -5,29924E-11 | 1,08652E-05 | -1,9379E-11 | 1,17642E-09 | 1,08664E-05 | 2,39236E-07 |
| 4 | G Longitudinal | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 4 | G Vertical | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 4 | G transversal | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 5 | D Longitudinal | -8,60305E-06 | -4,18084E-07 | 1,08626E-05 | -1,63989E-11 | -3,72052E-10 | 1,08332E-05 | -1,27333E-10 | 2,73004E-09 |
| 5 | D Vertical | 0,000173574 | -0,000350412 | -4,21886E-08 | 4,28241E-08 | -2,92923E-08 | -4,3335E-08 | 4,2873E-08 | -2,50325E-08 |
| 5 | D transversal | 0,071642961 | 7,8773E-06 | 2,28663E-10 | 1,08653E-05 | -3,65739E-10 | -2,70763E-08 | 1,08651E-05 | 2,36468E-07 |
| 5 | G Longitudinal | 0,002884148 | 3,42216E-06 | 4,59218E-09 | 7,19023E-07 | 3,09878E-09 | 6,95981E-08 | 7,17669E-07 | 9,96158E-08 |
| 5 | G Vertical | 1,65025E-05 | 9,99775E-06 | 4,28319E-08 | 8,6582E-08 | -4,60238E-09 | 2,04805E-07 | 7,83593E-08 | 8,38903E-08 |
| 5 | G transversal | 1,02359E-05 | -2,21502E-07 | -7,28516E-07 | 2,28747E-08 | -3,83322E-09 | -6,89447E-07 | 2,18045E-08 | 1,15694E-08 |
| 6 | D Longitudinal | -8,61117E-06 | 6,10776E-07 | 1,08625E-05 | 2,48945E-11 | 3,96585E-10 | 1,08889E-05 | -1,38577E-10 | 3,06645E-09 |
| 6 | D Vertical | -0,000172702 | -0,000350707 | -4,29301E-08 | -4,2209E-08 | -2,92332E-08 | -4,70137E-08 | -4,22508E-08 | -3,36774E-08 |
| 6 | D transversal | 0,071642933 | 7,87598E-06 | 2,12125E-10 | 1,08649E-05 | -4,22047E-10 | -2,76552E-08 | 1,08651E-05 | 2,36529E-07 |
| 6 | G Longitudinal | 0,00288932 | 6,98396E-06 | 2,55689E-08 | 7,29404E-07 | 2,1748E-09 | 7,8941E-08 | 7,29122E-07 | 1,13012E-07 |
| 6 | G Vertical | -1,48054E-05 | -9,7669E-06 | -7,95028E-08 | 3,84312E-08 | -5,97061E-09 | 1,1827E-07 | 4,58647E-08 | 8,59361E-08 |
| 6 | G transversal | 9,7839E-06 | 3,49896E-06 | -7,20202E-07 | 2,46551E-09 | 4,34075E-09 | -7,30473E-07 | 3,45789E-09 | -6,45597E-09 |
| 7 | D Longitudinal | -7,70478E-06 | -6,36223E-07 | 1,07752E-05 | 1,07559E-09 | -7,76867E-10 | 1,07456E-05 | 9,94481E-10 | 2,56208E-09 |
| 7 | D Vertical | 0,000227385 | -0,000350286 | 5,67551E-08 | 5,56694E-08 | -2,89518E-08 | 5,14401E-08 | 5,56643E-08 | -2,27998E-08 |

APOYO 2

| DESPLAZAMIENTOS (metros) | | VIENTO | PESO | CT1 | | | CT2 | | |
|---|---|---|---|---|---|---|---|---|---|
| Nudo | Desplazamiento | | | L | T | V | L | T | V |
| 7 | D transversal | 0,071296473 | 8,63039E-06 | -9,23665E-10 | 1,07767E-05 | 5,96956E-10 | 3,65087E-08 | 1,07766E-05 | 2,24029E-07 |
| 7 | G Longitudinal | 0,002889871 | -2,32927E-07 | 1,9538E-08 | 7,26507E-07 | -1,88464E-09 | -2,35443E-08 | 7,26297E-07 | 8,46751E-08 |
| 7 | G Vertical | 1,53908E-05 | -1,4016E-05 | 8,97942E-08 | -3,91044E-08 | -4,6952E-09 | 1,80629E-07 | -3,6758E-08 | -5,5022E-08 |
| 7 | G transversal | 1,01249E-05 | -4,29409E-06 | -7,14258E-07 | 6,59229E-09 | -5,18942E-09 | -6,97304E-07 | 6,81298E-09 | -8,25758E-09 |
| 8 | D Longitudinal | -7,71609E-06 | 8,39973E-07 | 1,0774E-05 | 1,10502E-09 | 7,65294E-10 | 1,08013E-05 | 1,17563E-09 | 3,3237E-09 |
| 8 | D Vertical | -0,000228571 | -0,000350776 | 5,57509E-08 | -5,69113E-08 | -2,90547E-08 | 5,61095E-08 | -5,68943E-08 | -3,5132E-08 |
| 8 | D transversal | 0,071296491 | 8,61648E-06 | -9,77359E-10 | 1,07775E-05 | 6,08723E-10 | 3,88885E-08 | 1,07774E-05 | 2,23506E-07 |
| 8 | G Longitudinal | 0,002885703 | 2,01328E-06 | 6,0209E-09 | 7,15703E-07 | -4,25202E-09 | -2,27838E-08 | 7,16024E-07 | 6,84425E-08 |
| 8 | G Vertical | -1,69184E-05 | 2,37646E-06 | -2,77961E-08 | -8,94628E-08 | -7,61748E-09 | 1,84212E-07 | -9,61422E-08 | -1,78594E-07 |
| 8 | G transversal | 9,74065E-06 | 1,25769E-06 | -7,27533E-07 | 2,17253E-08 | 3,2467E-09 | -7,51797E-07 | 2,26174E-08 | 2,59534E-08 |
| 9 | D Longitudinal | -7,71013E-06 | -6,33077E-07 | 1,07744E-05 | 1,01864E-09 | -7,56542E-10 | 1,07467E-05 | 9,33451E-10 | 2,52016E-09 |
| 9 | D Vertical | 0,000228577 | -0,000350341 | -5,55299E-08 | 5,68685E-08 | -2,90484E-08 | -5,56563E-08 | 5,68815E-08 | -2,30548E-08 |
| 9 | D transversal | 0,071296483 | 7,28319E-06 | -1,22576E-09 | 1,07775E-05 | -6,46111E-10 | -3,87043E-08 | 1,07776E-05 | 2,23589E-07 |
| 9 | G Longitudinal | 0,002885734 | 3,3119E-06 | 8,47057E-09 | 7,15228E-07 | 4,04385E-09 | 5,33227E-08 | 7,15075E-07 | 8,3259E-08 |
| 9 | G Vertical | 1,71603E-05 | 9,91318E-06 | 4,13986E-08 | 8,68294E-08 | -5,08871E-09 | 1,99009E-07 | 7,88418E-08 | 8,07409E-08 |
| 9 | G transversal | 9,79523E-06 | -1,54601E-07 | -7,24876E-07 | 2,12108E-08 | -3,21474E-09 | -6,89584E-07 | 2,01353E-08 | 1,08729E-08 |
| 10 | D Longitudinal | -7,71215E-06 | 8,59391E-07 | 1,07747E-05 | 1,17241E-09 | 7,96495E-10 | 1,08034E-05 | 1,22827E-09 | 3,89917E-09 |
| 10 | D Vertical | -0,000227391 | -0,000350729 | -5,70128E-08 | -5,56195E-08 | -2,89475E-08 | -6,25283E-08 | -5,56336E-08 | -3,51657E-08 |
| 10 | D transversal | 0,071296469 | 7,24293E-06 | -1,25566E-09 | 1,07767E-05 | -5,93713E-10 | -3,86404E-08 | 1,07768E-05 | 2,21948E-07 |
| 10 | G Longitudinal | 0,002889929 | 6,43245E-06 | 2,31889E-08 | 7,25801E-07 | 1,89191E-09 | 6,25195E-08 | 7,25354E-07 | 9,5876E-08 |
| 10 | G Vertical | -1,51381E-05 | -1,03737E-05 | -8,00001E-08 | 3,72083E-08 | -6,38956E-09 | 1,10875E-07 | 4,44085E-08 | 8,05556E-08 |
| 10 | G transversal | 1,00792E-05 | 4,0853E-06 | -7,16605E-07 | 7,04655E-09 | 5,14763E-09 | -7,33113E-07 | 7,08372E-09 | -3,71492E-09 |
| 11 | D Longitudinal | -6,27426E-06 | -9,25524E-07 | 1,06127E-05 | 2,21653E-09 | -1,1145E-09 | 1,05866E-05 | 2,1604E-09 | 2,2035E-09 |
| 11 | D Vertical | 0,000329766 | -0,000350238 | -7,8902E-08 | 8,16862E-08 | -2,84696E-08 | -8,01081E-08 | 8,16899E-08 | -2,1766E-08 |
| 11 | D transversal | 0,070652842 | 6,42355E-06 | -5,25892E-09 | 1,06164E-05 | -1,48867E-09 | -5,23741E-08 | 1,06164E-05 | 2,07242E-07 |
| 11 | G Longitudinal | 0,002876027 | 6,49962E-07 | 1,45012E-08 | 7,0244E-07 | 5,23409E-09 | 1,55081E-08 | 7,04229E-07 | 4,61435E-08 |
| 11 | G Vertical | 1,71726E-05 | 9,17206E-06 | 3,73405E-08 | 8,60113E-08 | -6,1601E-09 | 1,80863E-07 | 7,88279E-08 | 6,86249E-08 |
| 11 | G transversal | 8,72194E-06 | 8,03037E-07 | -7,10989E-07 | 1,63024E-08 | -1,25399E-09 | -6,88187E-07 | 1,52578E-08 | 7,98489E-09 |
| 12 | D Longitudinal | -5,8973E-06 | 1,34095E-06 | 1,06134E-05 | 4,95386E-09 | 1,79854E-09 | 1,06432E-05 | 5,0064E-09 | 5,93645E-09 |
| 12 | D Vertical | -0,000328151 | -0,000350655 | -8,1855E-08 | -7,90156E-08 | -2,83485E-08 | -8,95239E-08 | -7,90294E-08 | -3,58737E-08 |
| 12 | D transversal | 0,07065204 | 6,45753E-06 | -2,86872E-09 | 1,0615E-05 | -7,31968E-10 | -5,00899E-08 | 1,0615E-05 | 2,0407E-07 |
| 12 | G Longitudinal | 0,002895448 | 3,85154E-06 | 1,6139E-08 | 7,11976E-07 | 9,54436E-10 | 1,32969E-08 | 7,11085E-07 | 4,37194E-08 |
| 12 | G Vertical | -1,47406E-05 | -1,2173E-05 | -8,00568E-08 | 3,38263E-08 | -7,22868E-09 | 8,83622E-08 | 4,0216E-08 | 6,18471E-08 |
| 12 | G transversal | 1,10908E-05 | 2,83635E-06 | -7,0391E-07 | 1,45177E-08 | 5,90437E-09 | -7,30167E-07 | 1,30087E-08 | 4,12795E-11 |
| 13 | D Longitudinal | -6,28477E-06 | 1,12229E-06 | 1,06121E-05 | 2,33426E-09 | 1,08118E-09 | 1,06402E-05 | 2,38095E-09 | 3,17409E-09 |
| 13 | D Vertical | -0,000329761 | -0,00035071 | 7,91452E-08 | -8,17333E-08 | -2,84655E-08 | 7,76915E-08 | -8,17283E-08 | -3,49927E-08 |
| 13 | D transversal | 0,070652855 | 8,45955E-06 | -4,55569E-09 | 1,06162E-05 | 1,48597E-09 | 4,26561E-08 | 1,06162E-05 | 2,10823E-07 |
| 13 | G Longitudinal | 0,002876063 | 1,60799E-06 | 1,57843E-08 | 7,02192E-07 | -5,86035E-09 | 3,20306E-08 | 7,00709E-07 | 9,30902E-09 |
| 13 | G Vertical | -1,69573E-05 | 2,56293E-06 | -2,52973E-08 | -8,83428E-08 | -8,40307E-09 | 1,65563E-07 | -9,43184E-08 | -1,59708E-07 |
| 13 | G transversal | 8,66812E-06 | 5,03364E-08 | -7,13635E-07 | 1,68146E-08 | 1,5641E-09 | -7,41562E-07 | 1,7693E-08 | 2,25925E-08 |
| 14 | D Longitudinal | -5,88374E-06 | -1,01729E-06 | 1,06142E-05 | 4,80843E-09 | -1,79531E-09 | 1,05843E-05 | 4,75732E-09 | 3,13509E-09 |
| 14 | D Vertical | 0,000328144 | -0,000350138 | 8,15488E-08 | 7,90749E-08 | -2,83527E-08 | 7,40541E-08 | 7,90612E-08 | -2,11886E-08 |
| 14 | D transversal | 0,070652057 | 8,25324E-06 | -1,83149E-09 | 1,06148E-05 | 7,63321E-10 | 4,41018E-08 | 1,06148E-05 | 2,07905E-07 |
| 14 | G Longitudinal | 0,002895453 | -5,4252E-07 | 1,61396E-08 | 7,11976E-07 | -7,36221E-10 | 6,03539E-09 | 7,12189E-07 | 4,60435E-08 |

APOYO 2

| DESPLAZAMIENTOS (metros) | | VIENTO | PESO | CT1 | | | CT2 | | |
|---|---|---|---|---|---|---|---|---|---|
| Nudo | Desplazamiento | | | L | T | V | L | T | V |
| 14 | G Vertical | 1,49598E-05 | -1,48985E-05 | 8,83703E-08 | -3,54358E-08 | -5,7464E-09 | 1,68252E-07 | -3,33909E-08 | -4,3568E-08 |
| 14 | G transversal | 1,11564E-05 | -2,76729E-06 | -7,01581E-07 | 1,40668E-08 | -5,63676E-09 | -6,91491E-07 | 1,46215E-08 | -3,49266E-09 |
| 15 | D Longitudinal | -3,54606E-06 | -1,64166E-06 | 1,03145E-05 | 3,8181E-09 | -1,12491E-09 | 1,02855E-05 | 3,79326E-09 | 8,89197E-10 |
| 15 | D Vertical | 0,000522068 | -0,000350148 | -1,22354E-07 | 1,25412E-07 | -2,73307E-08 | -1,21366E-07 | 1,25433E-07 | -1,96944E-08 |
| 15 | D transversal | 0,069438001 | 6,27904E-06 | -1,23285E-08 | 1,03174E-05 | -2,72112E-09 | -6,43798E-08 | 1,03174E-05 | 1,88332E-07 |
| 15 | G Longitudinal | 0,002878358 | 1,52579E-07 | 9,8416E-09 | 6,81613E-07 | 3,53823E-09 | -6,83791E-09 | 6,82618E-07 | 2,51435E-08 |
| 15 | G Vertical | 2,43248E-05 | 1,06882E-05 | 3,05289E-08 | 8,47295E-08 | -7,74444E-09 | 1,56762E-07 | 7,8439E-08 | 5,53377E-08 |
| 15 | G transversal | 1,06962E-05 | -3,64562E-06 | -6,87426E-07 | 1,82938E-08 | -1,27717E-09 | -6,77151E-07 | 1,73532E-08 | 5,66287E-09 |
| 16 | D Longitudinal | -2,02273E-06 | 1,06036E-06 | 1,03144E-05 | 1,19055E-08 | 3,13876E-09 | 1,03443E-05 | 1,18611E-08 | 7,85422E-09 |
| 16 | D Vertical | -0,000520797 | -0,000350522 | -1,25521E-07 | -1,2247E-07 | -2,72373E-08 | -1,29331E-07 | -1,22488E-07 | -3,41354E-08 |
| 16 | D transversal | 0,069430692 | 5,53181E-06 | -4,38463E-09 | 1,03166E-05 | -7,46213E-10 | -5,38526E-08 | 1,03166E-05 | 1,91619E-07 |
| 16 | G Longitudinal | 0,002870349 | 7,44126E-06 | 1,69049E-08 | 6,88195E-07 | 1,63907E-09 | -9,13429E-09 | 6,87178E-07 | 1,16608E-08 |
| 16 | G Vertical | -2,15383E-05 | -1,24161E-05 | -7,96104E-08 | 2,7802E-08 | -8,61297E-09 | 6,49496E-08 | 3,33325E-08 | 4,34353E-08 |
| 16 | G transversal | 1,23601E-05 | 3,09178E-06 | -6,82309E-07 | 1,02326E-08 | 3,69752E-09 | -7,021E-07 | 9,34291E-09 | -4,4399E-09 |
| 17 | D Longitudinal | -3,56383E-06 | 1,7585E-06 | 1,03136E-05 | 3,99064E-09 | 1,1241E-09 | 1,03426E-05 | 4,01632E-09 | 2,38553E-09 |
| 17 | D Vertical | -0,000522064 | -0,000350677 | 1,22556E-07 | -1,25451E-07 | -2,73238E-08 | 1,2329E-07 | -1,25433E-07 | -3,45174E-08 |
| 17 | D transversal | 0,069438016 | 7,42196E-06 | -1,14631E-08 | 1,03173E-05 | 2,7646E-09 | 3,90147E-08 | 1,03173E-05 | 1,96705E-07 |
| 17 | G Longitudinal | 0,002878382 | 1,2305E-06 | 1,13707E-08 | 6,81317E-07 | -3,8294E-09 | 3,38809E-08 | 6,80473E-07 | 8,05267E-09 |
| 17 | G Vertical | -2,41376E-05 | 5,0244E-06 | -2,02174E-08 | -8,67258E-08 | -9,69269E-09 | 1,46703E-07 | -9,19541E-08 | -1,40687E-07 |
| 17 | G transversal | 1,06561E-05 | 4,36425E-06 | -6,8946E-07 | 1,86875E-08 | 1,6901E-09 | -7,12117E-07 | 1,94784E-08 | 2,07994E-08 |
| 18 | D Longitudinal | -2,00228E-06 | -6,72878E-07 | 1,03154E-05 | 1,17169E-08 | -3,13088E-09 | 1,02851E-05 | 1,1718E-08 | 2,864E-09 |
| 18 | D Vertical | 0,000520792 | -0,000350039 | 1,25305E-07 | 1,22512E-07 | -2,72386E-08 | 1,21568E-07 | 1,225E-07 | -2,05407E-08 |
| 18 | D transversal | 0,069430709 | 8,19389E-06 | -3,49975E-09 | 1,03164E-05 | 7,45962E-10 | 4,59711E-08 | 1,03164E-05 | 1,93835E-07 |
| 18 | G Longitudinal | 0,002870391 | -6,13462E-06 | 1,89904E-08 | 6,87791E-07 | -1,34822E-09 | 2,91708E-08 | 6,8819E-07 | 1,76E-08 |
| 18 | G Vertical | 2,17234E-05 | -1,42914E-05 | 8,6466E-08 | -2,91292E-08 | -7,35224E-09 | 1,5532E-07 | -2,73853E-08 | -3,3209E-08 |
| 18 | G transversal | 1,23919E-05 | -3,39703E-06 | -6,81173E-07 | 1,00128E-08 | -3,50394E-09 | -6,73011E-07 | 1,03218E-08 | -7,87267E-09 |
| 19 | D Longitudinal | 1,03119E-06 | -6,05071E-06 | 9,91827E-06 | 1,03478E-08 | -2,12354E-09 | 9,88366E-06 | 1,03468E-08 | -7,7751E-11 |
| 19 | D Vertical | 0,000788947 | -0,000349978 | -1,77936E-07 | 1,83994E-07 | -2,61037E-08 | -1,81095E-07 | 1,84002E-07 | -1,8445E-08 |
| 19 | D transversal | 0,067749331 | 3,70606E-06 | -1,73666E-08 | 9,9195E-06 | -3,28763E-09 | -6,91251E-08 | 9,9195E-06 | 1,73079E-07 |
| 19 | G Longitudinal | 0,002895174 | 1,69132E-06 | 2,48283E-09 | 6,5748E-07 | 1,98012E-09 | -1,53506E-08 | 6,58157E-07 | 1,55903E-08 |
| 19 | G Vertical | 3,77332E-05 | 1,23365E-05 | 2,17398E-08 | 8,21472E-08 | -9,39615E-09 | 1,25541E-07 | 7,71872E-08 | 3,91567E-08 |
| 19 | G transversal | 1,39685E-05 | -8,88845E-07 | -6,64532E-07 | 2,55191E-08 | -3,71037E-09 | -6,58827E-07 | 2,47587E-08 | 5,22022E-09 |
| 20 | D Longitudinal | 2,26601E-06 | 3,36586E-06 | 9,91667E-06 | 1,69914E-08 | 3,63973E-09 | 9,94991E-06 | 1,69974E-08 | 7,41672E-09 |
| 20 | D Vertical | -0,000781401 | -0,000350304 | -1,84011E-07 | -1,78031E-07 | -2,60616E-08 | -1,89208E-07 | -1,78033E-07 | -3,37288E-08 |
| 20 | D transversal | 0,067768515 | 8,88185E-07 | -1,077E-08 | 9,92023E-06 | -1,81291E-09 | -6,17408E-08 | 9,92027E-06 | 1,76887E-07 |
| 20 | G Longitudinal | 0,002884889 | 5,40738E-06 | 2,48213E-08 | 6,64834E-07 | 3,87721E-09 | 1,29623E-08 | 6,642E-07 | 2,41229E-08 |
| 20 | G Vertical | -2,56511E-05 | -1,28863E-05 | -7,78769E-08 | 1,99899E-08 | -1,01021E-08 | 4,15637E-08 | 2,43503E-08 | 2,8002E-08 |
| 20 | G transversal | 1,08068E-05 | 5,51256E-06 | -6,57779E-07 | 2,88053E-09 | 1,92395E-09 | -6,68876E-07 | 2,26931E-09 | -5,87923E-09 |
| 21 | D Longitudinal | 1,01221E-06 | 6,17902E-06 | 9,91736E-06 | 1,05244E-08 | 2,1423E-09 | 9,95087E-06 | 1,053E-08 | 3,74616E-09 |
| 21 | D Vertical | -0,000788944 | -0,000350522 | 1,78061E-07 | -1,84018E-07 | -2,61065E-08 | 1,7507E-07 | -1,84011E-07 | -3,37407E-08 |
| 21 | D transversal | 0,067749348 | 8,87724E-06 | -1,65543E-08 | 9,91934E-06 | 3,28854E-09 | 3,51706E-08 | 9,91933E-06 | 1,80311E-07 |
| 21 | G Longitudinal | 0,002895198 | -7,69866E-07 | 4,00982E-09 | 6,57185E-07 | -2,16568E-09 | 2,4903E-08 | 6,56615E-07 | 6,03526E-09 |
| 21 | G Vertical | -3,75861E-05 | 7,92573E-06 | -1,37166E-08 | -8,37004E-08 | -1,09434E-08 | 1,22836E-07 | -8,78215E-08 | -1,13725E-07 |
| 21 | G transversal | 1,39504E-05 | 1,67675E-06 | -6,65522E-07 | 2,57108E-08 | 3,93706E-09 | -6,7545E-07 | 2,63356E-08 | 2,13933E-08 |

APOYO 2

| DESPLAZAMIENTOS (metros) | | VIENTO | PESO | CT1 | | | CT2 | | |
|---|---|---|---|---|---|---|---|---|---|
| Nudo | Desplazamiento | | | L | T | V | L | T | V |
| 22 | D Longitudinal | 2,28338E-06 | -3,07403E-06 | 9,91751E-06 | 1,68295E-08 | -3,63972E-09 | 9,88426E-06 | 1,68227E-08 | 7,74331E-10 |
| 22 | D Vertical | 0,000781399 | -0,000349751 | 1,83926E-07 | 1,78047E-07 | -2,6059E-08 | 1,78618E-07 | 1,78045E-07 | -1,8306E-08 |
| 22 | D transversal | 0,067768529 | 1,1803E-05 | -1,01408E-08 | 9,9201E-06 | 1,7955E-09 | 4,15567E-08 | 9,92007E-06 | 1,80223E-07 |
| 22 | G Longitudinal | 0,002884914 | -3,77709E-06 | 2,57355E-08 | 6,64657E-07 | -3,73686E-09 | 2,88961E-08 | 6,64827E-07 | 1,92545E-08 |
| 22 | G Vertical | 2,57966E-05 | -1,41506E-05 | 8,32583E-08 | -2,10317E-08 | -9,11126E-09 | 1,4323E-07 | -1,96521E-08 | -2,64116E-08 |
| 22 | G transversal | 1,08215E-05 | -5,8824E-06 | -6,57297E-07 | 2,78728E-09 | -1,77752E-09 | -6,54969E-07 | 2,9867E-09 | -7,26439E-09 |
| 23 | D Longitudinal | 5,10132E-06 | -3,45234E-06 | 9,51477E-06 | 1,64793E-08 | -3,29521E-09 | 9,4742E-06 | 1,64801E-08 | -3,1139E-10 |
| 23 | D Vertical | 0,001064749 | -0,0003487 | -2,34676E-07 | 2,41165E-07 | -2,49743E-08 | -2,37624E-07 | 2,4117E-07 | -1,63624E-08 |
| 23 | D transversal | 0,065981169 | 3,33257E-06 | -1,69323E-08 | 9,51578E-06 | -3,02642E-09 | -6,90246E-08 | 9,51578E-06 | 1,60669E-07 |
| 23 | G Longitudinal | 0,002877103 | -1,62274E-06 | -6,23696E-09 | 6,32115E-07 | 1,19639E-09 | -1,81107E-08 | 6,3271E-07 | 1,42205E-08 |
| 23 | G Vertical | 4,43124E-05 | 9,67469E-06 | 1,09115E-08 | 8,09116E-08 | -1,17515E-08 | 9,22667E-08 | 7,74192E-08 | 2,35005E-08 |
| 23 | G transversal | 9,33263E-06 | 8,56279E-06 | -6,45353E-07 | 1,17774E-08 | -1,74221E-09 | -6,40272E-07 | 1,12186E-08 | 3,73021E-09 |
| 24 | D Longitudinal | 5,09418E-06 | 3,48419E-06 | 9,51316E-06 | 1,66314E-08 | 3,29411E-09 | 9,55156E-06 | 1,66324E-08 | 5,81327E-09 |
| 24 | D Vertical | -0,001059379 | -0,000349032 | -2,41138E-07 | -2,34747E-07 | -2,49617E-08 | -2,44567E-07 | -2,34752E-07 | -3,36964E-08 |
| 24 | D transversal | 0,065983459 | 3,14243E-06 | -1,69235E-08 | 9,51674E-06 | -3,01472E-09 | -7,18897E-08 | 9,51674E-06 | 1,59889E-07 |
| 24 | G Longitudinal | 0,002925029 | -3,81613E-06 | 1,12594E-08 | 6,45416E-07 | 1,90086E-09 | -2,1102E-10 | 6,44984E-07 | 2,06071E-08 |
| 24 | G Vertical | -1,67673E-05 | -1,80505E-05 | -7,76546E-08 | 1,01861E-08 | -1,22197E-08 | 1,32056E-08 | 1,32415E-08 | 9,95762E-09 |
| 24 | G transversal | 4,92922E-06 | 1,56329E-06 | -6,32304E-07 | -5,92748E-09 | 1,13132E-09 | -6,37781E-07 | -6,44443E-09 | -3,8651E-09 |
| 25 | D Longitudinal | 5,08702E-06 | 3,64793E-06 | 9,5141E-06 | 1,66101E-08 | 3,29563E-09 | 9,55465E-06 | 1,6609E-08 | 5,80431E-09 |
| 25 | D Vertical | -0,001064748 | -0,000349314 | 2,34706E-07 | -2,41171E-07 | -2,49744E-08 | 2,31766E-07 | -2,41166E-07 | -3,35942E-08 |
| 25 | D transversal | 0,065981182 | 8,33993E-06 | -1,63235E-08 | 9,51566E-06 | 3,0262E-09 | 3,57792E-08 | 9,51566E-06 | 1,67151E-07 |
| 25 | G Longitudinal | 0,002877128 | 2,4255E-06 | -4,9719E-09 | 6,3187E-07 | -1,38583E-09 | 1,112E-08 | 6,31376E-07 | 4,96964E-09 |
| 25 | G Vertical | -4,42101E-05 | 6,49691E-06 | -5,32142E-09 | -8,19938E-08 | -1,28324E-08 | 9,85921E-08 | -8,48937E-08 | -8,61637E-08 |
| 25 | G transversal | 9,32545E-06 | -8,06414E-06 | -6,45801E-07 | 1,1864E-08 | 1,88718E-09 | -6,52885E-07 | 1,23219E-08 | 1,34219E-08 |
| 26 | D Longitudinal | 5,10774E-06 | -3,28841E-06 | 9,5138E-06 | 1,65067E-08 | -3,29379E-09 | 9,47538E-06 | 1,65058E-08 | -3,1467E-10 |
| 26 | D Vertical | 0,001059378 | -0,00034841 | 2,41109E-07 | 2,34752E-07 | -2,49617E-08 | 2,37677E-07 | 2,34747E-07 | -1,62186E-08 |
| 26 | D transversal | 0,065983472 | 8,47446E-06 | -1,62846E-08 | 9,51662E-06 | 3,01469E-09 | 3,86854E-08 | 9,51662E-06 | 1,66371E-07 |
| 26 | G Longitudinal | 0,002925048 | 5,23374E-06 | 1,1917E-08 | 6,45289E-07 | -1,81645E-09 | 1,78361E-08 | 6,4539E-07 | 1,81361E-08 |
| 26 | G Vertical | 1,6867E-05 | -1,86354E-05 | 8,12873E-08 | -1,08894E-08 | -1,15287E-08 | 1,30541E-07 | -9,93257E-09 | -1,95031E-08 |
| 26 | G transversal | 4,93869E-06 | -1,76225E-06 | -6,32055E-07 | -5,97557E-09 | -1,01862E-09 | -6,33375E-07 | -5,80986E-09 | -3,83531E-09 |
| 27 | D Longitudinal | -1,08554E-06 | 1,98076E-07 | 8,67149E-06 | -2,12392E-09 | 2,88217E-10 | 8,62353E-06 | -2,12432E-09 | 1,52035E-10 |
| 27 | D Vertical | 0,001664492 | -0,000345172 | -3,54192E-07 | 3,54182E-07 | -2,19029E-08 | -3,55148E-07 | 3,54183E-07 | -1,20503E-08 |
| 27 | D transversal | 0,062112377 | 3,56091E-06 | -2,15892E-09 | 8,67324E-06 | -3,02408E-10 | -5,33183E-08 | 8,67324E-06 | 1,42012E-07 |
| 27 | G Longitudinal | 0,002873269 | -2,85108E-06 | -5,09656E-09 | 6,08479E-07 | -1,95131E-10 | -8,28353E-09 | 6,08491E-07 | 1,53211E-08 |
| 27 | G Vertical | 6,26175E-05 | 8,7134E-06 | -5,20364E-09 | 8,05929E-08 | -1,59672E-08 | 2,77198E-08 | 8,02368E-08 | -9,39144E-09 |
| 27 | G transversal | 5,63352E-07 | 9,93045E-07 | -6,13513E-07 | -1,91219E-09 | 3,27686E-10 | -6,13736E-07 | -1,93062E-09 | -4,68628E-10 |
| 28 | D Longitudinal | 1,30222E-06 | 1,90926E-07 | 8,67105E-06 | 2,19997E-09 | 3,80889E-10 | 8,71851E-06 | 2,2008E-09 | 4,82065E-10 |
| 28 | D Vertical | -0,00166461 | -0,000345882 | -3,54055E-07 | -3,54215E-07 | -2,19455E-08 | -3,52907E-07 | -3,54216E-07 | -3,17681E-08 |
| 28 | D transversal | 0,062112991 | 6,66762E-06 | 1,93508E-09 | 8,67346E-06 | 3,69647E-10 | -4,98886E-08 | 8,67346E-06 | 1,42518E-07 |
| 28 | G Longitudinal | 0,002872354 | 4,21062E-06 | -2,32931E-09 | 6,1334E-07 | -2,13643E-10 | -7,47666E-09 | 6,13318E-07 | 1,52646E-08 |
| 28 | G Vertical | -1,37825E-05 | -2,39748E-05 | -7,95701E-08 | -3,7129E-09 | -1,59299E-08 | -5,00272E-08 | -3,46742E-09 | -2,78524E-08 |
| 28 | G transversal | -1,28847E-06 | 6,29041E-07 | -6,08362E-07 | -5,27012E-09 | -2,97341E-10 | -6,0669E-07 | -5,2783E-09 | -2,40241E-10 |
| 29 | D Longitudinal | -1,09003E-06 | -2,13301E-07 | 8,67128E-06 | -2,08252E-09 | -2,88241E-10 | 8,71924E-06 | -2,08211E-09 | -5,79944E-10 |
| 29 | D Vertical | -0,001664494 | -0,000345876 | 3,54093E-07 | -3,54163E-07 | -2,19029E-08 | 3,53136E-07 | -3,54162E-07 | -3,1832E-08 |

APOYO 2

| DESPLAZAMIENTOS (metros) | | VIENTO | PESO | CT1 | | | CT2 | | |
|---|---|---|---|---|---|---|---|---|---|
| Nudo | Desplazamiento | | | L | T | V | L | T | V |
| 29 | D transversal | 0,062112381 | 6,5781E-06 | -2,00007E-09 | 8,67321E-06 | 3,02414E-10 | 4,91586E-08 | 8,67321E-06 | 1,42733E-07 |
| 29 | G Longitudinal | 0,002873273 | 3,96119E-06 | -4,88223E-09 | 6,08437E-07 | 1,93568E-10 | -1,7528E-09 | 6,08427E-07 | 1,57795E-08 |
| 29 | G Vertical | -6,26116E-05 | 8,1583E-06 | 5,47357E-09 | -8,06451E-08 | -1,60531E-08 | 3,93424E-08 | -8,09319E-08 | -2,68267E-08 |
| 29 | G transversal | 5,68293E-07 | -1,03753E-06 | -6,13281E-07 | -1,95719E-09 | -3,18776E-10 | -6,13367E-07 | -1,94117E-09 | -6,66872E-10 |
| 30 | D Longitudinal | 1,30656E-06 | -1,78292E-07 | 8,67126E-06 | 2,15988E-09 | -3,80901E-10 | 8,6238E-06 | 2,15908E-09 | -1,27364E-10 |
| 30 | D Vertical | 0,001664612 | -0,00034518 | 3,54155E-07 | 3,54195E-07 | -2,19455E-08 | 3,55303E-07 | 3,54194E-07 | -1,20463E-08 |
| 30 | D transversal | 0,062112995 | 3,45969E-06 | 2,10083E-09 | 8,67343E-06 | -3,69636E-10 | 5,39238E-08 | 8,67343E-06 | 1,41898E-07 |
| 30 | G Longitudinal | 0,00287236 | -3,08931E-06 | -2,07307E-09 | 6,13291E-07 | 2,19828E-10 | 2,7527E-09 | 6,13302E-07 | 1,60573E-08 |
| 30 | G Vertical | 1,37833E-05 | -2,31265E-05 | 7,9386E-08 | 3,74854E-09 | -1,58933E-08 | 1,06185E-07 | 3,79024E-09 | -4,11973E-09 |
| 30 | G transversal | -1,29376E-06 | -6,32864E-07 | -6,08621E-07 | -5,21985E-09 | 2,98585E-10 | -6,10397E-07 | -5,21938E-09 | 1,37956E-10 |
| 31 | D Longitudinal | -1,05982E-06 | 8,10984E-07 | 8,06376E-06 | -1,4954E-09 | 1,3622E-10 | 8,01542E-06 | -1,49518E-09 | 2,61023E-11 |
| 31 | D Vertical | 0,001658292 | -0,000341997 | -3,44183E-07 | 3,44195E-07 | -2,05529E-08 | -3,44883E-07 | 3,44196E-07 | -1,15586E-08 |
| 31 | D transversal | 0,059240385 | 5,04909E-06 | -1,5785E-09 | 8,06586E-06 | -1,34199E-10 | -5,05677E-08 | 8,06586E-06 | 1,2586E-07 |
| 31 | G Longitudinal | 0,002872884 | 2,80899E-06 | 3,35493E-09 | 6,01901E-07 | 3,86059E-10 | 8,12677E-10 | 6,01899E-07 | 1,63342E-08 |
| 31 | G Vertical | 2,16585E-05 | 3,8012E-06 | -3,02735E-09 | 2,66049E-08 | -5,53744E-09 | 6,11872E-08 | 2,64804E-08 | -3,369E-09 |
| 31 | G transversal | -9,95776E-07 | 1,21861E-06 | -6,00754E-07 | -1,62776E-09 | 2,6352E-10 | -6,00233E-07 | -1,62197E-09 | 2,63807E-10 |
| 32 | D Longitudinal | 6,57446E-08 | 4,95502E-07 | 8,36752E-06 | 1,46638E-11 | 2,3773E-10 | 8,3674E-06 | 1,4743E-11 | 2,2867E-10 |
| 32 | D Vertical | 1,53143E-07 | -0,000342976 | -3,48862E-07 | 6,06697E-11 | -2,11328E-08 | -3,49027E-07 | 6,05079E-11 | -2,11771E-08 |
| 32 | D transversal | 0,06067394 | 4,80687E-06 | -4,40478E-11 | 8,3653E-06 | 1,69833E-11 | -5,01153E-08 | 8,3653E-06 | 1,3377E-07 |
| 32 | G Longitudinal | 0,002867841 | 6,03999E-07 | -9,55462E-11 | 6,04382E-07 | 2,91128E-11 | -2,04273E-09 | 6,04383E-07 | 1,62622E-08 |
| 32 | G Vertical | 2,01161E-06 | -3,52076E-08 | -2,80466E-10 | 3,21729E-09 | 3,72772E-12 | 8,24148E-08 | 3,21746E-09 | 1,93602E-10 |
| 32 | G transversal | -1,56904E-07 | 5,77281E-07 | -6,07566E-07 | -1,33795E-10 | -1,91268E-10 | -6,07296E-07 | -1,33541E-10 | -1,92597E-10 |
| 33 | D Longitudinal | 1,10611E-06 | 7,82021E-07 | 8,06378E-06 | 1,47801E-09 | 1,45595E-10 | 8,11216E-06 | 1,47768E-09 | 2,54479E-10 |
| 33 | D Vertical | -0,001658294 | -0,000342685 | -3,44116E-07 | -3,44197E-07 | -2,05812E-08 | -3,43419E-07 | -3,44197E-07 | -2,95763E-08 |
| 33 | D transversal | 0,059240365 | 3,96817E-06 | 1,56618E-09 | 8,06584E-06 | 1,47188E-10 | -4,73545E-08 | 8,06584E-06 | 1,26154E-07 |
| 33 | G Longitudinal | 0,002873614 | -1,70506E-06 | -1,57566E-09 | 6,00739E-07 | -2,22896E-10 | -4,10794E-09 | 6,00746E-07 | 1,56014E-08 |
| 33 | G Vertical | -4,82815E-06 | -9,45597E-06 | -2,63195E-08 | -2,58357E-09 | -5,52958E-09 | 3,67648E-08 | -2,49759E-09 | -9,75594E-09 |
| 33 | G transversal | 1,03894E-06 | 1,36606E-06 | -6,01799E-07 | 3,47149E-09 | 3,44363E-10 | -6,02316E-07 | 3,47266E-09 | 5,67498E-10 |
| 34 | D Longitudinal | 3,95407E-08 | -6,16068E-09 | 8,36318E-06 | 1,79821E-11 | 2,24352E-11 | 8,41137E-06 | 1,78483E-11 | -1,6735E-11 |
| 34 | D Vertical | -0,001661358 | -0,000344868 | -6,77567E-11 | -3,4881E-07 | -2,11337E-08 | -1,78938E-10 | -3,4881E-07 | -3,05354E-08 |
| 34 | D transversal | 0,06072808 | 5,28453E-06 | -1,18995E-11 | 8,36959E-06 | 2,38362E-10 | -1,60959E-10 | 8,36959E-06 | 1,34388E-07 |
| 34 | G Longitudinal | 0,002872361 | 2,63972E-06 | -1,29019E-10 | 6,07554E-07 | 1,93128E-10 | -5,00892E-10 | 6,07554E-07 | 1,64677E-08 |
| 34 | G Vertical | -3,4941E-07 | -7,68405E-08 | -3,10878E-09 | -1,94624E-10 | -7,45109E-11 | 8,33372E-08 | -1,94796E-10 | 2,20938E-11 |
| 34 | G transversal | -6,4246E-08 | -1,60006E-08 | -6,04241E-07 | -4,41185E-11 | -3,52966E-11 | -6,031E-07 | -4,52968E-11 | 4,02452E-11 |
| 35 | D Longitudinal | -1,06032E-06 | -8,19364E-07 | 8,06374E-06 | -1,49092E-09 | -1,36203E-10 | 8,11208E-06 | -1,49115E-09 | -2,61197E-10 |
| 35 | D Vertical | -0,001658294 | -0,000342639 | 3,44117E-07 | -3,44183E-07 | -2,05529E-08 | 3,43416E-07 | -3,44182E-07 | -2,95965E-08 |
| 35 | D transversal | 0,059240386 | 3,92424E-06 | -1,54879E-09 | 8,06586E-06 | 1,34198E-10 | 4,74407E-08 | 8,06586E-06 | 1,26148E-07 |
| 35 | G Longitudinal | 0,002872886 | -1,6709E-06 | 3,43651E-09 | 6,01885E-07 | -3,85609E-10 | 5,99305E-09 | 6,01887E-07 | 1,56482E-08 |
| 35 | G Vertical | -2,16565E-05 | 3,61641E-06 | 3,11986E-09 | -2,66228E-08 | -5,56759E-09 | 6,76705E-08 | -2,67232E-08 | -9,20538E-09 |
| 35 | G transversal | -9,93172E-07 | -1,21697E-06 | -6,00629E-07 | -1,65204E-09 | -2,65912E-10 | -6,01067E-07 | -1,65718E-09 | -2,4832E-10 |
| 36 | D Longitudinal | 6,57109E-08 | -4,96166E-07 | 8,36752E-06 | 1,49418E-11 | -2,37734E-10 | 8,36763E-06 | 1,48659E-11 | -2,47366E-10 |
| 36 | D Vertical | -1,53198E-07 | -0,000342973 | 3,4886E-07 | -6,02187E-11 | -2,11328E-08 | 3,48695E-07 | -6,03707E-11 | -2,10896E-08 |
| 36 | D transversal | 0,060673942 | 4,72038E-06 | 3,72544E-11 | 8,36529E-06 | -1,69809E-11 | 5,01083E-08 | 8,36529E-06 | 1,33794E-07 |
| 36 | G Longitudinal | 0,002867844 | 5,55754E-07 | 4,31081E-11 | 6,04355E-07 | -2,91061E-11 | 1,98983E-09 | 6,04354E-07 | 1,63081E-08 |

APOYO 2

| DESPLAZAMIENTOS (metros) | | VIENTO | PESO | CT1 | | | CT2 | | |
|---|---|---|---|---|---|---|---|---|---|
| Nudo | Desplazamiento | | | L | T | V | L | T | V |
| 36 | G Vertical | -2,01583E-06 | -5,39966E-08 | 7,97206E-11 | -3,17843E-09 | 3,67833E-12 | 8,27724E-08 | -3,17842E-09 | -3,36336E-10 |
| 36 | G transversal | -1,56807E-07 | -5,7739E-07 | -6,07561E-07 | -1,3463E-10 | 1,91194E-10 | -6,0783E-07 | -1,34668E-10 | 1,88403E-10 |
| 37 | D Longitudinal | 1,10663E-06 | -7,73707E-07 | 8,0638E-06 | 1,47332E-09 | -1,45592E-10 | 8,01542E-06 | 1,47364E-09 | -2,09584E-11 |
| 37 | D Vertical | 0,001658295 | -0,000342043 | 3,44182E-07 | 3,44184E-07 | -2,05812E-08 | 3,44878E-07 | 3,44183E-07 | -1,15367E-08 |
| 37 | D transversal | 0,059240366 | 5,00602E-06 | 1,5947E-09 | 8,06583E-06 | -1,47199E-10 | 5,0516E-08 | 8,06583E-06 | 1,25879E-07 |
| 37 | G Longitudinal | 0,002873616 | 2,83065E-06 | -1,50011E-09 | 6,00725E-07 | 2,21235E-10 | 1,1184E-09 | 6,00721E-07 | 1,60546E-08 |
| 37 | G Vertical | 4,82844E-06 | -9,15497E-06 | 2,62572E-08 | 2,59563E-09 | -5,51663E-09 | 8,83751E-08 | 2,61027E-09 | -1,33972E-09 |
| 37 | G transversal | 1,03656E-06 | -1,35291E-06 | -6,01912E-07 | 3,49332E-09 | -3,44681E-10 | -6,01368E-07 | 3,49424E-09 | -1,99405E-10 |
| 38 | D Longitudinal | 4,17128E-08 | 5,97018E-09 | 8,36328E-06 | -1,89448E-12 | -2,24405E-11 | 8,3151E-06 | -1,75603E-12 | 1,13241E-11 |
| 38 | D Vertical | 0,001661358 | -0,000344199 | 7,00376E-11 | 3,48809E-07 | -2,11337E-08 | -4,0936E-11 | 3,48809E-07 | -1,17309E-08 |
| 38 | D transversal | 0,06072808 | 4,26893E-06 | -1,04734E-11 | 8,36959E-06 | -2,3836E-10 | 1,38453E-10 | 8,36959E-06 | 1,33912E-07 |
| 38 | G Longitudinal | 0,002872361 | -1,48081E-06 | -1,24515E-10 | 6,07553E-07 | -1,93062E-10 | 2,47435E-10 | 6,07553E-07 | 1,60801E-08 |
| 38 | G Vertical | 3,52877E-07 | -7,97927E-08 | 3,27296E-09 | 1,62838E-10 | -7,43719E-11 | 8,97148E-08 | 1,62347E-10 | -5,84853E-11 |
| 38 | G transversal | -6,76055E-08 | 1,70522E-08 | -6,04402E-07 | -1,28496E-11 | 3,53067E-11 | -6,05544E-07 | -1,16794E-11 | -1,05655E-11 |
| 39 | D Longitudinal | 1,90793E-07 | -2,58052E-05 | 8,36256E-06 | 1,31307E-10 | 8,19146E-13 | 8,51027E-06 | 1,3134E-10 | 5,78775E-11 |
| 39 | D Vertical | -0,004919 | -0,001056244 | 1,74058E-07 | -1,05551E-06 | -2,16579E-08 | 1,74238E-07 | -1,05551E-06 | -5,01359E-08 |
| 39 | D transversal | 0,060709657 | -0,00028851 | -2,06451E-09 | 8,3704E-06 | 3,43632E-10 | 2,37883E-08 | 8,3704E-06 | 1,3465E-07 |
| 39 | G Longitudinal | 0,002877041 | 5,02253E-06 | -3,31849E-10 | 6,1135E-07 | 9,10647E-10 | 1,4051E-09 | 6,11363E-07 | 1,76416E-08 |
| 39 | G Vertical | -9,16444E-06 | 6,63725E-06 | -2,85459E-09 | -5,43945E-09 | -1,12258E-09 | 7,9808E-08 | -5,46353E-09 | -1,66971E-09 |
| 39 | G transversal | 2,21295E-05 | -3,16266E-05 | -6,09354E-07 | 1,43442E-08 | 2,7864E-09 | -6,00435E-07 | 1,43989E-08 | 4,55441E-09 |
| 40 | D Longitudinal | 2,55932E-07 | -2,5772E-05 | 8,36256E-06 | 1,31828E-10 | 9,05375E-13 | 8,51027E-06 | 1,31861E-10 | 5,80129E-11 |
| 40 | D Vertical | -0,004918625 | -0,000983197 | -1,74026E-07 | -1,05527E-06 | -2,16351E-08 | -1,73387E-07 | -1,05527E-06 | -5,00647E-08 |
| 40 | D transversal | 0,060710309 | -0,000269819 | 2,0543E-09 | 8,37072E-06 | 4,00352E-10 | -2,40674E-08 | 8,37072E-06 | 1,34559E-07 |
| 40 | G Longitudinal | 0,002873222 | -1,69099E-05 | -4,03378E-09 | 6,08181E-07 | -4,75567E-10 | -6,79778E-09 | 6,08192E-07 | 1,52759E-08 |
| 40 | G Vertical | 2,51108E-06 | -6,83763E-05 | -1,02728E-08 | -5,50947E-12 | -1,31728E-09 | 7,18601E-08 | 1,27026E-11 | -2,19116E-09 |
| 40 | G transversal | -7,16222E-06 | 0,000146679 | -5,91949E-07 | -1,93318E-09 | 2,66455E-09 | -5,81368E-07 | -1,97697E-09 | 4,85386E-09 |
| 41 | D Longitudinal | 1,18872E-06 | -2,51236E-06 | 8,06042E-06 | 7,21824E-10 | 5,62568E-11 | 8,20727E-06 | 7,21779E-10 | 1,41741E-10 |
| 41 | D Vertical | -0,004919065 | -0,001056179 | 1,74056E-07 | -1,0555E-06 | -2,16576E-08 | 1,74236E-07 | -1,0555E-06 | -5,01354E-08 |
| 41 | D transversal | 0,059240533 | 1,3925E-06 | -9,50448E-10 | 8,06528E-06 | 8,09359E-11 | 2,39678E-08 | 8,06528E-06 | 1,2607E-07 |
| 41 | G Longitudinal | 0,002876654 | 6,996E-06 | -1,60537E-09 | 6,11089E-07 | 6,65258E-10 | -2,34731E-09 | 6,11088E-07 | 1,72605E-08 |
| 41 | G Vertical | 1,08888E-07 | 3,76381E-06 | -3,35551E-09 | 4,64472E-10 | 2,40558E-11 | 8,29199E-08 | 4,64284E-10 | 1,6361E-10 |
| 41 | G transversal | 1,14825E-05 | -3,55006E-05 | -6,00249E-07 | -1,51202E-09 | -2,02972E-10 | -6,00305E-07 | -1,51438E-09 | -2,22608E-10 |
| 42 | D Longitudinal | -2,98689E-07 | -2,8603E-07 | 8,05568E-06 | -1,57794E-10 | -6,10595E-11 | 8,30429E-06 | -1,58507E-10 | 1,63693E-10 |
| 42 | D Vertical | -0,008325678 | -0,000387292 | 3,49694E-11 | -1,76318E-06 | -2,22655E-08 | 8,304E-10 | -1,76318E-06 | -6,98624E-08 |
| 42 | D transversal | 0,059241212 | -2,15298E-06 | 3,00304E-12 | 8,06548E-06 | 1,05323E-10 | 3,50209E-11 | 8,06548E-06 | 1,26086E-07 |
| 42 | G Longitudinal | 0,002968939 | -0,000827497 | -2,04417E-11 | 6,10174E-07 | 5,33543E-10 | -3,53617E-10 | 6,10174E-07 | 1,70361E-08 |
| 42 | G Vertical | -1,72236E-06 | -6,88691E-06 | -4,58766E-09 | -1,01719E-09 | -1,34156E-10 | 8,34935E-08 | -1,01789E-09 | -1,5095E-11 |
| 42 | G transversal | 1,82867E-06 | 0,000141006 | -6,01526E-07 | 1,15762E-09 | 1,55613E-10 | -6,02127E-07 | 1,15727E-09 | 2,62259E-10 |
| 43 | D Longitudinal | 1,24093E-06 | -2,49898E-06 | 8,06042E-06 | 7,22016E-10 | 5,62721E-11 | 8,20727E-06 | 7,21971E-10 | 1,4188E-10 |
| 43 | D Vertical | -0,00491869 | -0,000983087 | -1,74023E-07 | -1,05526E-06 | -2,16349E-08 | -1,73385E-07 | -1,05526E-06 | -5,00643E-08 |
| 43 | D transversal | 0,05924115 | 2,23107E-07 | 9,5633E-10 | 8,06567E-06 | 1,29759E-10 | -2,38974E-08 | 8,06567E-06 | 1,26103E-07 |
| 43 | G Longitudinal | 0,002876124 | -1,97591E-05 | 1,77062E-09 | 6,10492E-07 | 6,01333E-10 | 1,8588E-09 | 6,10491E-07 | 1,71563E-08 |
| 43 | G Vertical | -4,5276E-07 | 1,62712E-06 | -3,37021E-09 | -6,32797E-10 | -8,00912E-11 | 8,28892E-08 | -6,32944E-10 | -2,69872E-11 |
| 43 | G transversal | -9,8544E-06 | 0,000169896 | -6,0102E-07 | 3,57328E-09 | 3,6149E-10 | -6,01199E-07 | 3,57279E-09 | 6,24275E-10 |

APOYO 2

| DESPLAZAMIENTOS (metros) | | VIENTO | PESO | CT1 | | | CT2 | | |
|---|---|---|---|---|---|---|---|---|---|
| Nudo | Desplazamiento | | | L | T | V | L | T | V |
| 44 | D Longitudinal | 1,90127E-07 | 2,58086E-05 | 8,36253E-06 | 1,37374E-10 | -8,75399E-13 | 8,21483E-06 | 1,37453E-10 | 3,61006E-11 |
| 44 | D Vertical | 0,004918999 | -0,001054217 | -1,74085E-07 | 1,05551E-06 | -2,16578E-08 | -1,73908E-07 | 1,05551E-06 | 6,79672E-09 |
| 44 | D transversal | 0,060709655 | 0,000298073 | -2,15384E-09 | 8,37041E-06 | -3,43637E-10 | -2,80066E-08 | 8,37041E-06 | 1,33896E-07 |
| 44 | G Longitudinal | 0,002877041 | -3,84179E-06 | -3,32297E-10 | 6,1135E-07 | -9,06024E-10 | -2,14507E-09 | 6,11333E-07 | 1,56077E-08 |
| 44 | G Vertical | 9,16787E-06 | 6,66184E-06 | 3,01681E-09 | 5,40805E-09 | -1,11465E-09 | 8,55511E-08 | 5,37834E-09 | -8,24176E-10 |
| 44 | G transversal | 2,21267E-05 | 3,17059E-05 | -6,09494E-07 | 1,43712E-08 | -2,768E-09 | -6,18711E-07 | 1,43035E-08 | -1,96919E-09 |
| 45 | D Longitudinal | 2,55266E-07 | 2,57754E-05 | 8,36253E-06 | 1,37895E-10 | -9,61626E-13 | 8,21483E-06 | 1,37975E-10 | 3,6063E-11 |
| 45 | D Vertical | 0,004918626 | -0,000981172 | 1,74065E-07 | 1,05526E-06 | -2,16352E-08 | 1,74704E-07 | 1,05526E-06 | 6,82421E-09 |
| 45 | D transversal | 0,060710311 | 0,000279375 | 2,14703E-09 | 8,37071E-06 | -4,00342E-10 | 2,82684E-08 | 8,37071E-06 | 1,33826E-07 |
| 45 | G Longitudinal | 0,002873222 | 1,80328E-05 | -4,00014E-09 | 6,08175E-07 | 4,73978E-10 | -1,11471E-09 | 6,08174E-07 | 1,62572E-08 |
| 45 | G Vertical | -2,50818E-06 | -6,83115E-05 | 1,0393E-08 | -1,77665E-11 | -1,31453E-09 | 9,23152E-08 | -1,57312E-11 | -3,6943E-10 |
| 45 | G transversal | -7,16619E-06 | -0,000146531 | -5,9218E-07 | -1,88849E-09 | -2,6582E-09 | -6,03249E-07 | -1,88219E-09 | -6,7468E-10 |
| 46 | D Longitudinal | 1,18744E-06 | 2,51689E-06 | 8,06036E-06 | 7,33539E-10 | -5,62432E-11 | 7,9135E-06 | 7,33557E-10 | -1,43665E-11 |
| 46 | D Vertical | 0,004919064 | -0,001054152 | -1,74083E-07 | 1,05551E-06 | -2,16575E-08 | -1,73905E-07 | 1,05551E-06 | 6,79682E-09 |
| 46 | D transversal | 0,059240532 | 7,57886E-06 | -9,84761E-10 | 8,06529E-06 | -8,0939E-11 | -2,59026E-08 | 8,06529E-06 | 1,25883E-07 |
| 46 | G Longitudinal | 0,002876654 | -5,81363E-06 | -1,5954E-09 | 6,11087E-07 | -6,6546E-10 | -8,46069E-10 | 6,11088E-07 | 1,59424E-08 |
| 46 | G Vertical | -1,0607E-07 | 3,75732E-06 | 3,48942E-09 | -4,90397E-10 | 2,4051E-11 | 8,9765E-08 | -4,90565E-10 | -1,86495E-11 |
| 46 | G transversal | 1,14802E-05 | 3,54976E-05 | -6,00357E-07 | -1,49105E-09 | 2,02075E-10 | -6,00266E-07 | -1,48883E-09 | 1,28337E-10 |
| 47 | D Longitudinal | -3,04895E-07 | 2,94392E-07 | 8,05539E-06 | -1,00593E-10 | 6,10645E-11 | 7,80678E-06 | -9,98844E-11 | 7,09499E-11 |
| 47 | D Vertical | 0,008325679 | -0,000383902 | -2,29983E-11 | 1,76318E-06 | -2,22654E-08 | 7,70096E-10 | 1,76318E-06 | 2,53376E-08 |
| 47 | D transversal | 0,059241212 | 1,11247E-05 | 2,145E-12 | 8,06548E-06 | -1,05328E-10 | -2,94916E-11 | 8,06548E-06 | 1,25875E-07 |
| 47 | G Longitudinal | 0,002968939 | 0,000828672 | -1,52973E-11 | 6,10173E-07 | -5,33528E-10 | 3,1697E-10 | 6,10173E-07 | 1,59714E-08 |
| 47 | G Vertical | 1,72706E-06 | -6,88963E-06 | 4,81164E-09 | 9,73834E-10 | -1,34115E-10 | 9,28915E-08 | 9,73049E-10 | -9,08739E-11 |
| 47 | G transversal | 1,82729E-06 | -0,000141001 | -6,01593E-07 | 1,1706E-09 | -1,55232E-10 | -6,01004E-07 | 1,17015E-09 | -1,12311E-10 |
| 48 | D Longitudinal | 1,23966E-06 | 2,50352E-06 | 8,06036E-06 | 7,33748E-10 | -5,62585E-11 | 7,9135E-06 | 7,33767E-10 | -1,43263E-11 |
| 48 | D Vertical | 0,004918691 | -0,000981061 | 1,74063E-07 | 1,05526E-06 | -2,16349E-08 | 1,74701E-07 | 1,05526E-06 | 6,82433E-09 |
| 48 | D transversal | 0,059241151 | 8,74888E-06 | 9,88905E-10 | 8,06567E-06 | -1,29765E-10 | 2,5843E-08 | 8,06567E-06 | 1,25867E-07 |
| 48 | G Longitudinal | 0,002876124 | 2,0938E-05 | 1,76897E-09 | 6,10492E-07 | -6,01391E-10 | 1,68089E-09 | 6,10492E-07 | 1,5951E-08 |
| 48 | G Vertical | 4,55588E-07 | 1,6268E-06 | 3,5045E-09 | 6,06798E-10 | -8,01016E-11 | 8,97642E-08 | 6,06667E-10 | -3,60373E-11 |
| 48 | G transversal | -9,8565E-06 | -0,00016988 | -6,01121E-07 | 3,59272E-09 | -3,61267E-10 | -6,00945E-07 | 3,59347E-09 | -1,71356E-10 |
| 49 | D Longitudinal | -5,91497E-06 | 3,11874E-06 | 7,47329E-06 | -7,45324E-09 | 9,69898E-10 | 7,42668E-06 | -7,45253E-09 | 4,37091E-10 |
| 49 | D Vertical | 0,001646133 | -0,000336198 | -3,3029E-07 | 3,30317E-07 | -1,89231E-08 | -3,3063E-07 | 3,30317E-07 | -1,08579E-08 |
| 49 | D transversal | 0,056370569 | -3,13545E-07 | -7,33835E-09 | 7,47528E-06 | -9,69324E-10 | -5,2966E-08 | 7,47528E-06 | 1,10316E-07 |
| 49 | G Longitudinal | 0,002860645 | 3,2484E-06 | 7,18201E-09 | 5,77848E-07 | 6,40141E-10 | 3,91338E-09 | 5,77849E-07 | 1,44199E-08 |
| 49 | G Vertical | 7,05157E-06 | 1,63691E-06 | -2,92238E-09 | 9,60613E-09 | -2,38946E-09 | 6,79908E-08 | 9,55237E-09 | -1,54211E-09 |
| 49 | G transversal | -1,10656E-05 | 2,94832E-06 | -5,78082E-07 | -7,59096E-09 | 6,72019E-10 | -5,75834E-07 | -7,59217E-09 | 2,73841E-10 |
| 50 | D Longitudinal | 2,2049E-08 | 1,95126E-06 | 7,76853E-06 | -4,09601E-12 | 5,51284E-10 | 7,76853E-06 | -4,094E-12 | 5,51272E-10 |
| 50 | D Vertical | -7,66642E-09 | -0,000342461 | -3,40558E-07 | -1,55248E-11 | -2,02234E-08 | -3,40527E-07 | -1,5439E-11 | -2,02181E-08 |
| 50 | D transversal | 0,057800365 | 4,21835E-06 | 1,30857E-11 | 7,7646E-06 | -3,90799E-12 | -4,71345E-08 | 7,7646E-06 | 1,18237E-07 |
| 50 | G Longitudinal | 0,002857666 | 5,45375E-07 | -3,32931E-11 | 5,85347E-07 | 1,60982E-11 | -1,95694E-09 | 5,85347E-07 | 1,47274E-08 |
| 50 | G Vertical | 6,02118E-06 | -3,26518E-08 | -3,81518E-11 | 7,69529E-09 | -1,96277E-11 | 8,17603E-08 | 7,69444E-09 | 5,28326E-10 |
| 50 | G transversal | -2,6786E-08 | 2,29715E-06 | -5,90501E-07 | -1,54702E-11 | 8,18157E-10 | -5,90536E-07 | -1,51467E-11 | 8,13709E-10 |
| 51 | D Longitudinal | 5,95688E-06 | 3,0933E-06 | 7,47329E-06 | 7,45425E-09 | 9,53424E-10 | 7,51987E-06 | 7,45366E-09 | 1,48742E-09 |
| 51 | D Vertical | -0,001646137 | -0,000336787 | -3,3026E-07 | -3,30316E-07 | -1,89357E-08 | -3,29919E-07 | -3,30316E-07 | -2,70006E-08 |

APOYO 2

| DESPLAZAMIENTOS (metros) | | VIENTO | PESO | CT1 | | | CT2 | | |
|---|---|---|---|---|---|---|---|---|---|
| Nudo | Desplazamiento | | | L | T | V | L | T | V |
| 51 | D transversal | 0,056370571 | 8,25494E-06 | 7,37041E-09 | 7,47531E-06 | 9,54256E-10 | -3,82984E-08 | 7,47531E-06 | 1,12234E-07 |
| 51 | G Longitudinal | 0,002860425 | -2,23852E-06 | -7,70494E-09 | 5,78145E-07 | -6,57796E-10 | -1,09273E-08 | 5,78143E-07 | 1,31646E-08 |
| 51 | G Vertical | -4,41789E-06 | -4,99396E-06 | -9,75362E-09 | -3,01845E-09 | -2,39807E-09 | 6,06672E-08 | -2,98143E-09 | -4,31466E-09 |
| 51 | G transversal | 1,10472E-05 | 2,92229E-06 | -5,77768E-07 | 7,11024E-09 | 6,25773E-10 | -5,80048E-07 | 7,10966E-09 | 9,65198E-10 |
| 52 | D Longitudinal | 2,28449E-08 | -3,17787E-08 | 7,76257E-06 | -6,83697E-12 | -5,1637E-12 | 7,8102E-06 | -7,42583E-12 | 4,44168E-12 |
| 52 | D Vertical | -0,001655023 | -0,000341318 | 2,26896E-11 | -3,40708E-07 | -2,02232E-08 | 4,16807E-11 | -3,40708E-07 | -2,9003E-08 |
| 52 | D transversal | 0,057920936 | 6,09627E-06 | 3,88854E-12 | 7,77057E-06 | 5,51238E-10 | 1,09049E-11 | 7,77057E-06 | 1,19191E-07 |
| 52 | G Longitudinal | 0,002869807 | -4,29308E-06 | -1,52911E-11 | 5,90571E-07 | -8,1841E-10 | 3,78351E-11 | 5,90571E-07 | 1,39237E-08 |
| 52 | G Vertical | -3,11698E-08 | -3,60979E-08 | -7,68427E-09 | -4,6991E-11 | -1,56753E-11 | 7,38119E-08 | -4,63116E-11 | -3,36673E-11 |
| 52 | G transversal | -1,5445E-09 | -2,03236E-08 | -5,85235E-07 | -3,32786E-12 | -1,56353E-11 | -5,85473E-07 | -3,78829E-12 | 1,19849E-11 |
| 53 | D Longitudinal | -5,91418E-06 | -3,15559E-06 | 7,47333E-06 | -7,4608E-09 | -9,69919E-10 | 7,51993E-06 | -7,46152E-09 | -1,47222E-09 |
| 53 | D Vertical | -0,001646134 | -0,000336773 | 3,3026E-07 | -3,30311E-07 | -1,89231E-08 | 3,2992E-07 | -3,30311E-07 | -2,701E-08 |
| 53 | D transversal | 0,056370568 | 8,23774E-06 | -7,37225E-09 | 7,47529E-06 | 9,69309E-10 | 3,82558E-08 | 7,47529E-06 | 1,12228E-07 |
| 53 | G Longitudinal | 0,002860645 | -2,26616E-06 | 7,21955E-09 | 5,77841E-07 | -6,40265E-10 | 1,04847E-08 | 5,7784E-07 | 1,31603E-08 |
| 53 | G Vertical | -7,05064E-06 | 1,56353E-06 | 2,96499E-09 | -9,61438E-09 | -2,40248E-09 | 7,40234E-08 | -9,65769E-09 | -3,88233E-09 |
| 53 | G transversal | -1,10651E-05 | -2,97557E-06 | -5,78057E-07 | -7,5958E-09 | -6,71388E-10 | -5,80328E-07 | -7,59475E-09 | -1,03111E-09 |
| 54 | D Longitudinal | 2,20521E-08 | -1,95127E-06 | 7,76853E-06 | -4,12287E-12 | -5,51282E-10 | 7,76852E-06 | -4,12647E-12 | -5,5135E-10 |
| 54 | D Vertical | 7,68025E-09 | -0,000342461 | 3,40559E-07 | 1,54119E-11 | -2,02234E-08 | 3,40589E-07 | 1,54764E-11 | -2,0228E-08 |
| 54 | D transversal | 0,057800365 | 4,20163E-06 | -4,88573E-12 | 7,7646E-06 | 3,90388E-12 | 4,71429E-08 | 7,7646E-06 | 1,1823E-07 |
| 54 | G Longitudinal | 0,002857668 | 5,04241E-07 | 4,05539E-11 | 5,85333E-07 | -1,61E-11 | 1,96439E-09 | 5,85332E-07 | 1,47502E-08 |
| 54 | G Vertical | -6,02092E-06 | -7,12325E-08 | 5,18875E-11 | -7,69795E-09 | -1,96642E-11 | 8,18496E-08 | -7,69889E-09 | -5,56351E-10 |
| 54 | G transversal | -2,68033E-08 | -2,29753E-06 | -5,90502E-07 | -1,53502E-11 | -8,18215E-10 | -5,90466E-07 | -1,55662E-11 | -8,25054E-10 |
| 55 | D Longitudinal | 5,95607E-06 | -3,05641E-06 | 7,47325E-06 | 7,46191E-09 | -9,53412E-10 | 7,42667E-06 | 7,46251E-09 | -4,5103E-10 |
| 55 | D Vertical | 0,001646138 | -0,000336212 | 3,3029E-07 | 3,3031E-07 | -1,89357E-08 | 3,30631E-07 | 3,3031E-07 | -1,0849E-08 |
| 55 | D transversal | 0,05637057 | -3,31115E-07 | 7,33732E-09 | 7,47532E-06 | -9,54243E-10 | 5,30056E-08 | 7,47532E-06 | 1,10299E-07 |
| 55 | G Longitudinal | 0,002860426 | 3,22478E-06 | -7,66661E-09 | 5,78137E-07 | 6,58236E-10 | -4,46704E-09 | 5,78138E-07 | 1,45215E-08 |
| 55 | G Vertical | 4,41806E-06 | -4,85743E-06 | 9,72901E-09 | 3,02321E-09 | -2,39248E-09 | 7,97325E-08 | 3,02942E-09 | -4,96419E-10 |
| 55 | G transversal | 1,10466E-05 | -2,89893E-06 | -5,77797E-07 | 7,11589E-09 | -6,25695E-10 | -5,75525E-07 | 7,11592E-09 | -3,08944E-10 |
| 56 | D Longitudinal | 2,23708E-08 | 3,17557E-08 | 7,76255E-06 | -2,26345E-12 | 5,16635E-12 | 7,71492E-06 | -1,67576E-12 | -5,00819E-12 |
| 56 | D Vertical | 0,001655023 | -0,000340693 | -2,31412E-11 | 3,40708E-07 | -2,02232E-08 | -4,54967E-12 | 3,40708E-07 | -1,14439E-08 |
| 56 | D transversal | 0,057920936 | 2,35261E-06 | 3,79311E-12 | 7,77057E-06 | -5,51241E-10 | -3,02966E-12 | 7,77057E-06 | 1,18088E-07 |
| 56 | G Longitudinal | 0,002869807 | 5,34281E-06 | -1,6151E-11 | 5,90571E-07 | 8,18419E-10 | -6,80695E-11 | 5,90571E-07 | 1,5558E-08 |
| 56 | G Vertical | 3,11203E-08 | -3,51331E-08 | 7,68046E-09 | 4,77272E-11 | -1,55993E-11 | 8,91743E-08 | 4,82432E-11 | -5,77864E-12 |
| 56 | G transversal | -3,08782E-09 | 2,03359E-08 | -5,85309E-07 | 1,10027E-11 | 1,56293E-11 | -5,8507E-07 | 1,14696E-11 | -1,16959E-11 |
| 57 | D Longitudinal | 1,32195E-08 | 1,99769E-10 | 8,06534E-06 | -2,11701E-11 | 2,19807E-15 | 8,06534E-06 | -2,11694E-11 | 5,72636E-12 |
| 57 | D Vertical | 8,87915E-14 | -0,000531301 | 4,44645E-15 | -8,60807E-16 | -2,0567E-08 | -2,31173E-12 | -1,81182E-18 | -2,0567E-08 |
| 57 | D transversal | 0,059241636 | 4,49105E-06 | 2,86128E-11 | 8,06733E-06 | -6,74894E-15 | 2,89338E-11 | 8,06733E-06 | 1,26127E-07 |
| 57 | G Longitudinal | 0,002859234 | 5,53824E-07 | 1,48152E-12 | 5,93504E-07 | 2,6947E-15 | 1,50883E-12 | 5,93504E-07 | 1,55538E-08 |
| 57 | G Vertical | 4,83916E-11 | -3,48322E-08 | 2,34722E-12 | -4,54408E-13 | -1,55735E-12 | 8,38942E-08 | -5,01712E-13 | 3,7565E-13 |
| 57 | G transversal | 1,44565E-09 | -2,37271E-11 | -5,93434E-07 | 1,31745E-12 | -8,49056E-15 | -5,93433E-07 | 1,32941E-12 | -6,58758E-13 |
| 58 | D Longitudinal | -1,5745E-05 | 4,55692E-06 | 6,91011E-06 | -1,09101E-08 | 9,19134E-10 | 6,86585E-06 | -1,09095E-08 | 3,87569E-10 |
| 58 | D Vertical | 0,001625161 | -0,000328677 | -3,12416E-07 | 3,12459E-07 | -1,70939E-08 | -3,12482E-07 | 3,12459E-07 | -1,00207E-08 |
| 58 | D transversal | 0,053525173 | 1,30388E-07 | -1,10269E-08 | 6,91209E-06 | -9,17955E-10 | -5,3906E-08 | 6,91209E-06 | 9,73067E-08 |
| 58 | G Longitudinal | 0,002830165 | -1,04857E-06 | -3,74768E-09 | 5,48028E-07 | -5,96009E-10 | -6,45831E-09 | 5,48028E-07 | 1,16446E-08 |

APOYO 2

| DESPLAZAMIENTOS (metros) | | VIENTO | PESO | CT1 | | | CT2 | | |
|---|---|---|---|---|---|---|---|---|---|
| Nudo | Desplazamiento | | | L | T | V | L | T | V |
| 58 | G Vertical | -1,73316E-06 | 1,73631E-06 | -3,44425E-09 | 1,136E-09 | -9,82102E-10 | 6,78949E-08 | 1,1136E-09 | -7,43432E-10 |
| 58 | G transversal | 1,21726E-06 | -1,77695E-06 | -5,47866E-07 | 3,75833E-09 | -6,03613E-10 | -5,45154E-07 | 3,75845E-09 | -2,74908E-10 |
| 59 | D Longitudinal | 1,93621E-08 | 3,82817E-06 | 7,19172E-06 | -1,03548E-13 | 9,35034E-10 | 7,19171E-06 | -8,9796E-14 | 9,35269E-10 |
| 59 | D Vertical | -2,73298E-09 | -0,00033244 | -3,23483E-07 | 1,34583E-11 | -1,79813E-08 | -3,23502E-07 | 1,3379E-11 | -1,79838E-08 |
| 59 | D transversal | 0,054938972 | 3,7229E-06 | 2,50737E-11 | 7,186E-06 | -1,07836E-11 | -4,41149E-08 | 7,186E-06 | 1,04317E-07 |
| 59 | G Longitudinal | 0,002830874 | 4,65696E-07 | -1,09967E-11 | 5,57995E-07 | 4,56311E-12 | -1,39603E-09 | 5,57995E-07 | 1,30576E-08 |
| 59 | G Vertical | 1,86509E-05 | -2,38141E-08 | 1,24732E-11 | 1,57943E-08 | -2,35113E-11 | 7,83113E-08 | 1,57932E-08 | 8,90432E-10 |
| 59 | G transversal | -1,40846E-08 | 1,43818E-06 | -5,63155E-07 | -1,39365E-11 | -5,26166E-11 | -5,63137E-07 | -1,3946E-11 | -5,6058E-11 |
| 60 | D Longitudinal | 1,57806E-05 | 4,5437E-06 | 6,91018E-06 | 1,09087E-08 | 8,97679E-10 | 6,95445E-06 | 1,0908E-08 | 1,429E-09 |
| 60 | D Vertical | -0,001625164 | -0,000329181 | -3,12413E-07 | -3,12457E-07 | -1,70962E-08 | -3,1235E-07 | -3,12457E-07 | -2,41697E-08 |
| 60 | D transversal | 0,053525178 | 6,89402E-06 | 1,10728E-08 | 6,91207E-06 | 8,98743E-10 | -3,17869E-08 | 6,91207E-06 | 9,91261E-08 |
| 60 | G Longitudinal | 0,00283024 | 1,88367E-06 | 3,88671E-09 | 5,47974E-07 | 6,00169E-10 | 1,12782E-09 | 5,47974E-07 | 1,2824E-08 |
| 60 | G Vertical | -6,57243E-06 | -5,18519E-06 | -1,82338E-09 | -4,14597E-09 | -1,0137E-09 | 6,9313E-08 | -4,13059E-09 | -1,92602E-09 |
| 60 | G transversal | -1,21932E-06 | -1,77294E-06 | -5,47917E-07 | -3,63008E-09 | -5,9185E-10 | -5,50599E-07 | -3,62982E-09 | -9,05863E-10 |
| 61 | D Longitudinal | 1,97197E-08 | -3,12052E-08 | 7,18406E-06 | -5,70677E-12 | -1,16985E-11 | 7,22961E-06 | -6,4068E-12 | 9,84256E-12 |
| 61 | D Vertical | -0,001641336 | -0,000334068 | -1,73811E-11 | -3,23386E-07 | -1,79814E-08 | -2,90679E-11 | -3,23386E-07 | -2,55534E-08 |
| 61 | D transversal | 0,055063336 | 7,56254E-06 | 2,84831E-14 | 7,19369E-06 | 9,35068E-10 | -5,33466E-12 | 7,19369E-06 | 1,05674E-07 |
| 61 | G Longitudinal | 0,002845412 | 1,35641E-06 | -1,47669E-11 | 5,63228E-07 | 5,28792E-11 | -4,51784E-11 | 5,63228E-07 | 1,31122E-08 |
| 61 | G Vertical | -2,11936E-08 | -2,77009E-08 | -1,58652E-08 | -1,738E-11 | 7,50412E-12 | 6,04196E-08 | -1,64322E-11 | -2,21651E-11 |
| 61 | G transversal | -2,90815E-09 | -7,38022E-10 | -5,57912E-07 | -1,90712E-12 | -4,73487E-12 | -5,58703E-07 | -1,95193E-12 | 3,0293E-12 |
| 62 | D Longitudinal | -1,5744E-05 | -4,5934E-06 | 6,91016E-06 | -1,09198E-08 | -9,19123E-10 | 6,95442E-06 | -1,09203E-08 | -1,41188E-09 |
| 62 | D Vertical | -0,001625161 | -0,000329181 | 3,12411E-07 | -3,12458E-07 | -1,70939E-08 | 3,12345E-07 | -3,12458E-07 | -2,41709E-08 |
| 62 | D transversal | 0,053525172 | 6,86346E-06 | -1,10708E-08 | 6,9121E-06 | 9,17963E-10 | 3,18081E-08 | 6,9121E-06 | 9,9109E-08 |
| 62 | G Longitudinal | 0,002830165 | 1,91997E-06 | -3,75849E-09 | 5,4803E-07 | 5,96029E-10 | -1,04655E-09 | 5,4803E-07 | 1,28295E-08 |
| 62 | G Vertical | 1,73359E-06 | 1,71394E-06 | 3,46397E-09 | -1,13982E-09 | -9,87522E-10 | 7,48635E-08 | -1,15787E-09 | -1,48794E-09 |
| 62 | G transversal | 1,21715E-06 | 1,80006E-06 | -5,47872E-07 | 3,75948E-09 | 6,03462E-10 | -5,5058E-07 | 3,75942E-09 | 9,22064E-10 |
| 63 | D Longitudinal | 1,93603E-08 | -3,82815E-06 | 7,19172E-06 | -8,95649E-14 | -9,35036E-10 | 7,19172E-06 | -1,00359E-13 | -9,34912E-10 |
| 63 | D Vertical | 2,72445E-09 | -0,00033244 | 3,23483E-07 | -1,33889E-11 | -1,79813E-08 | 3,23465E-07 | -1,34426E-11 | -1,79794E-08 |
| 63 | D transversal | 0,054938971 | 3,7054E-06 | -2,40446E-11 | 7,18601E-06 | 1,07824E-11 | 4,41159E-08 | 7,18601E-06 | 1,043E-07 |
| 63 | G Longitudinal | 0,002830875 | 4,64433E-07 | 1,07216E-11 | 5,57991E-07 | -4,56367E-12 | 1,39574E-09 | 5,57991E-07 | 1,30642E-08 |
| 63 | G Vertical | -1,86493E-05 | -8,67888E-08 | 6,42629E-11 | -1,58091E-08 | -2,35268E-11 | 7,83628E-08 | -1,58102E-08 | -8,78649E-10 |
| 63 | G transversal | -1,40745E-08 | -1,43841E-06 | -5,63155E-07 | -1,40181E-11 | 5,26043E-11 | -5,63172E-07 | -1,39756E-11 | 4,94695E-11 |
| 64 | D Longitudinal | 1,57796E-05 | -4,50722E-06 | 6,91013E-06 | 1,09183E-08 | -8,97688E-10 | 6,86586E-06 | 1,09189E-08 | -4,04524E-10 |
| 64 | D Vertical | 0,001625164 | -0,000328677 | 3,12418E-07 | 3,12456E-07 | -1,70962E-08 | 3,12481E-07 | 3,12456E-07 | -1,00189E-08 |
| 64 | D transversal | 0,053525177 | 9,99861E-08 | 1,10284E-08 | 6,91208E-06 | -8,98753E-10 | 5,38884E-08 | 6,91208E-06 | 9,72941E-08 |
| 64 | G Longitudinal | 0,00283024 | -1,01367E-06 | 3,8764E-09 | 5,47976E-07 | -6,00275E-10 | 6,64092E-09 | 5,47976E-07 | 1,16122E-08 |
| 64 | G Vertical | 6,57255E-06 | -5,12015E-06 | 1,81533E-09 | 4,14753E-09 | -1,01138E-09 | 7,2778E-08 | 4,15008E-09 | -1,06069E-10 |
| 64 | G transversal | -1,21917E-06 | 1,75083E-06 | -5,47909E-07 | -3,63153E-09 | 5,91819E-10 | -5,45225E-07 | -3,63166E-09 | 2,84646E-10 |
| 65 | D Longitudinal | 1,85893E-08 | 3,12255E-08 | 7,184E-06 | 4,92727E-12 | 1,1696E-11 | 7,13845E-06 | 5,63098E-12 | -9,26474E-12 |
| 65 | D Vertical | 0,001641336 | -0,000333529 | 1,7586E-11 | 3,23386E-07 | -1,79814E-08 | 6,33891E-12 | 3,23386E-07 | -1,04088E-08 |
| 65 | D transversal | 0,055063336 | -1,03571E-07 | 1,28911E-13 | 7,19369E-06 | -9,35069E-10 | 5,4933E-12 | 7,19369E-06 | 1,03804E-07 |
| 65 | G Longitudinal | 0,002845412 | -4,26376E-07 | -1,40946E-11 | 5,63228E-07 | -5,28712E-11 | 1,64446E-11 | 5,63228E-07 | 1,3007E-08 |
| 65 | G Vertical | 1,98255E-08 | -2,74902E-08 | 1,57984E-08 | 3,0299E-11 | 7,53555E-12 | 9,20822E-08 | 3,11784E-11 | -1,59067E-11 |
| 65 | G transversal | -3,3637E-09 | 7,29362E-10 | -5,57933E-07 | 2,28935E-12 | 4,7374E-12 | -5,57142E-07 | 2,3307E-12 | -3,27112E-12 |

APOYO 2

| DESPLAZAMIENTOS (metros) | | VIENTO | PESO | CT1 | | | CT2 | | |
|---|---|---|---|---|---|---|---|---|---|
| Nudo | Desplazamiento | | | L | T | V | L | T | V |
| 66 | D Longitudinal | -4,84693E-06 | 8,86277E-07 | 6,37949E-06 | -2,94451E-09 | 2,1499E-10 | 6,33794E-06 | -2,94419E-09 | 7,58662E-11 |
| 66 | D Vertical | 0,001596476 | -0,000320967 | -2,92592E-07 | 2,92629E-07 | -1,5455E-08 | -2,92461E-07 | 2,92629E-07 | -9,32188E-09 |
| 66 | D transversal | 0,050718649 | 9,1785E-07 | -2,74578E-09 | 6,38137E-06 | -2,13922E-10 | -4,32582E-08 | 6,38137E-06 | 8,66191E-08 |
| 66 | G Longitudinal | 0,002774441 | -2,74717E-06 | -5,96366E-09 | 5,11764E-07 | -5,21726E-10 | -7,19621E-09 | 5,11764E-07 | 1,00938E-08 |
| 66 | G Vertical | -1,01847E-05 | 2,12477E-06 | -4,65185E-09 | -4,66952E-09 | -2,89812E-10 | 6,43591E-08 | -4,67686E-09 | -3,93341E-10 |
| 66 | G transversal | 9,39851E-06 | -2,53617E-06 | -5,11851E-07 | 6,07829E-09 | -5,21697E-10 | -5,09785E-07 | 6,07792E-09 | -2,57774E-10 |
| 67 | D Longitudinal | 1,62782E-08 | 2,71449E-06 | 6,64482E-06 | 8,23451E-14 | 5,58468E-10 | 6,64483E-06 | 6,72654E-14 | 5,58423E-10 |
| 67 | D Vertical | 2,50592E-09 | -0,000324626 | -2,97706E-07 | -4,14447E-12 | -1,58694E-08 | -2,977E-07 | -4,11326E-12 | -1,58686E-08 |
| 67 | D transversal | 0,052109691 | 3,30149E-06 | 1,9226E-11 | 6,63819E-06 | -8,54962E-12 | -4,15881E-08 | 6,63819E-06 | 9,21163E-08 |
| 67 | G Longitudinal | 0,002789749 | 4,00286E-07 | 5,25625E-12 | 5,25499E-07 | -1,85299E-12 | -9,66627E-10 | 5,25498E-07 | 1,13865E-08 |
| 67 | G Vertical | 1,76926E-05 | -2,22265E-08 | 3,51501E-11 | 1,18843E-08 | -1,75525E-11 | 7,39982E-08 | 1,18835E-08 | 5,56641E-10 |
| 67 | G transversal | -8,06411E-09 | -3,65456E-06 | -5,30648E-07 | -3,94894E-12 | -6,98714E-10 | -5,30655E-07 | -3,86999E-12 | -6,99806E-10 |
| 68 | D Longitudinal | 4,8765E-06 | 8,71047E-07 | 6,37951E-06 | 2,94627E-09 | 2,0207E-10 | 6,42106E-06 | 2,94595E-09 | 3,41257E-10 |
| 68 | D Vertical | -0,00159648 | -0,000321405 | -2,92597E-07 | -2,92629E-07 | -1,54524E-08 | -2,92728E-07 | -2,92629E-07 | -2,15855E-08 |
| 68 | D transversal | 0,05071864 | 5,32024E-06 | 2,76937E-09 | 6,38137E-06 | 2,03108E-10 | -3,77445E-08 | 6,38137E-06 | 8,70359E-08 |
| 68 | G Longitudinal | 0,002774397 | 3,50683E-06 | 5,95543E-09 | 5,11766E-07 | 5,09976E-10 | 4,75071E-09 | 5,11766E-07 | 1,11321E-08 |
| 68 | G Vertical | -1,19315E-05 | -8,12217E-06 | 2,93569E-09 | -6,47266E-09 | -3,67477E-10 | 7,1878E-08 | -6,46766E-09 | -8,51202E-10 |
| 68 | G transversal | -9,40899E-06 | -2,49552E-06 | -5,11884E-07 | -6,10873E-09 | -5,11856E-10 | -5,13967E-07 | -6,10841E-09 | -7,79215E-10 |
| 69 | D Longitudinal | 1,68844E-08 | -1,81642E-08 | 6,63632E-06 | -3,82302E-12 | -9,63436E-12 | 6,67931E-06 | -4,3137E-12 | 7,54063E-12 |
| 69 | D Vertical | -0,001604512 | -0,000323412 | 6,07036E-12 | -2,97934E-07 | -1,58693E-08 | 9,12655E-12 | -2,97934E-07 | -2,22499E-08 |
| 69 | D transversal | 0,052237373 | 6,08575E-06 | 2,5151E-13 | 6,64673E-06 | 5,58434E-10 | 4,70309E-12 | 6,64673E-06 | 9,30748E-08 |
| 69 | G Longitudinal | 0,002806522 | 1,6E-06 | -4,22368E-12 | 5,30717E-07 | 6,98831E-10 | 5,76091E-12 | 5,30717E-07 | 1,20849E-08 |
| 69 | G Vertical | -5,45272E-09 | -4,6748E-08 | -1,18776E-08 | 4,67366E-12 | 1,01022E-11 | 5,99927E-08 | 5,33947E-12 | -1,54584E-11 |
| 69 | G transversal | -3,06645E-09 | 5,28587E-09 | -5,25437E-07 | 2,06079E-12 | 1,8798E-12 | -5,26628E-07 | 2,23281E-12 | -1,66064E-12 |
| 70 | D Longitudinal | -4,84631E-06 | -8,95361E-07 | 6,37952E-06 | -2,95037E-09 | -2,14991E-10 | 6,42107E-06 | -2,9507E-09 | -3,30985E-10 |
| 70 | D Vertical | -0,001596476 | -0,000321404 | 2,92598E-07 | -2,9263E-07 | -1,5455E-08 | 2,92728E-07 | -2,9263E-07 | -2,15835E-08 |
| 70 | D transversal | 0,050718649 | 5,26527E-06 | -2,77032E-09 | 6,38138E-06 | 2,13921E-10 | 3,77421E-08 | 6,38138E-06 | 8,70281E-08 |
| 70 | G Longitudinal | 0,002774441 | 3,50255E-06 | -5,98601E-09 | 5,11769E-07 | 5,21726E-10 | -4,75398E-09 | 5,11769E-07 | 1,11198E-08 |
| 70 | G Vertical | 1,01849E-05 | 2,13043E-06 | 4,65976E-09 | 4,66799E-09 | -2,91587E-10 | 7,36905E-08 | 4,66208E-09 | -2,72616E-10 |
| 70 | G transversal | 9,39794E-06 | 2,55423E-06 | -5,11879E-07 | 6,08365E-09 | 5,21729E-10 | -5,13947E-07 | 6,08401E-09 | 7,65488E-10 |
| 71 | D Longitudinal | 1,62796E-08 | -2,71448E-06 | 6,64482E-06 | 7,27143E-14 | -5,58468E-10 | 6,64482E-06 | 8,77534E-14 | -5,58367E-10 |
| 71 | D Vertical | -2,50292E-09 | -0,000324626 | 2,97706E-07 | 4,12025E-12 | -1,58694E-08 | 2,97711E-07 | 4,14205E-12 | -1,58699E-08 |
| 71 | D transversal | 0,05210969 | 3,25808E-06 | -1,99448E-11 | 6,6382E-06 | 8,54973E-12 | 4,15874E-08 | 6,6382E-06 | 9,21034E-08 |
| 71 | G Longitudinal | 0,002789748 | 4,10486E-07 | -3,32469E-12 | 5,255E-07 | 1,85201E-12 | 9,68595E-10 | 5,255E-07 | 1,13833E-08 |
| 71 | G Vertical | -1,76912E-05 | -6,12427E-08 | 3,37504E-11 | -1,18976E-08 | -1,75492E-11 | 7,39964E-08 | -1,18984E-08 | -5,3917E-10 |
| 71 | G transversal | -8,06694E-09 | 3,65446E-06 | -5,30648E-07 | -3,93209E-12 | 6,98705E-10 | -5,30641E-07 | -3,99229E-12 | 6,96968E-10 |
| 72 | D Longitudinal | 4,87588E-06 | -8,61961E-07 | 6,37948E-06 | 2,95213E-09 | -2,02069E-10 | 6,33793E-06 | 2,95245E-09 | -8,60793E-11 |
| 72 | D Vertical | 0,00159648 | -0,000320968 | 2,92591E-07 | 2,9263E-07 | -1,54524E-08 | 2,92461E-07 | 2,9263E-07 | -9,32398E-09 |
| 72 | D transversal | 0,050718639 | 8,62864E-07 | 2,74487E-09 | 6,38138E-06 | -2,03107E-10 | 4,32587E-08 | 6,38138E-06 | 8,6611E-08 |
| 72 | G Longitudinal | 0,002774397 | -2,75096E-06 | 5,93263E-09 | 5,1177E-07 | -5,09956E-10 | 7,13612E-09 | 5,11771E-07 | 1,00952E-08 |
| 72 | G Vertical | 1,19316E-05 | -8,08766E-06 | -2,93702E-09 | 6,47292E-09 | -3,66712E-10 | 6,59483E-08 | 6,47372E-09 | 1,15605E-10 |
| 72 | G transversal | -9,40843E-06 | 2,47721E-06 | -5,11856E-07 | -6,11398E-09 | 5,11872E-10 | -5,09774E-07 | -6,11434E-09 | 2,6506E-10 |
| 73 | D Longitudinal | 1,59565E-08 | 1,81615E-08 | 6,63627E-06 | 4,87444E-12 | 9,6351E-12 | 6,59328E-06 | 5,36413E-12 | -7,6168E-12 |
| 73 | D Vertical | 0,001604512 | -0,000322957 | -6,14384E-12 | 2,97934E-07 | -1,58693E-08 | -3,25147E-12 | 2,97934E-07 | -9,48902E-09 |

APOYO 2

| DESPLAZAMIENTOS (metros) | | VIENTO | PESO | CT1 | | | CT2 | | |
|---|---|---|---|---|---|---|---|---|---|
| Nudo | Desplazamiento | | | L | T | V | L | T | V |
| 73 | D transversal | 0,052237373 | 5,02772E-07 | 1,5849E-13 | 6,64673E-06 | -5,58434E-10 | -4,27178E-12 | 6,64673E-06 | 9,19577E-08 |
| 73 | G Longitudinal | 0,002806522 | -7,89176E-07 | -4,41429E-12 | 5,30717E-07 | -6,98829E-10 | -1,42076E-11 | 5,30717E-07 | 1,06865E-08 |
| 73 | G Vertical | 4,23667E-09 | -4,65632E-08 | 1,18186E-08 | 6,74055E-12 | 1,01064E-11 | 8,36888E-08 | 7,39471E-12 | -1,00212E-11 |
| 73 | G transversal | -2,89234E-09 | -5,29007E-09 | -5,25428E-07 | 3,98421E-13 | -1,87941E-12 | -5,24237E-07 | 2,25367E-13 | 1,52803E-12 |
| 74 | D Longitudinal | -4,98551E-06 | 1,26661E-06 | 5,88665E-06 | -2,82477E-09 | 1,4083E-10 | 5,84681E-06 | -2,8247E-09 | 2,30748E-11 |
| 74 | D Vertical | 0,001561937 | -0,000312997 | -2,72499E-07 | 2,72485E-07 | -1,41455E-08 | -2,72394E-07 | 2,72485E-07 | -8,85218E-09 |
| 74 | D transversal | 0,047974478 | 2,78425E-06 | -3,00225E-09 | 5,88873E-06 | -1,41083E-10 | -4,26628E-08 | 5,88873E-06 | 7,68393E-08 |
| 74 | G Longitudinal | 0,002724118 | 4,08712E-06 | 3,57145E-09 | 4,74952E-07 | 3,54225E-10 | 1,55927E-09 | 4,74952E-07 | 9,38288E-09 |
| 74 | G Vertical | -1,98967E-05 | 3,97628E-06 | -5,74536E-09 | -8,39514E-09 | -2,76521E-12 | 5,77881E-08 | -8,39715E-09 | -2,7476E-10 |
| 74 | G transversal | -6,58884E-06 | 2,10217E-06 | -4,75052E-07 | -3,85679E-09 | 3,56615E-10 | -4,72779E-07 | -3,8569E-09 | 2,1206E-10 |
| 75 | D Longitudinal | 1,14442E-08 | 1,0705E-06 | 6,13308E-06 | 4,80987E-13 | 1,73898E-10 | 6,13308E-06 | 4,82339E-13 | 1,73911E-10 |
| 75 | D Vertical | -1,19006E-08 | -0,000316155 | -2,82692E-07 | -2,58046E-14 | -1,47591E-08 | -2,82692E-07 | -2,89808E-14 | -1,47591E-08 |
| 75 | D transversal | 0,049331823 | 2,92955E-06 | 7,84222E-12 | 6,1264E-06 | -3,52904E-12 | -4,00897E-08 | 6,1264E-06 | 8,15422E-08 |
| 75 | G Longitudinal | 0,002731887 | 3,66641E-07 | 6,27974E-12 | 4,89501E-07 | -2,8913E-12 | -2,40491E-10 | 4,89501E-07 | 9,84838E-09 |
| 75 | G Vertical | 8,37375E-06 | -1,78827E-08 | 1,32282E-11 | 4,90894E-09 | -7,65489E-12 | 7,01652E-08 | 4,90861E-09 | 2,11001E-10 |
| 75 | G transversal | -8,48745E-09 | 3,79977E-07 | -4,92856E-07 | -2,68769E-12 | -6,91873E-11 | -4,92855E-07 | -2,67895E-12 | -6,96215E-11 |
| 76 | D Longitudinal | 5,00171E-06 | 1,25808E-06 | 5,88666E-06 | 2,82494E-09 | 1,37702E-10 | 5,9265E-06 | 2,82487E-09 | 2,55447E-10 |
| 76 | D Vertical | -0,001561938 | -0,000313408 | -2,72505E-07 | -2,72485E-07 | -1,41429E-08 | -2,72611E-07 | -2,72485E-07 | -1,94363E-08 |
| 76 | D transversal | 0,047974504 | 2,71856E-06 | 3,00948E-09 | 5,88873E-06 | 1,37838E-10 | -3,6651E-08 | 5,88873E-06 | 7,71183E-08 |
| 76 | G Longitudinal | 0,002724156 | -3,42868E-06 | -3,55835E-09 | 4,74953E-07 | -3,58023E-10 | -5,57519E-09 | 4,74953E-07 | 8,66958E-09 |
| 76 | G Vertical | -2,03644E-05 | -6,37459E-06 | 5,27585E-09 | -8,89501E-09 | -1,78429E-10 | 6,87898E-08 | -8,89364E-09 | -5,55018E-10 |
| 76 | G transversal | 6,58396E-06 | 2,13311E-06 | -4,75061E-07 | 3,86095E-09 | 3,61575E-10 | -4,77332E-07 | 3,86107E-09 | 5,06602E-10 |
| 77 | D Longitudinal | 1,11951E-08 | -3,08027E-09 | 6,12445E-06 | -1,34994E-12 | -4,02652E-12 | 6,16514E-06 | -1,53705E-12 | 3,19143E-12 |
| 77 | D Vertical | -0,001579284 | -0,00031787 | -2,50011E-13 | -2,82487E-07 | -1,4759E-08 | -5,59323E-13 | -2,82487E-07 | -2,04626E-08 |
| 77 | D transversal | 0,049398117 | 4,00044E-06 | -2,87621E-13 | 6,13505E-06 | 1,73988E-10 | -6,41199E-13 | 6,13505E-06 | 8,20745E-08 |
| 77 | G Longitudinal | 0,002744213 | 2,56793E-06 | -2,2002E-12 | 4,92655E-07 | 6,92669E-11 | -3,02571E-12 | 4,92655E-07 | 9,91514E-09 |
| 77 | G Vertical | -9,81179E-09 | -4,02494E-08 | -4,92671E-09 | 2,29747E-14 | 5,25918E-12 | 6,41797E-08 | 3,03737E-13 | -5,66424E-12 |
| 77 | G transversal | -4,36688E-09 | -7,15281E-09 | -4,89588E-07 | 1,20499E-12 | 3,36522E-12 | -4,90433E-07 | 1,39728E-12 | -2,65929E-12 |
| 78 | D Longitudinal | -4,98535E-06 | -1,2748E-06 | 5,88666E-06 | -2,82621E-09 | -1,4083E-10 | 5,9265E-06 | -2,82627E-09 | -2,52963E-10 |
| 78 | D Vertical | -0,001561936 | -0,000313373 | 2,72505E-07 | -2,72486E-07 | -1,41455E-08 | 2,72611E-07 | -2,72486E-07 | -1,94343E-08 |
| 78 | D transversal | 0,047974477 | 2,69769E-06 | -3,00968E-09 | 5,88873E-06 | 1,41083E-10 | 3,66509E-08 | 5,88873E-06 | 7,71159E-08 |
| 78 | G Longitudinal | 0,002724118 | -3,4444E-06 | 3,56226E-09 | 4,74954E-07 | -3,54225E-10 | 5,57452E-09 | 4,74954E-07 | 8,66742E-09 |
| 78 | G Vertical | 1,98968E-05 | 3,99518E-06 | 5,74795E-09 | 8,39464E-09 | -3,25307E-12 | 6,92869E-08 | 8,39301E-09 | 2,45807E-10 |
| 78 | G transversal | -6,58907E-06 | -2,11276E-06 | -4,75063E-07 | -3,85467E-09 | -3,5662E-10 | -4,77336E-07 | -3,85456E-09 | -5,0972E-10 |
| 79 | D Longitudinal | 1,14441E-08 | -1,0705E-06 | 6,13308E-06 | 4,81688E-13 | -1,73898E-10 | 6,13308E-06 | 4,8016E-13 | -1,73898E-10 |
| 79 | D Vertical | 1,19003E-08 | -0,000316155 | 2,82692E-07 | 2,7967E-14 | -1,47591E-08 | 2,82691E-07 | 2,55773E-14 | -1,4759E-08 |
| 79 | D transversal | 0,049331823 | 2,87727E-06 | -8,21501E-12 | 6,1264E-06 | 3,52904E-12 | 4,00893E-08 | 6,1264E-06 | 8,15371E-08 |
| 79 | G Longitudinal | 0,002731887 | 3,34553E-07 | -6,87543E-12 | 4,89503E-07 | 2,89148E-12 | 2,39889E-10 | 4,89503E-07 | 9,844E-09 |
| 79 | G Vertical | -8,37308E-06 | -3,25766E-08 | 1,9112E-11 | -4,91521E-09 | -7,65674E-12 | 7,0171E-08 | -4,91555E-09 | -2,01719E-10 |
| 79 | G transversal | -8,487E-09 | -3,80008E-07 | -4,92856E-07 | -2,69198E-12 | 6,91847E-11 | -4,92856E-07 | -2,69479E-12 | 6,87066E-11 |
| 80 | D Longitudinal | 5,00156E-06 | -1,24989E-06 | 5,88665E-06 | 2,82637E-09 | -1,37702E-10 | 5,84681E-06 | 2,82644E-09 | -2,55639E-11 |
| 80 | D Vertical | 0,001561938 | -0,000313031 | 2,72499E-07 | 2,72486E-07 | -1,41429E-08 | 2,72394E-07 | 2,72486E-07 | -8,8542E-09 |
| 80 | D transversal | 0,047974504 | 2,76339E-06 | 3,00205E-09 | 5,88873E-06 | -1,37838E-10 | 4,26625E-08 | 5,88873E-06 | 7,6837E-08 |
| 80 | G Longitudinal | 0,002724156 | 4,07132E-06 | -3,56746E-09 | 4,74954E-07 | 3,5802E-10 | -1,55045E-09 | 4,74955E-07 | 9,37856E-09 |

APOYO 2

| DESPLAZAMIENTOS (metros) | | VIENTO | PESO | CT1 | | | CT2 | | |
|---|---|---|---|---|---|---|---|---|---|
| Nudo | Desplazamiento | | | L | T | V | L | T | V |
| 80 | G Vertical | 2,03644E-05 | -6,34775E-06 | -5,2758E-09 | 8,895E-09 | -1,78218E-10 | 5,82224E-08 | 8,89521E-09 | 1,98249E-10 |
| 80 | G transversal | 6,58418E-06 | -2,12248E-06 | -4,7505E-07 | 3,85882E-09 | -3,61578E-10 | -4,7278E-07 | 3,8587E-09 | -2,08056E-10 |
| 81 | D Longitudinal | 1,08035E-08 | 3,08143E-09 | 6,12443E-06 | 2,3131E-12 | 4,02656E-12 | 6,08375E-06 | 2,50015E-12 | -3,15929E-12 |
| 81 | D Vertical | 0,001579284 | -0,000317464 | 2,58667E-13 | 2,82487E-07 | -1,4759E-08 | -3,53871E-14 | 2,82487E-07 | -9,05533E-09 |
| 81 | D transversal | 0,049398117 | 1,83209E-06 | -2,79629E-13 | 6,13505E-06 | -1,73988E-10 | 7,18381E-14 | 6,13505E-06 | 8,17266E-08 |
| 81 | G Longitudinal | 0,002744213 | -1,86677E-06 | -2,17062E-12 | 4,92655E-07 | -6,92656E-11 | -1,31911E-12 | 4,92655E-07 | 9,77657E-09 |
| 81 | G Vertical | 9,24502E-09 | -4,02208E-08 | 4,8993E-09 | 5,28344E-12 | 5,26274E-12 | 7,40056E-08 | 5,55655E-12 | -4,82774E-12 |
| 81 | G transversal | -4,04525E-09 | 7,15297E-09 | -4,89572E-07 | -1,81793E-12 | -3,36531E-12 | -4,88728E-07 | -2,01001E-12 | 2,66658E-12 |
| 82 | D Longitudinal | 8,83046E-07 | -2,57073E-05 | 6,12381E-06 | 3,86492E-10 | 2,02866E-11 | 6,2445E-06 | 3,86554E-10 | 3,35263E-11 |
| 82 | D Vertical | -0,00469328 | -0,001030054 | 1,40026E-07 | -8,57629E-07 | -1,50932E-08 | 1,40235E-07 | -8,57629E-07 | -3,23723E-08 |
| 82 | D transversal | 0,049382686 | -0,000289279 | -3,79622E-09 | 6,13701E-06 | 3,10125E-10 | 1,65929E-08 | 6,13701E-06 | 8,22874E-08 |
| 82 | G Longitudinal | 0,002749215 | 5,77737E-06 | 9,97837E-12 | 4,94818E-07 | 2,10256E-10 | -2,94279E-10 | 4,94818E-07 | 1,01501E-08 |
| 82 | G Vertical | -5,768E-06 | 5,7314E-06 | -4,2359E-09 | -1,09391E-09 | -8,75746E-11 | 6,49833E-08 | -1,09412E-09 | -1,52173E-10 |
| 82 | G transversal | 1,83085E-05 | -2,88306E-05 | -4,99705E-07 | 5,33907E-09 | 4,11505E-10 | -5,01489E-07 | 5,34035E-09 | 6,52794E-10 |
| 83 | D Longitudinal | 9,48815E-07 | -2,56739E-05 | 6,12381E-06 | 3,87061E-10 | 2,03295E-11 | 6,2445E-06 | 3,87122E-10 | 3,35945E-11 |
| 83 | D Vertical | -0,004692445 | -0,000956945 | -1,4003E-07 | -8,5725E-07 | -1,5073E-08 | -1,40235E-07 | -8,5725E-07 | -3,23386E-08 |
| 83 | D transversal | 0,04938346 | -0,000270546 | 3,79368E-09 | 6,13736E-06 | 3,2196E-10 | -1,65948E-08 | 6,13736E-06 | 8,2323E-08 |
| 83 | G Longitudinal | 0,002747795 | -1,58804E-05 | -8,10558E-11 | 4,94133E-07 | 1,49636E-10 | 2,17793E-10 | 4,94133E-07 | 1,00481E-08 |
| 83 | G Vertical | 4,30671E-06 | -6,68761E-05 | -4,36438E-09 | 3,33476E-10 | 1,70489E-11 | 6,48526E-08 | 3,34084E-10 | 3,95861E-12 |
| 83 | G transversal | -1,35518E-05 | 0,000142726 | -4,99405E-07 | -3,02622E-09 | -1,88674E-10 | -5,01183E-07 | -3,02683E-09 | -2,85591E-10 |
| 84 | D Longitudinal | 3,13017E-06 | -2,24772E-06 | 5,8801E-06 | 1,39879E-09 | 7,12334E-11 | 5,99951E-06 | 1,3989E-09 | 1,242E-10 |
| 84 | D Vertical | -0,004693339 | -0,001029988 | 1,40021E-07 | -8,57625E-07 | -1,50929E-08 | 1,40231E-07 | -8,57625E-07 | -3,23718E-08 |
| 84 | D transversal | 0,047973223 | -1,34453E-08 | -1,89602E-09 | 5,88768E-06 | 8,86381E-11 | 1,81133E-08 | 5,88768E-06 | 7,70211E-08 |
| 84 | G Longitudinal | 0,002758739 | 8,6251E-06 | -1,87098E-09 | 4,99839E-07 | 5,26724E-10 | -2,29234E-09 | 4,99839E-07 | 1,06698E-08 |
| 84 | G Vertical | 1,66796E-06 | 3,95046E-06 | -6,82055E-09 | 1,0022E-09 | 5,41486E-11 | 6,23751E-08 | 1,00243E-09 | 8,66303E-11 |
| 84 | G transversal | 5,56594E-06 | -3,62912E-05 | -4,78768E-07 | -4,35622E-09 | -2,56999E-10 | -4,80413E-07 | -4,35611E-09 | -4,46788E-10 |
| 85 | D Longitudinal | 1,47621E-07 | -2,20482E-07 | 5,87044E-06 | 2,1623E-11 | 1,0693E-11 | 6,07084E-06 | 2,20928E-11 | -5,28526E-12 |
| 85 | D Vertical | -0,007960433 | -0,00036248 | -4,15948E-12 | -1,4355E-06 | -1,55741E-08 | 5,25447E-13 | -1,4355E-06 | -4,45404E-08 |
| 85 | D transversal | 0,047974346 | -3,50794E-06 | -2,15902E-12 | 5,88802E-06 | 1,04518E-10 | -8,35055E-13 | 5,88802E-06 | 7,70533E-08 |
| 85 | G Longitudinal | 0,002848855 | -0,00082628 | 1,70384E-12 | 4,98325E-07 | 4,23397E-10 | -3,0834E-13 | 4,98325E-07 | 1,05044E-08 |
| 85 | G Vertical | -3,5225E-06 | -7,12488E-06 | -9,11768E-09 | -1,60773E-09 | -7,24966E-11 | 6,08213E-08 | -1,60738E-09 | -1,50119E-10 |
| 85 | G transversal | 3,847E-06 | 0,000141274 | -4,84299E-07 | 1,74219E-09 | 8,86916E-11 | -4,8603E-07 | 1,74227E-09 | 1,5809E-10 |
| 86 | D Longitudinal | 3,1833E-06 | -2,23426E-06 | 5,8801E-06 | 1,39929E-09 | 7,12603E-11 | 5,99951E-06 | 1,3994E-09 | 1,24244E-10 |
| 86 | D Vertical | -0,004692504 | -0,000956834 | -1,40025E-07 | -8,57245E-07 | -1,50727E-08 | -1,4023E-07 | -8,57245E-07 | -3,23381E-08 |
| 86 | D transversal | 0,047974729 | -1,08069E-06 | 1,89134E-09 | 5,88837E-06 | 1,20448E-10 | -1,81151E-08 | 5,88837E-06 | 7,70856E-08 |
| 86 | G Longitudinal | 0,002757607 | -1,81871E-05 | 1,87442E-09 | 4,99326E-07 | 5,01161E-10 | 2,29145E-09 | 4,99326E-07 | 1,06228E-08 |
| 86 | G Vertical | -1,78411E-06 | 1,46951E-06 | -6,82023E-09 | -1,08638E-09 | -4,87931E-11 | 6,23752E-08 | -1,08615E-09 | -1,01271E-10 |
| 86 | G transversal | -2,00905E-06 | 0,00017087 | -4,78767E-07 | 5,97351E-09 | 3,42252E-10 | -4,80411E-07 | 5,97362E-09 | 5,91294E-10 |
| 87 | D Longitudinal | 8,83174E-07 | 2,57084E-05 | 6,12382E-06 | 3,85291E-10 | -2,0288E-11 | 6,00313E-06 | 3,85233E-10 | -2,29245E-12 |
| 87 | D Vertical | 0,00469328 | -0,001028823 | -1,40023E-07 | 8,57628E-07 | -1,50932E-08 | -1,39813E-07 | 8,57628E-07 | 2,18806E-09 |
| 87 | D transversal | 0,049382687 | 0,000295117 | -3,78368E-09 | 6,13701E-06 | -3,10125E-10 | -2,41728E-08 | 6,13701E-06 | 8,16767E-08 |
| 87 | G Longitudinal | 0,002749216 | -5,06958E-06 | 1,46928E-11 | 4,94817E-07 | -2,10176E-10 | 3,17935E-10 | 4,94817E-07 | 9,72922E-09 |
| 87 | G Vertical | 5,76753E-06 | 5,73504E-06 | 4,21335E-09 | 1,09828E-09 | -8,74352E-11 | 7,34308E-08 | 1,09796E-09 | -4,70178E-11 |
| 87 | G transversal | 1,8309E-05 | 2,88476E-05 | -4,99682E-07 | 5,33457E-09 | -4,11183E-10 | -4,97902E-07 | 5,33302E-09 | -1,68242E-10 |

APOYO 2

| DESPLAZAMIENTOS (metros) | | VIENTO | PESO | CT1 | | | CT2 | | |
|---|---|---|---|---|---|---|---|---|---|
| Nudo | Desplazamiento | | | L | T | V | L | T | V |
| 88 | D Longitudinal | 9,48943E-07 | 2,56751E-05 | 6,12382E-06 | 3,8586E-10 | -2,03309E-11 | 6,00313E-06 | 3,85801E-10 | -2,31002E-12 |
| 88 | D Vertical | 0,004692445 | -0,000955716 | 1,40027E-07 | 8,5725E-07 | -1,5073E-08 | 1,39822E-07 | 8,5725E-07 | 2,19054E-09 |
| 88 | D transversal | 0,049383459 | 0,000276386 | 3,78118E-09 | 6,13736E-06 | -3,2196E-10 | 2,41696E-08 | 6,13736E-06 | 8,16695E-08 |
| 88 | G Longitudinal | 0,002747795 | 1,65852E-05 | -8,53052E-11 | 4,94134E-07 | -1,49671E-10 | -3,81619E-10 | 4,94134E-07 | 9,74566E-09 |
| 88 | G Vertical | -4,30718E-06 | -6,68758E-05 | 4,34106E-09 | -3,28962E-10 | 1,71102E-11 | 7,35537E-08 | -3,28674E-10 | 1,22348E-11 |
| 88 | G transversal | -1,35514E-05 | -0,000142732 | -4,99384E-07 | -3,03037E-09 | 1,88814E-10 | -4,97616E-07 | -3,03051E-09 | 1,08027E-10 |
| 89 | D Longitudinal | 3,13039E-06 | 2,25177E-06 | 5,88011E-06 | 1,3968E-09 | -7,12335E-11 | 5,7607E-06 | 1,3967E-09 | -1,04434E-11 |
| 89 | D Vertical | 0,004693339 | -0,001028757 | -1,40018E-07 | 8,57624E-07 | -1,50929E-08 | -1,39809E-07 | 8,57624E-07 | 2,18816E-09 |
| 89 | D transversal | 0,047973223 | 5,49232E-06 | -1,89028E-09 | 5,88768E-06 | -8,86382E-11 | -2,18996E-08 | 5,88768E-06 | 7,68482E-08 |
| 89 | G Longitudinal | 0,002758739 | -7,90278E-06 | -1,8713E-09 | 4,99839E-07 | -5,26723E-10 | -1,44996E-09 | 4,99839E-07 | 9,6161E-09 |
| 89 | G Vertical | -1,66841E-06 | 3,94756E-06 | 6,79881E-09 | -9,97996E-10 | 5,4149E-11 | 7,59945E-08 | -9,97771E-10 | 5,07649E-12 |
| 89 | G transversal | 5,56614E-06 | 3,6278E-05 | -4,78758E-07 | -4,35813E-09 | 2,57E-10 | -4,77113E-07 | -4,35825E-09 | 7,47337E-11 |
| 90 | D Longitudinal | 1,48532E-07 | 2,20544E-07 | 5,87048E-06 | 1,30895E-11 | -1,06941E-11 | 5,67008E-06 | 1,26217E-11 | 7,02141E-12 |
| 90 | D Vertical | 0,007960433 | -0,000360417 | 4,18628E-12 | 1,4355E-06 | -1,55741E-08 | 8,86108E-12 | 1,4355E-06 | 1,33922E-08 |
| 90 | D transversal | 0,047974346 | 8,98782E-06 | -2,14888E-12 | 5,88802E-06 | -1,04518E-10 | -3,47094E-12 | 5,88802E-06 | 7,68442E-08 |
| 90 | G Longitudinal | 0,002848855 | 0,000826998 | 1,71572E-12 | 4,98325E-07 | -4,23397E-10 | 3,72642E-12 | 4,98325E-07 | 9,6576E-09 |
| 90 | G Vertical | 3,52185E-06 | -7,12022E-06 | 9,08595E-09 | 1,61387E-09 | -7,24949E-11 | 7,90249E-08 | 1,61421E-09 | -1,91819E-11 |
| 90 | G transversal | 3,84713E-06 | -0,000141269 | -4,84293E-07 | 1,74097E-09 | -8,8684E-11 | -4,82563E-07 | 1,74087E-09 | -1,46606E-11 |
| 91 | D Longitudinal | 3,18351E-06 | 2,23831E-06 | 5,88011E-06 | 1,3973E-09 | -7,12603E-11 | 5,7607E-06 | 1,3972E-09 | -1,04462E-11 |
| 91 | D Vertical | 0,004692504 | -0,000955605 | 1,40023E-07 | 8,57246E-07 | -1,50727E-08 | 1,39818E-07 | 8,57246E-07 | 2,19065E-09 |
| 91 | D transversal | 0,047974729 | 6,56158E-06 | 1,88561E-09 | 5,88837E-06 | -1,20448E-10 | 2,18921E-08 | 5,88837E-06 | 7,68403E-08 |
| 91 | G Longitudinal | 0,002757607 | 1,8908E-05 | 1,87475E-09 | 4,99326E-07 | -5,01162E-10 | 1,45775E-09 | 4,99326E-07 | 9,62077E-09 |
| 91 | G Vertical | 1,78366E-06 | 1,47265E-06 | 6,79849E-09 | 1,09059E-09 | -4,87928E-11 | 7,59939E-08 | 1,09081E-09 | -1,28995E-11 |
| 91 | G transversal | -2,00884E-06 | -0,000170852 | -4,78757E-07 | 5,9716E-09 | -3,42249E-10 | -4,77113E-07 | 5,97148E-09 | -8,56869E-11 |
| 92 | D Longitudinal | -1,45665E-05 | 3,54436E-06 | 5,42039E-06 | -7,25857E-09 | 5,10548E-10 | 5,38308E-06 | -7,25858E-09 | 2,44012E-10 |
| 92 | D Vertical | 0,00153268 | -0,00030608 | -2,57955E-07 | 2,57941E-07 | -1,32001E-08 | -2,57907E-07 | 2,57941E-07 | -8,44558E-09 |
| 92 | D transversal | 0,045263117 | -2,03837E-06 | -7,09046E-09 | 5,4225E-06 | -5,088E-10 | -4,42144E-08 | 5,4225E-06 | 6,78134E-08 |
| 92 | G Longitudinal | 0,002689181 | 2,5504E-06 | 4,96816E-09 | 4,54328E-07 | 2,56573E-10 | 2,29996E-09 | 4,54328E-07 | 8,47514E-09 |
| 92 | G Vertical | -2,90223E-05 | 5,33551E-06 | -6,35744E-09 | -1,08339E-08 | 8,04367E-11 | 5,40221E-08 | -1,08351E-08 | -2,51066E-10 |
| 92 | G transversal | -1,43733E-05 | 2,46604E-06 | -4,54316E-07 | -4,89122E-09 | 2,54659E-10 | -4,51776E-07 | -4,89126E-09 | 1,28408E-10 |
| 93 | D Longitudinal | 7,54396E-09 | 2,40131E-06 | 5,65352E-06 | 1,47125E-13 | 3,24805E-10 | 5,65352E-06 | 1,46993E-13 | 3,24807E-10 |
| 93 | D Vertical | 1,17826E-08 | -0,000312591 | -2,67594E-07 | 3,75285E-13 | -1,38854E-08 | -2,67594E-07 | 3,7601E-13 | -1,38854E-08 |
| 93 | D transversal | 0,046606335 | 2,58218E-06 | 1,49874E-12 | 5,64936E-06 | -7,08917E-13 | -3,84157E-08 | 5,64936E-06 | 7,24187E-08 |
| 93 | G Longitudinal | 0,002686365 | 3,23164E-07 | 3,66111E-12 | 4,61088E-07 | -1,59476E-12 | -1,00215E-09 | 4,61088E-07 | 8,6588E-09 |
| 93 | G Vertical | 1,66738E-05 | -1,20375E-08 | 2,78354E-12 | 8,61211E-09 | -1,82206E-12 | 6,64967E-08 | 8,61205E-09 | 3,26661E-10 |
| 93 | G transversal | -1,43413E-09 | 2,28224E-06 | -4,66255E-07 | -1,78415E-13 | 3,7075E-10 | -4,66256E-07 | -1,75254E-13 | 3,70698E-10 |
| 94 | D Longitudinal | 1,45804E-05 | 3,53617E-06 | 5,42039E-06 | 7,25899E-09 | 5,10141E-10 | 5,4577E-06 | 7,259E-09 | 7,76693E-10 |
| 94 | D Vertical | -0,001532681 | -0,000306435 | -2,57958E-07 | -2,57941E-07 | -1,31986E-08 | -2,58006E-07 | -2,5794E-07 | -1,79531E-08 |
| 94 | D transversal | 0,045263101 | 6,91323E-06 | 7,09141E-09 | 5,4225E-06 | 5,08254E-10 | -3,00324E-08 | 5,4225E-06 | 6,88304E-08 |
| 94 | G Longitudinal | 0,002689185 | -1,96352E-06 | -4,96525E-09 | 4,54328E-07 | -2,58343E-10 | -7,6321E-09 | 4,54328E-07 | 7,96053E-09 |
| 94 | G Vertical | -2,92992E-05 | -7,5783E-06 | 6,07028E-09 | -1,11462E-08 | -1,91794E-10 | 6,64372E-08 | -1,11453E-08 | -5,87632E-10 |
| 94 | G transversal | 1,43718E-05 | 2,46605E-06 | -4,54319E-07 | 4,89032E-09 | 2,56117E-10 | -4,5686E-07 | 4,89036E-09 | 3,82257E-10 |
| 95 | D Longitudinal | 7,37868E-09 | -1,49648E-08 | 5,64726E-06 | -1,64674E-13 | -6,44928E-13 | 5,68582E-06 | -1,82138E-13 | 5,28201E-13 |
| 95 | D Vertical | -0,001552853 | -0,000311482 | -1,58024E-13 | -2,67779E-07 | -1,38865E-08 | -2,58197E-14 | -2,67779E-07 | -1,89962E-08 |

APOYO 2

| DESPLAZAMIENTOS (metros) | | VIENTO | PESO | CT1 | | | CT2 | | |
|---|---|---|---|---|---|---|---|---|---|
| Nudo | Desplazamiento | | | L | T | V | L | T | V |
| 95 | D transversal | 0,046734263 | 4,80834E-06 | -1,07694E-13 | 5,65562E-06 | 3,23994E-10 | -6,44074E-14 | 5,65562E-06 | 7,29737E-08 |
| 95 | G Longitudinal | 0,002711375 | -4,1848E-06 | -2,81529E-13 | 4,66231E-07 | -3,68433E-10 | -3,18352E-13 | 4,66231E-07 | 8,28732E-09 |
| 95 | G Vertical | -5,47121E-09 | -1,78058E-08 | -8,64288E-09 | -2,52264E-13 | 1,3152E-12 | 5,75343E-08 | -1,95193E-13 | -1,69201E-12 |
| 95 | G transversal | -1,16965E-09 | -1,46571E-08 | -4,61121E-07 | 8,06314E-13 | 1,5996E-12 | -4,62276E-07 | 8,92597E-13 | -1,23871E-12 |
| 96 | D Longitudinal | -1,45664E-05 | -3,56332E-06 | 5,42039E-06 | -7,25879E-09 | -5,10548E-10 | 5,4577E-06 | -7,25878E-09 | -7,7632E-10 |
| 96 | D Vertical | -0,00153268 | -0,000306419 | 2,57958E-07 | -2,57941E-07 | -1,32001E-08 | 2,58006E-07 | -2,57941E-07 | -1,7952E-08 |
| 96 | D transversal | 0,045263117 | 6,90389E-06 | -7,09164E-09 | 5,4225E-06 | 5,088E-10 | 3,00323E-08 | 5,4225E-06 | 6,88301E-08 |
| 96 | G Longitudinal | 0,002689181 | -1,96523E-06 | 4,96416E-09 | 4,54329E-07 | -2,56573E-10 | 7,63235E-09 | 4,54329E-07 | 7,95892E-09 |
| 96 | G Vertical | 2,90223E-05 | 5,35883E-06 | 6,35897E-09 | 1,08336E-08 | 8,01373E-11 | 6,67418E-08 | 1,08326E-08 | 3,9752E-10 |
| 96 | G transversal | -1,43734E-05 | -2,47513E-06 | -4,54319E-07 | -4,89053E-09 | -2,54658E-10 | -4,56859E-07 | -4,89049E-09 | -3,83603E-10 |
| 97 | D Longitudinal | 7,54399E-09 | -2,40131E-06 | 5,65352E-06 | 1,46872E-13 | -3,24805E-10 | 5,65352E-06 | 1,4698E-13 | -3,24802E-10 |
| 97 | D Vertical | -1,17826E-08 | -0,000312591 | 2,67594E-07 | -3,75589E-13 | -1,38854E-08 | 2,67593E-07 | -3,75016E-13 | -1,38854E-08 |
| 97 | D transversal | 0,046606334 | 2,57507E-06 | -1,70724E-12 | 5,64936E-06 | 7,08901E-13 | 3,84155E-08 | 5,64936E-06 | 7,24177E-08 |
| 97 | G Longitudinal | 0,002686365 | 2,93382E-07 | -3,70257E-12 | 4,6109E-07 | 1,59474E-12 | 1,00211E-09 | 4,6109E-07 | 8,65633E-09 |
| 97 | G Vertical | -1,66736E-05 | -3,52365E-08 | 4,50791E-12 | -8,61352E-09 | -1,82249E-12 | 6,64984E-08 | -8,61357E-09 | -3,2488E-10 |
| 97 | G transversal | -1,43419E-09 | -2,28224E-06 | -4,66255E-07 | -1,78041E-13 | -3,70751E-10 | -4,66255E-07 | -1,80101E-13 | -3,70829E-10 |
| 98 | D Longitudinal | 1,45804E-05 | -3,51722E-06 | 5,42039E-06 | 7,25921E-09 | -5,10141E-10 | 5,38308E-06 | 7,2592E-09 | -2,4436E-10 |
| 98 | D Vertical | 0,001532681 | -0,000306096 | 2,57955E-07 | 2,57941E-07 | -1,31986E-08 | 2,57907E-07 | 2,57941E-07 | -8,44675E-09 |
| 98 | D transversal | 0,045263101 | -2,04772E-06 | 7,09023E-09 | 5,4225E-06 | -5,08254E-10 | 4,42141E-08 | 5,4225E-06 | 6,78131E-08 |
| 98 | G Longitudinal | 0,002689185 | 2,54871E-06 | -4,96927E-09 | 4,54329E-07 | 2,58344E-10 | -2,30246E-09 | 4,54329E-07 | 8,47415E-09 |
| 98 | G Vertical | 2,92992E-05 | -7,5501E-06 | -6,07031E-09 | 1,11462E-08 | -1,91665E-10 | 5,4287E-08 | 1,11463E-08 | 2,04044E-10 |
| 98 | G transversal | 1,43718E-05 | -2,45697E-06 | -4,54316E-07 | 4,88964E-09 | -2,56116E-10 | -4,51775E-07 | 4,88959E-09 | -1,27279E-10 |
| 99 | D Longitudinal | 7,31274E-09 | 1,49649E-08 | 5,64726E-06 | 4,46899E-13 | 6,44961E-13 | 5,60871E-06 | 4,64337E-13 | -5,25147E-13 |
| 99 | D Vertical | 0,001552853 | -0,000311118 | 1,55906E-13 | 2,67779E-07 | -1,38865E-08 | 2,84249E-13 | 2,67779E-07 | -8,77692E-09 |
| 99 | D transversal | 0,046734263 | 3,65386E-07 | -1,0875E-13 | 5,65562E-06 | -3,23994E-10 | -1,50892E-13 | 5,65562E-06 | 7,23257E-08 |
| 99 | G Longitudinal | 0,002711375 | 4,80121E-06 | -2,82496E-13 | 4,66231E-07 | 3,68433E-10 | -2,3531E-13 | 4,66231E-07 | 9,02416E-09 |
| 99 | G Vertical | 5,31811E-09 | -1,77908E-08 | 8,63551E-09 | 1,67882E-12 | 1,31639E-12 | 7,48126E-08 | 1,73326E-12 | -1,25495E-12 |
| 99 | G transversal | -1,01733E-09 | 1,46574E-08 | -4,61114E-07 | -6,23603E-13 | -1,59964E-12 | -4,5996E-07 | -7,09842E-13 | 1,2463E-12 |
| 100 | D Longitudinal | 2,15131E-08 | 4,58424E-13 | 5,88966E-06 | 4,38513E-13 | 4,29962E-18 | 5,88966E-06 | 4,3854E-13 | 1,38872E-14 |
| 100 | D Vertical | 1,41601E-16 | -0,000502162 | 1,43115E-17 | -2,7702E-18 | -1,41442E-08 | -2,45629E-14 | -3,09939E-18 | -1,41442E-08 |
| 100 | D transversal | 0,047979656 | 2,74506E-06 | -2,97242E-13 | 5,89156E-06 | -9,05002E-17 | -2,93781E-13 | 5,89156E-06 | 7,70924E-08 |
| 100 | G Longitudinal | 0,002693261 | 3,24841E-07 | -3,30007E-14 | 4,69866E-07 | -2,40033E-18 | -3,2704E-14 | 4,69866E-07 | 9,12285E-09 |
| 100 | G Vertical | -1,56308E-13 | -1,62001E-08 | -8,87046E-15 | 1,71737E-15 | 5,0222E-14 | 6,8537E-08 | 3,44969E-15 | 4,20793E-14 |
| 100 | G transversal | -1,34588E-09 | -1,02843E-13 | -4,69893E-07 | 7,18577E-14 | -1,28782E-17 | -4,69893E-07 | 7,18734E-14 | -2,96874E-15 |
| 101 | D Longitudinal | -2,49917E-05 | 4,67907E-06 | 4,98089E-06 | -9,62856E-09 | 5,10991E-10 | 4,94608E-06 | -9,62859E-09 | 2,19763E-10 |
| 101 | D Vertical | 0,001493835 | -0,000297988 | -2,41279E-07 | 2,41268E-07 | -1,21953E-08 | -2,41239E-07 | 2,41268E-07 | -7,99426E-09 |
| 101 | D transversal | 0,042605522 | -1,62996E-06 | -9,83888E-09 | 4,98303E-06 | -5,14812E-10 | -4,43441E-08 | 4,98303E-06 | 6,00873E-08 |
| 101 | G Longitudinal | 0,002626019 | -1,04642E-06 | -2,93638E-09 | 4,24847E-07 | -2,59394E-10 | -5,71658E-09 | 4,24847E-07 | 6,97251E-09 |
| 101 | G Vertical | -4,37048E-05 | 8,08633E-06 | -7,90497E-09 | -1,51581E-08 | 1,80369E-10 | 4,85184E-08 | -1,51588E-08 | -2,66262E-10 |
| 101 | G transversal | 4,06966E-06 | -1,72963E-06 | -4,24951E-07 | 3,01241E-09 | -2,64831E-10 | -4,22315E-07 | 3,01241E-09 | -1,35635E-10 |
| 102 | D Longitudinal | 6,54636E-09 | 4,11046E-06 | 5,20064E-06 | 2,39978E-13 | 5,10825E-10 | 5,20064E-06 | 2,40079E-13 | 5,10833E-10 |
| 102 | D Vertical | -8,06915E-09 | -0,000302059 | -2,51208E-07 | -1,96022E-13 | -1,2701E-08 | -2,51208E-07 | -1,96446E-13 | -1,27009E-08 |
| 102 | D transversal | 0,043917727 | 2,29254E-06 | -5,09803E-13 | 5,19559E-06 | 1,60566E-13 | -3,58184E-08 | 5,19559E-06 | 6,42241E-08 |
| 102 | G Longitudinal | 0,00262975 | 2,78868E-07 | 1,74083E-12 | 4,34239E-07 | -7,72679E-13 | -1,07157E-09 | 4,34239E-07 | 7,71944E-09 |

APOYO 2

| DESPLAZAMIENTOS (metros) | | VIENTO | PESO | CT1 | | | CT2 | | |
|---|---|---|---|---|---|---|---|---|---|
| Nudo | Desplazamiento | | | L | T | V | L | T | V |
| 102 | G Vertical | 3,38603E-05 | -7,22639E-09 | -5,34537E-13 | 1,44608E-08 | -8,95595E-14 | 6,21664E-08 | 1,44608E-08 | 4,77599E-10 |
| 102 | G transversal | -1,09291E-09 | 1,14406E-06 | -4,39501E-07 | -1,38618E-13 | 1,17213E-12 | -4,39501E-07 | -1,37736E-13 | 1,12641E-12 |
| 103 | D Longitudinal | 2,50039E-05 | 4,68224E-06 | 4,98089E-06 | 9,6291E-09 | 5,11621E-10 | 5,01571E-06 | 9,62913E-09 | 8,02863E-10 |
| 103 | D Vertical | -0,001493836 | -0,000298296 | -2,41281E-07 | -2,41268E-07 | -1,21946E-08 | -2,4132E-07 | -2,41268E-07 | -1,63957E-08 |
| 103 | D transversal | 0,042605532 | 5,96505E-06 | 9,83748E-09 | 4,98303E-06 | 5,15317E-10 | -2,46678E-08 | 4,98303E-06 | 6,11174E-08 |
| 103 | G Longitudinal | 0,002626017 | 1,54357E-06 | 2,93752E-09 | 4,24847E-07 | 2,59021E-10 | 1,57036E-10 | 4,24847E-07 | 7,49087E-09 |
| 103 | G Vertical | -4,38497E-05 | -1,06418E-05 | 7,73911E-09 | -1,53493E-08 | -2,45544E-10 | 6,4154E-08 | -1,53488E-08 | -7,29928E-10 |
| 103 | G transversal | -4,07068E-06 | -1,72552E-06 | -4,24952E-07 | -3,01187E-09 | -2,64347E-10 | -4,27588E-07 | -3,01187E-09 | -3,93502E-10 |
| 104 | D Longitudinal | 6,64694E-09 | -1,26656E-08 | 5,19346E-06 | 3,30046E-13 | 2,26573E-13 | 5,22953E-06 | 3,56448E-13 | -1,52671E-13 |
| 104 | D Vertical | -0,001519291 | -0,000303272 | 1,30903E-13 | -2,50976E-07 | -1,26977E-08 | 7,09626E-14 | -2,50976E-07 | -1,71894E-08 |
| 104 | D transversal | 0,044049782 | 6,43198E-06 | -8,58358E-14 | 5,20276E-06 | 5,11796E-10 | -8,03849E-14 | 5,20276E-06 | 6,4974E-08 |
| 104 | G Longitudinal | 0,00265763 | 9,53886E-07 | -2,59738E-13 | 4,39484E-07 | -6,22862E-12 | -1,76042E-13 | 4,39484E-07 | 7,71325E-09 |
| 104 | G Vertical | 2,11794E-09 | -1,72753E-08 | -1,45221E-08 | -5,05748E-13 | -1,70816E-13 | 4,72133E-08 | -5,30333E-13 | -2,11049E-13 |
| 104 | G transversal | -9,2655E-10 | -4,10937E-09 | -4,34265E-07 | 4,1495E-13 | 7,69564E-13 | -4,35371E-07 | 4,53547E-13 | -5,95947E-13 |
| 105 | D Longitudinal | -2,49917E-05 | -4,69985E-06 | 4,98089E-06 | -9,6283E-09 | -5,10991E-10 | 5,01571E-06 | -9,62827E-09 | -8,0331E-10 |
| 105 | D Vertical | -0,001493835 | -0,000298287 | 2,41281E-07 | -2,41268E-07 | -1,21953E-08 | 2,4132E-07 | -2,41268E-07 | -1,63952E-08 |
| 105 | D transversal | 0,042605522 | 5,94576E-06 | -9,8376E-09 | 4,98303E-06 | 5,14812E-10 | 2,46677E-08 | 4,98303E-06 | 6,1118E-08 |
| 105 | G Longitudinal | 0,002626019 | 1,56141E-06 | -2,93735E-09 | 4,24847E-07 | 2,59394E-10 | -1,57139E-10 | 4,24847E-07 | 7,49058E-09 |
| 105 | G Vertical | 4,37049E-05 | 8,11797E-06 | 7,90578E-09 | 1,51579E-08 | 1,80194E-10 | 6,43311E-08 | 1,51574E-08 | 6,18524E-10 |
| 105 | G transversal | 4,06964E-06 | 1,7388E-06 | -4,24952E-07 | 3,01262E-09 | 2,64831E-10 | -4,27588E-07 | 3,01263E-09 | 3,93209E-10 |
| 106 | D Longitudinal | 6,54635E-09 | -4,11046E-06 | 5,20064E-06 | 2,40035E-13 | -5,10825E-10 | 5,20064E-06 | 2,39948E-13 | -5,10819E-10 |
| 106 | D Vertical | 8,06915E-09 | -0,000302059 | 2,51208E-07 | 1,96042E-13 | -1,2701E-08 | 2,51208E-07 | 1,95741E-13 | -1,2701E-08 |
| 106 | D transversal | 0,043917727 | 2,28118E-06 | 3,33176E-13 | 5,19559E-06 | -1,60569E-13 | 3,58182E-08 | 5,19559E-06 | 6,42245E-08 |
| 106 | G Longitudinal | 0,002629749 | 2,70828E-07 | -1,83965E-12 | 4,34239E-07 | 7,72681E-13 | 1,07147E-09 | 4,34239E-07 | 7,71825E-09 |
| 106 | G Vertical | -3,38603E-05 | -4,12554E-08 | 3,22472E-13 | -1,44607E-08 | -8,98892E-14 | 6,21672E-08 | -1,44607E-08 | -4,78086E-10 |
| 106 | G transversal | -1,09289E-09 | -1,14406E-06 | -4,39501E-07 | -1,38908E-13 | -1,17239E-12 | -4,39501E-07 | -1,39178E-13 | -1,22093E-12 |
| 107 | D Longitudinal | 2,50039E-05 | -4,66146E-06 | 4,98089E-06 | 9,62884E-09 | -5,11621E-10 | 4,94607E-06 | 9,62881E-09 | -2,19285E-10 |
| 107 | D Vertical | 0,001493836 | -0,000297997 | 2,41279E-07 | 2,41268E-07 | -1,21946E-08 | 2,41239E-07 | 2,41268E-07 | -7,99481E-09 |
| 107 | D transversal | 0,042605532 | -1,64925E-06 | 9,83877E-09 | 4,98303E-06 | -5,15317E-10 | 4,43441E-08 | 4,98303E-06 | 6,00878E-08 |
| 107 | G Longitudinal | 0,002626017 | -1,02858E-06 | 2,93656E-09 | 4,24847E-07 | -2,59021E-10 | 5,71705E-09 | 4,24847E-07 | 6,97211E-09 |
| 107 | G Vertical | 4,38497E-05 | -1,06073E-05 | -7,73921E-09 | 1,53493E-08 | -2,45469E-10 | 4,86701E-08 | 1,53494E-08 | 2,38769E-10 |
| 107 | G transversal | -4,07066E-06 | 1,71635E-06 | -4,24951E-07 | -3,01209E-09 | 2,64346E-10 | -4,22315E-07 | -3,01209E-09 | 1,36017E-10 |
| 108 | D Longitudinal | 6,66506E-09 | 1,26661E-08 | 5,19347E-06 | 1,53898E-13 | -2,26581E-13 | 5,1574E-06 | 1,27512E-13 | 1,66358E-13 |
| 108 | D Vertical | 0,001519291 | -0,000302952 | -1,30633E-13 | 2,50976E-07 | -1,26977E-08 | -1,88398E-13 | 2,50976E-07 | -8,20608E-09 |
| 108 | D transversal | 0,044049782 | -1,84132E-06 | -8,5632E-14 | 5,20276E-06 | -5,11796E-10 | -9,12738E-14 | 5,20276E-06 | 6,39504E-08 |
| 108 | G Longitudinal | 0,00265763 | -4,04146E-07 | -2,58531E-13 | 4,39484E-07 | 6,22875E-12 | -3,38869E-13 | 4,39484E-07 | 7,72571E-09 |
| 108 | G Vertical | -2,11674E-09 | -1,7267E-08 | 1,45222E-08 | 4,85747E-13 | -1,70071E-13 | 7,62576E-08 | 4,59527E-13 | 3,20567E-14 |
| 108 | G transversal | -8,52691E-10 | 4,10953E-09 | -4,34262E-07 | -2,77155E-13 | -7,69551E-13 | -4,33156E-07 | -3,15769E-13 | 6,00653E-13 |
| 109 | D Longitudinal | -8,15504E-06 | 1,06621E-06 | 4,57121E-06 | -2,8357E-09 | 1,35034E-10 | 4,53889E-06 | -2,83572E-09 | 5,62196E-11 |
| 109 | D Vertical | 0,001446877 | -0,000289669 | -2,23437E-07 | 2,23417E-07 | -1,12507E-08 | -2,23354E-07 | 2,23417E-07 | -7,58697E-09 |
| 109 | D transversal | 0,040017693 | -3,32786E-07 | -2,53783E-09 | 4,57337E-06 | -1,29634E-10 | -3,44891E-08 | 4,57337E-06 | 5,36921E-08 |
| 109 | G Longitudinal | 0,002543012 | -3,48132E-06 | -6,87942E-09 | 3,93681E-07 | -3,56434E-10 | -8,60768E-09 | 3,93681E-07 | 5,99855E-09 |
| 109 | G Vertical | -6,67026E-05 | 1,23275E-05 | -1,06329E-08 | -2,22082E-08 | 3,19702E-10 | 4,11229E-08 | -2,22086E-08 | -3,21574E-10 |
| 109 | G transversal | 1,73274E-05 | -2,98153E-06 | -3,93406E-07 | 6,10898E-09 | -3,21806E-10 | -3,9153E-07 | 6,10899E-09 | -1,4923E-10 |

APOYO 2

| DESPLAZAMIENTOS (metros) | | VIENTO | PESO | CT1 | | | CT2 | | |
|---|---|---|---|---|---|---|---|---|---|
| Nudo | Desplazamiento | | | L | T | V | L | T | V |
| 110 | D Longitudinal | 5,53004E-09 | 2,87356E-06 | 4,77605E-06 | 3,02138E-13 | 3,23317E-10 | 4,77605E-06 | 3,02065E-13 | 3,23325E-10 |
| 110 | D Vertical | 5,00142E-09 | -0,000293339 | -2,28133E-07 | 2,79606E-13 | -1,14999E-08 | -2,28133E-07 | 2,79757E-13 | -1,14999E-08 |
| 110 | D transversal | 0,041291525 | 2,04249E-06 | -9,0031E-13 | 4,77052E-06 | 3,46295E-13 | -3,32107E-08 | 4,77052E-06 | 5,69811E-08 |
| 110 | G Longitudinal | 0,002557583 | 2,44573E-07 | 4,79369E-13 | 4,04458E-07 | -2,27001E-13 | -1,0279E-09 | 4,04458E-07 | 6,77993E-09 |
| 110 | G Vertical | 2,82628E-05 | -4,71309E-09 | -1,40802E-12 | 1,06286E-08 | 4,19775E-13 | 5,78646E-08 | 1,06286E-08 | 3,15839E-10 |
| 110 | G transversal | -1,32624E-09 | -3,58925E-06 | -4,09687E-07 | -6,9632E-14 | -3,74944E-10 | -4,09687E-07 | -6,84387E-14 | -3,74971E-10 |
| 111 | D Longitudinal | 8,16495E-06 | 1,06674E-06 | 4,57121E-06 | 2,83636E-09 | 1,35621E-10 | 4,60354E-06 | 2,83639E-09 | 2,14456E-10 |
| 111 | D Vertical | -0,001446878 | -0,000289944 | -2,23437E-07 | -2,23417E-07 | -1,12505E-08 | -2,2352E-07 | -2,23417E-07 | -1,49142E-08 |
| 111 | D transversal | 0,040017684 | 4,19649E-06 | 2,53658E-09 | 4,57337E-06 | 1,30104E-10 | -2,94147E-08 | 4,57337E-06 | 5,39519E-08 |
| 111 | G Longitudinal | 0,002542997 | 3,93932E-06 | 6,87852E-09 | 3,93681E-07 | 3,56644E-10 | 5,15029E-09 | 3,93681E-07 | 6,7116E-09 |
| 111 | G Vertical | -6,67465E-05 | -1,573E-05 | 1,05531E-08 | -2,2319E-08 | -3,52549E-10 | 6,23028E-08 | -2,23187E-08 | -1,01303E-09 |
| 111 | G transversal | -1,7334E-05 | -2,97182E-06 | -3,93406E-07 | -6,10949E-09 | -3,22219E-10 | -3,95281E-07 | -6,1095E-09 | -4,94838E-10 |
| 112 | D Longitudinal | 5,49816E-09 | -4,6712E-09 | 4,76837E-06 | 4,77155E-13 | 4,06563E-13 | 4,80197E-06 | 5,07942E-13 | -2,96912E-13 |
| 112 | D Vertical | -0,001460612 | -0,00029227 | -3,15662E-14 | -2,28411E-07 | -1,15052E-08 | -1,5074E-14 | -2,28411E-07 | -1,53142E-08 |
| 112 | D transversal | 0,041427071 | 5,06826E-06 | -3,48479E-14 | 4,7782E-06 | 3,22467E-10 | -5,02835E-14 | 4,7782E-06 | 5,75349E-08 |
| 112 | G Longitudinal | 0,002587889 | 1,79703E-06 | -1,85767E-13 | 4,09683E-07 | 3,85011E-10 | -2,41235E-13 | 4,09683E-07 | 7,16612E-09 |
| 112 | G Vertical | -4,44316E-10 | -2,77231E-08 | -1,05931E-08 | -4,89765E-13 | -5,23149E-13 | 4,66809E-08 | -5,28869E-13 | 2,73014E-13 |
| 112 | G transversal | -1,12892E-09 | -2,94696E-09 | -4,04483E-07 | 1,67336E-13 | 2,25223E-13 | -4,05606E-07 | 1,74877E-13 | -1,65592E-13 |
| 113 | D Longitudinal | -8,15507E-06 | -1,07186E-06 | 4,57121E-06 | -2,83545E-09 | -1,35034E-10 | 4,60354E-06 | -2,83543E-09 | -2,14868E-10 |
| 113 | D Vertical | -0,001446877 | -0,00028993 | 2,23437E-07 | -2,23417E-07 | -1,12507E-08 | 2,2352E-07 | -2,23417E-07 | -1,4914E-08 |
| 113 | D transversal | 0,040017693 | 4,16572E-06 | -2,53661E-09 | 4,57337E-06 | 1,29634E-10 | 2,94147E-08 | 4,57337E-06 | 5,39524E-08 |
| 113 | G Longitudinal | 0,002543012 | 3,93391E-06 | -6,87874E-09 | 3,93681E-07 | 3,56434E-10 | -5,15048E-09 | 3,93681E-07 | 6,71198E-09 |
| 113 | G Vertical | 6,67026E-05 | 1,23731E-05 | 1,06332E-08 | 2,22082E-08 | 3,19615E-10 | 6,23899E-08 | 2,22079E-08 | 9,56654E-10 |
| 113 | G transversal | 1,73274E-05 | 2,99384E-06 | -3,93405E-07 | 6,10883E-09 | 3,21806E-10 | -3,95281E-07 | 6,10881E-09 | 4,95001E-10 |
| 114 | D Longitudinal | 5,53004E-09 | -2,87356E-06 | 4,77605E-06 | 3,0214E-13 | -3,23317E-10 | 4,77605E-06 | 3,02213E-13 | -3,23308E-10 |
| 114 | D Vertical | -5,00142E-09 | -0,000293339 | 2,28133E-07 | -2,79589E-13 | -1,14999E-08 | 2,28133E-07 | -2,79482E-13 | -1,14999E-08 |
| 114 | D transversal | 0,041291525 | 2,01543E-06 | 8,32418E-13 | 4,77051E-06 | -3,46295E-13 | 3,32107E-08 | 4,77051E-06 | 5,69817E-08 |
| 114 | G Longitudinal | 0,002557583 | 2,38246E-07 | -5,69999E-13 | 4,04458E-07 | 2,26998E-13 | 1,02781E-09 | 4,04458E-07 | 6,7796E-09 |
| 114 | G Vertical | -2,82629E-05 | -2,72405E-08 | -8,53257E-13 | -1,06281E-08 | 4,19657E-13 | 5,78652E-08 | -1,06281E-08 | -3,16829E-10 |
| 114 | G transversal | -1,32623E-09 | 3,58924E-06 | -4,09687E-07 | -6,97965E-14 | 3,74944E-10 | -4,09687E-07 | -7,05242E-14 | 3,74908E-10 |
| 115 | D Longitudinal | 8,16497E-06 | -1,06109E-06 | 4,57121E-06 | 2,83612E-09 | -1,35621E-10 | 4,53889E-06 | 2,83609E-09 | -5,57683E-11 |
| 115 | D Vertical | 0,001446878 | -0,000289683 | 2,23437E-07 | 2,23417E-07 | -1,12505E-08 | 2,23354E-07 | 2,23417E-07 | -7,58714E-09 |
| 115 | D transversal | 0,040017684 | -3,63554E-07 | 2,53781E-09 | 4,57336E-06 | -1,30104E-10 | 3,44891E-08 | 4,57336E-06 | 5,36926E-08 |
| 115 | G Longitudinal | 0,002542997 | -3,48673E-06 | 6,8792E-09 | 3,9368E-07 | -3,56644E-10 | 8,60744E-09 | 3,9368E-07 | 5,99886E-09 |
| 115 | G Vertical | 6,67465E-05 | -1,5683E-05 | -1,05533E-08 | 2,2319E-08 | -3,52512E-10 | 4,11937E-08 | 2,23191E-08 | 3,07786E-10 |
| 115 | G transversal | -1,7334E-05 | 2,95951E-06 | -3,93406E-07 | -6,10933E-09 | 3,22219E-10 | -3,91531E-07 | -6,10932E-09 | 1,48969E-10 |
| 116 | D Longitudinal | 5,53476E-09 | 4,67183E-09 | 4,76838E-06 | 1,2986E-13 | -4,06557E-13 | 4,73478E-06 | 9,90709E-14 | 3,14925E-13 |
| 116 | D Vertical | 0,001460612 | -0,000291999 | 3,16178E-14 | 2,28411E-07 | -1,15052E-08 | 4,74309E-14 | 2,28411E-07 | -7,69616E-09 |
| 116 | D transversal | 0,041427071 | -9,93886E-07 | -3,48056E-14 | 4,7782E-06 | -3,22467E-10 | -1,92776E-14 | 4,7782E-06 | 5,689E-08 |
| 116 | G Longitudinal | 0,002587889 | -1,31412E-06 | -1,8486E-13 | 4,09683E-07 | -3,85011E-10 | -1,26042E-13 | 4,09683E-07 | 6,39609E-09 |
| 116 | G Vertical | 4,88256E-10 | -2,77191E-08 | 1,05952E-08 | 7,2111E-14 | -5,22784E-13 | 6,78693E-08 | 3,21882E-14 | 3,90837E-13 |
| 116 | G transversal | -1,10707E-09 | 2,94713E-09 | -4,04482E-07 | -3,593E-14 | -2,25224E-13 | -4,03358E-07 | -4,34715E-14 | 1,70241E-13 |
| 117 | D Longitudinal | -4,30116E-06 | 7,89789E-07 | 4,19591E-06 | -1,50871E-09 | 4,94015E-11 | 4,16508E-06 | -1,50872E-09 | 7,50755E-12 |
| 117 | D Vertical | 0,00139403 | -0,000281194 | -2,05342E-07 | 2,05367E-07 | -1,04322E-08 | -2,05254E-07 | 2,05367E-07 | -7,26612E-09 |

APOYO 2

| DESPLAZAMIENTOS (metros) | | VIENTO | PESO | CT1 | | | CT2 | | |
|---|---|---|---|---|---|---|---|---|---|
| Nudo | Desplazamiento | | | L | T | V | L | T | V |
| 117 | D transversal | 0,037533053 | 1,76861E-06 | -2,34852E-09 | 4,19831E-06 | -7,83457E-11 | -3,32762E-08 | 4,19831E-06 | 4,78578E-08 |
| 117 | G Longitudinal | 0,002419334 | 4,77412E-06 | 8,00247E-09 | 3,54585E-07 | 3,75883E-10 | 6,96615E-09 | 3,54585E-07 | 5,72196E-09 |
| 117 | G Vertical | -0,000108155 | 2,08126E-05 | -1,58442E-08 | -3,54717E-08 | 5,69655E-10 | 2,95433E-08 | -3,54718E-08 | -4,58803E-10 |
| 117 | G transversal | -1,13701E-05 | 2,01096E-06 | -3,56359E-07 | -3,11149E-09 | 1,67766E-10 | -3,54538E-07 | -3,11149E-09 | 9,56295E-11 |
| 118 | D Longitudinal | 2,59819E-09 | 9,26509E-07 | 4,38356E-06 | 1,74356E-13 | 9,2441E-11 | 4,38356E-06 | 1,74355E-13 | 9,24468E-11 |
| 118 | D Vertical | -1,04563E-08 | -0,00028447 | -2,1428E-07 | -2,35973E-13 | -1,08117E-08 | -2,1428E-07 | -2,35999E-13 | -1,08117E-08 |
| 118 | D transversal | 0,038752765 | 1,81423E-06 | -5,55719E-13 | 4,37808E-06 | 2,29101E-13 | -3,14376E-08 | 4,37808E-06 | 5,06653E-08 |
| 118 | G Longitudinal | 0,00246422 | 2,31748E-07 | 3,01005E-14 | 3,71949E-07 | -3,56513E-14 | -3,51899E-10 | 3,71949E-07 | 5,88682E-09 |
| 118 | G Vertical | 1,03221E-05 | -7,0182E-09 | -1,14951E-12 | 3,60638E-09 | 3,41401E-13 | 5,44235E-08 | 3,60641E-09 | 1,00427E-10 |
| 118 | G transversal | -5,01183E-09 | -2,59835E-07 | -3,75313E-07 | -4,22053E-13 | -8,5033E-11 | -3,75312E-07 | -4,21573E-13 | -8,50584E-11 |
| 119 | D Longitudinal | 4,30165E-06 | 7,83298E-07 | 4,19591E-06 | 1,50874E-09 | 4,97071E-11 | 4,22674E-06 | 1,50875E-09 | 9,16043E-11 |
| 119 | D Vertical | -0,00139403 | -0,000281458 | -2,05342E-07 | -2,05367E-07 | -1,04322E-08 | -2,0543E-07 | -2,05367E-07 | -1,35983E-08 |
| 119 | D transversal | 0,037533079 | 1,63329E-06 | 2,34784E-09 | 4,19831E-06 | 7,86403E-11 | -2,85799E-08 | 4,19831E-06 | 4,80148E-08 |
| 119 | G Longitudinal | 0,002419351 | -4,31629E-06 | -8,00211E-09 | 3,54586E-07 | -3,75705E-10 | -9,03837E-09 | 3,54586E-07 | 4,97049E-09 |
| 119 | G Vertical | -0,000107979 | -2,22987E-05 | 1,58193E-08 | -3,55082E-08 | -5,81723E-10 | 6,12008E-08 | -3,55081E-08 | -1,61726E-09 |
| 119 | G transversal | 1,13644E-05 | 1,99986E-06 | -3,56357E-07 | 3,11204E-09 | 1,67998E-10 | -3,58179E-07 | 3,11203E-09 | 2,4026E-10 |
| 120 | D Longitudinal | 2,33721E-09 | 1,79174E-09 | 4,37578E-06 | 3,03013E-13 | 2,60946E-13 | 4,40737E-06 | 3,20139E-13 | -1,8585E-13 |
| 120 | D Vertical | -0,001418225 | -0,000285777 | 1,96272E-13 | -2,13625E-07 | -1,07918E-08 | 7,6601E-14 | -2,13625E-07 | -1,41852E-08 |
| 120 | D transversal | 0,038826926 | 2,91017E-06 | -6,04201E-15 | 4,38584E-06 | 1,04181E-10 | -1,19161E-14 | 4,38584E-06 | 5,09835E-08 |
| 120 | G Longitudinal | 0,002484717 | 2,54518E-06 | -9,23366E-14 | 3,75087E-07 | 5,16553E-11 | -6,26513E-14 | 3,75087E-07 | 5,93832E-09 |
| 120 | G Vertical | -6,87803E-09 | -1,25539E-08 | -4,11528E-09 | -2,77831E-13 | -3,69729E-13 | 5,00686E-08 | -3,01904E-13 | 2,40549E-13 |
| 120 | G transversal | -2,33177E-09 | -1,39725E-08 | -3,72051E-07 | -1,1159E-13 | 1,31945E-14 | -3,72773E-07 | -1,15211E-13 | -3,83696E-15 |
| 121 | D Longitudinal | -4,30118E-06 | -7,92792E-07 | 4,19591E-06 | -1,50858E-09 | -4,94015E-11 | 4,22674E-06 | -1,50857E-09 | -9,18199E-11 |
| 121 | D Vertical | -0,00139403 | -0,000281419 | 2,05342E-07 | -2,05367E-07 | -1,04322E-08 | 2,0543E-07 | -2,05367E-07 | -1,35983E-08 |
| 121 | D transversal | 0,037533053 | 1,64517E-06 | -2,34784E-09 | 4,19831E-06 | 7,83457E-11 | 2,85798E-08 | 4,19831E-06 | 4,8015E-08 |
| 121 | G Longitudinal | 0,002419334 | -4,3934E-06 | 8,00251E-09 | 3,54585E-07 | -3,75884E-10 | 9,03884E-09 | 3,54585E-07 | 4,97021E-09 |
| 121 | G Vertical | 0,000108155 | 2,08858E-05 | 1,5844E-08 | 3,54717E-08 | 5,69622E-10 | 6,12318E-08 | 3,54716E-08 | 1,59626E-09 |
| 121 | G transversal | -1,13701E-05 | -2,01609E-06 | -3,56359E-07 | -3,11149E-09 | -1,67765E-10 | -3,5818E-07 | -3,11149E-09 | -2,39863E-10 |
| 122 | D Longitudinal | 2,59819E-09 | -9,26509E-07 | 4,38356E-06 | 1,74356E-13 | -9,2441E-11 | 4,38356E-06 | 1,74352E-13 | -9,24353E-11 |
| 122 | D Vertical | 1,04563E-08 | -0,00028447 | 2,1428E-07 | 2,35967E-13 | -1,08117E-08 | 2,1428E-07 | 2,35952E-13 | -1,08117E-08 |
| 122 | D transversal | 0,038752765 | 1,7939E-06 | 5,71704E-13 | 4,37808E-06 | -2,291E-13 | 3,14376E-08 | 4,37808E-06 | 5,06658E-08 |
| 122 | G Longitudinal | 0,00246422 | 1,87481E-07 | -6,07617E-14 | 3,71949E-07 | 3,56504E-14 | 3,51868E-10 | 3,71949E-07 | 5,88684E-09 |
| 122 | G Vertical | -1,03221E-05 | -1,4193E-08 | -5,33775E-13 | -3,60606E-09 | 3,41335E-13 | 5,44241E-08 | -3,60603E-09 | -1,01074E-10 |
| 122 | G transversal | -5,01183E-09 | 2,59834E-07 | -3,75313E-07 | -4,22116E-13 | 8,50329E-11 | -3,75313E-07 | -4,22372E-13 | 8,50045E-11 |
| 123 | D Longitudinal | 4,30166E-06 | -7,80296E-07 | 4,19591E-06 | 1,50861E-09 | -4,97071E-11 | 4,16508E-06 | 1,5086E-09 | -7,28506E-12 |
| 123 | D Vertical | 0,00139403 | -0,000281233 | 2,05342E-07 | 2,05367E-07 | -1,04322E-08 | 2,05254E-07 | 2,05367E-07 | -7,26614E-09 |
| 123 | D transversal | 0,037533079 | 1,78049E-06 | 2,34852E-09 | 4,19831E-06 | -7,86403E-11 | 3,32762E-08 | 4,19831E-06 | 4,78581E-08 |
| 123 | G Longitudinal | 0,002419351 | 4,69702E-06 | -8,00208E-09 | 3,54586E-07 | 3,75705E-10 | -6,96583E-09 | 3,54586E-07 | 5,72193E-09 |
| 123 | G Vertical | 0,000107979 | -2,2225E-05 | -1,58196E-08 | 3,55083E-08 | -5,81709E-10 | 2,95608E-08 | 3,55083E-08 | 4,53542E-10 |
| 123 | G transversal | 1,13644E-05 | -1,99472E-06 | -3,56357E-07 | 3,11204E-09 | -1,67997E-10 | -3,54536E-07 | 3,11204E-09 | -9,57455E-11 |
| 124 | D Longitudinal | 2,36091E-09 | -1,7913E-09 | 4,37579E-06 | 7,91267E-14 | -2,60941E-13 | 4,3442E-06 | 6,19956E-14 | 1,9832E-13 |
| 124 | D Vertical | 0,001418225 | -0,000285535 | -1,96314E-13 | 2,13625E-07 | -1,07918E-08 | -3,16004E-13 | 2,13625E-07 | -7,39852E-09 |
| 124 | D transversal | 0,038826926 | 7,1319E-07 | -6,04695E-15 | 4,38584E-06 | -1,04181E-10 | -1,54435E-16 | 4,38584E-06 | 5,07752E-08 |
| 124 | G Longitudinal | 0,002484717 | -2,12596E-06 | -9,19926E-14 | 3,75087E-07 | -5,16553E-11 | -1,20223E-13 | 3,75087E-07 | 5,83501E-09 |

APOYO 2

| DESPLAZAMIENTOS (metros) | | VIENTO | PESO | CT1 | | | CT2 | | |
|---|---|---|---|---|---|---|---|---|---|
| Nudo | Desplazamiento | | | L | T | V | L | T | V |
| 124 | G Vertical | 6,91151E-09 | -1,2552E-08 | 4,11691E-09 | -3,82975E-14 | -3,69571E-13 | 5,83008E-08 | -6,27211E-14 | 2,94336E-13 |
| 124 | G transversal | -2,33029E-09 | 1,39723E-08 | -3,72051E-07 | -1,23758E-13 | -1,31912E-14 | -3,7133E-07 | -1,20144E-13 | -2,03719E-15 |
| 125 | D Longitudinal | 7,8062E-07 | -2,57361E-05 | 4,37571E-06 | 2,06306E-10 | 6,66761E-12 | 4,46992E-06 | 2,06299E-10 | 1,2646E-11 |
| 125 | D Vertical | -0,004235395 | -0,000998148 | 1,06075E-07 | -6,52263E-07 | -1,10194E-08 | 1,06269E-07 | -6,52263E-07 | -2,13389E-08 |
| 125 | D transversal | 0,038813809 | -0,000290228 | -3,43339E-09 | 4,38776E-06 | 1,93886E-10 | 1,26802E-08 | 4,38776E-06 | 5,11261E-08 |
| 125 | G Longitudinal | 0,002488635 | 5,16462E-06 | -4,81638E-10 | 3,75929E-07 | 1,03506E-10 | -6,49866E-10 | 3,75929E-07 | 6,01178E-09 |
| 125 | G Vertical | -3,23002E-06 | 6,52033E-06 | -2,82668E-09 | 3,44705E-10 | -1,63372E-11 | 5,1286E-08 | 3,44664E-10 | -3,05926E-12 |
| 125 | G transversal | 1,51863E-05 | -3,04954E-05 | -3,82777E-07 | 1,77391E-09 | 1,57855E-10 | -3,84002E-07 | 1,77395E-09 | 2,00488E-10 |
| 126 | D Longitudinal | 8,47125E-07 | -2,57026E-05 | 4,37571E-06 | 2,06884E-10 | 6,69618E-12 | 4,46992E-06 | 2,06877E-10 | 1,26909E-11 |
| 126 | D Vertical | -0,004234653 | -0,000925109 | -1,06079E-07 | -6,52061E-07 | -1,10127E-08 | -1,0627E-07 | -6,52061E-07 | -2,13267E-08 |
| 126 | D transversal | 0,038814496 | -0,000271566 | 3,43128E-09 | 4,38794E-06 | 2,00247E-10 | -1,26809E-08 | 4,38794E-06 | 5,11373E-08 |
| 126 | G Longitudinal | 0,002487439 | -1,62762E-05 | 4,82245E-10 | 3,75599E-07 | 9,15658E-11 | 6,47432E-10 | 3,75599E-07 | 5,98943E-09 |
| 126 | G Vertical | 2,05511E-06 | -6,73107E-05 | -2,83271E-09 | -6,91124E-10 | 2,23554E-12 | 5,12795E-08 | -6,91126E-10 | -2,12147E-11 |
| 126 | G transversal | -1,12167E-05 | 0,000143581 | -3,82763E-07 | -6,84127E-10 | -1,17209E-10 | -3,83987E-07 | -6,84182E-10 | -1,25357E-10 |
| 127 | D Longitudinal | 2,78098E-06 | -2,44923E-06 | 4,19068E-06 | 7,46259E-10 | 2,43821E-11 | 4,28364E-06 | 7,4625E-10 | 4,5519E-11 |
| 127 | D Vertical | -0,00423545 | -0,000998083 | 1,06071E-07 | -6,52259E-07 | -1,10192E-08 | 1,06265E-07 | -6,52259E-07 | -2,13386E-08 |
| 127 | D transversal | 0,037532058 | -8,96019E-07 | -1,56608E-09 | 4,19775E-06 | 5,98844E-11 | 1,4097E-08 | 4,19775E-06 | 4,79807E-08 |
| 127 | G Longitudinal | 0,002503502 | 8,55336E-06 | -1,26502E-09 | 3,8102E-07 | 3,25484E-10 | -1,66522E-09 | 3,8102E-07 | 6,37795E-09 |
| 127 | G Vertical | 1,42365E-06 | 3,80553E-06 | -5,68915E-09 | 5,34006E-10 | 1,72943E-11 | 4,85385E-08 | 5,33988E-10 | 3,27173E-11 |
| 127 | G transversal | -3,2449E-06 | -3,65045E-05 | -3,60406E-07 | -4,54366E-09 | -1,64186E-10 | -3,61932E-07 | -4,54366E-09 | -2,79915E-10 |
| 128 | D Longitudinal | 1,37179E-07 | -1,63061E-07 | 4,18233E-06 | 9,508E-12 | -1,20329E-13 | 4,339E-06 | 9,47299E-12 | 1,05605E-12 |
| 128 | D Vertical | -0,007206405 | -0,000330527 | -4,72248E-12 | -1,09278E-06 | -1,13202E-08 | -1,51557E-12 | -1,09278E-06 | -2,86174E-08 |
| 128 | D transversal | 0,037533095 | -4,45679E-06 | -2,06954E-12 | 4,19793E-06 | 6,60583E-11 | -6,66252E-13 | 4,19793E-06 | 4,79919E-08 |
| 128 | G Longitudinal | 0,002593514 | -0,000826352 | 2,0316E-12 | 3,79842E-07 | 2,62212E-10 | 6,48221E-13 | 3,79842E-07 | 6,27982E-09 |
| 128 | G Vertical | -3,12714E-06 | -6,83063E-06 | -7,96954E-09 | -8,59535E-10 | -2,85133E-11 | 4,71015E-08 | -8,59558E-10 | -5,19688E-11 |
| 128 | G transversal | 3,41909E-06 | 0,00014097 | -3,67086E-07 | 9,27442E-10 | 3,05536E-11 | -3,68777E-07 | 9,27441E-10 | 5,65021E-11 |
| 129 | D Longitudinal | 2,83398E-06 | -2,43586E-06 | 4,19068E-06 | 7,46526E-10 | 2,43908E-11 | 4,28364E-06 | 7,46516E-10 | 4,55352E-11 |
| 129 | D Vertical | -0,004234708 | -0,000924997 | -1,06075E-07 | -6,52057E-07 | -1,10125E-08 | -1,06266E-07 | -6,52057E-07 | -2,13264E-08 |
| 129 | D transversal | 0,037533393 | -2,09599E-06 | 1,56157E-09 | 4,19812E-06 | 7,22501E-11 | -1,40985E-08 | 4,19812E-06 | 4,80032E-08 |
| 129 | G Longitudinal | 0,002502497 | -1,81658E-05 | 1,26878E-09 | 3,80747E-07 | 3,16509E-10 | 1,66638E-09 | 3,80747E-07 | 6,36128E-09 |
| 129 | G Vertical | -1,51682E-06 | 1,6782E-06 | -5,68876E-09 | -5,81149E-10 | -1,93348E-11 | 4,85387E-08 | -5,81167E-10 | -3,50736E-11 |
| 129 | G transversal | 6,4078E-06 | 0,000170777 | -3,60404E-07 | 5,40307E-09 | 1,92589E-10 | -3,61932E-07 | 5,40307E-09 | 3,32412E-10 |
| 130 | D Longitudinal | 7,80609E-07 | 2,57365E-05 | 4,37571E-06 | 2,06416E-10 | -6,66765E-12 | 4,28149E-06 | 2,06423E-10 | -1,12638E-12 |
| 130 | D Vertical | 0,004235395 | -0,000997413 | -1,06075E-07 | 6,52263E-07 | -1,10194E-08 | -1,05881E-07 | 6,52263E-07 | -6,99837E-10 |
| 130 | D transversal | 0,038813809 | 0,000293855 | -3,43391E-09 | 4,38776E-06 | -1,93886E-10 | -1,95475E-08 | 4,38776E-06 | 5,07379E-08 |
| 130 | G Longitudinal | 0,002488635 | -4,74388E-06 | -4,82017E-10 | 3,75929E-07 | -1,03502E-10 | -3,13832E-10 | 3,75929E-07 | 5,80428E-09 |
| 130 | G Vertical | 3,23005E-06 | 6,5194E-06 | 2,82801E-09 | -3,44964E-10 | -1,63307E-11 | 5,69406E-08 | -3,4501E-10 | -2,88913E-11 |
| 130 | G transversal | 1,51863E-05 | 3,04984E-05 | -3,82778E-07 | 1,77402E-09 | -1,5784E-10 | -3,81553E-07 | 1,77397E-09 | -1,16423E-10 |
| 131 | D Longitudinal | 8,47113E-07 | 2,57031E-05 | 4,37571E-06 | 2,06994E-10 | -6,69622E-12 | 4,28149E-06 | 2,07001E-10 | -1,13861E-12 |
| 131 | D Vertical | 0,004234653 | -0,000924374 | 1,06079E-07 | 6,52061E-07 | -1,10127E-08 | 1,05888E-07 | 6,52061E-07 | -6,98865E-10 |
| 131 | D transversal | 0,038814496 | 0,000275193 | 3,4318E-09 | 4,38794E-06 | -2,00247E-10 | 1,9544E-08 | 4,38794E-06 | 5,07372E-08 |
| 131 | G Longitudinal | 0,002487439 | 1,66962E-05 | 4,82644E-10 | 3,75599E-07 | -9,15675E-11 | 3,17578E-10 | 3,75599E-07 | 5,80661E-09 |
| 131 | G Vertical | -2,05509E-06 | -6,7309E-05 | 2,83402E-09 | 6,90872E-10 | 2,23841E-12 | 5,6946E-08 | 6,90855E-10 | 2,67063E-11 |
| 131 | G transversal | -1,12167E-05 | -0,000143581 | -3,82764E-07 | -6,84005E-10 | 1,17216E-10 | -3,81541E-07 | -6,83986E-10 | 1,08548E-10 |

APOYO 2

| DESPLAZAMIENTOS (metros) | | VIENTO | PESO | CT1 | | | CT2 | | |
|---|---|---|---|---|---|---|---|---|---|
| Nudo | Desplazamiento | | | L | T | V | L | T | V |
| 132 | D Longitudinal | 2,78096E-06 | 2,45071E-06 | 4,19068E-06 | 7,46398E-10 | -2,43821E-11 | 4,09771E-06 | 7,46408E-10 | -3,80427E-12 |
| 132 | D Vertical | 0,00423545 | -0,000997348 | -1,0607E-07 | 6,52259E-07 | -1,10192E-08 | -1,05876E-07 | 6,52259E-07 | -6,99767E-10 |
| 132 | D transversal | 0,037532058 | 4,30868E-06 | -1,56645E-09 | 4,19775E-06 | -5,98844E-11 | -1,72296E-08 | 4,19775E-06 | 4,78606E-08 |
| 132 | G Longitudinal | 0,002503502 | -8,12234E-06 | -1,26508E-09 | 3,8102E-07 | -3,25484E-10 | -8,64875E-10 | 3,8102E-07 | 5,72693E-09 |
| 132 | G Vertical | -1,42362E-06 | 3,80447E-06 | 5,69042E-09 | -5,34251E-10 | 1,72943E-11 | 5,99181E-08 | -5,3427E-10 | 2,86406E-12 |
| 132 | G transversal | -3,2449E-06 | 3,64962E-05 | -3,60406E-07 | -4,54367E-09 | 1,64186E-10 | -3,58879E-07 | -4,54366E-09 | 4,84677E-11 |
| 133 | D Longitudinal | 1,37132E-07 | 1,63081E-07 | 4,18233E-06 | 9,95296E-12 | 1,20335E-13 | 4,02565E-06 | 9,98796E-12 | -5,11292E-13 |
| 133 | D Vertical | 0,007206405 | -0,000329295 | 4,72254E-12 | 1,09278E-06 | -1,13202E-08 | 7,92908E-12 | 1,09278E-06 | 5,97697E-09 |
| 133 | D transversal | 0,037533095 | 7,86982E-06 | -2,06961E-12 | 4,19793E-06 | -6,60583E-11 | -3,47279E-12 | 4,19793E-06 | 4,78598E-08 |
| 133 | G Longitudinal | 0,002593514 | 0,00082678 | 2,03165E-12 | 3,79842E-07 | -2,62212E-10 | 3,415E-12 | 3,79842E-07 | 5,7554E-09 |
| 133 | G Vertical | 3,12717E-06 | -6,82891E-06 | 7,97097E-09 | 8,59257E-10 | -2,85133E-11 | 6,3042E-08 | 8,59234E-10 | -3,92684E-12 |
| 133 | G transversal | 3,4191E-06 | -0,000140968 | -3,67086E-07 | 9,27427E-10 | -3,05533E-11 | -3,65394E-07 | 9,27427E-10 | -4,56615E-12 |
| 134 | D Longitudinal | 2,83396E-06 | 2,43734E-06 | 4,19067E-06 | 7,46665E-10 | -2,43908E-11 | 4,09771E-06 | 7,46674E-10 | -3,80561E-12 |
| 134 | D Vertical | 0,004234708 | -0,000924263 | 1,06075E-07 | 6,52057E-07 | -1,10126E-08 | 1,05884E-07 | 6,52057E-07 | -6,98795E-10 |
| 134 | D transversal | 0,037533393 | 5,50939E-06 | 1,56193E-09 | 4,19812E-06 | -7,22501E-11 | 1,7222E-08 | 4,19812E-06 | 4,7859E-08 |
| 134 | G Longitudinal | 0,002502497 | 1,85963E-05 | 1,26884E-09 | 3,80747E-07 | -3,16509E-10 | 8,71233E-10 | 3,80747E-07 | 5,72831E-09 |
| 134 | G Vertical | 1,51685E-06 | 1,67935E-06 | 5,69003E-09 | 5,80904E-10 | -1,93348E-11 | 5,99175E-08 | 5,80885E-10 | -2,60309E-12 |
| 134 | G transversal | 6,4078E-06 | -0,000170767 | -3,60404E-07 | 5,40306E-09 | -1,92589E-10 | -3,58877E-07 | 5,40307E-09 | -5,27458E-11 |
| 135 | D Longitudinal | 1,30582E-08 | 2,51622E-13 | 4,19826E-06 | 2,25504E-13 | 3,25456E-18 | 4,19826E-06 | 2,25501E-13 | 7,12267E-15 |
| 135 | D Vertical | -1,17418E-16 | -0,000470286 | -7,11552E-20 | 1,36239E-20 | -1,04322E-08 | 4,31658E-15 | 4,95187E-19 | -1,04322E-08 |
| 135 | D transversal | 0,03753754 | 1,70839E-06 | -2,82369E-13 | 4,19982E-06 | 2,0357E-20 | -2,82356E-13 | 4,19982E-06 | 4,79785E-08 |
| 135 | G Longitudinal | 0,002403692 | 1,94361E-07 | 1,90356E-14 | 3,54106E-07 | -1,13451E-18 | 1,89977E-14 | 3,54106E-07 | 5,45846E-09 |
| 135 | G Vertical | 3,51572E-14 | 1,03053E-09 | 1,63775E-15 | -3,16994E-16 | 4,74489E-15 | 5,32412E-08 | -2,10944E-16 | 6,09881E-15 |
| 135 | G transversal | -2,55476E-11 | 2,73946E-14 | -3,5411E-07 | 2,42284E-15 | 2,53064E-18 | -3,5411E-07 | 2,41694E-15 | 8,03152E-16 |
| 136 | D Longitudinal | 4,43798E-11 | -1,42108E-08 | 4,08546E-06 | 7,59507E-14 | 1,63067E-13 | 4,11604E-06 | 8,44778E-14 | -1,13918E-13 |
| 136 | D Vertical | -0,001405559 | -0,000280966 | -3,98711E-13 | -2,06125E-07 | -1,03796E-08 | -1,48015E-13 | -2,06125E-07 | -1,3533E-08 |
| 136 | D transversal | 0,036824744 | 2,68887E-06 | 2,14182E-14 | 4,09022E-06 | 2,06405E-10 | 4,21513E-15 | 4,09022E-06 | 4,6532E-08 |
| 136 | G Longitudinal | 0,002404848 | -6,00702E-06 | -3,12788E-14 | 3,49591E-07 | -4,20698E-10 | -6,93542E-14 | 3,49591E-07 | 4,78604E-09 |
| 136 | G Vertical | -1,27255E-08 | 2,32903E-08 | -8,12151E-09 | -3,856E-13 | -2,77629E-13 | 4,44741E-08 | -3,99683E-13 | 1,69748E-13 |
| 136 | G transversal | -6,87066E-11 | -3,11565E-08 | -3,4901E-07 | 1,33385E-14 | 4,55563E-14 | -3,49613E-07 | 1,25172E-14 | -2,01676E-14 |
| 137 | D Longitudinal | 2,26457E-10 | 5,3311E-08 | 3,98796E-06 | 1,21529E-14 | 1,783E-10 | 3,98796E-06 | 1,21363E-14 | 1,78301E-10 |
| 137 | D Vertical | 9,60637E-09 | -0,000280879 | -2,06657E-07 | 1,52092E-13 | -1,03047E-08 | -2,06657E-07 | 1,52122E-13 | -1,03047E-08 |
| 137 | D transversal | 0,03606709 | 1,5667E-06 | -3,87277E-13 | 3,98368E-06 | 1,73504E-13 | -3,07377E-08 | 3,98368E-06 | 4,4699E-08 |
| 137 | G Longitudinal | 0,002385498 | 2,12069E-07 | 9,14427E-14 | 3,44362E-07 | -4,37293E-14 | -7,21976E-10 | 3,44362E-07 | 5,13389E-09 |
| 137 | G Vertical | 2,29806E-05 | -3,22716E-08 | -8,20542E-13 | 6,64358E-09 | 2,61716E-13 | 5,11251E-08 | 6,6436E-09 | 1,60912E-10 |
| 137 | G transversal | -1,52292E-10 | 2,36485E-06 | -3,45693E-07 | -2,13219E-14 | 2,27724E-10 | -3,45693E-07 | -2,12287E-14 | 2,2772E-10 |
| 138 | D Longitudinal | -1,19497E-05 | -1,98375E-06 | 3,97613E-06 | -3,49354E-09 | -1,6893E-10 | 4,00641E-06 | -3,49353E-09 | -2,54256E-10 |
| 138 | D Vertical | -0,001404523 | -0,000277544 | 2,03369E-07 | -2,03213E-07 | -1,01056E-08 | 2,03505E-07 | -2,03213E-07 | -1,31672E-08 |
| 138 | D transversal | 0,036027808 | 5,37047E-06 | -7,30273E-09 | 3,97965E-06 | 3,34323E-10 | 2,35155E-08 | 3,97965E-06 | 4,50127E-08 |
| 138 | G Longitudinal | 0,00240424 | -5,87752E-06 | 7,68695E-09 | 3,46004E-07 | -3,73231E-10 | 9,03749E-09 | 3,46004E-07 | 4,7335E-09 |
| 138 | G Vertical | 9,02358E-05 | 1,76241E-05 | 1,18089E-08 | 2,95758E-08 | 4,86319E-10 | 5,66058E-08 | 2,95757E-08 | 1,34394E-09 |
| 138 | G transversal | -2,01748E-05 | -3,07649E-06 | -3,46155E-07 | -5,5518E-09 | -2,58783E-10 | -3,48014E-07 | -5,5518E-09 | -3,89314E-10 |
| 139 | D Longitudinal | -1,19496E-05 | 1,97769E-06 | 3,97613E-06 | -3,49368E-09 | 1,6893E-10 | 3,94585E-06 | -3,49369E-09 | 8,41843E-11 |
| 139 | D Vertical | 0,001404523 | -0,000277326 | -2,03369E-07 | 2,03213E-07 | -1,01056E-08 | -2,03233E-07 | 2,03213E-07 | -7,04399E-09 |

APOYO 2

| DESPLAZAMIENTOS (metros) | | VIENTO | PESO | CT1 | | | CT2 | | |
|---|---|---|---|---|---|---|---|---|---|
| Nudo | Desplazamiento | | | L | T | V | L | T | V |
| 139 | D transversal | 0,036027808 | -2,18873E-06 | -7,30346E-09 | 3,97965E-06 | -3,34323E-10 | -3,81217E-08 | 3,97965E-06 | 4,43435E-08 |
| 139 | G Longitudinal | 0,00240424 | 6,2412E-06 | 7,68713E-09 | 3,46004E-07 | 3,7323E-10 | 6,3366E-09 | 3,46004E-07 | 5,48012E-09 |
| 139 | G Vertical | -9,02358E-05 | 1,75629E-05 | -1,1809E-08 | -2,95758E-08 | 4,86347E-10 | 3,29876E-08 | -2,95759E-08 | -3,72776E-10 |
| 139 | G transversal | -2,01748E-05 | 3,0672E-06 | -3,46155E-07 | -5,55183E-09 | 2,58784E-10 | -3,44297E-07 | -5,55183E-09 | 1,28338E-10 |
| 140 | D Longitudinal | 1,19496E-05 | 1,93874E-06 | 3,97613E-06 | 3,49368E-09 | 1,69272E-10 | 4,00641E-06 | 3,49369E-09 | 2,54018E-10 |
| 140 | D Vertical | -0,001404523 | -0,00027758 | -2,03369E-07 | -2,03213E-07 | -1,01056E-08 | -2,03505E-07 | -2,03213E-07 | -1,31672E-08 |
| 140 | D transversal | 0,036027812 | 5,32552E-06 | 7,30277E-09 | 3,97965E-06 | 3,3467E-10 | -2,35155E-08 | 3,97965E-06 | 4,50125E-08 |
| 140 | G Longitudinal | 0,002404277 | -5,79389E-06 | -7,68647E-09 | 3,46006E-07 | -3,73078E-10 | -9,03696E-09 | 3,46006E-07 | 4,73396E-09 |
| 140 | G Vertical | -9,00863E-05 | -1,88103E-05 | 1,17882E-08 | -2,96065E-08 | -4,96522E-10 | 5,65798E-08 | -2,96064E-08 | -1,3616E-09 |
| 140 | G transversal | 2,01713E-05 | 3,04502E-06 | -3,46154E-07 | 5,55255E-09 | 2,59102E-10 | -3,48013E-07 | 5,55255E-09 | 3,89685E-10 |
| 141 | D Longitudinal | -2,41361E-05 | 3,78098E-06 | 3,77039E-06 | -6,81578E-09 | 3,1675E-10 | 3,74059E-06 | -6,81579E-09 | 1,54814E-10 |
| 141 | D Vertical | 0,001413436 | -0,000273455 | -2,00921E-07 | 2,00907E-07 | -9,79616E-09 | -2,00874E-07 | 2,00907E-07 | -6,83952E-09 |
| 141 | D transversal | 0,03457904 | -4,93434E-06 | -9,98603E-09 | 3,77341E-06 | -4,7141E-10 | -4,04413E-08 | 3,77341E-06 | 4,12052E-08 |
| 141 | G Longitudinal | 0,002379945 | 1,32095E-06 | 1,32466E-09 | 3,35945E-07 | 3,84905E-11 | -4,68384E-10 | 3,35945E-07 | 4,86021E-09 |
| 141 | G Vertical | -7,45764E-05 | 1,47161E-05 | -9,75386E-09 | -2,48363E-08 | 4,0503E-10 | 3,42841E-08 | -2,48364E-08 | -3,18757E-10 |
| 141 | G transversal | -2,20255E-05 | 3,51815E-06 | -3,34091E-07 | -6,12697E-09 | 2,35826E-10 | -3,3247E-07 | -6,12697E-09 | 8,89728E-11 |
| 142 | D Longitudinal | 2,4136E-05 | 3,71603E-06 | 3,77039E-06 | 6,81579E-09 | 3,17137E-10 | 3,8002E-06 | 6,8158E-09 | 4,79074E-10 |
| 142 | D Vertical | -0,001413436 | -0,000273698 | -2,00921E-07 | -2,00907E-07 | -9,79611E-09 | -2,00968E-07 | -2,00907E-07 | -1,27527E-08 |
| 142 | D transversal | 0,034579026 | 7,82326E-06 | 9,98519E-09 | 3,77341E-06 | 4,71794E-10 | -2,047E-08 | 3,77341E-06 | 4,21484E-08 |
| 142 | G Longitudinal | 0,002379953 | -9,04773E-07 | -1,32408E-09 | 3,35946E-07 | -3,8363E-11 | -3,11704E-09 | 3,35946E-07 | 4,78348E-09 |
| 142 | G Vertical | -7,44489E-05 | -1,57708E-05 | 9,73625E-09 | -2,48623E-08 | -4,13661E-10 | 5,37699E-08 | -2,48622E-08 | -1,14249E-09 |
| 142 | G transversal | 2,20228E-05 | 3,50265E-06 | -3,34091E-07 | 6,12752E-09 | 2,36066E-10 | -3,35711E-07 | 6,12752E-09 | 3,83024E-10 |
| 143 | D Longitudinal | 5,92644E-11 | 1,42108E-08 | 4,08546E-06 | -6,37987E-14 | -1,63062E-13 | 4,05488E-06 | -7,23285E-14 | 1,15482E-13 |
| 143 | D Vertical | 0,001405559 | -0,000280742 | 3,98798E-13 | 2,06125E-07 | -1,03796E-08 | 6,49713E-13 | 2,06125E-07 | -7,22621E-09 |
| 143 | D transversal | 0,036824744 | 6,10199E-07 | 2,13536E-14 | 4,09022E-06 | -2,06405E-10 | 3,83719E-14 | 4,09022E-06 | 4,61192E-08 |
| 143 | G Longitudinal | 0,002404848 | 6,37781E-06 | -3,09693E-14 | 3,49591E-07 | 4,20698E-10 | 8,11998E-15 | 3,49591E-07 | 5,62743E-09 |
| 143 | G Vertical | 1,27503E-08 | 2,32913E-08 | 8,12271E-09 | 1,53011E-13 | -2,77582E-13 | 6,07183E-08 | 1,38825E-13 | 1,9857E-13 |
| 143 | G transversal | -6,47204E-11 | 3,11565E-08 | -3,4901E-07 | -2,29225E-14 | -4,55594E-14 | -3,48407E-07 | -2,20951E-14 | 1,90542E-14 |
| 144 | D Longitudinal | 2,26457E-10 | -5,33109E-08 | 3,98796E-06 | 1,21567E-14 | -1,783E-10 | 3,98796E-06 | 1,21648E-14 | -1,78299E-10 |
| 144 | D Vertical | -9,60638E-09 | -0,000280879 | 2,06657E-07 | -1,52086E-13 | -1,03047E-08 | 2,06657E-07 | -1,52069E-13 | -1,03047E-08 |
| 144 | D transversal | 0,03606709 | 1,61653E-06 | 3,91593E-13 | 3,98368E-06 | -1,73504E-13 | 3,07377E-08 | 3,98368E-06 | 4,46992E-08 |
| 144 | G Longitudinal | 0,002385498 | 1,53539E-07 | -8,24428E-14 | 3,44362E-07 | 4,37297E-14 | 7,21985E-10 | 3,44362E-07 | 5,13386E-09 |
| 144 | G Vertical | -2,29806E-05 | -4,3747E-08 | -4,49422E-13 | -6,64334E-09 | 2,61676E-13 | 5,11254E-08 | -6,64332E-09 | -1,61364E-10 |
| 144 | G transversal | -1,52291E-10 | -2,36485E-06 | -3,45693E-07 | -2,13391E-14 | -2,27724E-10 | -3,45693E-07 | -2,13882E-14 | -2,27727E-10 |
| 145 | D Longitudinal | 1,19497E-05 | -1,93268E-06 | 3,97613E-06 | 3,49353E-09 | -1,69272E-10 | 3,94585E-06 | 3,49353E-09 | -8,39466E-11 |
| 145 | D Vertical | 0,001404523 | -0,000277362 | 2,03369E-07 | 2,03213E-07 | -1,01056E-08 | 2,03233E-07 | 2,03213E-07 | -7,04401E-09 |
| 145 | D transversal | 0,036027812 | -2,14378E-06 | 7,3035E-09 | 3,97965E-06 | -3,3467E-10 | 3,81218E-08 | 3,97965E-06 | 4,43437E-08 |
| 145 | G Longitudinal | 0,002404277 | 6,15758E-06 | -7,68665E-09 | 3,46006E-07 | 3,73078E-10 | -6,33619E-09 | 3,46006E-07 | 5,47999E-09 |
| 145 | G Vertical | 9,00862E-05 | -1,87487E-05 | -1,17885E-08 | 2,96065E-08 | -4,9651E-10 | 3,30021E-08 | 2,96066E-08 | 3,68355E-10 |
| 145 | G transversal | 2,01713E-05 | -3,03571E-06 | -3,46154E-07 | 5,55252E-09 | -2,59102E-10 | -3,44295E-07 | 5,55252E-09 | -1,28404E-10 |
| 146 | D Longitudinal | -2,41361E-05 | -3,79254E-06 | 3,77039E-06 | -6,81562E-09 | -3,1675E-10 | 3,8002E-06 | -6,81561E-09 | -4,79324E-10 |
| 146 | D Vertical | -0,001413436 | -0,000273665 | 2,00921E-07 | -2,00907E-07 | -9,79616E-09 | 2,00968E-07 | -2,00907E-07 | -1,27527E-08 |
| 146 | D transversal | 0,03457904 | 7,90235E-06 | -9,98518E-09 | 3,77341E-06 | 4,7141E-10 | 2,04701E-08 | 3,77341E-06 | 4,21487E-08 |
| 146 | G Longitudinal | 0,002379945 | -9,77577E-07 | 1,32449E-09 | 3,35945E-07 | -3,8491E-11 | 3,11755E-09 | 3,35945E-07 | 4,78308E-09 |

APOYO 2

| DESPLAZAMIENTOS (metros) | | VIENTO | PESO | CT1 | | | CT2 | | |
|---|---|---|---|---|---|---|---|---|---|
| Nudo | Desplazamiento | | | L | T | V | L | T | V |
| 146 | G Vertical | 7,45764E-05 | 1,47676E-05 | 9,75378E-09 | 2,48363E-08 | 4,05007E-10 | 5,3792E-08 | 2,48362E-08 | 1,12753E-09 |
| 146 | G transversal | -2,20255E-05 | -3,52861E-06 | -3,34091E-07 | -6,12695E-09 | -2,35826E-10 | -3,35712E-07 | -6,12695E-09 | -3,82729E-10 |
| 147 | D Longitudinal | 2,4136E-05 | -3,70448E-06 | 3,77039E-06 | 6,81563E-09 | -3,17137E-10 | 3,74059E-06 | 6,81562E-09 | -1,54562E-10 |
| 147 | D Vertical | 0,001413436 | -0,000273487 | 2,00921E-07 | 2,00907E-07 | -9,79611E-09 | 2,00874E-07 | 2,00907E-07 | -6,83954E-09 |
| 147 | D transversal | 0,034579026 | -4,85525E-06 | 9,98603E-09 | 3,77341E-06 | -4,71794E-10 | 4,04412E-08 | 3,77341E-06 | 4,12055E-08 |
| 147 | G Longitudinal | 0,002379953 | 1,24816E-06 | -1,32425E-09 | 3,35946E-07 | 3,83633E-11 | 4,68694E-10 | 3,35946E-07 | 4,86008E-09 |
| 147 | G Vertical | 7,44489E-05 | -1,57189E-05 | -9,73645E-09 | 2,48623E-08 | -4,13651E-10 | 3,42964E-08 | 2,48624E-08 | 3,15011E-10 |
| 147 | G transversal | 2,20228E-05 | -3,49218E-06 | -3,34091E-07 | 6,1275E-09 | -2,36065E-10 | -3,3247E-07 | 6,1275E-09 | -8,90324E-11 |
| 148 | D Longitudinal | -7,98009E-11 | -3,90565E-08 | 3,76975E-06 | 7,99599E-14 | 1,92989E-13 | 3,79964E-06 | 8,74619E-14 | -1,26879E-13 |
| 148 | D Vertical | -0,001419402 | -0,000275414 | 9,1298E-14 | -2,03339E-07 | -9,90524E-09 | 3,18014E-14 | -2,03339E-07 | -1,29249E-08 |
| 148 | D transversal | 0,034691264 | 3,99194E-06 | -2,07131E-15 | 3,77966E-06 | 3,67945E-10 | 7,59009E-15 | 3,77966E-06 | 4,21816E-08 |
| 148 | G Longitudinal | 0,002370673 | -1,14382E-06 | 1,09647E-14 | 3,35038E-07 | -5,49262E-11 | 6,47548E-15 | 3,35038E-07 | 4,74435E-09 |
| 148 | G Vertical | 1,83442E-09 | 5,85734E-08 | -1,29655E-08 | -2,08414E-13 | -3,33826E-13 | 3,69966E-08 | -2,20498E-13 | 1,5685E-13 |
| 148 | G transversal | -5,57177E-11 | -2,59866E-08 | -3,32777E-07 | 1,65107E-14 | 3,88197E-14 | -3,33766E-07 | 1,58097E-14 | -1,41921E-14 |
| 149 | D Longitudinal | 6,2843E-10 | 7,84652E-07 | 3,57605E-06 | 1,1252E-14 | 3,11787E-10 | 3,57605E-06 | 1,12507E-14 | 3,11788E-10 |
| 149 | D Vertical | -4,79999E-09 | -0,000268125 | -1,95918E-07 | -6,8526E-14 | -9,36691E-09 | -1,95918E-07 | -6,85653E-14 | -9,36691E-09 |
| 149 | D transversal | 0,033142373 | 1,32788E-06 | -4,58748E-13 | 3,57133E-06 | 2,09774E-13 | -2,97948E-08 | 3,57133E-06 | 3,8797E-08 |
| 149 | G Longitudinal | 0,002316191 | 1,85134E-07 | 6,63885E-14 | 3,2198E-07 | -3,20189E-14 | -1,05016E-09 | 3,2198E-07 | 4,56306E-09 |
| 149 | G Vertical | 4,35827E-05 | -7,3109E-08 | -6,81703E-13 | 1,1689E-08 | 3,15697E-13 | 4,75167E-08 | 1,1689E-08 | 2,67425E-10 |
| 149 | G transversal | 1,06286E-10 | 6,93338E-07 | -3,22159E-07 | -1,18012E-14 | 2,46187E-11 | -3,22159E-07 | -1,17487E-14 | 2,46164E-11 |
| 150 | D Longitudinal | -3,22485E-05 | -5,15917E-06 | 3,56853E-06 | -8,9305E-09 | -3,93795E-10 | 3,59796E-06 | -8,93049E-09 | -6,04338E-10 |
| 150 | D Vertical | -0,001417541 | -0,000269479 | 1,98155E-07 | -1,98042E-07 | -9,48052E-09 | 1,98274E-07 | -1,98042E-07 | -1,23334E-08 |
| 150 | D transversal | 0,033127438 | 6,78524E-06 | -8,53304E-09 | 3,57058E-06 | 3,86987E-10 | 2,12578E-08 | 3,57058E-06 | 3,92023E-08 |
| 150 | G Longitudinal | 0,002345908 | 3,67714E-06 | -3,98648E-09 | 3,24202E-07 | 2,42527E-10 | -1,84319E-09 | 3,24202E-07 | 4,75329E-09 |
| 150 | G Vertical | 6,42943E-05 | 1,2235E-05 | 8,07335E-09 | 2,16828E-08 | 3,30829E-10 | 5,11511E-08 | 2,16827E-08 | 9,6114E-10 |
| 150 | G transversal | -6,48692E-06 | -1,17732E-06 | -3,22262E-07 | -1,39733E-09 | -2,45173E-11 | -3,23727E-07 | -1,39733E-09 | -5,17691E-11 |
| 151 | D Longitudinal | -3,22485E-05 | 5,1442E-06 | 3,56853E-06 | -8,93067E-09 | 3,93795E-10 | 3,5391E-06 | -8,93068E-09 | 1,83932E-10 |
| 151 | D Vertical | 0,001417541 | -0,000269276 | -1,98155E-07 | 1,98041E-07 | -9,48052E-09 | -1,98037E-07 | 1,98041E-07 | -6,62763E-09 |
| 151 | D transversal | 0,033127438 | -4,02104E-06 | -8,53397E-09 | 3,57058E-06 | -3,86987E-10 | -3,83248E-08 | 3,57058E-06 | 3,84276E-08 |
| 151 | G Longitudinal | 0,002345908 | -3,3559E-06 | -3,98639E-09 | 3,24202E-07 | -2,42527E-10 | -6,12968E-09 | 3,24202E-07 | 4,26832E-09 |
| 151 | G Vertical | -6,42943E-05 | 1,21901E-05 | -8,07336E-09 | -2,16828E-08 | 3,30849E-10 | 3,50042E-08 | -2,16829E-08 | -3,005E-10 |
| 151 | G transversal | -6,48692E-06 | 1,17538E-06 | -3,22262E-07 | -1,39735E-09 | 2,45178E-11 | -3,20796E-07 | -1,39735E-09 | -2,6968E-12 |
| 152 | D Longitudinal | 3,22485E-05 | 5,05577E-06 | 3,56853E-06 | 8,93067E-09 | 3,94212E-10 | 3,59796E-06 | 8,93068E-09 | 6,04075E-10 |
| 152 | D Vertical | -0,001417542 | -0,000269508 | -1,98155E-07 | -1,98041E-07 | -9,48048E-09 | -1,98274E-07 | -1,98041E-07 | -1,23334E-08 |
| 152 | D transversal | 0,03312743 | 6,6787E-06 | 8,53304E-09 | 3,57058E-06 | 3,87403E-10 | -2,12578E-08 | 3,57058E-06 | 3,9202E-08 |
| 152 | G Longitudinal | 0,002345883 | 3,73356E-06 | 3,98679E-09 | 3,24202E-07 | 2,42636E-10 | 1,84362E-09 | 3,24202E-07 | 4,75356E-09 |
| 152 | G Vertical | -6,41865E-05 | -1,30823E-05 | 8,05843E-09 | -2,1705E-08 | -3,3822E-10 | 5,11323E-08 | -2,17049E-08 | -9,73865E-10 |
| 152 | G transversal | 6,48473E-06 | 1,15495E-06 | -3,22262E-07 | 1,3978E-09 | 2,47158E-11 | -3,23727E-07 | 1,3978E-09 | 5,20189E-11 |
| 153 | D Longitudinal | 2,57082E-11 | -6,38965E-08 | 3,37419E-06 | 9,3824E-14 | 2,2282E-13 | 3,40325E-06 | 1,00236E-13 | -1,36081E-13 |
| 153 | D Vertical | -0,001413544 | -0,000264793 | -3,02278E-14 | -1,93321E-07 | -9,09459E-09 | -9,85792E-15 | -1,93321E-07 | -1,17973E-08 |
| 153 | D transversal | 0,031830927 | 3,22515E-06 | 1,85976E-15 | 3,3824E-06 | 3,07637E-10 | 3,38799E-16 | 3,3824E-06 | 3,65648E-08 |
| 153 | G Longitudinal | 0,002297013 | 1,82174E-06 | -8,43176E-15 | 3,12148E-07 | 1,13137E-10 | -2,25532E-15 | 3,12148E-07 | 4,35145E-09 |
| 153 | G Vertical | 1,68484E-09 | 9,69567E-08 | -1,13427E-08 | -1,58284E-13 | -3,59997E-13 | 3,4577E-08 | -1,68493E-13 | 1,93353E-13 |
| 153 | G transversal | -8,21803E-12 | -1,991E-08 | -3,0977E-07 | 1,1471E-14 | 2,80379E-14 | -3,10649E-07 | 1,08405E-14 | -1,01714E-14 |

APOYO 2

| DESPLAZAMIENTOS (metros) | | VIENTO | PESO | CT1 | | | CT2 | | |
|---|---|---|---|---|---|---|---|---|---|
| Nudo | Desplazamiento | | | L | T | V | L | T | V |
| 154 | D Longitudinal | -2,98557E-05 | -4,78479E-06 | 3,37384E-06 | -7,80483E-09 | -3,34724E-10 | 3,40293E-06 | -7,80482E-09 | -5,10438E-10 |
| 154 | D Vertical | -0,001421133 | -0,00026505 | 1,94934E-07 | -1,94989E-07 | -9,16449E-09 | 1,94957E-07 | -1,94989E-07 | -1,19089E-08 |
| 154 | D transversal | 0,031695513 | 4,77588E-06 | -6,01889E-09 | 3,37489E-06 | 2,47417E-10 | 2,29921E-08 | 3,37489E-06 | 3,63764E-08 |
| 154 | G Longitudinal | 0,002305115 | 2,1943E-06 | -2,19633E-09 | 3,12566E-07 | 1,37949E-10 | -5,78392E-11 | 3,12566E-07 | 4,38449E-09 |
| 154 | G Vertical | 5,53219E-05 | 1,04415E-05 | 7,13986E-09 | 1,89665E-08 | 2,82553E-10 | 4,90421E-08 | 1,89664E-08 | 8,34862E-10 |
| 154 | G transversal | 6,41652E-06 | 9,38011E-07 | -3,10798E-07 | 2,65616E-09 | 1,38184E-10 | -3,12297E-07 | 2,65616E-09 | 2,15845E-10 |
| 155 | D Longitudinal | -2,98557E-05 | 4,77231E-06 | 3,37385E-06 | -7,80501E-09 | 3,34724E-10 | 3,34476E-06 | -7,80502E-09 | 1,59725E-10 |
| 155 | D Vertical | 0,001421133 | -0,000264854 | -1,94934E-07 | 1,94989E-07 | -9,16449E-09 | -1,94911E-07 | 1,94989E-07 | -6,42006E-09 |
| 155 | D transversal | 0,031695513 | -2,20299E-06 | -6,01986E-09 | 3,37489E-06 | -2,47417E-10 | -3,50309E-08 | 3,37489E-06 | 3,58808E-08 |
| 155 | G Longitudinal | 0,002305115 | -1,89188E-06 | -2,19627E-09 | 3,12566E-07 | -1,37949E-10 | -4,33476E-09 | 3,12566E-07 | 4,10864E-09 |
| 155 | G Vertical | -5,53219E-05 | 1,04021E-05 | -7,13987E-09 | -1,89665E-08 | 2,8257E-10 | 3,47622E-08 | -1,89666E-08 | -2,70641E-10 |
| 155 | G transversal | 6,41652E-06 | -9,3248E-07 | -3,10798E-07 | 2,65614E-09 | -1,38183E-10 | -3,09299E-07 | 2,65614E-09 | -6,0491E-11 |
| 156 | D Longitudinal | 2,98557E-05 | 4,65842E-06 | 3,37384E-06 | 7,80501E-09 | 3,35166E-10 | 3,40293E-06 | 7,80502E-09 | 5,10166E-10 |
| 156 | D Vertical | -0,001421133 | -0,000265076 | -1,94934E-07 | -1,94989E-07 | -9,16446E-09 | -1,94957E-07 | -1,94989E-07 | -1,19089E-08 |
| 156 | D transversal | 0,031695518 | 4,64801E-06 | 6,01889E-09 | 3,37489E-06 | 2,47859E-10 | -2,29921E-08 | 3,37489E-06 | 3,63761E-08 |
| 156 | G Longitudinal | 0,002305101 | 2,24126E-06 | 2,1966E-09 | 3,12566E-07 | 1,38048E-10 | 5,81907E-11 | 3,12566E-07 | 4,38471E-09 |
| 156 | G Vertical | -5,52281E-05 | -1,11777E-05 | 7,1269E-09 | -1,89858E-08 | -2,8898E-10 | 4,90258E-08 | -1,89857E-08 | -8,45925E-10 |
| 156 | G transversal | -6,41844E-06 | -9,56536E-07 | -3,10797E-07 | -2,65573E-09 | -1,38009E-10 | -3,12296E-07 | -2,65573E-09 | -2,15622E-10 |
| 157 | D Longitudinal | -2,38485E-10 | 1,157E-06 | 3,19294E-06 | -3,54802E-15 | 3,13231E-10 | 3,19294E-06 | -3,54784E-15 | 3,13231E-10 |
| 157 | D Vertical | 1,69105E-09 | -0,000261248 | -1,92E-07 | 2,10344E-14 | -8,87928E-09 | -1,92E-07 | 2,10584E-14 | -8,87928E-09 |
| 157 | D transversal | 0,030304774 | 1,12138E-06 | -5,01378E-13 | 3,18645E-06 | 2,32043E-13 | -2,83456E-08 | 3,18645E-06 | 3,3565E-08 |
| 157 | G Longitudinal | 0,002228218 | 1,61143E-07 | 4,56097E-14 | 2,9876E-07 | -2,2524E-14 | -9,8809E-10 | 2,9876E-07 | 4,05094E-09 |
| 157 | G Vertical | 4,66496E-05 | -1,03045E-07 | -8,14688E-13 | 1,12448E-08 | 3,42753E-13 | 4,41216E-08 | 1,12448E-08 | 2,35849E-10 |
| 157 | G transversal | 1,3091E-11 | -3,19257E-07 | -2,99951E-07 | -3,26313E-15 | -3,5553E-11 | -2,99951E-07 | -3,22293E-15 | -3,55536E-11 |
| 158 | D Longitudinal | -2,59746E-05 | -4,16218E-06 | 3,18595E-06 | -6,14074E-09 | -2,56534E-10 | 3,21456E-06 | -6,14074E-09 | -3,82709E-10 |
| 158 | D Vertical | -0,001419883 | -0,000260448 | 1,91602E-07 | -1,91484E-07 | -8,85041E-09 | 1,91691E-07 | -1,91484E-07 | -1,149E-08 |
| 158 | D transversal | 0,030293369 | 4,55445E-06 | -5,7817E-09 | 3,18631E-06 | 2,3408E-10 | 2,24916E-08 | 3,18631E-06 | 3,38292E-08 |
| 158 | G Longitudinal | 0,002259464 | -1,18213E-06 | 1,76737E-09 | 3,00883E-07 | -7,81142E-11 | 3,78669E-09 | 3,00883E-07 | 3,92618E-09 |
| 158 | G Vertical | 4,78895E-05 | 8,81106E-06 | 6,06249E-09 | 1,66854E-08 | 2,35814E-10 | 4,67119E-08 | 1,66853E-08 | 7,21252E-10 |
| 158 | G transversal | -1,56937E-06 | 2,32622E-08 | -3,0016E-07 | 4,47598E-10 | 3,99171E-11 | -3,02006E-07 | 4,47599E-10 | 6,4256E-11 |
| 159 | D Longitudinal | -2,59746E-05 | 4,15322E-06 | 3,18595E-06 | -6,14094E-09 | 2,56534E-10 | 3,15734E-06 | -6,14094E-09 | 1,31099E-10 |
| 159 | D Vertical | 0,001419883 | -0,00026026 | -1,91602E-07 | 1,91484E-07 | -8,85041E-09 | -1,91513E-07 | 1,91484E-07 | -6,21079E-09 |
| 159 | D transversal | 0,030293369 | -2,16201E-06 | -5,7827E-09 | 3,18631E-06 | -2,3408E-10 | -3,40561E-08 | 3,18631E-06 | 3,33603E-08 |
| 159 | G Longitudinal | 0,002259464 | 1,4673E-06 | 1,76742E-09 | 3,00883E-07 | 7,81139E-11 | -2,51902E-10 | 3,00883E-07 | 4,08246E-09 |
| 159 | G Vertical | -4,78895E-05 | 8,77645E-06 | -6,06247E-09 | -1,66854E-08 | 2,35829E-10 | 3,45868E-08 | -1,66854E-08 | -2,50369E-10 |
| 159 | G transversal | -1,56937E-06 | -2,15285E-08 | -3,00159E-07 | 4,47588E-10 | -3,99168E-11 | -2,98313E-07 | 4,47587E-10 | -1,55592E-11 |
| 160 | D Longitudinal | 2,59746E-05 | 4,01677E-06 | 3,18595E-06 | 6,14094E-09 | 2,56997E-10 | 3,21456E-06 | 6,14094E-09 | 3,82432E-10 |
| 160 | D Vertical | -0,001419883 | -0,000260471 | -1,91602E-07 | -1,91484E-07 | -8,85038E-09 | -1,91691E-07 | -1,91484E-07 | -1,149E-08 |
| 160 | D transversal | 0,030293374 | 4,4086E-06 | 5,78171E-09 | 3,18631E-06 | 2,34542E-10 | -2,24917E-08 | 3,18631E-06 | 3,38289E-08 |
| 160 | G Longitudinal | 0,002259471 | -1,14188E-06 | -1,76713E-09 | 3,00883E-07 | -7,80228E-11 | -3,78641E-09 | 3,00883E-07 | 3,92639E-09 |
| 160 | G Vertical | -4,78079E-05 | -9,44617E-06 | 6,05123E-09 | -1,67021E-08 | -2,4141E-10 | 4,66977E-08 | -1,67021E-08 | -7,3085E-10 |
| 160 | G transversal | 1,56764E-06 | -3,73205E-08 | -3,00159E-07 | -4,47229E-10 | -3,97695E-11 | -3,02005E-07 | -4,47231E-10 | -6,40576E-11 |
| 161 | D Longitudinal | -3,01315E-05 | -4,48898E-06 | 3,00458E-06 | -6,7761E-09 | -2,77382E-10 | 3,03245E-06 | -6,77609E-09 | -4,1081E-10 |
| 161 | D Vertical | -0,00141806 | -0,000255597 | 1,87793E-07 | -1,87827E-07 | -8,5347E-09 | 1,878E-07 | -1,87827E-07 | -1,10665E-08 |

APOYO 2

| DESPLAZAMIENTOS (metros) | | VIENTO | PESO | CT1 | | | CT2 | | |
|---|---|---|---|---|---|---|---|---|---|
| Nudo | Desplazamiento | | | L | T | V | L | T | V |
| 161 | D transversal | 0,028916711 | 5,79001E-06 | -7,20833E-09 | 3,00496E-06 | 3,02878E-10 | 2,03577E-08 | 3,00496E-06 | 3,1513E-08 |
| 161 | G Longitudinal | 0,002211865 | -2,26508E-06 | 3,24628E-09 | 2,88991E-07 | -1,31044E-10 | 5,2341E-09 | 2,88991E-07 | 3,62839E-09 |
| 161 | G Vertical | 4,04613E-05 | 7,30846E-06 | 5,59832E-09 | 1,45235E-08 | 1,87037E-10 | 4,48953E-08 | 1,45235E-08 | 6,12133E-10 |
| 161 | G transversal | -1,39253E-05 | -1,68048E-06 | -2,89119E-07 | -3,09265E-09 | -1,12885E-10 | -2,91309E-07 | -3,09265E-09 | -1,76044E-10 |
| 162 | D Longitudinal | -3,01314E-05 | 4,4795E-06 | 3,00458E-06 | -6,77629E-09 | 2,77382E-10 | 2,97671E-06 | -6,7763E-09 | 1,44711E-10 |
| 162 | D Vertical | 0,00141806 | -0,000255417 | -1,87793E-07 | 1,87827E-07 | -8,5347E-09 | -1,87785E-07 | 1,87827E-07 | -6,0029E-09 |
| 162 | D transversal | 0,028916711 | -3,56741E-06 | -7,20935E-09 | 3,00496E-06 | -3,02878E-10 | -3,47754E-08 | 3,00496E-06 | 3,09065E-08 |
| 162 | G Longitudinal | 0,002211865 | 2,53281E-06 | 3,24632E-09 | 2,88991E-07 | 1,31044E-10 | 1,25851E-09 | 2,88991E-07 | 3,89051E-09 |
| 162 | G Vertical | -4,04613E-05 | 7,27816E-06 | -5,59831E-09 | -1,45235E-08 | 1,8705E-10 | 3,36985E-08 | -1,45236E-08 | -2,38724E-10 |
| 162 | G transversal | -1,39253E-05 | 1,67599E-06 | -2,89119E-07 | -3,09265E-09 | 1,12886E-10 | -2,86929E-07 | -3,09265E-09 | 4,97313E-11 |
| 163 | D Longitudinal | 3,01314E-05 | 4,3286E-06 | 3,00458E-06 | 6,7763E-09 | 2,7786E-10 | 3,03245E-06 | 6,7763E-09 | 4,10532E-10 |
| 163 | D Vertical | -0,00141806 | -0,000255617 | -1,87793E-07 | -1,87827E-07 | -8,53468E-09 | -1,878E-07 | -1,87827E-07 | -1,10665E-08 |
| 163 | D transversal | 0,02891671 | 5,62909E-06 | 7,20833E-09 | 3,00496E-06 | 3,03353E-10 | -2,03577E-08 | 3,00496E-06 | 3,15128E-08 |
| 163 | G Longitudinal | 0,00221187 | -2,23157E-06 | -3,24607E-09 | 2,88992E-07 | -1,30957E-10 | -5,23384E-09 | 2,88992E-07 | 3,62857E-09 |
| 163 | G Vertical | -4,03899E-05 | -7,86879E-06 | 5,58841E-09 | -1,45382E-08 | -1,91951E-10 | 4,48828E-08 | -1,45382E-08 | -6,20576E-10 |
| 163 | G transversal | 1,39237E-05 | 1,67123E-06 | -2,89118E-07 | 3,09297E-09 | 1,13007E-10 | -2,91308E-07 | 3,09297E-09 | 1,76222E-10 |
| 164 | D Longitudinal | -2,28877E-11 | -8,09588E-08 | 2,99943E-06 | 9,91088E-14 | 2,39547E-13 | 3,02729E-06 | 1,04544E-13 | -1,4E-13 |
| 164 | D Vertical | -0,001418872 | -0,000256407 | 7,59544E-15 | -1,88855E-07 | -8,56893E-09 | 2,36876E-15 | -1,88855E-07 | -1,11223E-08 |
| 164 | D transversal | 0,029110014 | 1,88208E-06 | -4,20547E-15 | 3,00755E-06 | 3,09444E-10 | -1,82231E-15 | 3,00755E-06 | 3,15844E-08 |
| 164 | G Longitudinal | 0,002197529 | -1,87143E-06 | -2,14854E-15 | 2,8838E-07 | -1,17321E-10 | -8,11101E-15 | 2,8838E-07 | 3,62748E-09 |
| 164 | G Vertical | -8,55248E-10 | 1,18928E-07 | -1,10712E-08 | -1,97977E-13 | -3,67631E-13 | 3,07364E-08 | -2,06246E-13 | 1,93016E-13 |
| 164 | G transversal | 4,65465E-12 | -1,42524E-08 | -2,86894E-07 | 7,85263E-15 | 1,84506E-14 | -2,88012E-07 | 7,29832E-15 | -5,97277E-15 |
| 165 | D Longitudinal | 9,2303E-11 | 5,4039E-07 | 2,82823E-06 | 9,09696E-16 | 3,05364E-10 | 2,82823E-06 | 9,17445E-16 | 3,05364E-10 |
| 165 | D Vertical | -4,24229E-10 | -0,000251406 | -1,84629E-07 | -4,00228E-15 | -8,23861E-09 | -1,84629E-07 | -4,01239E-15 | -8,23861E-09 |
| 165 | D transversal | 0,027504392 | 9,38832E-07 | -5,21608E-13 | 2,8207E-06 | 2,43311E-13 | -2,68555E-08 | 2,8207E-06 | 2,88152E-08 |
| 165 | G Longitudinal | 0,002129887 | 1,38728E-07 | 2,80219E-14 | 2,75059E-07 | -1,40533E-14 | -9,84539E-10 | 2,75059E-07 | 3,56383E-09 |
| 165 | G Vertical | 5,21908E-05 | -1,19569E-07 | -7,68274E-13 | 1,13018E-08 | 3,48394E-13 | 4,01489E-08 | 1,13018E-08 | 2,16284E-10 |
| 165 | G transversal | 2,44286E-11 | 7,40467E-07 | -2,76439E-07 | -6,04986E-15 | 6,0565E-11 | -2,76439E-07 | -6,02602E-15 | 6,05638E-11 |
| 166 | D Longitudinal | -3,78856E-05 | -5,46477E-06 | 2,82066E-06 | -8,43228E-09 | -3,42339E-10 | 2,84762E-06 | -8,43228E-09 | -5,08539E-10 |
| 166 | D Vertical | -0,001411158 | -0,00025019 | 1,83615E-07 | -1,83537E-07 | -8,19764E-09 | 1,83697E-07 | -1,83537E-07 | -1,06191E-08 |
| 166 | D transversal | 0,027496879 | 7,02341E-06 | -8,9566E-09 | 2,82115E-06 | 3,67932E-10 | 1,78529E-08 | 2,82115E-06 | 2,92183E-08 |
| 166 | G Longitudinal | 0,002161657 | -1,58595E-06 | 2,56354E-09 | 2,76755E-07 | -7,58588E-11 | 4,56354E-09 | 2,76755E-07 | 3,43627E-09 |
| 166 | G Vertical | 3,29897E-05 | 5,94016E-06 | 4,7167E-09 | 1,252E-08 | 1,44919E-10 | 4,25454E-08 | 1,252E-08 | 5,1476E-10 |
| 166 | G transversal | -1,06689E-05 | -1,32269E-06 | -2,76419E-07 | -2,21658E-09 | -7,72407E-11 | -2,78626E-07 | -2,21658E-09 | -1,21042E-10 |
| 167 | D Longitudinal | -3,78856E-05 | 5,45296E-06 | 2,82066E-06 | -8,43248E-09 | 3,42339E-10 | 2,79369E-06 | -8,43249E-09 | 1,76904E-10 |
| 167 | D Vertical | 0,001411158 | -0,000250018 | -1,83615E-07 | 1,83537E-07 | -8,19764E-09 | -1,83533E-07 | 1,83537E-07 | -5,77613E-09 |
| 167 | D transversal | 0,027496879 | -4,96886E-06 | -8,95764E-09 | 2,82115E-06 | -3,67932E-10 | -3,57672E-08 | 2,82115E-06 | 2,84817E-08 |
| 167 | G Longitudinal | 0,002161657 | 1,83606E-06 | 2,56356E-09 | 2,76755E-07 | 7,58585E-11 | 5,63564E-10 | 2,76755E-07 | 3,588E-09 |
| 167 | G Vertical | -3,29897E-05 | 5,9138E-06 | -4,71668E-09 | -1,252E-08 | 1,4493E-10 | 3,31119E-08 | -1,25201E-08 | -2,25493E-10 |
| 167 | G transversal | -1,06689E-05 | 1,31958E-06 | -2,76419E-07 | -2,21658E-09 | 7,72409E-11 | -2,74213E-07 | -2,21658E-09 | 3,34334E-11 |
| 168 | D Longitudinal | 3,78856E-05 | 5,29231E-06 | 2,82066E-06 | 8,43248E-09 | 3,42824E-10 | 2,84762E-06 | 8,43249E-09 | 5,08259E-10 |
| 168 | D Vertical | -0,001411158 | -0,000250207 | -1,83615E-07 | -1,83537E-07 | -8,19762E-09 | -1,83697E-07 | -1,83537E-07 | -1,06191E-08 |
| 168 | D transversal | 0,027496877 | 6,85037E-06 | 8,9566E-09 | 2,82115E-06 | 3,68417E-10 | -1,78529E-08 | 2,82115E-06 | 2,92181E-08 |
| 168 | G Longitudinal | 0,002161653 | -1,5596E-06 | -2,56336E-09 | 2,76755E-07 | -7,57753E-11 | -4,56329E-09 | 2,76755E-07 | 3,43642E-09 |

APOYO 2

| DESPLAZAMIENTOS (metros) | | VIENTO | PESO | CT1 | | | CT2 | | |
|---|---|---|---|---|---|---|---|---|---|
| Nudo | Desplazamiento | | | L | T | V | L | T | V |
| 168 | G Vertical | -3,29275E-05 | -6,42751E-06 | 4,70804E-09 | -1,25329E-08 | -1,49218E-10 | 4,25345E-08 | -1,25328E-08 | -5,22131E-10 |
| 168 | G transversal | 1,06676E-05 | 1,31733E-06 | -2,76419E-07 | 2,21685E-09 | 7,73404E-11 | -2,78626E-07 | 2,21685E-09 | 1,21201E-10 |
| 169 | D Longitudinal | -5,62952E-12 | -9,13884E-08 | 2,64221E-06 | 1,01401E-13 | 2,45664E-13 | 2,66837E-06 | 1,0598E-13 | -1,39166E-13 |
| 169 | D Vertical | -0,001396002 | -0,000244869 | 1,72326E-16 | -1,78421E-07 | -7,84026E-09 | -1,06442E-16 | -1,78421E-07 | -1,01353E-08 |
| 169 | D transversal | 0,026356548 | 2,16652E-06 | -2,42637E-16 | 2,65044E-06 | 3,48436E-10 | 1,00287E-16 | 2,65044E-06 | 2,70828E-08 |
| 169 | G Longitudinal | 0,002095875 | 4,19366E-07 | -1,48595E-15 | 2,64797E-07 | 1,84613E-11 | 6,86214E-16 | 2,64797E-07 | 3,29737E-09 |
| 169 | G Vertical | 6,65603E-10 | 1,29907E-07 | -1,26851E-08 | -1,60163E-13 | -3,59901E-13 | 2,52139E-08 | -1,6686E-13 | 1,89513E-13 |
| 169 | G transversal | -1,01383E-11 | -9,46406E-09 | -2,62746E-07 | 4,26367E-15 | 1,04557E-14 | -2,63817E-07 | 3,77975E-15 | -2,52509E-15 |
| 170 | D Longitudinal | -3,99701E-05 | -5,60099E-06 | 2,64486E-06 | -8,55722E-09 | -3,4247E-10 | 2,67095E-06 | -8,55722E-09 | -5,06404E-10 |
| 170 | D Vertical | -0,001403738 | -0,000244586 | 1,78983E-07 | -1,791E-07 | -7,86237E-09 | 1,78984E-07 | -1,791E-07 | -1,01706E-08 |
| 170 | D transversal | 0,026105725 | 7,50513E-06 | -9,60822E-09 | 2,64499E-06 | 3,80408E-10 | 1,64175E-08 | 2,64499E-06 | 2,70227E-08 |
| 170 | G Longitudinal | 0,002112132 | 3,75807E-07 | -1,68144E-10 | 2,65399E-07 | 2,90114E-11 | 1,84201E-09 | 2,65399E-07 | 3,31965E-09 |
| 170 | G Vertical | 2,52945E-05 | 4,69343E-06 | 4,17003E-09 | 1,05416E-08 | 1,0739E-10 | 4,04969E-08 | 1,05416E-08 | 4,2466E-10 |
| 170 | G transversal | -4,81101E-07 | -1,88763E-08 | -2,64423E-07 | 4,86885E-10 | 3,61468E-11 | -2,66497E-07 | 4,86885E-10 | 5,39545E-11 |
| 171 | D Longitudinal | -3,99701E-05 | 5,58934E-06 | 2,64486E-06 | -8,55742E-09 | 3,4247E-10 | 2,61876E-06 | -8,55743E-09 | 1,79303E-10 |
| 171 | D Vertical | 0,001403738 | -0,000244422 | -1,78983E-07 | 1,791E-07 | -7,86237E-09 | -1,78981E-07 | 1,791E-07 | -5,55415E-09 |
| 171 | D transversal | 0,026105725 | -5,60784E-06 | -9,60926E-09 | 2,64499E-06 | -3,80408E-10 | -3,5635E-08 | 2,64499E-06 | 2,62611E-08 |
| 171 | G Longitudinal | 0,002112132 | -1,41465E-07 | -1,68145E-10 | 2,65399E-07 | -2,90116E-11 | -2,1783E-09 | 2,65399E-07 | 3,26164E-09 |
| 171 | G Vertical | -2,52945E-05 | 4,67081E-06 | -4,17003E-09 | -1,05416E-08 | 1,074E-10 | 3,21568E-08 | -1,05417E-08 | -2,10387E-10 |
| 171 | G transversal | -4,81101E-07 | 2,01438E-08 | -2,64423E-07 | 4,86885E-10 | -3,61466E-11 | -2,6235E-07 | 4,86885E-10 | -1,83525E-11 |
| 172 | D Longitudinal | 3,99701E-05 | 5,41961E-06 | 2,64486E-06 | 8,55742E-09 | 3,42958E-10 | 2,67095E-06 | 8,55742E-09 | 5,06125E-10 |
| 172 | D Vertical | -0,001403738 | -0,0002446 | -1,78983E-07 | -1,791E-07 | -7,86236E-09 | -1,78984E-07 | -1,791E-07 | -1,01706E-08 |
| 172 | D transversal | 0,026105725 | 7,32324E-06 | 9,60822E-09 | 2,64499E-06 | 3,80896E-10 | -1,64175E-08 | 2,64499E-06 | 2,70224E-08 |
| 172 | G Longitudinal | 0,002112128 | 3,96311E-07 | 1,68307E-10 | 2,65399E-07 | 2,90901E-11 | -1,8418E-09 | 2,65399E-07 | 3,31979E-09 |
| 172 | G Vertical | -2,52402E-05 | -5,12131E-06 | 4,16247E-09 | -1,05528E-08 | -1,1114E-10 | 4,04874E-08 | -1,05528E-08 | -4,31103E-10 |
| 172 | G transversal | 4,79961E-07 | 1,66493E-08 | -2,64423E-07 | -4,86647E-10 | -3,60653E-11 | -2,66496E-07 | -4,86648E-10 | -5,38131E-11 |
| 173 | D Longitudinal | -3,84916E-05 | -5,4186E-06 | 2,47272E-06 | -7,74337E-09 | -3,0294E-10 | 2,49796E-06 | -7,74337E-09 | -4,43602E-10 |
| 173 | D Vertical | -0,001389519 | -0,000238696 | 1,74092E-07 | -1,74023E-07 | -7,52401E-09 | 1,74168E-07 | -1,74023E-07 | -9,7193E-09 |
| 173 | D transversal | 0,024721235 | 6,59481E-06 | -8,45978E-09 | 2,47257E-06 | 3,28887E-10 | 1,67314E-08 | 2,47257E-06 | 2,48605E-08 |
| 173 | G Longitudinal | 0,00205259 | 1,41162E-06 | -1,83639E-09 | 2,52382E-07 | 8,12676E-11 | 1,46949E-10 | 2,52382E-07 | 3,13216E-09 |
| 173 | G Vertical | 2,13734E-05 | 3,3869E-06 | 3,92799E-09 | 9,32678E-09 | 6,67399E-11 | 3,8688E-08 | 9,32675E-09 | 3,47366E-10 |
| 173 | G transversal | -1,57999E-06 | -1,26683E-07 | -2,52879E-07 | 3,34644E-10 | 3,02897E-11 | -2,54877E-07 | 3,34644E-10 | 4,60102E-11 |
| 174 | D Longitudinal | -3,84916E-05 | 5,40861E-06 | 2,47272E-06 | -7,74357E-09 | 3,0294E-10 | 2,44747E-06 | -7,74358E-09 | 1,6304E-10 |
| 174 | D Vertical | 0,001389519 | -0,00023854 | -1,74092E-07 | 1,74023E-07 | -7,52401E-09 | -1,74017E-07 | 1,74023E-07 | -5,32871E-09 |
| 174 | D transversal | 0,024721235 | -4,84783E-06 | -8,46081E-09 | 2,47257E-06 | -3,28887E-10 | -3,3652E-08 | 2,47257E-06 | 2,4202E-08 |
| 174 | G Longitudinal | 0,00205259 | -1,19435E-06 | -1,83641E-09 | 2,52382E-07 | -8,12678E-11 | -3,81975E-09 | 2,52382E-07 | 2,96963E-09 |
| 174 | G Vertical | -2,13734E-05 | 3,36689E-06 | -3,92797E-09 | -9,32679E-09 | 6,67487E-11 | 3,0832E-08 | -9,32682E-09 | -2,14318E-10 |
| 174 | G transversal | -1,57999E-06 | 1,27802E-07 | -2,52879E-07 | 3,34646E-10 | -3,02895E-11 | -2,50881E-07 | 3,34646E-10 | -1,45906E-11 |
| 175 | D Longitudinal | 3,84916E-05 | 5,23113E-06 | 2,47272E-06 | 7,74357E-09 | 3,03428E-10 | 2,49796E-06 | 7,74358E-09 | 4,43329E-10 |
| 175 | D Vertical | -0,001389519 | -0,000238708 | -1,74092E-07 | -1,74023E-07 | -7,524E-09 | -1,74168E-07 | -1,74023E-07 | -9,7193E-09 |
| 175 | D transversal | 0,024721236 | 6,40668E-06 | 8,45977E-09 | 2,47257E-06 | 3,29374E-10 | -1,67315E-08 | 2,47257E-06 | 2,48602E-08 |
| 175 | G Longitudinal | 0,00205259 | 1,42642E-06 | 1,83654E-09 | 2,52383E-07 | 8,1343E-11 | -1,46773E-10 | 2,52383E-07 | 3,13228E-09 |
| 175 | G Vertical | -2,13259E-05 | -3,75706E-06 | 3,92141E-09 | -9,33656E-09 | -7,001E-11 | 3,86798E-08 | -9,33653E-09 | -3,5297E-10 |
| 175 | G transversal | 1,57897E-06 | 1,27627E-07 | -2,52879E-07 | -3,34433E-10 | -3,02232E-11 | -2,54877E-07 | -3,34434E-10 | -4,58809E-11 |

APOYO 2

| DESPLAZAMIENTOS (metros) | | VIENTO | PESO | CT1 | | | CT2 | | |
|---|---|---|---|---|---|---|---|---|---|
| Nudo | Desplazamiento | | | L | T | V | L | T | V |
| 176 | D Longitudinal | -2,07771E-11 | 1,45172E-07 | 2,47356E-06 | -1,12474E-15 | 3,23426E-10 | 2,47356E-06 | -1,11966E-15 | 3,23425E-10 |
| 176 | D Vertical | 3,11538E-11 | -0,000237899 | -1,7244E-07 | -3,22765E-16 | -7,45417E-09 | -1,7244E-07 | -3,20626E-16 | -7,45417E-09 |
| 176 | D transversal | 0,024668972 | 7,74556E-07 | -5,21224E-13 | 2,46496E-06 | 2,44579E-13 | -2,52418E-08 | 2,46496E-06 | 2,44125E-08 |
| 176 | G Longitudinal | 0,00201547 | 1,17077E-07 | 1,25746E-14 | 2,49954E-07 | -6,43681E-15 | -9,88354E-10 | 2,49954E-07 | 3,08573E-09 |
| 176 | G Vertical | 5,72549E-05 | -1,25475E-07 | -7,53459E-13 | 1,14679E-08 | 3,37117E-13 | 3,59891E-08 | 1,14679E-08 | 2,07205E-10 |
| 176 | G transversal | 1,41799E-11 | -2,74022E-07 | -2,51856E-07 | -2,49425E-15 | -2,67735E-11 | -2,51856E-07 | -2,47308E-15 | -2,67739E-11 |
| 177 | D Longitudinal | -3,97507E-05 | 5,39866E-06 | 2,29436E-06 | -7,54901E-09 | 2,89425E-10 | 2,27001E-06 | -7,54901E-09 | 1,59661E-10 |
| 177 | D Vertical | 0,001374403 | -0,00023184 | -1,68441E-07 | 1,68422E-07 | -7,15439E-09 | -1,68446E-07 | 1,68422E-07 | -5,08441E-09 |
| 177 | D transversal | 0,02325801 | -4,17209E-06 | -7,07095E-09 | 2,29532E-06 | -2,72251E-10 | -3,1401E-08 | 2,29532E-06 | 2,21487E-08 |
| 177 | G Longitudinal | 0,001974609 | -6,18468E-07 | -1,26E-09 | 2,36508E-07 | -5,64583E-11 | -3,13725E-09 | 2,36508E-07 | 2,71866E-09 |
| 177 | G Vertical | -1,3358E-05 | 2,00954E-06 | -3,11398E-09 | -6,97679E-09 | 3,02519E-11 | 2,99115E-08 | -6,97682E-09 | -1,94652E-10 |
| 177 | G transversal | -2,4211E-06 | 1,91582E-07 | -2,37992E-07 | -1,28493E-10 | -6,11175E-12 | -2,36037E-07 | -1,28493E-10 | -4,36201E-12 |
| 178 | D Longitudinal | 3,97507E-05 | 5,21691E-06 | 2,29436E-06 | 7,54901E-09 | 2,89907E-10 | 2,31871E-06 | 7,54901E-09 | 4,19671E-10 |
| 178 | D Vertical | -0,001374403 | -0,000231996 | -1,68441E-07 | -1,68422E-07 | -7,15439E-09 | -1,68436E-07 | -1,68422E-07 | -9,22437E-09 |
| 178 | D transversal | 0,02325801 | 5,57758E-06 | 7,06993E-09 | 2,29532E-06 | 2,72732E-10 | -1,72601E-08 | 2,29532E-06 | 2,26937E-08 |
| 178 | G Longitudinal | 0,001974609 | 8,25048E-07 | 1,2601E-09 | 2,36508E-07 | 5,65303E-11 | -6,17119E-10 | 2,36508E-07 | 2,83168E-09 |
| 178 | G Vertical | -1,33172E-05 | -2,34506E-06 | 3,10834E-09 | -6,98516E-09 | -3,30417E-11 | 3,61325E-08 | -6,98514E-09 | -2,59568E-10 |
| 178 | G transversal | 2,4202E-06 | 1,96039E-07 | -2,37991E-07 | 1,28676E-10 | -6,0625E-12 | -2,39945E-07 | 1,28675E-10 | -7,77669E-12 |
| 179 | D Longitudinal | -6,22652E-11 | 3,90565E-08 | 3,76975E-06 | -8,37264E-14 | -1,9299E-13 | 3,73986E-06 | -9,12208E-14 | 1,26606E-13 |
| 179 | D Vertical | 0,001419402 | -0,000275199 | -9,13403E-14 | 2,03339E-07 | -9,90524E-09 | -1,50964E-13 | 2,03339E-07 | -6,88553E-09 |
| 179 | D transversal | 0,034691264 | -1,01419E-06 | -2,14121E-15 | 3,77966E-06 | -3,67945E-10 | -1,19999E-14 | 3,77966E-06 | 4,14457E-08 |
| 179 | G Longitudinal | 0,002370673 | 1,4856E-06 | 1,08623E-14 | 3,35038E-07 | 5,49262E-11 | 1,50622E-14 | 3,35038E-07 | 4,85421E-09 |
| 179 | G Vertical | -1,80643E-09 | 5,85746E-08 | 1,29669E-08 | -5,28946E-14 | -3,33716E-13 | 6,2929E-08 | -6,52211E-14 | 1,93553E-13 |
| 179 | G transversal | -5,24386E-11 | 2,59867E-08 | -3,32777E-07 | -1,33062E-14 | -3,88171E-14 | -3,31789E-07 | -1,26116E-14 | 1,50462E-14 |
| 180 | D Longitudinal | 6,2843E-10 | -7,84652E-07 | 3,57605E-06 | 1,12524E-14 | -3,11787E-10 | 3,57605E-06 | 1,1258E-14 | -3,11787E-10 |
| 180 | D Vertical | 4,79999E-09 | -0,000268125 | 1,95918E-07 | 6,85185E-14 | -9,36691E-09 | 1,95918E-07 | 6,84974E-14 | -9,36691E-09 |
| 180 | D transversal | 0,033142373 | 1,43505E-06 | 4,57614E-13 | 3,57133E-06 | -2,09775E-13 | 2,97948E-08 | 3,57133E-06 | 3,87973E-08 |
| 180 | G Longitudinal | 0,002316191 | 1,39822E-07 | -6,46912E-14 | 3,2198E-07 | 3,20179E-14 | 1,05016E-09 | 3,2198E-07 | 4,56304E-09 |
| 180 | G Vertical | -4,35827E-05 | -9,21698E-08 | -7,61933E-13 | -1,16887E-08 | 3,15672E-13 | 4,75166E-08 | -1,16887E-08 | -2,67881E-10 |
| 180 | G transversal | 1,06286E-10 | -6,93338E-07 | -3,22159E-07 | -1,1806E-14 | -2,46187E-11 | -3,22159E-07 | -1,18269E-14 | -2,46213E-11 |
| 181 | D Longitudinal | 3,22485E-05 | -5,0408E-06 | 3,56853E-06 | 8,9305E-09 | -3,94212E-10 | 3,5391E-06 | 8,93049E-09 | -1,83669E-10 |
| 181 | D Vertical | 0,001417542 | -0,000269305 | 1,98155E-07 | 1,98042E-07 | -9,48048E-09 | 1,98037E-07 | 1,98042E-07 | -6,62764E-09 |
| 181 | D transversal | 0,03312743 | -3,9145E-06 | 8,53396E-09 | 3,57058E-06 | -3,87403E-10 | 3,83248E-08 | 3,57058E-06 | 3,84279E-08 |
| 181 | G Longitudinal | 0,002345883 | -3,41232E-06 | 3,98671E-09 | 3,24202E-07 | -2,42636E-10 | 6,12986E-09 | 3,24202E-07 | 4,26823E-09 |
| 181 | G Vertical | 6,41865E-05 | -1,30371E-05 | -8,05854E-09 | 2,1705E-08 | -3,38212E-10 | 3,50147E-08 | 2,1705E-08 | 2,97327E-10 |
| 181 | G transversal | 6,48473E-06 | -1,153E-06 | -3,22262E-07 | 1,39778E-09 | -2,47156E-11 | -3,20797E-07 | 1,39779E-09 | 2,64429E-12 |
| 182 | D Longitudinal | 4,57498E-11 | 6,38965E-08 | 3,37419E-06 | -9,24415E-14 | -2,2282E-13 | 3,34514E-06 | -9,88487E-14 | 1,36155E-13 |
| 182 | D Vertical | 0,001413544 | -0,0002646 | 3,02519E-14 | 1,93321E-07 | -9,09459E-09 | 5,06976E-14 | 1,93321E-07 | -6,39192E-09 |
| 182 | D transversal | 0,031830927 | -6,43109E-07 | 1,87746E-15 | 3,3824E-06 | -3,07637E-10 | 3,44876E-15 | 3,3824E-06 | 3,59495E-08 |
| 182 | G Longitudinal | 0,002297013 | -1,51991E-06 | -8,38172E-15 | 3,12148E-07 | -1,13137E-10 | -1,4314E-14 | 3,12148E-07 | 4,12518E-09 |
| 182 | G Vertical | -1,65349E-09 | 9,69572E-08 | 1,13442E-08 | -1,33216E-13 | -3,59944E-13 | 5,72639E-08 | -1,4354E-13 | 2,09325E-13 |
| 182 | G transversal | -5,84122E-12 | 1,991E-08 | -3,0977E-07 | -1,00959E-14 | -2,80369E-14 | -3,08891E-07 | -9,46825E-15 | 1,05171E-14 |
| 183 | D Longitudinal | 2,98557E-05 | -4,64593E-06 | 3,37385E-06 | 7,80483E-09 | -3,35166E-10 | 3,34476E-06 | 7,80482E-09 | -1,59454E-10 |
| 183 | D Vertical | 0,001421133 | -0,00026488 | 1,94934E-07 | 1,94989E-07 | -9,16446E-09 | 1,94911E-07 | 1,94989E-07 | -6,42007E-09 |

APOYO 2

| DESPLAZAMIENTOS (metros) | | VIENTO | PESO | CT1 | | | CT2 | | |
|---|---|---|---|---|---|---|---|---|---|
| Nudo | Desplazamiento | | | L | T | V | L | T | V |
| 183 | D transversal | 0,031695518 | -2,07512E-06 | 6,01985E-09 | 3,37489E-06 | -2,47859E-10 | 3,50309E-08 | 3,37489E-06 | 3,58811E-08 |
| 183 | G Longitudinal | 0,002305101 | -1,93884E-06 | 2,19654E-09 | 3,12566E-07 | -1,38048E-10 | 4,33493E-09 | 3,12566E-07 | 4,10858E-09 |
| 183 | G Vertical | 5,52281E-05 | -1,1138E-05 | -7,12699E-09 | 1,89858E-08 | -2,88973E-10 | 3,47714E-08 | 1,89858E-08 | 2,67882E-10 |
| 183 | G transversal | -6,41844E-06 | 9,51011E-07 | -3,10797E-07 | -2,65575E-09 | 1,38009E-10 | -3,09299E-07 | -2,65575E-09 | 6,04438E-11 |
| 184 | D Longitudinal | -2,38485E-10 | -1,157E-06 | 3,19294E-06 | -3,54735E-15 | -3,13231E-10 | 3,19294E-06 | -3,54289E-15 | -3,13231E-10 |
| 184 | D Vertical | -1,69105E-09 | -0,000261248 | 1,92E-07 | -2,10298E-14 | -8,87928E-09 | 1,92E-07 | -2,10164E-14 | -8,87927E-09 |
| 184 | D transversal | 0,030304774 | 1,26896E-06 | 5,01671E-13 | 3,18645E-06 | -2,32042E-13 | 2,83456E-08 | 3,18645E-06 | 3,35653E-08 |
| 184 | G Longitudinal | 0,002228218 | 1,27344E-07 | -4,4433E-14 | 2,9876E-07 | 2,25237E-14 | 9,88091E-10 | 2,9876E-07 | 4,05092E-09 |
| 184 | G Vertical | -4,66496E-05 | -1,19857E-07 | -7,10019E-13 | -1,12445E-08 | 3,42735E-13 | 4,41217E-08 | -1,12445E-08 | -2,36298E-10 |
| 184 | G transversal | 1,30916E-11 | 3,19257E-07 | -2,99951E-07 | -3,27114E-15 | 3,5553E-11 | -2,99951E-07 | -3,30183E-15 | 3,55521E-11 |
| 185 | D Longitudinal | 2,59746E-05 | -4,00781E-06 | 3,18595E-06 | 6,14074E-09 | -2,56997E-10 | 3,15734E-06 | 6,14074E-09 | -1,30823E-10 |
| 185 | D Vertical | 0,001419883 | -0,000260283 | 1,91602E-07 | 1,91484E-07 | -8,85038E-09 | 1,91513E-07 | 1,91484E-07 | -6,2108E-09 |
| 185 | D transversal | 0,030293374 | -2,01616E-06 | 5,7827E-09 | 3,18631E-06 | -2,34542E-10 | 3,40561E-08 | 3,18631E-06 | 3,33605E-08 |
| 185 | G Longitudinal | 0,002259471 | 1,42705E-06 | -1,76718E-09 | 3,00883E-07 | 7,8023E-11 | 2,52089E-10 | 3,00883E-07 | 4,0824E-09 |
| 185 | G Vertical | 4,78079E-05 | -9,41131E-06 | -6,05128E-09 | 1,67021E-08 | -2,41403E-10 | 3,45947E-08 | 1,67021E-08 | 2,4798E-10 |
| 185 | G transversal | 1,56764E-06 | 3,5592E-08 | -3,00159E-07 | -4,47239E-10 | 3,97697E-11 | -2,98313E-07 | -4,47238E-10 | 1,55151E-11 |
| 186 | D Longitudinal | 3,01315E-05 | -4,31912E-06 | 3,00458E-06 | 6,7761E-09 | -2,7786E-10 | 2,97671E-06 | 6,77609E-09 | -1,44432E-10 |
| 186 | D Vertical | 0,00141806 | -0,000255437 | 1,87793E-07 | 1,87827E-07 | -8,53468E-09 | 1,87785E-07 | 1,87827E-07 | -6,00291E-09 |
| 186 | D transversal | 0,02891671 | -3,4065E-06 | 7,20935E-09 | 3,00496E-06 | -3,03353E-10 | 3,47754E-08 | 3,00496E-06 | 3,09068E-08 |
| 186 | G Longitudinal | 0,00221187 | 2,4993E-06 | -3,24611E-09 | 2,88992E-07 | 1,30957E-10 | -1,25834E-09 | 2,88992E-07 | 3,89046E-09 |
| 186 | G Vertical | 4,03899E-05 | -7,83827E-06 | -5,58847E-09 | 1,45383E-08 | -1,91946E-10 | 3,37055E-08 | 1,45383E-08 | 2,3662E-10 |
| 186 | G transversal | 1,39237E-05 | -1,66672E-06 | -2,89118E-07 | 3,09296E-09 | -1,13007E-10 | -2,86929E-07 | 3,09296E-09 | -4,97742E-11 |
| 187 | D Longitudinal | -1,45829E-12 | 8,09588E-08 | 2,99943E-06 | -9,9521E-14 | -2,39547E-13 | 2,97157E-06 | -1,04951E-13 | 1,39993E-13 |
| 187 | D Vertical | 0,001418872 | -0,000256225 | -7,60532E-15 | 1,88855E-07 | -8,56893E-09 | -1,28636E-14 | 1,88855E-07 | -6,01552E-09 |
| 187 | D transversal | 0,029110014 | 3,45162E-07 | -4,21316E-15 | 3,00755E-06 | -3,09444E-10 | -6,62399E-15 | 3,00755E-06 | 3,09655E-08 |
| 187 | G Longitudinal | 0,002197529 | 2,13812E-06 | -2,11606E-15 | 2,8838E-07 | 1,17321E-10 | 3,90559E-15 | 2,8838E-07 | 3,86212E-09 |
| 187 | G Vertical | 8,87329E-10 | 1,18928E-07 | 1,10727E-08 | -9,9428E-14 | -3,6759E-13 | 5,28803E-08 | -1,07787E-13 | 2,07683E-13 |
| 187 | G transversal | 6,20323E-12 | 1,42524E-08 | -2,86894E-07 | -6,14503E-15 | -1,84497E-14 | -2,85776E-07 | -5,59314E-15 | 6,2758E-15 |
| 188 | D Longitudinal | 9,23031E-11 | -5,4039E-07 | 2,82823E-06 | 9,08526E-16 | -3,05364E-10 | 2,82823E-06 | 9,0676E-16 | -3,05365E-10 |
| 188 | D Vertical | 4,24229E-10 | -0,000251406 | 1,84629E-07 | 4,00037E-15 | -8,23861E-09 | 1,84629E-07 | 3,99506E-15 | -8,23861E-09 |
| 188 | D transversal | 0,027504392 | 1,11325E-06 | 5,21304E-13 | 2,8207E-06 | -2,43311E-13 | 2,68555E-08 | 2,8207E-06 | 2,88155E-08 |
| 188 | G Longitudinal | 0,002129887 | 1,15069E-07 | -2,75705E-14 | 2,75059E-07 | 1,4053E-14 | 9,84539E-10 | 2,75059E-07 | 3,56382E-09 |
| 188 | G Vertical | -5,21908E-05 | -1,34987E-07 | -7,59595E-13 | -1,13015E-08 | 3,48379E-13 | 4,01489E-08 | -1,13015E-08 | -2,16716E-10 |
| 188 | G transversal | 2,44287E-11 | -7,40468E-07 | -2,76439E-07 | -6,05182E-15 | -6,0565E-11 | -2,76439E-07 | -6,05946E-15 | -6,05664E-11 |
| 189 | D Longitudinal | 3,78856E-05 | -5,2805E-06 | 2,82066E-06 | 8,43228E-09 | -3,42824E-10 | 2,79369E-06 | 8,43228E-09 | -1,76624E-10 |
| 189 | D Vertical | 0,001411158 | -0,000250035 | 1,83615E-07 | 1,83537E-07 | -8,19762E-09 | 1,83533E-07 | 1,83537E-07 | -5,77614E-09 |
| 189 | D transversal | 0,027496877 | -4,79583E-06 | 8,95764E-09 | 2,82115E-06 | -3,68417E-10 | 3,57672E-08 | 2,82115E-06 | 2,8482E-08 |
| 189 | G Longitudinal | 0,002161653 | 1,80972E-06 | -2,56337E-09 | 2,76755E-07 | 7,57754E-11 | -5,63439E-10 | 2,76755E-07 | 3,58797E-09 |
| 189 | G Vertical | 3,29275E-05 | -6,40095E-06 | -4,70808E-09 | 1,25329E-08 | -1,49213E-10 | 3,3118E-08 | 1,25329E-08 | 2,23658E-10 |
| 189 | G transversal | 1,06676E-05 | -1,31421E-06 | -2,76419E-07 | 2,21685E-09 | -7,73403E-11 | -2,74213E-07 | 2,21685E-09 | -3,34742E-11 |
| 190 | D Longitudinal | 1,62639E-11 | 9,13884E-08 | 2,64221E-06 | -1,01162E-13 | -2,45664E-13 | 2,61606E-06 | -1,05736E-13 | 1,39188E-13 |
| 190 | D Vertical | 0,001396002 | -0,000244705 | -1,71296E-16 | 1,78421E-07 | -7,84026E-09 | -4,48061E-16 | 1,78421E-07 | -5,5452E-09 |
| 190 | D transversal | 0,026356548 | -2,62637E-07 | -2,40889E-16 | 2,65044E-06 | -3,48436E-10 | -5,63516E-16 | 2,65044E-06 | 2,6386E-08 |
| 190 | G Longitudinal | 0,002095875 | -1,85859E-07 | -1,48809E-15 | 2,64797E-07 | -1,84613E-11 | -3,61556E-15 | 2,64797E-07 | 3,26045E-09 |

APOYO 2

| DESPLAZAMIENTOS (metros) | | VIENTO | PESO | CT1 | | | CT2 | | |
|---|---|---|---|---|---|---|---|---|---|
| Nudo | Desplazamiento | | | L | T | V | L | T | V |
| 190 | G Vertical | -6,34075E-10 | 1,29907E-07 | 1,26866E-08 | -1,31591E-13 | -3,59872E-13 | 5,05857E-08 | -1,38352E-13 | 1,98916E-13 |
| 190 | G transversal | -9,27974E-12 | 9,46407E-09 | -2,62746E-07 | -3,43048E-15 | -1,04551E-14 | -2,61675E-07 | -2,9485E-15 | 2,74703E-15 |
| 191 | D Longitudinal | 3,99701E-05 | -5,40797E-06 | 2,64486E-06 | 8,55722E-09 | -3,42958E-10 | 2,61876E-06 | 8,55721E-09 | -1,79026E-10 |
| 191 | D Vertical | 0,001403738 | -0,000244436 | 1,78983E-07 | 1,791E-07 | -7,86236E-09 | 1,78981E-07 | 1,791E-07 | -5,55416E-09 |
| 191 | D transversal | 0,026105725 | -5,42595E-06 | 9,60926E-09 | 2,64499E-06 | -3,80896E-10 | 3,5635E-08 | 2,64499E-06 | 2,62614E-08 |
| 191 | G Longitudinal | 0,002112128 | -1,61965E-07 | 1,68306E-10 | 2,65399E-07 | -2,909E-11 | 2,17841E-09 | 2,65399E-07 | 3,26161E-09 |
| 191 | G Vertical | 2,52402E-05 | -5,09852E-06 | -4,16251E-09 | 1,05529E-08 | -1,11136E-10 | 3,21621E-08 | 1,05529E-08 | 2,08781E-10 |
| 191 | G transversal | 4,79961E-07 | -1,79133E-08 | -2,64423E-07 | -4,86646E-10 | 3,60654E-11 | -2,6235E-07 | -4,86646E-10 | 1,83139E-11 |
| 192 | D Longitudinal | 3,84916E-05 | -5,22114E-06 | 2,47272E-06 | 7,74337E-09 | -3,03428E-10 | 2,44747E-06 | 7,74337E-09 | -1,62766E-10 |
| 192 | D Vertical | 0,001389519 | -0,000238551 | 1,74092E-07 | 1,74023E-07 | -7,524E-09 | 1,74017E-07 | 1,74023E-07 | -5,32872E-09 |
| 192 | D transversal | 0,024721236 | -4,6597E-06 | 8,46081E-09 | 2,47257E-06 | -3,29374E-10 | 3,3652E-08 | 2,47257E-06 | 2,42022E-08 |
| 192 | G Longitudinal | 0,00205259 | -1,20915E-06 | 1,83655E-09 | 2,52383E-07 | -8,13429E-11 | 3,81985E-09 | 2,52383E-07 | 2,9696E-09 |
| 192 | G Vertical | 2,13259E-05 | -3,73691E-06 | -3,92143E-09 | 9,33656E-09 | -7,00062E-11 | 3,08366E-08 | 9,33657E-09 | 2,12924E-10 |
| 192 | G transversal | 1,57897E-06 | -1,28743E-07 | -2,52879E-07 | -3,34431E-10 | 3,02233E-11 | -2,50881E-07 | -3,3443E-10 | 1,45529E-11 |
| 193 | D Longitudinal | -2,07771E-11 | -1,45172E-07 | 2,47356E-06 | -1,12492E-15 | -3,23426E-10 | 2,47356E-06 | -1,12358E-15 | -3,23426E-10 |
| 193 | D Vertical | -3,1154E-11 | -0,000237899 | 1,7244E-07 | 3,23238E-16 | -7,45417E-09 | 1,7244E-07 | 3,24628E-16 | -7,45417E-09 |
| 193 | D transversal | 0,024668972 | 9,63986E-07 | 5,21219E-13 | 2,46496E-06 | -2,44579E-13 | 2,52418E-08 | 2,46496E-06 | 2,44128E-08 |
| 193 | G Longitudinal | 0,00201547 | 1,02672E-07 | -1,17836E-14 | 2,49954E-07 | 6,43656E-15 | 9,88355E-10 | 2,49954E-07 | 3,08573E-09 |
| 193 | G Vertical | -5,72549E-05 | -1,40246E-07 | -7,12595E-13 | -1,14676E-08 | 3,37106E-13 | 3,59891E-08 | -1,14676E-08 | -2,07608E-10 |
| 193 | G transversal | 1,41801E-11 | 2,74022E-07 | -2,51856E-07 | -2,49785E-15 | 2,67735E-11 | -2,51856E-07 | -2,51224E-15 | 2,67728E-11 |
| 194 | D Longitudinal | -3,97508E-05 | -5,40793E-06 | 2,29436E-06 | -7,54881E-09 | -2,89425E-10 | 2,31871E-06 | -7,5488E-09 | -4,19938E-10 |
| 194 | D Vertical | -0,001374403 | -0,000231988 | 1,68441E-07 | -1,68422E-07 | -7,15439E-09 | 1,68436E-07 | -1,68422E-07 | -9,22437E-09 |
| 194 | D transversal | 0,02325801 | 5,76882E-06 | -7,06993E-09 | 2,29532E-06 | 2,72251E-10 | 1,72601E-08 | 2,29532E-06 | 2,2694E-08 |
| 194 | G Longitudinal | 0,001974609 | 8,16098E-07 | -1,25998E-09 | 2,36508E-07 | 5,64581E-11 | 6,1727E-10 | 2,36508E-07 | 2,83159E-09 |
| 194 | G Vertical | 1,3358E-05 | 2,02555E-06 | 3,11398E-09 | 6,97679E-09 | 3,02445E-11 | 3,61396E-08 | 6,97676E-09 | 2,54762E-10 |
| 194 | G transversal | -2,4211E-06 | -1,91456E-07 | -2,37992E-07 | -1,28499E-10 | 6,11192E-12 | -2,39946E-07 | -1,28499E-10 | 7,89226E-12 |
| 195 | D Longitudinal | 3,97508E-05 | -5,20764E-06 | 2,29436E-06 | 7,54881E-09 | -2,89907E-10 | 2,27001E-06 | 7,5488E-09 | -1,59393E-10 |
| 195 | D Vertical | 0,001374403 | -0,000231849 | 1,68441E-07 | 1,68422E-07 | -7,15439E-09 | 1,68446E-07 | 1,68422E-07 | -5,08441E-09 |
| 195 | D transversal | 0,02325801 | -3,98085E-06 | 7,07095E-09 | 2,29532E-06 | -2,72732E-10 | 3,1401E-08 | 2,29532E-06 | 2,2149E-08 |
| 195 | G Longitudinal | 0,001974609 | -6,27416E-07 | 1,26013E-09 | 2,36508E-07 | -5,65303E-11 | 3,13734E-09 | 2,36508E-07 | 2,71864E-09 |
| 195 | G Vertical | 1,33172E-05 | -2,32893E-06 | -3,10837E-09 | 6,98517E-09 | -3,30385E-11 | 2,99155E-08 | 6,98517E-09 | 1,93453E-10 |
| 195 | G transversal | 2,4202E-06 | -1,96162E-07 | -2,37991E-07 | 1,28682E-10 | 6,06257E-12 | -2,36037E-07 | 1,28683E-10 | 4,32545E-12 |
| 196 | D Longitudinal | 9,67023E-12 | 9,5983E-08 | 2,30917E-06 | -9,96351E-14 | -2,42435E-13 | 2,28472E-06 | -1,03461E-13 | 1,34369E-13 |
| 196 | D Vertical | 0,001371208 | -0,000233282 | 1,04115E-15 | 1,69096E-07 | -7,20041E-09 | 2,1355E-15 | 1,69096E-07 | -5,11623E-09 |
| 196 | D transversal | 0,023671502 | 1,00393E-06 | -4,8E-16 | 2,31721E-06 | -2,83903E-10 | 4,42284E-17 | 2,31721E-06 | 2,24149E-08 |
| 196 | G Longitudinal | 0,001974457 | -9,42676E-07 | -2,86248E-15 | 2,39141E-07 | -5,94807E-11 | -1,09495E-15 | 2,39141E-07 | 2,75917E-09 |
| 196 | G Vertical | 1,75233E-10 | 1,31727E-07 | 1,03097E-08 | -1,18993E-13 | -3,40109E-13 | 4,44854E-08 | -1,24413E-13 | 1,85031E-13 |
| 196 | G transversal | 2,28837E-12 | 5,50696E-09 | -2,39086E-07 | -1,00846E-15 | -3,88029E-15 | -2,38127E-07 | -5,90492E-16 | -6,56965E-17 |
| 197 | D Longitudinal | -1,18815E-11 | -9,5983E-08 | 2,30917E-06 | 9,95137E-14 | 2,42435E-13 | 2,33362E-06 | 1,03344E-13 | -1,34388E-13 |
| 197 | D Vertical | -0,001371208 | -0,000233431 | -1,03852E-15 | -1,69096E-07 | -7,20041E-09 | 4,5008E-17 | -1,69096E-07 | -9,28459E-09 |
| 197 | D transversal | 0,023671502 | 6,12554E-07 | -4,85216E-16 | 2,31721E-06 | 2,83903E-10 | -9,9484E-16 | 2,31721E-06 | 2,29827E-08 |
| 197 | G Longitudinal | 0,001974457 | 1,14341E-06 | -2,88734E-15 | 2,39141E-07 | 5,94807E-11 | -4,57692E-15 | 2,39141E-07 | 2,87813E-09 |
| 197 | G Vertical | -1,45388E-10 | 1,31727E-07 | -1,03083E-08 | -1,56828E-13 | -3,40128E-13 | 2,38674E-08 | -1,62205E-13 | 1,78227E-13 |
| 197 | G transversal | 1,9918E-12 | -5,50696E-09 | -2,39086E-07 | 1,55456E-15 | 3,88057E-15 | -2,40046E-07 | 1,13556E-15 | 1,63574E-16 |

APOYO 2

| DESPLAZAMIENTOS (metros) | | VIENTO | PESO | CT1 | | | CT2 | | |
|---|---|---|---|---|---|---|---|---|---|
| Nudo | Desplazamiento | | | L | T | V | L | T | V |
| 198 | D Longitudinal | 3,88859E-05 | -5,03858E-06 | 2,1538E-06 | 7,17511E-09 | -2,72599E-10 | 2,13019E-06 | 7,1751E-09 | -1,51616E-10 |
| 198 | D Vertical | 0,001365069 | -0,000227234 | 1,65149E-07 | 1,65025E-07 | -6,91024E-09 | 1,65103E-07 | 1,65025E-07 | -4,91312E-09 |
| 198 | D transversal | 0,022083747 | -3,57675E-06 | 6,22342E-09 | 2,15536E-06 | -2,36893E-10 | 2,98668E-08 | 2,15536E-06 | 2,05538E-08 |
| 198 | G Longitudinal | 0,001939695 | -3,63007E-07 | 9,56945E-10 | 2,29674E-07 | -4,50356E-11 | 2,77604E-09 | 2,29674E-07 | 2,61579E-09 |
| 198 | G Vertical | 1,06613E-05 | -1,45173E-06 | -2,73114E-09 | 5,91595E-09 | -1,13516E-11 | 2,91472E-08 | 5,91595E-09 | 1,87372E-10 |
| 198 | G transversal | -2,86446E-06 | 5,12884E-07 | -2,29858E-07 | -7,27304E-10 | 3,65609E-11 | -2,2794E-07 | -7,27303E-10 | 2,19974E-11 |
| 199 | D Longitudinal | -3,88859E-05 | -5,23906E-06 | 2,1538E-06 | -7,17511E-09 | -2,72125E-10 | 2,17741E-06 | -7,1751E-09 | -3,93108E-10 |
| 199 | D Vertical | -0,001365069 | -0,000227369 | 1,65149E-07 | -1,65025E-07 | -6,91025E-09 | 1,65194E-07 | -1,65025E-07 | -8,90737E-09 |
| 199 | D transversal | 0,022083747 | 5,24928E-06 | -6,22242E-09 | 2,15536E-06 | 2,3642E-10 | 1,7421E-08 | 2,15536E-06 | 2,10271E-08 |
| 199 | G Longitudinal | 0,001939695 | 5,46084E-07 | -9,56802E-10 | 2,29674E-07 | 4,49667E-11 | 8,62325E-10 | 2,29674E-07 | 2,70575E-09 |
| 199 | G Vertical | 1,06982E-05 | 1,17878E-06 | 2,73621E-09 | 5,90838E-09 | 8,82369E-12 | 3,4616E-08 | 5,90836E-09 | 2,05764E-10 |
| 199 | G transversal | 2,86367E-06 | 5,1977E-07 | -2,29858E-07 | 7,27466E-10 | 3,66002E-11 | -2,31775E-07 | 7,27466E-10 | 5,12019E-11 |
| 200 | D Longitudinal | -3,88858E-05 | 5,23047E-06 | 2,1538E-06 | -7,1753E-09 | 2,72125E-10 | 2,13019E-06 | -7,17531E-09 | 1,51877E-10 |
| 200 | D Vertical | 0,001365069 | -0,000227227 | -1,65149E-07 | 1,65025E-07 | -6,91025E-09 | -1,65103E-07 | 1,65025E-07 | -4,91312E-09 |
| 200 | D transversal | 0,022083747 | -3,7687E-06 | -6,22342E-09 | 2,15536E-06 | -2,3642E-10 | -2,98668E-08 | 2,15536E-06 | 2,05536E-08 |
| 200 | G Longitudinal | 0,001939695 | -3,56598E-07 | -9,56836E-10 | 2,29674E-07 | -4,49669E-11 | -2,77596E-09 | 2,29674E-07 | 2,6158E-09 |
| 200 | G Vertical | -1,06982E-05 | 1,16474E-06 | -2,7362E-09 | -5,90838E-09 | 8,83046E-12 | 2,91435E-08 | -5,90841E-09 | -1,88453E-10 |
| 200 | G transversal | 2,86367E-06 | -5,18732E-07 | -2,29858E-07 | 7,27472E-10 | -3,66001E-11 | -2,2794E-07 | 7,27472E-10 | -2,2032E-11 |
| 201 | D Longitudinal | 3,88858E-05 | 5,04717E-06 | 2,1538E-06 | 7,1753E-09 | 2,72599E-10 | 2,17741E-06 | 7,17531E-09 | 3,92847E-10 |
| 201 | D Vertical | -0,001365069 | -0,000227376 | -1,65149E-07 | -1,65025E-07 | -6,91024E-09 | -1,65194E-07 | -1,65025E-07 | -8,90737E-09 |
| 201 | D transversal | 0,022083747 | 5,05733E-06 | 6,22242E-09 | 2,15536E-06 | 2,36893E-10 | -1,7421E-08 | 2,15536E-06 | 2,10269E-08 |
| 201 | G Longitudinal | 0,001939695 | 5,52496E-07 | 9,56912E-10 | 2,29674E-07 | 4,50357E-11 | -8,62187E-10 | 2,29674E-07 | 2,70584E-09 |
| 201 | G Vertical | -1,06613E-05 | -1,46589E-06 | 2,73111E-09 | -5,91595E-09 | -1,13545E-11 | 3,46096E-08 | -5,91593E-09 | -2,10104E-10 |
| 201 | G transversal | -2,86446E-06 | -5,1392E-07 | -2,29858E-07 | -7,27311E-10 | -3,65609E-11 | -2,31775E-07 | -7,27311E-10 | -5,10975E-11 |
| 202 | D Longitudinal | 1,78894E-12 | 5,52046E-08 | 2,15267E-06 | -4,13451E-16 | 2,66485E-10 | 2,15267E-06 | -4,07757E-16 | 2,66485E-10 |
| 202 | D Vertical | 5,18209E-11 | -0,000227091 | -1,63834E-07 | 7,56347E-16 | -6,86243E-09 | -1,63834E-07 | 7,57387E-16 | -6,86243E-09 |
| 202 | D transversal | 0,022030092 | 6,40013E-07 | -5,0375E-13 | 2,14791E-06 | 2,3731E-13 | -2,36411E-08 | 2,14791E-06 | 2,06843E-08 |
| 202 | G Longitudinal | 0,00189873 | 9,99626E-08 | 1,28065E-15 | 2,27363E-07 | -1,08599E-15 | -7,86425E-10 | 2,27363E-07 | 2,69905E-09 |
| 202 | G Vertical | 5,14146E-05 | -1,25393E-07 | -6,92189E-13 | 9,44015E-09 | 3,18569E-13 | 3,23181E-08 | 9,44015E-09 | 1,57584E-10 |
| 202 | G transversal | 8,62046E-12 | -7,99195E-07 | -2,29228E-07 | -2,14981E-15 | -3,5745E-11 | -2,29228E-07 | -2,13812E-15 | -3,57454E-11 |
| 203 | D Longitudinal | -9,85333E-12 | -9,60474E-08 | 2,00264E-06 | 9,50472E-14 | 2,32244E-13 | 2,02548E-06 | 9,82284E-14 | -1,26598E-13 |
| 203 | D Vertical | -0,001341341 | -0,00022188 | 4,77589E-16 | -1,59953E-07 | -6,60131E-09 | -2,28008E-16 | -1,59953E-07 | -8,49718E-09 |
| 203 | D transversal | 0,021109679 | -3,29314E-07 | -2,39471E-16 | 2,01056E-06 | 2,29286E-10 | -9,18524E-17 | 2,01056E-06 | 1,9373E-08 |
| 203 | G Longitudinal | 0,001876052 | 1,40121E-07 | -5,41945E-16 | 2,20217E-07 | 3,82418E-12 | -4,78518E-16 | 2,20217E-07 | 2,50664E-09 |
| 203 | G Vertical | 1,17052E-10 | 1,27358E-07 | -8,2047E-09 | -1,38707E-13 | -3,13502E-13 | 2,25776E-08 | -1,43007E-13 | 1,62947E-13 |
| 203 | G transversal | -2,23416E-12 | -2,55171E-09 | -2,18339E-07 | -2,48915E-16 | -8,51127E-16 | -2,19205E-07 | -6,1732E-16 | 2,33582E-15 |
| 204 | D Longitudinal | -3,45029E-05 | -4,5489E-06 | 2,00523E-06 | -6,21431E-09 | -2,33147E-10 | 2,02804E-06 | -6,21431E-09 | -3,35483E-10 |
| 204 | D Vertical | -0,001353845 | -0,000222087 | 1,61112E-07 | -1,61131E-07 | -6,64216E-09 | 1,61104E-07 | -1,61131E-07 | -8,55682E-09 |
| 204 | D transversal | 0,020816489 | 5,0051E-06 | -5,67026E-09 | 2,00656E-06 | 2,11511E-10 | 1,7222E-08 | 2,00656E-06 | 1,92935E-08 |
| 204 | G Longitudinal | 0,001893577 | -1,24356E-07 | 6,73444E-11 | 2,20704E-07 | 5,43377E-12 | 1,86101E-09 | 2,20704E-07 | 2,51747E-09 |
| 204 | G Vertical | 9,26128E-06 | 3,49612E-07 | 2,96505E-09 | 5,15397E-09 | -1,17325E-11 | 3,35785E-08 | 5,15396E-09 | 1,6305E-10 |
| 204 | G transversal | 6,01484E-06 | 8,69186E-07 | -2,20127E-07 | 1,25324E-09 | 5,54526E-11 | -2,21987E-07 | 1,25324E-09 | 7,81652E-11 |
| 205 | D Longitudinal | -3,45028E-05 | 4,54164E-06 | 2,00524E-06 | -6,2145E-09 | 2,33147E-10 | 1,98243E-06 | -6,2145E-09 | 1,31527E-10 |
| 205 | D Vertical | 0,001353845 | -0,000221951 | -1,61112E-07 | 1,61131E-07 | -6,64216E-09 | -1,6112E-07 | 1,61131E-07 | -4,7275E-09 |

APOYO 2

| DESPLAZAMIENTOS (metros) | | VIENTO | PESO | CT1 | | | CT2 | | |
|---|---|---|---|---|---|---|---|---|---|
| Nudo | Desplazamiento | | | L | T | V | L | T | V |
| 205 | D transversal | 0,020816489 | -3,6462E-06 | -5,67124E-09 | 2,00656E-06 | -2,11511E-10 | -2,85635E-08 | 2,00656E-06 | 1,88698E-08 |
| 205 | G Longitudinal | 0,001893577 | 3,03249E-07 | 6,73043E-11 | 2,20704E-07 | -5,4339E-12 | -1,72636E-09 | 2,20704E-07 | 2,50658E-09 |
| 205 | G Vertical | -9,26128E-06 | 3,37149E-07 | -2,96505E-09 | -5,15397E-09 | -1,17265E-11 | 2,76483E-08 | -5,154E-09 | -1,86822E-10 |
| 205 | G transversal | 6,01484E-06 | -8,6757E-07 | -2,20127E-07 | 1,25325E-09 | -5,54525E-11 | -2,18268E-07 | 1,25325E-09 | -3,27774E-11 |
| 206 | D Longitudinal | 3,45028E-05 | 4,35755E-06 | 2,00523E-06 | 6,2145E-09 | 2,3361E-10 | 2,02804E-06 | 6,2145E-09 | 3,35229E-10 |
| 206 | D Vertical | -0,001353845 | -0,000222092 | -1,61112E-07 | -1,61131E-07 | -6,64216E-09 | -1,61104E-07 | -1,61131E-07 | -8,55681E-09 |
| 206 | D transversal | 0,020816489 | 4,81362E-06 | 5,67026E-09 | 2,00656E-06 | 2,11973E-10 | -1,7222E-08 | 2,00656E-06 | 1,92933E-08 |
| 206 | G Longitudinal | 0,001893576 | -1,20816E-07 | -6,72477E-11 | 2,20704E-07 | 5,49954E-12 | -1,86089E-09 | 2,20704E-07 | 2,51754E-09 |
| 206 | G Vertical | -9,2283E-06 | -6,08259E-07 | 2,96048E-09 | -5,16075E-09 | 9,46989E-12 | 3,35728E-08 | -5,16073E-09 | -1,66939E-10 |
| 206 | G transversal | -6,01553E-06 | -8,61753E-07 | -2,20127E-07 | -1,25311E-09 | -5,54236E-11 | -2,21986E-07 | -1,25311E-09 | -7,80714E-11 |
| 207 | D Longitudinal | 6,29527E-12 | -9,29226E-07 | 1,86784E-06 | -4,02018E-16 | 2,36426E-10 | 1,86784E-06 | -3,98001E-16 | 2,36426E-10 |
| 207 | D Vertical | -3,65576E-11 | -0,000217352 | -1,57218E-07 | -2,51478E-16 | -6,38619E-09 | -1,57218E-07 | -2,53632E-16 | -6,38619E-09 |
| 207 | D transversal | 0,019578751 | 5,26186E-07 | -4,77035E-13 | 1,86269E-06 | 2,2536E-13 | -2,21651E-08 | 1,86269E-06 | 1,74467E-08 |
| 207 | G Longitudinal | 0,00179834 | 8,65499E-08 | -6,66753E-15 | 2,08687E-07 | 2,85661E-15 | -7,76599E-10 | 2,08687E-07 | 2,3907E-09 |
| 207 | G Vertical | 4,87326E-05 | -1,19916E-07 | -6,32869E-13 | 8,29698E-09 | 2,9218E-13 | 2,90831E-08 | 8,29699E-09 | 1,29439E-10 |
| 207 | G transversal | 8,10415E-12 | 2,6914E-07 | -2,10329E-07 | -1,48709E-15 | 7,50547E-12 | -2,10329E-07 | -1,47924E-15 | 7,50517E-12 |
| 208 | D Longitudinal | -3,2056E-05 | -4,254E-06 | 1,85878E-06 | -5,55988E-09 | -2,05323E-10 | 1,88076E-06 | -5,55988E-09 | -2,93764E-10 |
| 208 | D Vertical | -0,001336415 | -0,000216422 | 1,56743E-07 | -1,56673E-07 | -6,36652E-09 | 1,56785E-07 | -1,56673E-07 | -8,19722E-09 |
| 208 | D transversal | 0,019547845 | 5,23723E-06 | -5,98175E-09 | 1,85996E-06 | 2,19633E-10 | 1,61126E-08 | 1,85996E-06 | 1,76514E-08 |
| 208 | G Longitudinal | 0,00183776 | -9,34056E-07 | 1,27115E-09 | 2,10108E-07 | -4,08007E-11 | 3,05151E-09 | 2,10108E-07 | 2,29998E-09 |
| 208 | G Vertical | 1,26089E-05 | -5,25115E-07 | 3,63645E-09 | 5,22412E-09 | -3,05394E-11 | 3,29455E-08 | 5,22411E-09 | 1,36506E-10 |
| 208 | G transversal | -5,08057E-06 | -6,16929E-07 | -2,1021E-07 | -5,07265E-10 | -7,95164E-12 | -2,12007E-07 | -5,07265E-10 | -1,17234E-11 |
| 209 | D Longitudinal | -3,2056E-05 | 4,24772E-06 | 1,85878E-06 | -5,56007E-09 | 2,05323E-10 | 1,8368E-06 | -5,56007E-09 | 1,17575E-10 |
| 209 | D Vertical | 0,001336415 | -0,000216292 | -1,56743E-07 | 1,56673E-07 | -6,36652E-09 | -1,56701E-07 | 1,56673E-07 | -4,53582E-09 |
| 209 | D transversal | 0,019547845 | -3,99585E-06 | -5,9827E-09 | 1,85996E-06 | -2,19633E-10 | -2,8077E-08 | 1,85996E-06 | 1,72115E-08 |
| 209 | G Longitudinal | 0,00183776 | 1,10075E-06 | 1,2711E-09 | 2,10108E-07 | 4,08006E-11 | -5,0926E-10 | 2,10108E-07 | 2,38155E-09 |
| 209 | G Vertical | -1,26089E-05 | -5,37025E-07 | -3,63644E-09 | -5,22413E-09 | -3,0534E-11 | 2,56726E-08 | -5,22415E-09 | -1,97853E-10 |
| 209 | G transversal | -5,08057E-06 | 6,16659E-07 | -2,1021E-07 | -5,07256E-10 | 7,95175E-12 | -2,08413E-07 | -5,07256E-10 | 4,13879E-12 |
| 210 | D Longitudinal | 3,20559E-05 | 4,06481E-06 | 1,85878E-06 | 5,56007E-09 | 2,05773E-10 | 1,88076E-06 | 5,56007E-09 | 2,9352E-10 |
| 210 | D Vertical | -0,001336415 | -0,000216425 | -1,56743E-07 | -1,56673E-07 | -6,36652E-09 | -1,56785E-07 | -1,56673E-07 | -8,19722E-09 |
| 210 | D transversal | 0,019547845 | 5,04777E-06 | 5,98175E-09 | 1,85996E-06 | 2,20082E-10 | -1,61126E-08 | 1,85996E-06 | 1,76512E-08 |
| 210 | G Longitudinal | 0,001837759 | -9,33553E-07 | -1,27106E-09 | 2,10108E-07 | -4,0737E-11 | -3,0514E-09 | 2,10108E-07 | 2,30004E-09 |
| 210 | G Vertical | -1,25795E-05 | 2,95721E-07 | 3,63238E-09 | -5,23017E-09 | 2,8516E-11 | 3,29404E-08 | -5,23015E-09 | -1,39975E-10 |
| 210 | G transversal | 5,07995E-06 | 6,26036E-07 | -2,1021E-07 | 5,07383E-10 | 7,9729E-12 | -2,12007E-07 | 5,07383E-10 | 1,18105E-11 |
| 211 | D Longitudinal | -9,85383E-12 | -9,31757E-08 | 1,72461E-06 | 8,91703E-14 | 2,18086E-13 | 1,74587E-06 | 9,17982E-14 | -1,17187E-13 |
| 211 | D Vertical | -0,001320126 | -0,000212313 | -1,97058E-16 | -1,5331E-07 | -6,13761E-09 | 8,57541E-17 | -1,5331E-07 | -7,90031E-09 |
| 211 | D transversal | 0,018686481 | -7,33903E-07 | -2,54892E-16 | 1,73189E-06 | 2,16869E-10 | -4,01263E-16 | 1,73189E-06 | 1,62481E-08 |
| 211 | G Longitudinal | 0,001767712 | 3,60281E-08 | -1,57585E-15 | 2,00362E-07 | -8,74179E-12 | -2,0012E-15 | 2,00362E-07 | 2,18034E-09 |
| 211 | G Vertical | 4,73962E-11 | 1,19548E-07 | -7,82931E-09 | -1,23085E-13 | -2,83412E-13 | 1,98685E-08 | -1,2651E-13 | 1,47167E-13 |
| 211 | G transversal | -4,29093E-13 | -3,64848E-10 | -1,99006E-07 | -1,81515E-15 | -4,37761E-15 | -1,99764E-07 | -2,13962E-15 | 3,69499E-15 |
| 212 | D Longitudinal | -3,88007E-05 | -5,08599E-06 | 1,72519E-06 | -6,38772E-09 | -2,31589E-10 | 1,74641E-06 | -6,38772E-09 | -3,28743E-10 |
| 212 | D Vertical | -0,001319814 | -0,000210734 | 1,52359E-07 | -1,52347E-07 | -6,1009E-09 | 1,5235E-07 | -1,52347E-07 | -7,84978E-09 |
| 212 | D transversal | 0,01836949 | 5,67787E-06 | -6,50359E-09 | 1,72655E-06 | 2,36712E-10 | 1,48458E-08 | 1,72655E-06 | 1,61974E-08 |
| 212 | G Longitudinal | 0,001783223 | -3,57041E-07 | 4,79241E-10 | 2,0036E-07 | -1,25436E-11 | 2,22697E-09 | 2,0036E-07 | 2,17733E-09 |

APOYO 2

| DESPLAZAMIENTOS (metros) | | VIENTO | PESO | CT1 | | | CT2 | | |
|---|---|---|---|---|---|---|---|---|---|
| Nudo | Desplazamiento | | | L | T | V | L | T | V |
| 212 | G Vertical | 1,23929E-05 | -1,25313E-06 | 3,51622E-09 | 4,44772E-09 | -4,14266E-11 | 3,1576E-08 | 4,4477E-09 | 1,05541E-10 |
| 212 | G transversal | -1,61119E-05 | -2,00416E-06 | -2,00576E-07 | -2,26556E-09 | -7,23828E-11 | -2,02335E-07 | -2,26556E-09 | -1,02843E-10 |
| 213 | D Longitudinal | -3,88007E-05 | 5,0791E-06 | 1,72519E-06 | -6,3879E-09 | 2,31589E-10 | 1,70396E-06 | -6,3879E-09 | 1,35104E-10 |
| 213 | D Vertical | 0,001319814 | -0,000210609 | -1,52359E-07 | 1,52347E-07 | -6,1009E-09 | -1,52368E-07 | 1,52347E-07 | -4,35202E-09 |
| 213 | D transversal | 0,01836949 | -4,54125E-06 | -6,50451E-09 | 1,72655E-06 | -2,36712E-10 | -2,78539E-08 | 1,72655E-06 | 1,57233E-08 |
| 213 | G Longitudinal | 0,001783223 | 5,12992E-07 | 4,79189E-10 | 2,0036E-07 | 1,25435E-11 | -1,26853E-09 | 2,0036E-07 | 2,20238E-09 |
| 213 | G Vertical | -1,23929E-05 | -1,26361E-06 | -3,51622E-09 | -4,44772E-09 | -4,14218E-11 | 2,45435E-08 | -4,44774E-09 | -1,8864E-10 |
| 213 | G transversal | -1,61119E-05 | 2,00199E-06 | -2,00576E-07 | -2,26555E-09 | 7,23829E-11 | -1,98817E-07 | -2,26555E-09 | 4,18775E-11 |
| 214 | D Longitudinal | 3,88007E-05 | 4,90019E-06 | 1,72519E-06 | 6,3879E-09 | 2,32024E-10 | 1,74641E-06 | 6,3879E-09 | 3,28509E-10 |
| 214 | D Vertical | -0,001319814 | -0,000210735 | -1,52359E-07 | -1,52347E-07 | -6,1009E-09 | -1,5235E-07 | -1,52347E-07 | -7,84977E-09 |
| 214 | D transversal | 0,01836949 | 5,49192E-06 | 6,50359E-09 | 1,72655E-06 | 2,37147E-10 | -1,48459E-08 | 1,72655E-06 | 1,61972E-08 |
| 214 | G Longitudinal | 0,001783223 | -3,58932E-07 | -4,79164E-10 | 2,0036E-07 | -1,24811E-11 | -2,22687E-09 | 2,0036E-07 | 2,17738E-09 |
| 214 | G Vertical | -1,23665E-05 | 1,04593E-06 | 3,51257E-09 | -4,45314E-09 | 3,96146E-11 | 3,15714E-08 | -4,45313E-09 | -1,08655E-10 |
| 214 | G transversal | 1,61113E-05 | 2,01491E-06 | -2,00576E-07 | 2,26566E-09 | 7,23976E-11 | -2,02335E-07 | 2,26566E-09 | 1,02926E-10 |
| 215 | D Longitudinal | -2,90092E-12 | -6,33329E-07 | 1,60287E-06 | 1,62894E-16 | 2,47844E-10 | 1,60287E-06 | 1,63029E-16 | 2,47844E-10 |
| 215 | D Vertical | 1,50037E-11 | -0,000205022 | -1,47153E-07 | -4,37098E-17 | -5,81389E-09 | -1,47153E-07 | -4,22778E-17 | -5,81389E-09 |
| 215 | D transversal | 0,017226985 | 4,27387E-07 | -4,42628E-13 | 1,59829E-06 | 2,09574E-13 | -2,06579E-08 | 1,59829E-06 | 1,4557E-08 |
| 215 | G Longitudinal | 0,00168496 | 7,4166E-08 | -1,3011E-14 | 1,89503E-07 | 5,87705E-15 | -6,9545E-10 | 1,89503E-07 | 2,09852E-09 |
| 215 | G Vertical | 5,56773E-05 | -1,10447E-07 | -5,65142E-13 | 8,78675E-09 | 2,63182E-13 | 2,60692E-08 | 8,78675E-09 | 1,28293E-10 |
| 215 | G transversal | 2,27708E-12 | 6,42895E-07 | -1,91168E-07 | -5,23829E-16 | 3,45157E-11 | -1,91168E-07 | -5,18645E-16 | 3,45156E-11 |
| 216 | D Longitudinal | -4,70046E-05 | -6,13159E-06 | 1,59775E-06 | -7,47061E-09 | -2,67763E-10 | 1,61822E-06 | -7,47061E-09 | -3,78045E-10 |
| 216 | D Vertical | -0,001298164 | -0,000204829 | 1,47849E-07 | -1,47696E-07 | -5,83524E-09 | 1,47883E-07 | -1,47696E-07 | -7,50423E-09 |
| 216 | D transversal | 0,017227924 | 5,36482E-06 | -6,10336E-09 | 1,59918E-06 | 2,19833E-10 | 1,45068E-08 | 1,59918E-06 | 1,48011E-08 |
| 216 | G Longitudinal | 0,001729572 | 4,65101E-07 | -7,32828E-10 | 1,91176E-07 | 3,21005E-11 | 9,72847E-10 | 1,91176E-07 | 2,0853E-09 |
| 216 | G Vertical | 1,32983E-05 | -1,94567E-06 | 3,30803E-09 | 3,87094E-09 | -5,08318E-11 | 3,01235E-08 | 3,87093E-09 | 7,9855E-11 |
| 216 | G transversal | -9,82013E-06 | -1,01797E-06 | -1,9126E-07 | -1,27354E-09 | -3,80106E-11 | -1,93015E-07 | -1,27354E-09 | -5,43823E-11 |
| 217 | D Longitudinal | -4,70046E-05 | 6,12376E-06 | 1,59775E-06 | -7,47078E-09 | 2,67763E-10 | 1,57728E-06 | -7,47078E-09 | 1,58125E-10 |
| 217 | D Vertical | 0,001298164 | -0,000204711 | -1,47849E-07 | 1,47696E-07 | -5,83524E-09 | -1,47814E-07 | 1,47696E-07 | -4,16626E-09 |
| 217 | D transversal | 0,017227924 | -4,32645E-06 | -6,10424E-09 | 1,59918E-06 | -2,19833E-10 | -2,67144E-08 | 1,59918E-06 | 1,43608E-08 |
| 217 | G Longitudinal | 0,001729572 | -3,18885E-07 | -7,32885E-10 | 1,91176E-07 | -3,21006E-11 | -2,43856E-09 | 1,91176E-07 | 2,02106E-09 |
| 217 | G Vertical | -1,32983E-05 | -1,95498E-06 | -3,30803E-09 | -3,87094E-09 | -5,08274E-11 | 2,35074E-08 | -3,87096E-09 | -1,81735E-10 |
| 217 | G transversal | -9,82013E-06 | 1,0168E-06 | -1,9126E-07 | -1,27353E-09 | 3,80107E-11 | -1,89506E-07 | -1,27353E-09 | 2,15915E-11 |
| 218 | D Longitudinal | 4,70046E-05 | 5,95044E-06 | 1,59775E-06 | 7,47078E-09 | 2,68182E-10 | 1,61822E-06 | 7,47078E-09 | 3,77821E-10 |
| 218 | D Vertical | -0,001298164 | -0,000204829 | -1,47849E-07 | -1,47696E-07 | -5,83525E-09 | -1,47883E-07 | -1,47696E-07 | -7,50422E-09 |
| 218 | D transversal | 0,017227924 | 5,18349E-06 | 6,10336E-09 | 1,59918E-06 | 2,20251E-10 | -1,45068E-08 | 1,59918E-06 | 1,48008E-08 |
| 218 | G Longitudinal | 0,001729571 | 4,61186E-07 | 7,32899E-10 | 1,91176E-07 | 3,21619E-11 | -9,72759E-10 | 1,91176E-07 | 2,08534E-09 |
| 218 | G Vertical | -1,32746E-05 | 1,76105E-06 | 3,30475E-09 | -3,87581E-09 | 4,92034E-11 | 3,01193E-08 | -3,8758E-09 | -8,26468E-11 |
| 218 | G transversal | 9,81961E-06 | 1,03005E-06 | -1,9126E-07 | 1,27363E-09 | 3,80197E-11 | -1,93014E-07 | 1,27363E-09 | 5,44596E-11 |
| 219 | D Longitudinal | -4,8192E-05 | -6,0972E-06 | 1,47635E-06 | -7,45888E-09 | -2,65206E-10 | 1,49605E-06 | -7,45888E-09 | -3,72918E-10 |
| 219 | D Vertical | -0,001276226 | -0,000198764 | 1,43025E-07 | -1,42983E-07 | -5,57207E-09 | 1,43008E-07 | -1,42983E-07 | -7,16021E-09 |
| 219 | D transversal | 0,01612011 | 5,1186E-06 | -5,59751E-09 | 1,47788E-06 | 1,98835E-10 | 1,42855E-08 | 1,47788E-06 | 1,34896E-08 |
| 219 | G Longitudinal | 0,001672834 | -3,60962E-07 | 1,60877E-10 | 1,81667E-07 | -1,06791E-13 | 1,82515E-09 | 1,81667E-07 | 1,91524E-09 |
| 219 | G Vertical | 1,37259E-05 | -2,6151E-06 | 3,18595E-09 | 3,23086E-09 | -5,85184E-11 | 2,87653E-08 | 3,23085E-09 | 5,57427E-11 |
| 219 | G transversal | 1,2192E-06 | 4,72033E-07 | -1,81825E-07 | 4,57376E-10 | 2,32692E-11 | -1,83569E-07 | 4,57376E-10 | 3,19515E-11 |

APOYO 2

| DESPLAZAMIENTOS (metros) | | VIENTO | PESO | CT1 | | | CT2 | | |
|---|---|---|---|---|---|---|---|---|---|
| Nudo | Desplazamiento | | | L | T | V | L | T | V |
| 220 | D Longitudinal | -4,8192E-05 | 6,08955E-06 | 1,47635E-06 | -7,45905E-09 | 2,65206E-10 | 1,45665E-06 | -7,45905E-09 | 1,58109E-10 |
| 220 | D Vertical | 0,001276226 | -0,000198651 | -1,43025E-07 | 1,42983E-07 | -5,57207E-09 | -1,43041E-07 | 1,42983E-07 | -3,98395E-09 |
| 220 | D transversal | 0,016120109 | -4,17213E-06 | -5,59836E-09 | 1,47788E-06 | -1,98835E-10 | -2,54813E-08 | 1,47788E-06 | 1,30913E-08 |
| 220 | G Longitudinal | 0,001672834 | 4,97362E-07 | 1,60816E-10 | 1,81667E-07 | 1,06706E-13 | -1,50346E-09 | 1,81667E-07 | 1,91541E-09 |
| 220 | G Vertical | -1,37259E-05 | -2,62325E-06 | -3,18595E-09 | -3,23086E-09 | -5,85145E-11 | 2,23934E-08 | -3,23088E-09 | -1,72978E-10 |
| 220 | G transversal | 1,2192E-06 | -4,71417E-07 | -1,81825E-07 | 4,57388E-10 | -2,32691E-11 | -1,8008E-07 | 4,57388E-10 | -1,46367E-11 |
| 221 | D Longitudinal | 4,8192E-05 | 5,9218E-06 | 1,47635E-06 | 7,45905E-09 | 2,65608E-10 | 1,49605E-06 | 7,45905E-09 | 3,72706E-10 |
| 221 | D Vertical | -0,001276226 | -0,000198763 | -1,43025E-07 | -1,42983E-07 | -5,57208E-09 | -1,43008E-07 | -1,42983E-07 | -7,16021E-09 |
| 221 | D transversal | 0,016120109 | 4,94283E-06 | 5,59751E-09 | 1,47788E-06 | 1,99236E-10 | -1,42855E-08 | 1,47788E-06 | 1,34894E-08 |
| 221 | G Longitudinal | 0,001672833 | -3,66647E-07 | -1,60813E-10 | 1,81667E-07 | -4,71306E-14 | -1,82507E-09 | 1,81667E-07 | 1,91528E-09 |
| 221 | G Vertical | -1,37047E-05 | 2,44824E-06 | 3,18301E-09 | -3,23523E-09 | 5,70608E-11 | 2,87616E-08 | -3,23521E-09 | -5,82483E-11 |
| 221 | G transversal | -1,21967E-06 | -4,58862E-07 | -1,81825E-07 | -4,57292E-10 | -2,32657E-11 | -1,83569E-07 | -4,57293E-10 | -3,18795E-11 |
| 222 | D Longitudinal | -8,60663E-12 | -8,76784E-08 | 1,46065E-06 | 8,13894E-14 | 1,99719E-13 | 1,4803E-06 | 8,35186E-14 | -1,06173E-13 |
| 222 | D Vertical | -0,001259822 | -0,000198025 | 2,30256E-16 | -1,41599E-07 | -5,51322E-09 | 2,24152E-16 | -1,41599E-07 | -7,08077E-09 |
| 222 | D transversal | 0,016405925 | -2,40194E-06 | 4,27299E-16 | 1,46992E-06 | 2,22854E-10 | 5,64331E-16 | 1,46992E-06 | 1,34447E-08 |
| 222 | G Longitudinal | 0,001645786 | 9,95305E-08 | -1,27139E-15 | 1,80598E-07 | -1,52518E-12 | -1,62746E-15 | 1,80598E-07 | 1,89743E-09 |
| 222 | G Vertical | 4,99965E-11 | 1,08317E-07 | -7,51758E-09 | -1,10153E-13 | -2,5074E-13 | 1,72183E-08 | -1,12834E-13 | 1,27374E-13 |
| 222 | G transversal | -3,24233E-13 | 1,57521E-09 | -1,79388E-07 | -3,00559E-15 | -7,36847E-15 | -1,80187E-07 | -3,28651E-15 | 4,93369E-15 |
| 223 | D Longitudinal | -4,14803E-05 | -5,20189E-06 | 1,33362E-06 | -6,21675E-09 | -2,18569E-10 | 1,35238E-06 | -6,21675E-09 | -3,0581E-10 |
| 223 | D Vertical | -0,001243534 | -0,000190899 | 1,36894E-07 | -1,36842E-07 | -5,24394E-09 | 1,36923E-07 | -1,36842E-07 | -6,7348E-09 |
| 223 | D transversal | 0,014793381 | 5,51311E-06 | -5,94937E-09 | 1,33512E-06 | 2,08302E-10 | 1,3046E-08 | 1,33512E-06 | 1,20114E-08 |
| 223 | G Longitudinal | 0,001606282 | -7,92883E-07 | 7,20966E-10 | 1,70851E-07 | -2,23994E-11 | 2,35598E-09 | 1,70851E-07 | 1,73904E-09 |
| 223 | G Vertical | 8,00468E-06 | -3,68834E-06 | 2,20356E-09 | 1,55328E-09 | -8,07323E-11 | 2,62542E-08 | 1,55327E-09 | 1,30487E-12 |
| 223 | G transversal | 1,21173E-05 | 1,65348E-06 | -1,7046E-07 | 2,06992E-09 | 7,94899E-11 | -1,72127E-07 | 2,06992E-09 | 1,1073E-10 |
| 224 | D Longitudinal | 4,14803E-05 | 5,03464E-06 | 1,33362E-06 | 6,21691E-09 | 2,18946E-10 | 1,35238E-06 | 6,21691E-09 | 3,05611E-10 |
| 224 | D Vertical | -0,001243534 | -0,000190896 | -1,36894E-07 | -1,36842E-07 | -5,24395E-09 | -1,36923E-07 | -1,36842E-07 | -6,7348E-09 |
| 224 | D transversal | 0,01479338 | 5,34552E-06 | 5,94937E-09 | 1,33512E-06 | 2,0868E-10 | -1,3046E-08 | 1,33512E-06 | 1,20112E-08 |
| 224 | G Longitudinal | 0,001606281 | -8,00466E-07 | -7,20911E-10 | 1,70851E-07 | -2,23423E-11 | -2,35591E-09 | 1,70851E-07 | 1,73907E-09 |
| 224 | G Vertical | -7,98618E-06 | 3,5443E-06 | 2,201E-09 | -1,55708E-09 | 7,9461E-11 | 2,62509E-08 | -1,55707E-09 | -3,48415E-12 |
| 224 | G transversal | -1,21176E-05 | -1,63973E-06 | -1,7046E-07 | -2,06985E-09 | -7,94928E-11 | -1,72127E-07 | -2,06985E-09 | -1,10666E-10 |
| 225 | D Longitudinal | 1,78895E-12 | -5,52046E-08 | 2,15267E-06 | -4,14093E-16 | -2,66485E-10 | 2,15267E-06 | -4,14959E-16 | -2,66485E-10 |
| 225 | D Vertical | -5,1821E-11 | -0,000227091 | 1,63834E-07 | -7,5621E-16 | -6,86243E-09 | 1,63834E-07 | -7,55427E-16 | -6,86243E-09 |
| 225 | D transversal | 0,022030092 | 8,33024E-07 | 5,03782E-13 | 2,14791E-06 | -2,3731E-13 | 2,36411E-08 | 2,14791E-06 | 2,06846E-08 |
| 225 | G Longitudinal | 0,00189873 | 9,22494E-08 | -9,81026E-16 | 2,27363E-07 | 1,08586E-15 | 7,86425E-10 | 2,27363E-07 | 2,69905E-09 |
| 225 | G Vertical | -5,14146E-05 | -1,36628E-07 | -6,76527E-13 | -9,43988E-09 | 3,18562E-13 | 3,23181E-08 | -9,43988E-09 | -1,57949E-10 |
| 225 | G transversal | 8,62054E-12 | 7,99195E-07 | -2,29228E-07 | -2,15132E-15 | 3,5745E-11 | -2,29228E-07 | -2,1574E-15 | 3,57445E-11 |
| 226 | D Longitudinal | 1,07521E-11 | 9,60474E-08 | 2,00264E-06 | -9,51761E-14 | -2,32244E-13 | 1,9798E-06 | -9,83538E-14 | 1,2657E-13 |
| 226 | D Vertical | 0,001341341 | -0,000221745 | -4,80579E-16 | 1,59953E-07 | -6,60131E-09 | -1,19801E-15 | 1,59953E-07 | -4,70545E-09 |
| 226 | D transversal | 0,021109679 | 1,69263E-06 | -2,39359E-16 | 2,01056E-06 | -2,29286E-10 | -3,8158E-16 | 2,01056E-06 | 1,89144E-08 |
| 226 | G Longitudinal | 0,001876052 | 3,81163E-08 | -5,39747E-16 | 2,20217E-07 | -3,82418E-12 | -5,87523E-16 | 2,20217E-07 | 2,49899E-09 |
| 226 | G Vertical | -8,95383E-11 | 1,27358E-07 | 8,20602E-09 | -1,15323E-13 | -3,13487E-13 | 3,89884E-08 | -1,19658E-13 | 1,68218E-13 |
| 226 | G transversal | -2,35182E-12 | 2,55172E-09 | -2,18339E-07 | 9,69138E-16 | 8,51596E-16 | -2,17473E-07 | 1,33613E-15 | -2,17785E-15 |
| 227 | D Longitudinal | 3,45029E-05 | -4,35029E-06 | 2,00524E-06 | 6,21431E-09 | -2,3361E-10 | 1,98243E-06 | 6,2143E-09 | -1,31274E-10 |
| 227 | D Vertical | 0,001353845 | -0,000221956 | 1,61112E-07 | 1,61131E-07 | -6,64216E-09 | 1,6112E-07 | 1,61131E-07 | -4,7275E-09 |

APOYO 2

| DESPLAZAMIENTOS (metros) | | VIENTO | PESO | CT1 | | | CT2 | | |
|---|---|---|---|---|---|---|---|---|---|
| Nudo | Desplazamiento | | | L | T | V | L | T | V |
| 227 | D transversal | 0,020816489 | -3,45473E-06 | 5,67124E-09 | 2,00656E-06 | -2,11973E-10 | 2,85635E-08 | 2,00656E-06 | 1,887E-08 |
| 227 | G Longitudinal | 0,001893576 | 2,99712E-07 | -6,72082E-11 | 2,20704E-07 | -5,49948E-12 | 1,72643E-09 | 2,20704E-07 | 2,50657E-09 |
| 227 | G Vertical | 9,2283E-06 | -5,95696E-07 | -2,96051E-09 | 5,16075E-09 | 9,47247E-12 | 2,76516E-08 | 5,16076E-09 | 1,85852E-10 |
| 227 | G transversal | -6,01553E-06 | 8,60139E-07 | -2,20127E-07 | -1,2531E-09 | 5,54237E-11 | -2,18267E-07 | -1,2531E-09 | 3,27445E-11 |
| 228 | D Longitudinal | 6,29529E-12 | 9,29226E-07 | 1,86784E-06 | -4,0233E-16 | -2,36426E-10 | 1,86784E-06 | -4,01881E-16 | -2,36426E-10 |
| 228 | D Vertical | 3,65575E-11 | -0,000217352 | 1,57218E-07 | 2,51185E-16 | -6,38619E-09 | 1,57218E-07 | 2,5021E-16 | -6,38619E-09 |
| 228 | D transversal | 0,019578751 | 7,16282E-07 | 4,77007E-13 | 1,86269E-06 | -2,2536E-13 | 2,21651E-08 | 1,86269E-06 | 1,74469E-08 |
| 228 | G Longitudinal | 0,00179834 | 8,3703E-08 | 7,06678E-15 | 2,08687E-07 | -2,85676E-15 | 7,76599E-10 | 2,08687E-07 | 2,3907E-09 |
| 228 | G Vertical | -4,87327E-05 | -1,29146E-07 | -6,17781E-13 | -8,29674E-09 | 2,92174E-13 | 2,90832E-08 | -8,29674E-09 | -1,29768E-10 |
| 228 | G transversal | 8,10422E-12 | -2,6914E-07 | -2,10329E-07 | -1,48819E-15 | -7,50547E-12 | -2,10329E-07 | -1,49216E-15 | -7,50582E-12 |
| 229 | D Longitudinal | 3,2056E-05 | -4,05854E-06 | 1,85878E-06 | 5,55988E-09 | -2,05773E-10 | 1,8368E-06 | 5,55988E-09 | -1,17332E-10 |
| 229 | D Vertical | 0,001336415 | -0,000216295 | 1,56743E-07 | 1,56673E-07 | -6,36652E-09 | 1,56701E-07 | 1,56673E-07 | -4,53582E-09 |
| 229 | D transversal | 0,019547845 | -3,8064E-06 | 5,9827E-09 | 1,85996E-06 | -2,20082E-10 | 2,8077E-08 | 1,85996E-06 | 1,72117E-08 |
| 229 | G Longitudinal | 0,001837759 | 1,10025E-06 | -1,27101E-09 | 2,10108E-07 | 4,0737E-11 | 5,0932E-10 | 2,10108E-07 | 2,38154E-09 |
| 229 | G Vertical | 1,25795E-05 | 3,07719E-07 | -3,6324E-09 | 5,23017E-09 | 2,85183E-11 | 2,56754E-08 | 5,23018E-09 | 1,96989E-10 |
| 229 | G transversal | 5,07995E-06 | -6,25764E-07 | -2,1021E-07 | 5,07393E-10 | -7,97285E-12 | -2,08413E-07 | 5,07393E-10 | -4,17103E-12 |
| 230 | D Longitudinal | 9,46105E-12 | 9,31757E-08 | 1,72461E-06 | -8,90058E-14 | -2,18086E-13 | 1,70335E-06 | -9,16311E-14 | 1,17221E-13 |
| 230 | D Vertical | 0,001320126 | -0,000212188 | 1,98358E-16 | 1,5331E-07 | -6,13761E-09 | 4,86243E-16 | 1,5331E-07 | -4,37492E-09 |
| 230 | D transversal | 0,018686481 | 1,87557E-06 | -2,52542E-16 | 1,73189E-06 | -2,16869E-10 | -9,60859E-17 | 1,73189E-06 | 1,58144E-08 |
| 230 | G Longitudinal | 0,001767712 | 1,19867E-07 | -1,5652E-15 | 2,00362E-07 | 8,74179E-12 | -1,09649E-15 | 2,00362E-07 | 2,19782E-09 |
| 230 | G Vertical | -2,24898E-11 | 1,19548E-07 | 7,8305E-09 | -1,06694E-13 | -2,83401E-13 | 3,55283E-08 | -1,10142E-13 | 1,50681E-13 |
| 230 | G transversal | -8,457E-13 | 3,6485E-10 | -1,99006E-07 | 2,12878E-15 | 4,37781E-15 | -1,98248E-07 | 2,45247E-15 | -3,62803E-15 |
| 231 | D Longitudinal | 3,88007E-05 | -4,89329E-06 | 1,72519E-06 | 6,38772E-09 | -2,32024E-10 | 1,70396E-06 | 6,38772E-09 | -1,3487E-10 |
| 231 | D Vertical | 0,001319814 | -0,000210611 | 1,52359E-07 | 1,52347E-07 | -6,1009E-09 | 1,52368E-07 | 1,52347E-07 | -4,35202E-09 |
| 231 | D transversal | 0,01836949 | -4,35531E-06 | 6,50451E-09 | 1,72655E-06 | -2,37147E-10 | 2,78539E-08 | 1,72655E-06 | 1,57236E-08 |
| 231 | G Longitudinal | 0,001783223 | 5,14884E-07 | -4,79112E-10 | 2,0036E-07 | 1,24812E-11 | 1,26859E-09 | 2,0036E-07 | 2,20238E-09 |
| 231 | G Vertical | 1,23665E-05 | 1,05649E-06 | -3,51259E-09 | 4,45315E-09 | 3,96166E-11 | 2,45461E-08 | 4,45315E-09 | 1,87863E-10 |
| 231 | G transversal | 1,61113E-05 | -2,01273E-06 | -2,00576E-07 | 2,26567E-09 | -7,23975E-11 | -1,98817E-07 | 2,26568E-09 | -4,19094E-11 |
| 232 | D Longitudinal | -2,90091E-12 | 6,33329E-07 | 1,60287E-06 | 1,63065E-16 | -2,47844E-10 | 1,60287E-06 | 1,65063E-16 | -2,47844E-10 |
| 232 | D Vertical | -1,50039E-11 | -0,000205022 | 1,47153E-07 | 4,3936E-17 | -5,81389E-09 | 1,47153E-07 | 4,49032E-17 | -5,81389E-09 |
| 232 | D transversal | 0,017226985 | 6,09293E-07 | 4,42552E-13 | 1,59829E-06 | -2,09573E-13 | 2,06579E-08 | 1,59829E-06 | 1,45572E-08 |
| 232 | G Longitudinal | 0,00168496 | 7,528E-08 | 1,31798E-14 | 1,89503E-07 | -5,87712E-15 | 6,9545E-10 | 1,89503E-07 | 2,09853E-09 |
| 232 | G Vertical | -5,56773E-05 | -1,19594E-07 | -5,55143E-13 | -8,78653E-09 | 2,63178E-13 | 2,60692E-08 | -8,78653E-09 | -1,28583E-10 |
| 232 | G transversal | 2,27713E-12 | -6,42895E-07 | -1,91168E-07 | -5,24674E-16 | -3,45157E-11 | -1,91168E-07 | -5,28711E-16 | -3,45158E-11 |
| 233 | D Longitudinal | 4,70046E-05 | -5,94261E-06 | 1,59775E-06 | 7,47061E-09 | -2,68182E-10 | 1,57728E-06 | 7,47061E-09 | -1,57901E-10 |
| 233 | D Vertical | 0,001298164 | -0,00020471 | 1,47849E-07 | 1,47696E-07 | -5,83525E-09 | 1,47814E-07 | 1,47696E-07 | -4,16625E-09 |
| 233 | D transversal | 0,017227924 | -4,14511E-06 | 6,10424E-09 | 1,59918E-06 | -2,20251E-10 | 2,67144E-08 | 1,59918E-06 | 1,4361E-08 |
| 233 | G Longitudinal | 0,001729571 | -3,14968E-07 | 7,32955E-10 | 1,91176E-07 | -3,21618E-11 | 2,43861E-09 | 1,91176E-07 | 2,02106E-09 |
| 233 | G Vertical | 1,32746E-05 | 1,77044E-06 | -3,30477E-09 | 3,87581E-09 | 4,92052E-11 | 2,35097E-08 | 3,87581E-09 | 1,81039E-10 |
| 233 | G transversal | 9,81961E-06 | -1,02888E-06 | -1,9126E-07 | 1,27364E-09 | -3,80196E-11 | -1,89506E-07 | 1,27365E-09 | -2,16229E-11 |
| 234 | D Longitudinal | 4,8192E-05 | -5,91415E-06 | 1,47635E-06 | 7,45888E-09 | -2,65608E-10 | 1,45665E-06 | 7,45888E-09 | -1,57896E-10 |
| 234 | D Vertical | 0,001276226 | -0,000198649 | 1,43025E-07 | 1,42983E-07 | -5,57208E-09 | 1,43041E-07 | 1,42983E-07 | -3,98394E-09 |
| 234 | D transversal | 0,016120109 | -3,99635E-06 | 5,59836E-09 | 1,47788E-06 | -1,99236E-10 | 2,54813E-08 | 1,47788E-06 | 1,30915E-08 |
| 234 | G Longitudinal | 0,001672833 | 5,03048E-07 | -1,60753E-10 | 1,81667E-07 | 4,71665E-14 | 1,5035E-09 | 1,81667E-07 | 1,91542E-09 |

APOYO 2

| DESPLAZAMIENTOS (metros) | | VIENTO | PESO | CT1 | | | CT2 | | |
|---|---|---|---|---|---|---|---|---|---|
| Nudo | Desplazamiento | | | L | T | V | L | T | V |
| 234 | G Vertical | 1,37047E-05 | 2,45645E-06 | -3,18303E-09 | 3,23523E-09 | 5,70624E-11 | 2,23955E-08 | 3,23523E-09 | 1,72353E-10 |
| 234 | G transversal | -1,21967E-06 | 4,58247E-07 | -1,81825E-07 | -4,5728E-10 | 2,32658E-11 | -1,8008E-07 | -4,5728E-10 | 1,46061E-11 |
| 235 | D Longitudinal | 9,06131E-12 | 8,76784E-08 | 1,46065E-06 | -8,14907E-14 | -1,99719E-13 | 1,44099E-06 | -8,36173E-14 | 1,06151E-13 |
| 235 | D Vertical | 0,001259822 | -0,000197913 | -2,29251E-16 | 1,41599E-07 | -5,51322E-09 | -2,31071E-16 | 1,41599E-07 | -3,94567E-09 |
| 235 | D transversal | 0,016405925 | 3,34353E-06 | 4,24131E-16 | 1,46992E-06 | -2,22854E-10 | 2,75929E-16 | 1,46992E-06 | 1,2999E-08 |
| 235 | G Longitudinal | 0,001645786 | 3,57028E-08 | -1,26243E-15 | 1,80598E-07 | 1,52518E-12 | -8,71205E-16 | 1,80598E-07 | 1,90048E-09 |
| 235 | G Vertical | -2,80426E-11 | 1,08318E-07 | 7,51863E-09 | -9,22587E-14 | -2,50729E-13 | 3,22545E-08 | -9,49649E-14 | 1,31199E-13 |
| 235 | G transversal | -9,98288E-13 | -1,57521E-09 | -1,79388E-07 | 3,28372E-15 | 7,36865E-15 | -1,7859E-07 | 3,56395E-15 | -4,87394E-15 |
| 236 | D Longitudinal | -4,14803E-05 | 5,1957E-06 | 1,33362E-06 | -6,21691E-09 | 2,18569E-10 | 1,31486E-06 | -6,21691E-09 | 1,31904E-10 |
| 236 | D Vertical | 0,001243534 | -0,000190792 | -1,36894E-07 | 1,36842E-07 | -5,24394E-09 | -1,36865E-07 | 1,36842E-07 | -3,7531E-09 |
| 236 | D transversal | 0,014793381 | -4,67258E-06 | -5,95016E-09 | 1,33512E-06 | -2,08302E-10 | -2,49455E-08 | 1,33512E-06 | 1,15942E-08 |
| 236 | G Longitudinal | 0,001606282 | 9,18322E-07 | 7,20902E-10 | 1,70851E-07 | 2,23993E-11 | -9,14113E-10 | 1,70851E-07 | 1,7838E-09 |
| 236 | G Vertical | -8,00468E-06 | -3,69419E-06 | -2,20355E-09 | -1,55328E-09 | -8,07289E-11 | 2,1847E-08 | -1,5533E-09 | -1,62938E-10 |
| 236 | G transversal | 1,21173E-05 | -1,65126E-06 | -1,7046E-07 | 2,06993E-09 | -7,94898E-11 | -1,68793E-07 | 2,06993E-09 | -4,83007E-11 |
| 237 | D Longitudinal | 4,14803E-05 | -5,02845E-06 | 1,33362E-06 | 6,21675E-09 | -2,18946E-10 | 1,31486E-06 | 6,21675E-09 | -1,31705E-10 |
| 237 | D Vertical | 0,001243534 | -0,000190789 | 1,36894E-07 | 1,36842E-07 | -5,24395E-09 | 1,36865E-07 | 1,36842E-07 | -3,75309E-09 |
| 237 | D transversal | 0,01479338 | -4,50499E-06 | 5,95016E-09 | 1,33512E-06 | -2,0868E-10 | 2,49455E-08 | 1,33512E-06 | 1,15944E-08 |
| 237 | G Longitudinal | 0,001606282 | 9,25906E-07 | -7,20847E-10 | 1,70851E-07 | 2,23423E-11 | 9,14152E-10 | 1,70851E-07 | 1,7838E-09 |
| 237 | G Vertical | 7,98618E-06 | 3,5502E-06 | -2,20101E-09 | 1,55708E-09 | 7,94625E-11 | 2,18488E-08 | 1,55708E-09 | 1,62395E-10 |
| 237 | G transversal | -1,21176E-05 | 1,6375E-06 | -1,7046E-07 | -2,06984E-09 | 7,94929E-11 | -1,68793E-07 | -2,06983E-09 | 4,82721E-11 |
| 238 | D Longitudinal | -1,76505E-12 | 1,59292E-06 | 1,36573E-06 | 5,13433E-16 | -2,1897E-10 | 1,36573E-06 | 5,1563E-16 | -2,1897E-10 |
| 238 | D Vertical | 3,51294E-12 | -0,000193769 | 1,38687E-07 | -6,73877E-17 | -5,3323E-09 | 1,38687E-07 | -6,76468E-17 | -5,3323E-09 |
| 238 | D transversal | 0,015048137 | 5,14473E-07 | 4,0328E-13 | 1,36156E-06 | -1,91337E-13 | 1,91885E-08 | 1,36156E-06 | 1,20641E-08 |
| 238 | G Longitudinal | 0,001571626 | 6,75516E-08 | 1,78272E-14 | 1,71503E-07 | -8,17794E-15 | 6,38111E-10 | 1,71503E-07 | 1,83843E-09 |
| 238 | G Vertical | -5,1499E-05 | -1,07559E-07 | -4,8964E-13 | -7,7192E-09 | 2,32531E-13 | 2,33061E-08 | -7,7192E-09 | -1,07952E-10 |
| 238 | G transversal | 6,11079E-12 | 1,54545E-06 | -1,7281E-07 | -1,25483E-15 | 6,16934E-11 | -1,7281E-07 | -1,25804E-15 | 6,16932E-11 |
| 239 | D Longitudinal | -1,76506E-12 | -1,59292E-06 | 1,36573E-06 | 5,1311E-16 | 2,1897E-10 | 1,36573E-06 | 5,11774E-16 | 2,1897E-10 |
| 239 | D Vertical | -3,51307E-12 | -0,000193769 | -1,38687E-07 | 6,72853E-17 | -5,3323E-09 | -1,38687E-07 | 6,64906E-17 | -5,3323E-09 |
| 239 | D transversal | 0,015048137 | 3,44662E-07 | -4,03283E-13 | 1,36156E-06 | 1,91337E-13 | -1,91885E-08 | 1,36156E-06 | 1,20639E-08 |
| 239 | G Longitudinal | 0,001571626 | 6,33714E-08 | -1,76821E-14 | 1,71503E-07 | 8,17789E-15 | -6,38111E-10 | 1,71503E-07 | 1,83842E-09 |
| 239 | G Vertical | 5,1499E-05 | -9,98799E-08 | -4,96522E-13 | 7,71939E-09 | 2,32533E-13 | 2,33061E-08 | 7,7194E-09 | 1,077E-10 |
| 239 | G transversal | 6,11073E-12 | -1,54545E-06 | -1,7281E-07 | -1,25395E-15 | -6,16934E-11 | -1,7281E-07 | -1,24748E-15 | -6,16937E-11 |
| 240 | D Longitudinal | 3,42658E-05 | -4,11616E-06 | 1,2514E-06 | 5,01527E-09 | -1,74799E-10 | 1,23321E-06 | 5,01527E-09 | -1,06017E-10 |
| 240 | D Vertical | 0,001227679 | -0,000186624 | 1,33731E-07 | 1,33766E-07 | -5,07627E-09 | 1,33735E-07 | 1,33766E-07 | -3,63478E-09 |
| 240 | D transversal | 0,014013474 | -4,76136E-06 | 6,09399E-09 | 1,25262E-06 | -2,12254E-10 | 2,45248E-08 | 1,25262E-06 | 1,07454E-08 |
| 240 | G Longitudinal | 0,00157121 | 6,63419E-07 | -5,14275E-10 | 1,65357E-07 | 1,4597E-11 | 1,13115E-09 | 1,65357E-07 | 1,69896E-09 |
| 240 | G Vertical | 1,01286E-05 | 3,90643E-06 | -2,77976E-09 | 1,74026E-09 | 8,73117E-11 | 2,07312E-08 | 1,74026E-09 | 1,69928E-10 |
| 240 | G transversal | -1,21432E-05 | 1,55787E-06 | -1,64722E-07 | -2,05528E-09 | 7,90338E-11 | -1,63097E-07 | -2,05528E-09 | 4,81971E-11 |
| 241 | D Longitudinal | -3,42659E-05 | -4,28291E-06 | 1,2514E-06 | -5,01527E-09 | -1,74436E-10 | 1,26959E-06 | -5,01527E-09 | -2,43218E-10 |
| 241 | D Vertical | -0,001227679 | -0,00018673 | 1,33731E-07 | -1,33766E-07 | -5,07626E-09 | 1,33727E-07 | -1,33766E-07 | -6,51775E-09 |
| 241 | D transversal | 0,014013474 | 5,70398E-06 | -6,09322E-09 | 1,25262E-06 | 2,11892E-10 | 1,23375E-08 | 1,25262E-06 | 1,11695E-08 |
| 241 | G Longitudinal | 0,00157121 | -5,35127E-07 | 5,14392E-10 | 1,65357E-07 | -1,46535E-11 | 2,15984E-09 | 1,65357E-07 | 1,66969E-09 |
| 241 | G Vertical | 1,01462E-05 | -4,03815E-06 | 2,78218E-09 | 1,73664E-09 | -8,8519E-11 | 2,62939E-08 | 1,73663E-09 | -6,75456E-12 |
| 241 | G transversal | 1,21428E-05 | 1,57411E-06 | -1,64722E-07 | 2,05536E-09 | 7,90287E-11 | -1,66347E-07 | 2,05536E-09 | 1,09883E-10 |

APOYO 2

| DESPLAZAMIENTOS (metros) | | VIENTO | PESO | CT1 | | | CT2 | | |
|---|---|---|---|---|---|---|---|---|---|
| Nudo | Desplazamiento | | | L | T | V | L | T | V |
| 242 | D Longitudinal | -3,42658E-05 | 4,27803E-06 | 1,2514E-06 | -5,01542E-09 | 1,74436E-10 | 1,23321E-06 | -5,01542E-09 | 1,06208E-10 |
| 242 | D Vertical | 0,001227679 | -0,000186627 | -1,33731E-07 | 1,33766E-07 | -5,07626E-09 | -1,33735E-07 | 1,33766E-07 | -3,63479E-09 |
| 242 | D transversal | 0,014013474 | -4,92366E-06 | -6,09399E-09 | 1,25262E-06 | -2,11892E-10 | -2,45248E-08 | 1,25262E-06 | 1,07452E-08 |
| 242 | G Longitudinal | 0,00157121 | 6,55075E-07 | 5,14327E-10 | 1,65357E-07 | 1,46534E-11 | -1,13112E-09 | 1,65357E-07 | 1,69895E-09 |
| 242 | G Vertical | -1,01462E-05 | -4,04399E-06 | -2,78218E-09 | -1,73664E-09 | -8,85158E-11 | 2,07295E-08 | -1,73665E-09 | -1,70446E-10 |
| 242 | G transversal | 1,21428E-05 | -1,57191E-06 | -1,64722E-07 | 2,05537E-09 | -7,90286E-11 | -1,63097E-07 | 2,05537E-09 | -4,8225E-11 |
| 243 | D Longitudinal | 3,42658E-05 | 4,12104E-06 | 1,2514E-06 | 5,01542E-09 | 1,74799E-10 | 1,26959E-06 | 5,01542E-09 | 2,43027E-10 |
| 243 | D Vertical | -0,001227679 | -0,000186726 | -1,33731E-07 | -1,33766E-07 | -5,07627E-09 | -1,33727E-07 | -1,33766E-07 | -6,51774E-09 |
| 243 | D transversal | 0,014013474 | 5,54169E-06 | 6,09322E-09 | 1,25262E-06 | 2,12254E-10 | -1,23375E-08 | 1,25262E-06 | 1,11693E-08 |
| 243 | G Longitudinal | 0,00157121 | -5,43469E-07 | -5,1434E-10 | 1,65357E-07 | -1,4597E-11 | -2,15977E-09 | 1,65357E-07 | 1,66971E-09 |
| 243 | G Vertical | -1,01286E-05 | 3,90055E-06 | 2,77974E-09 | -1,74026E-09 | 8,73103E-11 | 2,62908E-08 | -1,74025E-09 | 4,67994E-12 |
| 243 | G transversal | -1,21432E-05 | -1,56006E-06 | -1,64722E-07 | -2,05529E-09 | -7,90338E-11 | -1,66347E-07 | -2,05529E-09 | -1,09823E-10 |
| 244 | D Longitudinal | -7,8007E-12 | -8,03504E-08 | 1,22867E-06 | 7,2999E-14 | 1,79352E-13 | 1,24675E-06 | 7,47178E-14 | -9,44646E-14 |
| 244 | D Vertical | -0,001206769 | -0,000185229 | -3,69089E-16 | -1,31445E-07 | -4,97925E-09 | -4,74953E-16 | -1,31445E-07 | -6,38668E-09 |
| 244 | D transversal | 0,014145931 | -8,3842E-07 | 1,43502E-16 | 1,23429E-06 | 2,09467E-10 | 1,75927E-16 | 1,23429E-06 | 1,09886E-08 |
| 244 | G Longitudinal | 0,001543053 | -2,84208E-07 | 5,49307E-16 | 1,6348E-07 | -1,8537E-11 | 7,35474E-16 | 1,6348E-07 | 1,63912E-09 |
| 244 | G Vertical | 3,4381E-11 | 9,63397E-08 | -7,471E-09 | -9,26251E-14 | -2,17042E-13 | 1,45432E-08 | -9,47069E-14 | 1,11206E-13 |
| 244 | G transversal | -4,50362E-13 | 2,79893E-09 | -1,61236E-07 | -3,65665E-15 | -9,11033E-15 | -1,61836E-07 | -3,90239E-15 | 5,64949E-15 |
| 245 | D Longitudinal | 5,89985E-13 | -4,95689E-06 | 1,13467E-06 | -9,98827E-17 | 1,83683E-10 | 1,13467E-06 | -9,85552E-17 | 1,83683E-10 |
| 245 | D Vertical | -5,3676E-13 | -0,0001812 | -1,29207E-07 | 5,22896E-17 | -4,83211E-09 | -1,29207E-07 | 5,18209E-17 | -4,83211E-09 |
| 245 | D transversal | 0,012834308 | 2,68545E-07 | -3,57331E-13 | 1,129E-06 | 1,69826E-13 | -1,75815E-08 | 1,129E-06 | 9,70098E-09 |
| 245 | G Longitudinal | 0,001461291 | 5,33248E-08 | -2,14272E-14 | 1,54168E-07 | 1,00585E-14 | -7,30645E-10 | 1,54168E-07 | 1,59227E-09 |
| 245 | G Vertical | 4,61587E-05 | -8,76557E-08 | -4,25447E-13 | 6,3764E-09 | 1,98285E-13 | 2,05659E-08 | 6,3764E-09 | 8,2634E-11 |
| 245 | G transversal | 5,52653E-12 | 3,79553E-07 | -1,55366E-07 | -1,13342E-15 | 2,15139E-11 | -1,55366E-07 | -1,12667E-15 | 2,15137E-11 |
| 246 | D Longitudinal | -3,00826E-05 | -3,83488E-06 | 1,12965E-06 | -4,18674E-09 | -1,4272E-10 | 1,14699E-06 | -4,18674E-09 | -1,97416E-10 |
| 246 | D Vertical | -0,001198262 | -0,000180019 | 1,288E-07 | -1,28762E-07 | -4,81593E-09 | 1,28831E-07 | -1,28762E-07 | -6,18338E-09 |
| 246 | D transversal | 0,012843378 | 6,03372E-06 | -6,48109E-09 | 1,13052E-06 | 2,22713E-10 | 1,10607E-08 | 1,13052E-06 | 9,9503E-09 |
| 246 | G Longitudinal | 0,001507943 | -1,15945E-06 | 1,1425E-09 | 1,55471E-07 | -3,55746E-11 | 2,80264E-09 | 1,55471E-07 | 1,51408E-09 |
| 246 | G Vertical | 1,06984E-05 | -4,53529E-06 | 3,16856E-09 | 1,664E-09 | -1,00291E-10 | 2,58568E-08 | 1,66399E-09 | -2,35912E-11 |
| 246 | G transversal | -7,95053E-06 | -8,30107E-07 | -1,55407E-07 | -8,41367E-10 | -2,2503E-11 | -1,57017E-07 | -8,41367E-10 | -3,16093E-11 |
| 247 | D Longitudinal | -3,00826E-05 | 3,83101E-06 | 1,12965E-06 | -4,18688E-09 | 1,4272E-10 | 1,11232E-06 | -4,18688E-09 | 8,85415E-11 |
| 247 | D Vertical | 0,001198262 | -0,000179921 | -1,288E-07 | 1,28762E-07 | -4,81593E-09 | -1,28769E-07 | 1,28762E-07 | -3,44851E-09 |
| 247 | D transversal | 0,012843378 | -5,34099E-06 | -6,4818E-09 | 1,13052E-06 | -2,22713E-10 | -2,40236E-08 | 1,13052E-06 | 9,50436E-09 |
| 247 | G Longitudinal | 0,001507943 | 1,2698E-06 | 1,14243E-09 | 1,55471E-07 | 3,55746E-11 | -5,17703E-10 | 1,55471E-07 | 1,58518E-09 |
| 247 | G Vertical | -1,06984E-05 | -4,54076E-06 | -3,16855E-09 | -1,664E-09 | -1,00288E-10 | 1,95196E-08 | -1,66402E-09 | -1,7714E-10 |
| 247 | G transversal | -7,95053E-06 | 8,29457E-07 | -1,55407E-07 | -8,41354E-10 | 2,2503E-11 | -1,53797E-07 | -8,41354E-10 | 1,33449E-11 |
| 248 | D Longitudinal | 3,00826E-05 | 3,68181E-06 | 1,12965E-06 | 4,18688E-09 | 1,4306E-10 | 1,14699E-06 | 4,18688E-09 | 1,97239E-10 |
| 248 | D Vertical | -0,001198262 | -0,000180014 | -1,288E-07 | -1,28762E-07 | -4,81595E-09 | -1,28831E-07 | -1,28762E-07 | -6,18337E-09 |
| 248 | D transversal | 0,012843378 | 5,88032E-06 | 6,48109E-09 | 1,13052E-06 | 2,23052E-10 | -1,10607E-08 | 1,13052E-06 | 9,95012E-09 |
| 248 | G Longitudinal | 0,001507943 | -1,16894E-06 | -1,14245E-09 | 1,55471E-07 | -3,5519E-11 | -2,80257E-09 | 1,55471E-07 | 1,5141E-09 |
| 248 | G Vertical | -1,0682E-05 | 4,4081E-06 | 3,1663E-09 | -1,66736E-09 | 9,91674E-11 | 2,58539E-08 | -1,66735E-09 | 2,16652E-11 |
| 248 | G transversal | 7,95019E-06 | 8,44882E-07 | -1,55407E-07 | 8,41425E-10 | 2,24956E-11 | -1,57017E-07 | 8,41425E-10 | 3,16676E-11 |
| 249 | D Longitudinal | -7,05213E-12 | -7,21199E-08 | 1,01724E-06 | 6,42959E-14 | 1,58125E-13 | 1,03377E-06 | 6,56574E-14 | -8,25691E-14 |
| 249 | D Vertical | -0,001173696 | -0,000175838 | 2,94937E-16 | -1,25748E-07 | -4,63204E-09 | 3,8631E-16 | -1,25748E-07 | -5,95212E-09 |

APOYO 2

| DESPLAZAMIENTOS (metros) | | VIENTO | PESO | CT1 | | | CT2 | | |
|---|---|---|---|---|---|---|---|---|---|
| Nudo | Desplazamiento | | | L | T | V | L | T | V |
| 249 | D transversal | 0,012237443 | -2,76718E-06 | -2,82028E-16 | 1,02473E-06 | 2,40433E-10 | -3,63097E-16 | 1,02473E-06 | 8,93343E-09 |
| 249 | G Longitudinal | 0,001424768 | -4,23146E-07 | -5,87632E-16 | 1,46548E-07 | -2,3087E-11 | -7,72769E-16 | 1,46548E-07 | 1,41011E-09 |
| 249 | G Vertical | 2,98689E-11 | 8,35041E-08 | -7,99071E-09 | -7,94422E-14 | -1,85142E-13 | 1,14541E-08 | -8,10424E-14 | 9,35892E-14 |
| 249 | G transversal | 2,53792E-13 | 3,78119E-09 | -1,45441E-07 | -4,3155E-15 | -1,05309E-14 | -1,46121E-07 | -4,53014E-15 | 6,102E-15 |
| 250 | D Longitudinal | -4,30222E-05 | -5,31624E-06 | 1,01337E-06 | -5,79496E-09 | -1,96362E-10 | 1,02984E-06 | -5,79496E-09 | -2,70317E-10 |
| 250 | D Vertical | -0,001168486 | -0,000172912 | 1,23607E-07 | -1,23635E-07 | -4,55138E-09 | 1,23592E-07 | -1,23635E-07 | -5,84266E-09 |
| 250 | D transversal | 0,011705063 | 6,85395E-06 | -7,19869E-09 | 1,01442E-06 | 2,44642E-10 | 9,44899E-09 | 1,01442E-06 | 8,82727E-09 |
| 250 | G Longitudinal | 0,001443323 | -1,06406E-06 | 9,21591E-10 | 1,46035E-07 | -2,80408E-11 | 2,56403E-09 | 1,46035E-07 | 1,39905E-09 |
| 250 | G Vertical | 8,91959E-06 | -4,94433E-06 | 2,99188E-09 | 1,05898E-09 | -1,03565E-10 | 2,4865E-08 | 1,05897E-09 | -3,86381E-11 |
| 250 | G transversal | -2,45652E-05 | -2,81432E-06 | -1,46455E-07 | -3,14828E-09 | -1,03258E-10 | -1,48079E-07 | -3,14828E-09 | -1,43504E-10 |
| 251 | D Longitudinal | -4,30222E-05 | 5,31099E-06 | 1,01337E-06 | -5,79509E-09 | 1,96362E-10 | 9,96904E-07 | -5,79509E-09 | 1,22886E-10 |
| 251 | D Vertical | 0,001168486 | -0,00017282 | -1,23607E-07 | 1,23635E-07 | -4,55138E-09 | -1,23621E-07 | 1,23635E-07 | -3,26013E-09 |
| 251 | D transversal | 0,011705063 | -6,24275E-06 | -7,19935E-09 | 1,01442E-06 | -2,44642E-10 | -2,3847E-08 | 1,01442E-06 | 8,3375E-09 |
| 251 | G Longitudinal | 0,001443323 | 1,16569E-06 | 9,21523E-10 | 1,46035E-07 | 2,80408E-11 | -7,20914E-10 | 1,46035E-07 | 1,45509E-09 |
| 251 | G Vertical | -8,91959E-06 | -4,94896E-06 | -2,99187E-09 | -1,05898E-09 | -1,03562E-10 | 1,88813E-08 | -1,05899E-09 | -1,68632E-10 |
| 251 | G transversal | -2,45652E-05 | 2,81145E-06 | -1,46456E-07 | -3,14826E-09 | 1,03258E-10 | -1,44832E-07 | -3,14826E-09 | 6,29583E-11 |
| 252 | D Longitudinal | 4,30222E-05 | 5,17273E-06 | 1,01337E-06 | 5,79508E-09 | 1,96676E-10 | 1,02984E-06 | 5,79509E-09 | 2,70152E-10 |
| 252 | D Vertical | -0,001168486 | -0,000172906 | -1,23607E-07 | -1,23635E-07 | -4,5514E-09 | -1,23592E-07 | -1,23635E-07 | -5,84265E-09 |
| 252 | D transversal | 0,011705063 | 6,71027E-06 | 7,19869E-09 | 1,01442E-06 | 2,44956E-10 | -9,44899E-09 | 1,01442E-06 | 8,8271E-09 |
| 252 | G Longitudinal | 0,001443323 | -1,07436E-06 | -9,21546E-10 | 1,46035E-07 | -2,79865E-11 | -2,56397E-09 | 1,46035E-07 | 1,39907E-09 |
| 252 | G Vertical | -8,90438E-06 | 4,82549E-06 | 2,98977E-09 | -1,0621E-09 | 1,02522E-10 | 2,48624E-08 | -1,06209E-09 | 3,68473E-11 |
| 252 | G transversal | 2,45649E-05 | 2,82974E-06 | -1,46455E-07 | 3,14833E-09 | 1,03248E-10 | -1,48079E-07 | 3,14833E-09 | 1,43561E-10 |
| 253 | D Longitudinal | -5,83463E-05 | -7,19062E-06 | 9,13562E-07 | -7,69279E-09 | -2,59783E-10 | 9,29214E-07 | -7,69279E-09 | -3,56649E-10 |
| 253 | D Vertical | -0,001135018 | -0,000166186 | 1,18689E-07 | -1,18613E-07 | -4,31054E-09 | 1,18714E-07 | -1,18613E-07 | -5,53363E-09 |
| 253 | D transversal | 0,010714323 | 7,02728E-06 | -7,29254E-09 | 9,14763E-07 | 2,45409E-10 | 8,53689E-09 | 9,14763E-07 | 7,86189E-09 |
| 253 | G Longitudinal | 0,001388051 | -3,13066E-07 | 2,01199E-11 | 1,38282E-07 | 3,02034E-12 | 1,63736E-09 | 1,38282E-07 | 1,33353E-09 |
| 253 | G Vertical | 1,12222E-05 | -5,42042E-06 | 3,24253E-09 | 9,74656E-10 | -1,07884E-10 | 2,43934E-08 | 9,74648E-10 | -4,74228E-11 |
| 253 | G transversal | -2,09338E-05 | -2,32638E-06 | -1,38268E-07 | -2,43711E-09 | -7,66703E-11 | -1,39893E-07 | -2,43711E-09 | -1,0535E-10 |
| 254 | D Longitudinal | -5,83463E-05 | 7,18374E-06 | 9,13563E-07 | -7,69291E-09 | 2,59783E-10 | 8,97911E-07 | -7,69291E-09 | 1,63362E-10 |
| 254 | D Vertical | 0,001135018 | -0,000166099 | -1,18689E-07 | 1,18614E-07 | -4,31054E-09 | -1,18664E-07 | 1,18614E-07 | -3,08748E-09 |
| 254 | D transversal | 0,010714323 | -6,48489E-06 | -7,29315E-09 | 9,14763E-07 | -2,45409E-10 | -2,31226E-08 | 9,14763E-07 | 7,37063E-09 |
| 254 | G Longitudinal | 0,001388051 | 4,07817E-07 | 2,00523E-11 | 1,38283E-07 | -3,02039E-12 | -1,59718E-09 | 1,38283E-07 | 1,32745E-09 |
| 254 | G Vertical | -1,12222E-05 | -5,42473E-06 | -3,24252E-09 | -9,74657E-10 | -1,07881E-10 | 1,79084E-08 | -9,74667E-10 | -1,68475E-10 |
| 254 | G transversal | -2,09338E-05 | 2,32434E-06 | -1,38268E-07 | -2,4371E-09 | 7,66704E-11 | -1,36644E-07 | -2,4371E-09 | 4,79384E-11 |
| 255 | D Longitudinal | 5,83463E-05 | 7,05625E-06 | 9,13562E-07 | 7,69291E-09 | 2,60075E-10 | 9,29214E-07 | 7,69291E-09 | 3,56497E-10 |
| 255 | D Vertical | -0,001135018 | -0,000166179 | -1,18689E-07 | -1,18614E-07 | -4,31056E-09 | -1,18714E-07 | -1,18614E-07 | -5,53362E-09 |
| 255 | D transversal | 0,010714323 | 6,8927E-06 | 7,29254E-09 | 9,14763E-07 | 2,45701E-10 | -8,53689E-09 | 9,14763E-07 | 7,86174E-09 |
| 255 | G Longitudinal | 0,001388051 | -3,23841E-07 | -2,00776E-11 | 1,38283E-07 | 3,07322E-12 | -1,6373E-09 | 1,38283E-07 | 1,33355E-09 |
| 255 | G Vertical | -1,1208E-05 | 5,30951E-06 | 3,24056E-09 | -9,77583E-10 | 1,06905E-10 | 2,4391E-08 | -9,77575E-10 | 4,57439E-11 |
| 255 | G transversal | 2,09335E-05 | 2,34196E-06 | -1,38268E-07 | 2,43716E-09 | 7,66596E-11 | -1,39893E-07 | 2,43716E-09 | 1,05404E-10 |
| 256 | D Longitudinal | 1,73913E-12 | -3,83025E-06 | 9,0935E-07 | -3,52328E-16 | 2,42351E-10 | 9,0935E-07 | -3,49278E-16 | 2,42351E-10 |
| 256 | D Vertical | 1,68575E-12 | -0,000166211 | -1,17789E-07 | -2,11446E-16 | -4,27782E-09 | -1,17789E-07 | -2,10171E-16 | -4,27782E-09 |
| 256 | D transversal | 0,010608184 | 1,99904E-07 | -3,05351E-13 | 9,03526E-07 | 1,45376E-13 | -1,57885E-08 | 9,03526E-07 | 7,49645E-09 |
| 256 | G Longitudinal | 0,001332068 | 4,42575E-08 | -2,35202E-14 | 1,36132E-07 | 1,10945E-14 | -6,83055E-10 | 1,36132E-07 | 1,36087E-09 |

APOYO 2

| DESPLAZAMIENTOS (metros) | | VIENTO | PESO | CT1 | | | CT2 | | |
|---|---|---|---|---|---|---|---|---|---|
| Nudo | Desplazamiento | | | L | T | V | L | T | V |
| 256 | G Vertical | 6,35246E-05 | -7,26442E-08 | -3,50828E-13 | 8,16251E-09 | 1,63558E-13 | 1,77858E-08 | 8,16251E-09 | 9,97755E-11 |
| 256 | G transversal | 1,41269E-12 | 1,60452E-06 | -1,3742E-07 | -2,90984E-16 | 6,6462E-11 | -1,3742E-07 | -2,88649E-16 | 6,64619E-11 |
| 257 | D Longitudinal | -6,82083E-05 | 8,23952E-06 | 8,01409E-07 | -8,62431E-09 | 2,87503E-10 | 7,86744E-07 | -8,62432E-09 | 1,83221E-10 |
| 257 | D Vertical | 0,001093811 | -0,000157725 | -1,12451E-07 | 1,12433E-07 | -4,02196E-09 | -1,12471E-07 | 1,12433E-07 | -2,8826E-09 |
| 257 | D transversal | 0,009574303 | -6,46722E-06 | -6,8964E-09 | 8,02437E-07 | -2,28985E-10 | -2,17511E-08 | 8,02437E-07 | 6,31712E-09 |
| 257 | G Longitudinal | 0,001317915 | 1,29661E-07 | -2,3051E-10 | 1,28714E-07 | -1,1419E-11 | -1,82393E-09 | 1,28714E-07 | 1,20252E-09 |
| 257 | G Vertical | -1,38191E-05 | -5,99307E-06 | -3,60874E-09 | -8,38063E-10 | -1,1212E-10 | 1,67009E-08 | -8,38072E-10 | -1,67231E-10 |
| 257 | G transversal | -5,01643E-06 | 4,07513E-07 | -1,28737E-07 | -1,61245E-10 | -2,92052E-12 | -1,27129E-07 | -1,61245E-10 | -6,59767E-13 |
| 258 | D Longitudinal | 6,82083E-05 | 8,12374E-06 | 8,01408E-07 | 8,62431E-09 | 2,87768E-10 | 8,16074E-07 | 8,62432E-09 | 3,9205E-10 |
| 258 | D Vertical | -0,001093811 | -0,000157799 | -1,12451E-07 | -1,12433E-07 | -4,02198E-09 | -1,1243E-07 | -1,12433E-07 | -5,16133E-09 |
| 258 | D transversal | 0,009574303 | 6,80999E-06 | 6,89584E-09 | 8,02437E-07 | 2,29251E-10 | -7,95888E-09 | 8,02437E-07 | 6,77535E-09 |
| 258 | G Longitudinal | 0,001317915 | -5,43641E-08 | 2,30482E-10 | 1,28714E-07 | 1,14695E-11 | -1,36293E-09 | 1,28714E-07 | 1,22542E-09 |
| 258 | G Vertical | -1,38058E-05 | 5,88563E-06 | 3,60692E-09 | -8,4078E-10 | 1,11214E-10 | 2,39161E-08 | -8,40772E-10 | 5,55769E-11 |
| 258 | G transversal | 5,01615E-06 | 4,22904E-07 | -1,28737E-07 | 1,61303E-10 | -2,93306E-12 | -1,30345E-07 | 1,61302E-10 | -5,18274E-12 |
| 259 | D Longitudinal | 8,04813E-12 | 8,03504E-08 | 1,22867E-06 | -7,30387E-14 | -1,79352E-13 | 1,21059E-06 | -7,47554E-14 | 9,44559E-14 |
| 259 | D Vertical | 0,001206769 | -0,000185129 | 3,66568E-16 | 1,31445E-07 | -4,97925E-09 | 2,50413E-16 | 1,31445E-07 | -3,57182E-09 |
| 259 | D transversal | 0,014145931 | 1,60606E-06 | 1,42642E-16 | 1,23429E-06 | -2,09467E-10 | 1,07383E-16 | 1,23429E-06 | 1,05697E-08 |
| 259 | G Longitudinal | 0,001543053 | 4,02258E-07 | 5,4475E-16 | 1,6348E-07 | 1,8537E-11 | 3,43646E-16 | 1,6348E-07 | 1,67619E-09 |
| 259 | G Vertical | -1,53196E-11 | 9,63397E-08 | 7,47191E-09 | -8,30275E-14 | -2,17036E-13 | 2,94861E-08 | -8,5123E-14 | 1,13282E-13 |
| 259 | G transversal | -1,27511E-12 | -2,79893E-09 | -1,61236E-07 | 4,00195E-15 | 9,11055E-15 | -1,60637E-07 | 4,24692E-15 | -5,57499E-15 |
| 260 | D Longitudinal | 5,89978E-13 | 4,95689E-06 | 1,13467E-06 | -9,9925E-17 | -1,83683E-10 | 1,13467E-06 | -9,90745E-17 | -1,83683E-10 |
| 260 | D Vertical | 5,36665E-13 | -0,0001812 | 1,29207E-07 | -5,23394E-17 | -4,83211E-09 | 1,29207E-07 | -5,24202E-17 | -4,83211E-09 |
| 260 | D transversal | 0,012834308 | 4,22314E-07 | 3,57321E-13 | 1,129E-06 | -1,69826E-13 | 1,75815E-08 | 1,129E-06 | 9,70116E-09 |
| 260 | G Longitudinal | 0,001461291 | 6,0069E-08 | 2,16117E-14 | 1,54168E-07 | -1,00586E-14 | 7,30645E-10 | 1,54168E-07 | 1,59229E-09 |
| 260 | G Vertical | -4,61587E-05 | -9,35481E-08 | -4,16975E-13 | -6,37624E-09 | 1,98282E-13 | 2,05659E-08 | -6,37624E-09 | -8,2849E-11 |
| 260 | G transversal | 5,52659E-12 | -3,79553E-07 | -1,55366E-07 | -1,13438E-15 | -2,15139E-11 | -1,55366E-07 | -1,13819E-15 | -2,15142E-11 |
| 261 | D Longitudinal | 3,00826E-05 | -3,67793E-06 | 1,12965E-06 | 4,18674E-09 | -1,4306E-10 | 1,11232E-06 | 4,18674E-09 | -8,83636E-11 |
| 261 | D Vertical | 0,001198262 | -0,000179917 | 1,288E-07 | 1,28762E-07 | -4,81595E-09 | 1,28769E-07 | 1,28762E-07 | -3,4485E-09 |
| 261 | D transversal | 0,012843378 | -5,18759E-06 | 6,4818E-09 | 1,13052E-06 | -2,23052E-10 | 2,40236E-08 | 1,13052E-06 | 9,50454E-09 |
| 261 | G Longitudinal | 0,001507943 | 1,2793E-06 | -1,14238E-09 | 1,55471E-07 | 3,5519E-11 | 5,17737E-10 | 1,55471E-07 | 1,58519E-09 |
| 261 | G Vertical | 1,0682E-05 | 4,41361E-06 | -3,16631E-09 | 1,66736E-09 | 9,91686E-11 | 1,95212E-08 | 1,66736E-09 | 1,7666E-10 |
| 261 | G transversal | 7,95019E-06 | -8,4423E-07 | -1,55407E-07 | 8,41438E-10 | -2,24956E-11 | -1,53797E-07 | 8,41439E-10 | -1,33725E-11 |
| 262 | D Longitudinal | 6,90641E-12 | 7,21199E-08 | 1,01724E-06 | -6,42665E-14 | -1,58125E-13 | 1,00071E-06 | -6,56263E-14 | 8,25754E-14 |
| 262 | D Vertical | 0,001173696 | -0,000175744 | -2,92853E-16 | 1,25748E-07 | -4,63204E-09 | -1,92813E-16 | 1,25748E-07 | -3,31196E-09 |
| 262 | D transversal | 0,012237443 | 3,38625E-06 | -2,79994E-16 | 1,02473E-06 | -2,40433E-10 | -1,90269E-16 | 1,02473E-06 | 8,45256E-09 |
| 262 | G Longitudinal | 0,001424768 | 5,25211E-07 | -5,82984E-16 | 1,46548E-07 | 2,3087E-11 | -3,81597E-16 | 1,46548E-07 | 1,45629E-09 |
| 262 | G Vertical | -1,36445E-11 | 8,35042E-08 | 7,99148E-09 | -7,00026E-14 | -1,85136E-13 | 2,74363E-08 | -7,16161E-14 | 9,56156E-14 |
| 262 | G transversal | -6,88732E-13 | -3,78119E-09 | -1,45441E-07 | 4,41175E-15 | 1,05309E-14 | -1,44761E-07 | 4,62601E-15 | -6,08136E-15 |
| 263 | D Longitudinal | 4,30222E-05 | -5,16748E-06 | 1,01337E-06 | 5,79496E-09 | -1,96676E-10 | 9,96904E-07 | 5,79496E-09 | -1,22722E-10 |
| 263 | D Vertical | 0,001168486 | -0,000172814 | 1,23607E-07 | 1,23635E-07 | -4,5514E-09 | 1,23621E-07 | 1,23635E-07 | -3,26012E-09 |
| 263 | D transversal | 0,011705063 | -6,09908E-06 | 7,19935E-09 | 1,01442E-06 | -2,44956E-10 | 2,3847E-08 | 1,01442E-06 | 8,33767E-09 |
| 263 | G Longitudinal | 0,001443323 | 1,17599E-06 | -9,21478E-10 | 1,46035E-07 | 2,79865E-11 | 7,20946E-10 | 1,46035E-07 | 1,45509E-09 |
| 263 | G Vertical | 8,90438E-06 | 4,83016E-06 | -2,98979E-09 | 1,0621E-09 | 1,02523E-10 | 1,88827E-08 | 1,0621E-09 | 1,68185E-10 |
| 263 | G transversal | 2,45649E-05 | -2,82687E-06 | -1,46456E-07 | 3,14835E-09 | -1,03248E-10 | -1,44832E-07 | 3,14835E-09 | -6,29857E-11 |

APOYO 2

| DESPLAZAMIENTOS (metros) | | VIENTO | PESO | CT1 | | | CT2 | | |
|---|---|---|---|---|---|---|---|---|---|
| Nudo | Desplazamiento | | | L | T | V | L | T | V |
| 264 | D Longitudinal | 5,83463E-05 | -7,04936E-06 | 9,13563E-07 | 7,69279E-09 | -2,60075E-10 | 8,97911E-07 | 7,69279E-09 | -1,6321E-10 |
| 264 | D Vertical | 0,001135018 | -0,000166092 | 1,18689E-07 | 1,18613E-07 | -4,31056E-09 | 1,18664E-07 | 1,18613E-07 | -3,08747E-09 |
| 264 | D transversal | 0,010714323 | -6,35031E-06 | 7,29315E-09 | 9,14763E-07 | -2,45701E-10 | 2,31226E-08 | 9,14763E-07 | 7,37078E-09 |
| 264 | G Longitudinal | 0,001388051 | 4,18592E-07 | -2,00102E-11 | 1,38283E-07 | -3,0732E-12 | 1,59721E-09 | 1,38283E-07 | 1,32745E-09 |
| 264 | G Vertical | 1,1208E-05 | 5,31386E-06 | -3,24057E-09 | 9,77584E-10 | 1,06906E-10 | 1,79098E-08 | 9,77586E-10 | 1,68057E-10 |
| 264 | G transversal | 2,09335E-05 | -2,33991E-06 | -1,38268E-07 | 2,43718E-09 | -7,66596E-11 | -1,36644E-07 | 2,43718E-09 | -4,79649E-11 |
| 265 | D Longitudinal | 1,73914E-12 | 3,83025E-06 | 9,0935E-07 | -3,52655E-16 | -2,42351E-10 | 9,0935E-07 | -3,53193E-16 | -2,42351E-10 |
| 265 | D Vertical | -1,68587E-12 | -0,000166211 | 1,17789E-07 | 2,11638E-16 | -4,27782E-09 | 1,17789E-07 | 2,12484E-16 | -4,27782E-09 |
| 265 | D transversal | 0,010608184 | 3,33959E-07 | 3,05386E-13 | 9,03526E-07 | -1,45376E-13 | 1,57885E-08 | 9,03526E-07 | 7,4966E-09 |
| 265 | G Longitudinal | 0,001332068 | 5,26572E-08 | 2,36501E-14 | 1,36132E-07 | -1,10945E-14 | 6,83055E-10 | 1,36132E-07 | 1,36089E-09 |
| 265 | G Vertical | -6,35246E-05 | -7,97559E-08 | -3,43414E-13 | -8,16238E-09 | 1,63555E-13 | 1,77858E-08 | -8,16238E-09 | -9,99516E-11 |
| 265 | G transversal | 1,41271E-12 | -1,60452E-06 | -1,3742E-07 | -2,91355E-16 | -6,6462E-11 | -1,3742E-07 | -2,93099E-16 | -6,64621E-11 |
| 266 | D Longitudinal | -6,82083E-05 | -8,24697E-06 | 8,01408E-07 | -8,62421E-09 | -2,87503E-10 | 8,16074E-07 | -8,62421E-09 | -3,92188E-10 |
| 266 | D Vertical | -0,001093811 | -0,000157806 | 1,12451E-07 | -1,12433E-07 | -4,02196E-09 | 1,1243E-07 | -1,12433E-07 | -5,16134E-09 |
| 266 | D transversal | 0,009574303 | 6,93342E-06 | -6,89584E-09 | 8,02437E-07 | 2,28985E-10 | 7,95889E-09 | 8,02437E-07 | 6,77549E-09 |
| 266 | G Longitudinal | 0,001317915 | -4,3209E-08 | -2,30443E-10 | 1,28714E-07 | 1,1419E-11 | 1,36297E-09 | 1,28714E-07 | 1,22541E-09 |
| 266 | G Vertical | 1,38191E-05 | -5,98915E-06 | 3,60875E-09 | 8,38063E-10 | -1,12123E-10 | 2,39184E-08 | 8,38055E-10 | -5,71363E-11 |
| 266 | G transversal | -5,01642E-06 | -4,0735E-07 | -1,28737E-07 | -1,61258E-10 | 2,92057E-12 | -1,30345E-07 | -1,61258E-10 | 5,23265E-12 |
| 267 | D Longitudinal | 6,82083E-05 | -8,11629E-06 | 8,01409E-07 | 8,62421E-09 | -2,87768E-10 | 7,86744E-07 | 8,62421E-09 | -1,83083E-10 |
| 267 | D Vertical | 0,001093811 | -0,000157718 | 1,12451E-07 | 1,12433E-07 | -4,02198E-09 | 1,12471E-07 | 1,12433E-07 | -2,88259E-09 |
| 267 | D transversal | 0,009574303 | -6,34379E-06 | 6,8964E-09 | 8,02437E-07 | -2,29251E-10 | 2,17511E-08 | 8,02437E-07 | 6,31726E-09 |
| 267 | G Longitudinal | 0,001317915 | 1,40817E-07 | 2,30548E-10 | 1,28714E-07 | -1,14695E-11 | 1,82395E-09 | 1,28714E-07 | 1,20253E-09 |
| 267 | G Vertical | 1,38058E-05 | 5,8896E-06 | -3,60693E-09 | 8,40782E-10 | 1,11215E-10 | 1,67022E-08 | 8,40783E-10 | 1,66842E-10 |
| 267 | G transversal | 5,01615E-06 | -4,23066E-07 | -1,28737E-07 | 1,61316E-10 | 2,93308E-12 | -1,27129E-07 | 1,61316E-10 | 6,34511E-13 |
| 268 | D Longitudinal | 6,11953E-12 | 6,20525E-08 | 8,03975E-07 | -5,43123E-14 | -1,33658E-13 | 7,89244E-07 | -5,53326E-14 | 6,92367E-14 |
| 268 | D Vertical | 0,001082278 | -0,00015913 | 1,67215E-16 | 1,12464E-07 | -4,03322E-09 | 1,1158E-16 | 1,12464E-07 | -2,89377E-09 |
| 268 | D transversal | 0,010231058 | 5,21741E-06 | -6,60027E-17 | 8,12871E-07 | -2,39956E-10 | -4,73491E-17 | 8,12871E-07 | 6,41528E-09 |
| 268 | G Longitudinal | 0,00129411 | -4,33074E-07 | -3,84552E-16 | 1,29072E-07 | -1,02406E-11 | -2,93647E-16 | 1,29072E-07 | 1,20752E-09 |
| 268 | G Vertical | -1,80795E-11 | 6,91906E-08 | 7,77548E-09 | -5,57926E-14 | -1,51269E-13 | 2,45028E-08 | -5,69689E-14 | 7,71048E-14 |
| 268 | G transversal | -1,14899E-12 | -4,50289E-09 | -1,27828E-07 | 4,81641E-15 | 1,13545E-14 | -1,27128E-07 | 4,99816E-15 | -6,35716E-15 |
| 269 | D Longitudinal | -5,66956E-12 | -6,20525E-08 | 8,03974E-07 | 5,42205E-14 | 1,33658E-13 | 8,18705E-07 | 5,52422E-14 | -6,92565E-14 |
| 269 | D Vertical | -0,001082278 | -0,000159211 | -1,68389E-16 | -1,12464E-07 | -4,03322E-09 | -2,19254E-16 | -1,12464E-07 | -5,17267E-09 |
| 269 | D transversal | 0,010231058 | -4,74346E-06 | -6,64006E-17 | 8,12871E-07 | 2,39956E-10 | -8,24539E-17 | 8,12871E-07 | 6,89519E-09 |
| 269 | G Longitudinal | 0,00129411 | 5,19797E-07 | -3,86695E-16 | 1,29072E-07 | 1,02406E-11 | -4,66862E-16 | 1,29072E-07 | 1,228E-09 |
| 269 | G Vertical | 3,12885E-11 | 6,91906E-08 | -7,77486E-09 | -6,58225E-14 | -1,51275E-13 | 8,95251E-09 | -6,69846E-14 | 7,49434E-14 |
| 269 | G transversal | -1,34956E-13 | 4,50289E-09 | -1,27828E-07 | -4,55471E-15 | -1,13543E-14 | -1,28529E-07 | -4,73704E-15 | 6,41354E-15 |
| 270 | D Longitudinal | 6,44125E-05 | -7,70157E-06 | 7,05327E-07 | 7,84333E-09 | -2,57949E-10 | 6,91571E-07 | 7,84333E-09 | -1,66234E-10 |
| 270 | D Vertical | 0,001049143 | -0,000149777 | 1,06531E-07 | 1,06422E-07 | -3,75879E-09 | 1,0651E-07 | 1,06422E-07 | -2,69464E-09 |
| 270 | D transversal | 0,008585728 | -6,18516E-06 | 6,59341E-09 | 7,06591E-07 | -2,16805E-10 | 2,0549E-08 | 7,06591E-07 | 5,4346E-09 |
| 270 | G Longitudinal | 0,00125133 | 3,79368E-07 | -7,689E-11 | 1,19862E-07 | -5,68474E-13 | 1,49044E-09 | 1,19862E-07 | 1,10827E-09 |
| 270 | G Vertical | 2,1649E-05 | 6,40583E-06 | -4,26185E-09 | 1,32665E-09 | 1,12195E-10 | 1,53044E-08 | 1,32665E-09 | 1,70287E-10 |
| 270 | G transversal | -9,26842E-06 | 1,37461E-06 | -1,20476E-07 | -1,48174E-09 | 5,63983E-11 | -1,18892E-07 | -1,48174E-09 | 3,5954E-11 |
| 271 | D Longitudinal | -6,44125E-05 | -7,82097E-06 | 7,05326E-07 | -7,84333E-09 | -2,57708E-10 | 7,19082E-07 | -7,84333E-09 | -3,49423E-10 |
| 271 | D Vertical | -0,001049143 | -0,000149861 | 1,06531E-07 | -1,06422E-07 | -3,75877E-09 | 1,06552E-07 | -1,06422E-07 | -4,82291E-09 |

APOYO 2

| DESPLAZAMIENTOS (metros) | | VIENTO | PESO | CT1 | | | CT2 | | |
|---|---|---|---|---|---|---|---|---|---|
| Nudo | Desplazamiento | | | L | T | V | L | T | V |
| 271 | D transversal | 0,008585728 | 6,70076E-06 | -6,5929E-09 | 7,06591E-07 | 2,16564E-10 | 7,36269E-09 | 7,06591E-07 | 5,86796E-09 |
| 271 | G Longitudinal | 0,00125133 | -2,89018E-07 | 7,69908E-11 | 1,19862E-07 | 5,19885E-13 | 1,64433E-09 | 1,19862E-07 | 1,10934E-09 |
| 271 | G Vertical | 2,16614E-05 | -6,49818E-06 | 4,26356E-09 | 1,3241E-09 | -1,13046E-10 | 2,38303E-08 | 1,32409E-09 | -5,5554E-11 |
| 271 | G transversal | 9,26816E-06 | 1,39155E-06 | -1,20476E-07 | 1,4818E-09 | 5,63849E-11 | -1,22059E-07 | 1,4818E-09 | 7,68418E-11 |
| 272 | D Longitudinal | -6,44125E-05 | 7,81445E-06 | 7,05327E-07 | -7,84343E-09 | 2,57708E-10 | 6,91571E-07 | -7,84343E-09 | 1,66358E-10 |
| 272 | D Vertical | 0,001049143 | -0,000149785 | -1,06531E-07 | 1,06422E-07 | -3,75877E-09 | -1,0651E-07 | 1,06422E-07 | -2,69465E-09 |
| 272 | D transversal | 0,008585728 | -6,29831E-06 | -6,59341E-09 | 7,06591E-07 | -2,16564E-10 | -2,0549E-08 | 7,06591E-07 | 5,43447E-09 |
| 272 | G Longitudinal | 0,00125133 | 3,67981E-07 | 7,69253E-11 | 1,19862E-07 | -5,19932E-13 | -1,49042E-09 | 1,19862E-07 | 1,10826E-09 |
| 272 | G Vertical | -2,16614E-05 | -6,50228E-06 | -4,26356E-09 | -1,3241E-09 | -1,13043E-10 | 1,53032E-08 | -1,32411E-09 | -1,7065E-10 |
| 272 | G transversal | 9,26816E-06 | -1,3901E-06 | -1,20476E-07 | 1,48181E-09 | -5,63849E-11 | -1,18893E-07 | 1,48181E-09 | -3,59784E-11 |
| 273 | D Longitudinal | 6,44125E-05 | 7,70809E-06 | 7,05326E-07 | 7,84343E-09 | 2,57949E-10 | 7,19082E-07 | 7,84343E-09 | 3,49299E-10 |
| 273 | D Vertical | -0,001049143 | -0,000149853 | -1,06531E-07 | -1,06422E-07 | -3,75879E-09 | -1,06552E-07 | -1,06422E-07 | -4,8229E-09 |
| 273 | D transversal | 0,008585728 | 6,58761E-06 | 6,5929E-09 | 7,06591E-07 | 2,16805E-10 | -7,36269E-09 | 7,06591E-07 | 5,86784E-09 |
| 273 | G Longitudinal | 0,00125133 | -3,00405E-07 | -7,69553E-11 | 1,19862E-07 | 5,68495E-13 | -1,64429E-09 | 1,19862E-07 | 1,10936E-09 |
| 273 | G Vertical | -2,1649E-05 | 6,4017E-06 | 4,26185E-09 | -1,32665E-09 | 1,12194E-10 | 2,38282E-08 | -1,32664E-09 | 5,4094E-11 |
| 273 | G transversal | -9,26842E-06 | -1,37607E-06 | -1,20476E-07 | -1,48175E-09 | -5,63982E-11 | -1,22059E-07 | -1,48175E-09 | -7,67944E-11 |
| 274 | D Longitudinal | -1,4981E-13 | -3,70857E-06 | 7,10364E-07 | 4,31373E-17 | 2,49488E-10 | 7,10364E-07 | 4,35003E-17 | 2,49488E-10 |
| 274 | D Vertical | -2,16127E-12 | -0,000150581 | -1,06208E-07 | 3,66228E-16 | -3,75127E-09 | -1,06208E-07 | 3,63841E-16 | -3,75127E-09 |
| 274 | D transversal | 0,008574019 | 1,43673E-07 | -2,53645E-13 | 7,04938E-07 | 1,20911E-13 | -1,40008E-08 | 7,04938E-07 | 5,62623E-09 |
| 274 | G Longitudinal | 0,001196061 | 3,61873E-08 | -2,42354E-14 | 1,18453E-07 | 1,15086E-14 | -6,2908E-10 | 1,18453E-07 | 1,14737E-09 |
| 274 | G Vertical | 6,83211E-05 | -5,87543E-08 | -2,81281E-13 | 8,33637E-09 | 1,31517E-13 | 1,51672E-08 | 8,33638E-09 | 9,73275E-11 |
| 274 | G transversal | 1,98766E-13 | -1,43519E-06 | -1,20213E-07 | -4,00658E-17 | -4,31175E-11 | -1,20213E-07 | -4,06527E-17 | -4,31175E-11 |
| 275 | D Longitudinal | -5,44686E-05 | -6,46243E-06 | 6,15951E-07 | -6,46131E-09 | -2,09959E-10 | 6,28805E-07 | -6,46131E-09 | -2,83436E-10 |
| 275 | D Vertical | -0,001003763 | -0,000141654 | 1,00298E-07 | -1,00305E-07 | -3,49646E-09 | 1,00278E-07 | -1,00305E-07 | -4,48409E-09 |
| 275 | D transversal | 0,00764569 | 6,93086E-06 | -6,61998E-09 | 6,17539E-07 | 2,15766E-10 | 6,44491E-09 | 6,17539E-07 | 5,0517E-09 |
| 275 | G Longitudinal | 0,001182976 | -9,12117E-07 | 6,76517E-10 | 1,11089E-07 | -1,8792E-11 | 2,22719E-09 | 1,11089E-07 | 9,88454E-10 |
| 275 | G Vertical | 2,88032E-05 | -7,08849E-06 | 5,01862E-09 | 1,70364E-09 | -1,16055E-10 | 2,38719E-08 | 1,70364E-09 | -5,70852E-11 |
| 275 | G transversal | 8,24071E-06 | 1,29621E-06 | -1,1116E-07 | 1,20264E-09 | 4,5136E-11 | -1,12714E-07 | 1,20264E-09 | 6,0237E-11 |
| 276 | D Longitudinal | -5,44686E-05 | 6,45721E-06 | 6,15951E-07 | -6,4614E-09 | 2,09959E-10 | 6,03097E-07 | -6,4614E-09 | 1,36811E-10 |
| 276 | D Vertical | 0,001003763 | -0,000141584 | -1,00299E-07 | 1,00305E-07 | -3,49646E-09 | -1,00319E-07 | 1,00305E-07 | -2,50886E-09 |
| 276 | D transversal | 0,00764569 | -6,58649E-06 | -6,62044E-09 | 6,17539E-07 | -2,15766E-10 | -1,96853E-08 | 6,17539E-07 | 4,61983E-09 |
| 276 | G Longitudinal | 0,001182976 | 9,83846E-07 | 6,76452E-10 | 1,11089E-07 | 1,8792E-11 | -8,74224E-10 | 1,11089E-07 | 1,02599E-09 |
| 276 | G Vertical | -2,88032E-05 | -7,0927E-06 | -5,01862E-09 | -1,70364E-09 | -1,16052E-10 | 1,38346E-08 | -1,70365E-09 | -1,75131E-10 |
| 276 | G transversal | 8,24071E-06 | -1,29513E-06 | -1,1116E-07 | 1,20265E-09 | -4,5136E-11 | -1,09606E-07 | 1,20265E-09 | -3,00841E-11 |
| 277 | D Longitudinal | 5,44686E-05 | 6,35993E-06 | 6,15951E-07 | 6,4614E-09 | 2,10177E-10 | 6,28805E-07 | 6,4614E-09 | 2,83324E-10 |
| 277 | D Vertical | -0,001003763 | -0,000141646 | -1,00298E-07 | -1,00305E-07 | -3,49648E-09 | -1,00278E-07 | -1,00305E-07 | -4,48408E-09 |
| 277 | D transversal | 0,00764569 | 6,82802E-06 | 6,61998E-09 | 6,17539E-07 | 2,15984E-10 | -6,44491E-09 | 6,17539E-07 | 5,05158E-09 |
| 277 | G Longitudinal | 0,001182976 | -9,23573E-07 | -6,76482E-10 | 1,11089E-07 | -1,87445E-11 | -2,22715E-09 | 1,11089E-07 | 9,88467E-10 |
| 277 | G Vertical | -2,87916E-05 | 6,99747E-06 | 5,01701E-09 | -1,70603E-09 | 1,15256E-10 | 2,38699E-08 | -1,70603E-09 | 5,57135E-11 |
| 277 | G transversal | -8,24096E-06 | -1,28087E-06 | -1,1116E-07 | -1,2026E-09 | -4,51496E-11 | -1,12714E-07 | -1,2026E-09 | -6,01917E-11 |
| 278 | D Longitudinal | -4,81734E-12 | -5,11343E-08 | 6,1109E-07 | 4,39583E-14 | 1,08404E-13 | 6,23967E-07 | 4,46894E-14 | -5,5699E-14 |
| 278 | D Vertical | -0,000978145 | -0,000141084 | 4,66955E-17 | -9,88018E-08 | -3,44648E-09 | 6,18035E-17 | -9,88018E-08 | -4,41699E-09 |
| 278 | D transversal | 0,00826186 | -5,33514E-06 | -6,29237E-17 | 6,19667E-07 | 2,27385E-10 | -8,34801E-17 | 6,19667E-07 | 5,09129E-09 |
| 278 | G Longitudinal | 0,001151202 | -1,95105E-07 | -1,06741E-16 | 1,10664E-07 | -1,60172E-11 | -1,46249E-16 | 1,10664E-07 | 9,86034E-10 |

APOYO 2

| DESPLAZAMIENTOS (metros) | | VIENTO | PESO | CT1 | | | CT2 | | |
|---|---|---|---|---|---|---|---|---|---|
| Nudo | Desplazamiento | | | L | T | V | L | T | V |
| 278 | G Vertical | 2,4367E-11 | 5,5186E-08 | -7,3821E-09 | -5,1596E-14 | -1,18741E-13 | 6,728E-09 | -5,24016E-14 | 5,83055E-14 |
| 278 | G transversal | 7,87678E-14 | 4,81343E-09 | -1,09421E-07 | -4,61625E-15 | -1,14623E-14 | -1,10053E-07 | -4,76719E-15 | 6,29402E-15 |
| 279 | D Longitudinal | 5,39028E-13 | -7,08711E-06 | 5,36417E-07 | -1,07161E-16 | 2,0226E-10 | 5,36417E-07 | -1,06298E-16 | 2,0226E-10 |
| 279 | D Vertical | 2,20496E-12 | -0,000134303 | -9,40614E-08 | -4,24523E-16 | -3,23678E-09 | -9,40614E-08 | -4,21956E-16 | -3,23678E-09 |
| 279 | D transversal | 0,006718383 | 9,79699E-08 | -2,03336E-13 | 5,30661E-07 | 9,70598E-14 | -1,21888E-08 | 5,30661E-07 | 4,04795E-09 |
| 279 | G Longitudinal | 0,001051745 | 2,87274E-08 | -2,38783E-14 | 1,00683E-07 | 1,13243E-14 | -6,02613E-10 | 1,00683E-07 | 9,42691E-10 |
| 279 | G Vertical | 5,83965E-05 | -4,64113E-08 | -2,18275E-13 | 6,66688E-09 | 1,01837E-13 | 1,27273E-08 | 6,66688E-09 | 7,29974E-11 |
| 279 | G transversal | 4,18983E-12 | -3,28809E-07 | -1,01452E-07 | -8,59746E-16 | -1,61047E-12 | -1,01452E-07 | -8,54123E-16 | -1,61064E-12 |
| 280 | D Longitudinal | -5,08919E-05 | -6,10807E-06 | 5,27944E-07 | -5,8831E-09 | -1,89655E-10 | 5,39858E-07 | -5,8831E-09 | -2,54963E-10 |
| 280 | D Vertical | -0,000948326 | -0,000132454 | 9,34793E-08 | -9,34469E-08 | -3,21284E-09 | 9,34984E-08 | -9,34469E-08 | -4,12023E-09 |
| 280 | D transversal | 0,006696723 | 7,53364E-06 | -7,13123E-09 | 5,29163E-07 | 2,30223E-10 | 4,98135E-09 | 5,29163E-07 | 4,27412E-09 |
| 280 | G Longitudinal | 0,001104854 | -1,41737E-06 | 1,10378E-09 | 1,01384E-07 | -3,18916E-11 | 2,64673E-09 | 1,01384E-07 | 8,66277E-10 |
| 280 | G Vertical | 3,17473E-05 | -7,66629E-06 | 5,10191E-09 | 1,62388E-09 | -1,18907E-10 | 2,32216E-08 | 1,62387E-09 | -6,35845E-11 |
| 280 | G transversal | -4,89941E-06 | -4,0136E-07 | -1,00878E-07 | -3,0174E-10 | -4,27474E-12 | -1,02393E-07 | -3,0174E-10 | -6,4719E-12 |
| 281 | D Longitudinal | -5,08919E-05 | 6,10343E-06 | 5,27945E-07 | -5,88318E-09 | 1,89655E-10 | 5,16032E-07 | -5,88318E-09 | 1,24639E-10 |
| 281 | D Vertical | 0,000948326 | -0,000132389 | -9,34793E-08 | 9,34469E-08 | -3,21284E-09 | -9,34602E-08 | 9,34469E-08 | -2,30549E-09 |
| 281 | D transversal | 0,006696723 | -7,24566E-06 | -7,13164E-09 | 5,29163E-07 | -2,30223E-10 | -1,92442E-08 | 5,29163E-07 | 3,81339E-09 |
| 281 | G Longitudinal | 0,001104854 | 1,48133E-06 | 1,10372E-09 | 1,01384E-07 | 3,18915E-11 | -4,39229E-10 | 1,01384E-07 | 9,30017E-10 |
| 281 | G Vertical | -3,17473E-05 | -7,67024E-06 | -5,10191E-09 | -1,62388E-09 | -1,18905E-10 | 1,30178E-08 | -1,62389E-09 | -1,74328E-10 |
| 281 | G transversal | -4,89941E-06 | 4,01202E-07 | -1,00878E-07 | -3,01728E-10 | 4,27478E-12 | -9,93632E-08 | -3,01728E-10 | 2,0306E-12 |
| 282 | D Longitudinal | 5,08919E-05 | 6,01658E-06 | 5,27944E-07 | 5,88318E-09 | 1,89848E-10 | 5,39858E-07 | 5,88318E-09 | 2,54864E-10 |
| 282 | D Vertical | -0,000948326 | -0,000132446 | -9,34793E-08 | -9,34469E-08 | -3,21286E-09 | -9,34984E-08 | -9,34469E-08 | -4,12022E-09 |
| 282 | D transversal | 0,006696723 | 7,44186E-06 | 7,13123E-09 | 5,29163E-07 | 2,30416E-10 | -4,98136E-09 | 5,29163E-07 | 4,27403E-09 |
| 282 | G Longitudinal | 0,001104854 | -1,42872E-06 | -1,10375E-09 | 1,01384E-07 | -3,18455E-11 | -2,64669E-09 | 1,01384E-07 | 8,66289E-10 |
| 282 | G Vertical | -3,17364E-05 | 7,5813E-06 | 5,1004E-09 | -1,62612E-09 | 1,18157E-10 | 2,32197E-08 | -1,62611E-09 | 6,22986E-11 |
| 282 | G transversal | 4,89917E-06 | 4,16321E-07 | -1,00878E-07 | 3,01776E-10 | 4,26152E-12 | -1,02393E-07 | 3,01776E-10 | 6,51506E-12 |
| 283 | D Longitudinal | -3,7862E-12 | -4,11275E-08 | 4,56389E-07 | 3,48281E-14 | 8,60023E-14 | 4,67534E-07 | 3,53412E-14 | -4,38914E-14 |
| 283 | D Vertical | -0,000887415 | -0,000125544 | -4,59828E-18 | -8,73574E-08 | -2,97113E-09 | -6,17008E-18 | -8,73574E-08 | -3,80754E-09 |
| 283 | D transversal | 0,006515182 | -4,30609E-06 | -9,69552E-17 | 4,63433E-07 | 2,23524E-10 | -1,11758E-16 | 4,63433E-07 | 3,69654E-09 |
| 283 | G Longitudinal | 0,001013097 | 4,67892E-07 | -2,53844E-16 | 9,34172E-08 | 6,85848E-12 | -3,24605E-16 | 9,34172E-08 | 8,17744E-10 |
| 283 | G Vertical | 1,65204E-11 | 4,30076E-08 | -7,15896E-09 | -3,91426E-14 | -9,10353E-14 | 4,6539E-09 | -3,96892E-14 | 4,47314E-14 |
| 283 | G transversal | 2,44789E-13 | 4,75123E-09 | -9,2171E-08 | -4,41906E-15 | -1,09273E-14 | -9,2669E-08 | -4,54262E-15 | 5,88279E-15 |
| 284 | D Longitudinal | -5,45406E-05 | -6,53682E-06 | 4,54078E-07 | -6,11087E-09 | -1,95671E-10 | 4,65152E-07 | -6,11087E-09 | -2,61899E-10 |
| 284 | D Vertical | -0,000896411 | -0,000123665 | 8,69765E-08 | -8,70042E-08 | -2,95131E-09 | 8,6959E-08 | -8,70042E-08 | -3,78331E-09 |
| 284 | D transversal | 0,005879655 | 8,04389E-06 | -7,40265E-09 | 4,55077E-07 | 2,36925E-10 | 3,84477E-09 | 4,55077E-07 | 3,63173E-09 |
| 284 | G Longitudinal | 0,001033704 | -1,36964E-07 | -1,10246E-10 | 9,28778E-08 | 6,87205E-12 | 1,40897E-09 | 9,28778E-08 | 8,12367E-10 |
| 284 | G Vertical | 3,20051E-05 | -8,23576E-06 | 4,83843E-09 | 1,1387E-09 | -1,20529E-10 | 2,2316E-08 | 1,13869E-09 | -7,29441E-11 |
| 284 | G transversal | -6,8539E-06 | -6,20623E-07 | -9,31087E-08 | -4,6274E-10 | -9,63311E-12 | -9,45929E-08 | -4,6274E-10 | -1,33912E-11 |
| 285 | D Longitudinal | -5,45405E-05 | 6,53212E-06 | 4,54079E-07 | -6,11094E-09 | 1,95671E-10 | 4,43005E-07 | -6,11094E-09 | 1,29701E-10 |
| 285 | D Vertical | 0,000896411 | -0,000123606 | -8,69765E-08 | 8,70042E-08 | -2,95131E-09 | -8,69939E-08 | 8,70042E-08 | -2,11935E-09 |
| 285 | D transversal | 0,005879655 | -7,80214E-06 | -7,40301E-09 | 4,55077E-07 | -2,36925E-10 | -1,86504E-08 | 4,55077E-07 | 3,15762E-09 |
| 285 | G Longitudinal | 0,001033704 | 1,94325E-07 | -1,10305E-10 | 9,28778E-08 | -6,87209E-12 | -1,62952E-09 | 9,28778E-08 | 7,98581E-10 |
| 285 | G Vertical | -3,20051E-05 | -8,23916E-06 | -4,83843E-09 | -1,1387E-09 | -1,20527E-10 | 1,26392E-08 | -1,13871E-09 | -1,68209E-10 |
| 285 | G transversal | -6,8539E-06 | 6,20354E-07 | -9,31088E-08 | -4,62729E-10 | 9,63315E-12 | -9,16246E-08 | -4,62729E-10 | 5,82984E-12 |

APOYO 2

| DESPLAZAMIENTOS (metros) | | VIENTO | PESO | CT1 | | | CT2 | | |
|---|---|---|---|---|---|---|---|---|---|
| Nudo | Desplazamiento | | | L | T | V | L | T | V |
| 286 | D Longitudinal | 5,45406E-05 | 6,45518E-06 | 4,54078E-07 | 6,11093E-09 | 1,95842E-10 | 4,65152E-07 | 6,11093E-09 | 2,61812E-10 |
| 286 | D Vertical | -0,000896411 | -0,000123657 | -8,69765E-08 | -8,70042E-08 | -2,95133E-09 | -8,6959E-08 | -8,70042E-08 | -3,7833E-09 |
| 286 | D transversal | 0,005879655 | 7,96209E-06 | 7,40265E-09 | 4,55077E-07 | 2,37096E-10 | -3,84477E-09 | 4,55077E-07 | 3,63164E-09 |
| 286 | G Longitudinal | 0,001033704 | -1,4806E-07 | 1,10277E-10 | 9,28778E-08 | 6,91559E-12 | -1,40893E-09 | 9,28778E-08 | 8,12378E-10 |
| 286 | G Vertical | -3,19948E-05 | 8,15515E-06 | 4,837E-09 | -1,14082E-09 | 1,19821E-10 | 2,23142E-08 | -1,14081E-09 | 7,17283E-11 |
| 286 | G transversal | 6,85368E-06 | 6,35187E-07 | -9,31087E-08 | 4,62775E-10 | 9,62019E-12 | -9,45929E-08 | 4,62775E-10 | 1,34324E-11 |
| 287 | D Longitudinal | -5,61852E-05 | -6,7818E-06 | 3,9398E-07 | -6,12323E-09 | -1,94736E-10 | 4,04309E-07 | -6,12323E-09 | -2,59715E-10 |
| 287 | D Vertical | -0,000844344 | -0,000115758 | 8,11224E-08 | -8,10556E-08 | -2,72312E-09 | 8,1136E-08 | -8,10556E-08 | -3,48997E-09 |
| 287 | D transversal | 0,005210893 | 7,23586E-06 | -6,59895E-09 | 3,95334E-07 | 2,09578E-10 | 3,88556E-09 | 3,95334E-07 | 3,09105E-09 |
| 287 | G Longitudinal | 0,000971956 | 1,20378E-06 | -1,3295E-09 | 8,578E-08 | 4,56559E-11 | 1,60521E-10 | 8,578E-08 | 7,75984E-10 |
| 287 | G Vertical | 4,06192E-05 | -9,00937E-06 | 5,37532E-09 | 1,52318E-09 | -1,26675E-10 | 2,23253E-08 | 1,52318E-09 | -7,70409E-11 |
| 287 | G transversal | -5,65382E-06 | -3,14529E-07 | -8,6648E-08 | -2,9738E-10 | -3,55153E-12 | -8,8125E-08 | -2,9738E-10 | -5,12772E-12 |
| 288 | D Longitudinal | -5,61852E-05 | 6,77719E-06 | 3,9398E-07 | -6,12329E-09 | 1,94736E-10 | 3,83651E-07 | -6,12329E-09 | 1,29987E-10 |
| 288 | D Vertical | 0,000844344 | -0,000115703 | -8,11224E-08 | 8,10556E-08 | -2,72312E-09 | -8,11089E-08 | 8,10556E-08 | -1,95631E-09 |
| 288 | D transversal | 0,005210893 | -7,03067E-06 | -6,59927E-09 | 3,95334E-07 | -2,09578E-10 | -1,70838E-08 | 3,95334E-07 | 2,67166E-09 |
| 288 | G Longitudinal | 0,000971956 | -1,15177E-06 | -1,32956E-09 | 8,578E-08 | -4,56559E-11 | -2,81958E-09 | 8,578E-08 | 6,84633E-10 |
| 288 | G Vertical | -4,06192E-05 | -9,01291E-06 | -5,37532E-09 | -1,52318E-09 | -1,26674E-10 | 1,15746E-08 | -1,52319E-09 | -1,764E-10 |
| 288 | G transversal | -5,65382E-06 | 3,14415E-07 | -8,6648E-08 | -2,97369E-10 | 3,55157E-12 | -8,5171E-08 | -2,97369E-10 | 1,93182E-12 |
| 289 | D Longitudinal | 5,61852E-05 | 6,70866E-06 | 3,9398E-07 | 6,12329E-09 | 1,94888E-10 | 4,04309E-07 | 6,12329E-09 | 2,59638E-10 |
| 289 | D Vertical | -0,000844344 | -0,000115749 | -8,11224E-08 | -8,10556E-08 | -2,72314E-09 | -8,1136E-08 | -8,10556E-08 | -3,48996E-09 |
| 289 | D transversal | 0,005210893 | 7,16247E-06 | 6,59895E-09 | 3,95334E-07 | 2,0973E-10 | -3,88556E-09 | 3,95334E-07 | 3,09097E-09 |
| 289 | G Longitudinal | 0,000971956 | 1,19299E-06 | 1,32953E-09 | 8,578E-08 | 4,56971E-11 | -1,60485E-10 | 8,578E-08 | 7,75994E-10 |
| 289 | G Vertical | -4,06094E-05 | 8,93263E-06 | 5,37396E-09 | -1,5252E-09 | 1,25999E-10 | 2,23236E-08 | -1,5252E-09 | 7,58802E-11 |
| 289 | G transversal | 5,6536E-06 | 3,28691E-07 | -8,66479E-08 | 2,97413E-10 | 3,53896E-12 | -8,8125E-08 | 2,97413E-10 | 5,16724E-12 |
| 290 | D Longitudinal | 9,68152E-14 | -6,21773E-06 | 3,90027E-07 | -1,77897E-17 | 1,9783E-10 | 3,90027E-07 | -1,72649E-17 | 1,9783E-10 |
| 290 | D Vertical | -2,06217E-12 | -0,000114307 | -7,88749E-08 | 4,16963E-16 | -2,64833E-09 | -7,88749E-08 | 4,14303E-16 | -2,64833E-09 |
| 290 | D transversal | 0,005100937 | 6,31525E-08 | -1,56631E-13 | 3,85179E-07 | 7,48731E-14 | -1,04187E-08 | 3,85179E-07 | 2,78726E-09 |
| 290 | G Longitudinal | 0,000898675 | 2,22536E-08 | -2,22396E-14 | 8,33086E-08 | 1,06138E-14 | -5,25211E-10 | 8,33086E-08 | 7,56355E-10 |
| 290 | G Vertical | 5,96681E-05 | -3,47321E-08 | -1,62877E-13 | 6,4194E-09 | 7,60724E-14 | 1,05005E-08 | 6,4194E-09 | 6,68934E-11 |
| 290 | G transversal | -2,47887E-12 | 1,19822E-07 | -8,52406E-08 | 5,08685E-16 | 1,17171E-11 | -8,52406E-08 | 5,0552E-16 | 1,17172E-11 |
| 291 | D Longitudinal | -6,11004E-05 | 7,17356E-06 | 3,23828E-07 | -6,43679E-09 | 2,02584E-10 | 3,14466E-07 | -6,43679E-09 | 1,36586E-10 |
| 291 | D Vertical | 0,000776318 | -0,000105243 | -7,3309E-08 | 7,3276E-08 | -2,43049E-09 | -7,33311E-08 | 7,3276E-08 | -1,74879E-09 |
| 291 | D transversal | 0,004411493 | -6,02646E-06 | -5,43035E-09 | 3,25821E-07 | -1,70679E-10 | -1,49479E-08 | 3,25821E-07 | 2,12694E-09 |
| 291 | G Longitudinal | 0,000885 | 6,59184E-08 | -1,961E-10 | 7,59334E-08 | -9,2455E-12 | -1,66807E-09 | 7,59334E-08 | 6,18832E-10 |
| 291 | G Vertical | -5,12434E-05 | -1,00263E-05 | -6,11712E-09 | -1,94326E-09 | -1,34126E-10 | 1,01965E-08 | -1,94327E-09 | -1,85882E-10 |
| 291 | G transversal | -1,21345E-05 | 1,00082E-06 | -7,6516E-08 | -9,84172E-10 | 2,45129E-11 | -7,50415E-08 | -9,84172E-10 | 1,59856E-11 |
| 292 | D Longitudinal | 6,11004E-05 | 7,11562E-06 | 3,23828E-07 | 6,43679E-09 | 2,02714E-10 | 3,3319E-07 | 6,43679E-09 | 2,68712E-10 |
| 292 | D Vertical | -0,000776318 | -0,000105284 | -7,33089E-08 | -7,3276E-08 | -2,4305E-09 | -7,32868E-08 | -7,3276E-08 | -3,11219E-09 |
| 292 | D transversal | 0,004411493 | 6,12706E-06 | 5,43008E-09 | 3,25821E-07 | 1,70809E-10 | -4,08744E-09 | 3,25821E-07 | 2,46843E-09 |
| 292 | G Longitudinal | 0,000885 | -3,13732E-08 | 1,96074E-10 | 7,59335E-08 | 9,28434E-12 | -1,27589E-09 | 7,59335E-08 | 6,3737E-10 |
| 292 | G Vertical | -5,12341E-05 | 9,94985E-06 | 6,11583E-09 | -1,94518E-09 | 1,33488E-10 | 2,24292E-08 | -1,94517E-09 | 8,13609E-11 |
| 292 | G transversal | 1,21343E-05 | 1,01483E-06 | -7,65159E-08 | 9,84213E-10 | 2,45012E-11 | -7,79904E-08 | 9,84213E-10 | 3,30365E-11 |
| 293 | D Longitudinal | -1,49833E-13 | 3,70857E-06 | 7,10364E-07 | 4,31682E-17 | -2,49488E-10 | 7,10364E-07 | 4,38654E-17 | -2,49488E-10 |
| 293 | D Vertical | 2,16121E-12 | -0,000150581 | 1,06208E-07 | -3,66553E-16 | -3,75127E-09 | 1,06208E-07 | -3,67709E-16 | -3,75127E-09 |

APOYO 2

| DESPLAZAMIENTOS (metros) | | VIENTO | PESO | CT1 | | | CT2 | | |
|---|---|---|---|---|---|---|---|---|---|
| Nudo | Desplazamiento | | | L | T | V | L | T | V |
| 293 | D transversal | 0,008574019 | 2,57002E-07 | 2,53628E-13 | 7,04937E-07 | -1,20911E-13 | 1,40008E-08 | 7,04937E-07 | 5,62635E-09 |
| 293 | G Longitudinal | 0,001196061 | 4,55226E-08 | 2,44074E-14 | 1,18453E-07 | -1,15087E-14 | 6,2908E-10 | 1,18453E-07 | 1,14738E-09 |
| 293 | G Vertical | -6,83211E-05 | -6,56904E-08 | -2,75761E-13 | -8,33627E-09 | 1,31515E-13 | 1,51673E-08 | -8,33627E-09 | -9,74676E-11 |
| 293 | G transversal | 1,98762E-13 | 1,43519E-06 | -1,20213E-07 | -3,9967E-17 | 4,31175E-11 | -1,20213E-07 | -3,94685E-17 | 4,31175E-11 |
| 294 | D Longitudinal | 5,44686E-05 | -6,35471E-06 | 6,15951E-07 | 6,46131E-09 | -2,10177E-10 | 6,03097E-07 | 6,46131E-09 | -1,367E-10 |
| 294 | D Vertical | 0,001003763 | -0,000141576 | 1,00299E-07 | 1,00305E-07 | -3,49648E-09 | 1,00319E-07 | 1,00305E-07 | -2,50885E-09 |
| 294 | D transversal | 0,00764569 | -6,48365E-06 | 6,62044E-09 | 6,17539E-07 | -2,15984E-10 | 1,96853E-08 | 6,17539E-07 | 4,61995E-09 |
| 294 | G Longitudinal | 0,001182976 | 9,95303E-07 | -6,76418E-10 | 1,11089E-07 | 1,87445E-11 | 8,74249E-10 | 1,11089E-07 | 1,026E-09 |
| 294 | G Vertical | 2,87916E-05 | 7,00171E-06 | -5,01702E-09 | 1,70603E-09 | 1,15257E-10 | 1,38358E-08 | 1,70604E-09 | 1,7479E-10 |
| 294 | G transversal | -8,24096E-06 | 1,2798E-06 | -1,1116E-07 | -1,20259E-09 | 4,51496E-11 | -1,09606E-07 | -1,20259E-09 | 3,00606E-11 |
| 295 | D Longitudinal | 4,73438E-12 | 5,11343E-08 | 6,11091E-07 | -4,39401E-14 | -1,08404E-13 | 5,98214E-07 | -4,46702E-14 | 5,57029E-14 |
| 295 | D Vertical | 0,000978145 | -0,000141015 | -4,63471E-17 | 9,88018E-08 | -3,44648E-09 | -2,97937E-17 | 9,88018E-08 | -2,47597E-09 |
| 295 | D transversal | 0,00826186 | 5,68152E-06 | -6,24034E-17 | 6,19667E-07 | -2,27385E-10 | -3,95667E-17 | 6,19667E-07 | 4,63652E-09 |
| 295 | G Longitudinal | 0,001151202 | 2,66466E-07 | -1,05732E-16 | 1,10664E-07 | 1,60172E-11 | -6,32031E-17 | 1,10664E-07 | 1,01807E-09 |
| 295 | G Vertical | -1,40106E-11 | 5,5186E-08 | 7,38259E-09 | -4,37163E-14 | -1,18736E-13 | 2,14927E-08 | -4,4533E-14 | 6,00027E-14 |
| 295 | G transversal | -9,40732E-13 | -4,81343E-09 | -1,09421E-07 | 4,79323E-15 | 1,14625E-14 | -1,08789E-07 | 4,94374E-15 | -6,2559E-15 |
| 296 | D Longitudinal | 5,39042E-13 | 7,08711E-06 | 5,36417E-07 | -1,07209E-16 | -2,0226E-10 | 5,36417E-07 | -1,06882E-16 | -2,0226E-10 |
| 296 | D Vertical | -2,20505E-12 | -0,000134303 | 9,40614E-08 | 4,24895E-16 | -3,23678E-09 | 9,40614E-08 | 4,26416E-16 | -3,23678E-09 |
| 296 | D transversal | 0,006718383 | 1,90307E-07 | 2,03321E-13 | 5,30661E-07 | -9,70598E-14 | 1,21888E-08 | 5,30661E-07 | 4,04805E-09 |
| 296 | G Longitudinal | 0,001051745 | 3,84065E-08 | 2,39267E-14 | 1,00683E-07 | -1,13243E-14 | 6,02613E-10 | 1,00683E-07 | 9,42704E-10 |
| 296 | G Vertical | -5,83965E-05 | -5,16136E-08 | -2,13323E-13 | -6,6668E-09 | 1,01835E-13 | 1,27273E-08 | -6,6668E-09 | -7,31058E-11 |
| 296 | G transversal | 4,18988E-12 | 3,28809E-07 | -1,01452E-07 | -8,60565E-16 | 1,61047E-12 | -1,01452E-07 | -8,63929E-16 | 1,61027E-12 |
| 297 | D Longitudinal | 5,08919E-05 | -6,01194E-06 | 5,27945E-07 | 5,8831E-09 | -1,89848E-10 | 5,16032E-07 | 5,8831E-09 | -1,2454E-10 |
| 297 | D Vertical | 0,000948326 | -0,000132381 | 9,34793E-08 | 9,34469E-08 | -3,21286E-09 | 9,34602E-08 | 9,34469E-08 | -2,30547E-09 |
| 297 | D transversal | 0,006696723 | -7,15389E-06 | 7,13164E-09 | 5,29163E-07 | -2,30416E-10 | 1,92442E-08 | 5,29163E-07 | 3,81349E-09 |
| 297 | G Longitudinal | 0,001104854 | 1,49268E-06 | -1,10369E-09 | 1,01384E-07 | 3,18455E-11 | 4,39253E-10 | 1,01384E-07 | 9,30025E-10 |
| 297 | G Vertical | 3,17364E-05 | 7,58528E-06 | -5,10041E-09 | 1,62612E-09 | 1,18158E-10 | 1,30189E-08 | 1,62612E-09 | 1,74008E-10 |
| 297 | G transversal | 4,89917E-06 | -4,16162E-07 | -1,00878E-07 | 3,01788E-10 | -4,2615E-12 | -9,93632E-08 | 3,01788E-10 | -2,05297E-12 |
| 298 | D Longitudinal | 3,78587E-12 | 4,11275E-08 | 4,5639E-07 | -3,48277E-14 | -8,60023E-14 | 4,45245E-07 | -3,534E-14 | 4,38915E-14 |
| 298 | D Vertical | 0,000887415 | -0,000125484 | 4,56854E-18 | 8,73574E-08 | -2,97113E-09 | 2,92635E-18 | 8,73574E-08 | -2,13471E-09 |
| 298 | D transversal | 0,006515182 | 4,55342E-06 | -9,65523E-17 | 4,63433E-07 | -2,23524E-10 | -7,86799E-17 | 4,63433E-07 | 3,24949E-09 |
| 298 | G Longitudinal | 0,001013097 | -4,10145E-07 | -2,52015E-16 | 9,34172E-08 | -6,85848E-12 | -1,74202E-16 | 9,34172E-08 | 8,04027E-10 |
| 298 | G Vertical | -8,57231E-12 | 4,30076E-08 | 7,15933E-09 | -3,39782E-14 | -9,1032E-14 | 1,89722E-08 | -3,4532E-14 | 4,58435E-14 |
| 298 | G transversal | -7,2429E-13 | -4,75123E-09 | -9,21711E-08 | 4,51756E-15 | 1,09274E-14 | -9,16731E-08 | 4,64082E-15 | -5,86158E-15 |
| 299 | D Longitudinal | 5,45406E-05 | -6,45048E-06 | 4,54079E-07 | 6,11086E-09 | -1,95842E-10 | 4,43005E-07 | 6,11086E-09 | -1,29614E-10 |
| 299 | D Vertical | 0,000896411 | -0,000123598 | 8,69765E-08 | 8,70042E-08 | -2,95133E-09 | 8,69939E-08 | 8,70042E-08 | -2,11934E-09 |
| 299 | D transversal | 0,005879655 | -7,72034E-06 | 7,40301E-09 | 4,55077E-07 | -2,37096E-10 | 1,86504E-08 | 4,55077E-07 | 3,15771E-09 |
| 299 | G Longitudinal | 0,001033704 | 2,05422E-07 | 1,10336E-10 | 9,28778E-08 | -6,91557E-12 | 1,62954E-09 | 9,28778E-08 | 7,9859E-10 |
| 299 | G Vertical | 3,19948E-05 | 8,15858E-06 | -4,83701E-09 | 1,14082E-09 | 1,19821E-10 | 1,26402E-08 | 1,14082E-09 | 1,67906E-10 |
| 299 | G transversal | 6,85368E-06 | -6,34917E-07 | -9,31088E-08 | 4,62786E-10 | -9,62017E-12 | -9,16246E-08 | 4,62787E-10 | -5,85125E-12 |
| 300 | D Longitudinal | 5,61852E-05 | -6,70404E-06 | 3,9398E-07 | 6,12323E-09 | -1,94888E-10 | 3,83651E-07 | 6,12323E-09 | -1,2991E-10 |
| 300 | D Vertical | 0,000844344 | -0,000115695 | 8,11224E-08 | 8,10556E-08 | -2,72314E-09 | 8,11089E-08 | 8,10556E-08 | -1,9563E-09 |
| 300 | D transversal | 0,005210893 | -6,95728E-06 | 6,59927E-09 | 3,95334E-07 | -2,0973E-10 | 1,70838E-08 | 3,95334E-07 | 2,67174E-09 |
| 300 | G Longitudinal | 0,000971956 | -1,14098E-06 | 1,32959E-09 | 8,578E-08 | -4,5697E-11 | 2,8196E-09 | 8,578E-08 | 6,84641E-10 |

APOYO 2

| DESPLAZAMIENTOS (metros) | | VIENTO | PESO | CT1 | | | CT2 | | |
|---|---|---|---|---|---|---|---|---|---|
| Nudo | Desplazamiento | | | L | T | V | L | T | V |
| 300 | G Vertical | 4,06094E-05 | 8,9362E-06 | -5,37396E-09 | 1,52521E-09 | 1,25999E-10 | 1,15756E-08 | 1,52521E-09 | 1,76111E-10 |
| 300 | G transversal | 5,6536E-06 | -3,28577E-07 | -8,6648E-08 | 2,97424E-10 | -3,53894E-12 | -8,5171E-08 | 2,97425E-10 | -1,95236E-12 |
| 301 | D Longitudinal | 9,6814E-14 | 6,21773E-06 | 3,90027E-07 | -1,78213E-17 | -1,9783E-10 | 3,90027E-07 | -1,76516E-17 | -1,9783E-10 |
| 301 | D Vertical | 2,06213E-12 | -0,000114307 | 7,88749E-08 | -4,1733E-16 | -2,64833E-09 | 7,88749E-08 | -4,18678E-16 | -2,64833E-09 |
| 301 | D transversal | 0,005100937 | 1,35344E-07 | 1,56652E-13 | 3,85179E-07 | -7,48731E-14 | 1,04187E-08 | 3,85179E-07 | 2,78733E-09 |
| 301 | G Longitudinal | 0,000898675 | 3,16104E-08 | 2,23626E-14 | 8,33086E-08 | -1,06138E-14 | 5,25211E-10 | 8,33086E-08 | 7,56366E-10 |
| 301 | G Vertical | -5,96681E-05 | -3,94987E-08 | -1,59123E-13 | -6,41933E-09 | 7,6071E-14 | 1,05005E-08 | -6,41933E-09 | -6,69738E-11 |
| 301 | G transversal | -2,4789E-12 | -1,19822E-07 | -8,52406E-08 | 5,09118E-16 | -1,17171E-11 | -8,52406E-08 | 5,10703E-16 | -1,1717E-11 |
| 302 | D Longitudinal | -6,11004E-05 | -7,17826E-06 | 3,23828E-07 | -6,43674E-09 | -2,02584E-10 | 3,3319E-07 | -6,43674E-09 | -2,68777E-10 |
| 302 | D Vertical | -0,000776318 | -0,000105292 | 7,33089E-08 | -7,3276E-08 | -2,43049E-09 | 7,32868E-08 | -7,3276E-08 | -3,1122E-09 |
| 302 | D transversal | 0,004411493 | 6,19009E-06 | -5,43008E-09 | 3,25821E-07 | 1,70679E-10 | 4,08744E-09 | 3,25821E-07 | 2,46849E-09 |
| 302 | G Longitudinal | 0,000885 | -2,11887E-08 | -1,96047E-10 | 7,59334E-08 | 9,24547E-12 | 1,27592E-09 | 7,59334E-08 | 6,37359E-10 |
| 302 | G Vertical | 5,12434E-05 | -1,00226E-05 | 6,11712E-09 | 1,94326E-09 | -1,34128E-10 | 2,24308E-08 | 1,94326E-09 | -8,2459E-11 |
| 302 | G transversal | -1,21345E-05 | -1,00143E-06 | -7,65159E-08 | -9,84182E-10 | -2,45129E-11 | -7,79904E-08 | -9,84182E-10 | -3,29995E-11 |
| 303 | D Longitudinal | 6,11004E-05 | -7,11091E-06 | 3,23828E-07 | 6,43674E-09 | -2,02714E-10 | 3,14466E-07 | 6,43674E-09 | -1,36521E-10 |
| 303 | D Vertical | 0,000776318 | -0,000105235 | 7,3309E-08 | 7,3276E-08 | -2,4305E-09 | 7,33311E-08 | 7,3276E-08 | -1,74878E-09 |
| 303 | D transversal | 0,004411493 | -5,96343E-06 | 5,43035E-09 | 3,25821E-07 | -1,70809E-10 | 1,49479E-08 | 3,25821E-07 | 2,12701E-09 |
| 303 | G Longitudinal | 0,000885 | 7,61035E-08 | 1,96127E-10 | 7,59335E-08 | -9,28433E-12 | 1,66809E-09 | 7,59335E-08 | 6,18839E-10 |
| 303 | G Vertical | 5,12341E-05 | 9,95356E-06 | -6,11584E-09 | 1,94518E-09 | 1,33489E-10 | 1,01975E-08 | 1,94518E-09 | 1,85609E-10 |
| 303 | G transversal | 1,21343E-05 | -1,01422E-06 | -7,65159E-08 | 9,84223E-10 | -2,45012E-11 | -7,50415E-08 | 9,84223E-10 | -1,60047E-11 |
| 304 | D Longitudinal | 2,99648E-12 | 3,16298E-08 | 3,25693E-07 | -2,64256E-14 | -6,52572E-14 | 3,16239E-07 | -2,67644E-14 | 3,30852E-14 |
| 304 | D Vertical | 0,000772693 | -0,000108001 | -3,92129E-17 | 7,45585E-08 | -2,47518E-09 | -2,76797E-17 | 7,45585E-08 | -1,78024E-09 |
| 304 | D transversal | 0,005218918 | 8,89649E-06 | 1,38486E-16 | 3,34018E-07 | -1,88504E-10 | 9,75864E-17 | 3,34018E-07 | 2,184E-09 |
| 304 | G Longitudinal | 0,000861523 | -9,52828E-07 | -3,47143E-16 | 7,68348E-08 | -1,7115E-11 | -2,63494E-16 | 7,68348E-08 | 6,19829E-10 |
| 304 | G Vertical | -1,23951E-11 | 3,21385E-08 | 6,08365E-09 | -2,38466E-14 | -6,76999E-14 | 1,57809E-08 | -2,42111E-14 | 3,34644E-14 |
| 304 | G transversal | -7,5787E-13 | -4,58163E-09 | -7,61326E-08 | 4,22328E-15 | 1,01952E-14 | -7,55962E-08 | 4,32082E-15 | -5,39429E-15 |
| 305 | D Longitudinal | -2,74534E-12 | -3,16298E-08 | 3,25692E-07 | 2,63746E-14 | 6,52571E-14 | 3,35146E-07 | 2,6714E-14 | -3,30962E-14 |
| 305 | D Vertical | -0,000772693 | -0,00010805 | 3,94867E-17 | -7,45585E-08 | -2,47518E-09 | 4,98749E-17 | -7,45585E-08 | -3,17011E-09 |
| 305 | D transversal | 0,005218918 | -8,72753E-06 | 1,3945E-16 | 3,34018E-07 | 1,88504E-10 | 1,76809E-16 | 3,34018E-07 | 2,56101E-09 |
| 305 | G Longitudinal | 0,000861523 | 9,98188E-07 | -3,49089E-16 | 7,68348E-08 | 1,7115E-11 | -4,23076E-16 | 7,68348E-08 | 6,54059E-10 |
| 305 | G Vertical | 1,82643E-11 | 3,21384E-08 | -6,08337E-09 | -3,01305E-14 | -6,77039E-14 | 3,61386E-09 | -3,04861E-14 | 3,21109E-14 |
| 305 | G transversal | 1,45158E-13 | 4,58163E-09 | -7,61326E-08 | -4,09773E-15 | -1,01951E-14 | -7,66691E-08 | -4,19557E-15 | 5,42133E-15 |
| 306 | D Longitudinal | 6,58083E-05 | -7,68545E-06 | 2,68566E-07 | 6,78439E-09 | -2,12233E-10 | 2,60047E-07 | 6,78439E-09 | -1,44025E-10 |
| 306 | D Vertical | 0,00072107 | -9,69088E-05 | 6,74008E-08 | 6,73084E-08 | -2,20534E-09 | 6,73938E-08 | 6,73084E-08 | -1,58586E-09 |
| 306 | D transversal | 0,003763422 | -6,09396E-06 | 5,46651E-09 | 2,70673E-07 | -1,70901E-10 | 1,41381E-08 | 2,70673E-07 | 1,67643E-09 |
| 306 | G Longitudinal | 0,000823301 | 9,11623E-07 | -5,53879E-10 | 6,8993E-08 | 1,51949E-11 | 9,16487E-10 | 6,8993E-08 | 5,72629E-10 |
| 306 | G Vertical | 5,25533E-05 | 1,05674E-05 | -6,06967E-09 | 1,73199E-09 | 1,40666E-10 | 9,90916E-09 | 1,73199E-09 | 1,89369E-10 |
| 306 | G transversal | 1,18116E-06 | 3,0828E-07 | -6,89178E-08 | -1,30741E-10 | 9,96395E-12 | -6,74588E-08 | -1,3074E-10 | 7,64654E-12 |
| 307 | D Longitudinal | -6,58083E-05 | -7,74423E-06 | 2,68566E-07 | -6,78439E-09 | -2,12123E-10 | 2,77085E-07 | -6,78439E-09 | -2,80331E-10 |
| 307 | D Vertical | -0,00072107 | -9,6961E-05 | 6,74008E-08 | -6,73084E-08 | -2,20533E-09 | 6,74078E-08 | -6,73084E-08 | -2,82481E-09 |
| 307 | D transversal | 0,003763422 | 6,27977E-06 | -5,46628E-09 | 2,70673E-07 | 1,70789E-10 | 3,20527E-09 | 2,70673E-07 | 2,01812E-09 |
| 307 | G Longitudinal | 0,000823301 | -8,62256E-07 | 5,53956E-10 | 6,89929E-08 | -1,52322E-11 | 2,02433E-09 | 6,89929E-08 | 5,42193E-10 |
| 307 | G Vertical | 5,25624E-05 | -1,06345E-05 | 6,07092E-09 | 1,73013E-09 | -1,41287E-10 | 2,20501E-08 | 1,73012E-09 | -9,30229E-11 |
| 307 | G transversal | -1,18136E-06 | 3,21135E-07 | -6,89178E-08 | 1,3078E-10 | 9,9533E-12 | -7,03768E-08 | 1,3078E-10 | 1,228E-11 |

APOYO 2

| DESPLAZAMIENTOS (metros) | | VIENTO | PESO | CT1 | | | CT2 | | |
|---|---|---|---|---|---|---|---|---|---|
| Nudo | Desplazamiento | | | L | T | V | L | T | V |
| 308 | D Longitudinal | -6,58082E-05 | 7,73938E-06 | 2,68566E-07 | -6,78444E-09 | 2,12123E-10 | 2,60047E-07 | -6,78444E-09 | 1,44081E-10 |
| 308 | D Vertical | 0,00072107 | -9,69168E-05 | -6,74008E-08 | 6,73085E-08 | -2,20533E-09 | -6,73938E-08 | 6,73085E-08 | -1,58587E-09 |
| 308 | D transversal | 0,003763422 | -6,14821E-06 | -5,46651E-09 | 2,70673E-07 | -1,70789E-10 | -1,41381E-08 | 2,70673E-07 | 1,67637E-09 |
| 308 | G Longitudinal | 0,000823301 | 9,01951E-07 | 5,53906E-10 | 6,89929E-08 | 1,52322E-11 | -9,16467E-10 | 6,89929E-08 | 5,72623E-10 |
| 308 | G Vertical | -5,25624E-05 | -1,06379E-05 | -6,07092E-09 | -1,73013E-09 | -1,41286E-10 | 9,90828E-09 | -1,73014E-09 | -1,89635E-10 |
| 308 | G transversal | -1,18136E-06 | -3,20971E-07 | -6,89178E-08 | 1,3079E-10 | -9,95326E-12 | -6,74588E-08 | 1,3079E-10 | -7,66449E-12 |
| 309 | D Longitudinal | 6,58082E-05 | 7,6903E-06 | 2,68566E-07 | 6,78444E-09 | 2,12233E-10 | 2,77085E-07 | 6,78444E-09 | 2,80275E-10 |
| 309 | D Vertical | -0,00072107 | -9,6953E-05 | -6,74008E-08 | -6,73085E-08 | -2,20534E-09 | -6,74078E-08 | -6,73085E-08 | -2,8248E-09 |
| 309 | D transversal | 0,003763422 | 6,22552E-06 | 5,46628E-09 | 2,70673E-07 | 1,70901E-10 | -3,20527E-09 | 2,70673E-07 | 2,01806E-09 |
| 309 | G Longitudinal | 0,000823301 | -8,71927E-07 | -5,53929E-10 | 6,8993E-08 | -1,51948E-11 | -2,0243E-09 | 6,8993E-08 | 5,42203E-10 |
| 309 | G Vertical | -5,25533E-05 | 1,05639E-05 | 6,06967E-09 | -1,73199E-09 | 1,40666E-10 | 2,20486E-08 | -1,73198E-09 | 9,19564E-11 |
| 309 | G transversal | 1,18116E-06 | -3,08444E-07 | -6,89177E-08 | -1,3075E-10 | -9,96394E-12 | -7,03767E-08 | -1,3075E-10 | -1,2245E-11 |
| 310 | D Longitudinal | -1,54266E-12 | -7,78854E-06 | 2,72068E-07 | 3,17001E-16 | 1,91834E-10 | 2,72068E-07 | 3,15217E-16 | 1,91834E-10 |
| 310 | D Vertical | 1,58235E-12 | -9,82086E-05 | -6,72956E-08 | -3,25302E-16 | -2,20678E-09 | -6,72956E-08 | -3,23332E-16 | -2,20678E-09 |
| 310 | D transversal | 0,003743334 | 3,78382E-08 | -1,16007E-13 | 2,68598E-07 | 5,55069E-14 | -8,69006E-09 | 2,68598E-07 | 1,82375E-09 |
| 310 | G Longitudinal | 0,000755352 | 1,68661E-08 | -2,00681E-14 | 6,77245E-08 | 9,55721E-15 | -4,87146E-10 | 6,77245E-08 | 5,95304E-10 |
| 310 | G Vertical | 5,93201E-05 | -2,48415E-08 | -1,16837E-13 | 6,06414E-09 | 5,45837E-14 | 8,47652E-09 | 6,06414E-09 | 6,03805E-11 |
| 310 | G transversal | 2,12331E-12 | -7,69285E-07 | -6,8933E-08 | -4,35734E-16 | -8,86308E-12 | -6,8933E-08 | -4,33331E-16 | -8,86317E-12 |
| 311 | D Longitudinal | -5,72882E-05 | -6,58846E-06 | 2,18607E-07 | -5,77578E-09 | -1,79424E-10 | 2,26277E-07 | -5,77578E-09 | -2,36397E-10 |
| 311 | D Vertical | -0,000664322 | -8,83762E-05 | 6,1196E-08 | -6,11861E-08 | -1,98081E-09 | 6,11749E-08 | -6,11861E-08 | -2,53661E-09 |
| 311 | D transversal | 0,003157015 | 6,55592E-06 | -5,54312E-09 | 2,20489E-07 | 1,7227E-10 | 2,26563E-09 | 2,20489E-07 | 1,61901E-09 |
| 311 | G Longitudinal | 0,000762218 | -7,94076E-07 | 4,56322E-10 | 6,23414E-08 | -1,13051E-11 | 1,91862E-09 | 6,23414E-08 | 4,8003E-10 |
| 311 | G Vertical | 5,87939E-05 | -1,1027E-05 | 6,58417E-09 | 2,12623E-09 | -1,44264E-10 | 2,22574E-08 | 2,12622E-09 | -9,32427E-11 |
| 311 | G transversal | 1,30557E-05 | 1,97611E-06 | -6,21871E-08 | 1,59986E-09 | 5,58516E-11 | -6,36249E-08 | 1,59986E-09 | 7,262E-11 |
| 312 | D Longitudinal | -5,72882E-05 | 6,58441E-06 | 2,18607E-07 | -5,77582E-09 | 1,79424E-10 | 2,10936E-07 | -5,77582E-09 | 1,22591E-10 |
| 312 | D Vertical | 0,000664322 | -8,83366E-05 | -6,1196E-08 | 6,11861E-08 | -1,98081E-09 | -6,12171E-08 | 6,11861E-08 | -1,42504E-09 |
| 312 | D transversal | 0,003157015 | -6,4529E-06 | -5,54332E-09 | 2,20489E-07 | -1,7227E-10 | -1,33521E-08 | 2,20489E-07 | 1,27433E-09 |
| 312 | G Longitudinal | 0,000762218 | 8,29065E-07 | 4,56275E-10 | 6,23414E-08 | 1,1305E-11 | -1,00603E-09 | 6,23414E-08 | 5,02608E-10 |
| 312 | G Vertical | -5,87939E-05 | -1,10306E-05 | -6,58416E-09 | -2,12623E-09 | -1,44262E-10 | 9,08907E-09 | -2,12623E-09 | -1,95366E-10 |
| 312 | G transversal | 1,30557E-05 | -1,97492E-06 | -6,21871E-08 | 1,59987E-09 | -5,58515E-11 | -6,07493E-08 | 1,59987E-09 | -3,91186E-11 |
| 313 | D Longitudinal | 5,72882E-05 | 6,54283E-06 | 2,18607E-07 | 5,77582E-09 | 1,79517E-10 | 2,26277E-07 | 5,77582E-09 | 2,3635E-10 |
| 313 | D Vertical | -0,000664322 | -8,83685E-05 | -6,1196E-08 | -6,11861E-08 | -1,98083E-09 | -6,11749E-08 | -6,11861E-08 | -2,5366E-09 |
| 313 | D transversal | 0,003157015 | 6,50996E-06 | 5,54312E-09 | 2,20489E-07 | 1,72363E-10 | -2,26563E-09 | 2,20489E-07 | 1,61896E-09 |
| 313 | G Longitudinal | 0,000762218 | -8,03174E-07 | -4,56296E-10 | 6,23414E-08 | -1,12697E-11 | -1,91859E-09 | 6,23414E-08 | 4,80041E-10 |
| 313 | G Vertical | -5,87851E-05 | 1,09582E-05 | 6,58295E-09 | -2,12804E-09 | 1,43658E-10 | 2,22559E-08 | -2,12803E-09 | 9,22036E-11 |
| 313 | G transversal | -1,30559E-05 | -1,96412E-06 | -6,2187E-08 | -1,59983E-09 | -5,58611E-11 | -6,36249E-08 | -1,59983E-09 | -7,25866E-11 |
| 314 | D Longitudinal | -2,00436E-12 | -2,26563E-08 | 2,15281E-07 | 1,86297E-14 | 4,61197E-14 | 2,22963E-07 | 1,88329E-14 | -2,32149E-14 |
| 314 | D Vertical | -0,000631244 | -8,76481E-05 | -9,62102E-17 | -5,94133E-08 | -1,92752E-09 | -1,20413E-16 | -5,94133E-08 | -2,46586E-09 |
| 314 | D transversal | 0,003920019 | -9,02725E-06 | 2,02208E-16 | 2,22871E-07 | 1,72152E-10 | 2,54408E-16 | 2,22871E-07 | 1,64314E-09 |
| 314 | G Longitudinal | 0,000727586 | 3,97314E-08 | 1,31727E-16 | 6,20095E-08 | -8,96594E-12 | 1,50141E-16 | 6,20095E-08 | 4,78736E-10 |
| 314 | G Vertical | 1,49604E-11 | 2,24185E-08 | -5,41707E-09 | -2,12282E-14 | -4,6809E-14 | 2,21414E-09 | -2,14375E-14 | 2,16705E-14 |
| 314 | G transversal | 4,22327E-14 | 4,11662E-09 | -6,0572E-08 | -3,57685E-15 | -8,95293E-15 | -6,10412E-08 | -3,65206E-15 | 4,72525E-15 |
| 315 | D Longitudinal | -1,2879E-12 | -1,00009E-05 | 1,76127E-07 | 2,64454E-16 | 1,59786E-10 | 1,76127E-07 | 2,62842E-16 | 1,59786E-10 |
| 315 | D Vertical | -1,15706E-12 | -8,06667E-05 | -5,46859E-08 | 2,38646E-16 | -1,75124E-09 | -5,46859E-08 | 2,37117E-16 | -1,75124E-09 |

APOYO 2

| DESPLAZAMIENTOS (metros) | | VIENTO | PESO | CT1 | | | CT2 | | |
|---|---|---|---|---|---|---|---|---|---|
| Nudo | Desplazamiento | | | L | T | V | L | T | V |
| 315 | D transversal | 0,00256924 | 1,9139E-08 | -7,98083E-14 | 1,72564E-07 | 3,82447E-14 | -6,95429E-09 | 1,72564E-07 | 1,06901E-09 |
| 315 | G Longitudinal | 0,000618563 | 1,234E-08 | -1,7358E-14 | 5,34953E-08 | 8,30767E-15 | -4,67982E-10 | 5,34953E-08 | 4,54193E-10 |
| 315 | G Vertical | 5,15402E-05 | -1,6685E-08 | -7,86772E-14 | 4,98579E-09 | 3,63979E-14 | 6,57023E-09 | 4,98579E-09 | 4,72343E-11 |
| 315 | G transversal | -1,00575E-12 | -9,61825E-07 | -5,49667E-08 | 2,06342E-16 | -1,91124E-11 | -5,49667E-08 | 2,05163E-16 | -1,91124E-11 |
| 316 | D Longitudinal | -4,66243E-05 | -5,42079E-06 | 1,71683E-07 | -4,53688E-09 | -1,39593E-10 | 1,78472E-07 | -4,53688E-09 | -1,83071E-10 |
| 316 | D Vertical | -0,000598612 | -7,90518E-05 | 5,45666E-08 | -5,4531E-08 | -1,74495E-09 | 5,45724E-08 | -5,4531E-08 | -2,23511E-09 |
| 316 | D transversal | 0,002577354 | 6,81683E-06 | -5,68268E-09 | 1,73566E-07 | 1,75019E-10 | 1,22475E-09 | 1,73566E-07 | 1,25797E-09 |
| 316 | G Longitudinal | 0,000689648 | -8,87799E-07 | 4,80173E-10 | 5,46879E-08 | -1,131E-11 | 1,93015E-09 | 5,46879E-08 | 4,05791E-10 |
| 316 | G Vertical | 6,43333E-05 | -1,15338E-05 | 7,02613E-09 | 2,43257E-09 | -1,49703E-10 | 2,24074E-08 | 2,43257E-09 | -9,67942E-11 |
| 316 | G transversal | 3,05594E-06 | 6,67239E-07 | -5,50499E-08 | 6,12458E-10 | 2,5649E-11 | -5,64795E-08 | 6,12458E-10 | 3,28046E-11 |
| 317 | D Longitudinal | -4,66243E-05 | 5,4177E-06 | 1,71683E-07 | -4,53691E-09 | 1,39593E-10 | 1,64894E-07 | -4,53691E-09 | 9,62295E-11 |
| 317 | D Vertical | 0,000598612 | -7,90169E-05 | -5,45667E-08 | 5,4531E-08 | -1,74495E-09 | -5,45609E-08 | 5,4531E-08 | -1,2548E-09 |
| 317 | D transversal | 0,002577354 | -6,73971E-06 | -5,68284E-09 | 1,73566E-07 | -1,75019E-10 | -1,25903E-08 | 1,73566E-07 | 9,07815E-10 |
| 317 | G Longitudinal | 0,000689648 | 9,17501E-07 | 4,8013E-10 | 5,46879E-08 | 1,131E-11 | -9,69851E-10 | 5,46879E-08 | 4,28382E-10 |
| 317 | G Vertical | -6,43333E-05 | -1,15375E-05 | -7,02613E-09 | -2,43257E-09 | -1,49701E-10 | 8,35517E-09 | -2,43258E-09 | -2,0269E-10 |
| 317 | G transversal | 3,05594E-06 | -6,66731E-07 | -5,50499E-08 | 6,12466E-10 | -2,5649E-11 | -5,36204E-08 | 6,12466E-10 | -1,85261E-11 |
| 318 | D Longitudinal | 4,66243E-05 | 5,38331E-06 | 1,71683E-07 | 4,53691E-09 | 1,39669E-10 | 1,78472E-07 | 4,53691E-09 | 1,83032E-10 |
| 318 | D Vertical | -0,000598612 | -7,90445E-05 | -5,45666E-08 | -5,4531E-08 | -1,74496E-09 | -5,45724E-08 | -5,4531E-08 | -2,23511E-09 |
| 318 | D transversal | 0,002577354 | 6,77901E-06 | 5,68268E-09 | 1,73566E-07 | 1,75096E-10 | -1,22475E-09 | 1,73566E-07 | 1,25793E-09 |
| 318 | G Longitudinal | 0,000689648 | -8,96144E-07 | -4,80148E-10 | 5,4688E-08 | -1,12772E-11 | -1,93012E-09 | 5,4688E-08 | 4,05802E-10 |
| 318 | G Vertical | -6,43247E-05 | 1,14667E-05 | 7,02494E-09 | -2,43434E-09 | 1,49112E-10 | 2,24059E-08 | -2,43433E-09 | 9,57804E-11 |
| 318 | G transversal | -3,05612E-06 | -6,56005E-07 | -5,50499E-08 | -6,12428E-10 | -2,56569E-11 | -5,64795E-08 | -6,12429E-10 | -3,27724E-11 |
| 319 | D Longitudinal | -1,31246E-12 | -1,529E-08 | 1,32991E-07 | 1,23769E-14 | 3,06876E-14 | 1,39014E-07 | 1,24865E-14 | -1,53335E-14 |
| 319 | D Vertical | -0,000527263 | -7,25203E-05 | 1,444E-16 | -4,88465E-08 | -1,54769E-09 | 1,81874E-16 | -4,88465E-08 | -1,98156E-09 |
| 319 | D transversal | 0,002853963 | -8,32419E-06 | 2,1349E-16 | 1,39842E-07 | 1,74172E-10 | 2,67456E-16 | 1,39842E-07 | 1,00897E-09 |
| 319 | G Longitudinal | 0,000591107 | 2,83603E-07 | -2,38716E-16 | 4,76947E-08 | -1,24472E-12 | -2,81355E-16 | 4,76947E-08 | 3,49336E-10 |
| 319 | G Vertical | 1,15478E-11 | 1,48201E-08 | -5,27896E-09 | -1,42069E-14 | -3,06805E-14 | 5,26623E-10 | -1,43195E-14 | 1,38234E-14 |
| 319 | G transversal | 1,84337E-13 | 3,48571E-09 | -4,66565E-08 | -3,00946E-15 | -7,47592E-15 | -4,70448E-08 | -3,06569E-15 | 3,89334E-15 |
| 320 | D Longitudinal | -4,87833E-05 | -5,70035E-06 | 1,32327E-07 | -4,59023E-09 | -1,39771E-10 | 1,38268E-07 | -4,59023E-09 | -1,82425E-10 |
| 320 | D Vertical | -0,000534268 | -6,98184E-05 | 4,80098E-08 | -4,80103E-08 | -1,51883E-09 | 4,79906E-08 | -4,80103E-08 | -1,94477E-09 |
| 320 | D transversal | 0,002076147 | 7,09194E-06 | -5,703E-09 | 1,34511E-07 | 1,74234E-10 | 3,44089E-10 | 1,34511E-07 | 9,64819E-10 |
| 320 | G Longitudinal | 0,00061543 | -6,81684E-07 | 3,25068E-10 | 4,71492E-08 | -6,88387E-12 | 1,76873E-09 | 4,71492E-08 | 3,3906E-10 |
| 320 | G Vertical | 7,0078E-05 | -1,21102E-05 | 7,62443E-09 | 2,77522E-09 | -1,57254E-10 | 2,27553E-08 | 2,77521E-09 | -1,02018E-10 |
| 320 | G transversal | -1,47663E-05 | -1,45166E-06 | -4,76369E-08 | -1,18381E-09 | -2,96853E-11 | -4,90654E-08 | -1,18381E-09 | -4,00534E-11 |
| 321 | D Longitudinal | -4,87833E-05 | 5,69732E-06 | 1,32327E-07 | -4,59025E-09 | 1,39771E-10 | 1,26387E-07 | -4,59025E-09 | 9,72072E-11 |
| 321 | D Vertical | 0,000534268 | -6,97881E-05 | -4,80098E-08 | 4,80103E-08 | -1,51883E-09 | -4,80289E-08 | 4,80103E-08 | -1,09291E-09 |
| 321 | D transversal | 0,002076147 | -7,03564E-06 | -5,70312E-09 | 1,34511E-07 | -1,74234E-10 | -1,17502E-08 | 1,34511E-07 | 6,16258E-10 |
| 321 | G Longitudinal | 0,00061543 | 7,0632E-07 | 3,2503E-10 | 4,71492E-08 | 6,88384E-12 | -1,11863E-09 | 4,71492E-08 | 3,52801E-10 |
| 321 | G Vertical | -7,0078E-05 | -1,21141E-05 | -7,62443E-09 | -2,77522E-09 | -1,57252E-10 | 7,5064E-09 | -2,77522E-09 | -2,12568E-10 |
| 321 | G transversal | -1,47663E-05 | 1,45092E-06 | -4,7637E-08 | -1,18381E-09 | 2,96854E-11 | -4,62085E-08 | -1,18381E-09 | 1,92875E-11 |
| 322 | D Longitudinal | 4,87833E-05 | 5,6701E-06 | 1,32327E-07 | 4,59026E-09 | 1,39832E-10 | 1,38268E-07 | 4,59026E-09 | 1,82396E-10 |
| 322 | D Vertical | -0,000534268 | -6,98117E-05 | -4,80098E-08 | -4,80103E-08 | -1,51884E-09 | -4,79906E-08 | -4,80103E-08 | -1,94476E-09 |
| 322 | D transversal | 0,002076147 | 7,06127E-06 | 5,703E-09 | 1,34511E-07 | 1,74296E-10 | -3,44089E-10 | 1,34511E-07 | 9,64788E-10 |
| 322 | G Longitudinal | 0,000615429 | -6,8916E-07 | -3,25044E-10 | 4,71493E-08 | -6,85319E-12 | -1,7687E-09 | 4,71493E-08 | 3,39071E-10 |

APOYO 2

| DESPLAZAMIENTOS (metros) | | VIENTO | PESO | CT1 | | | CT2 | | |
|---|---|---|---|---|---|---|---|---|---|
| Nudo | Desplazamiento | | | L | T | V | L | T | V |
| 322 | G Vertical | -7,00696E-05 | 1,20445E-05 | 7,62327E-09 | -2,77695E-09 | 1,56675E-10 | 2,27538E-08 | -2,77694E-09 | 1,01024E-10 |
| 322 | G transversal | 1,47662E-05 | 1,46203E-06 | -4,76369E-08 | 1,18384E-09 | 2,96793E-11 | -4,90654E-08 | 1,18384E-09 | 4,00844E-11 |
| 323 | D Longitudinal | -5,64363E-05 | -6,73618E-06 | 1,02599E-07 | -5,26766E-09 | -1,60084E-10 | 1,07812E-07 | -5,26766E-09 | -2,08423E-10 |
| 323 | D Vertical | -0,000473078 | -6,14896E-05 | 4,22203E-08 | -4,21441E-08 | -1,32058E-09 | 4,22239E-08 | -4,21441E-08 | -1,69142E-09 |
| 323 | D transversal | 0,001685728 | 6,903E-06 | -5,50385E-09 | 1,04921E-07 | 1,67489E-10 | -1,96623E-10 | 1,04921E-07 | 7,45245E-10 |
| 323 | G Longitudinal | 0,000557649 | 2,61006E-07 | -3,63168E-10 | 4,13667E-08 | 1,33729E-11 | 1,07751E-09 | 4,13667E-08 | 3,05677E-10 |
| 323 | G Vertical | 7,02705E-05 | -1,23974E-05 | 7,5594E-09 | 2,66886E-09 | -1,59842E-10 | 2,24989E-08 | 2,66886E-09 | -1,06243E-10 |
| 323 | G transversal | -9,88208E-06 | -7,66114E-07 | -4,14668E-08 | -8,29611E-10 | -1,9801E-11 | -4,28889E-08 | -8,29611E-10 | -2,75728E-11 |
| 324 | D Longitudinal | -5,64363E-05 | 6,73274E-06 | 1,02599E-07 | -5,26768E-09 | 1,60084E-10 | 9,73865E-08 | -5,26768E-09 | 1,11818E-10 |
| 324 | D Vertical | 0,000473078 | -6,14632E-05 | -4,22203E-08 | 4,21441E-08 | -1,32058E-09 | -4,22167E-08 | 4,21441E-08 | -9,49752E-10 |
| 324 | D transversal | 0,001685728 | -6,86186E-06 | -5,50395E-09 | 1,04921E-07 | -1,67489E-10 | -1,08112E-08 | 1,04921E-07 | 4,10192E-10 |
| 324 | G Longitudinal | 0,000557649 | -2,40191E-07 | -3,63203E-10 | 4,13667E-08 | -1,3373E-11 | -1,80388E-09 | 4,13667E-08 | 2,78907E-10 |
| 324 | G Vertical | -7,02705E-05 | -1,24012E-05 | -7,5594E-09 | -2,66887E-09 | -1,5984E-10 | 7,38009E-09 | -2,66887E-09 | -2,13517E-10 |
| 324 | G transversal | -9,88208E-06 | 7,6556E-07 | -4,14669E-08 | -8,29604E-10 | 1,9801E-11 | -4,00448E-08 | -8,29604E-10 | 1,20022E-11 |
| 325 | D Longitudinal | 5,64363E-05 | 6,71162E-06 | 1,02599E-07 | 5,26768E-09 | 1,60133E-10 | 1,07812E-07 | 5,26768E-09 | 2,08398E-10 |
| 325 | D Vertical | -0,000473078 | -6,14835E-05 | -4,22203E-08 | -4,21441E-08 | -1,32059E-09 | -4,22239E-08 | -4,21441E-08 | -1,69142E-09 |
| 325 | D transversal | 0,001685728 | 6,87807E-06 | 5,50385E-09 | 1,04921E-07 | 1,67539E-10 | 1,96624E-10 | 1,04921E-07 | 7,4522E-10 |
| 325 | G Longitudinal | 0,000557649 | 2,54247E-07 | 3,63192E-10 | 4,13668E-08 | 1,34019E-11 | -1,07748E-09 | 4,13668E-08 | 3,05689E-10 |
| 325 | G Vertical | -7,02622E-05 | 1,23327E-05 | 7,55825E-09 | -2,67057E-09 | 1,59272E-10 | 2,24975E-08 | -2,67057E-09 | 1,05265E-10 |
| 325 | G transversal | 9,8819E-06 | 7,75651E-07 | -4,14668E-08 | 8,29641E-10 | 1,97964E-11 | -4,28889E-08 | 8,29641E-10 | 2,76022E-11 |
| 326 | D Longitudinal | -1,59698E-12 | -1,14236E-05 | 1,01395E-07 | 3,27702E-16 | 1,45184E-10 | 1,01395E-07 | 3,25814E-16 | 1,45184E-10 |
| 326 | D Vertical | 6,2687E-13 | -6,06892E-05 | -4,04775E-08 | -1,29364E-16 | -1,26892E-09 | -4,04775E-08 | -1,28588E-16 | -1,26892E-09 |
| 326 | D transversal | 0,001603267 | 6,71981E-09 | -4,95156E-14 | 9,83333E-08 | 2,3755E-14 | -5,21322E-09 | 9,83333E-08 | 5,24135E-10 |
| 326 | G Longitudinal | 0,000473406 | 8,31898E-09 | -1,38984E-14 | 3,93228E-08 | 6,64749E-15 | -4,26319E-10 | 3,93228E-08 | 3,21334E-10 |
| 326 | G Vertical | 4,87384E-05 | -9,8794E-09 | -4,79922E-14 | 4,50852E-09 | 2,19436E-14 | 4,77858E-09 | 4,50852E-09 | 4,08116E-11 |
| 326 | G transversal | 8,3327E-13 | 6,47333E-08 | -4,0562E-08 | -1,71007E-16 | 1,62558E-11 | -4,0562E-08 | -1,69894E-16 | 1,62557E-11 |
| 327 | D Longitudinal | -5,49245E-05 | 6,44135E-06 | 6,96347E-08 | -5,11836E-09 | 1,55232E-10 | 6,53857E-08 | -5,11836E-09 | 1,08709E-10 |
| 327 | D Vertical | 0,000392182 | -5,04001E-05 | -3,442E-08 | 3,43913E-08 | -1,0647E-09 | -3,4442E-08 | 3,43913E-08 | -7,66545E-10 |
| 327 | D transversal | 0,001228178 | -5,98138E-06 | -4,67192E-09 | 7,18042E-08 | -1,41385E-10 | -8,99663E-09 | 7,18042E-08 | 2,08649E-10 |
| 327 | G Longitudinal | 0,000485379 | -1,40733E-07 | -1,8758E-10 | 3,42032E-08 | -8,87915E-12 | -1,62333E-09 | 3,42032E-08 | 2,18265E-10 |
| 327 | G Vertical | -7,75966E-05 | -1,25318E-05 | -8,28522E-09 | -3,33573E-09 | -1,60088E-10 | 6,44303E-09 | -3,33573E-09 | -2,19081E-10 |
| 327 | G transversal | -9,53608E-07 | -3,5227E-07 | -3,41227E-08 | 5,29291E-11 | -7,71034E-12 | -3,27135E-08 | 5,29291E-11 | -7,0502E-12 |
| 328 | D Longitudinal | 5,49245E-05 | 6,42681E-06 | 6,96346E-08 | 5,11836E-09 | 1,55267E-10 | 7,38836E-08 | 5,11836E-09 | 2,0179E-10 |
| 328 | D Vertical | -0,000392182 | -5,04161E-05 | -3,44199E-08 | -3,43913E-08 | -1,06471E-09 | -3,43979E-08 | -3,43913E-08 | -1,36287E-09 |
| 328 | D transversal | 0,001228178 | 5,98805E-06 | 4,67184E-09 | 7,18042E-08 | 1,41421E-10 | 3,47127E-10 | 7,18042E-08 | 4,91456E-10 |
| 328 | G Longitudinal | 0,000485379 | 1,51104E-07 | 1,87573E-10 | 3,42032E-08 | 8,9057E-12 | -1,24817E-09 | 3,42032E-08 | 2,36057E-10 |
| 328 | G Vertical | -7,75885E-05 | 1,2464E-05 | 8,2841E-09 | -3,3374E-09 | 1,59529E-10 | 2,30121E-08 | -3,3374E-09 | 1,0021E-10 |
| 328 | G transversal | 9,53437E-07 | -3,43852E-07 | -3,41226E-08 | -5,28941E-11 | -7,71319E-12 | -3,55318E-08 | -5,28942E-11 | -8,36655E-12 |
| 329 | D Longitudinal | -1,54267E-12 | 7,78854E-06 | 2,72068E-07 | 3,17284E-16 | -1,91834E-10 | 2,72068E-07 | 3,18619E-16 | -1,91834E-10 |
| 329 | D Vertical | -1,58242E-12 | -9,82086E-05 | 6,72956E-08 | 3,25587E-16 | -2,20678E-09 | 6,72956E-08 | 3,26751E-16 | -2,20678E-09 |
| 329 | D transversal | 0,003743334 | 9,20419E-08 | 1,16E-13 | 2,68598E-07 | -5,55069E-14 | 8,69006E-09 | 2,68598E-07 | 1,82381E-09 |
| 329 | G Longitudinal | 0,000755352 | 2,55287E-08 | 2,00967E-14 | 6,77245E-08 | -9,55722E-15 | 4,87146E-10 | 6,77245E-08 | 5,95314E-10 |
| 329 | G Vertical | -5,93201E-05 | -2,91435E-08 | -1,14062E-13 | -6,0641E-09 | 5,45827E-14 | 8,47652E-09 | -6,0641E-09 | -6,04379E-11 |
| 329 | G transversal | 2,12333E-12 | 7,69285E-07 | -6,8933E-08 | -4,3607E-16 | 8,86308E-12 | -6,8933E-08 | -4,37357E-16 | 8,86298E-12 |

APOYO 2

| DESPLAZAMIENTOS (metros) | | VIENTO | PESO | CT1 | | | CT2 | | |
|---|---|---|---|---|---|---|---|---|---|
| Nudo | Desplazamiento | | | L | T | V | L | T | V |
| 330 | D Longitudinal | 5,72882E-05 | -6,53877E-06 | 2,18607E-07 | 5,77578E-09 | -1,79517E-10 | 2,10936E-07 | 5,77578E-09 | -1,22544E-10 |
| 330 | D Vertical | 0,000664322 | -8,83289E-05 | 6,1196E-08 | 6,11861E-08 | -1,98083E-09 | 6,12171E-08 | 6,11861E-08 | -1,42503E-09 |
| 330 | D transversal | 0,003157015 | -6,40693E-06 | 5,54332E-09 | 2,20489E-07 | -1,72363E-10 | 1,33521E-08 | 2,20489E-07 | 1,27438E-09 |
| 330 | G Longitudinal | 0,000762218 | 8,38164E-07 | -4,56249E-10 | 6,23414E-08 | 1,12697E-11 | 1,00605E-09 | 6,23414E-08 | 5,02614E-10 |
| 330 | G Vertical | 5,87851E-05 | 1,09618E-05 | -6,58295E-09 | 2,12804E-09 | 1,43659E-10 | 9,08993E-09 | 2,12804E-09 | 1,95107E-10 |
| 330 | G transversal | -1,30559E-05 | 1,96293E-06 | -6,21871E-08 | -1,59982E-09 | 5,58611E-11 | -6,07492E-08 | -1,59982E-09 | 3,91017E-11 |
| 331 | D Longitudinal | 2,04994E-12 | 2,26563E-08 | 2,15281E-07 | -1,86387E-14 | -4,61197E-14 | 2,07599E-07 | -1,88416E-14 | 2,32129E-14 |
| 331 | D Vertical | 0,000631244 | -8,76097E-05 | 9,55799E-17 | 5,94133E-08 | -1,92752E-09 | 6,87871E-17 | 5,94133E-08 | -1,38917E-09 |
| 331 | D transversal | 0,003920019 | 9,132E-06 | 2,00854E-16 | 2,22871E-07 | -1,72152E-10 | 1,43292E-16 | 2,22871E-07 | 1,29883E-09 |
| 331 | G Longitudinal | 0,000727586 | -4,99984E-09 | 1,31227E-16 | 6,20095E-08 | 8,96594E-12 | 1,09241E-16 | 6,20095E-08 | 4,96668E-10 |
| 331 | G Vertical | -1,09204E-11 | 2,24185E-08 | 5,41726E-09 | -1,5912E-14 | -4,68056E-14 | 1,30485E-08 | -1,61288E-14 | 2,28155E-14 |
| 331 | G transversal | -7,50322E-13 | -4,11662E-09 | -6,0572E-08 | 3,72217E-15 | 8,95302E-15 | -6,01029E-08 | 3,79707E-15 | -4,69395E-15 |
| 332 | D Longitudinal | -1,28791E-12 | 1,00009E-05 | 1,76127E-07 | 2,64707E-16 | -1,59786E-10 | 1,76127E-07 | 2,6586E-16 | -1,59786E-10 |
| 332 | D Vertical | 1,15703E-12 | -8,06667E-05 | 5,46859E-08 | -2,38856E-16 | -1,75124E-09 | 5,46859E-08 | -2,39619E-16 | -1,75124E-09 |
| 332 | D transversal | 0,00256924 | 5,69917E-08 | 7,98227E-14 | 1,72564E-07 | -3,82447E-14 | 6,95429E-09 | 1,72564E-07 | 1,06905E-09 |
| 332 | G Longitudinal | 0,000618563 | 2,00056E-08 | 1,74379E-14 | 5,34953E-08 | -8,3077E-15 | 4,67982E-10 | 5,34953E-08 | 4,54201E-10 |
| 332 | G Vertical | -5,15402E-05 | -2,00501E-08 | -7,59999E-14 | -4,98576E-09 | 3,63969E-14 | 6,57023E-09 | -4,98576E-09 | -4,72729E-11 |
| 332 | G transversal | -1,00575E-12 | 9,61825E-07 | -5,49667E-08 | 2,06495E-16 | 1,91124E-11 | -5,49667E-08 | 2,07001E-16 | 1,91125E-11 |
| 333 | D Longitudinal | 4,66243E-05 | -5,38022E-06 | 1,71683E-07 | 4,53688E-09 | -1,39669E-10 | 1,64894E-07 | 4,53688E-09 | -9,61914E-11 |
| 333 | D Vertical | 0,000598612 | -7,90096E-05 | 5,45667E-08 | 5,4531E-08 | -1,74496E-09 | 5,45609E-08 | 5,4531E-08 | -1,25479E-09 |
| 333 | D transversal | 0,002577354 | -6,7019E-06 | 5,68284E-09 | 1,73566E-07 | -1,75096E-10 | 1,25903E-08 | 1,73566E-07 | 9,07854E-10 |
| 333 | G Longitudinal | 0,000689648 | 9,25847E-07 | -4,80105E-10 | 5,4688E-08 | 1,12772E-11 | 9,69868E-10 | 5,4688E-08 | 4,28387E-10 |
| 333 | G Vertical | 6,43247E-05 | 1,14705E-05 | -7,02494E-09 | 2,43434E-09 | 1,49113E-10 | 8,35601E-09 | 2,43434E-09 | 2,02438E-10 |
| 333 | G transversal | -3,05612E-06 | 6,55497E-07 | -5,50499E-08 | -6,1242E-10 | 2,56569E-11 | -5,36203E-08 | -6,1242E-10 | 1,85102E-11 |
| 334 | D Longitudinal | 1,38305E-12 | 1,529E-08 | 1,32991E-07 | -1,23912E-14 | -3,06876E-14 | 1,26968E-07 | -1,25006E-14 | 1,53304E-14 |
| 334 | D Vertical | 0,000527263 | -7,24894E-05 | -1,43424E-16 | 4,88465E-08 | -1,54769E-09 | -1,01943E-16 | 4,88465E-08 | -1,11382E-09 |
| 334 | D transversal | 0,002853963 | 8,38364E-06 | 2,12088E-16 | 1,39842E-07 | -1,74172E-10 | 1,52379E-16 | 1,39842E-07 | 6,60631E-10 |
| 334 | G Longitudinal | 0,000591107 | -2,58636E-07 | -2,37582E-16 | 4,76947E-08 | 1,24472E-12 | -1,88337E-16 | 4,76947E-08 | 3,51825E-10 |
| 334 | G Vertical | -8,91292E-12 | 1,48201E-08 | 5,27908E-09 | -1,00075E-14 | -3,06779E-14 | 1,10847E-08 | -1,0126E-14 | 1,47279E-14 |
| 334 | G transversal | -4,75976E-13 | -3,48571E-09 | -4,66565E-08 | 3,06925E-15 | 7,47596E-15 | -4,62682E-08 | 3,12532E-15 | -3,88046E-15 |
| 335 | D Longitudinal | 4,87833E-05 | -5,66707E-06 | 1,32327E-07 | 4,59023E-09 | -1,39832E-10 | 1,26387E-07 | 4,59023E-09 | -9,7177E-11 |
| 335 | D Vertical | 0,000534268 | -6,97814E-05 | 4,80098E-08 | 4,80103E-08 | -1,51884E-09 | 4,80289E-08 | 4,80103E-08 | -1,0929E-09 |
| 335 | D transversal | 0,002076147 | -7,00497E-06 | 5,70312E-09 | 1,34511E-07 | -1,74296E-10 | 1,17502E-08 | 1,34511E-07 | 6,16289E-10 |
| 335 | G Longitudinal | 0,000615429 | 7,13796E-07 | -3,25005E-10 | 4,71493E-08 | 6,85321E-12 | 1,11865E-09 | 4,71493E-08 | 3,52806E-10 |
| 335 | G Vertical | 7,00696E-05 | 1,20484E-05 | -7,62327E-09 | 2,77695E-09 | 1,56676E-10 | 7,50723E-09 | 2,77695E-09 | 2,12321E-10 |
| 335 | G transversal | 1,47662E-05 | -1,46129E-06 | -4,76369E-08 | 1,18385E-09 | -2,96793E-11 | -4,62085E-08 | 1,18385E-09 | -1,93023E-11 |
| 336 | D Longitudinal | 5,64363E-05 | -6,70818E-06 | 1,02599E-07 | 5,26766E-09 | -1,60133E-10 | 9,73865E-08 | 5,26766E-09 | -1,11793E-10 |
| 336 | D Vertical | 0,000473078 | -6,14571E-05 | 4,22203E-08 | 4,21441E-08 | -1,32059E-09 | 4,22167E-08 | 4,21441E-08 | -9,49745E-10 |
| 336 | D transversal | 0,001685728 | -6,83693E-06 | 5,50395E-09 | 1,04921E-07 | -1,67539E-10 | 1,08112E-08 | 1,04921E-07 | 4,10217E-10 |
| 336 | G Longitudinal | 0,000557649 | -2,33431E-07 | 3,63227E-10 | 4,13667E-08 | -1,34019E-11 | 1,8039E-09 | 4,13667E-08 | 2,7891E-10 |
| 336 | G Vertical | 7,02622E-05 | 1,23365E-05 | -7,55826E-09 | 2,67057E-09 | 1,59273E-10 | 7,3809E-09 | 2,67057E-09 | 2,13274E-10 |
| 336 | G transversal | 9,8819E-06 | -7,75096E-07 | -4,14669E-08 | 8,29648E-10 | -1,97963E-11 | -4,00448E-08 | 8,29648E-10 | -1,20159E-11 |
| 337 | D Longitudinal | -1,59699E-12 | 1,14236E-05 | 1,01395E-07 | 3,27977E-16 | -1,45184E-10 | 1,01395E-07 | 3,29104E-16 | -1,45184E-10 |
| 337 | D Vertical | -6,26905E-13 | -6,06892E-05 | 4,04775E-08 | 1,29478E-16 | -1,26892E-09 | 4,04775E-08 | 1,29957E-16 | -1,26892E-09 |

APOYO 2

| DESPLAZAMIENTOS (metros) | | VIENTO | PESO | CT1 | | | CT2 | | |
|---|---|---|---|---|---|---|---|---|---|
| Nudo | Desplazamiento | | | L | T | V | L | T | V |
| 337 | D transversal | 0,001603267 | 3,06072E-08 | 4,95082E-14 | 9,83333E-08 | -2,3755E-14 | 5,21322E-09 | 9,83333E-08 | 5,24159E-10 |
| 337 | G Longitudinal | 0,000473406 | 1,4565E-08 | 1,39339E-14 | 3,93228E-08 | -6,6475E-15 | 4,26319E-10 | 3,93228E-08 | 3,21341E-10 |
| 337 | G Vertical | -4,87384E-05 | -1,27866E-08 | -4,57479E-14 | -4,5085E-09 | 2,19427E-14 | 4,77858E-09 | -4,5085E-09 | -4,08352E-11 |
| 337 | G transversal | 8,3328E-13 | -6,47333E-08 | -4,0562E-08 | -1,71172E-16 | -1,62558E-11 | -4,0562E-08 | -1,71869E-16 | -1,62558E-11 |
| 338 | D Longitudinal | -5,49245E-05 | -6,44467E-06 | 6,96346E-08 | -5,11834E-09 | -1,55232E-10 | 7,38836E-08 | -5,11834E-09 | -2,01807E-10 |
| 338 | D Vertical | -0,000392182 | -5,04214E-05 | 3,44199E-08 | -3,43913E-08 | -1,0647E-09 | 3,43979E-08 | -3,43913E-08 | -1,36287E-09 |
| 338 | D transversal | 0,001228178 | 6,00631E-06 | -4,67184E-09 | 7,18042E-08 | 1,41385E-10 | -3,47127E-10 | 7,18042E-08 | 4,91473E-10 |
| 338 | G Longitudinal | 0,000485379 | 1,5691E-07 | -1,87549E-10 | 3,42032E-08 | 8,87911E-12 | 1,2482E-09 | 3,42032E-08 | 2,36044E-10 |
| 338 | G Vertical | 7,75966E-05 | -1,25276E-05 | 8,28523E-09 | 3,33573E-09 | -1,60089E-10 | 2,30135E-08 | 3,33572E-09 | -1,01172E-10 |
| 338 | G transversal | -9,53607E-07 | 3,52317E-07 | -3,41227E-08 | 5,29233E-11 | 7,71037E-12 | -3,55319E-08 | 5,29233E-11 | 8,39396E-12 |
| 339 | D Longitudinal | 5,49245E-05 | -6,42349E-06 | 6,96347E-08 | 5,11834E-09 | -1,55267E-10 | 6,53857E-08 | 5,11834E-09 | -1,08692E-10 |
| 339 | D Vertical | 0,000392182 | -5,03949E-05 | 3,442E-08 | 3,43913E-08 | -1,06471E-09 | 3,4442E-08 | 3,43913E-08 | -7,66539E-10 |
| 339 | D transversal | 0,001228178 | -5,96312E-06 | 4,67192E-09 | 7,18042E-08 | -1,41421E-10 | 8,99663E-09 | 7,18042E-08 | 2,08667E-10 |
| 339 | G Longitudinal | 0,000485379 | -1,34927E-07 | 1,87604E-10 | 3,42032E-08 | -8,90569E-12 | 1,62335E-09 | 3,42032E-08 | 2,18267E-10 |
| 339 | G Vertical | 7,75885E-05 | 1,24682E-05 | -8,2841E-09 | 3,3374E-09 | 1,59529E-10 | 6,44383E-09 | 3,3374E-09 | 2,18842E-10 |
| 339 | G transversal | 9,53437E-07 | 3,43805E-07 | -3,41227E-08 | -5,28882E-11 | 7,7132E-12 | -3,27135E-08 | -5,28882E-11 | 7,03788E-12 |
| 340 | D Longitudinal | 8,43617E-13 | 8,99533E-09 | 6,91755E-08 | -7,15452E-15 | -1,77218E-14 | 6,48282E-08 | -7,19807E-15 | 8,76678E-15 |
| 340 | D Vertical | 0,000379487 | -5,27534E-05 | 9,84684E-17 | 3,50745E-08 | -1,08829E-09 | 7,04842E-17 | 3,50745E-08 | -7,83481E-10 |
| 340 | D transversal | 0,002211171 | 1,21233E-05 | 1,97372E-16 | 7,73072E-08 | -1,60875E-10 | 1,43528E-16 | 7,73072E-08 | 2,33006E-10 |
| 340 | G Longitudinal | 0,000453416 | -9,06163E-07 | 2,46972E-16 | 3,45799E-08 | -8,60293E-12 | 1,91535E-16 | 3,45799E-08 | 2,21561E-10 |
| 340 | G Vertical | -1,07109E-11 | 8,73195E-09 | 4,7067E-09 | -4,69578E-15 | -1,82752E-14 | 8,77874E-09 | -4,75248E-15 | 8,35255E-15 |
| 340 | G transversal | -5,76618E-13 | -2,79034E-09 | -3,32562E-08 | 2,44658E-15 | 5,85327E-15 | -3,28319E-08 | 2,48409E-15 | -3,02205E-15 |
| 341 | D Longitudinal | -7,11511E-13 | -8,99533E-09 | 6,91754E-08 | 7,12751E-15 | 1,77218E-14 | 7,35227E-08 | 7,17121E-15 | -8,7726E-15 |
| 341 | D Vertical | -0,000379487 | -5,27751E-05 | -9,91253E-17 | -3,50745E-08 | -1,08829E-09 | -1,24416E-16 | -3,50745E-08 | -1,3931E-09 |
| 341 | D transversal | 0,002211171 | -1,20953E-05 | 1,98634E-16 | 7,73072E-08 | 1,60875E-10 | 2,47088E-16 | 7,73072E-08 | 5,54757E-10 |
| 341 | G Longitudinal | 0,000453416 | 9,22554E-07 | 2,48256E-16 | 3,45799E-08 | 8,60293E-12 | 2,96897E-16 | 3,45799E-08 | 2,38767E-10 |
| 341 | G Vertical | 1,22463E-11 | 8,73191E-09 | -4,70663E-09 | -9,4085E-15 | -1,82782E-14 | -6,34598E-10 | -9,45855E-15 | 7,33754E-15 |
| 341 | G transversal | -5,89962E-14 | 2,79034E-09 | -3,32562E-08 | -2,31615E-15 | -5,85319E-15 | -3,36805E-08 | -2,35389E-15 | 3,05015E-15 |
| 342 | D Longitudinal | 5,84872E-05 | -6,90637E-06 | 4,62933E-08 | 5,31195E-09 | -1,60077E-10 | 4,28693E-08 | 5,31195E-09 | -1,12896E-10 |
| 342 | D Vertical | 0,000321299 | -4,10682E-05 | 2,79892E-08 | 2,79311E-08 | -8,55635E-10 | 2,79888E-08 | 2,79311E-08 | -6,15438E-10 |
| 342 | D transversal | 0,000889634 | -6,08547E-06 | 4,77199E-09 | 4,84681E-08 | -1,43285E-10 | 8,24971E-09 | 4,84681E-08 | 5,79332E-11 |
| 342 | G Longitudinal | 0,000415 | 1,56388E-06 | -1,05451E-09 | 2,7462E-08 | 2,79565E-11 | 3,77912E-10 | 2,7462E-08 | 1,95115E-10 |
| 342 | G Vertical | 8,12766E-05 | 1,26131E-05 | -8,67956E-09 | 3,67713E-09 | 1,61337E-10 | 5,92468E-09 | 3,67713E-09 | 2,23265E-10 |
| 342 | G transversal | 1,9064E-05 | -1,73995E-06 | -2,78289E-08 | 1,32066E-09 | -3,15854E-11 | -2,64242E-08 | 1,32066E-09 | -2,16213E-11 |
| 343 | D Longitudinal | -5,84873E-05 | -6,92255E-06 | 4,62933E-08 | -5,31195E-09 | -1,60052E-10 | 4,97172E-08 | -5,31195E-09 | -2,07234E-10 |
| 343 | D Vertical | -0,000321299 | -4,10897E-05 | 2,79892E-08 | -2,79311E-08 | -8,55625E-10 | 2,79897E-08 | -2,79311E-08 | -1,09582E-09 |
| 343 | D transversal | 0,000889634 | 6,11302E-06 | -4,77194E-09 | 4,84681E-08 | 1,43259E-10 | -1,29421E-09 | 4,84681E-08 | 3,44477E-10 |
| 343 | G Longitudinal | 0,000415 | -1,54714E-06 | 1,05456E-09 | 2,74619E-08 | -2,79807E-11 | 2,48698E-09 | 2,74619E-08 | 1,3917E-10 |
| 343 | G Vertical | 8,12847E-05 | -1,26717E-05 | 8,68068E-09 | 3,67547E-09 | -1,61892E-10 | 2,32853E-08 | 3,67546E-09 | -1,00356E-10 |
| 343 | G transversal | -1,90642E-05 | -1,73313E-06 | -2,78289E-08 | -1,32063E-09 | -3,15863E-11 | -2,92335E-08 | -1,32063E-09 | -4,15422E-11 |
| 344 | D Longitudinal | -5,84872E-05 | 6,91919E-06 | 4,62933E-08 | -5,31196E-09 | 1,60052E-10 | 4,28693E-08 | -5,31196E-09 | 1,12908E-10 |
| 344 | D Vertical | 0,000321299 | -4,10726E-05 | -2,79892E-08 | 2,79311E-08 | -8,55625E-10 | -2,79888E-08 | 2,79311E-08 | -6,15443E-10 |
| 344 | D transversal | 0,000889634 | -6,09869E-06 | -4,77199E-09 | 4,84681E-08 | -1,43259E-10 | -8,24971E-09 | 4,84681E-08 | 5,79205E-11 |
| 344 | G Longitudinal | 0,000415 | 1,55904E-06 | 1,05453E-09 | 2,74619E-08 | 2,79806E-11 | -3,77895E-10 | 2,74619E-08 | 1,95114E-10 |

APOYO 2

| DESPLAZAMIENTOS (metros) | | VIENTO | PESO | CT1 | | | CT2 | | |
|---|---|---|---|---|---|---|---|---|---|
| Nudo | Desplazamiento | | | L | T | V | L | T | V |
| 344 | G Vertical | -8,12847E-05 | -1,26761E-05 | -8,68068E-09 | -3,67547E-09 | -1,61891E-10 | 5,92389E-09 | -3,67547E-09 | -2,23502E-10 |
| 344 | G transversal | -1,90642E-05 | 1,73242E-06 | -2,78289E-08 | -1,32062E-09 | 3,15863E-11 | -2,64242E-08 | -1,32062E-09 | 2,16101E-11 |
| 345 | D Longitudinal | 5,84872E-05 | 6,90973E-06 | 4,62933E-08 | 5,31196E-09 | 1,60077E-10 | 4,97172E-08 | 5,31196E-09 | 2,07221E-10 |
| 345 | D Vertical | -0,000321299 | -4,10853E-05 | -2,79892E-08 | -2,79311E-08 | -8,55635E-10 | -2,79897E-08 | -2,79311E-08 | -1,09582E-09 |
| 345 | D transversal | 0,000889634 | 6,0998E-06 | 4,77194E-09 | 4,84681E-08 | 1,43285E-10 | 1,29421E-09 | 4,84681E-08 | 3,44464E-10 |
| 345 | G Longitudinal | 0,000415 | -1,55197E-06 | -1,05453E-09 | 2,7462E-08 | -2,79565E-11 | -2,48695E-09 | 2,7462E-08 | 1,39184E-10 |
| 345 | G Vertical | -8,12766E-05 | 1,26087E-05 | 8,67956E-09 | -3,67713E-09 | 1,61337E-10 | 2,32839E-08 | -3,67712E-09 | 9,94033E-11 |
| 345 | G transversal | 1,9064E-05 | 1,74066E-06 | -2,78288E-08 | 1,32066E-09 | 3,15854E-11 | -2,92335E-08 | 1,32066E-09 | 4,15685E-11 |
| 346 | D Longitudinal | -4,39346E-13 | -1,05714E-05 | 4,88578E-08 | 9,01437E-17 | 1,70587E-10 | 4,88578E-08 | 8,95938E-17 | 1,70587E-10 |
| 346 | D Vertical | -2,18244E-13 | -4,33021E-05 | -2,84661E-08 | 4,49936E-17 | -8,70299E-10 | -2,84661E-08 | 4,46961E-17 | -8,70299E-10 |
| 346 | D transversal | 0,000868249 | 3,87976E-11 | -2,6308E-14 | 4,65937E-08 | 1,26513E-14 | -3,50351E-09 | 4,65937E-08 | 1,83131E-10 |
| 346 | G Longitudinal | 0,000330646 | 4,90509E-09 | -1,0026E-14 | 2,60599E-08 | 4,81585E-15 | -3,9E-10 | 2,60599E-08 | 2,02204E-10 |
| 346 | G Vertical | 5,89419E-05 | -4,45253E-09 | -2,55779E-14 | 5,21605E-09 | 1,12143E-14 | 3,12848E-09 | 5,21605E-09 | 4,53122E-11 |
| 346 | G transversal | 4,77555E-13 | 1,09774E-06 | -2,76284E-08 | -9,80344E-17 | 3,06951E-11 | -2,76284E-08 | -9,76567E-17 | 3,06951E-11 |
| 347 | D Longitudinal | -7,50941E-05 | -8,74452E-06 | 2,76886E-08 | -6,48652E-09 | -1,93023E-10 | 3,02853E-08 | -6,48652E-09 | -2,48386E-10 |
| 347 | D Vertical | -0,000248719 | -3,13908E-05 | 2,13568E-08 | -2,13145E-08 | -6,44748E-10 | 2,13353E-08 | -2,13145E-08 | -8,25625E-10 |
| 347 | D transversal | 0,000602272 | 7,33819E-06 | -5,46608E-09 | 3,02024E-08 | 1,62817E-10 | -2,83441E-09 | 3,02024E-08 | 2,59743E-10 |
| 347 | G Longitudinal | 0,000342129 | -2,48026E-06 | 1,41142E-09 | 2,07664E-08 | -3,81708E-11 | 2,84212E-09 | 2,07664E-08 | 7,08467E-11 |
| 347 | G Vertical | 8,51963E-05 | -1,2841E-05 | 9,13231E-09 | 4,01672E-09 | -1,64213E-10 | 2,36421E-08 | 4,01671E-09 | -1,00018E-10 |
| 347 | G transversal | -2,65802E-05 | -2,55532E-06 | -2,13868E-08 | -1,85721E-09 | -4,64246E-11 | -2,27931E-08 | -1,85721E-09 | -6,04168E-11 |
| 348 | D Longitudinal | -7,50941E-05 | 8,74058E-06 | 2,76886E-08 | -6,48653E-09 | 1,93023E-10 | 2,50918E-08 | -6,48653E-09 | 1,37684E-10 |
| 348 | D Vertical | 0,000248719 | -3,1378E-05 | -2,13568E-08 | 2,13145E-08 | -6,44748E-10 | -2,13782E-08 | 2,13145E-08 | -4,63882E-10 |
| 348 | D transversal | 0,000602272 | -7,33129E-06 | -5,46612E-09 | 3,02024E-08 | -1,62817E-10 | -8,09779E-09 | 3,02024E-08 | -6,59173E-11 |
| 348 | G Longitudinal | 0,000342129 | 2,48802E-06 | 1,4114E-09 | 2,07664E-08 | 3,81707E-11 | -1,93054E-11 | 2,07664E-08 | 1,47175E-10 |
| 348 | G Vertical | -8,51963E-05 | -1,28455E-05 | -9,13231E-09 | -4,01672E-09 | -1,64211E-10 | 5,37749E-09 | -4,01673E-09 | -2,28482E-10 |
| 348 | G transversal | -2,65802E-05 | 2,55432E-06 | -2,13868E-08 | -1,8572E-09 | 4,64247E-11 | -1,99805E-08 | -1,8572E-09 | 3,24154E-11 |
| 349 | D Longitudinal | 7,50941E-05 | 8,73604E-06 | 2,76886E-08 | 6,48653E-09 | 1,93039E-10 | 3,02853E-08 | 6,48653E-09 | 2,48378E-10 |
| 349 | D Vertical | -0,000248719 | -3,13873E-05 | -2,13568E-08 | -2,13145E-08 | -6,44755E-10 | -2,13353E-08 | -2,13145E-08 | -8,25621E-10 |
| 349 | D transversal | 0,000602272 | 7,32926E-06 | 5,46608E-09 | 3,02024E-08 | 1,62834E-10 | 2,83441E-09 | 3,02024E-08 | 2,59734E-10 |
| 349 | G Longitudinal | 0,000342129 | -2,48405E-06 | -1,41139E-09 | 2,07664E-08 | -3,8149E-11 | -2,84209E-09 | 2,07664E-08 | 7,08617E-11 |
| 349 | G Vertical | -8,51882E-05 | 1,27784E-05 | 9,1312E-09 | -4,01837E-09 | 1,63661E-10 | 2,36407E-08 | -4,01836E-09 | 9,90717E-11 |
| 349 | G transversal | 2,65801E-05 | 2,56186E-06 | -2,13868E-08 | 1,85724E-09 | 4,64261E-11 | -2,27931E-08 | 1,85724E-09 | 6,04421E-11 |
| 350 | D Longitudinal | -4,18786E-13 | -3,97597E-09 | 2,46478E-08 | 3,07853E-15 | 7,62449E-15 | 2,72252E-08 | 3,08402E-15 | -3,69627E-15 |
| 350 | D Vertical | -0,00023647 | -3,39332E-05 | 5,01335E-17 | -2,18484E-08 | -6,607E-10 | 6,36268E-17 | -2,18484E-08 | -8,44975E-10 |
| 350 | D transversal | 0,001586723 | -1,34186E-05 | 1,8468E-17 | 3,19553E-08 | 1,49667E-10 | 2,76893E-17 | 3,19553E-08 | 2,63861E-10 |
| 350 | G Longitudinal | 0,000301604 | -9,49774E-07 | -2,85882E-17 | 2,04761E-08 | -2,48108E-11 | -2,89376E-17 | 2,04761E-08 | 8,12716E-11 |
| 350 | G Vertical | 9,79791E-12 | 4,04504E-09 | -4,71211E-09 | -5,1623E-15 | -8,64743E-15 | -2,37047E-09 | -5,17579E-15 | 2,83264E-15 |
| 350 | G transversal | -3,23402E-14 | 1,8488E-09 | -1,95441E-08 | -1,50484E-15 | -3,80678E-15 | -1,9928E-08 | -1,52525E-15 | 1,96346E-15 |
| 351 | D Longitudinal | -5,19107E-13 | -1,37654E-05 | 1,65893E-08 | 1,06546E-16 | 1,60292E-10 | 1,65893E-08 | 1,05893E-16 | 1,60292E-10 |
| 351 | D Vertical | -1,9749E-13 | -2,18853E-05 | -1,33731E-08 | 4,04824E-17 | -4,00391E-10 | -1,33731E-08 | 4,02254E-17 | -4,00391E-10 |
| 351 | D transversal | 0,000325797 | -2,16386E-09 | -9,47652E-15 | 1,34125E-08 | 4,55543E-15 | -1,76802E-09 | 1,34125E-08 | 7,00096E-12 |
| 351 | G Longitudinal | 0,000190911 | 1,86445E-09 | -5,8309E-15 | 1,33796E-08 | 2,82085E-15 | -3,89269E-10 | 1,33796E-08 | 9,09226E-11 |
| 351 | G Vertical | 5,58147E-05 | -1,03273E-09 | -1,0515E-14 | 4,68639E-09 | 3,93381E-15 | 1,55285E-09 | 4,68639E-09 | 3,8931E-11 |
| 351 | G transversal | -9,70724E-13 | -2,44501E-06 | -1,40989E-08 | 1,99201E-16 | -3,93603E-11 | -1,40989E-08 | 1,98188E-16 | -3,93603E-11 |

APOYO 2

| DESPLAZAMIENTOS (metros) | | VIENTO | PESO | CT1 | | | CT2 | | |
|---|---|---|---|---|---|---|---|---|---|
| Nudo | Desplazamiento | | | L | T | V | L | T | V |
| 352 | D Longitudinal | -8,07968E-05 | -9,42541E-06 | 1,29355E-08 | -6,7525E-09 | -1,99182E-10 | 1,46104E-08 | -6,7525E-09 | -2,55305E-10 |
| 352 | D Vertical | -0,000161649 | -2,03127E-05 | 1,38668E-08 | -1,37528E-08 | -4,11139E-10 | 1,38673E-08 | -1,37528E-08 | -5,27026E-10 |
| 352 | D transversal | 0,000347612 | 8,43326E-06 | -5,88817E-09 | 1,5541E-08 | 1,74114E-10 | -4,19751E-09 | 1,5541E-08 | 2,03745E-10 |
| 352 | G Longitudinal | 0,000271461 | -6,16777E-07 | -6,86873E-11 | 1,42153E-08 | 5,78247E-12 | 1,36007E-09 | 1,42153E-08 | 5,90874E-11 |
| 352 | G Vertical | 8,96652E-05 | -1,30198E-05 | 9,60765E-09 | 4,39797E-09 | -1,66457E-10 | 2,40444E-08 | 4,39796E-09 | -9,92898E-11 |
| 352 | G transversal | 1,36975E-05 | 2,21388E-06 | -1,37069E-08 | 1,36665E-09 | 4,79894E-11 | -1,51169E-08 | 1,36665E-09 | 5,97376E-11 |
| 353 | D Longitudinal | -8,07968E-05 | 9,42142E-06 | 1,29355E-08 | -6,75251E-09 | 1,99182E-10 | 1,12606E-08 | -6,75251E-09 | 1,43071E-10 |
| 353 | D Vertical | 0,000161649 | -2,03044E-05 | -1,38668E-08 | 1,37528E-08 | -4,11139E-10 | -1,38662E-08 | 1,37528E-08 | -2,9526E-10 |
| 353 | D transversal | 0,000347612 | -8,43115E-06 | -5,88819E-09 | 1,5541E-08 | -1,74114E-10 | -7,57885E-09 | 1,5541E-08 | -1,44497E-10 |
| 353 | G Longitudinal | 0,000271461 | 6,20573E-07 | -6,87036E-11 | 1,42153E-08 | -5,7825E-12 | -1,49746E-09 | 1,42153E-08 | 4,75123E-11 |
| 353 | G Vertical | -8,96652E-05 | -1,30246E-05 | -9,60765E-09 | -4,39797E-09 | -1,66455E-10 | 4,82903E-09 | -4,39797E-09 | -2,33697E-10 |
| 353 | G transversal | 1,36975E-05 | -2,21305E-06 | -1,37069E-08 | 1,36666E-09 | -4,79894E-11 | -1,22969E-08 | 1,36666E-09 | -3,62541E-11 |
| 354 | D Longitudinal | 8,07968E-05 | 9,4208E-06 | 1,29355E-08 | 6,75251E-09 | 1,9919E-10 | 1,46104E-08 | 6,75251E-09 | 2,553E-10 |
| 354 | D Vertical | -0,000161649 | -2,03103E-05 | -1,38668E-08 | -1,37528E-08 | -4,11144E-10 | -1,38673E-08 | -1,37528E-08 | -5,27023E-10 |
| 354 | D transversal | 0,000347612 | 8,42818E-06 | 5,88817E-09 | 1,5541E-08 | 1,74123E-10 | 4,19751E-09 | 1,5541E-08 | 2,0374E-10 |
| 354 | G Longitudinal | 0,000271461 | -6,19467E-07 | 6,87109E-11 | 1,42153E-08 | 5,80202E-12 | -1,36004E-09 | 1,42153E-08 | 5,91037E-11 |
| 354 | G Vertical | -8,96573E-05 | 1,29576E-05 | 9,60655E-09 | -4,39961E-09 | 1,65908E-10 | 2,4043E-08 | -4,3996E-09 | 9,83488E-11 |
| 354 | G transversal | -1,36977E-05 | -2,20863E-06 | -1,37069E-08 | -1,36662E-09 | -4,79852E-11 | -1,51169E-08 | -1,36662E-09 | -5,97135E-11 |
| 355 | D Longitudinal | -4,9802E-05 | -5,64656E-06 | 4,96056E-09 | -4,11501E-09 | -1,20904E-10 | 5,80652E-09 | -4,11501E-09 | -1,54801E-10 |
| 355 | D Vertical | -8,43515E-05 | -1,03507E-05 | 7,02546E-09 | -7,01917E-09 | -2,06895E-10 | 7,00552E-09 | -7,01917E-09 | -2,64872E-10 |
| 355 | D transversal | 0,000160397 | 6,60711E-06 | -4,32126E-09 | 6,55472E-09 | 1,27232E-10 | -3,46989E-09 | 6,55472E-09 | 1,31349E-10 |
| 355 | G Longitudinal | 0,000225361 | 5,16684E-06 | -3,6206E-09 | 9,7422E-09 | 1,09902E-10 | -2,19564E-09 | 9,7422E-09 | 1,26011E-10 |
| 355 | G Vertical | 9,38607E-05 | -1,32587E-05 | 1,01297E-08 | 4,7526E-09 | -1,69546E-10 | 2,45309E-08 | 4,75259E-09 | -9,95725E-11 |
| 355 | G transversal | 5,34875E-05 | 6,81369E-06 | -7,99356E-09 | 4,51962E-09 | 1,39915E-10 | -9,40842E-09 | 4,51962E-09 | 1,76699E-10 |
| 356 | D Longitudinal | -9,48901E-14 | -7,60768E-10 | 1,90868E-09 | 5,4678E-16 | 1,35504E-15 | 2,77008E-09 | 5,41149E-16 | -6,23581E-16 |
| 356 | D Vertical | 1,70146E-06 | -4,67029E-06 | -1,06203E-17 | -1,77078E-09 | -5,50512E-11 | -1,31431E-17 | -1,77078E-09 | -7,05894E-11 |
| 356 | D transversal | 0,001155156 | -1,78732E-05 | 3,50641E-17 | 7,22677E-09 | 6,90764E-11 | 4,35835E-17 | 7,22677E-09 | 7,87312E-11 |
| 356 | G Longitudinal | 0,000190077 | 6,06291E-06 | 1,15365E-16 | 1,00569E-08 | 1,09096E-10 | 1,444E-16 | 1,00569E-08 | 1,27204E-10 |
| 356 | G Vertical | 8,12366E-12 | 1,0694E-09 | -2,61453E-09 | -2,51732E-15 | -2,7153E-15 | -1,84426E-09 | -2,51869E-15 | 1,06538E-16 |
| 356 | G transversal | -9,27774E-14 | 8,2208E-10 | -6,90206E-09 | -6,26555E-16 | -1,62587E-15 | -7,23908E-09 | -6,31796E-16 | 8,34694E-16 |
| 357 | D Longitudinal | -4,9802E-05 | 5,64414E-06 | 4,96057E-09 | -4,11501E-09 | 1,20904E-10 | 4,1146E-09 | -4,11501E-09 | 8,70133E-11 |
| 357 | D Vertical | 8,43515E-05 | -1,03466E-05 | -7,02546E-09 | 7,01917E-09 | -2,06895E-10 | -7,0454E-09 | 7,01917E-09 | -1,48923E-10 |
| 357 | D transversal | 0,000160397 | -6,60682E-06 | -4,32127E-09 | 6,55472E-09 | -1,27232E-10 | -5,17264E-09 | 6,55472E-09 | -1,23122E-10 |
| 357 | G Longitudinal | 0,000225361 | -5,16569E-06 | -3,62061E-09 | 9,7422E-09 | -1,09902E-10 | -5,04557E-09 | 9,7422E-09 | -9,37996E-11 |
| 357 | G Vertical | -9,38607E-05 | -1,32637E-05 | -1,01297E-08 | -4,7526E-09 | -1,69544E-10 | 4,27144E-09 | -4,7526E-09 | -2,39592E-10 |
| 357 | G transversal | 5,34875E-05 | -6,81107E-06 | -7,99357E-09 | 4,51963E-09 | -1,39915E-10 | -6,5787E-09 | 4,51963E-09 | -1,03139E-10 |
| 358 | D Longitudinal | 4,9802E-05 | 5,64451E-06 | 4,96056E-09 | 4,11501E-09 | 1,20908E-10 | 5,80652E-09 | 4,11501E-09 | 1,548E-10 |
| 358 | D Vertical | -8,43515E-05 | -1,03495E-05 | -7,02546E-09 | -7,01917E-09 | -2,06898E-10 | -7,00552E-09 | -7,01917E-09 | -2,64871E-10 |
| 358 | D transversal | 0,000160397 | 6,60476E-06 | 4,32126E-09 | 6,55472E-09 | 1,27237E-10 | 3,46989E-09 | 6,55472E-09 | 1,31347E-10 |
| 358 | G Longitudinal | 0,000225361 | 5,16495E-06 | 3,62062E-09 | 9,74224E-09 | 1,0992E-10 | 2,19567E-09 | 9,74224E-09 | 1,26029E-10 |
| 358 | G Vertical | -9,38527E-05 | 1,31966E-05 | 1,01286E-08 | -4,75423E-09 | 1,68999E-10 | 2,45295E-08 | -4,75423E-09 | 9,86337E-11 |
| 358 | G transversal | -5,34876E-05 | -6,80943E-06 | -7,99353E-09 | -4,51959E-09 | -1,39908E-10 | -9,40839E-09 | -4,51959E-09 | -1,76676E-10 |
| 359 | D Longitudinal | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 359 | D Vertical | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |

APOYO 2

| DESPLAZAMIENTOS (metros) | | VIENTO | PESO | CT1 | | | CT2 | | |
|---|---|---|---|---|---|---|---|---|---|
| Nudo | Desplazamiento | | | L | T | V | L | T | V |
| 359 | D transversal | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 359 | G Longitudinal | 0,000199079 | 9,39072E-06 | -5,95947E-09 | 7,74482E-09 | 1,78144E-10 | -4,53791E-09 | 7,74482E-09 | 1,77908E-10 |
| 359 | G Vertical | 9,45361E-05 | -1,33255E-05 | 1,02279E-08 | 4,81228E-09 | -1,70485E-10 | 2,4611E-08 | 4,81227E-09 | -1,00065E-10 |
| 359 | G transversal | 6,33262E-05 | 7,57713E-06 | -5,69361E-09 | 5,28602E-09 | 1,62081E-10 | -7,11154E-09 | 5,28602E-09 | 2,04867E-10 |
| 360 | D Longitudinal | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 360 | D Vertical | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 360 | D transversal | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 360 | G Longitudinal | 0,000199079 | -9,39074E-06 | -5,95948E-09 | 7,74482E-09 | -1,78144E-10 | -7,38104E-09 | 7,74482E-09 | -1,78387E-10 |
| 360 | G Vertical | -9,45361E-05 | -1,33305E-05 | -1,02279E-08 | -4,81228E-09 | -1,70483E-10 | 4,15525E-09 | -4,81228E-09 | -2,40977E-10 |
| 360 | G transversal | 6,33262E-05 | -7,57409E-06 | -5,69362E-09 | 5,28602E-09 | -1,62081E-10 | -4,27569E-09 | 5,28602E-09 | -1,19304E-10 |
| 361 | D Longitudinal | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 361 | D Vertical | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 361 | D transversal | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 361 | G Longitudinal | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 361 | G Vertical | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 361 | G transversal | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 362 | D Longitudinal | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 362 | D Vertical | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 362 | D transversal | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 362 | G Longitudinal | 0,000199079 | 9,38921E-06 | 5,95949E-09 | 7,74485E-09 | 1,78162E-10 | 4,53794E-09 | 7,74485E-09 | 1,77926E-10 |
| 362 | G Vertical | -9,45282E-05 | 1,32634E-05 | 1,02268E-08 | -4,81391E-09 | 1,69938E-10 | 2,46097E-08 | -4,81391E-09 | 9,91276E-11 |
| 362 | G transversal | -6,33264E-05 | -7,57327E-06 | -5,69359E-09 | -5,28598E-09 | -1,62074E-10 | -7,11151E-09 | -5,28598E-09 | -2,04845E-10 |
| 363 | D Longitudinal | -4,39352E-13 | 1,05714E-05 | 4,88578E-08 | 9,02278E-17 | -1,70587E-10 | 4,88578E-08 | 9,06017E-17 | -1,70587E-10 |
| 363 | D Vertical | 2,18227E-13 | -4,33021E-05 | 2,84661E-08 | -4,50322E-17 | -8,70299E-10 | 2,84661E-08 | -4,51551E-17 | -8,70299E-10 |
| 363 | D transversal | 0,000868249 | 1,30033E-08 | 2,63176E-14 | 4,65937E-08 | -1,26513E-14 | 3,50351E-09 | 4,65937E-08 | 1,83143E-10 |
| 363 | G Longitudinal | 0,000330646 | 9,49497E-09 | 1,00799E-14 | 2,60599E-08 | -4,81587E-15 | 3,9E-10 | 2,60599E-08 | 2,02209E-10 |
| 363 | G Vertical | -5,89419E-05 | -7,67988E-09 | -2,33658E-14 | -5,21604E-09 | 1,12135E-14 | 3,12848E-09 | -5,21604E-09 | -4,5325E-11 |
| 363 | G transversal | 4,77557E-13 | -1,09774E-06 | -2,76284E-08 | -9,80822E-17 | -3,06951E-11 | -2,76284E-08 | -9,8228E-17 | -3,06951E-11 |
| 364 | D Longitudinal | 7,50941E-05 | -8,73209E-06 | 2,76886E-08 | 6,48652E-09 | -1,93039E-10 | 2,50918E-08 | 6,48652E-09 | -1,37676E-10 |
| 364 | D Vertical | 0,000248719 | -3,13745E-05 | 2,13568E-08 | 2,13145E-08 | -6,44755E-10 | 2,13782E-08 | 2,13145E-08 | -4,63878E-10 |
| 364 | D transversal | 0,000602272 | -7,32236E-06 | 5,46612E-09 | 3,02024E-08 | -1,62834E-10 | 8,09779E-09 | 3,02024E-08 | -6,59089E-11 |
| 364 | G Longitudinal | 0,000342129 | 2,49181E-06 | -1,41137E-09 | 2,07664E-08 | 3,8149E-11 | 1,93221E-11 | 2,07664E-08 | 1,47175E-10 |
| 364 | G Vertical | 8,51882E-05 | 1,2783E-05 | -9,1312E-09 | 4,01837E-09 | 1,63662E-10 | 5,37828E-09 | 4,01837E-09 | 2,28246E-10 |
| 364 | G transversal | 2,65801E-05 | -2,56086E-06 | -2,13868E-08 | 1,85724E-09 | -4,6426E-11 | -1,99805E-08 | 1,85724E-09 | -3,24256E-11 |
| 365 | D Longitudinal | 2,48384E-13 | 3,97597E-09 | 2,46479E-08 | -3,04351E-15 | -7,62447E-15 | 2,20705E-08 | -3,04901E-15 | 3,70381E-15 |
| 365 | D Vertical | 0,00023647 | -3,39201E-05 | -4,9783E-17 | 2,18484E-08 | -6,607E-10 | -3,48939E-17 | 2,18484E-08 | -4,76426E-10 |
| 365 | D transversal | 0,001586723 | 1,34267E-05 | 1,82348E-17 | 3,19553E-08 | -1,49667E-10 | 8,53705E-18 | 3,19553E-08 | -3,54729E-11 |
| 365 | G Longitudinal | 0,000301604 | 9,57329E-07 | -2,85697E-17 | 2,04761E-08 | 2,48108E-11 | -2,7414E-17 | 2,04761E-08 | 1,30893E-10 |
| 365 | G Vertical | -9,09574E-12 | 4,04506E-09 | 4,71215E-09 | -1,28359E-15 | -8,64495E-15 | 7,05379E-09 | -1,30254E-15 | 3,66802E-15 |
| 365 | G transversal | -3,68548E-13 | -1,8488E-09 | -1,95441E-08 | 1,58711E-15 | 3,80683E-15 | -1,91602E-08 | 1,60737E-15 | -1,94574E-15 |
| 366 | D Longitudinal | -5,19117E-13 | 1,37654E-05 | 1,65893E-08 | 1,06639E-16 | -1,60292E-10 | 1,65893E-08 | 1,07017E-16 | -1,60292E-10 |
| 366 | D Vertical | 1,97483E-13 | -2,18853E-05 | 1,33731E-08 | -4,05169E-17 | -4,00391E-10 | 1,33731E-08 | -4,06372E-17 | -4,00392E-10 |
| 366 | D transversal | 0,000325797 | 2,66259E-09 | 9,4474E-15 | 1,34125E-08 | -4,55541E-15 | 1,76802E-09 | 1,34125E-08 | 7,00539E-12 |
| 366 | G Longitudinal | 0,000190911 | 4,61068E-09 | 5,89067E-15 | 1,33796E-08 | -2,82088E-15 | 3,89269E-10 | 1,33796E-08 | 9,09254E-11 |

APOYO 2

| DESPLAZAMIENTOS (metros) | | VIENTO | PESO | CT1 | | | CT2 | | |
|---|---|---|---|---|---|---|---|---|---|
| Nudo | Desplazamiento | | | L | T | V | L | T | V |
| 366 | G Vertical | -5,58147E-05 | -3,80539E-09 | -8,20241E-15 | -4,68638E-09 | 3,93293E-15 | 1,55285E-09 | -4,68638E-09 | -3,89366E-11 |
| 366 | G transversal | -9,70731E-13 | 2,44501E-06 | -1,40989E-08 | 1,99332E-16 | 3,93603E-11 | -1,40989E-08 | 1,99758E-16 | 3,93604E-11 |
| 367 | D Longitudinal | 8,07968E-05 | -9,4168E-06 | 1,29355E-08 | 6,7525E-09 | -1,9919E-10 | 1,12606E-08 | 6,7525E-09 | -1,43067E-10 |
| 367 | D Vertical | 0,000161649 | -2,03021E-05 | 1,38668E-08 | 1,37528E-08 | -4,11144E-10 | 1,38662E-08 | 1,37528E-08 | -2,95258E-10 |
| 367 | D transversal | 0,000347612 | -8,42608E-06 | 5,88819E-09 | 1,5541E-08 | -1,74123E-10 | 7,57885E-09 | 1,5541E-08 | -1,44492E-10 |
| 367 | G Longitudinal | 0,000271461 | 6,23264E-07 | 6,87271E-11 | 1,42153E-08 | -5,80201E-12 | 1,49748E-09 | 1,42153E-08 | 4,75112E-11 |
| 367 | G Vertical | 8,96573E-05 | 1,29624E-05 | -9,60655E-09 | 4,39961E-09 | 1,65909E-10 | 4,82981E-09 | 4,39961E-09 | 2,33463E-10 |
| 367 | G transversal | -1,36977E-05 | 2,2078E-06 | -1,37069E-08 | -1,36662E-09 | 4,79852E-11 | -1,22969E-08 | -1,36662E-09 | 3,62454E-11 |
| 368 | D Longitudinal | 2,29546E-14 | 7,60768E-10 | 1,90869E-09 | -5,32009E-16 | -1,35503E-15 | 1,04729E-09 | -5,26396E-16 | 6,26763E-16 |
| 368 | D Vertical | -1,70146E-06 | -4,66919E-06 | 1,05546E-17 | 1,77078E-09 | -5,50512E-11 | 7,74142E-18 | 1,77078E-09 | -3,95129E-11 |
| 368 | D transversal | 0,001155156 | 1,78739E-05 | 3,48422E-17 | 7,22677E-09 | -6,90764E-11 | 2,5366E-17 | 7,22677E-09 | -5,94216E-11 |
| 368 | G Longitudinal | 0,000190077 | -6,06162E-06 | 1,1461E-16 | 1,00569E-08 | -1,09096E-10 | 8,24148E-17 | 1,00569E-08 | -9,09888E-11 |
| 368 | G Vertical | -7,93414E-12 | 1,06942E-09 | 2,61454E-09 | 7,79057E-16 | -2,7132E-15 | 3,38481E-09 | 7,73027E-16 | 8,16498E-16 |
| 368 | G transversal | -2,36532E-13 | -8,2208E-10 | -6,90207E-09 | 6,94146E-16 | 1,62591E-15 | -6,56505E-09 | 6,9928E-16 | -8,20137E-16 |
| 369 | D Longitudinal | 4,9802E-05 | -5,64209E-06 | 4,96057E-09 | 4,11501E-09 | -1,20908E-10 | 4,1146E-09 | 4,11501E-09 | -8,70115E-11 |
| 369 | D Vertical | 8,43515E-05 | -1,03454E-05 | 7,02546E-09 | 7,01917E-09 | -2,06898E-10 | 7,0454E-09 | 7,01917E-09 | -1,48921E-10 |
| 369 | D transversal | 0,000160397 | -6,60447E-06 | 4,32127E-09 | 6,55472E-09 | -1,27237E-10 | 5,17264E-09 | 6,55472E-09 | -1,2312E-10 |
| 369 | G Longitudinal | 0,000225361 | -5,16381E-06 | 3,62064E-09 | 9,74224E-09 | -1,0992E-10 | 5,04559E-09 | 9,74224E-09 | -9,38017E-11 |
| 369 | G Vertical | 9,38527E-05 | 1,32016E-05 | -1,01286E-08 | 4,75423E-09 | 1,68999E-10 | 4,27222E-09 | 4,75423E-09 | 2,39359E-10 |
| 369 | G transversal | -5,34876E-05 | 6,80682E-06 | -7,99354E-09 | -4,51959E-09 | 1,39908E-10 | -6,57868E-09 | -4,51959E-09 | 1,03132E-10 |
| 370 | D Longitudinal | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 370 | D Vertical | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 370 | D transversal | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 370 | G Longitudinal | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 370 | G Vertical | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 370 | G transversal | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 371 | D Longitudinal | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 371 | D Vertical | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 371 | D transversal | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 371 | G Longitudinal | 0,000199079 | -9,38922E-06 | 5,95951E-09 | 7,74485E-09 | -1,78162E-10 | 7,38106E-09 | 7,74485E-09 | -1,78389E-10 |
| 371 | G Vertical | 9,45282E-05 | 1,32685E-05 | -1,02268E-08 | 4,81391E-09 | 1,69939E-10 | 4,15603E-09 | 4,81391E-09 | 2,40743E-10 |
| 371 | G transversal | -6,33264E-05 | 7,57023E-06 | -5,6936E-09 | -5,28598E-09 | 1,62074E-10 | -4,27567E-09 | -5,28598E-09 | 1,19296E-10 |

| DESPLAZAMIENTOS (metros) | | C1 | | | C2 | | | C3 | | |
|---|---|---|---|---|---|---|---|---|---|---|
| Nudo | Desplazamiento | L | T | V | L | T | V | L | T | V |
| 1 | D Longitudinal | 8,10101E-06 | 7,2411E-12 | 1,59357E-10 | 5,90752E-06 | -1,89558E-12 | -3,35093E-12 | 4,21125E-06 | -1,81064E-12 | -4,13075E-12 |
| 1 | D Vertical | 2,36257E-08 | 2,33655E-08 | -3,10261E-08 | 1,40071E-08 | 1,43104E-08 | -2,09218E-08 | 8,78421E-09 | 8,91389E-09 | -1,45136E-08 |
| 1 | D transversal | -4,57246E-08 | 8,06547E-06 | -1,76332E-06 | -3,7024E-08 | 5,88802E-06 | -1,4355E-06 | -2,89125E-08 | 4,19793E-06 | -1,09278E-06 |
| 1 | G Longitudinal | 1,06007E-08 | 3,86441E-07 | -1,52334E-07 | -1,52155E-09 | 2,36744E-07 | -8,93755E-08 | 8,39037E-11 | 1,47463E-07 | -5,32266E-08 |
| 1 | G Vertical | -7,42168E-07 | -7,74529E-09 | -4,10536E-08 | -6,1989E-07 | -1,37611E-10 | -1,58723E-09 | -4,81884E-07 | -1,04981E-11 | -3,83188E-11 |
| 1 | G transversal | -3,94878E-07 | -1,25328E-09 | -6,66208E-09 | -2,33151E-07 | -2,01554E-11 | -2,48141E-10 | -1,46409E-07 | -6,69168E-13 | -3,78573E-12 |
| 2 | D Longitudinal | 8,00981E-06 | -2,91603E-12 | -1,12564E-10 | 5,83344E-06 | -2,40552E-12 | -5,03961E-12 | 4,1534E-06 | -2,32858E-12 | -5,31448E-12 |
| 2 | D Vertical | 2,24747E-08 | -2,31536E-08 | -1,34977E-08 | 1,41697E-08 | -1,41014E-08 | -1,02266E-08 | 8,77568E-09 | -8,78181E-09 | -8,12692E-09 |
| 2 | D transversal | -4,58349E-08 | 8,06547E-06 | -1,76332E-06 | -3,70082E-08 | 5,88802E-06 | -1,4355E-06 | -2,89133E-08 | 4,19793E-06 | -1,09278E-06 |
| 2 | G Longitudinal | 1,09537E-08 | 3,87721E-07 | -1,45919E-07 | -1,38342E-09 | 2,36774E-07 | -8,8922E-08 | 8,39134E-11 | 1,47464E-07 | -5,32216E-08 |
| 2 | G Vertical | -7,25301E-07 | 3,84165E-10 | -1,18639E-11 | -6,21238E-07 | 5,13394E-11 | 1,28144E-09 | -4,81768E-07 | -5,3564E-12 | -6,73293E-12 |
| 2 | G transversal | -3,75334E-07 | -4,21551E-11 | 1,75321E-10 | -2,36319E-07 | -8,87229E-12 | -2,02925E-10 | -1,46256E-07 | 4,7815E-13 | 2,19417E-13 |
| 3 | D Longitudinal | 8,05543E-06 | 2,25084E-12 | 2,46115E-11 | 5,87048E-06 | -2,15052E-12 | -4,18326E-12 | 4,18233E-06 | -2,06962E-12 | -4,72262E-12 |
| 3 | D Vertical | -6,10645E-11 | 1,05328E-10 | -2,22654E-08 | 1,06941E-11 | 1,04518E-10 | -1,55741E-08 | -1,20335E-13 | 6,60583E-11 | -1,13202E-08 |
| 3 | D transversal | -1,09083E-10 | 8,06548E-06 | -1,76318E-06 | 1,43539E-11 | 5,88802E-06 | -1,4355E-06 | 9,8869E-12 | 4,19793E-06 | -1,09278E-06 |
| 3 | G Longitudinal | 5,15485E-10 | 3,87622E-07 | -1,46523E-07 | -1,97451E-11 | 2,36765E-07 | -8,91275E-08 | 2,00082E-12 | 1,47464E-07 | -5,32221E-08 |
| 3 | G Vertical | -7,60723E-07 | -8,60896E-11 | -2,28173E-09 | -6,1725E-07 | -4,22015E-12 | -1,40684E-11 | -4,82042E-07 | -4,31676E-12 | -9,86616E-12 |
| 3 | G transversal | -3,85186E-07 | -9,95373E-12 | -5,80815E-11 | -2,3463E-07 | 4,57156E-13 | 8,32985E-13 | -1,46334E-07 | 3,09375E-13 | 7,07901E-13 |
| 4 | D Longitudinal | 7,80678E-06 | -2,94916E-11 | -7,70096E-10 | 5,67008E-06 | -3,47094E-12 | -8,86108E-12 | 4,02565E-06 | -3,47279E-12 | -7,92908E-12 |
| 4 | D Vertical | -7,09499E-11 | -1,25875E-07 | 2,53376E-08 | -7,02141E-12 | -7,68442E-08 | 1,33922E-08 | 5,11292E-13 | -4,78598E-08 | 5,97697E-09 |
| 4 | D transversal | -9,98844E-11 | 8,06548E-06 | -1,76318E-06 | 1,26217E-11 | 5,88802E-06 | -1,4355E-06 | 9,98796E-12 | 4,19793E-06 | -1,09278E-06 |
| 4 | G Longitudinal | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 4 | G Vertical | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 4 | G transversal | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 5 | D Longitudinal | 8,10098E-06 | 7,29701E-12 | 1,59551E-10 | 5,90753E-06 | -1,8925E-12 | -3,32956E-12 | 4,21125E-06 | -1,81059E-12 | -4,13047E-12 |
| 5 | D Vertical | -2,36864E-08 | 2,33609E-08 | -3,10814E-08 | -1,3988E-08 | 1,43105E-08 | -2,09218E-08 | -8,78421E-09 | 8,91393E-09 | -1,45135E-08 |
| 5 | D transversal | 4,55381E-08 | 8,06548E-06 | -1,76305E-06 | 3,70486E-08 | 5,88802E-06 | -1,43549E-06 | 2,89324E-08 | 4,19793E-06 | -1,09278E-06 |
| 5 | G Longitudinal | -9,83314E-09 | 3,86309E-07 | -1,54447E-07 | 1,60064E-09 | 2,36744E-07 | -8,93866E-08 | -8,6173E-11 | 1,47463E-07 | -5,32266E-08 |
| 5 | G Vertical | -7,4154E-07 | 8,17266E-09 | 4,65604E-08 | -6,20533E-07 | 1,31162E-10 | 1,62582E-09 | -4,81849E-07 | 1,95892E-12 | 1,88605E-11 |
| 5 | G transversal | -3,9527E-07 | 1,25925E-09 | 7,1593E-09 | -2,33174E-07 | 2,23225E-11 | 2,59224E-10 | -1,46407E-07 | 1,29678E-12 | 5,24032E-12 |
| 6 | D Longitudinal | 8,00974E-06 | -3,04205E-12 | -1,14351E-10 | 5,83345E-06 | -2,40189E-12 | -5,02504E-12 | 4,1534E-06 | -2,32861E-12 | -5,31447E-12 |
| 6 | D Vertical | -2,26583E-08 | -2,31514E-08 | -1,34566E-08 | -1,41459E-08 | -1,41014E-08 | -1,02264E-08 | -8,77616E-09 | -8,78177E-09 | -8,12684E-09 |
| 6 | D transversal | 4,5619E-08 | 8,06548E-06 | -1,76304E-06 | 3,70359E-08 | 5,88802E-06 | -1,43549E-06 | 2,89331E-08 | 4,19793E-06 | -1,09278E-06 |
| 6 | G Longitudinal | -9,50318E-09 | 3,8764E-07 | -1,4772E-07 | 1,33632E-09 | 2,36774E-07 | -8,89319E-08 | -7,88074E-11 | 1,47464E-07 | -5,32216E-08 |
| 6 | G Vertical | -7,34998E-07 | -2,22872E-10 | 4,39509E-09 | -6,20109E-07 | -5,96385E-11 | -1,24826E-09 | -4,81832E-07 | -3,25272E-12 | -1,29072E-11 |
| 6 | G transversal | -3,74201E-07 | 5,36958E-11 | -5,26028E-10 | -2,36432E-07 | 8,67376E-12 | 1,96508E-10 | -1,4625E-07 | 1,45895E-13 | 1,19433E-12 |
| 7 | D Longitudinal | 8,06774E-06 | 3,87894E-12 | 1,39265E-10 | 5,89132E-06 | -1,70287E-12 | -3,00023E-12 | 4,20284E-06 | -1,69156E-12 | -3,8574E-12 |
| 7 | D Vertical | 3,13891E-08 | 3,07319E-08 | -3,37901E-08 | 1,83999E-08 | 1,88089E-08 | -2,26152E-08 | 1,1568E-08 | 1,17157E-08 | -1,55248E-08 |
| 7 | D transversal | -6,11082E-08 | 8,01895E-06 | -1,74582E-06 | -4,86183E-08 | 5,85961E-06 | -1,4248E-06 | -3,80784E-08 | 4,18024E-06 | -1,08639E-06 |
| 7 | G Longitudinal | 1,10734E-08 | 3,8642E-07 | -1,52403E-07 | -1,57758E-09 | 2,36744E-07 | -8,93801E-08 | 8,65787E-11 | 1,47463E-07 | -5,32267E-08 |
| 7 | G Vertical | -7,42252E-07 | -7,92426E-09 | -4,19738E-08 | -6,19876E-07 | -1,40682E-10 | -1,62386E-09 | -4,81885E-07 | -1,06393E-11 | -3,89711E-11 |
| 7 | G transversal | -3,94628E-07 | -1,28129E-09 | -6,81478E-09 | -2,33199E-07 | -2,06402E-11 | -2,53818E-10 | -1,46406E-07 | -6,90147E-13 | -3,88324E-12 |
| 8 | D Longitudinal | 7,95097E-06 | -6,46562E-13 | -9,19534E-11 | 5,79328E-06 | -2,49624E-12 | -5,12368E-12 | 4,1267E-06 | -2,3729E-12 | -5,41622E-12 |

APOYO 2

| DESPLAZAMIENTOS (metros) | | C1 | | | C2 | | | C3 | | |
|---|---|---|---|---|---|---|---|---|---|---|
| Nudo | Desplazamiento | L | T | V | L | T | V | L | T | V |
| 8 | D Vertical | 2,94443E-08 | -3,05195E-08 | -1,07282E-08 | 1,86784E-08 | -1,86E-08 | -8,53323E-09 | 1,15534E-08 | -1,15836E-08 | -7,11572E-09 |
| 8 | D transversal | -6,10246E-08 | 8,01895E-06 | -1,74582E-06 | -4,86319E-08 | 5,85961E-06 | -1,4248E-06 | -3,80776E-08 | 4,18024E-06 | -1,08639E-06 |
| 8 | G Longitudinal | 1,30359E-08 | 3,87728E-07 | -1,45813E-07 | -1,67879E-09 | 2,36774E-07 | -8,89172E-08 | 9,92393E-11 | 1,47464E-07 | -5,32216E-08 |
| 8 | G Vertical | -7,25714E-07 | 3,92965E-10 | -1,6362E-12 | -6,21146E-07 | 5,26751E-11 | 1,31123E-09 | -4,81771E-07 | -5,38008E-12 | -6,65894E-12 |
| 8 | G transversal | -3,7615E-07 | -4,28848E-11 | 1,65243E-10 | -2,3619E-07 | -9,07835E-12 | -2,08894E-10 | -1,46264E-07 | 4,83074E-13 | 2,06038E-13 |
| 9 | D Longitudinal | 8,06765E-06 | 3,65197E-12 | 1,37205E-10 | 5,89133E-06 | -1,70053E-12 | -3,01699E-12 | 4,20283E-06 | -1,69168E-12 | -3,85787E-12 |
| 9 | D Vertical | -3,13666E-08 | 3,07247E-08 | -3,38803E-08 | -1,83911E-08 | 1,88091E-08 | -2,26152E-08 | -1,15674E-08 | 1,17158E-08 | -1,55247E-08 |
| 9 | D transversal | 6,08428E-08 | 8,01897E-06 | -1,74539E-06 | 4,86416E-08 | 5,85961E-06 | -1,4248E-06 | 3,80982E-08 | 4,18024E-06 | -1,08639E-06 |
| 9 | G Longitudinal | -1,06179E-08 | 3,86274E-07 | -1,54686E-07 | 1,70953E-09 | 2,36744E-07 | -8,93926E-08 | -9,16201E-11 | 1,47463E-07 | -5,32267E-08 |
| 9 | G Vertical | -7,41702E-07 | 8,35992E-09 | 4,76521E-08 | -6,20517E-07 | 1,34301E-10 | 1,66352E-09 | -4,8185E-07 | 2,10227E-12 | 1,95186E-11 |
| 9 | G transversal | -3,94903E-07 | 1,29731E-09 | 7,38316E-09 | -2,33244E-07 | 2,28712E-11 | 2,66638E-10 | -1,46403E-07 | 1,32871E-12 | 5,38083E-12 |
| 10 | D Longitudinal | 7,95082E-06 | -9,32425E-13 | -9,54535E-11 | 5,7933E-06 | -2,49108E-12 | -5,13986E-12 | 4,1267E-06 | -2,37294E-12 | -5,41637E-12 |
| 10 | D Vertical | -2,95277E-08 | -3,05153E-08 | -1,0656E-08 | -1,86717E-08 | -1,85999E-08 | -8,53297E-09 | -1,1553E-08 | -1,15836E-08 | -7,1156E-09 |
| 10 | D transversal | 6,07492E-08 | 8,01897E-06 | -1,7454E-06 | 4,86544E-08 | 5,85961E-06 | -1,4248E-06 | 3,80975E-08 | 4,18024E-06 | -1,08639E-06 |
| 10 | G Longitudinal | -1,03122E-08 | 3,87638E-07 | -1,47788E-07 | 1,43896E-09 | 2,36775E-07 | -8,89286E-08 | -8,39707E-11 | 1,47464E-07 | -5,32216E-08 |
| 10 | G Vertical | -7,35365E-07 | -2,29472E-10 | 4,50659E-09 | -6,20033E-07 | -6,09021E-11 | -1,27713E-09 | -4,81835E-07 | -3,22929E-12 | -1,29813E-11 |
| 10 | G transversal | -3,75244E-07 | 5,31428E-11 | -5,63314E-10 | -2,3627E-07 | 8,91368E-12 | 2,00937E-10 | -1,46259E-07 | 1,41938E-13 | 1,20475E-12 |
| 11 | D Longitudinal | 8,0057E-06 | 1,10792E-12 | 1,2016E-10 | 5,86101E-06 | -1,31277E-12 | -1,69876E-12 | 4,18705E-06 | -1,46764E-12 | -3,3366E-12 |
| 11 | D Vertical | -4,55044E-08 | 4,42897E-08 | -3,90394E-08 | -2,65078E-08 | 2,70959E-08 | -2,57345E-08 | -1,66939E-08 | 1,6877E-08 | -1,73874E-08 |
| 11 | D transversal | 8,93586E-08 | 7,93254E-06 | -1,71256E-06 | 6,99548E-08 | 5,80681E-06 | -1,40492E-06 | 5,49845E-08 | 4,14735E-06 | -1,07452E-06 |
| 11 | G Longitudinal | -1,14162E-08 | 3,8623E-07 | -1,54977E-07 | 1,78385E-09 | 2,36743E-07 | -8,94008E-08 | -9,44536E-11 | 1,47463E-07 | -5,32269E-08 |
| 11 | G Vertical | -7,42402E-07 | 8,71153E-09 | 4,96974E-08 | -6,20429E-07 | 1,4023E-10 | 1,73455E-09 | -4,81853E-07 | 2,36908E-12 | 2,07473E-11 |
| 11 | G transversal | -3,93524E-07 | 1,35521E-09 | 7,71088E-09 | -2,33498E-07 | 2,3679E-11 | 2,77894E-10 | -1,46388E-07 | 1,37791E-12 | 5,59734E-12 |
| 12 | D Longitudinal | 7,84105E-06 | 2,13555E-12 | -6,99241E-11 | 5,71897E-06 | -2,62735E-12 | -5,15216E-12 | 4,07722E-06 | -2,45444E-12 | -5,60299E-12 |
| 12 | D Vertical | -4,23456E-08 | -4,40804E-08 | -5,49643E-09 | -2,69802E-08 | -2,68867E-08 | -5,41333E-09 | -1,66698E-08 | -1,67448E-08 | -5,25281E-09 |
| 12 | D transversal | 8,90736E-08 | 7,93253E-06 | -1,71258E-06 | 6,99968E-08 | 5,80681E-06 | -1,40492E-06 | 5,49823E-08 | 4,14735E-06 | -1,07452E-06 |
| 12 | G Longitudinal | -1,22547E-08 | 3,87629E-07 | -1,47979E-07 | 1,67595E-09 | 2,36775E-07 | -8,89234E-08 | -9,53138E-11 | 1,47464E-07 | -5,32216E-08 |
| 12 | G Vertical | -7,3685E-07 | -2,44606E-10 | 4,6817E-09 | -6,19772E-07 | -6,32645E-11 | -1,33176E-09 | -4,81845E-07 | -3,18606E-12 | -1,3123E-11 |
| 12 | G transversal | -3,77744E-07 | 4,92302E-11 | -6,38505E-10 | -2,3586E-07 | 9,37824E-12 | 2,09536E-10 | -1,46282E-07 | 1,32612E-13 | 1,21957E-12 |
| 13 | D Longitudinal | 7,84136E-06 | 3,65098E-12 | -5,84578E-11 | 5,71892E-06 | -2,66161E-12 | -5,9064E-12 | 4,07722E-06 | -2,45341E-12 | -5,60339E-12 |
| 13 | D Vertical | 4,21908E-08 | -4,40888E-08 | -5,63683E-09 | 2,69937E-08 | -2,68867E-08 | -5,41378E-09 | 1,66698E-08 | -1,67449E-08 | -5,25297E-09 |
| 13 | D transversal | -8,98529E-08 | 7,9325E-06 | -1,71332E-06 | -6,99236E-08 | 5,80681E-06 | -1,40493E-06 | -5,49655E-08 | 4,14735E-06 | -1,07453E-06 |
| 13 | G Longitudinal | 1,56526E-08 | 3,8774E-07 | -1,45676E-07 | -2,0218E-09 | 2,36774E-07 | -8,89107E-08 | 1,16218E-10 | 1,47464E-07 | -5,32216E-08 |
| 13 | G Vertical | -7,2745E-07 | 4,07883E-10 | -1,02281E-11 | -6,20829E-07 | 5,52307E-11 | 1,36731E-09 | -4,81785E-07 | -5,42444E-12 | -6,51911E-12 |
| 13 | G transversal | -3,78769E-07 | -4,51858E-11 | 1,42911E-10 | -2,35762E-07 | -9,33309E-12 | -2,17954E-10 | -1,46288E-07 | 4,89729E-13 | 1,82891E-13 |
| 14 | D Longitudinal | 8,00584E-06 | -3,70944E-12 | 9,02261E-11 | 5,86099E-06 | -1,36927E-12 | -2,61756E-12 | 4,18705E-06 | -1,47269E-12 | -3,35712E-12 |
| 14 | D Vertical | 4,55501E-08 | 4,43022E-08 | -3,88763E-08 | 2,6517E-08 | 2,70957E-08 | -2,57345E-08 | 1,66945E-08 | 1,68769E-08 | -1,73876E-08 |
| 14 | D transversal | -8,9711E-08 | 7,9325E-06 | -1,71333E-06 | -6,9944E-08 | 5,80681E-06 | -1,40493E-06 | -5,49645E-08 | 4,14735E-06 | -1,07453E-06 |
| 14 | G Longitudinal | 1,20818E-08 | 3,8639E-07 | -1,52465E-07 | -1,68049E-09 | 2,36743E-07 | -8,93873E-08 | 9,08203E-11 | 1,47463E-07 | -5,32269E-08 |
| 14 | G Vertical | -7,42783E-07 | -8,26351E-09 | -4,37295E-08 | -6,19794E-07 | -1,46465E-10 | -1,69308E-09 | -4,81888E-07 | -1,09021E-11 | -4,01885E-11 |
| 14 | G transversal | -3,93466E-07 | -1,33332E-09 | -7,10778E-09 | -2,33413E-07 | -2,1532E-11 | -2,6466E-10 | -1,46393E-07 | -7,35165E-13 | -4,08514E-12 |
| 15 | D Longitudinal | 7,88954E-06 | -1,81799E-11 | -1,46298E-11 | 5,80371E-06 | -7,63019E-13 | -1,92292E-12 | 4,15742E-06 | -1,05359E-12 | -2,39736E-12 |
| 15 | D Vertical | -7,2083E-08 | 7,0257E-08 | -4,89144E-08 | -4,213E-08 | 4,29592E-08 | -3,17061E-08 | -2,65028E-08 | 2,67571E-08 | -2,09533E-08 |
| 15 | D transversal | 1,435E-07 | 7,76857E-06 | -1,65037E-06 | 1,1085E-07 | 5,70666E-06 | -1,36722E-06 | 8,7304E-08 | 4,08497E-06 | -1,05201E-06 |

APOYO 2

| DESPLAZAMIENTOS (metros) | | C1 | | | C2 | | | C3 | | |
|---|---|---|---|---|---|---|---|---|---|---|
| Nudo | Desplazamiento | L | T | V | L | T | V | L | T | V |
| 15 | G Longitudinal | -8,97602E-09 | 3,86126E-07 | -1,55554E-07 | 1,34481E-09 | 2,36741E-07 | -8,94228E-08 | -6,97485E-11 | 1,47463E-07 | -5,32273E-08 |
| 15 | G Vertical | -7,43087E-07 | 9,38013E-09 | 5,35903E-08 | -6,20357E-07 | 1,51383E-10 | 1,8691E-09 | -4,81855E-07 | 2,88875E-12 | 2,31227E-11 |
| 15 | G transversal | -3,90698E-07 | 1,40636E-09 | 7,92176E-09 | -2,33983E-07 | 2,50619E-11 | 2,89674E-10 | -1,46361E-07 | 1,39525E-12 | 5,72822E-12 |
| 16 | D Longitudinal | 7,63142E-06 | 5,47635E-12 | -3,12289E-11 | 5,57776E-06 | -2,84921E-12 | -4,90036E-12 | 3,98305E-06 | -2,61333E-12 | -5,96694E-12 |
| 16 | D Vertical | -6,73115E-08 | -7,00476E-08 | 4,38703E-09 | -4,28094E-08 | -4,275E-08 | 5,58453E-10 | -2,64692E-08 | -2,66249E-08 | -1,68688E-09 |
| 16 | D transversal | 1,43654E-07 | 7,76859E-06 | -1,65025E-06 | 1,10819E-07 | 5,70666E-06 | -1,36722E-06 | 8,73056E-08 | 4,08497E-06 | -1,05201E-06 |
| 16 | G Longitudinal | -1,07627E-08 | 3,87611E-07 | -1,48281E-07 | 1,39158E-09 | 2,36776E-07 | -8,88937E-08 | -7,99947E-11 | 1,47464E-07 | -5,32215E-08 |
| 16 | G Vertical | -7,38038E-07 | -2,69002E-10 | 5,06891E-09 | -6,19516E-07 | -6,76989E-11 | -1,43251E-09 | -4,81854E-07 | -3,10105E-12 | -1,33781E-11 |
| 16 | G transversal | -3,80058E-07 | 5,12529E-11 | -6,9836E-10 | -2,35454E-07 | 1,031E-11 | 2,2853E-10 | -1,46306E-07 | 1,14028E-13 | 1,258E-12 |
| 17 | D Longitudinal | 7,63161E-06 | 8,64304E-12 | -8,53142E-12 | 5,57773E-06 | -2,84798E-12 | -5,12008E-12 | 3,98305E-06 | -2,61214E-12 | -5,96491E-12 |
| 17 | D Vertical | 6,71568E-08 | -7,00641E-08 | 4,1142E-09 | 4,28156E-08 | -4,275E-08 | 5,57583E-10 | 2,64694E-08 | -2,6625E-08 | -1,68713E-09 |
| 17 | D transversal | -1,44466E-07 | 7,76851E-06 | -1,65168E-06 | -1,10789E-07 | 5,70666E-06 | -1,36723E-06 | -8,72872E-08 | 4,08497E-06 | -1,05201E-06 |
| 17 | G Longitudinal | 1,17612E-08 | 3,87744E-07 | -1,45724E-07 | -1,35192E-09 | 2,36775E-07 | -8,88934E-08 | 8,0003E-11 | 1,47464E-07 | -5,32215E-08 |
| 17 | G Vertical | -7,29049E-07 | 4,36178E-10 | 5,07691E-12 | -6,20483E-07 | 5,9982E-11 | 1,4737E-09 | -4,81797E-07 | -5,51059E-12 | -6,25904E-12 |
| 17 | G transversal | -3,82162E-07 | -6,91525E-11 | 9,33407E-11 | -2,35212E-07 | -9,77263E-12 | -2,26324E-10 | -1,46318E-07 | 4,88336E-13 | 1,28606E-13 |
| 18 | D Longitudinal | 7,8897E-06 | -1,81117E-11 | -1,197E-11 | 5,80369E-06 | -7,44541E-13 | -2,12934E-12 | 4,15742E-06 | -1,05888E-12 | -2,41597E-12 |
| 18 | D Vertical | 7,22186E-08 | 7,02784E-08 | -4,86167E-08 | 4,21327E-08 | 4,29589E-08 | -3,17059E-08 | 2,65038E-08 | 2,6757E-08 | -2,09535E-08 |
| 18 | D transversal | -1,44469E-07 | 7,76851E-06 | -1,65171E-06 | -1,10789E-07 | 5,70666E-06 | -1,36723E-06 | -8,72874E-08 | 4,08497E-06 | -1,05201E-06 |
| 18 | G Longitudinal | 1,0418E-08 | 3,86207E-07 | -1,53412E-07 | -1,37782E-09 | 2,3674E-07 | -8,94239E-08 | 7,29574E-11 | 1,47463E-07 | -5,32271E-08 |
| 18 | G Vertical | -7,42968E-07 | -8,88785E-09 | -4,69286E-08 | -6,19757E-07 | -1,57258E-10 | -1,82106E-09 | -4,81888E-07 | -1,14135E-11 | -4,2534E-11 |
| 18 | G transversal | -3,90803E-07 | -1,44674E-09 | -7,71143E-09 | -2,33882E-07 | -2,35941E-11 | -2,88525E-10 | -1,46366E-07 | -8,31582E-13 | -4,52427E-12 |
| 19 | D Longitudinal | 7,73148E-06 | -7,6023E-11 | -4,3088E-10 | 5,72445E-06 | -2,04163E-13 | -7,67204E-12 | 4,11658E-06 | -5,24842E-13 | -1,25662E-12 |
| 19 | D Vertical | -1,07696E-07 | 1,05904E-07 | -6,25534E-08 | -6,37272E-08 | 6,47416E-08 | -3,99075E-08 | -3,99636E-08 | 4,03239E-08 | -2,58497E-08 |
| 19 | D transversal | 2,16188E-07 | 7,54301E-06 | -1,56451E-06 | 1,67281E-07 | 5,56887E-06 | -1,31535E-06 | 1,31667E-07 | 3,99915E-06 | -1,02103E-06 |
| 19 | G Longitudinal | -5,19167E-09 | 3,85865E-07 | -1,57501E-07 | 7,72572E-10 | 2,36738E-07 | -8,94708E-08 | -3,77833E-11 | 1,47463E-07 | -5,32276E-08 |
| 19 | G Vertical | -7,43913E-07 | 1,02723E-08 | 5,86975E-08 | -6,20262E-07 | 1,66562E-10 | 2,04994E-09 | -4,81858E-07 | 3,61067E-12 | 2,64076E-11 |
| 19 | G transversal | -3,87216E-07 | 1,54285E-09 | 8,69266E-09 | -2,34584E-07 | 2,72427E-11 | 3,1677E-10 | -1,46327E-07 | 1,50025E-12 | 6,21094E-12 |
| 20 | D Longitudinal | 7,34145E-06 | 1,75294E-11 | 8,08607E-11 | 5,38388E-06 | -3,04733E-12 | -5,07705E-12 | 3,85356E-06 | -2,82919E-12 | -6,46407E-12 |
| 20 | D Vertical | -1,02524E-07 | -1,05702E-07 | 1,79737E-08 | -6,43914E-08 | -6,45324E-08 | 8,75692E-09 | -3,99335E-08 | -4,01916E-08 | 3,20961E-09 |
| 20 | D transversal | 2,16326E-07 | 7,54302E-06 | -1,5644E-06 | 1,67242E-07 | 5,56886E-06 | -1,31536E-06 | 1,3167E-07 | 3,99915E-06 | -1,02103E-06 |
| 20 | G Longitudinal | -5,49304E-09 | 3,87622E-07 | -1,48306E-07 | 5,12067E-10 | 2,36777E-07 | -8,887E-08 | -3,30238E-11 | 1,47464E-07 | -5,32214E-08 |
| 20 | G Vertical | -7,39125E-07 | -2,92319E-10 | 5,69237E-09 | -6,19252E-07 | -7,39097E-11 | -1,57478E-09 | -4,8186E-07 | -2,98217E-12 | -1,37361E-11 |
| 20 | G transversal | -3,8341E-07 | 8,51347E-11 | -5,74633E-10 | -2,34912E-07 | 1,13649E-11 | 2,43881E-10 | -1,46336E-07 | 1,09552E-13 | 1,31986E-12 |
| 21 | D Longitudinal | 7,34131E-06 | 3,71661E-12 | 3,99165E-11 | 5,38389E-06 | -2,94408E-12 | 8,93692E-13 | 3,85356E-06 | -2,83889E-12 | -6,46966E-12 |
| 21 | D Vertical | 1,02373E-07 | -1,0573E-07 | 1,7497E-08 | 6,43847E-08 | -6,45325E-08 | 8,75547E-09 | 3,99341E-08 | -4,01917E-08 | 3,20923E-09 |
| 21 | D transversal | -2,1743E-07 | 7,54288E-06 | -1,56697E-06 | -1,67253E-07 | 5,56886E-06 | -1,31536E-06 | -1,3165E-07 | 3,99915E-06 | -1,02104E-06 |
| 21 | G Longitudinal | 7,9801E-09 | 3,8776E-07 | -1,45304E-07 | -6,75545E-10 | 2,36777E-07 | -8,8854E-08 | 4,451E-11 | 1,47464E-07 | -5,32214E-08 |
| 21 | G Vertical | -7,31178E-07 | 4,76294E-10 | -4,19177E-11 | -6,20019E-07 | 6,64243E-11 | 1,61633E-09 | -4,81814E-07 | -5,6306E-12 | -5,91141E-12 |
| 21 | G transversal | -3,84909E-07 | -7,78601E-11 | 1,09566E-10 | -2,34747E-07 | -1,06103E-11 | -2,47478E-10 | -1,46346E-07 | 5,03274E-13 | 6,70434E-14 |
| 22 | D Longitudinal | 7,73147E-06 | -3,58079E-11 | -1,51404E-10 | 5,72444E-06 | -2,998E-14 | -9,39949E-13 | 4,11658E-06 | -4,74567E-13 | -1,06813E-12 |
| 22 | D Vertical | 1,07926E-07 | 1,05937E-07 | -6,20513E-08 | 6,37264E-08 | 6,47412E-08 | -3,99072E-08 | 3,99649E-08 | 4,03237E-08 | -2,585E-08 |
| 22 | D transversal | -2,17586E-07 | 7,54295E-06 | -1,5666E-06 | -1,67214E-07 | 5,56886E-06 | -1,31535E-06 | -1,31652E-07 | 3,99915E-06 | -1,02104E-06 |
| 22 | G Longitudinal | 5,82444E-09 | 3,86058E-07 | -1,54206E-07 | -6,15191E-10 | 2,36738E-07 | -8,94536E-08 | 3,12073E-11 | 1,47463E-07 | -5,32276E-08 |
| 22 | G Vertical | -7,42779E-07 | -9,76658E-09 | -5,14287E-08 | -6,19777E-07 | -1,72322E-10 | -2,00149E-09 | -4,81885E-07 | -1,21249E-11 | -4,58011E-11 |

APOYO 2

| DESPLAZAMIENTOS (metros) | | C1 | | | C2 | | | C3 | | |
|---|---|---|---|---|---|---|---|---|---|---|
| Nudo | Desplazamiento | L | T | V | L | T | V | L | T | V |
| 22 | G transversal | -3,87371E-07 | -1,55069E-09 | -8,24712E-09 | -2,34459E-07 | -2,59638E-11 | -3,08899E-10 | -1,46334E-07 | -8,61792E-13 | -4,73105E-12 |
| 23 | D Longitudinal | 7,56688E-06 | -5,52342E-11 | -3,06635E-10 | 5,64024E-06 | 6,19038E-13 | -5,45502E-13 | 4,07329E-06 | 1,29459E-13 | 3,14405E-13 |
| 23 | D Vertical | -1,43975E-07 | 1,43116E-07 | -7,6671E-08 | -8,64167E-08 | 8,74711E-08 | -4,84631E-08 | -5,4001E-08 | 5,44805E-08 | -3,09589E-08 |
| 23 | D transversal | 2,89838E-07 | 7,30581E-06 | -1,47439E-06 | 2,26548E-07 | 5,42397E-06 | -1,2608E-06 | 1,77938E-07 | 3,9089E-06 | -9,88461E-07 |
| 23 | G Longitudinal | -1,73154E-09 | 3,86171E-07 | -1,54271E-07 | -3,78597E-11 | 2,36739E-07 | -8,94274E-08 | 5,83002E-12 | 1,47463E-07 | -5,32288E-08 |
| 23 | G Vertical | -7,44802E-07 | 1,12361E-08 | 6,43941E-08 | -6,2018E-07 | 1,82993E-10 | 2,24428E-09 | -4,81861E-07 | 4,27142E-12 | 2,95323E-11 |
| 23 | G transversal | -3,83478E-07 | 1,93879E-09 | 1,12927E-08 | -2,35302E-07 | 3,03503E-11 | 3,86552E-10 | -1,46284E-07 | 1,93463E-12 | 7,91844E-12 |
| 24 | D Longitudinal | 7,03484E-06 | 2,41851E-11 | 1,66406E-10 | 5,18085E-06 | -3,14222E-12 | -4,22195E-12 | 3,71773E-06 | -3,05632E-12 | -6,98497E-12 |
| 24 | D Vertical | -1,402E-07 | -1,42913E-07 | 3,21036E-08 | -8,67495E-08 | -8,72617E-08 | 1,73154E-08 | -5,39923E-08 | -5,43481E-08 | 8,319E-09 |
| 24 | D transversal | 2,89716E-07 | 7,30581E-06 | -1,47439E-06 | 2,26568E-07 | 5,42397E-06 | -1,2608E-06 | 1,77937E-07 | 3,9089E-06 | -9,88461E-07 |
| 24 | G Longitudinal | -1,84794E-09 | 3,87713E-07 | -1,47635E-07 | -2,50526E-10 | 2,36775E-07 | -8,89196E-08 | 1,24023E-11 | 1,47464E-07 | -5,32216E-08 |
| 24 | G Vertical | -7,40579E-07 | -3,19129E-10 | 6,36871E-09 | -6,18941E-07 | -8,08443E-11 | -1,73528E-09 | -4,81869E-07 | -2,87564E-12 | -1,41786E-11 |
| 24 | G transversal | -3,8698E-07 | -2,2384E-11 | -1,40394E-09 | -2,34245E-07 | 1,27539E-11 | 2,90254E-10 | -1,46379E-07 | 4,00224E-14 | 1,33554E-12 |
| 25 | D Longitudinal | 7,03472E-06 | 2,47019E-11 | 1,6757E-10 | 5,18087E-06 | -3,13975E-12 | -4,44066E-12 | 3,71773E-06 | -3,05597E-12 | -6,98478E-12 |
| 25 | D Vertical | 1,39939E-07 | -1,42949E-07 | 3,14651E-08 | 8,67501E-08 | -8,72621E-08 | 1,73121E-08 | 5,39925E-08 | -5,43483E-08 | 8,31849E-09 |
| 25 | D transversal | -2,91504E-07 | 7,30563E-06 | -1,47782E-06 | -2,26523E-07 | 5,42396E-06 | -1,26081E-06 | -1,77922E-07 | 3,9089E-06 | -9,88468E-07 |
| 25 | G Longitudinal | 3,29396E-09 | 3,87725E-07 | -1,46764E-07 | 8,09279E-11 | 2,36776E-07 | -8,88935E-08 | 2,90665E-13 | 1,47464E-07 | -5,32216E-08 |
| 25 | G Vertical | -7,33354E-07 | 5,42529E-10 | 1,89972E-10 | -6,1952E-07 | 7,3432E-11 | 1,76958E-09 | -4,81834E-07 | -5,7381E-12 | -5,50149E-12 |
| 25 | G transversal | -3,88057E-07 | 2,16773E-12 | 3,35092E-10 | -2,34157E-07 | -1,20036E-11 | -3,06893E-10 | -1,46386E-07 | 5,81982E-13 | 4,99331E-14 |
| 26 | D Longitudinal | 7,56676E-06 | -5,67504E-11 | -3,1756E-10 | 5,64026E-06 | 6,19884E-13 | -7,8962E-13 | 4,07329E-06 | 1,27347E-13 | 3,06613E-13 |
| 26 | D Vertical | 1,44246E-07 | 1,43167E-07 | -7,59527E-08 | 8,6421E-08 | 8,74708E-08 | -4,8461E-08 | 5,40023E-08 | 5,44802E-08 | -3,09594E-08 |
| 26 | D transversal | -2,91383E-07 | 7,30563E-06 | -1,47783E-06 | -2,26543E-07 | 5,42396E-06 | -1,26081E-06 | -1,77921E-07 | 3,9089E-06 | -9,88468E-07 |
| 26 | G Longitudinal | 1,73443E-09 | 3,86359E-07 | -1,52366E-07 | 1,79226E-10 | 2,36741E-07 | -8,93968E-08 | -1,13617E-11 | 1,47463E-07 | -5,32289E-08 |
| 26 | G Vertical | -7,42764E-07 | -1,07645E-08 | -5,6595E-08 | -6,19784E-07 | -1,89061E-10 | -2,2044E-09 | -4,81882E-07 | -1,27773E-11 | -4,89383E-11 |
| 26 | G transversal | -3,83142E-07 | -1,79049E-09 | -9,52867E-09 | -2,35208E-07 | -2,88179E-11 | -3,63871E-10 | -1,4629E-07 | -1,20714E-12 | -6,12554E-12 |
| 27 | D Longitudinal | 7,21363E-06 | -9,4161E-11 | -6,32946E-10 | 5,4553E-06 | 1,72448E-12 | -5,18618E-13 | 3,97897E-06 | 1,45682E-12 | 3,35171E-12 |
| 27 | D Vertical | -2,21738E-07 | 2,24936E-07 | -1,06905E-07 | -1,36682E-07 | 1,37429E-07 | -6,72675E-08 | -8,48323E-08 | 8,55955E-08 | -4,21886E-08 |
| 27 | D transversal | 4,47437E-07 | 6,78617E-06 | -1,28258E-06 | 3,57967E-07 | 5,1067E-06 | -1,14138E-06 | 2,79574E-07 | 3,7113E-06 | -9,17142E-07 |
| 27 | G Longitudinal | 9,84528E-10 | 3,84185E-07 | -1,64167E-07 | -2,60675E-10 | 2,36716E-07 | -8,98198E-08 | 2,1358E-11 | 1,47464E-07 | -5,32269E-08 |
| 27 | G Vertical | -7,46598E-07 | 1,31116E-08 | 7,52737E-08 | -6,19947E-07 | 2,15063E-10 | 2,6234E-09 | -4,81864E-07 | 6,37909E-12 | 3,85239E-11 |
| 27 | G transversal | -3,80026E-07 | 1,24076E-09 | 6,0627E-09 | -2,3558E-07 | 3,23236E-11 | 2,82353E-10 | -1,46281E-07 | 8,93218E-13 | 4,27489E-12 |
| 28 | D Longitudinal | 6,35598E-06 | -4,27387E-11 | -4,33351E-10 | 4,73696E-06 | -3,47997E-12 | -1,233E-11 | 3,41988E-06 | -3,55933E-12 | -8,13646E-12 |
| 28 | D Vertical | -2,25366E-07 | -2,24702E-07 | 6,31098E-08 | -1,35505E-07 | -1,37219E-07 | 3,61211E-08 | -8,49137E-08 | -8,5463E-08 | 1,9549E-08 |
| 28 | D transversal | 4,44737E-07 | 6,78645E-06 | -1,27688E-06 | 3,57968E-07 | 5,1067E-06 | -1,14136E-06 | 2,79574E-07 | 3,7113E-06 | -9,17142E-07 |
| 28 | G Longitudinal | 4,59214E-09 | 3,87326E-07 | -1,51357E-07 | -7,72972E-10 | 2,36786E-07 | -8,85645E-08 | 1,96408E-11 | 1,47464E-07 | -5,32202E-08 |
| 28 | G Vertical | -7,43578E-07 | -3,60999E-10 | 7,63669E-09 | -6,18239E-07 | -9,39754E-11 | -2,03831E-09 | -4,81887E-07 | -2,51193E-12 | -1,47399E-11 |
| 28 | G transversal | -3,92445E-07 | 3,53815E-10 | 2,46368E-10 | -2,33759E-07 | 1,32889E-11 | 2,06008E-10 | -1,46385E-07 | 2,40084E-13 | 1,66132E-12 |
| 29 | D Longitudinal | 6,35595E-06 | 4,11412E-11 | 3,74227E-10 | 4,73696E-06 | -3,00245E-12 | -2,07084E-12 | 3,41988E-06 | -3,56145E-12 | -8,14783E-12 |
| 29 | D Vertical | 2,25366E-07 | -2,24703E-07 | 6,30777E-08 | 1,35504E-07 | -1,3722E-07 | 3,6119E-08 | 8,49135E-08 | -8,54633E-08 | 1,95482E-08 |
| 29 | D transversal | -4,44763E-07 | 6,78645E-06 | -1,27684E-06 | -3,57942E-07 | 5,1067E-06 | -1,14137E-06 | -2,7956E-07 | 3,7113E-06 | -9,17153E-07 |
| 29 | G Longitudinal | -5,05047E-09 | 3,87278E-07 | -1,5218E-07 | 7,91545E-10 | 2,36787E-07 | -8,85672E-08 | -1,87599E-11 | 1,47464E-07 | -5,32202E-08 |
| 29 | G Vertical | -7,38215E-07 | 6,36513E-10 | 4,41627E-10 | -6,18414E-07 | 8,69852E-11 | 2,06807E-09 | -4,81874E-07 | -6,10429E-12 | -4,97904E-12 |
| 29 | G transversal | -3,92687E-07 | -3,90143E-10 | -7,9648E-10 | -2,3376E-07 | -1,19356E-11 | -2,05679E-10 | -1,46385E-07 | 3,66152E-13 | -2,75774E-13 |
| 30 | D Longitudinal | 7,2136E-06 | 9,99544E-11 | 7,02745E-10 | 5,45531E-06 | 2,53527E-12 | 1,09555E-11 | 3,97897E-06 | 1,45564E-12 | 3,33591E-12 |

APOYO 2

| DESPLAZAMIENTOS (metros) | | C1 | | | C2 | | | C3 | | |
|---|---|---|---|---|---|---|---|---|---|---|
| Nudo | Desplazamiento | L | T | V | L | T | V | L | T | V |
| 30 | D Vertical | 2,21744E-07 | 2,24935E-07 | -1,06876E-07 | 1,36687E-07 | 1,37428E-07 | -6,72676E-08 | 8,4834E-08 | 8,55951E-08 | -4,21894E-08 |
| 30 | D transversal | -4,47406E-07 | 6,78616E-06 | -1,28256E-06 | -3,57951E-07 | 5,1067E-06 | -1,14139E-06 | -2,7956E-07 | 3,7113E-06 | -9,17153E-07 |
| 30 | G Longitudinal | -1,2831E-09 | 3,84115E-07 | -1,65099E-07 | 2,52191E-10 | 2,36716E-07 | -8,98244E-08 | -1,90648E-11 | 1,47464E-07 | -5,32268E-08 |
| 30 | G Vertical | -7,42692E-07 | -1,26333E-08 | -6,61324E-08 | -6,1974E-07 | -2,20954E-10 | -2,58838E-09 | -4,81876E-07 | -1,48558E-11 | -5,78953E-11 |
| 30 | G transversal | -3,79711E-07 | -1,18299E-09 | -5,42342E-09 | -2,35585E-07 | -3,15702E-11 | -2,78242E-10 | -1,46281E-07 | -2,81544E-13 | -2,90047E-12 |
| 31 | D Longitudinal | 6,82591E-06 | 4,92654E-10 | 2,4838E-09 | 5,21932E-06 | 4,69183E-12 | 3,35524E-11 | 3,83273E-06 | 1,76337E-12 | 4,02885E-12 |
| 31 | D Vertical | -2,22757E-07 | 2,24872E-07 | -1,01013E-07 | -1,37139E-07 | 1,37428E-07 | -6,72734E-08 | -8,48056E-08 | 8,55955E-08 | -4,21886E-08 |
| 31 | D transversal | 4,40148E-07 | 6,39953E-06 | -1,12223E-06 | 3,58907E-07 | 4,86994E-06 | -1,05218E-06 | 2,79508E-07 | 3,56384E-06 | -8,6392E-07 |
| 31 | G Longitudinal | 1,99331E-08 | 3,92832E-07 | -1,44367E-07 | -2,70022E-09 | 2,36867E-07 | -8,77234E-08 | 1,72668E-10 | 1,47465E-07 | -5,32142E-08 |
| 31 | G Vertical | -7,28479E-07 | 5,82468E-09 | 3,01123E-08 | -6,17613E-07 | 1,09852E-10 | 1,1668E-09 | -4,81616E-07 | 6,49553E-11 | 2,40106E-10 |
| 31 | G transversal | -4,02741E-07 | -4,52431E-11 | 1,86078E-09 | -2,3706E-07 | -5,32534E-11 | -3,51055E-10 | -1,46146E-07 | -1,52394E-14 | -3,34681E-12 |
| 32 | D Longitudinal | 6,59046E-06 | 1,22477E-10 | 2,55334E-10 | 4,97881E-06 | 4,63838E-13 | 9,89198E-12 | 3,62626E-06 | -9,01019E-13 | -2,05384E-12 |
| 32 | D Vertical | -2,23707E-07 | 6,61659E-10 | -1,82701E-08 | -1,36107E-07 | 1,06425E-10 | -1,55356E-08 | -8,48731E-08 | 6,62293E-11 | -1,13199E-08 |
| 32 | D transversal | 4,42135E-07 | 6,59249E-06 | -1,20016E-06 | 3,58253E-07 | 4,98832E-06 | -1,09681E-06 | 2,79553E-07 | 3,63757E-06 | -8,90531E-07 |
| 32 | G Longitudinal | 5,35888E-09 | 3,87656E-07 | -1,48053E-07 | -1,22487E-09 | 2,36765E-07 | -8,91277E-08 | 8,13113E-11 | 1,47464E-07 | -5,32221E-08 |
| 32 | G Vertical | -7,40204E-07 | -1,1507E-10 | -1,04621E-09 | -6,1811E-07 | -4,59728E-12 | -1,07901E-11 | -4,82047E-07 | -4,24351E-12 | -9,62153E-12 |
| 32 | G transversal | -3,88688E-07 | 3,6977E-10 | 1,51787E-09 | -2,34634E-07 | 2,3965E-12 | 2,85342E-11 | -1,46333E-07 | 3,68067E-13 | 9,26822E-13 |
| 33 | D Longitudinal | 5,96634E-06 | 1,34156E-10 | -3,96168E-10 | 4,50366E-06 | -1,08099E-12 | 1,88641E-11 | 3,27346E-06 | -3,26494E-12 | -7,45946E-12 |
| 33 | D Vertical | -2,26838E-07 | -2,24825E-07 | 5,99998E-08 | -1,35034E-07 | -1,37219E-07 | 3,61152E-08 | -8,49405E-08 | -8,5463E-08 | 1,9549E-08 |
| 33 | D transversal | 4,35829E-07 | 6,39776E-06 | -1,12667E-06 | 3,58968E-07 | 4,86993E-06 | -1,0523E-06 | 2,79508E-07 | 3,56384E-06 | -8,63919E-07 |
| 33 | G Longitudinal | 1,6266E-08 | 3,91677E-07 | -1,4579E-07 | -1,61661E-09 | 2,36726E-07 | -9,02284E-08 | 1,77439E-10 | 1,47464E-07 | -5,32273E-08 |
| 33 | G Vertical | -7,28456E-07 | 3,04029E-10 | 3,62694E-09 | -6,16869E-07 | -4,03098E-11 | -8,71292E-10 | -4,81738E-07 | 8,79933E-12 | 9,81993E-12 |
| 33 | G transversal | -3,83142E-07 | -4,76065E-10 | -2,13092E-09 | -2,32228E-07 | -1,80534E-11 | -2,23952E-10 | -1,46522E-07 | 2,26247E-13 | -1,42009E-12 |
| 34 | D Longitudinal | 6,16179E-06 | -3,82591E-13 | -1,32552E-11 | 4,62011E-06 | -2,84049E-12 | -6,27318E-12 | 3,34668E-06 | -3,41075E-12 | -7,80163E-12 |
| 34 | D Vertical | 9,41936E-12 | -2,24866E-07 | 6,15361E-08 | -1,8005E-12 | -1,3722E-07 | 3,61001E-08 | -2,84923E-14 | -8,54632E-08 | 1,95486E-08 |
| 34 | D transversal | -4,60076E-12 | 6,5921E-06 | -1,20177E-06 | 1,06151E-11 | 4,98831E-06 | -1,09684E-06 | 6,4918E-12 | 3,63757E-06 | -8,90536E-07 |
| 34 | G Longitudinal | -2,24334E-11 | 3,88696E-07 | -1,50174E-07 | 5,24054E-12 | 2,36768E-07 | -8,90617E-08 | 6,69499E-13 | 1,47464E-07 | -5,32224E-08 |
| 34 | G Vertical | -7,59049E-07 | -1,9613E-12 | 2,81318E-11 | -6,18027E-07 | -4,39836E-12 | -9,78072E-12 | -4,81956E-07 | -4,30128E-12 | -9,8495E-12 |
| 34 | G transversal | -3,89745E-07 | 1,41502E-13 | 2,33327E-11 | -2,33253E-07 | 9,32707E-13 | 2,12087E-12 | -1,46425E-07 | 2,97803E-13 | 6,77464E-13 |
| 35 | D Longitudinal | 5,96634E-06 | -1,35008E-10 | 3,89401E-10 | 4,50366E-06 | -3,55648E-12 | -2,90572E-11 | 3,27346E-06 | -3,26039E-12 | -7,47029E-12 |
| 35 | D Vertical | 2,26839E-07 | -2,24825E-07 | 5,99827E-08 | 1,35034E-07 | -1,3722E-07 | 3,61124E-08 | 8,49402E-08 | -8,54633E-08 | 1,95482E-08 |
| 35 | D transversal | -4,35821E-07 | 6,39776E-06 | -1,12667E-06 | -3,58952E-07 | 4,86993E-06 | -1,05232E-06 | -2,79496E-07 | 3,56383E-06 | -8,63931E-07 |
| 35 | G Longitudinal | -1,61637E-08 | 3,91685E-07 | -1,45542E-07 | 1,62131E-09 | 2,36727E-07 | -9,02254E-08 | -1,75755E-10 | 1,47464E-07 | -5,32274E-08 |
| 35 | G Vertical | -7,26616E-07 | -2,11191E-10 | -8,23217E-10 | -6,16928E-07 | 3,23714E-11 | 8,70152E-10 | -4,81733E-07 | -1,74039E-11 | -2,95325E-11 |
| 35 | G transversal | -3,83056E-07 | 4,86356E-10 | 2,33153E-09 | -2,32231E-07 | 2,06766E-11 | 2,30629E-10 | -1,46521E-07 | 3,36702E-13 | 2,69708E-12 |
| 36 | D Longitudinal | 6,59046E-06 | -1,21467E-10 | -2,5242E-10 | 4,97881E-06 | -1,07785E-12 | -1,08514E-11 | 3,62626E-06 | -8,96233E-13 | -2,04491E-12 |
| 36 | D Vertical | 2,23689E-07 | 6,63848E-10 | -1,82636E-08 | 1,36113E-07 | 1,05878E-10 | -1,55367E-08 | 8,48736E-08 | 6,58728E-11 | -1,13207E-08 |
| 36 | D transversal | -4,42134E-07 | 6,59249E-06 | -1,20014E-06 | -3,58234E-07 | 4,98831E-06 | -1,09682E-06 | -2,79539E-07 | 3,63756E-06 | -8,90542E-07 |
| 36 | G Longitudinal | -5,35693E-09 | 3,87652E-07 | -1,48022E-07 | 1,22946E-09 | 2,36766E-07 | -8,91257E-08 | -7,96385E-11 | 1,47464E-07 | -5,32221E-08 |
| 36 | G Vertical | -7,40203E-07 | 1,12032E-10 | 1,00413E-09 | -6,1811E-07 | -3,90861E-12 | -8,59907E-12 | -4,82047E-07 | -4,42037E-12 | -1,02173E-11 |
| 36 | G transversal | -3,88639E-07 | -3,72088E-10 | -1,52357E-09 | -2,3464E-07 | -1,37288E-12 | -2,64286E-11 | -1,46333E-07 | 2,46859E-13 | 4,74839E-13 |
| 37 | D Longitudinal | 6,82594E-06 | -4,91957E-10 | -2,47605E-09 | 5,21932E-06 | -2,87737E-13 | -2,3233E-11 | 3,83273E-06 | 1,78126E-12 | 4,10259E-12 |
| 37 | D Vertical | 2,22759E-07 | 2,24871E-07 | -1,00995E-07 | 1,37144E-07 | 1,37428E-07 | -6,72731E-08 | 8,48073E-08 | 8,55951E-08 | -4,21894E-08 |
| 37 | D transversal | -4,40153E-07 | 6,39953E-06 | -1,12221E-06 | -3,58889E-07 | 4,86993E-06 | -1,05219E-06 | -2,79496E-07 | 3,56383E-06 | -8,63931E-07 |

APOYO 2

| DESPLAZAMIENTOS (metros) | | C1 | | | C2 | | | C3 | | |
|---|---|---|---|---|---|---|---|---|---|---|
| Nudo | Desplazamiento | L | T | V | L | T | V | L | T | V |
| 37 | G Longitudinal | -1,98321E-08 | 3,92842E-07 | -1,44101E-07 | 2,70449E-09 | 2,3687E-07 | -8,77166E-08 | -1,70961E-10 | 1,47465E-07 | -5,32143E-08 |
| 37 | G Vertical | -7,27111E-07 | -5,65744E-09 | -2,69448E-08 | -6,17543E-07 | -9,64106E-11 | -1,12042E-09 | -4,81619E-07 | -7,26268E-11 | -2,57695E-10 |
| 37 | G transversal | -4,0281E-07 | 2,9721E-11 | -2,08532E-09 | -2,37064E-07 | 5,25426E-11 | 3,48272E-10 | -1,46146E-07 | 6,82187E-13 | 4,87791E-12 |
| 38 | D Longitudinal | 7,02021E-06 | 1,65321E-12 | 1,68978E-11 | 5,33751E-06 | 2,22251E-12 | 5,30569E-12 | 3,90584E-06 | 1,61349E-12 | 3,70284E-12 |
| 38 | D Vertical | 2,04766E-11 | 2,24563E-07 | -1,05766E-07 | 8,4115E-13 | 1,37427E-07 | -6,72901E-08 | 9,42293E-13 | 8,55953E-08 | -4,2189E-08 |
| 38 | D transversal | 6,3982E-12 | 6,59285E-06 | -1,2024E-06 | 8,64876E-12 | 4,98832E-06 | -1,09679E-06 | 6,59985E-12 | 3,63757E-06 | -8,90536E-07 |
| 38 | G Longitudinal | 1,34406E-11 | 3,86673E-07 | -1,60191E-07 | -6,78696E-13 | 2,36763E-07 | -8,91895E-08 | 1,00209E-12 | 1,47464E-07 | -5,32224E-08 |
| 38 | G Vertical | -7,65082E-07 | -2,26377E-12 | 2,65684E-11 | -6,17978E-07 | -4,34283E-12 | -9,66204E-12 | -4,81956E-07 | -4,30018E-12 | -9,84678E-12 |
| 38 | G transversal | -3,85111E-07 | -6,82759E-13 | -2,48495E-11 | -2,36024E-07 | 5,94942E-14 | -8,19309E-14 | -1,46242E-07 | 3,16049E-13 | 7,21868E-13 |
| 39 | D Longitudinal | 5,28392E-06 | 1,57995E-11 | -5,07462E-11 | 3,90296E-06 | -7,8558E-12 | -1,46175E-11 | 2,78763E-06 | -8,39847E-12 | -1,92212E-11 |
| 39 | D Vertical | 1,12625E-07 | -6,75688E-07 | 2,36314E-07 | 6,76553E-08 | -4,11872E-07 | 1,39412E-07 | 4,24608E-08 | -2,56522E-07 | 8,12862E-08 |
| 39 | D transversal | -2,22716E-07 | 6,59207E-06 | -1,20207E-06 | -1,78968E-07 | 4,98831E-06 | -1,09685E-06 | -1,39777E-07 | 3,63757E-06 | -8,90539E-07 |
| 39 | G Longitudinal | -1,40546E-09 | 3,88642E-07 | -1,50536E-07 | 4,76996E-11 | 2,36764E-07 | -8,9145E-08 | -2,81983E-12 | 1,47464E-07 | -5,32225E-08 |
| 39 | G Vertical | -7,56663E-07 | 1,48672E-10 | 2,27522E-10 | -6,18088E-07 | 3,61044E-12 | 1,55642E-10 | -4,81951E-07 | -4,44409E-12 | -9,41149E-12 |
| 39 | G transversal | -3,91287E-07 | -3,72431E-10 | -8,48041E-10 | -2,33705E-07 | -1,79271E-11 | -3,84369E-10 | -1,464E-07 | 6,33353E-13 | -3,24688E-13 |
| 40 | D Longitudinal | 5,28392E-06 | 1,57876E-11 | -5,0816E-11 | 3,90296E-06 | -7,85588E-12 | -1,46192E-11 | 2,78763E-06 | -8,39847E-12 | -1,92212E-11 |
| 40 | D Vertical | -1,12597E-07 | -6,7567E-07 | 2,36266E-07 | -6,76669E-08 | -4,11871E-07 | 1,39417E-07 | -4,24627E-08 | -2,56522E-07 | 8,12866E-08 |
| 40 | D transversal | 2,22695E-07 | 6,59208E-06 | -1,20214E-06 | 1,78991E-07 | 4,98832E-06 | -1,09684E-06 | 1,3979E-07 | 3,63757E-06 | -8,90533E-07 |
| 40 | G Longitudinal | 1,11581E-09 | 3,8863E-07 | -1,50016E-07 | -3,04886E-11 | 2,36764E-07 | -8,91476E-08 | 3,66911E-12 | 1,47464E-07 | -5,32225E-08 |
| 40 | G Vertical | -7,57131E-07 | -1,53673E-10 | 6,46165E-10 | -6,18073E-07 | -1,25327E-11 | -1,76263E-10 | -4,81952E-07 | -4,16003E-12 | -1,02938E-11 |
| 40 | G transversal | -3,90225E-07 | 4,00912E-10 | -1,12718E-09 | -2,33735E-07 | 1,99343E-11 | 3,94446E-10 | -1,46398E-07 | -2,74654E-14 | 1,71255E-12 |
| 41 | D Longitudinal | 5,09293E-06 | 6,4614E-11 | -1,89649E-10 | 3,78593E-06 | -7,08186E-12 | -5,3542E-12 | 2,71444E-06 | -8,24762E-12 | -1,88738E-11 |
| 41 | D Vertical | 1,12626E-07 | -6,75688E-07 | 2,36313E-07 | 6,76552E-08 | -4,11872E-07 | 1,39412E-07 | 4,24608E-08 | -2,56522E-07 | 8,12862E-08 |
| 41 | D transversal | -2,19176E-07 | 6,39771E-06 | -1,12652E-06 | -1,79337E-07 | 4,86993E-06 | -1,05232E-06 | -1,39754E-07 | 3,56383E-06 | -8,63928E-07 |
| 41 | G Longitudinal | 1,48261E-09 | 3,88845E-07 | -1,51039E-07 | -8,49573E-12 | 2,3677E-07 | -8,90569E-08 | -5,10796E-12 | 1,47464E-07 | -5,32222E-08 |
| 41 | G Vertical | -7,57082E-07 | 4,55699E-11 | -1,25531E-10 | -6,18292E-07 | -4,04896E-12 | -1,58314E-12 | -4,81939E-07 | -4,3003E-12 | -9,84323E-12 |
| 41 | G transversal | -3,85944E-07 | 6,21694E-10 | 1,72265E-09 | -2,32806E-07 | 5,57955E-12 | -2,18939E-11 | -1,46476E-07 | 3,07571E-13 | 1,0325E-12 |
| 42 | D Longitudinal | 4,20948E-06 | -4,38477E-12 | 2,79603E-11 | 3,06927E-06 | -1,27062E-11 | -2,8248E-11 | 2,15536E-06 | -1,32378E-11 | -3,03064E-11 |
| 42 | D Vertical | 2,80753E-11 | -1,12657E-06 | 4,11523E-07 | -1,13869E-11 | -6,86523E-07 | 2,42713E-07 | -1,75251E-12 | -4,2758E-07 | 1,43024E-07 |
| 42 | D transversal | -4,36658E-12 | 6,39772E-06 | -1,12657E-06 | 8,90064E-12 | 4,86993E-06 | -1,05232E-06 | 6,09688E-12 | 3,56384E-06 | -8,63925E-07 |
| 42 | G Longitudinal | -1,21969E-11 | 3,88703E-07 | -1,51062E-07 | 4,8161E-12 | 2,36769E-07 | -8,9051E-08 | 7,03541E-13 | 1,47464E-07 | -5,32223E-08 |
| 42 | G Vertical | -7,62867E-07 | -7,96128E-11 | 2,50859E-10 | -6,17684E-07 | -4,98844E-12 | -2,31718E-11 | -4,81979E-07 | -4,30251E-12 | -9,85883E-12 |
| 42 | G transversal | -3,84048E-07 | 8,28719E-11 | -2,5489E-10 | -2,33791E-07 | 1,50538E-12 | 1,62137E-11 | -1,4639E-07 | 3,00278E-13 | 6,90343E-13 |
| 43 | D Longitudinal | 5,09293E-06 | 6,46366E-11 | -1,8971E-10 | 3,78593E-06 | -7,08142E-12 | -5,34942E-12 | 2,71444E-06 | -8,24762E-12 | -1,88738E-11 |
| 43 | D Vertical | -1,12597E-07 | -6,7567E-07 | 2,36265E-07 | -6,76668E-08 | -4,11871E-07 | 1,39417E-07 | -4,24627E-08 | -2,56522E-07 | 8,12866E-08 |
| 43 | D transversal | 2,19166E-07 | 6,39774E-06 | -1,12663E-06 | 1,79355E-07 | 4,86993E-06 | -1,05231E-06 | 1,39766E-07 | 3,56384E-06 | -8,63922E-07 |
| 43 | G Longitudinal | -1,49247E-09 | 3,88819E-07 | -1,50987E-07 | 1,76225E-11 | 2,3677E-07 | -8,90613E-08 | 6,54197E-12 | 1,47464E-07 | -5,32222E-08 |
| 43 | G Vertical | -7,57079E-07 | -5,39093E-11 | 1,64803E-10 | -6,18293E-07 | -4,96389E-12 | -1,92941E-11 | -4,81939E-07 | -4,29862E-12 | -9,84723E-12 |
| 43 | G transversal | -3,86E-07 | -5,39176E-10 | -1,83303E-09 | -2,32803E-07 | -2,72356E-12 | 4,07214E-11 | -1,46477E-07 | 2,68928E-13 | 2,83235E-13 |
| 44 | D Longitudinal | 7,95438E-06 | 1,69313E-09 | 3,73829E-09 | 6,05458E-06 | 7,01459E-12 | 1,29326E-11 | 4,46489E-06 | 6,60213E-12 | 1,51281E-11 |
| 44 | D Vertical | -1,18531E-07 | 6,59181E-07 | -3,77923E-07 | -6,84321E-08 | 4,12072E-07 | -1,70749E-07 | -4,24097E-08 | 2,56654E-07 | -1,03926E-07 |
| 44 | D transversal | 2,3065E-07 | 6,59856E-06 | -1,18981E-06 | 1,78991E-07 | 4,98832E-06 | -1,09678E-06 | 1,3979E-07 | 3,63757E-06 | -8,90533E-07 |
| 44 | G Longitudinal | -1,23923E-08 | 3,75948E-07 | -2,20306E-07 | -1,0452E-10 | 2,36773E-07 | -8,90812E-08 | 4,9643E-12 | 1,47465E-07 | -5,32195E-08 |
| 44 | G Vertical | -8,19398E-07 | 2,99417E-09 | 7,67792E-09 | -6,18145E-07 | 1,51133E-11 | 2,0348E-10 | -4,8195E-07 | -3,43344E-12 | -5,8439E-12 |

APOYO 2

| DESPLAZAMIENTOS (metros) | | C1 | | | C2 | | | C3 | | |
|---|---|---|---|---|---|---|---|---|---|---|
| Nudo | Desplazamiento | L | T | V | L | T | V | L | T | V |
| 44 | G transversal | -4,0523E-07 | 8,20847E-09 | 3,27517E-08 | -2,35851E-07 | 4,55333E-11 | 4,9729E-10 | -1,46265E-07 | 2,32609E-12 | 1,00022E-11 |
| 45 | D Longitudinal | 7,95438E-06 | 1,69316E-09 | 3,73649E-09 | 6,05458E-06 | 7,01473E-12 | 1,29345E-11 | 4,46489E-06 | 6,60213E-12 | 1,51281E-11 |
| 45 | D Vertical | 1,18383E-07 | 6,57532E-07 | -3,81565E-07 | 6,84363E-08 | 4,12072E-07 | -1,70746E-07 | 4,24136E-08 | 2,56654E-07 | -1,03927E-07 |
| 45 | D transversal | -2,30545E-07 | 6,60009E-06 | -1,1864E-06 | -1,78975E-07 | 4,98832E-06 | -1,09679E-06 | -1,39777E-07 | 3,63757E-06 | -8,90539E-07 |
| 45 | G Longitudinal | 1,20548E-08 | 3,73263E-07 | -2,26676E-07 | 9,53926E-11 | 2,36774E-07 | -8,90779E-08 | -2,58106E-12 | 1,47465E-07 | -5,32196E-08 |
| 45 | G Vertical | -8,19056E-07 | -1,86459E-10 | -6,85132E-10 | -6,18129E-07 | -2,41187E-11 | -2,24433E-10 | -4,81951E-07 | -5,16101E-12 | -1,38342E-11 |
| 45 | G transversal | -4,04409E-07 | 6,63E-10 | -1,14547E-08 | -2,35817E-07 | -4,618E-11 | -5,05304E-10 | -1,46267E-07 | -1,68085E-12 | -8,52171E-12 |
| 46 | D Longitudinal | 7,72405E-06 | 6,11088E-09 | 1,3507E-08 | 5,93695E-06 | 6,27003E-12 | 3,05943E-12 | 4,39174E-06 | 6,7609E-12 | 1,54963E-11 |
| 46 | D Vertical | -1,1853E-07 | 6,59181E-07 | -3,77924E-07 | -6,84322E-08 | 4,12072E-07 | -1,70749E-07 | -4,24097E-08 | 2,56654E-07 | -1,03926E-07 |
| 46 | D transversal | 2,32932E-07 | 6,40454E-06 | -1,1101E-06 | 1,79332E-07 | 4,86994E-06 | -1,05217E-06 | 1,39766E-07 | 3,56384E-06 | -8,63923E-07 |
| 46 | G Longitudinal | -1,04536E-08 | 3,75359E-07 | -2,34361E-07 | -3,07996E-11 | 2,36759E-07 | -8,9203E-08 | 6,64776E-12 | 1,47464E-07 | -5,32221E-08 |
| 46 | G Vertical | -8,16662E-07 | 2,04642E-09 | 5,23843E-09 | -6,18226E-07 | -3,56147E-12 | 7,79481E-14 | -4,81939E-07 | -4,30267E-12 | -9,8581E-12 |
| 46 | G transversal | -4,18706E-07 | 5,74432E-09 | 2,03707E-08 | -2,36631E-07 | -1,32811E-11 | 9,40608E-13 | -1,46191E-07 | 2,2059E-13 | -2,77067E-13 |
| 47 | D Longitudinal | 8,72407E-06 | 8,54081E-11 | 1,50422E-10 | 6,65357E-06 | 1,24811E-11 | 2,80743E-11 | 4,95083E-06 | 1,17475E-11 | 2,69071E-11 |
| 47 | D Vertical | -1,50422E-10 | 1,09183E-06 | -6,56396E-07 | 1,77082E-12 | 6,86716E-07 | -2,74223E-07 | 3,09901E-12 | 4,27712E-07 | -1,65664E-07 |
| 47 | D transversal | 8,54081E-11 | 6,41248E-06 | -1,09183E-06 | 8,12248E-12 | 4,86994E-06 | -1,05218E-06 | 6,15824E-12 | 3,56384E-06 | -8,63925E-07 |
| 47 | G Longitudinal | -6,60705E-11 | 3,73685E-07 | -2,35978E-07 | -2,90706E-13 | 2,36762E-07 | -8,92029E-08 | 9,69199E-13 | 1,47464E-07 | -5,32219E-08 |
| 47 | G Vertical | -8,7363E-07 | 7,02575E-09 | 1,55691E-08 | -6,1766E-07 | -5,68711E-12 | -2,56745E-11 | -4,81979E-07 | -4,29828E-12 | -9,83337E-12 |
| 47 | G transversal | -4,44864E-07 | 7,5841E-09 | 1,67866E-08 | -2,35541E-07 | -1,31201E-12 | -1,69611E-11 | -1,46277E-07 | 3,18394E-13 | 7,36894E-13 |
| 48 | D Longitudinal | 7,72411E-06 | 6,10435E-09 | 1,34916E-08 | 5,93694E-06 | 6,2694E-12 | 3,05394E-12 | 4,39174E-06 | 6,7609E-12 | 1,54963E-11 |
| 48 | D Vertical | 1,18382E-07 | 6,57532E-07 | -3,81566E-07 | 6,84364E-08 | 4,12072E-07 | -1,70746E-07 | 4,24136E-08 | 2,56654E-07 | -1,03927E-07 |
| 48 | D transversal | -2,32745E-07 | 6,40758E-06 | -1,10336E-06 | -1,79316E-07 | 4,86993E-06 | -1,05219E-06 | -1,39754E-07 | 3,56383E-06 | -8,63928E-07 |
| 48 | G Longitudinal | 1,0338E-08 | 3,73131E-07 | -2,39273E-07 | 3,08122E-11 | 2,36759E-07 | -8,91976E-08 | -4,72501E-12 | 1,47464E-07 | -5,32221E-08 |
| 48 | G Vertical | -8,16642E-07 | -1,66749E-09 | -4,36668E-09 | -6,18226E-07 | -5,40186E-12 | -2,0909E-11 | -4,81939E-07 | -4,29606E-12 | -9,83084E-12 |
| 48 | G transversal | -4,18765E-07 | 1,27366E-09 | -4,95761E-09 | -2,36633E-07 | 1,14327E-11 | -1,88062E-11 | -1,46191E-07 | 4,3608E-13 | 1,79081E-12 |
| 49 | D Longitudinal | 6,41118E-06 | -8,54146E-10 | 4,78466E-09 | 4,98137E-06 | -2,40616E-11 | -1,89676E-10 | 3,68666E-06 | 2,19451E-12 | 4,70735E-12 |
| 49 | D Vertical | -2,22049E-07 | 2,23459E-07 | -9,10064E-08 | -1,37366E-07 | 1,37429E-07 | -6,72026E-08 | -8,48266E-08 | 8,55955E-08 | -4,21888E-08 |
| 49 | D transversal | 4,10078E-07 | 6,00257E-06 | -9,95269E-07 | 3,62604E-07 | 4,63314E-06 | -9,63884E-07 | 2,79237E-07 | 3,41637E-06 | -8,10696E-07 |
| 49 | G Longitudinal | 3,13222E-08 | 3,95281E-07 | -1,20275E-07 | -2,83758E-09 | 2,36489E-07 | -9,17783E-08 | 2,96976E-10 | 1,47463E-07 | -5,32537E-08 |
| 49 | G Vertical | -7,0029E-07 | 1,58547E-09 | 1,31682E-08 | -6,14631E-07 | 8,81479E-11 | 3,94996E-10 | -4,80853E-07 | 2,14272E-10 | 7,66527E-10 |
| 49 | G transversal | -4,16371E-07 | -3,34279E-09 | 2,67611E-09 | -2,37972E-07 | 1,0352E-10 | 5,55345E-10 | -1,46064E-07 | 1,25832E-12 | 1,27602E-11 |
| 50 | D Longitudinal | 6,19836E-06 | 5,70482E-11 | 7,17438E-10 | 4,74415E-06 | -7,86892E-12 | -6,94696E-11 | 3,47993E-06 | -5,75814E-13 | -1,53942E-12 |
| 50 | D Vertical | -2,26487E-07 | -8,1754E-10 | -2,24024E-08 | -1,35869E-07 | 8,61658E-11 | -1,6028E-08 | -8,48737E-08 | 6,63102E-11 | -1,13187E-08 |
| 50 | D transversal | 4,2472E-07 | 6,20028E-06 | -1,05503E-06 | 3,60499E-07 | 4,75155E-06 | -1,00768E-06 | 2,79364E-07 | 3,49011E-06 | -8,37308E-07 |
| 50 | G Longitudinal | 1,28476E-08 | 3,90335E-07 | -1,3155E-07 | -2,52426E-09 | 2,36763E-07 | -8,91337E-08 | 1,71204E-10 | 1,47464E-07 | -5,3222E-08 |
| 50 | G Vertical | -7,24444E-07 | 4,07703E-10 | -4,95368E-09 | -6,14133E-07 | 3,40823E-12 | 1,58134E-11 | -4,82352E-07 | -4,04166E-12 | -8,99366E-12 |
| 50 | G transversal | -3,95518E-07 | -5,16284E-10 | -6,74605E-10 | -2,34678E-07 | -1,91705E-11 | -1,91852E-10 | -1,46333E-07 | 5,49646E-13 | 1,155E-12 |
| 51 | D Longitudinal | 5,59E-06 | 4,55529E-10 | -4,00254E-09 | 4,27226E-06 | -1,1025E-11 | -1,40619E-10 | 3,12686E-06 | -2,9962E-12 | -7,43442E-12 |
| 51 | D Vertical | -2,25006E-07 | -2,23471E-07 | 5,31167E-08 | -1,3491E-07 | -1,37217E-07 | 3,61921E-08 | -8,49192E-08 | -8,5463E-08 | 1,95487E-08 |
| 51 | D transversal | 4,13792E-07 | 6,00366E-06 | -9,90465E-07 | 3,61822E-07 | 4,6332E-06 | -9,62328E-07 | 2,7924E-07 | 3,41637E-06 | -8,10699E-07 |
| 51 | G Longitudinal | 2,31661E-08 | 3,94338E-07 | -1,24708E-07 | -4,31718E-09 | 2,36801E-07 | -8,76204E-08 | 2,71349E-10 | 1,47465E-07 | -5,31975E-08 |
| 51 | G Vertical | -6,99202E-07 | -3,28649E-10 | 3,02302E-09 | -6,14299E-07 | -1,19887E-12 | -1,21675E-10 | -4,81235E-07 | 3,72396E-11 | 6,18922E-11 |
| 51 | G transversal | -3,72931E-07 | 3,0474E-09 | -2,40035E-09 | -2,31417E-07 | 3,63652E-11 | 3,05501E-10 | -1,46602E-07 | 5,69258E-13 | 6,18015E-12 |
| 52 | D Longitudinal | 5,77738E-06 | -5,77966E-13 | 3,13929E-12 | 4,38791E-06 | -1,51271E-12 | -3,28444E-12 | 3,20015E-06 | -3,13275E-12 | -7,1704E-12 |

APOYO 2

| DESPLAZAMIENTOS (metros) | | C1 | | | C2 | | | C3 | | |
|---|---|---|---|---|---|---|---|---|---|---|
| Nudo | Desplazamiento | L | T | V | L | T | V | L | T | V |
| 52 | D Vertical | -1,59411E-12 | -2,24334E-07 | 5,86443E-08 | 2,91725E-13 | -1,37212E-07 | 3,62467E-08 | -1,48948E-13 | -8,54632E-08 | 1,95488E-08 |
| 52 | D transversal | 9,96497E-13 | 6,20071E-06 | -1,05857E-06 | 7,21628E-12 | 4,75157E-06 | -1,00732E-06 | 5,71433E-12 | 3,4901E-06 | -8,37315E-07 |
| 52 | G Longitudinal | 4,14063E-12 | 3,94091E-07 | -1,36197E-07 | 1,78444E-12 | 2,3673E-07 | -8,99698E-08 | 8,68238E-13 | 1,47464E-07 | -5,32202E-08 |
| 52 | G Vertical | -7,32366E-07 | 5,4482E-13 | 3,06367E-12 | -6,21327E-07 | -5,38401E-12 | -1,22028E-11 | -4,81669E-07 | -4,26279E-12 | -9,75822E-12 |
| 52 | G transversal | -3,839E-07 | -1,73258E-13 | 1,00452E-11 | -2,32152E-07 | 1,26409E-12 | 2,8195E-12 | -1,46504E-07 | 2,89077E-13 | 6,56797E-13 |
| 53 | D Longitudinal | 5,59E-06 | -4,56513E-10 | 4,0139E-09 | 4,27226E-06 | 9,54721E-12 | 1,37489E-10 | 3,12686E-06 | -2,99284E-12 | -6,27916E-12 |
| 53 | D Vertical | 2,25007E-07 | -2,23471E-07 | 5,31088E-08 | 1,3491E-07 | -1,37218E-07 | 3,61896E-08 | 8,49189E-08 | -8,54634E-08 | 1,95479E-08 |
| 53 | D transversal | -4,13796E-07 | 6,00366E-06 | -9,90472E-07 | -3,6181E-07 | 4,6332E-06 | -9,62344E-07 | -2,79229E-07 | 3,41637E-06 | -8,10711E-07 |
| 53 | G Longitudinal | -2,31883E-08 | 3,94334E-07 | -1,2476E-07 | 4,32072E-09 | 2,36804E-07 | -8,7613E-08 | -2,69647E-10 | 1,47465E-07 | -5,31977E-08 |
| 53 | G Vertical | -6,98403E-07 | 3,62133E-10 | -1,80529E-09 | -6,14325E-07 | -7,17187E-12 | 1,12928E-10 | -4,81233E-07 | -4,57943E-11 | -8,15224E-11 |
| 53 | G transversal | -3,72957E-07 | -3,05014E-09 | 2,36302E-09 | -2,31415E-07 | -3,32014E-11 | -2,98684E-10 | -1,46602E-07 | -3,17536E-14 | -4,96079E-12 |
| 54 | D Longitudinal | 6,19836E-06 | -5,70268E-11 | -7,17159E-10 | 4,74415E-06 | 8,22032E-12 | 7,049E-11 | 3,47993E-06 | -6,07465E-13 | -1,15967E-12 |
| 54 | D Vertical | 2,26494E-07 | -8,19494E-10 | -2,24062E-08 | 1,3587E-07 | 8,5285E-11 | -1,60299E-08 | 8,48745E-08 | 6,59553E-11 | -1,13196E-08 |
| 54 | D transversal | -4,24719E-07 | 6,20028E-06 | -1,05503E-06 | -3,60485E-07 | 4,75155E-06 | -1,00769E-06 | -2,79353E-07 | 3,4901E-06 | -8,3732E-07 |
| 54 | G Longitudinal | -1,2847E-08 | 3,90335E-07 | -1,31529E-07 | 2,52888E-09 | 2,36765E-07 | -8,913E-08 | -1,69531E-10 | 1,47464E-07 | -5,32221E-08 |
| 54 | G Vertical | -7,24443E-07 | -4,08882E-10 | 4,96679E-09 | -6,14133E-07 | -9,20009E-12 | -2,8812E-11 | -4,82352E-07 | -4,70157E-12 | -1,10343E-11 |
| 54 | G transversal | -3,95547E-07 | 5,16428E-10 | 6,73795E-10 | -2,34677E-07 | 2,0187E-11 | 1,9394E-10 | -1,46333E-07 | 6,78119E-14 | 2,52639E-13 |
| 55 | D Longitudinal | 6,41116E-06 | 8,55371E-10 | -4,79588E-09 | 4,98137E-06 | 2,71783E-11 | 1,96762E-10 | 3,68666E-06 | 2,0421E-12 | 5,00816E-12 |
| 55 | D Vertical | 2,2205E-07 | 2,23459E-07 | -9,09984E-08 | 1,37371E-07 | 1,37429E-07 | -6,72021E-08 | 8,48283E-08 | 8,55951E-08 | -4,21896E-08 |
| 55 | D transversal | -4,10074E-07 | 6,00257E-06 | -9,95281E-07 | -3,62592E-07 | 4,63313E-06 | -9,63902E-07 | -2,79227E-07 | 3,41637E-06 | -8,10707E-07 |
| 55 | G Longitudinal | -3,13525E-08 | 3,95279E-07 | -1,20326E-07 | 2,84324E-09 | 2,3649E-07 | -9,17774E-08 | -2,95345E-10 | 1,47463E-07 | -5,32539E-08 |
| 55 | G Vertical | -6,99703E-07 | -1,50659E-09 | -1,18035E-08 | -6,146E-07 | -2,6147E-11 | -2,50166E-10 | -4,80852E-07 | -2,19876E-10 | -7,79469E-10 |
| 55 | G transversal | -4,16374E-07 | 3,34747E-09 | -2,63324E-09 | -2,37967E-07 | -1,04896E-10 | -5,5851E-10 | -1,46064E-07 | -5,67327E-13 | -1,11799E-11 |
| 56 | D Longitudinal | 6,61824E-06 | 5,60819E-13 | -2,96186E-12 | 5,10044E-06 | 1,89505E-12 | 4,37251E-12 | 3,7597E-06 | 1,94936E-12 | 4,47103E-12 |
| 56 | D Vertical | -1,42906E-11 | 2,24945E-07 | -9,73404E-08 | 2,73569E-12 | 1,37445E-07 | -6,71096E-08 | 8,2188E-13 | 8,55952E-08 | -4,2189E-08 |
| 56 | D transversal | -1,24503E-13 | 6,20105E-06 | -1,05875E-06 | 7,44704E-12 | 4,75154E-06 | -1,00804E-06 | 5,70449E-12 | 3,4901E-06 | -8,37313E-07 |
| 56 | G Longitudinal | -5,56953E-12 | 3,96947E-07 | -1,26934E-07 | 2,81669E-12 | 2,36796E-07 | -8,83034E-08 | 8,07096E-13 | 1,47464E-07 | -5,32259E-08 |
| 56 | G Vertical | -7,32902E-07 | 1,22025E-12 | 5,04547E-12 | -6,21954E-07 | -5,7215E-12 | -1,294E-11 | -4,81666E-07 | -4,25723E-12 | -9,74527E-12 |
| 56 | G transversal | -3,96798E-07 | 3,88794E-13 | -1,03977E-11 | -2,37205E-07 | -3,27817E-13 | -9,04647E-13 | -1,46163E-07 | 3,25052E-13 | 7,43292E-13 |
| 57 | D Longitudinal | 6,39397E-06 | 9,06823E-13 | 2,38395E-12 | 4,86152E-06 | -3,72765E-14 | 7,78989E-14 | 3,55309E-06 | -7,45286E-13 | -1,69987E-12 |
| 57 | D Vertical | 6,39875E-13 | 2,3269E-11 | -2,05065E-08 | 1,16888E-12 | 1,04396E-10 | -1,55797E-08 | 3,62409E-13 | 6,60591E-11 | -1,13202E-08 |
| 57 | D transversal | 7,40134E-12 | 6,39846E-06 | -1,12588E-06 | 8,49797E-12 | 4,86993E-06 | -1,05225E-06 | 6,12777E-12 | 3,56384E-06 | -8,63925E-07 |
| 57 | G Longitudinal | 4,41146E-13 | 3,877E-07 | -1,38847E-07 | 2,28368E-12 | 2,36766E-07 | -8,91253E-08 | 8,36468E-13 | 1,47464E-07 | -5,32221E-08 |
| 57 | G Vertical | -7,48086E-07 | -6,26531E-14 | 9,0856E-13 | -6,17896E-07 | -4,27434E-12 | -9,67279E-12 | -4,82013E-07 | -4,31798E-12 | -9,88772E-12 |
| 57 | G transversal | -3,87634E-07 | 6,90836E-14 | -2,62212E-13 | -2,3463E-07 | 5,02069E-13 | 1,03165E-12 | -1,46333E-07 | 3,06956E-13 | 6,99769E-13 |
| 58 | D Longitudinal | 6,00018E-06 | -4,01691E-09 | 5,85952E-09 | 4,74384E-06 | 5,51467E-11 | 3,7974E-10 | 3,54046E-06 | 2,31595E-12 | 6,34615E-12 |
| 58 | D Vertical | -2,18154E-07 | 2,18862E-07 | -8,0197E-08 | -1,36616E-07 | 1,37428E-07 | -6,72888E-08 | -8,4961E-08 | 8,55954E-08 | -4,21888E-08 |
| 58 | D transversal | 3,83369E-07 | 5,61297E-06 | -8,76544E-07 | 3,64248E-07 | 4,39647E-06 | -8,72366E-07 | 2,79105E-07 | 3,26891E-06 | -7,57478E-07 |
| 58 | G Longitudinal | 2,50892E-08 | 3,85721E-07 | -1,11592E-07 | -1,96996E-09 | 2,37573E-07 | -8,46052E-08 | -1,49183E-10 | 1,4747E-07 | -5,30971E-08 |
| 58 | G Vertical | -6,65471E-07 | -5,89699E-10 | 6,75623E-09 | -6,09279E-07 | 1,76465E-10 | 7,40906E-10 | -4,79244E-07 | 5,23479E-10 | 1,86041E-09 |
| 58 | G transversal | -4,08915E-07 | -1,07973E-10 | -2,4418E-09 | -2,3749E-07 | -2,09674E-10 | -8,32793E-10 | -1,46387E-07 | -3,36278E-12 | -4,07716E-11 |
| 59 | D Longitudinal | 5,80537E-06 | -4,96283E-11 | 7,91999E-10 | 4,50948E-06 | 1,03078E-11 | 7,75984E-11 | 3,33359E-06 | -2,88954E-13 | -3,09521E-13 |
| 59 | D Vertical | -2,22155E-07 | 4,72014E-10 | -1,67321E-08 | -1,36801E-07 | 1,62328E-10 | -1,41565E-08 | -8,48713E-08 | 6,60533E-11 | -1,13222E-08 |
| 59 | D transversal | 3,99078E-07 | 5,80592E-06 | -9,30761E-07 | 3,63931E-07 | 4,51479E-06 | -9,18549E-07 | 2,79113E-07 | 3,34264E-06 | -7,84087E-07 |

APOYO 2

| DESPLAZAMIENTOS (metros) | | C1 | | | C2 | | | C3 | | |
|---|---|---|---|---|---|---|---|---|---|---|
| Nudo | Desplazamiento | L | T | V | L | T | V | L | T | V |
| 59 | G Longitudinal | 1,17199E-08 | 3,85185E-07 | -1,16549E-07 | -2,08443E-09 | 2,36766E-07 | -8,91214E-08 | 3,72763E-11 | 1,47464E-07 | -5,3222E-08 |
| 59 | G Vertical | -6,90164E-07 | 4,10232E-09 | -7,76344E-09 | -6,0885E-07 | -8,97903E-12 | -3,01577E-11 | -4,82696E-07 | -3,45269E-12 | -7,04489E-12 |
| 59 | G transversal | -3,9045E-07 | 2,95823E-10 | 7,87544E-10 | -2,34671E-07 | 5,51802E-11 | 4,8217E-10 | -1,46332E-07 | 6,2906E-13 | 3,64517E-12 |
| 60 | D Longitudinal | 5,2201E-06 | 4,21702E-09 | -3,47364E-09 | 4,04044E-06 | 2,11711E-11 | 2,60948E-10 | 2,98039E-06 | -2,67008E-12 | -4,85716E-12 |
| 60 | D Vertical | -2,19474E-07 | -2,18827E-07 | 4,60938E-08 | -1,35541E-07 | -1,3722E-07 | 3,6099E-08 | -8,4785E-08 | -8,5463E-08 | 1,9549E-08 |
| 60 | D transversal | 3,90482E-07 | 5,61244E-06 | -8,76116E-07 | 3,65861E-07 | 4,39634E-06 | -8,75626E-07 | 2,79101E-07 | 3,26891E-06 | -7,57474E-07 |
| 60 | G Longitudinal | 2,70921E-08 | 3,86917E-07 | -1,07058E-07 | -1,79013E-09 | 2,36861E-07 | -8,93274E-08 | -4,19851E-11 | 1,47461E-07 | -5,33201E-08 |
| 60 | G Vertical | -6,63065E-07 | -1,5906E-09 | 2,01278E-09 | -6,09103E-07 | -4,86907E-12 | -2,88646E-10 | -4,80165E-07 | 9,59787E-11 | 1,66578E-10 |
| 60 | G transversal | -3,63846E-07 | 5,30901E-10 | 2,5032E-09 | -2,31768E-07 | -6,07139E-11 | -2,72275E-10 | -1,46283E-07 | -7,1796E-13 | -1,55014E-11 |
| 61 | D Longitudinal | 5,40267E-06 | -4,41597E-13 | 7,64267E-12 | 4,15662E-06 | 3,6402E-14 | 1,54511E-13 | 3,05357E-06 | -2,85623E-12 | -6,54306E-12 |
| 61 | D Vertical | 1,28459E-12 | -2,23326E-07 | 4,92975E-08 | -3,57867E-13 | -1,37237E-07 | 3,59139E-08 | -1,13308E-13 | -8,54632E-08 | 1,95473E-08 |
| 61 | D transversal | -3,7217E-13 | 5,80805E-06 | -9,33295E-07 | 5,13553E-12 | 4,51477E-06 | -9,18987E-07 | 4,86876E-12 | 3,34264E-06 | -7,84092E-07 |
| 61 | G Longitudinal | -3,78879E-12 | 3,91218E-07 | -1,14356E-07 | 2,45706E-12 | 2,36869E-07 | -8,67105E-08 | 8,16349E-13 | 1,47464E-07 | -5,32264E-08 |
| 61 | G Vertical | -6,93298E-07 | 1,05033E-12 | -6,56203E-12 | -6,27245E-07 | -7,51034E-12 | -1,70422E-11 | -4,81317E-07 | -4,22661E-12 | -9,67105E-12 |
| 61 | G transversal | -3,77514E-07 | 1,17572E-13 | 2,65664E-12 | -2,32581E-07 | 9,55363E-13 | 2,07721E-12 | -1,4637E-07 | 3,26254E-13 | 7,42851E-13 |
| 62 | D Longitudinal | 5,22011E-06 | -4,21763E-09 | 3,48703E-09 | 4,04044E-06 | -2,01027E-11 | -2,58498E-10 | 2,98039E-06 | -2,70825E-12 | -7,46801E-12 |
| 62 | D Vertical | 2,19475E-07 | -2,18827E-07 | 4,60927E-08 | 1,35541E-07 | -1,37221E-07 | 3,60979E-08 | 8,47847E-08 | -8,54634E-08 | 1,9548E-08 |
| 62 | D transversal | -3,9048E-07 | 5,61244E-06 | -8,76129E-07 | -3,65853E-07 | 4,39633E-06 | -8,7565E-07 | -2,79092E-07 | 3,2689E-06 | -7,57485E-07 |
| 62 | G Longitudinal | -2,70892E-08 | 3,86919E-07 | -1,07042E-07 | 1,79624E-09 | 2,36862E-07 | -8,93264E-08 | 4,36385E-11 | 1,47461E-07 | -5,33199E-08 |
| 62 | G Vertical | -6,62736E-07 | 1,58916E-09 | -1,49494E-09 | -6,09114E-07 | -3,8728E-12 | 2,79868E-10 | -4,80164E-07 | -1,04428E-10 | -1,86027E-10 |
| 62 | G transversal | -3,63839E-07 | -5,29529E-10 | -2,49389E-09 | -2,31769E-07 | 6,25515E-11 | 2,76258E-10 | -1,46283E-07 | 1,44613E-12 | 1,7161E-11 |
| 63 | D Longitudinal | 5,80536E-06 | 4,98767E-11 | -7,92057E-10 | 4,50948E-06 | -9,01273E-12 | -7,4647E-11 | 3,33359E-06 | -2,80136E-13 | -9,89354E-13 |
| 63 | D Vertical | 2,22152E-07 | 4,7305E-10 | -1,67298E-08 | 1,36804E-07 | 1,62754E-10 | -1,41555E-08 | 8,4872E-08 | 6,56943E-11 | -1,1323E-08 |
| 63 | D transversal | -3,99078E-07 | 5,80592E-06 | -9,30775E-07 | -3,63921E-07 | 4,51478E-06 | -9,18569E-07 | -2,79103E-07 | 3,34264E-06 | -7,84098E-07 |
| 63 | G Longitudinal | -1,17197E-08 | 3,85185E-07 | -1,16543E-07 | 2,08903E-09 | 2,36767E-07 | -8,91191E-08 | -3,56034E-11 | 1,47464E-07 | -5,32219E-08 |
| 63 | G Vertical | -6,90158E-07 | -4,10396E-09 | 7,78853E-09 | -6,08851E-07 | 6,62642E-12 | 2,50323E-11 | -4,82696E-07 | -5,35406E-12 | -1,3137E-11 |
| 63 | G transversal | -3,90433E-07 | -2,95558E-10 | -7,87965E-10 | -2,34671E-07 | -5,40637E-11 | -4,79863E-10 | -1,46332E-07 | -7,96924E-15 | -2,22934E-12 |
| 64 | D Longitudinal | 6,00019E-06 | 4,01828E-09 | -5,87328E-09 | 4,74385E-06 | -5,26738E-11 | -3,7434E-10 | 3,54046E-06 | 2,53844E-12 | 4,78159E-12 |
| 64 | D Vertical | 2,18156E-07 | 2,18862E-07 | -8,01954E-08 | 1,36621E-07 | 1,37427E-07 | -6,72902E-08 | 8,49626E-08 | 8,55951E-08 | -4,21894E-08 |
| 64 | D transversal | -3,83371E-07 | 5,61297E-06 | -8,76554E-07 | -3,6424E-07 | 4,39646E-06 | -8,72385E-07 | -2,79096E-07 | 3,2689E-06 | -7,57489E-07 |
| 64 | G Longitudinal | -2,50776E-08 | 3,85721E-07 | -1,11582E-07 | 1,97334E-09 | 2,37577E-07 | -8,45963E-08 | 1,5088E-10 | 1,47471E-07 | -5,30966E-08 |
| 64 | G Vertical | -6,65224E-07 | 6,37811E-10 | -6,20078E-09 | -6,09264E-07 | -1,44207E-11 | -3,77828E-10 | -4,79239E-07 | -5,248E-10 | -1,86372E-09 |
| 64 | G transversal | -4,08899E-07 | 1,0676E-10 | 2,43022E-09 | -2,37501E-07 | 2,10097E-10 | 8,33485E-10 | -1,46387E-07 | 3,86099E-12 | 4,19079E-11 |
| 65 | D Longitudinal | 6,204E-06 | 7,18902E-13 | -7,60933E-12 | 4,86228E-06 | 1,22134E-12 | 2,71534E-12 | 3,61362E-06 | 2,28719E-12 | 5,24432E-12 |
| 65 | D Vertical | 9,14687E-12 | 2,22991E-07 | -8,62221E-08 | 3,02191E-12 | 1,37382E-07 | -6,75759E-08 | 8,5514E-13 | 8,55954E-08 | -4,21897E-08 |
| 65 | D transversal | 5,89022E-13 | 5,80777E-06 | -9,35912E-07 | 4,923E-12 | 4,5148E-06 | -9,18134E-07 | 4,87702E-12 | 3,34264E-06 | -7,84092E-07 |
| 65 | G Longitudinal | 2,41151E-12 | 3,89619E-07 | -1,18685E-07 | 2,13802E-12 | 2,36672E-07 | -9,14928E-08 | 8,6181E-13 | 1,47464E-07 | -5,32213E-08 |
| 65 | G Vertical | -6,83984E-07 | 7,43324E-13 | -7,64816E-12 | -6,26528E-07 | -6,72919E-12 | -1,53369E-11 | -4,81314E-07 | -4,21639E-12 | -9,64825E-12 |
| 65 | G transversal | -3,92913E-07 | 1,3332E-13 | -2,92397E-12 | -2,36762E-07 | -5,35072E-15 | -1,32345E-13 | -1,46297E-07 | 2,87986E-13 | 6,57475E-13 |
| 66 | D Longitudinal | 5,59806E-06 | -1,27191E-09 | 1,30442E-09 | 4,50829E-06 | -9,18237E-11 | -5,95979E-10 | 3,39394E-06 | 2,64205E-12 | 3,08019E-12 |
| 66 | D Vertical | -2,11977E-07 | 2,11513E-07 | -7,01619E-08 | -1,35127E-07 | 1,37433E-07 | -6,71698E-08 | -8,52101E-08 | 8,55954E-08 | -4,21885E-08 |
| 66 | D transversal | 3,62422E-07 | 5,23261E-06 | -7,74997E-07 | 3,67256E-07 | 4,15953E-06 | -7,87502E-07 | 2,79293E-07 | 3,12145E-06 | -7,04256E-07 |
| 66 | G Longitudinal | 1,12698E-08 | 3,7172E-07 | -9,41679E-08 | -3,23808E-09 | 2,3406E-07 | -9,89549E-08 | 1,33065E-10 | 1,47441E-07 | -5,3676E-08 |
| 66 | G Vertical | -6,26874E-07 | -2,91125E-09 | 3,60179E-09 | -5,97639E-07 | 3,07181E-10 | -3,90733E-11 | -4,75617E-07 | 1,21921E-09 | 4,32353E-09 |

APOYO 2

| DESPLAZAMIENTOS (metros) | | C1 | | | C2 | | | C3 | | |
|---|---|---|---|---|---|---|---|---|---|---|
| Nudo | Desplazamiento | L | T | V | L | T | V | L | T | V |
| 66 | G transversal | -3,87305E-07 | 2,52134E-09 | -3,34667E-09 | -2,31303E-07 | 5,32363E-10 | 1,5586E-09 | -1,46558E-07 | 1,35452E-11 | 1,45553E-10 |
| 67 | D Longitudinal | 5,4201E-06 | 4,4871E-11 | 6,85743E-10 | 4,2748E-06 | -1,21229E-11 | -8,58194E-11 | 3,18726E-06 | -2,10926E-14 | -7,57739E-13 |
| 67 | D Vertical | -2,13868E-07 | -1,57311E-10 | -1,6287E-08 | -1,349E-07 | -7,7049E-12 | -1,80528E-08 | -8,48737E-08 | 6,63433E-11 | -1,13205E-08 |
| 67 | D transversal | 3,74849E-07 | 5,41951E-06 | -8,21896E-07 | 3,66181E-07 | 4,27803E-06 | -8,29389E-07 | 2,79091E-07 | 3,19518E-06 | -7,30864E-07 |
| 67 | G Longitudinal | 1,00255E-08 | 3,74867E-07 | -1,01597E-07 | -1,5005E-10 | 2,36758E-07 | -8,91624E-08 | -2,90891E-10 | 1,47464E-07 | -5,32225E-08 |
| 67 | G Vertical | -6,53429E-07 | 4,61574E-09 | -4,95666E-09 | -6,056E-07 | 1,19347E-11 | 4,23908E-11 | -4,82638E-07 | -2,09666E-12 | -2,12712E-12 |
| 67 | G transversal | -3,8008E-07 | -1,10551E-10 | -1,01594E-09 | -2,3468E-07 | -9,89732E-11 | -8,087E-10 | -1,46332E-07 | 1,26216E-12 | 9,5761E-13 |
| 68 | D Longitudinal | 4,86206E-06 | 1,25129E-09 | -9,47329E-10 | 3,80664E-06 | -3,29858E-11 | -3,87988E-10 | 2,83425E-06 | -2,37229E-12 | -7,60013E-12 |
| 68 | D Vertical | -2,11151E-07 | -2,11517E-07 | 3,92442E-08 | -1,37168E-07 | -1,37216E-07 | 3,62135E-08 | -8,45365E-08 | -8,54629E-08 | 1,95496E-08 |
| 68 | D transversal | 3,6497E-07 | 5,23266E-06 | -7,74459E-07 | 3,64678E-07 | 4,15979E-06 | -7,82066E-07 | 2,79292E-07 | 3,12145E-06 | -7,04249E-07 |
| 68 | G Longitudinal | 1,49078E-08 | 3,71002E-07 | -9,50793E-08 | 2,91197E-09 | 2,36008E-07 | -9,58564E-08 | -2,58596E-10 | 1,47476E-07 | -5,28722E-08 |
| 68 | G Vertical | -6,22573E-07 | -3,09906E-09 | 2,49433E-09 | -5,97504E-07 | 9,10322E-11 | 1,06624E-09 | -4,7775E-07 | 2,27412E-10 | 3,98564E-10 |
| 68 | G transversal | -3,55539E-07 | -2,78431E-09 | 1,54944E-09 | -2,38385E-07 | 1,40734E-10 | 4,18631E-11 | -1,46098E-07 | 4,18024E-12 | 5,53809E-11 |
| 69 | D Longitudinal | 5,0375E-06 | -1,65166E-13 | 5,90192E-12 | 3,92424E-06 | 1,03058E-12 | 2,29333E-12 | 2,90721E-06 | -2,52272E-12 | -5,78354E-12 |
| 69 | D Vertical | -1,08338E-13 | -2,13456E-07 | 4,12055E-08 | -1,50087E-13 | -1,37186E-07 | 3,65325E-08 | -1,18394E-13 | -8,54631E-08 | 1,95508E-08 |
| 69 | D transversal | 4,27262E-13 | 5,42255E-06 | -8,25292E-07 | 2,61829E-12 | 4,27806E-06 | -8,28856E-07 | 4,03985E-12 | 3,19517E-06 | -7,30867E-07 |
| 69 | G Longitudinal | 1,03548E-12 | 3,79784E-07 | -1,01657E-07 | 2,60738E-12 | 2,36548E-07 | -9,35611E-08 | 8,37591E-13 | 1,47464E-07 | -5,32239E-08 |
| 69 | G Vertical | -6,51185E-07 | 3,6946E-13 | -7,62851E-12 | -6,29671E-07 | -7,46432E-12 | -1,69705E-11 | -4,81356E-07 | -4,28842E-12 | -9,81204E-12 |
| 69 | G transversal | -3,6561E-07 | 2,71637E-13 | -1,31894E-12 | -2,34545E-07 | 5,04434E-16 | -1,13304E-13 | -1,46041E-07 | 4,04295E-13 | 9,24037E-13 |
| 70 | D Longitudinal | 4,86206E-06 | -1,25121E-09 | 9,55159E-10 | 3,80664E-06 | 3,46892E-11 | 3,91637E-10 | 2,83425E-06 | -2,24083E-12 | -2,97789E-12 |
| 70 | D Vertical | 2,11152E-07 | -2,11517E-07 | 3,92458E-08 | 1,37168E-07 | -1,37215E-07 | 3,62161E-08 | 8,45363E-08 | -8,54634E-08 | 1,95484E-08 |
| 70 | D transversal | -3,6497E-07 | 5,23266E-06 | -7,74466E-07 | -3,64676E-07 | 4,15978E-06 | -7,82082E-07 | -2,79284E-07 | 3,12144E-06 | -7,04261E-07 |
| 70 | G Longitudinal | -1,49071E-08 | 3,71002E-07 | -9,50912E-08 | -2,90975E-09 | 2,36003E-07 | -9,58685E-08 | 2,60227E-10 | 1,47476E-07 | -5,28717E-08 |
| 70 | G Vertical | -6,22467E-07 | 3,06165E-09 | -2,30019E-09 | -5,97509E-07 | -1,00508E-10 | -1,06782E-09 | -4,7775E-07 | -2,35627E-10 | -4,17615E-10 |
| 70 | G transversal | -3,55538E-07 | 2,78475E-09 | -1,55999E-09 | -2,38384E-07 | -1,41705E-10 | -4,42753E-11 | -1,46098E-07 | -3,50281E-12 | -5,38323E-11 |
| 71 | D Longitudinal | 5,4201E-06 | -4,43807E-11 | -6,86078E-10 | 4,2748E-06 | 1,43534E-11 | 9,06837E-11 | 3,18726E-06 | 6,60219E-14 | 8,58696E-13 |
| 71 | D Vertical | 2,1387E-07 | -1,58159E-10 | -1,62873E-08 | 1,34903E-07 | -1,00248E-11 | -1,80578E-08 | 8,48744E-08 | 6,59887E-11 | -1,13213E-08 |
| 71 | D transversal | -3,74849E-07 | 5,41952E-06 | -8,21906E-07 | -3,66176E-07 | 4,27802E-06 | -8,29411E-07 | -2,79083E-07 | 3,19517E-06 | -7,30876E-07 |
| 71 | G Longitudinal | -1,00252E-08 | 3,74867E-07 | -1,01599E-07 | 1,54687E-10 | 2,36757E-07 | -8,91646E-08 | 2,92564E-10 | 1,47464E-07 | -5,32221E-08 |
| 71 | G Vertical | -6,53432E-07 | -4,61698E-09 | 4,977E-09 | -6,05599E-07 | -1,28201E-11 | -4,42152E-11 | -4,82638E-07 | -6,56753E-12 | -1,77314E-11 |
| 71 | G transversal | -3,80086E-07 | 1,10845E-10 | 1,0155E-09 | -2,34683E-07 | 1,00261E-10 | 8,11379E-10 | -1,46332E-07 | -6,32935E-13 | 4,7667E-13 |
| 72 | D Longitudinal | 5,59806E-06 | 1,27303E-09 | -1,31323E-09 | 4,50829E-06 | 9,55007E-11 | 6,03937E-10 | 3,39394E-06 | 2,67473E-12 | 9,09909E-12 |
| 72 | D Vertical | 2,11978E-07 | 2,11513E-07 | -7,01634E-08 | 1,35132E-07 | 1,37431E-07 | -6,71742E-08 | 8,52118E-08 | 8,55952E-08 | -4,21888E-08 |
| 72 | D transversal | -3,62422E-07 | 5,23261E-06 | -7,75003E-07 | -3,67252E-07 | 4,15952E-06 | -7,87526E-07 | -2,79286E-07 | 3,12144E-06 | -7,04268E-07 |
| 72 | G Longitudinal | -1,12737E-08 | 3,71721E-07 | -9,4176E-08 | 3,24408E-09 | 2,34052E-07 | -9,89738E-08 | -1,31356E-10 | 1,4744E-07 | -5,36768E-08 |
| 72 | G Vertical | -6,26794E-07 | 2,9638E-09 | -3,45186E-09 | -5,97631E-07 | 7,94513E-11 | 8,99585E-10 | -4,75603E-07 | -1,21091E-09 | -4,30518E-09 |
| 72 | G transversal | -3,87313E-07 | -2,52147E-09 | 3,35742E-09 | -2,31274E-07 | -5,30997E-10 | -1,55559E-09 | -1,46558E-07 | -1,29884E-11 | -1,44287E-10 |
| 73 | D Longitudinal | 5,79647E-06 | 6,34712E-13 | -6,3182E-12 | 4,62543E-06 | 1,2486E-12 | 2,67742E-12 | 3,46731E-06 | 2,56785E-12 | 5,88493E-12 |
| 73 | D Vertical | -2,67721E-12 | 2,13599E-07 | -7,25419E-08 | 1,06323E-12 | 1,37515E-07 | -6,66653E-08 | 8,53607E-13 | 8,55952E-08 | -4,21867E-08 |
| 73 | D transversal | -4,26706E-13 | 5,42279E-06 | -8,25775E-07 | 2,82455E-12 | 4,278E-06 | -8,29945E-07 | 4,03285E-12 | 3,19517E-06 | -7,30873E-07 |
| 73 | G Longitudinal | -1,24819E-12 | 3,80352E-07 | -1,01549E-07 | 2,02417E-12 | 2,36937E-07 | -8,49106E-08 | 8,47997E-13 | 1,47462E-07 | -5,32304E-08 |
| 73 | G Vertical | -6,42904E-07 | 8,0808E-13 | -6,48986E-12 | -6,30484E-07 | -7,55188E-12 | -1,71659E-11 | -4,81354E-07 | -4,26708E-12 | -9,76334E-12 |
| 73 | G transversal | -3,8416E-07 | -4,15737E-14 | 1,01759E-12 | -2,34816E-07 | 9,22881E-13 | 2,00008E-12 | -1,46626E-07 | 2,09469E-13 | 4,75222E-13 |
| 74 | D Longitudinal | 5,22249E-06 | -1,30273E-09 | 1,16968E-09 | 4,27004E-06 | 5,21912E-10 | 2,33866E-09 | 3,24671E-06 | 3,20766E-12 | 2,60599E-11 |

APOYO 2

| DESPLAZAMIENTOS (metros) | | C1 | | | C2 | | | C3 | | |
|---|---|---|---|---|---|---|---|---|---|---|
| Nudo | Desplazamiento | L | T | V | L | T | V | L | T | V |
| 74 | D Vertical | -2,0287E-07 | 2,02481E-07 | -6,13557E-08 | -1,35965E-07 | 1,37375E-07 | -6,13183E-08 | -8,56313E-08 | 8,55952E-08 | -4,2192E-08 |
| 74 | D transversal | 3,53157E-07 | 4,87026E-06 | -6,87009E-07 | 3,60861E-07 | 3,92369E-06 | -6,84795E-07 | 2,79926E-07 | 2,97398E-06 | -6,50994E-07 |
| 74 | G Longitudinal | 2,0464E-08 | 3,55495E-07 | -8,03362E-08 | 2,50278E-08 | 2,44549E-07 | -8,22828E-08 | -2,85985E-09 | 1,47547E-07 | -5,16572E-08 |
| 74 | G Vertical | -5,71763E-07 | -4,6896E-09 | 3,23295E-09 | -5,59164E-07 | 2,39486E-10 | 5,00446E-09 | -4,63457E-07 | 3,53874E-09 | 1,24128E-08 |
| 74 | G transversal | -3,74897E-07 | -1,85449E-09 | 1,78069E-09 | -2,58814E-07 | -5,15531E-10 | 4,76196E-10 | -1,48621E-07 | -4,63155E-11 | -4,76241E-10 |
| 75 | D Longitudinal | 5,04881E-06 | -4,18274E-12 | 1,61425E-10 | 4,03847E-06 | 1,22979E-10 | 2,57471E-10 | 3,04093E-06 | 5,58481E-13 | 7,25171E-12 |
| 75 | D Vertical | -2,07084E-07 | 1,34822E-11 | -1,47227E-08 | -1,36252E-07 | 6,4031E-10 | -1,19602E-08 | -8,48847E-08 | 6,66037E-11 | -1,12972E-08 |
| 75 | D transversal | 3,59126E-07 | 5,04756E-06 | -7,27583E-07 | 3,62497E-07 | 4,04125E-06 | -7,33956E-07 | 2,79438E-07 | 3,04771E-06 | -6,77642E-07 |
| 75 | G Longitudinal | 3,551E-09 | 3,59229E-07 | -8,78551E-08 | 4,31378E-09 | 2,36815E-07 | -9,06117E-08 | -8,24189E-10 | 1,47464E-07 | -5,32215E-08 |
| 75 | G Vertical | -6,23128E-07 | 2,18044E-09 | -1,82855E-09 | -6,04581E-07 | -1,58887E-10 | -1,04634E-09 | -4,81685E-07 | 1,0675E-12 | 3,86237E-12 |
| 75 | G transversal | -3,62509E-07 | 1,16147E-11 | -3,65381E-11 | -2,37988E-07 | 3,69164E-10 | 1,49529E-09 | -1,46321E-07 | 3,45013E-12 | 2,84493E-11 |
| 76 | D Longitudinal | 4,51263E-06 | 1,30662E-09 | -8,81079E-10 | 3,56893E-06 | 9,48141E-11 | -3,24811E-10 | 2,68882E-06 | -1,2435E-12 | 7,46694E-12 |
| 76 | D Vertical | -2,0219E-07 | -2,02481E-07 | 3,30677E-08 | -1,38808E-07 | -1,37344E-07 | 3,31113E-08 | -8,41043E-08 | -8,54628E-08 | 1,95451E-08 |
| 76 | D transversal | 3,5583E-07 | 4,87026E-06 | -6,86744E-07 | 3,56502E-07 | 3,92194E-06 | -6,89159E-07 | 2,79973E-07 | 2,97398E-06 | -6,5107E-07 |
| 76 | G Longitudinal | 1,71962E-08 | 3,55614E-07 | -8,07287E-08 | 1,8169E-08 | 2,42292E-07 | -8,66389E-08 | -1,54678E-09 | 1,47421E-07 | -5,44027E-08 |
| 76 | G Vertical | -5,66918E-07 | -4,74081E-09 | 2,78684E-09 | -5,61318E-07 | -7,15584E-10 | 2,18454E-09 | -4,6977E-07 | 6,69557E-10 | 1,2698E-09 |
| 76 | G transversal | -3,36441E-07 | 1,8975E-09 | -9,37981E-10 | -2,2923E-07 | -2,81762E-10 | -1,6539E-09 | -1,44044E-07 | -1,20757E-11 | -1,69796E-10 |
| 77 | D Longitudinal | 4,68349E-06 | 6,84073E-14 | 2,44812E-12 | 3,68849E-06 | 4,41048E-13 | 8,94957E-13 | 2,76135E-06 | -2,07426E-12 | -4,75819E-12 |
| 77 | D Vertical | 1,47745E-12 | -2,07031E-07 | 3,61168E-08 | 1,68714E-13 | -1,37354E-07 | 3,46261E-08 | -1,70299E-13 | -8,54635E-08 | 1,95387E-08 |
| 77 | D transversal | -5,45894E-14 | 5,05146E-06 | -7,30604E-07 | 1,13649E-12 | 4,04086E-06 | -7,35617E-07 | 3,19832E-12 | 3,04771E-06 | -6,77666E-07 |
| 77 | G Longitudinal | -5,5679E-13 | 3,62409E-07 | -8,77203E-08 | 3,60198E-13 | 2,37851E-07 | -9,29058E-08 | 8,41398E-13 | 1,47464E-07 | -5,31839E-08 |
| 77 | G Vertical | -6,21287E-07 | 2,07527E-13 | -3,34503E-12 | -6,21582E-07 | -3,74208E-12 | -8,4628E-12 | -4,82086E-07 | -4,51716E-12 | -1,03453E-11 |
| 77 | G transversal | -3,53387E-07 | 1,15212E-13 | -2,05968E-12 | -2,37825E-07 | -9,83643E-13 | -2,27794E-12 | -1,45401E-07 | 5,55746E-13 | 1,27199E-12 |
| 78 | D Longitudinal | 4,51263E-06 | -1,30656E-09 | 8,83056E-10 | 3,56893E-06 | -9,49742E-11 | 3,24276E-10 | 2,68882E-06 | -2,26487E-12 | -1,55195E-11 |
| 78 | D Vertical | 2,0219E-07 | -2,02481E-07 | 3,30693E-08 | 1,38808E-07 | -1,37343E-07 | 3,31144E-08 | 8,41041E-08 | -8,54636E-08 | 1,95434E-08 |
| 78 | D transversal | -3,5583E-07 | 4,87026E-06 | -6,86745E-07 | -3,565E-07 | 3,92194E-06 | -6,89162E-07 | -2,79967E-07 | 2,97398E-06 | -6,51083E-07 |
| 78 | G Longitudinal | -1,71959E-08 | 3,55614E-07 | -8,073E-08 | -1,81663E-08 | 2,42287E-07 | -8,66508E-08 | 1,5487E-09 | 1,47421E-07 | -5,44012E-08 |
| 78 | G Vertical | -5,66896E-07 | 4,7273E-09 | -2,73221E-09 | -5,61329E-07 | 7,11141E-10 | -2,18456E-09 | -4,69773E-07 | -6,77074E-10 | -1,28684E-09 |
| 78 | G transversal | -3,36445E-07 | -1,8972E-09 | 9,35454E-10 | -2,29231E-07 | 2,80235E-10 | 1,65028E-09 | -1,44044E-07 | 1,42494E-11 | 1,74775E-10 |
| 79 | D Longitudinal | 5,04881E-06 | 4,56578E-12 | -1,61703E-10 | 4,03848E-06 | -1,21571E-10 | -2,54536E-10 | 3,04093E-06 | 1,03865E-13 | -5,74199E-12 |
| 79 | D Vertical | 2,07084E-07 | 1,38608E-11 | -1,47229E-08 | 1,36253E-07 | 6,42235E-10 | -1,19559E-08 | 8,48854E-08 | 6,62605E-11 | -1,1298E-08 |
| 79 | D transversal | -3,59126E-07 | 5,04756E-06 | -7,27587E-07 | -3,62496E-07 | 4,04125E-06 | -7,33966E-07 | -2,79431E-07 | 3,04771E-06 | -6,77654E-07 |
| 79 | G Longitudinal | -3,5511E-09 | 3,5923E-07 | -8,78586E-08 | -4,3111E-09 | 2,3681E-07 | -9,06236E-08 | 8,25862E-10 | 1,47464E-07 | -5,32205E-08 |
| 79 | G Vertical | -6,23127E-07 | -2,18096E-09 | 1,83784E-09 | -6,0459E-07 | 1,58233E-10 | 1,04498E-09 | -4,81685E-07 | -9,15371E-12 | -2,23965E-11 |
| 79 | G transversal | -3,62505E-07 | -1,21376E-11 | 3,69967E-11 | -2,37973E-07 | -3,72118E-10 | -1,50189E-09 | -1,46321E-07 | -2,78403E-12 | -2,6928E-11 |
| 80 | D Longitudinal | 5,22249E-06 | 1,303E-09 | -1,1718E-09 | 4,27006E-06 | -5,21501E-10 | -2,33799E-09 | 3,24671E-06 | 2,24643E-12 | -1,35696E-11 |
| 80 | D Vertical | 2,0287E-07 | 2,02481E-07 | -6,13573E-08 | 1,35966E-07 | 1,37373E-07 | -6,13211E-08 | 8,5633E-08 | 8,55953E-08 | -4,2192E-08 |
| 80 | D transversal | -3,53157E-07 | 4,87026E-06 | -6,87011E-07 | -3,60862E-07 | 3,92369E-06 | -6,84791E-07 | -2,7992E-07 | 2,97398E-06 | -6,51006E-07 |
| 80 | G Longitudinal | -2,04639E-08 | 3,55495E-07 | -8,03386E-08 | -2,50291E-08 | 2,44546E-07 | -8,22894E-08 | 2,86132E-09 | 1,4755E-07 | -5,16512E-08 |
| 80 | G Vertical | -5,71735E-07 | 4,70728E-09 | -3,19288E-09 | -5,5915E-07 | -1,33216E-10 | -4,7728E-09 | -4,63416E-07 | -3,49815E-09 | -1,23202E-08 |
| 80 | G transversal | -3,749E-07 | 1,85432E-09 | -1,77822E-09 | -2,58847E-07 | 5,16836E-10 | -4,7333E-10 | -1,48622E-07 | 4,54134E-11 | 4,74163E-10 |
| 81 | D Longitudinal | 5,40636E-06 | 3,63645E-13 | -2,7537E-12 | 4,38953E-06 | 1,18512E-12 | 2,51775E-12 | 3,32051E-06 | 2,73394E-12 | 6,26168E-12 |
| 81 | D Vertical | 1,6503E-12 | 2,07015E-07 | -6,56798E-08 | 9,92284E-12 | 1,37047E-07 | -6,59433E-08 | 8,0243E-13 | 8,5595E-08 | -4,22035E-08 |
| 81 | D transversal | -9,66756E-14 | 5,05144E-06 | -7,31005E-07 | 6,50469E-13 | 4,04161E-06 | -7,36154E-07 | 3,20144E-12 | 3,04771E-06 | -6,77631E-07 |

APOYO 2

| DESPLAZAMIENTOS (metros) | | C1 | | | C2 | | | C3 | | |
|---|---|---|---|---|---|---|---|---|---|---|
| Nudo | Desplazamiento | L | T | V | L | T | V | L | T | V |
| 81 | G Longitudinal | 2,5496E-13 | 3,62361E-07 | -8,79845E-08 | 2,3173E-12 | 2,35856E-07 | -1,02657E-07 | 8,67227E-13 | 1,47457E-07 | -5,32814E-08 |
| 81 | G Vertical | -6,16834E-07 | 2,60502E-13 | -3,46693E-12 | -6,27565E-07 | -3,39679E-12 | -7,72625E-12 | -4,82027E-07 | -4,43275E-12 | -1,0153E-11 |
| 81 | G transversal | -3,65277E-07 | -2,03844E-13 | 2,19252E-12 | -2,35637E-07 | 1,14396E-13 | 2,4627E-13 | -1,47256E-07 | 6,39394E-14 | 1,41983E-13 |
| 82 | D Longitudinal | 3,96741E-06 | 1,78981E-10 | -1,21373E-10 | 2,96972E-06 | 9,96061E-12 | -5,13506E-11 | 2,20196E-06 | -7,28932E-12 | -1,52908E-11 |
| 82 | D Vertical | 1,01576E-07 | -6,29035E-07 | 1,39007E-07 | 6,86014E-08 | -4,13196E-07 | 1,4298E-07 | 4,21704E-08 | -2,56523E-07 | 8,12291E-08 |
| 82 | D transversal | -1,84646E-07 | 5,05233E-06 | -7,31196E-07 | -1,82606E-07 | 4,04083E-06 | -7,35951E-07 | -1,39657E-07 | 3,04771E-06 | -6,77671E-07 |
| 82 | G Longitudinal | 2,17537E-09 | 3,63367E-07 | -8,83506E-08 | -1,27693E-09 | 2,37819E-07 | -9,31191E-08 | -1,94816E-10 | 1,47475E-07 | -5,31543E-08 |
| 82 | G Vertical | -6,22063E-07 | -4,55205E-10 | 2,671E-10 | -6,19476E-07 | 7,38498E-11 | -1,10723E-11 | -4,81759E-07 | -2,16068E-11 | -4,62445E-11 |
| 82 | G transversal | -3,49661E-07 | 2,25339E-09 | -1,52871E-09 | -2,39103E-07 | -1,99849E-10 | -3,58667E-10 | -1,46671E-07 | 4,00758E-11 | 8,33924E-11 |
| 83 | D Longitudinal | 3,96741E-06 | 1,79211E-10 | -1,21564E-10 | 2,96972E-06 | 9,95168E-12 | -5,14155E-11 | 2,20196E-06 | -7,28934E-12 | -1,52915E-11 |
| 83 | D Vertical | -1,01604E-07 | -6,2886E-07 | 1,38888E-07 | -6,86208E-08 | -4,13183E-07 | 1,42936E-07 | -4,21712E-08 | -2,56522E-07 | 8,12314E-08 |
| 83 | D transversal | 1,84633E-07 | 5,0525E-06 | -7,31302E-07 | 1,826E-07 | 4,04084E-06 | -7,35982E-07 | 1,39664E-07 | 3,04771E-06 | -6,77664E-07 |
| 83 | G Longitudinal | -2,15575E-09 | 3,63084E-07 | -8,81505E-08 | 1,29356E-09 | 2,37798E-07 | -9,30486E-08 | 1,95348E-10 | 1,47475E-07 | -5,31566E-08 |
| 83 | G Vertical | -6,22072E-07 | 1,60246E-10 | -6,01101E-11 | -6,19476E-07 | -1,02706E-10 | 6,80278E-11 | -4,81759E-07 | 1,25432E-11 | 2,31569E-11 |
| 83 | G transversal | -3,49641E-07 | -1,31919E-09 | 8,60984E-10 | -2,39103E-07 | 2,6777E-10 | 1,2597E-10 | -1,46671E-07 | -3,90395E-11 | -7,36565E-11 |
| 84 | D Longitudinal | 3,79837E-06 | 6,46507E-10 | -4,37649E-10 | 2,85433E-06 | 4,46256E-11 | -1,65859E-10 | 2,129E-06 | -6,90107E-12 | -1,07122E-11 |
| 84 | D Vertical | 1,01574E-07 | -6,29033E-07 | 1,39006E-07 | 6,86015E-08 | -4,13196E-07 | 1,42979E-07 | 4,21703E-08 | -2,56523E-07 | 8,12291E-08 |
| 84 | D transversal | -1,79789E-07 | 4,86977E-06 | -6,86415E-07 | -1,79403E-07 | 3,92191E-06 | -6,89041E-07 | -1,39894E-07 | 2,97398E-06 | -6,51084E-07 |
| 84 | G Longitudinal | 2,20397E-09 | 3,65671E-07 | -8,99014E-08 | 1,61502E-09 | 2,37993E-07 | -9,37711E-08 | 6,39177E-11 | 1,47465E-07 | -5,31915E-08 |
| 84 | G Vertical | -6,2191E-07 | 4,62779E-10 | -3,15118E-10 | -6,19803E-07 | 3,04035E-11 | -1,22134E-10 | -4,82313E-07 | -4,39205E-12 | -6,40525E-12 |
| 84 | G transversal | -3,42259E-07 | -1,89127E-09 | 1,39842E-09 | -2,33626E-07 | 6,86754E-10 | 1,61588E-09 | -1,44717E-07 | 1,95814E-12 | -5,78672E-11 |
| 85 | D Longitudinal | 3,06927E-06 | 8,90335E-12 | -1,13697E-11 | 2,1306E-06 | -7,01025E-12 | -1,94417E-11 | 1,56988E-06 | -1,2352E-11 | -2,82341E-11 |
| 85 | D Vertical | -2,82478E-11 | -1,05232E-06 | 2,42713E-07 | -1,94417E-11 | -6,89079E-07 | 2,51737E-07 | -6,99891E-13 | -4,27582E-07 | 1,42915E-07 |
| 85 | D transversal | -1,27062E-11 | 4,86993E-06 | -6,86523E-07 | -7,01024E-12 | 3,92192E-06 | -6,89079E-07 | 3,37447E-12 | 2,97398E-06 | -6,5108E-07 |
| 85 | G Longitudinal | 1,22745E-11 | 3,64974E-07 | -8,94531E-08 | 8,37701E-12 | 2,37836E-07 | -9,37748E-08 | 2,51948E-13 | 1,47465E-07 | -5,31763E-08 |
| 85 | G Vertical | -6,30248E-07 | -7,43955E-10 | 4,98375E-10 | -6,25062E-07 | -5,9017E-11 | 1,73602E-10 | -4,81915E-07 | -4,75081E-12 | -1,67581E-11 |
| 85 | G transversal | -3,42676E-07 | 8,03138E-10 | -5,43534E-10 | -2,32674E-07 | 5,91609E-11 | -1,97647E-10 | -1,45745E-07 | 7,75216E-13 | 8,11589E-12 |
| 86 | D Longitudinal | 3,79836E-06 | 6,46738E-10 | -4,37806E-10 | 2,85433E-06 | 4,46404E-11 | -1,65921E-10 | 2,129E-06 | -6,90086E-12 | -1,07098E-11 |
| 86 | D Vertical | -1,01602E-07 | -6,28858E-07 | 1,38887E-07 | -6,86209E-08 | -4,13183E-07 | 1,42935E-07 | -4,21711E-08 | -2,56522E-07 | 8,12314E-08 |
| 86 | D transversal | 1,79761E-07 | 4,87009E-06 | -6,86631E-07 | 1,79387E-07 | 3,92193E-06 | -6,89117E-07 | 1,39901E-07 | 2,97398E-06 | -6,51075E-07 |
| 86 | G Longitudinal | -2,18069E-09 | 3,65435E-07 | -8,9742E-08 | -1,59874E-09 | 2,37976E-07 | -9,37136E-08 | -6,33523E-11 | 1,47465E-07 | -5,31937E-08 |
| 86 | G Vertical | -6,21908E-07 | -5,03016E-10 | 3,36881E-10 | -6,19802E-07 | -3,97396E-11 | 1,17759E-10 | -4,82313E-07 | -4,76957E-12 | -1,49008E-11 |
| 86 | G transversal | -3,42255E-07 | 2,6355E-09 | -1,90351E-09 | -2,33624E-07 | -6,33445E-10 | -1,80245E-09 | -1,44717E-07 | -5,44651E-14 | 6,81043E-11 |
| 87 | D Longitudinal | 6,12234E-06 | 1,78361E-10 | -1,59607E-10 | 5,1646E-06 | 1,68956E-09 | 3,76592E-09 | 3,87983E-06 | 7,91268E-12 | 1,5563E-11 |
| 87 | D Vertical | -1,0473E-07 | 6,28965E-07 | -1,69375E-07 | -7,51406E-08 | 3,96734E-07 | -2,71287E-07 | -4,2699E-08 | 2,56653E-07 | -1,03982E-07 |
| 87 | D transversal | 1,81537E-07 | 5,05231E-06 | -7,31868E-07 | 1,90484E-07 | 4,04732E-06 | -7,23567E-07 | 1,39665E-07 | 3,04771E-06 | -6,77624E-07 |
| 87 | G Longitudinal | -3,34676E-09 | 3,6331E-07 | -8,88609E-08 | -1,20559E-08 | 2,24524E-07 | -1,66128E-07 | 2,9892E-10 | 1,47517E-07 | -5,30786E-08 |
| 87 | G Vertical | -6,18676E-07 | 4,47768E-10 | -3,78138E-10 | -6,81357E-07 | 1,94518E-09 | 1,62487E-09 | -4,81545E-07 | 8,78457E-11 | 3,16591E-10 |
| 87 | G transversal | -3,80453E-07 | 2,25267E-09 | -2,10028E-09 | -2,54115E-07 | 5,77207E-09 | 1,8741E-08 | -1,45602E-07 | 2,14365E-10 | 7,59449E-10 |
| 88 | D Longitudinal | 6,12234E-06 | 1,78599E-10 | -1,59862E-10 | 5,1646E-06 | 1,68959E-09 | 3,7641E-09 | 3,87983E-06 | 7,91269E-12 | 1,5564E-11 |
| 88 | D Vertical | 1,04702E-07 | 6,28791E-07 | -1,6922E-07 | 7,49476E-08 | 3,95088E-07 | -2,74954E-07 | 4,27039E-08 | 2,56653E-07 | -1,0398E-07 |
| 88 | D transversal | -1,81524E-07 | 5,05247E-06 | -7,32016E-07 | -1,90394E-07 | 4,04885E-06 | -7,20167E-07 | -1,39659E-07 | 3,04771E-06 | -6,77632E-07 |
| 88 | G Longitudinal | 3,32013E-09 | 3,63027E-07 | -8,8617E-08 | 1,18875E-08 | 2,21856E-07 | -1,72073E-07 | -2,96814E-10 | 1,47516E-07 | -5,30761E-08 |
| 88 | G Vertical | -6,18673E-07 | -1,51632E-10 | 1,21775E-10 | -6,8136E-07 | 8,34401E-10 | 4,56873E-09 | -4,81543E-07 | -9,55895E-11 | -3,38568E-10 |

APOYO 2

| DESPLAZAMIENTOS (metros) | | C1 | | | C2 | | | C3 | | |
|---|---|---|---|---|---|---|---|---|---|---|
| Nudo | Desplazamiento | L | T | V | L | T | V | L | T | V |
| 88 | G transversal | -3,80445E-07 | -1,31907E-09 | 1,303E-09 | -2,54119E-07 | 3,03448E-09 | 8,8308E-10 | -1,456E-07 | -2,11233E-10 | -7,65679E-10 |
| 89 | D Longitudinal | 5,9312E-06 | 6,44497E-10 | -5,77885E-10 | 5,00941E-06 | 6,09694E-09 | 1,35866E-08 | 3,80645E-06 | 7,84032E-12 | 8,70382E-12 |
| 89 | D Vertical | -1,04728E-07 | 6,28963E-07 | -1,69373E-07 | -7,51396E-08 | 3,96734E-07 | -2,71288E-07 | -4,2699E-08 | 2,56653E-07 | -1,03982E-07 |
| 89 | D transversal | 1,78303E-07 | 4,86978E-06 | -6,86571E-07 | 1,93157E-07 | 3,92871E-06 | -6,72716E-07 | 1,39883E-07 | 2,97398E-06 | -6,50989E-07 |
| 89 | G Longitudinal | -5,40564E-09 | 3,65615E-07 | -9,11013E-08 | -1,09177E-08 | 2,24559E-07 | -1,76693E-07 | -1,07231E-10 | 1,47461E-07 | -5,32772E-08 |
| 89 | G Vertical | -6,16807E-07 | -4,61098E-10 | 4,11596E-10 | -6,79361E-07 | 2,056E-09 | 5,16944E-09 | -4,82262E-07 | -4,37418E-12 | -3,39409E-12 |
| 89 | G transversal | -3,69735E-07 | -1,87928E-09 | 1,95786E-09 | -2,70948E-07 | 5,81251E-09 | 2,02684E-08 | -1,48108E-07 | -1,19807E-11 | -4,01652E-11 |
| 90 | D Longitudinal | 6,65357E-06 | 8,12248E-12 | -1,77082E-12 | 5,84962E-06 | 8,70592E-11 | 1,94169E-10 | 4,36553E-06 | 1,32576E-11 | 3,02455E-11 |
| 90 | D Vertical | -2,80743E-11 | 1,05218E-06 | -2,74223E-07 | -1,94169E-10 | 6,54434E-07 | -4,82857E-07 | 4,04432E-12 | 4,27711E-07 | -1,65771E-07 |
| 90 | D transversal | 1,24811E-11 | 4,86994E-06 | -6,86716E-07 | 8,70592E-11 | 3,93665E-06 | -6,54434E-07 | 2,23493E-12 | 2,97398E-06 | -6,50995E-07 |
| 90 | G Longitudinal | -1,21989E-11 | 3,64916E-07 | -9,04536E-08 | -8,42064E-11 | 2,22867E-07 | -1,78299E-07 | 1,37435E-12 | 1,47464E-07 | -5,32665E-08 |
| 90 | G Vertical | -6,23705E-07 | 7,42393E-10 | -6,71077E-10 | -7,3572E-07 | 7,00781E-09 | 1,56159E-08 | -4,81893E-07 | -4,7174E-12 | -2,14612E-11 |
| 90 | G transversal | -3,72389E-07 | 8,00766E-10 | -7,18198E-10 | -2,94778E-07 | 7,56596E-09 | 1,68597E-08 | -1,46935E-07 | -1,12546E-13 | -1,17613E-11 |
| 91 | D Longitudinal | 5,93121E-06 | 6,44727E-10 | -5,7809E-10 | 5,00948E-06 | 6,09041E-09 | 1,35713E-08 | 3,80645E-06 | 7,84013E-12 | 8,70009E-12 |
| 91 | D Vertical | 1,047E-07 | 6,28789E-07 | -1,69218E-07 | 7,49466E-08 | 3,95088E-07 | -2,74954E-07 | 4,27039E-08 | 2,56653E-07 | -1,0398E-07 |
| 91 | D transversal | -1,78276E-07 | 4,8701E-06 | -6,86861E-07 | -1,92967E-07 | 3,93175E-06 | -6,65954E-07 | -1,39878E-07 | 2,97398E-06 | -6,51E-07 |
| 91 | G Longitudinal | 5,38234E-09 | 3,6538E-07 | -9,08897E-08 | 1,07587E-08 | 2,22334E-07 | -1,81651E-07 | 1,10096E-10 | 1,47461E-07 | -5,32733E-08 |
| 91 | G Vertical | -6,16804E-07 | 5,01943E-10 | -4,53783E-10 | -6,79344E-07 | -1,67964E-09 | -4,331E-09 | -4,82262E-07 | -4,72938E-12 | -1,80404E-11 |
| 91 | G transversal | -3,69739E-07 | 2,62101E-09 | -2,62161E-09 | -2,70983E-07 | 1,19816E-09 | -4,64601E-09 | -1,48109E-07 | 1,11439E-11 | 2,7584E-11 |
| 92 | D Longitudinal | 4,84872E-06 | -3,73752E-09 | 2,88421E-09 | 4,00504E-06 | -6,91798E-10 | 2,23049E-09 | 3,09775E-06 | -5,53599E-12 | -1,74489E-10 |
| 92 | D Vertical | -1,95191E-07 | 1,95052E-07 | -5,56121E-08 | -1,35565E-07 | 1,36547E-07 | -5,56244E-08 | -8,57197E-08 | 8,55957E-08 | -4,21648E-08 |
| 92 | D transversal | 3,27585E-07 | 4,51855E-06 | -6,10148E-07 | 3,3167E-07 | 3,67719E-06 | -6,11379E-07 | 2,8287E-07 | 2,82651E-06 | -5,98324E-07 |
| 92 | G Longitudinal | 2,74947E-08 | 3,45626E-07 | -7,30138E-08 | 2,81311E-08 | 2,45084E-07 | -7,08414E-08 | -1,84517E-09 | 1,47281E-07 | -5,56384E-08 |
| 92 | G Vertical | -5,43061E-07 | -6,38261E-09 | 3,53443E-09 | -5,33714E-07 | -1,33103E-09 | 4,63184E-09 | -4,52828E-07 | 5,55297E-09 | 1,92583E-08 |
| 92 | G transversal | -3,67999E-07 | -3,21297E-09 | 1,36478E-09 | -2,65774E-07 | -1,81155E-09 | 8,54363E-10 | -1,48921E-07 | 9,17749E-11 | 6,4196E-10 |
| 93 | D Longitudinal | 4,69166E-06 | 7,85461E-13 | 3,26677E-10 | 3,79685E-06 | 6,6367E-11 | 5,1333E-10 | 2,89459E-06 | -2,38154E-12 | -5,32532E-11 |
| 93 | D Vertical | -2,00171E-07 | -1,10209E-12 | -1,3889E-08 | -1,39207E-07 | -7,78572E-10 | -1,59371E-08 | -8,46868E-08 | 5,92845E-11 | -1,16382E-08 |
| 93 | D transversal | 3,42986E-07 | 4,69121E-06 | -6,46193E-07 | 3,45833E-07 | 3,7999E-06 | -6,46233E-07 | 2,81227E-07 | 2,90025E-06 | -6,24414E-07 |
| 93 | G Longitudinal | 9,69365E-09 | 3,46543E-07 | -7,72512E-08 | 1,20779E-08 | 2,39975E-07 | -7,73012E-08 | -1,89972E-09 | 1,47463E-07 | -5,32309E-08 |
| 93 | G Vertical | -5,92851E-07 | 4,30133E-09 | -2,90633E-09 | -5,87235E-07 | 2,52004E-10 | -3,02577E-09 | -4,78623E-07 | 9,46641E-12 | 7,39749E-11 |
| 93 | G transversal | -3,51789E-07 | -2,27237E-12 | 3,64452E-10 | -2,45258E-07 | -4,82907E-10 | -9,8399E-10 | -1,4634E-07 | -3,91384E-12 | -1,28843E-10 |
| 94 | D Longitudinal | 4,1828E-06 | 3,73678E-09 | -1,86611E-09 | 3,3434E-06 | 3,4054E-10 | -2,19103E-09 | 2,54509E-06 | -5,95432E-12 | -7,20507E-11 |
| 94 | D Vertical | -1,95017E-07 | -1,95052E-07 | 2,92132E-08 | -1,37749E-07 | -1,36558E-07 | 2,91961E-08 | -8,40647E-08 | -8,54625E-08 | 1,95789E-08 |
| 94 | D transversal | 3,34937E-07 | 4,51855E-06 | -6,09132E-07 | 3,34865E-07 | 3,67815E-06 | -6,07869E-07 | 2,8225E-07 | 2,82653E-06 | -5,97261E-07 |
| 94 | G Longitudinal | 2,08658E-08 | 3,4559E-07 | -7,36271E-08 | 2,35853E-08 | 2,44391E-07 | -7,38473E-08 | -3,28326E-09 | 1,47534E-07 | -5,18935E-08 |
| 94 | G Vertical | -5,3748E-07 | -6,4176E-09 | 3,09767E-09 | -5,35478E-07 | -1,90213E-09 | 2,78122E-09 | -4,62914E-07 | 1,06173E-09 | 2,19415E-09 |
| 94 | G transversal | -3,23331E-07 | 3,19847E-09 | -8,95835E-10 | -2,23649E-07 | 1,57374E-09 | -1,10928E-09 | -1,43821E-07 | 1,84035E-11 | 2,14322E-10 |
| 95 | D Longitudinal | 4,34463E-06 | 8,87619E-14 | 4,1163E-13 | 3,45571E-06 | -4,94778E-13 | -1,2491E-12 | 2,61693E-06 | -1,12138E-12 | -2,57656E-12 |
| 95 | D Vertical | -1,46439E-12 | -2,00173E-07 | 3,17106E-08 | -1,90791E-13 | -1,37093E-07 | 3,22341E-08 | -4,41097E-14 | -8,54596E-08 | 1,96089E-08 |
| 95 | D transversal | -5,26332E-15 | 4,6944E-06 | -6,47938E-07 | 3,02433E-13 | 3,80005E-06 | -6,48514E-07 | 2,33985E-12 | 2,90025E-06 | -6,24173E-07 |
| 95 | G Longitudinal | 3,16671E-13 | 3,51707E-07 | -7,76101E-08 | 1,30068E-12 | 2,43792E-07 | -8,12876E-08 | 8,70266E-13 | 1,47449E-07 | -5,3806E-08 |
| 95 | G Vertical | -5,95315E-07 | -4,02998E-14 | -8,3117E-13 | -5,95817E-07 | 1,7144E-13 | 4,49051E-13 | -4,84589E-07 | -5,28891E-12 | -1,21256E-11 |
| 95 | G transversal | -3,3705E-07 | 1,14013E-13 | -1,00985E-12 | -2,3292E-07 | -6,8074E-13 | -1,62149E-12 | -1,44445E-07 | 8,57852E-13 | 1,96463E-12 |
| 96 | D Longitudinal | 4,1828E-06 | -3,73652E-09 | 1,86636E-09 | 3,3434E-06 | -3,41714E-10 | 2,18803E-09 | 2,54509E-06 | 4,87232E-12 | 6,95555E-11 |

APOYO 2

| DESPLAZAMIENTOS (metros) | | C1 | | | C2 | | | C3 | | |
|---|---|---|---|---|---|---|---|---|---|---|
| Nudo | Desplazamiento | L | T | V | L | T | V | L | T | V |
| 96 | D Vertical | 1,95017E-07 | -1,95053E-07 | 2,92142E-08 | 1,37749E-07 | -1,36558E-07 | 2,91975E-08 | 8,40645E-08 | -8,54631E-08 | 1,95775E-08 |
| 96 | D transversal | -3,34937E-07 | 4,51855E-06 | -6,09133E-07 | -3,34865E-07 | 3,67815E-06 | -6,07864E-07 | -2,82246E-07 | 2,82652E-06 | -5,97277E-07 |
| 96 | G Longitudinal | -2,08657E-08 | 3,4559E-07 | -7,36284E-08 | -2,35849E-08 | 2,4439E-07 | -7,38494E-08 | 3,28452E-09 | 1,47537E-07 | -5,18871E-08 |
| 96 | G Vertical | -5,37473E-07 | 6,40576E-09 | -3,06292E-09 | -5,3549E-07 | 1,89778E-09 | -2,78003E-09 | -4,62918E-07 | -1,06875E-09 | -2,20987E-09 |
| 96 | G transversal | -3,23332E-07 | -3,19834E-09 | 8,9472E-10 | -2,23649E-07 | -1,57422E-09 | 1,10804E-09 | -1,43821E-07 | -1,60541E-11 | -2,08941E-10 |
| 97 | D Longitudinal | 4,69166E-06 | -5,81516E-13 | -3,26761E-10 | 3,79685E-06 | -6,62367E-11 | -5,13316E-10 | 2,89459E-06 | 3,65259E-12 | 5,61521E-11 |
| 97 | D Vertical | 2,00171E-07 | -1,51885E-12 | -1,38887E-08 | 1,39209E-07 | -7,80177E-10 | -1,59405E-08 | 8,46876E-08 | 5,87082E-11 | -1,16395E-08 |
| 97 | D transversal | -3,42986E-07 | 4,69121E-06 | -6,46194E-07 | -3,45833E-07 | 3,7999E-06 | -6,46231E-07 | -2,81222E-07 | 2,90024E-06 | -6,24428E-07 |
| 97 | G Longitudinal | -9,69367E-09 | 3,46543E-07 | -7,72532E-08 | -1,20777E-08 | 2,39974E-07 | -7,73044E-08 | 1,90139E-09 | 1,47464E-07 | -5,32283E-08 |
| 97 | G Vertical | -5,92851E-07 | -4,3014E-09 | 2,90854E-09 | -5,8724E-07 | -2,53202E-10 | 3,02311E-09 | -4,78623E-07 | -1,54897E-11 | -8,7779E-11 |
| 97 | G transversal | -3,51794E-07 | 2,34881E-12 | -3,64479E-10 | -2,45279E-07 | 4,8285E-10 | 9,8373E-10 | -1,4634E-07 | 4,55558E-12 | 1,30307E-10 |
| 98 | D Longitudinal | 4,84871E-06 | 3,73776E-09 | -2,88466E-09 | 4,00502E-06 | 6,93242E-10 | -2,22758E-09 | 3,09775E-06 | 9,75647E-12 | 1,84142E-10 |
| 98 | D Vertical | 1,95191E-07 | 1,95052E-07 | -5,5613E-08 | 1,35565E-07 | 1,36547E-07 | -5,56258E-08 | 8,57215E-08 | 8,55956E-08 | -4,21648E-08 |
| 98 | D transversal | -3,27585E-07 | 4,51855E-06 | -6,10148E-07 | -3,31669E-07 | 3,67719E-06 | -6,11378E-07 | -2,82866E-07 | 2,8265E-06 | -5,98342E-07 |
| 98 | G Longitudinal | -2,7495E-08 | 3,45626E-07 | -7,3015E-08 | -2,81315E-08 | 2,45085E-07 | -7,08389E-08 | 1,84711E-09 | 1,47281E-07 | -5,56382E-08 |
| 98 | G Vertical | -5,43038E-07 | 6,39701E-09 | -3,51141E-09 | -5,33698E-07 | 1,39767E-09 | -4,4917E-09 | -4,52763E-07 | -5,48411E-09 | -1,9101E-08 |
| 98 | G transversal | -3,68E-07 | 3,213E-09 | -1,36372E-09 | -2,65784E-07 | 1,81213E-09 | -8,53126E-10 | -1,48918E-07 | -9,31364E-11 | -6,45088E-10 |
| 99 | D Longitudinal | 5,0323E-06 | 1,10445E-13 | -4,91897E-13 | 4,13737E-06 | 5,95005E-13 | 1,19424E-12 | 3,17227E-06 | 2,40495E-12 | 5,50406E-12 |
| 99 | D Vertical | -1,48856E-12 | 2,00176E-07 | -5,94762E-08 | -1,12442E-11 | 1,37663E-07 | -5,84092E-08 | 8,98232E-13 | 8,56002E-08 | -4,20632E-08 |
| 99 | D transversal | -8,18296E-14 | 4,69441E-06 | -6,48579E-07 | 3,68127E-14 | 3,80044E-06 | -6,48086E-07 | 2,38754E-12 | 2,90024E-06 | -6,24666E-07 |
| 99 | G Longitudinal | -3,73734E-13 | 3,51711E-07 | -7,68616E-08 | -1,08152E-12 | 2,46494E-07 | -7,3437E-08 | 8,37665E-13 | 1,47468E-07 | -5,26965E-08 |
| 99 | G Vertical | -5,86739E-07 | 1,30639E-13 | -9,51332E-13 | -5,96804E-07 | 1,06644E-12 | 2,44076E-12 | -4,85053E-07 | -5,45736E-12 | -1,25104E-11 |
| 99 | G transversal | -3,56209E-07 | -2,86941E-14 | 9,77917E-13 | -2,47269E-07 | 6,92236E-13 | 1,51905E-12 | -1,48247E-07 | -2,59989E-13 | -6,01024E-13 |
| 100 | D Longitudinal | 4,86889E-06 | 2,71394E-13 | -1,8067E-13 | 3,91731E-06 | 9,56343E-13 | 1,98314E-12 | 2,96779E-06 | 4,99789E-13 | 1,13928E-12 |
| 100 | D Vertical | 1,43201E-13 | 9,35176E-14 | -1,4144E-08 | 2,57063E-13 | 1,50949E-11 | -1,41034E-08 | 3,73544E-13 | 6,60294E-11 | -1,13239E-08 |
| 100 | D transversal | -3,84473E-14 | 4,87156E-06 | -6,87902E-07 | 6,46485E-12 | 3,9226E-06 | -6,88306E-07 | 2,78435E-12 | 2,97398E-06 | -6,51042E-07 |
| 100 | G Longitudinal | -1,02952E-14 | 3,49164E-07 | -8,14043E-08 | 2,54982E-13 | 2,36873E-07 | -8,14364E-08 | 8,33106E-13 | 1,47464E-07 | -5,32185E-08 |
| 100 | G Vertical | -6,11572E-07 | 1,30118E-15 | 3,11616E-14 | -6,11414E-07 | -9,63266E-14 | -1,84433E-13 | -4,81805E-07 | -4,26237E-12 | -9,77015E-12 |
| 100 | G transversal | -3,49247E-07 | 3,90852E-14 | -1,39461E-14 | -2,36948E-07 | -1,92965E-14 | -1,09478E-13 | -1,4632E-07 | 3,15475E-13 | 7,19554E-13 |
| 101 | D Longitudinal | 4,48925E-06 | -5,76814E-09 | 3,11483E-09 | 3,74179E-06 | -2,07515E-09 | 3,40279E-09 | 2,94907E-06 | 2,81878E-11 | 4,16793E-10 |
| 101 | D Vertical | -1,85948E-07 | 1,85693E-07 | -4,96758E-08 | -1,33525E-07 | 1,34002E-07 | -4,96594E-08 | -8,52869E-08 | 8,55949E-08 | -4,22089E-08 |
| 101 | D transversal | 3,01816E-07 | 4,18121E-06 | -5,41279E-07 | 3,06694E-07 | 3,43553E-06 | -5,40764E-07 | 2,84208E-07 | 2,67909E-06 | -5,43335E-07 |
| 101 | G Longitudinal | 2,35704E-08 | 3,29164E-07 | -6,47993E-08 | 2,4943E-08 | 2,39589E-07 | -6,64469E-08 | -2,60602E-09 | 1,48006E-07 | -4,87641E-08 |
| 101 | G Vertical | -5,07887E-07 | -9,21105E-09 | 4,4552E-09 | -5,00009E-07 | -2,97672E-09 | 5,55963E-09 | -4,3605E-07 | 8,75611E-09 | 3,03834E-08 |
| 101 | G transversal | -3,52803E-07 | 1,31154E-09 | -1,40491E-09 | -2,62812E-07 | -2,87154E-11 | -7,01694E-10 | -1,48627E-07 | -2,45915E-10 | -9,1981E-10 |
| 102 | D Longitudinal | 4,34705E-06 | -5,73058E-14 | 5,1023E-10 | 3,55298E-06 | -4,87022E-11 | 3,73929E-10 | 2,74825E-06 | 7,23748E-12 | 7,90368E-11 |
| 102 | D Vertical | -1,91693E-07 | -5,49441E-13 | -1,27021E-08 | -1,35417E-07 | 3,98047E-10 | -1,16732E-08 | -8,54633E-08 | 9,5948E-11 | -1,02605E-08 |
| 102 | D transversal | 3,19423E-07 | 4,34585E-06 | -5,73079E-07 | 3,2059E-07 | 3,5554E-06 | -5,73079E-07 | 2,83908E-07 | 2,75278E-06 | -5,71209E-07 |
| 102 | G Longitudinal | 9,904E-09 | 3,32113E-07 | -6,88753E-08 | 1,13944E-08 | 2,37114E-07 | -6,88652E-08 | -1,62459E-09 | 1,47467E-07 | -5,31982E-08 |
| 102 | G Vertical | -5,54931E-07 | 8,13791E-09 | -4,26348E-09 | -5,52332E-07 | 2,28485E-09 | -4,1813E-09 | -4,74313E-07 | 1,06072E-11 | -1,53167E-11 |
| 102 | G transversal | -3,37432E-07 | 5,95488E-13 | 2,38865E-12 | -2,42479E-07 | 2,52298E-10 | 7,04058E-10 | -1,46325E-07 | 2,97243E-11 | 4,1718E-10 |
| 103 | D Longitudinal | 3,86741E-06 | 5,76866E-09 | -2,09201E-09 | 3,12169E-06 | 2,2316E-09 | -1,94654E-09 | 2,4011E-06 | 1,22524E-11 | 1,45894E-10 |
| 103 | D Vertical | -1,85533E-07 | -1,85693E-07 | 2,52856E-08 | -1,3456E-07 | -1,33985E-07 | 2,53112E-08 | -8,44303E-08 | -8,54642E-08 | 1,95263E-08 |
| 103 | D transversal | 3,1356E-07 | 4,18121E-06 | -5,40246E-07 | 3,10122E-07 | 3,43512E-06 | -5,40782E-07 | 2,85619E-07 | 2,67901E-06 | -5,45923E-07 |

APOYO 2

| DESPLAZAMIENTOS (metros) | | C1 | | | C2 | | | C3 | | |
|---|---|---|---|---|---|---|---|---|---|---|
| Nudo | Desplazamiento | L | T | V | L | T | V | L | T | V |
| 103 | G Longitudinal | 2,61456E-08 | 3,29173E-07 | -6,42559E-08 | 2,66234E-08 | 2,40608E-07 | -6,31022E-08 | -2,2581E-09 | 1,47357E-07 | -5,34667E-08 |
| 103 | G Vertical | -5,00827E-07 | -9,23777E-09 | 3,93422E-09 | -5,01852E-07 | -3,6277E-09 | 3,37317E-09 | -4,52047E-07 | 1,67331E-09 | 3,39896E-09 |
| 103 | G transversal | -3,05892E-07 | -1,30664E-09 | 8,88968E-10 | -2,17908E-07 | 3,96439E-10 | 1,22623E-09 | -1,43822E-07 | -2,10549E-11 | -2,72309E-10 |
| 104 | D Longitudinal | 4,02103E-06 | 1,72332E-13 | -1,6191E-13 | 3,23117E-06 | -6,80181E-13 | -1,74552E-12 | 2,47325E-06 | 4,22272E-14 | 8,79117E-14 |
| 104 | D Vertical | 9,42079E-13 | -1,91548E-07 | 2,73803E-08 | 2,86535E-13 | -1,36366E-07 | 2,71126E-08 | -1,26913E-13 | -8,54735E-08 | 1,94273E-08 |
| 104 | D transversal | -5,42875E-14 | 4,34988E-06 | -5,74689E-07 | -1,1446E-14 | 3,55664E-06 | -5,74324E-07 | 1,56081E-12 | 2,75277E-06 | -5,71601E-07 |
| 104 | G Longitudinal | -2,6457E-13 | 3,37348E-07 | -6,88898E-08 | -6,80905E-13 | 2,4303E-07 | -6,70985E-08 | 6,82753E-13 | 1,47521E-07 | -5,13493E-08 |
| 104 | G Vertical | -5,58894E-07 | -3,69441E-14 | 7,88975E-14 | -5,55873E-07 | 1,22815E-12 | 2,90401E-12 | -4,89407E-07 | -7,02207E-12 | -1,60951E-11 |
| 104 | G transversal | -3,2266E-07 | 7,79743E-14 | -5,03709E-13 | -2,29192E-07 | -1,78636E-13 | -4,78531E-13 | -1,44712E-07 | 5,88651E-13 | 1,34626E-12 |
| 105 | D Longitudinal | 3,86741E-06 | -5,76827E-09 | 2,09154E-09 | 3,12169E-06 | -2,23278E-09 | 1,94337E-09 | 2,4011E-06 | -1,14394E-11 | -1,44052E-10 |
| 105 | D Vertical | 1,85533E-07 | -1,85693E-07 | 2,52861E-08 | 1,3456E-07 | -1,33985E-07 | 2,53116E-08 | 8,44301E-08 | -8,54643E-08 | 1,9526E-08 |
| 105 | D transversal | -3,1356E-07 | 4,18121E-06 | -5,40245E-07 | -3,10121E-07 | 3,43512E-06 | -5,4078E-07 | -2,85617E-07 | 2,679E-06 | -5,45944E-07 |
| 105 | G Longitudinal | -2,61458E-08 | 3,29173E-07 | -6,42562E-08 | -2,6624E-08 | 2,40609E-07 | -6,30993E-08 | 2,26049E-09 | 1,47358E-07 | -5,34662E-08 |
| 105 | G Vertical | -5,00833E-07 | 9,22511E-09 | -3,912E-09 | -5,01868E-07 | 3,62254E-09 | -3,37046E-09 | -4,52053E-07 | -1,67953E-09 | -3,41257E-09 |
| 105 | G transversal | -3,05891E-07 | 1,30681E-09 | -8,89311E-10 | -2,17909E-07 | -3,96049E-10 | -1,22558E-09 | -1,43823E-07 | 2,24477E-11 | 2,75489E-10 |
| 106 | D Longitudinal | 4,34705E-06 | 3,5101E-13 | -5,10348E-10 | 3,55298E-06 | 4,88554E-11 | -3,73996E-10 | 2,74825E-06 | -5,35522E-12 | -7,47438E-11 |
| 106 | D Vertical | 1,91693E-07 | -3,29655E-13 | -1,27023E-08 | 1,35417E-07 | 3,9885E-10 | -1,16715E-08 | 8,54638E-08 | 9,63339E-11 | -1,02596E-08 |
| 106 | D transversal | -3,19423E-07 | 4,34585E-06 | -5,73078E-07 | -3,2059E-07 | 3,5554E-06 | -5,73076E-07 | -2,83905E-07 | 2,75278E-06 | -5,71227E-07 |
| 106 | G Longitudinal | -9,90403E-09 | 3,32113E-07 | -6,88763E-08 | -1,13943E-08 | 2,37114E-07 | -6,88661E-08 | 1,62625E-09 | 1,47467E-07 | -5,31968E-08 |
| 106 | G Vertical | -5,54931E-07 | -8,13785E-09 | 4,26359E-09 | -5,52328E-07 | -2,28704E-09 | 4,17636E-09 | -4,74313E-07 | -1,38874E-11 | 7,80297E-12 |
| 106 | G transversal | -3,37429E-07 | -4,99471E-13 | -2,42453E-12 | -2,42469E-07 | -2,52302E-10 | -7,04216E-10 | -1,46324E-07 | -2,9025E-11 | -4,15586E-10 |
| 107 | D Longitudinal | 4,48925E-06 | 5,76843E-09 | -3,11463E-09 | 3,7418E-06 | 2,07668E-09 | -3,39981E-09 | 2,94907E-06 | -2,46103E-11 | -4,08621E-10 |
| 107 | D Vertical | 1,85948E-07 | 1,85693E-07 | -4,96762E-08 | 1,33525E-07 | 1,34002E-07 | -4,96597E-08 | 8,52886E-08 | 8,55943E-08 | -4,22104E-08 |
| 107 | D transversal | -3,01817E-07 | 4,18121E-06 | -5,41278E-07 | -3,06694E-07 | 3,43553E-06 | -5,4076E-07 | -2,84206E-07 | 2,67908E-06 | -5,43352E-07 |
| 107 | G Longitudinal | -2,35703E-08 | 3,29164E-07 | -6,47995E-08 | -2,4942E-08 | 2,39588E-07 | -6,64489E-08 | 2,60745E-09 | 1,4801E-07 | -4,87553E-08 |
| 107 | G Vertical | -5,07865E-07 | 9,22521E-09 | -4,44436E-09 | -4,99986E-07 | 3,0179E-09 | -5,48119E-09 | -4,35949E-07 | -8,64254E-09 | -3,01239E-08 |
| 107 | G transversal | -3,52802E-07 | -1,3114E-09 | 1,40513E-09 | -2,62799E-07 | 2,84326E-11 | 7,00825E-10 | -1,48638E-07 | 2,46634E-10 | 9,21448E-10 |
| 108 | D Longitudinal | 4,66501E-06 | 1,22601E-13 | 4,13398E-14 | 3,87253E-06 | 8,52365E-13 | 1,72437E-12 | 3,02323E-06 | 1,82035E-12 | 4,16017E-12 |
| 108 | D Vertical | 9,08716E-13 | 1,91548E-07 | -5,27775E-08 | 5,92969E-12 | 1,36075E-07 | -5,33207E-08 | 1,05018E-12 | 8,55754E-08 | -4,25299E-08 |
| 108 | D transversal | -3,97665E-15 | 4,34988E-06 | -5,75713E-07 | 2,0428E-13 | 3,55636E-06 | -5,7607E-07 | 1,4987E-12 | 2,75279E-06 | -5,70838E-07 |
| 108 | G Longitudinal | 2,0866E-13 | 3,3735E-07 | -6,88729E-08 | 7,59538E-13 | 2,41667E-07 | -7,06052E-08 | 1,03881E-12 | 1,4741E-07 | -5,50048E-08 |
| 108 | G Vertical | -5,42505E-07 | -8,5224E-15 | 1,06149E-13 | -5,50164E-07 | 9,04771E-13 | 2,05207E-12 | -4,88668E-07 | -6,34095E-12 | -1,45413E-11 |
| 108 | G transversal | -3,41739E-07 | 1,57075E-14 | 4,67744E-13 | -2,45301E-07 | 2,14353E-13 | 4,24558E-13 | -1,4796E-07 | 3,01033E-14 | 6,49827E-14 |
| 109 | D Longitudinal | 4,14692E-06 | -1,78604E-09 | 8,43363E-10 | 3,48351E-06 | -8,17805E-10 | 8,20429E-10 | 2,80151E-06 | -7,8457E-11 | -7,92282E-10 |
| 109 | D Vertical | -1,757E-07 | 1,74945E-07 | -4,39405E-08 | -1,30243E-07 | 1,29855E-07 | -4,39421E-08 | -8,44768E-08 | 8,55986E-08 | -4,21249E-08 |
| 109 | D transversal | 2,83323E-07 | 3,86126E-06 | -4,8039E-07 | 2,84241E-07 | 3,19881E-06 | -4,80429E-07 | 2,87338E-07 | 2,53149E-06 | -4,93731E-07 |
| 109 | G Longitudinal | 1,10013E-08 | 3,09597E-07 | -5,70626E-08 | 1,43787E-08 | 2,31688E-07 | -5,62218E-08 | -1,13325E-09 | 1,45746E-07 | -6,30889E-08 |
| 109 | G Vertical | -4,67006E-07 | -1,37051E-08 | 6,18669E-09 | -4,59148E-07 | -5,22854E-09 | 7,33335E-09 | -4,09556E-07 | 1,38072E-08 | 4,75752E-08 |
| 109 | G transversal | -3,26178E-07 | 3,82071E-09 | -1,86715E-09 | -2,47562E-07 | 1,5484E-09 | -2,27761E-09 | -1,45293E-07 | 6,73313E-10 | 1,18448E-09 |
| 110 | D Longitudinal | 4,01832E-06 | 2,36437E-13 | 3,23336E-10 | 3,31344E-06 | 3,57479E-11 | 4,22367E-10 | 2,60191E-06 | -1,43895E-11 | -1,20179E-10 |
| 110 | D Vertical | -1,77912E-07 | 4,65661E-13 | -1,14991E-08 | -1,3147E-07 | -1,23477E-10 | -1,18164E-08 | -8,37615E-08 | -2,5423E-11 | -1,35363E-08 |
| 110 | D transversal | 2,96106E-07 | 4,01661E-06 | -5,0845E-07 | 2,96378E-07 | 3,3153E-06 | -5,08452E-07 | 2,85879E-07 | 2,60533E-06 | -5,17894E-07 |
| 110 | G Longitudinal | 9,24519E-09 | 3,14757E-07 | -6,04962E-08 | 1,00658E-08 | 2,31311E-07 | -6,05031E-08 | -5,11213E-10 | 1,47453E-07 | -5,33244E-08 |
| 110 | G Vertical | -5,16685E-07 | 6,44286E-09 | -2,82252E-09 | -5,15719E-07 | 2,53058E-09 | -2,87969E-09 | -4,71183E-07 | 4,79089E-11 | 2,09795E-10 |

APOYO 2

| DESPLAZAMIENTOS (metros) | | C1 | | | C2 | | | C3 | | |
|---|---|---|---|---|---|---|---|---|---|---|
| Nudo | Desplazamiento | L | T | V | L | T | V | L | T | V |
| 110 | G transversal | -3,20028E-07 | -4,20693E-14 | -3,75171E-10 | -2,36597E-07 | -8,39161E-11 | -6,07602E-10 | -1,46345E-07 | -6,1196E-11 | -7,7195E-10 |
| 111 | D Longitudinal | 3,56969E-06 | 1,78647E-09 | -5,72835E-10 | 2,90676E-06 | 8,04348E-10 | -5,87211E-10 | 2,25594E-06 | -1,95411E-11 | -2,51121E-10 |
| 111 | D Vertical | -1,74298E-07 | -1,74945E-07 | 2,14393E-08 | -1,29645E-07 | -1,29857E-07 | 2,1437E-08 | -8,53282E-08 | -8,54602E-08 | 1,96061E-08 |
| 111 | D transversal | 2,86575E-07 | 3,86126E-06 | -4,8013E-07 | 2,85861E-07 | 3,19884E-06 | -4,80091E-07 | 2,84882E-07 | 2,53173E-06 | -4,88592E-07 |
| 111 | G Longitudinal | 1,96297E-08 | 3,09595E-07 | -5,63541E-08 | 1,69235E-08 | 2,31097E-07 | -5,70804E-08 | 4,42073E-09 | 1,47437E-07 | -6,02474E-08 |
| 111 | G Vertical | -4,57555E-07 | -1,37294E-08 | 5,4683E-09 | -4,61654E-07 | -5,94542E-09 | 4,74517E-09 | -4,34872E-07 | 2,66001E-09 | 5,76334E-09 |
| 111 | G transversal | -2,92461E-07 | -3,8223E-09 | 1,21938E-09 | -2,14635E-07 | -1,76826E-09 | 1,01524E-09 | -1,48328E-07 | 2,5075E-11 | 3,37877E-10 |
| 112 | D Longitudinal | 3,71371E-06 | 2,18394E-13 | -3,04462E-13 | 3,01211E-06 | -5,07608E-13 | -1,42463E-12 | 2,32891E-06 | 7,67497E-13 | 1,74638E-12 |
| 112 | D Vertical | -2,89166E-13 | -1,78014E-07 | 2,24834E-08 | -1,09106E-13 | -1,31095E-07 | 2,25878E-08 | -1,48023E-13 | -8,54434E-08 | 1,97968E-08 |
| 112 | D transversal | 3,11319E-15 | 4,02123E-06 | -5,10188E-07 | 1,22929E-13 | 3,31698E-06 | -5,10435E-07 | 6,50989E-13 | 2,60537E-06 | -5,17266E-07 |
| 112 | G Longitudinal | 1,04357E-13 | 3,19964E-07 | -6,01218E-08 | 3,92962E-13 | 2,36283E-07 | -6,0691E-08 | 1,12513E-12 | 1,47274E-07 | -5,73385E-08 |
| 112 | G Vertical | -5,17181E-07 | -3,54712E-14 | 3,76618E-13 | -5,13619E-07 | 6,5108E-13 | 1,50194E-12 | -4,91622E-07 | -6,86122E-12 | -1,57322E-11 |
| 112 | G transversal | -3,0488E-07 | 4,63817E-14 | -1,57023E-13 | -2,22289E-07 | 1,15275E-13 | 2,03384E-13 | -1,4584E-07 | -1,01274E-13 | -2,35623E-13 |
| 113 | D Longitudinal | 3,56969E-06 | -1,78602E-09 | 5,72346E-10 | 2,90676E-06 | -8,04962E-10 | 5,85225E-10 | 2,25594E-06 | 2,0863E-11 | 2,54121E-10 |
| 113 | D Vertical | 1,74298E-07 | -1,74945E-07 | 2,14395E-08 | 1,29645E-07 | -1,29857E-07 | 2,14368E-08 | 8,5328E-08 | -8,54592E-08 | 1,96083E-08 |
| 113 | D transversal | -2,86575E-07 | 3,86126E-06 | -4,8013E-07 | -2,85861E-07 | 3,19884E-06 | -4,80089E-07 | -2,84882E-07 | 2,53172E-06 | -4,88607E-07 |
| 113 | G Longitudinal | -1,96298E-08 | 3,09595E-07 | -5,63539E-08 | -1,69231E-08 | 2,31097E-07 | -5,70803E-08 | -4,42063E-09 | 1,47432E-07 | -6,02585E-08 |
| 113 | G Vertical | -4,57575E-07 | 1,37132E-08 | -5,45389E-09 | -4,61678E-07 | 5,93836E-09 | -4,74035E-09 | -4,34882E-07 | -2,66499E-09 | -5,77368E-09 |
| 113 | G transversal | -2,92458E-07 | 3,82208E-09 | -1,2191E-09 | -2,14631E-07 | 1,76886E-09 | -1,0136E-09 | -1,48328E-07 | -2,57839E-11 | -3,39489E-10 |
| 114 | D Longitudinal | 4,01832E-06 | 1,4344E-13 | -3,23487E-10 | 3,31344E-06 | -3,55686E-11 | -4,225E-10 | 2,60191E-06 | 1,68514E-11 | 1,25794E-10 |
| 114 | D Vertical | 1,77913E-07 | 1,20864E-13 | -1,1499E-08 | 1,31471E-07 | -1,2384E-10 | -1,18168E-08 | 8,37626E-08 | -2,73619E-11 | -1,35407E-08 |
| 114 | D transversal | -2,96106E-07 | 4,01661E-06 | -5,08449E-07 | -2,96378E-07 | 3,3153E-06 | -5,0845E-07 | -2,85878E-07 | 2,60532E-06 | -5,17914E-07 |
| 114 | G Longitudinal | -9,24522E-09 | 3,14757E-07 | -6,04965E-08 | -1,00656E-08 | 2,31312E-07 | -6,05026E-08 | 5,12917E-10 | 1,47453E-07 | -5,33264E-08 |
| 114 | G Vertical | -5,16685E-07 | -6,44278E-09 | 2,822E-09 | -5,15722E-07 | -2,53238E-09 | 2,87561E-09 | -4,71182E-07 | -5,00009E-11 | -2,14586E-10 |
| 114 | G transversal | -3,20029E-07 | 1,2923E-13 | 3,75139E-10 | -2,36601E-07 | 8,39073E-11 | 6,07446E-10 | -1,46346E-07 | 6,18384E-11 | 7,73415E-10 |
| 115 | D Longitudinal | 4,14692E-06 | 1,78642E-09 | -8,43205E-10 | 3,4835E-06 | 8,18794E-10 | -8,1879E-10 | 2,80151E-06 | 8,25921E-11 | 8,01728E-10 |
| 115 | D Vertical | 1,757E-07 | 1,74945E-07 | -4,39406E-08 | 1,30243E-07 | 1,29855E-07 | -4,39418E-08 | 8,44787E-08 | 8,55971E-08 | -4,21285E-08 |
| 115 | D transversal | -2,83323E-07 | 3,86126E-06 | -4,8039E-07 | -2,84241E-07 | 3,19881E-06 | -4,80427E-07 | -2,87337E-07 | 2,53148E-06 | -4,93754E-07 |
| 115 | G Longitudinal | -1,10013E-08 | 3,09596E-07 | -5,70624E-08 | -1,4379E-08 | 2,31689E-07 | -5,6219E-08 | 1,13476E-09 | 1,45738E-07 | -6,31065E-08 |
| 115 | G Vertical | -4,6698E-07 | 1,37221E-08 | -6,18573E-09 | -4,59115E-07 | 5,25305E-09 | -7,29989E-09 | -4,09396E-07 | -1,3623E-08 | -4,7154E-08 |
| 115 | G transversal | -3,26175E-07 | -3,82088E-09 | 1,86703E-09 | -2,47566E-07 | -1,54921E-09 | 2,27603E-09 | -1,45262E-07 | -6,75086E-10 | -1,18853E-09 |
| 116 | D Longitudinal | 4,31368E-06 | 1,63855E-13 | 1,53898E-13 | 3,61124E-06 | 6,7583E-13 | 1,25984E-12 | 2,87494E-06 | 1,72772E-12 | 3,94463E-12 |
| 116 | D Vertical | -2,8315E-13 | 1,78015E-07 | -4,54937E-08 | -1,79943E-12 | 1,31201E-07 | -4,53067E-08 | -1,73905E-13 | 8,56581E-08 | -4,14681E-08 |
| 116 | D transversal | -2,88858E-14 | 4,02123E-06 | -5,10834E-07 | -5,09043E-14 | 3,31717E-06 | -5,10595E-07 | 7,32288E-13 | 2,60529E-06 | -5,18543E-07 |
| 116 | G Longitudinal | -1,52842E-13 | 3,19963E-07 | -6,08946E-08 | -2,23159E-13 | 2,36719E-07 | -6,03475E-08 | 6,51482E-13 | 1,47578E-07 | -4,97053E-08 |
| 116 | G Vertical | -5,04328E-07 | -3,1995E-14 | 3,44296E-13 | -5,09274E-07 | 9,93082E-13 | 2,35316E-12 | -4,92419E-07 | -7,34808E-12 | -1,68429E-11 |
| 116 | G transversal | -3,24799E-07 | 3,57758E-14 | 1,26519E-13 | -2,40562E-07 | -9,74756E-14 | -2,84719E-13 | -1,46864E-07 | 6,64767E-13 | 1,52083E-12 |
| 117 | D Longitudinal | 3,83612E-06 | -9,5089E-10 | 4,25799E-10 | 3,24555E-06 | -4,3144E-10 | 4,27117E-10 | 2,65065E-06 | 5,11727E-10 | 1,60019E-09 |
| 117 | D Vertical | -1,64282E-07 | 1,63477E-07 | -3,86833E-08 | -1,25124E-07 | 1,24511E-07 | -3,8683E-08 | -8,5075E-08 | 8,55605E-08 | -3,86294E-08 |
| 117 | D transversal | 2,74425E-07 | 3,56407E-06 | -4,27819E-07 | 2,75112E-07 | 2,97409E-06 | -4,27818E-07 | 2,81883E-07 | 2,38491E-06 | -4,25712E-07 |
| 117 | G Longitudinal | 1,45808E-08 | 2,83852E-07 | -4,7329E-08 | 1,22607E-08 | 2,17987E-07 | -4,75049E-08 | 1,40597E-08 | 1,51546E-07 | -5,17778E-08 |
| 117 | G Vertical | -4,11813E-07 | -2,18578E-08 | 9,80331E-09 | -4,01341E-07 | -8,47576E-09 | 1,16181E-08 | -3,54717E-07 | 2,4119E-08 | 8,50229E-08 |
| 117 | G transversal | -3,01852E-07 | -2,15689E-09 | 8,12704E-10 | -2,3563E-07 | -1,2396E-09 | 8,9258E-10 | -1,65452E-07 | -9,88605E-10 | -2,42509E-10 |
| 118 | D Longitudinal | 3,70961E-06 | 1,06905E-13 | 9,24001E-11 | 3,08269E-06 | -3,12504E-12 | 8,36661E-11 | 2,45412E-06 | 1,16779E-10 | 1,52036E-10 |

APOYO 2

| DESPLAZAMIENTOS (metros) | | C1 | | | C2 | | | C3 | | |
|---|---|---|---|---|---|---|---|---|---|---|
| Nudo | Desplazamiento | L | T | V | L | T | V | L | T | V |
| 118 | D Vertical | -1,69157E-07 | -1,8699E-13 | -1,08118E-08 | -1,27166E-07 | 8,90145E-12 | -1,07889E-08 | -8,47736E-08 | 5,97383E-10 | -8,09806E-09 |
| 118 | D transversal | 2,80386E-07 | 3,70774E-06 | -4,52093E-07 | 2,80298E-07 | 3,08416E-06 | -4,52093E-07 | 2,83011E-07 | 2,45785E-06 | -4,58383E-07 |
| 118 | G Longitudinal | 3,12258E-09 | 2,94062E-07 | -5,25286E-08 | 3,5325E-09 | 2,21609E-07 | -5,25281E-08 | 3,18066E-09 | 1,47511E-07 | -5,62049E-08 |
| 118 | G Vertical | -4,85847E-07 | 2,2731E-09 | -8,9917E-10 | -4,85729E-07 | 1,03458E-09 | -8,94507E-10 | -4,68679E-07 | -1,32069E-10 | -2,96526E-10 |
| 118 | G transversal | -2,9738E-07 | -2,38047E-13 | -8,50232E-11 | -2,24887E-07 | 7,52461E-12 | -6,43232E-11 | -1,49191E-07 | 3,41092E-10 | 1,38566E-09 |
| 119 | D Longitudinal | 3,28574E-06 | 9,5089E-10 | -3,26727E-10 | 2,69494E-06 | 4,32397E-10 | -3,2567E-10 | 2,10837E-06 | 5,33873E-11 | 5,13583E-11 |
| 119 | D Vertical | -1,62705E-07 | -1,63477E-07 | 1,78189E-08 | -1,24006E-07 | -1,2451E-07 | 1,78196E-08 | -8,62002E-08 | -8,55424E-08 | 1,78235E-08 |
| 119 | D transversal | 2,77369E-07 | 3,56407E-06 | -4,27662E-07 | 2,76427E-07 | 2,97409E-06 | -4,27664E-07 | 2,77708E-07 | 2,38322E-06 | -4,30035E-07 |
| 119 | G Longitudinal | 3,87046E-09 | 2,83852E-07 | -4,80796E-08 | 6,73726E-09 | 2,18111E-07 | -4,79283E-08 | 8,27181E-09 | 1,50272E-07 | -5,32071E-08 |
| 119 | G Vertical | -3,98595E-07 | -2,18661E-08 | 8,62708E-09 | -4,07011E-07 | -9,65026E-09 | 7,31224E-09 | -4,00083E-07 | 4,45607E-09 | 1,00646E-08 |
| 119 | G transversal | -2,69296E-07 | 2,15713E-09 | -4,76008E-10 | -2,03803E-07 | 1,28568E-09 | -4,2929E-10 | -1,41065E-07 | 4,28872E-11 | -1,36562E-09 |
| 120 | D Longitudinal | 3,42273E-06 | 1,32675E-13 | -1,95699E-13 | 2,79843E-06 | -2,10323E-13 | -6,43522E-13 | 2,18253E-06 | 3,19716E-13 | 7,24695E-13 |
| 120 | D Vertical | 1,14516E-12 | -1,68729E-07 | 1,94871E-08 | 1,04872E-12 | -1,26969E-07 | 1,94775E-08 | 1,24993E-13 | -8,55434E-08 | 1,85403E-08 |
| 120 | D transversal | 6,21157E-14 | 3,71266E-06 | -4,53896E-07 | 5,46364E-14 | 3,08646E-06 | -4,53877E-07 | 3,39609E-13 | 2,45747E-06 | -4,59318E-07 |
| 120 | G Longitudinal | -2,78776E-13 | 2,97202E-07 | -5,24757E-08 | -2,95215E-13 | 2,24767E-07 | -5,24338E-08 | -5,1926E-13 | 1,48509E-07 | -5,85627E-08 |
| 120 | G Vertical | -4,85912E-07 | -2,92997E-14 | 2,53646E-13 | -4,84525E-07 | 3,74657E-13 | 8,92309E-13 | -4,84752E-07 | -3,37409E-12 | -7,73446E-12 |
| 120 | G transversal | -2,87718E-07 | -7,9319E-14 | 2,0754E-14 | -2,15746E-07 | 1,49332E-13 | 4,51015E-13 | -1,4774E-07 | -9,36814E-13 | -2,14218E-12 |
| 121 | D Longitudinal | 3,28574E-06 | -9,50863E-10 | 3,26545E-10 | 2,69495E-06 | -4,32608E-10 | 3,25176E-10 | 2,10837E-06 | -5,37647E-11 | -5,22237E-11 |
| 121 | D Vertical | 1,62705E-07 | -1,63477E-07 | 1,78189E-08 | 1,24005E-07 | -1,2451E-07 | 1,78192E-08 | 8,62002E-08 | -8,55411E-08 | 1,78266E-08 |
| 121 | D transversal | -2,77369E-07 | 3,56407E-06 | -4,27662E-07 | -2,76426E-07 | 2,97409E-06 | -4,27664E-07 | -2,77707E-07 | 2,38322E-06 | -4,30038E-07 |
| 121 | G Longitudinal | -3,87084E-09 | 2,83852E-07 | -4,80795E-08 | -6,73771E-09 | 2,18112E-07 | -4,79274E-08 | -8,27084E-09 | 1,50267E-07 | -5,32191E-08 |
| 121 | G Vertical | -3,98638E-07 | 2,18632E-08 | -8,62289E-09 | -4,07052E-07 | 9,64917E-09 | -7,31118E-09 | -4,00101E-07 | -4,45747E-09 | -1,00677E-08 |
| 121 | G transversal | -2,69302E-07 | -2,15716E-09 | 4,75967E-10 | -2,0381E-07 | -1,28541E-09 | 4,2997E-10 | -1,41066E-07 | -4,49953E-11 | 1,36079E-09 |
| 122 | D Longitudinal | 3,70962E-06 | 1,082E-13 | -9,2485E-11 | 3,08269E-06 | 3,22189E-12 | -8,37534E-11 | 2,45412E-06 | -1,15378E-10 | -1,48841E-10 |
| 122 | D Vertical | 1,69157E-07 | 1,12326E-13 | -1,08119E-08 | 1,27166E-07 | 9,04916E-12 | -1,0789E-08 | 8,47729E-08 | 5,99314E-10 | -8,09366E-09 |
| 122 | D transversal | -2,80386E-07 | 3,70774E-06 | -4,52092E-07 | -2,80298E-07 | 3,08416E-06 | -4,52092E-07 | -2,83012E-07 | 2,45784E-06 | -4,58392E-07 |
| 122 | G Longitudinal | -3,1226E-09 | 2,94062E-07 | -5,25286E-08 | -3,53251E-09 | 2,21609E-07 | -5,25273E-08 | -3,17997E-09 | 1,47506E-07 | -5,62164E-08 |
| 122 | G Vertical | -4,85847E-07 | -2,27305E-09 | 8,9876E-10 | -4,85729E-07 | -1,03544E-09 | 8,92575E-10 | -4,68687E-07 | 1,30669E-10 | 2,93318E-10 |
| 122 | G transversal | -2,97377E-07 | -2,05715E-13 | 8,51988E-11 | -2,24883E-07 | -7,73799E-12 | 6,4469E-11 | -1,49178E-07 | -3,4396E-10 | -1,39221E-09 |
| 123 | D Longitudinal | 3,83612E-06 | 9,50887E-10 | -4,25626E-10 | 3,24555E-06 | 4,31664E-10 | -4,26625E-10 | 2,65067E-06 | -5,11203E-10 | -1,59899E-09 |
| 123 | D Vertical | 1,64282E-07 | 1,63477E-07 | -3,86833E-08 | 1,25124E-07 | 1,24511E-07 | -3,86826E-08 | 8,50744E-08 | 8,55592E-08 | -3,86324E-08 |
| 123 | D transversal | -2,74426E-07 | 3,56407E-06 | -4,27819E-07 | -2,75112E-07 | 2,97409E-06 | -4,27818E-07 | -2,81884E-07 | 2,38491E-06 | -4,25707E-07 |
| 123 | G Longitudinal | -1,45804E-08 | 2,83852E-07 | -4,73289E-08 | -1,226E-08 | 2,17988E-07 | -4,75043E-08 | -1,40564E-08 | 1,51542E-07 | -5,17855E-08 |
| 123 | G Vertical | -4,11771E-07 | 2,1861E-08 | -9,80154E-09 | -4,01285E-07 | 8,48256E-09 | -1,16063E-08 | -3,54436E-07 | -2,40896E-08 | -8,49557E-08 |
| 123 | G transversal | -3,01858E-07 | 2,15688E-09 | -8,12645E-10 | -2,35636E-07 | 1,23941E-09 | -8,92997E-10 | -1,65498E-07 | 9,9026E-10 | 2,46307E-10 |
| 124 | D Longitudinal | 3,98661E-06 | 1,03077E-13 | 1,02463E-13 | 3,36233E-06 | 3,17927E-13 | 5,51524E-13 | 2,72634E-06 | 1,21349E-12 | 2,77219E-12 |
| 124 | D Vertical | 1,00259E-12 | 1,68729E-07 | -4,10707E-08 | 1,24115E-12 | 1,26959E-07 | -4,10855E-08 | 7,73554E-12 | 8,52369E-08 | -4,17633E-08 |
| 124 | D transversal | -6,56549E-14 | 3,71266E-06 | -4,54104E-07 | -6,11725E-14 | 3,08645E-06 | -4,54123E-07 | -1,56167E-13 | 2,4582E-06 | -4,59726E-07 |
| 124 | G Longitudinal | 2,54965E-13 | 2,97202E-07 | -5,25785E-08 | 2,96924E-13 | 2,24735E-07 | -5,26173E-08 | 1,39526E-12 | 1,46559E-07 | -6,807E-08 |
| 124 | G Vertical | -4,80674E-07 | -1,14798E-14 | 2,48658E-13 | -4,82006E-07 | 3,80021E-13 | 8,79039E-13 | -4,90342E-07 | -3,25695E-12 | -7,46729E-12 |
| 124 | G transversal | -3,00638E-07 | -7,15919E-14 | 3,86485E-14 | -2,27736E-07 | -2,14904E-13 | -3,83837E-13 | -1,48163E-07 | -4,95914E-14 | -1,07583E-13 |
| 125 | D Longitudinal | 2,8642E-06 | 1,30079E-10 | -4,45904E-11 | 2,2402E-06 | 5,92564E-11 | -4,43032E-11 | 1,6222E-06 | 4,56295E-12 | 7,47696E-13 |
| 125 | D Vertical | 8,2307E-08 | -5,15727E-07 | 8,10629E-08 | 6,19226E-08 | -3,88739E-07 | 8,10074E-08 | 4,25002E-08 | -2,57785E-07 | 8,68634E-08 |
| 125 | D transversal | -1,45792E-07 | 3,71389E-06 | -4,54276E-07 | -1,44649E-07 | 3,08704E-06 | -4,54255E-07 | -1,42759E-07 | 2,45745E-06 | -4,59552E-07 |

APOYO 2

| DESPLAZAMIENTOS (metros) | | C1 | | | C2 | | | C3 | | |
|---|---|---|---|---|---|---|---|---|---|---|
| Nudo | Desplazamiento | L | T | V | L | T | V | L | T | V |
| 125 | G Longitudinal | 9,28045E-10 | 2,97763E-07 | -5,26111E-08 | 7,99564E-10 | 2,25063E-07 | -5,25948E-08 | -2,32538E-09 | 1,48616E-07 | -5,83995E-08 |
| 125 | G Vertical | -4,84478E-07 | 1,70833E-10 | -1,36654E-10 | -4,83434E-07 | 1,71733E-11 | -8,94331E-11 | -4,80861E-07 | -1,6142E-10 | -3,71852E-10 |
| 125 | G transversal | -2,90428E-07 | 1,22495E-09 | -2,0423E-10 | -2,15344E-07 | 6,9192E-10 | -3,2353E-10 | -1,54057E-07 | 3,54633E-10 | 6,33603E-10 |
| 126 | D Longitudinal | 2,8642E-06 | 1,3044E-10 | -4,47076E-11 | 2,2402E-06 | 5,9415E-11 | -4,44253E-11 | 1,6222E-06 | 4,55774E-12 | 7,0031E-13 |
| 126 | D Vertical | -8,23373E-08 | -5,156E-07 | 8,10192E-08 | -6,19508E-08 | -3,88681E-07 | 8,09641E-08 | -4,25158E-08 | -2,57778E-07 | 8,68696E-08 |
| 126 | D transversal | 1,45779E-07 | 3,71401E-06 | -4,54317E-07 | 1,44637E-07 | 3,08709E-06 | -4,54296E-07 | 1,42753E-07 | 2,45746E-06 | -4,59538E-07 |
| 126 | G Longitudinal | -9,01264E-10 | 2,97557E-07 | -5,25403E-08 | -7,74294E-10 | 2,24969E-07 | -5,25247E-08 | 2,33883E-09 | 1,48605E-07 | -5,84106E-08 |
| 126 | G Vertical | -4,84477E-07 | -3,85014E-10 | 2,11274E-10 | -4,83432E-07 | -1,13899E-10 | 1,6422E-10 | -4,80861E-07 | 1,42814E-10 | 3,45186E-10 |
| 126 | G transversal | -2,9043E-07 | -5,47365E-10 | -2,99162E-11 | -2,15348E-07 | -3,83273E-10 | 9,28678E-11 | -1,54058E-07 | -3,16556E-10 | -5,96908E-10 |
| 127 | D Longitudinal | 2,72829E-06 | 4,70381E-10 | -1,61475E-10 | 2,13958E-06 | 2,14089E-10 | -1,60662E-10 | 1,55153E-06 | 2,44466E-11 | 2,09047E-11 |
| 127 | D Vertical | 8,23041E-08 | -5,15725E-07 | 8,10621E-08 | 6,1921E-08 | -3,88738E-07 | 8,10066E-08 | 4,25002E-08 | -2,57785E-07 | 8,6863E-08 |
| 127 | D transversal | -1,40639E-07 | 3,56372E-06 | -4,2754E-07 | -1,40023E-07 | 2,97392E-06 | -4,27542E-07 | -1,39888E-07 | 2,3832E-06 | -4,30058E-07 |
| 127 | G Longitudinal | 2,34023E-09 | 3,00942E-07 | -5,3681E-08 | 2,39711E-09 | 2,26468E-07 | -5,36359E-08 | 1,45607E-09 | 1,48549E-07 | -5,88685E-08 |
| 127 | G Vertical | -4,86986E-07 | 3,3663E-10 | -1,15455E-10 | -4,84733E-07 | 1,53416E-10 | -1,14519E-10 | -4,83426E-07 | 1,61246E-11 | 1,1818E-11 |
| 127 | G transversal | -2,73859E-07 | -3,01223E-09 | 8,68713E-10 | -2,06375E-07 | -1,59033E-09 | 8,59755E-10 | -1,43509E-07 | 2,03893E-10 | 1,38827E-09 |
| 128 | D Longitudinal | 2,15536E-06 | 6,09674E-12 | -1,7534E-12 | 1,56988E-06 | 3,37447E-12 | -6,99892E-13 | 9,86482E-07 | -6,56847E-12 | -1,55152E-11 |
| 128 | D Vertical | -3,03064E-11 | -8,63925E-07 | 1,43024E-07 | -2,82341E-11 | -6,5108E-07 | 1,42915E-07 | -1,55152E-11 | -4,3005E-07 | 1,55296E-07 |
| 128 | D transversal | -1,32379E-11 | 3,56384E-06 | -4,2758E-07 | -1,2352E-11 | 2,97398E-06 | -4,27582E-07 | -6,56848E-12 | 2,3832E-06 | -4,3005E-07 |
| 128 | G Longitudinal | 1,30699E-11 | 3,00225E-07 | -5,34336E-08 | 1,21764E-11 | 2,2618E-07 | -5,33869E-08 | 6,66708E-12 | 1,48507E-07 | -5,89897E-08 |
| 128 | G Vertical | -4,95723E-07 | -5,41666E-10 | 1,86284E-10 | -4,92732E-07 | -2,4594E-10 | 1,8638E-10 | -4,88126E-07 | -3,50816E-11 | -3,99617E-11 |
| 128 | G transversal | -2,76281E-07 | 5,84391E-10 | -2,00788E-10 | -2,0606E-07 | 2,65873E-10 | -1,99858E-10 | -1,43158E-07 | 3,37397E-11 | 3,36924E-11 |
| 129 | D Longitudinal | 2,72828E-06 | 4,70549E-10 | -1,61533E-10 | 2,13957E-06 | 2,14165E-10 | -1,60719E-10 | 1,55152E-06 | 2,44543E-11 | 2,09097E-11 |
| 129 | D Vertical | -8,23344E-08 | -5,15598E-07 | 8,10184E-08 | -6,19492E-08 | -3,8868E-07 | 8,09633E-08 | -4,25158E-08 | -2,57778E-07 | 8,68693E-08 |
| 129 | D transversal | 1,4061E-07 | 3,56395E-06 | -4,2762E-07 | 1,39996E-07 | 2,97403E-06 | -4,27623E-07 | 1,39873E-07 | 2,38321E-06 | -4,30042E-07 |
| 129 | G Longitudinal | -2,3157E-09 | 3,0077E-07 | -5,3622E-08 | -2,37426E-09 | 2,2639E-07 | -5,35771E-08 | -1,44317E-09 | 1,48539E-07 | -5,8879E-08 |
| 129 | G Vertical | -4,86984E-07 | -3,6623E-10 | 1,25985E-10 | -4,84731E-07 | -1,66277E-10 | 1,26024E-10 | -4,83425E-07 | -2,34772E-11 | -2,64647E-11 |
| 129 | G transversal | -2,73853E-07 | 3,55361E-09 | -1,05474E-09 | -2,06369E-07 | 1,83683E-09 | -1,04445E-09 | -1,43507E-07 | -1,74404E-10 | -1,36111E-09 |
| 130 | D Longitudinal | 4,54539E-06 | 1,30092E-10 | -5,83334E-11 | 3,92114E-06 | 5,89639E-11 | -5,85879E-11 | 3,34286E-06 | 1,69074E-09 | 3,86679E-09 |
| 130 | D Vertical | -8,57649E-08 | 5,15727E-07 | -1,03101E-07 | -6,51434E-08 | 3,88696E-07 | -1,03155E-07 | -4,96529E-08 | 2,41375E-07 | -2,06571E-07 |
| 130 | D transversal | 1,41634E-07 | 3,71389E-06 | -4,54664E-07 | 1,42974E-07 | 3,08702E-06 | -4,54686E-07 | 1,50442E-07 | 2,46391E-06 | -4,46969E-07 |
| 130 | G Longitudinal | -2,20052E-09 | 2,97763E-07 | -5,28142E-08 | -2,28366E-09 | 2,25051E-07 | -5,28286E-08 | -9,86075E-09 | 1,35892E-07 | -1,29067E-07 |
| 130 | G Vertical | -4,80976E-07 | -1,70436E-10 | 1,11436E-10 | -4,81749E-07 | 2,10223E-11 | 1,57241E-10 | -5,40601E-07 | 3,02013E-09 | 5,1909E-09 |
| 130 | G transversal | -3,12632E-07 | 1,22596E-09 | -5,0524E-10 | -2,36246E-07 | 7,90168E-10 | -3,80501E-10 | -1,57651E-07 | 8,25461E-09 | 2,72511E-08 |
| 131 | D Longitudinal | 4,54539E-06 | 1,30454E-10 | -5,85078E-11 | 3,92114E-06 | 5,91274E-11 | -5,87539E-11 | 3,34286E-06 | 1,69076E-09 | 3,86498E-09 |
| 131 | D Vertical | 8,5738E-08 | 5,156E-07 | -1,03044E-07 | 6,51132E-08 | 3,88639E-07 | -1,03098E-07 | 4,94558E-08 | 2,39728E-07 | -2,10336E-07 |
| 131 | D transversal | -1,41622E-07 | 3,71401E-06 | -4,54717E-07 | -1,42961E-07 | 3,08708E-06 | -4,54738E-07 | -1,50355E-07 | 2,46544E-06 | -4,43476E-07 |
| 131 | G Longitudinal | 2,1764E-09 | 2,97558E-07 | -5,27225E-08 | 2,25713E-09 | 2,24957E-07 | -5,27378E-08 | 9,68422E-09 | 1,33231E-07 | -1,35151E-07 |
| 131 | G Vertical | -4,80975E-07 | 3,84609E-10 | -2,06292E-10 | -4,81748E-07 | 7,80258E-11 | -2,48982E-10 | -5,40592E-07 | -2,53227E-10 | 1,13552E-09 |
| 131 | G transversal | -3,12629E-07 | -5,48195E-10 | 2,03153E-10 | -2,36244E-07 | -4,8026E-10 | 8,19927E-11 | -1,57628E-07 | 5,22365E-10 | -7,18272E-09 |
| 132 | D Longitudinal | 4,38718E-06 | 4,70404E-10 | -2,10706E-10 | 3,79831E-06 | 2,1336E-10 | -2,1147E-10 | 3,23188E-06 | 6,10173E-09 | 1,39517E-08 |
| 132 | D Vertical | -8,57627E-08 | 5,15725E-07 | -1,031E-07 | -6,51426E-08 | 3,88695E-07 | -1,03154E-07 | -4,96518E-08 | 2,41375E-07 | -2,06572E-07 |
| 132 | D transversal | 1,38802E-07 | 3,56372E-06 | -4,2766E-07 | 1,39382E-07 | 2,97393E-06 | -4,27658E-07 | 1,53529E-07 | 2,38993E-06 | -4,13909E-07 |
| 132 | G Longitudinal | -4,81302E-09 | 3,00942E-07 | -5,43315E-08 | -4,8138E-09 | 2,26434E-07 | -5,43721E-08 | -1,04544E-08 | 1,35134E-07 | -1,41085E-07 |
| 132 | G Vertical | -4,80467E-07 | -3,36667E-10 | 1,50907E-10 | -4,82692E-07 | -1,5251E-10 | 1,51777E-10 | -5,4258E-07 | 2,05279E-09 | 4,90875E-09 |

APOYO 2

| DESPLAZAMIENTOS (metros) | | C1 | | | C2 | | | C3 | | |
|---|---|---|---|---|---|---|---|---|---|---|
| Nudo | Desplazamiento | L | T | V | L | T | V | L | T | V |
| 132 | G transversal | -3,01143E-07 | -3,01215E-09 | 1,19761E-09 | -2,32988E-07 | -1,57934E-09 | 1,21962E-09 | -1,81501E-07 | 5,15267E-09 | 1,94837E-08 |
| 133 | D Longitudinal | 4,95083E-06 | 6,15824E-12 | -3,09901E-12 | 4,36553E-06 | 2,23493E-12 | -4,04432E-12 | 3,91283E-06 | 8,62525E-11 | 1,97256E-10 |
| 133 | D Vertical | -2,69071E-11 | 8,63925E-07 | -1,65664E-07 | -3,02455E-11 | 6,50995E-07 | -1,65771E-07 | -1,97256E-10 | 3,95537E-07 | -3,77018E-07 |
| 133 | D transversal | 1,17475E-11 | 3,56384E-06 | -4,27712E-07 | 1,32576E-11 | 2,97398E-06 | -4,27711E-07 | 8,62525E-11 | 2,39787E-06 | -3,95537E-07 |
| 133 | G Longitudinal | -1,16037E-11 | 3,00225E-07 | -5,39576E-08 | -1,30433E-11 | 2,26144E-07 | -5,40031E-08 | -8,50915E-11 | 1,33611E-07 | -1,42803E-07 |
| 133 | G Vertical | -4,86712E-07 | 5,41633E-10 | -2,42272E-10 | -4,90078E-07 | 2,46223E-10 | -2,42218E-10 | -5,98251E-07 | 7,01415E-09 | 1,60377E-08 |
| 133 | G transversal | -3,06484E-07 | 5,84403E-10 | -2,61593E-10 | -2,35814E-07 | 2,65193E-10 | -2,6241E-10 | -2,06271E-07 | 7,57174E-09 | 1,73126E-08 |
| 134 | D Longitudinal | 4,38719E-06 | 4,70572E-10 | -2,10781E-10 | 3,79832E-06 | 2,13436E-10 | -2,11545E-10 | 3,23194E-06 | 6,0952E-09 | 1,39364E-08 |
| 134 | D Vertical | 8,57358E-08 | 5,15598E-07 | -1,03043E-07 | 6,51124E-08 | 3,88638E-07 | -1,03097E-07 | 4,94547E-08 | 2,39728E-07 | -2,10337E-07 |
| 134 | D transversal | -1,38777E-07 | 3,56395E-06 | -4,27765E-07 | -1,39353E-07 | 2,97403E-06 | -4,27763E-07 | -1,53341E-07 | 2,39297E-06 | -4,06965E-07 |
| 134 | G Longitudinal | 4,79121E-09 | 3,0077E-07 | -5,42545E-08 | 4,78918E-09 | 2,26356E-07 | -5,4295E-08 | 1,02951E-08 | 1,32907E-07 | -1,46177E-07 |
| 134 | G Vertical | -4,80465E-07 | 3,66202E-10 | -1,63767E-10 | -4,82689E-07 | 1,6648E-10 | -1,63753E-10 | -5,42564E-07 | -1,67528E-09 | -4,04563E-09 |
| 134 | G transversal | -3,01149E-07 | 3,55355E-09 | -1,43994E-09 | -2,32993E-07 | 1,82489E-09 | -1,46303E-09 | -1,81543E-07 | 1,8636E-09 | -3,44117E-09 |
| 135 | D Longitudinal | 3,5624E-06 | 1,39646E-13 | -5,52353E-14 | 2,9709E-06 | 6,34524E-14 | -5,52319E-14 | 2,37743E-06 | 9,08711E-13 | 2,07256E-12 |
| 135 | D Vertical | -3,84797E-14 | -2,5935E-17 | -1,04322E-08 | -3,88562E-14 | 1,92431E-13 | -1,04317E-08 | -1,43769E-13 | 9,07006E-12 | -1,04029E-08 |
| 135 | D transversal | -1,018E-13 | 3,56502E-06 | -4,28116E-07 | 6,07131E-14 | 2,97452E-06 | -4,28116E-07 | 5,43892E-12 | 2,38383E-06 | -4,28646E-07 |
| 135 | G Longitudinal | 5,79151E-15 | 2,81887E-07 | -4,87062E-08 | 8,46758E-16 | 2,14706E-07 | -4,87065E-08 | -2,98668E-13 | 1,47529E-07 | -4,86998E-08 |
| 135 | G Vertical | -4,75076E-07 | 2,58646E-17 | -5,71977E-16 | -4,75063E-07 | -6,20706E-15 | -1,3886E-14 | -4,74949E-07 | -2,77829E-14 | -6,36704E-14 |
| 135 | G transversal | -2,8195E-07 | -5,90104E-16 | 2,9463E-16 | -2,14821E-07 | -6,82282E-16 | -7,98381E-16 | -1,47711E-07 | -3,24563E-15 | -7,40197E-15 |
| 136 | D Longitudinal | 3,19948E-06 | 9,09845E-15 | -9,37357E-14 | 2,62898E-06 | -7,01702E-14 | -1,58468E-13 | 2,06219E-06 | -5,36479E-13 | -1,22972E-12 |
| 136 | D Vertical | -2,37461E-12 | -1,64403E-07 | 1,77585E-08 | -2,20019E-12 | -1,25591E-07 | 1,77592E-08 | -4,02681E-13 | -8,65731E-08 | 1,83181E-08 |
| 136 | D transversal | 1,62805E-13 | 3,47729E-06 | -4,13161E-07 | 1,64711E-13 | 2,90713E-06 | -4,13176E-07 | 3,11914E-13 | 2,33657E-06 | -4,14263E-07 |
| 136 | G Longitudinal | 3,10306E-13 | 2,80702E-07 | -4,68807E-08 | 3,02445E-13 | 2,16635E-07 | -4,68395E-08 | 9,5718E-13 | 1,50944E-07 | -5,10498E-08 |
| 136 | G Vertical | -4,74553E-07 | -1,60514E-13 | 2,14185E-13 | -4,71576E-07 | 3,83606E-14 | 2,89442E-13 | -4,73123E-07 | 1,36417E-13 | 3,23366E-13 |
| 136 | G transversal | -2,73723E-07 | -3,0868E-15 | -1,81999E-14 | -2,09065E-07 | 1,11725E-13 | 2,65071E-13 | -1,45888E-07 | -1,09422E-12 | -2,50836E-12 |
| 137 | D Longitudinal | 3,3934E-06 | 2,11296E-15 | 1,78292E-10 | 2,84031E-06 | -2,50999E-13 | 1,77577E-10 | 2,28718E-06 | 6,45172E-11 | 3,5056E-10 |
| 137 | D Vertical | -1,65077E-07 | 1,09038E-13 | -1,03047E-08 | -1,26395E-07 | 7,75634E-13 | -1,03026E-08 | -8,91945E-08 | -6,3564E-10 | -1,19589E-08 |
| 137 | D transversal | 2,74202E-07 | 3,39228E-06 | -3,98854E-07 | 2,73852E-07 | 2,84213E-06 | -3,98854E-07 | 2,76661E-07 | 2,29198E-06 | -3,98904E-07 |
| 137 | G Longitudinal | 6,43999E-09 | 2,76437E-07 | -4,581E-08 | 6,78316E-09 | 2,13251E-07 | -4,58104E-08 | 8,50915E-09 | 1,50046E-07 | -4,58808E-08 |
| 137 | G Vertical | -4,56319E-07 | 4,51141E-09 | -1,43796E-09 | -4,56819E-07 | 2,52864E-09 | -1,43656E-09 | -4,51514E-07 | 5,25171E-10 | -1,45254E-09 |
| 137 | G transversal | -2,78552E-07 | -6,39917E-16 | 2,27733E-10 | -2,16098E-07 | -1,32503E-12 | 2,2427E-10 | -1,5361E-07 | -3,57621E-10 | -7,6498E-10 |
| 138 | D Longitudinal | 3,11402E-06 | -2,36851E-09 | 5,89567E-10 | 2,56313E-06 | -1,32216E-09 | 5,8895E-10 | 2,01546E-06 | -1,98934E-10 | 7,96465E-10 |
| 138 | D Vertical | 1,61689E-07 | -1,62706E-07 | 1,72132E-08 | 1,24257E-07 | -1,25025E-07 | 1,72127E-08 | 8,76539E-08 | -8,73368E-08 | 1,72323E-08 |
| 138 | D transversal | -2,79808E-07 | 3,38853E-06 | -3,98332E-07 | -2,772E-07 | 2,83863E-06 | -3,98359E-07 | -2,7772E-07 | 2,28887E-06 | -3,98097E-07 |
| 138 | G Longitudinal | -6,80111E-09 | 2,78437E-07 | -4,59422E-08 | -9,38073E-09 | 2,15585E-07 | -4,59359E-08 | -1,02298E-08 | 1,51551E-07 | -4,90419E-08 |
| 138 | G Vertical | -3,95443E-07 | 1,82078E-08 | -7,19285E-09 | -4,02074E-07 | 8,00765E-09 | -6,08813E-09 | -3,95935E-07 | -3,72719E-09 | -8,25646E-09 |
| 138 | G transversal | -2,62275E-07 | -3,82509E-09 | 9,06E-10 | -2,00003E-07 | -2,22419E-09 | 8,89282E-10 | -1,39265E-07 | -3,77303E-10 | 1,51636E-09 |
| 139 | D Longitudinal | 3,65453E-06 | -2,36851E-09 | 9,27996E-10 | 3,10429E-06 | -1,32112E-09 | 9,30267E-10 | 2,55086E-06 | -5,0603E-10 | 3,03984E-10 |
| 139 | D Vertical | -1,6412E-07 | 1,62706E-07 | -3,74243E-08 | -1,26271E-07 | 1,25025E-07 | -3,74248E-08 | -8,75781E-08 | 8,73477E-08 | -3,74202E-08 |
| 139 | D transversal | 2,7005E-07 | 3,38853E-06 | -3,99001E-07 | 2,72E-07 | 2,83865E-06 | -3,98971E-07 | 2,77043E-07 | 2,28904E-06 | -3,97825E-07 |
| 139 | G Longitudinal | 1,73045E-08 | 2,78437E-07 | -4,51964E-08 | 1,53485E-08 | 2,15578E-07 | -4,52103E-08 | 1,70016E-08 | 1,53816E-07 | -4,24236E-08 |
| 139 | G Vertical | -4,04388E-07 | -1,82032E-08 | 8,20018E-09 | -3,95972E-07 | -7,01916E-09 | 9,72931E-09 | -3,57027E-07 | 2,04488E-08 | 7,18291E-08 |
| 139 | G transversal | -2,95451E-07 | -3,825E-09 | 1,42444E-09 | -2,32495E-07 | -2,21015E-09 | 1,44449E-09 | -1,67673E-07 | -8,37068E-10 | 1,07803E-09 |
| 140 | D Longitudinal | 3,11402E-06 | 2,36852E-09 | -5,89758E-10 | 2,56313E-06 | 1,32209E-09 | -5,89108E-10 | 2,01546E-06 | 1,97264E-10 | -8,00295E-10 |

APOYO 2

| DESPLAZAMIENTOS (metros) | | C1 | | | C2 | | | C3 | | |
|---|---|---|---|---|---|---|---|---|---|---|
| Nudo | Desplazamiento | L | T | V | L | T | V | L | T | V |
| 140 | D Vertical | -1,6169E-07 | -1,62706E-07 | 1,72132E-08 | -1,24257E-07 | -1,25025E-07 | 1,7213E-08 | -8,76539E-08 | -8,7338E-08 | 1,72295E-08 |
| 140 | D transversal | 2,79808E-07 | 3,38853E-06 | -3,98332E-07 | 2,772E-07 | 2,83863E-06 | -3,9836E-07 | 2,7772E-07 | 2,28887E-06 | -3,98101E-07 |
| 140 | G Longitudinal | 6,80086E-09 | 2,78437E-07 | -4,59424E-08 | 9,38054E-09 | 2,15585E-07 | -4,59365E-08 | 1,02315E-08 | 1,51555E-07 | -4,90317E-08 |
| 140 | G Vertical | -3,95406E-07 | -1,82101E-08 | 7,19638E-09 | -4,02038E-07 | -8,00857E-09 | 6,08899E-09 | -3,9592E-07 | 3,72627E-09 | 8,25449E-09 |
| 140 | G transversal | -2,62271E-07 | 3,82515E-09 | -9,06119E-10 | -1,99999E-07 | 2,22441E-09 | -8,88852E-10 | -1,39264E-07 | 3,75388E-10 | -1,52076E-09 |
| 141 | D Longitudinal | 3,48414E-06 | -4,66895E-09 | 1,76487E-09 | 2,97089E-06 | -2,67275E-09 | 1,76257E-09 | 2,4552E-06 | -8,92595E-10 | 1,15416E-09 |
| 141 | D Vertical | -1,62208E-07 | 1,61789E-07 | -3,61781E-08 | -1,25617E-07 | 1,254E-07 | -3,61784E-08 | -8,8261E-08 | 8,90067E-08 | -3,61927E-08 |
| 141 | D transversal | 2,64899E-07 | 3,222E-06 | -3,72358E-07 | 2,67356E-07 | 2,70905E-06 | -3,72352E-07 | 2,71022E-07 | 2,19565E-06 | -3,73498E-07 |
| 141 | G Longitudinal | 1,7023E-08 | 2,72151E-07 | -4,29864E-08 | 1,70325E-08 | 2,12811E-07 | -4,29752E-08 | 1,80803E-08 | 1,53711E-07 | -4,2086E-08 |
| 141 | G Vertical | -3,96714E-07 | -1,52551E-08 | 6,904E-09 | -3,89624E-07 | -5,82944E-09 | 8,20081E-09 | -3,56582E-07 | 1,73879E-08 | 6,08202E-08 |
| 141 | G transversal | -2,84897E-07 | -4,1834E-09 | 1,54742E-09 | -2,25367E-07 | -2,36544E-09 | 1,57212E-09 | -1,6397E-07 | 1,96919E-10 | 3,91524E-09 |
| 142 | D Longitudinal | 2,95206E-06 | 4,66895E-09 | -1,13098E-09 | 2,43779E-06 | 2,67142E-09 | -1,13225E-09 | 1,92594E-06 | 5,95784E-10 | -1,34411E-09 |
| 142 | D Vertical | -1,61371E-07 | -1,61789E-07 | 1,65858E-08 | -1,25158E-07 | -1,254E-07 | 1,65858E-08 | -8,97213E-08 | -8,9014E-08 | 1,65786E-08 |
| 142 | D transversal | 2,78479E-07 | 3,222E-06 | -3,71415E-07 | 2,74979E-07 | 2,70905E-06 | -3,7142E-07 | 2,74935E-07 | 2,19659E-06 | -3,70169E-07 |
| 142 | G Longitudinal | 1,49823E-08 | 2,72151E-07 | -4,3063E-08 | 1,55219E-08 | 2,128E-07 | -4,30792E-08 | 1,66496E-08 | 1,53429E-07 | -4,32067E-08 |
| 142 | G Vertical | -3,89486E-07 | -1,5261E-08 | 6,06757E-09 | -3,95035E-07 | -6,66855E-09 | 5,12838E-09 | -3,89771E-07 | 3,23697E-09 | 7,00164E-09 |
| 142 | G transversal | -2,55956E-07 | 4,1835E-09 | -1,07521E-09 | -1,97011E-07 | 2,38227E-09 | -1,05555E-09 | -1,39615E-07 | 7,02188E-10 | -6,93526E-10 |
| 143 | D Longitudinal | 3,74536E-06 | -4,93377E-15 | 9,20702E-14 | 3,17532E-06 | 7,27047E-14 | 1,58443E-13 | 2,60154E-06 | 5,62559E-13 | 1,2892E-12 |
| 143 | D Vertical | -2,08038E-12 | 1,64403E-07 | -3,85178E-08 | -2,34434E-12 | 1,25591E-07 | -3,85187E-08 | -1,61814E-11 | 8,74019E-08 | -3,68117E-08 |
| 143 | D transversal | -1,51987E-13 | 3,47729E-06 | -4,13574E-07 | -1,65049E-13 | 2,90714E-06 | -4,13558E-07 | -8,45927E-13 | 2,33754E-06 | -4,11874E-07 |
| 143 | G Longitudinal | -3,0748E-13 | 2,80702E-07 | -4,60395E-08 | -3,28121E-13 | 2,16602E-07 | -4,60849E-08 | -1,35079E-12 | 1,53378E-07 | -4,45396E-08 |
| 143 | G Vertical | -4,63841E-07 | 1,37438E-13 | 9,47435E-14 | -4,66048E-07 | 1,95438E-13 | 2,26115E-13 | -4,76096E-07 | 2,04193E-12 | 4,66939E-12 |
| 143 | G transversal | -2,84492E-07 | -5,48276E-16 | 1,96472E-14 | -2,19099E-07 | -1,13792E-13 | -2,64683E-13 | -1,52197E-07 | 1,07123E-12 | 2,45593E-12 |
| 144 | D Longitudinal | 3,3934E-06 | 7,59686E-15 | -1,78295E-10 | 2,84031E-06 | 2,56555E-13 | -1,77578E-10 | 2,28718E-06 | -6,44558E-11 | -3,5042E-10 |
| 144 | D Vertical | 1,65077E-07 | -8,80422E-14 | -1,03046E-08 | 1,26395E-07 | 6,89908E-13 | -1,03026E-08 | 8,91954E-08 | -6,36928E-10 | -1,19618E-08 |
| 144 | D transversal | -2,74202E-07 | 3,39228E-06 | -3,98853E-07 | -2,73852E-07 | 2,84213E-06 | -3,98854E-07 | -2,76661E-07 | 2,29198E-06 | -3,989E-07 |
| 144 | G Longitudinal | -6,43999E-09 | 2,76437E-07 | -4,581E-08 | -6,78316E-09 | 2,13251E-07 | -4,58099E-08 | -8,50935E-09 | 1,50044E-07 | -4,58856E-08 |
| 144 | G Vertical | -4,56319E-07 | -4,51139E-09 | 1,43765E-09 | -4,56819E-07 | -2,52879E-09 | 1,43624E-09 | -4,51519E-07 | -5,27717E-10 | 1,4467E-09 |
| 144 | G transversal | -2,78556E-07 | -9,11681E-15 | -2,27729E-10 | -2,16102E-07 | 1,31811E-12 | -2,24272E-10 | -1,53624E-07 | 3,57562E-10 | 7,64845E-10 |
| 145 | D Longitudinal | 3,65453E-06 | 2,36849E-09 | -9,27804E-10 | 3,10429E-06 | 1,32119E-09 | -9,30108E-10 | 2,55085E-06 | 5,07694E-10 | -3,00168E-10 |
| 145 | D Vertical | 1,6412E-07 | 1,62706E-07 | -3,74244E-08 | 1,26271E-07 | 1,25025E-07 | -3,74245E-08 | 8,75779E-08 | 8,73464E-08 | -3,7423E-08 |
| 145 | D transversal | -2,7005E-07 | 3,38853E-06 | -3,99001E-07 | -2,72E-07 | 2,83865E-06 | -3,98971E-07 | -2,77043E-07 | 2,28905E-06 | -3,97819E-07 |
| 145 | G Longitudinal | -1,73043E-08 | 2,78437E-07 | -4,51966E-08 | -1,5348E-08 | 2,15578E-07 | -4,52098E-08 | -1,69983E-08 | 1,53818E-07 | -4,24194E-08 |
| 145 | G Vertical | -4,04352E-07 | 1,82059E-08 | -8,19867E-09 | -3,95923E-07 | 7,02487E-09 | -9,71944E-09 | -3,56786E-07 | -2,0424E-08 | -7,17725E-08 |
| 145 | G transversal | -2,95455E-07 | 3,82507E-09 | -1,42437E-09 | -2,32499E-07 | 2,21009E-09 | -1,44473E-09 | -1,67701E-07 | 8,39695E-10 | -1,07201E-09 |
| 146 | D Longitudinal | 2,95205E-06 | -4,66894E-09 | 1,13077E-09 | 2,43778E-06 | -2,67138E-09 | 1,13235E-09 | 1,92594E-06 | -5,98538E-10 | 1,3378E-09 |
| 146 | D Vertical | 1,61371E-07 | -1,61789E-07 | 1,65858E-08 | 1,25158E-07 | -1,254E-07 | 1,65856E-08 | 8,97213E-08 | -8,90129E-08 | 1,65812E-08 |
| 146 | D transversal | -2,78479E-07 | 3,222E-06 | -3,71415E-07 | -2,74979E-07 | 2,70905E-06 | -3,71421E-07 | -2,74936E-07 | 2,19659E-06 | -3,7016E-07 |
| 146 | G Longitudinal | -1,49829E-08 | 2,72151E-07 | -4,30629E-08 | -1,55225E-08 | 2,128E-07 | -4,30788E-08 | -1,66496E-08 | 1,53427E-07 | -4,32113E-08 |
| 146 | G Vertical | -3,89517E-07 | 1,5259E-08 | -6,06458E-09 | -3,95065E-07 | 6,66777E-09 | -5,12767E-09 | -3,89784E-07 | -3,23764E-09 | -7,00305E-09 |
| 146 | G transversal | -2,55952E-07 | -4,18346E-09 | 1,07512E-09 | -1,97008E-07 | -2,38207E-09 | 1,05596E-09 | -1,39614E-07 | -7,03822E-10 | 6,89779E-10 |
| 147 | D Longitudinal | 3,48414E-06 | 4,66894E-09 | -1,76466E-09 | 2,97088E-06 | 2,67272E-09 | -1,76268E-09 | 2,45519E-06 | 8,9537E-10 | -1,1478E-09 |
| 147 | D Vertical | 1,62208E-07 | 1,61789E-07 | -3,61781E-08 | 1,25617E-07 | 1,254E-07 | -3,61781E-08 | 8,82611E-08 | 8,90056E-08 | -3,61953E-08 |
| 147 | D transversal | -2,64899E-07 | 3,222E-06 | -3,72358E-07 | -2,67356E-07 | 2,70905E-06 | -3,72352E-07 | -2,71021E-07 | 2,19565E-06 | -3,73493E-07 |

APOYO 2

| DESPLAZAMIENTOS (metros) | | C1 | | | C2 | | | C3 | | |
|---|---|---|---|---|---|---|---|---|---|---|
| Nudo | Desplazamiento | L | T | V | L | T | V | L | T | V |
| 147 | G Longitudinal | -1,70224E-08 | 2,72151E-07 | -4,29864E-08 | -1,70317E-08 | 2,12811E-07 | -4,29746E-08 | -1,80761E-08 | 1,53711E-07 | -4,20853E-08 |
| 147 | G Vertical | -3,96685E-07 | 1,52574E-08 | -6,90272E-09 | -3,89583E-07 | 5,83427E-09 | -8,19247E-09 | -3,56379E-07 | -1,73668E-08 | -6,07722E-08 |
| 147 | G transversal | -2,84893E-07 | 4,18345E-09 | -1,54737E-09 | -2,25363E-07 | 2,36536E-09 | -1,57237E-09 | -1,63942E-07 | -1,94851E-10 | -3,9105E-09 |
| 148 | D Longitudinal | 2,95131E-06 | 4,75029E-15 | -1,04077E-13 | 2,43762E-06 | 2,35417E-14 | 6,55811E-14 | 1,92629E-06 | -1,41364E-12 | -3,24041E-12 |
| 148 | D Vertical | 5,61393E-13 | -1,63386E-07 | 1,70398E-08 | 5,22618E-13 | -1,26221E-07 | 1,70405E-08 | 9,50214E-14 | -8,91025E-08 | 1,69125E-08 |
| 148 | D transversal | -8,30232E-14 | 3,22643E-06 | -3,72739E-07 | -7,62277E-14 | 2,7118E-06 | -3,7275E-07 | -1,02814E-13 | 2,19734E-06 | -3,72331E-07 |
| 148 | G Longitudinal | 4,84941E-14 | 2,71539E-07 | -4,28793E-08 | 5,9711E-14 | 2,1246E-07 | -4,29077E-08 | 1,57308E-13 | 1,53324E-07 | -4,31505E-08 |
| 148 | G Vertical | -4,54586E-07 | -1,02371E-14 | 1,72875E-13 | -4,49947E-07 | -4,09575E-14 | -1,12909E-13 | -4,49622E-07 | 2,4174E-12 | 5,5412E-12 |
| 148 | G transversal | -2,59845E-07 | -1,19307E-15 | -1,57226E-14 | -2,00514E-07 | 9,37024E-14 | 2,20402E-13 | -1,42422E-07 | -9,10802E-13 | -2,08799E-12 |
| 149 | D Longitudinal | 3,06002E-06 | 7,26822E-15 | 3,11786E-10 | 2,58E-06 | -2,4234E-13 | 3,11116E-10 | 2,09988E-06 | -8,68593E-11 | 7,7568E-11 |
| 149 | D Vertical | -1,58945E-07 | -5,49455E-14 | -9,36691E-09 | -1,24557E-07 | -1,98108E-12 | -9,37214E-09 | -8,93831E-08 | 3,25906E-10 | -8,55399E-09 |
| 149 | D transversal | 2,65795E-07 | 3,05801E-06 | -3,4619E-07 | 2,6511E-07 | 2,58051E-06 | -3,4619E-07 | 2,65991E-07 | 2,10301E-06 | -3,46172E-07 |
| 149 | G Longitudinal | 9,36852E-09 | 2,61608E-07 | -4,07164E-08 | 9,63322E-09 | 2,05447E-07 | -4,07166E-08 | 1,10035E-08 | 1,49294E-07 | -4,06916E-08 |
| 149 | G Vertical | -4,24103E-07 | 8,14758E-09 | -2,38843E-09 | -4,25138E-07 | 4,85391E-09 | -2,38691E-09 | -4,23334E-07 | 1,62065E-09 | -2,18769E-09 |
| 149 | G transversal | -2,62128E-07 | -4,91542E-15 | 2,46064E-11 | -2,06285E-07 | 3,03111E-13 | 2,53957E-11 | -1,50451E-07 | 1,67786E-10 | 4,84139E-10 |
| 150 | D Longitudinal | 2,7916E-06 | -6,14943E-09 | 1,48155E-09 | 2,31256E-06 | -3,56196E-09 | 1,48267E-09 | 1,83516E-06 | -1,00145E-09 | 1,41219E-09 |
| 150 | D Vertical | 1,59394E-07 | -1,60296E-07 | 1,59758E-08 | 1,24493E-07 | -1,25184E-07 | 1,59758E-08 | 9,02949E-08 | -9,00705E-08 | 1,59785E-08 |
| 150 | D transversal | -2,71689E-07 | 3,05702E-06 | -3,45961E-07 | -2,6859E-07 | 2,5793E-06 | -3,45956E-07 | -2,67634E-07 | 2,10179E-06 | -3,45394E-07 |
| 150 | G Longitudinal | -2,16856E-08 | 2,64521E-07 | -4,00081E-08 | -2,05767E-08 | 2,09007E-07 | -3,99962E-08 | -2,21828E-08 | 1,54207E-07 | -3,8162E-08 |
| 150 | G Vertical | -3,81633E-07 | 1,33284E-08 | -5,31242E-09 | -3,86265E-07 | 5,82691E-09 | -4,51645E-09 | -3,81732E-07 | -2,81463E-09 | -6,17164E-09 |
| 150 | G transversal | -2,49038E-07 | -1,03686E-09 | 2,18754E-10 | -1,93335E-07 | -7,07815E-10 | 2,00463E-10 | -1,39027E-07 | -4,67372E-10 | -6,97213E-11 |
| 151 | D Longitudinal | 3,31695E-06 | -6,14945E-09 | 2,26976E-09 | 2,83924E-06 | -3,56306E-09 | 2,26756E-09 | 2,3599E-06 | -8,95059E-10 | 2,47905E-09 |
| 151 | D Vertical | -1,61514E-07 | 1,60296E-07 | -3,49368E-08 | -1,26273E-07 | 1,25184E-07 | -3,49369E-08 | -9,03221E-08 | 9,00728E-08 | -3,49324E-08 |
| 151 | D transversal | 2,59835E-07 | 3,05702E-06 | -3,46736E-07 | 2,61577E-07 | 2,5793E-06 | -3,46742E-07 | 2,64399E-07 | 2,10128E-06 | -3,47619E-07 |
| 151 | G Longitudinal | 1,65583E-08 | 2,64521E-07 | -4,04936E-08 | 1,80873E-08 | 2,08995E-07 | -4,05123E-08 | 1,84949E-08 | 1,5243E-07 | -4,35214E-08 |
| 151 | G Vertical | -3,87404E-07 | -1,33251E-08 | 5,99914E-09 | -3,81376E-07 | -5,11457E-09 | 7,10121E-09 | -3,53401E-07 | 1,47882E-08 | 5,17399E-08 |
| 151 | G transversal | -2,75206E-07 | -1,0368E-09 | 2,6836E-10 | -2,19001E-07 | -6,91408E-10 | 2,93804E-10 | -1,61128E-07 | 2,16127E-10 | 2,11752E-09 |
| 152 | D Longitudinal | 2,7916E-06 | 6,14944E-09 | -1,48177E-09 | 2,31256E-06 | 3,5621E-09 | -1,48231E-09 | 1,83516E-06 | 9,97756E-10 | -1,42067E-09 |
| 152 | D Vertical | -1,59394E-07 | -1,60296E-07 | 1,59758E-08 | -1,24493E-07 | -1,25184E-07 | 1,5976E-08 | -9,02949E-08 | -9,00715E-08 | 1,59762E-08 |
| 152 | D transversal | 2,71689E-07 | 3,05702E-06 | -3,45962E-07 | 2,6859E-07 | 2,5793E-06 | -3,45955E-07 | 2,67634E-07 | 2,10179E-06 | -3,45404E-07 |
| 152 | G Longitudinal | 2,16847E-08 | 2,6452E-07 | -4,0008E-08 | 2,05758E-08 | 2,09007E-07 | -3,99964E-08 | 2,21812E-08 | 1,54207E-07 | -3,81622E-08 |
| 152 | G Vertical | -3,81607E-07 | -1,33301E-08 | 5,31499E-09 | -3,8624E-07 | -5,82758E-09 | 4,51704E-09 | -3,81722E-07 | 2,81426E-09 | 6,1709E-09 |
| 152 | G transversal | -2,49041E-07 | 1,03689E-09 | -2,18823E-10 | -1,93338E-07 | 7,07988E-10 | -2,001E-10 | -1,39028E-07 | 4,65971E-10 | 6,65089E-11 |
| 153 | D Longitudinal | 2,6368E-06 | 4,68961E-15 | -1,15538E-13 | 2,19126E-06 | 1,19241E-13 | 2,88078E-13 | 1,74666E-06 | -2,26777E-12 | -5,19858E-12 |
| 153 | D Vertical | -1,91395E-13 | -1,57563E-07 | 1,50215E-08 | -1,78911E-13 | -1,24299E-07 | 1,50209E-08 | -2,50148E-14 | -9,10206E-08 | 1,50611E-08 |
| 153 | D transversal | 1,34624E-14 | 2,90269E-06 | -3,23217E-07 | 1,06156E-14 | 2,45645E-06 | -3,23214E-07 | -2,62994E-14 | 2,01024E-06 | -3,23117E-07 |
| 153 | G Longitudinal | -5,77911E-14 | 2,56072E-07 | -3,77057E-08 | -6,3343E-14 | 2,0391E-07 | -3,77015E-08 | -2,57212E-13 | 1,52033E-07 | -3,69461E-08 |
| 153 | G Vertical | -4,17692E-07 | 7,55499E-15 | 1,7831E-13 | -4,13381E-07 | -1,704E-13 | -4,35004E-13 | -4,10813E-07 | 3,57005E-12 | 8,18276E-12 |
| 153 | G transversal | -2,44825E-07 | -9,25749E-16 | -1,11648E-14 | -1,91943E-07 | 7,30673E-14 | 1,71612E-13 | -1,40065E-07 | -6,93415E-13 | -1,58965E-12 |
| 154 | D Longitudinal | 2,63589E-06 | -5,48482E-09 | 1,22966E-09 | 2,1901E-06 | -3,32652E-09 | 1,22995E-09 | 1,74527E-06 | -1,20538E-09 | 1,13103E-09 |
| 154 | D Vertical | 1,58401E-07 | -1,58678E-07 | 1,53241E-08 | 1,24763E-07 | -1,24901E-07 | 1,5324E-08 | 9,17665E-08 | -9,11211E-08 | 1,53296E-08 |
| 154 | D transversal | -2,63123E-07 | 2,89688E-06 | -3,22131E-07 | -2,60737E-07 | 2,45222E-06 | -3,22126E-07 | -2,58879E-07 | 2,00738E-06 | -3,22555E-07 |
| 154 | G Longitudinal | -2,05089E-08 | 2,56381E-07 | -3,77548E-08 | -1,99818E-08 | 2,04123E-07 | -3,77333E-08 | -2,10996E-08 | 1,52164E-07 | -3,69113E-08 |
| 154 | G Vertical | -3,71439E-07 | 1,16461E-08 | -4,66221E-09 | -3,75515E-07 | 5,07109E-09 | -3,97034E-09 | -3,7161E-07 | -2,4857E-09 | -5,38575E-09 |

APOYO 2

| DESPLAZAMIENTOS (metros) | | C1 | | | C2 | | | C3 | | |
|---|---|---|---|---|---|---|---|---|---|---|
| Nudo | Desplazamiento | L | T | V | L | T | V | L | T | V |
| 154 | G transversal | -2,40793E-07 | 1,62857E-09 | -5,54713E-10 | -1,88319E-07 | 6,67354E-10 | -5,7042E-10 | -1,37012E-07 | -2,21463E-10 | -4,02773E-10 |
| 155 | D Longitudinal | 3,15507E-06 | -5,48483E-09 | 1,89977E-09 | 2,71088E-06 | -3,32673E-09 | 1,89926E-09 | 2,26573E-06 | -1,06829E-09 | 2,1731E-09 |
| 155 | D Vertical | -1,58821E-07 | 1,58678E-07 | -3,36531E-08 | -1,24881E-07 | 1,24901E-07 | -3,36531E-08 | -9,02921E-08 | 9,11263E-08 | -3,36445E-08 |
| 155 | D transversal | 2,54493E-07 | 2,89688E-06 | -3,22626E-07 | 2,55271E-07 | 2,45222E-06 | -3,2263E-07 | 2,57433E-07 | 2,00773E-06 | -3,22227E-07 |
| 155 | G Longitudinal | 1,76477E-08 | 2,56381E-07 | -3,80311E-08 | 1,85172E-08 | 2,04104E-07 | -3,80588E-08 | 1,91501E-08 | 1,5117E-07 | -4,0167E-08 |
| 155 | G Vertical | -3,76586E-07 | -1,16432E-08 | 5,2491E-09 | -3,71289E-07 | -4,4519E-09 | 6,2071E-09 | -3,46894E-07 | 1,29176E-08 | 4,50494E-08 |
| 155 | G transversal | -2,67554E-07 | 1,62865E-09 | -8,30535E-10 | -2,14661E-07 | 6,81791E-10 | -8,07428E-10 | -1,60374E-07 | -2,17951E-10 | -4,30319E-10 |
| 156 | D Longitudinal | 2,63589E-06 | 5,48483E-09 | -1,22989E-09 | 2,1901E-06 | 3,32676E-09 | -1,22939E-09 | 1,74527E-06 | 1,20089E-09 | -1,14133E-09 |
| 156 | D Vertical | -1,58401E-07 | -1,58678E-07 | 1,53241E-08 | -1,24763E-07 | -1,24901E-07 | 1,53242E-08 | -9,17665E-08 | -9,1122E-08 | 1,53275E-08 |
| 156 | D transversal | 2,63123E-07 | 2,89688E-06 | -3,22131E-07 | 2,60737E-07 | 2,45222E-06 | -3,22126E-07 | 2,58879E-07 | 2,00738E-06 | -3,22565E-07 |
| 156 | G Longitudinal | 2,05083E-08 | 2,56381E-07 | -3,77547E-08 | 1,99812E-08 | 2,04123E-07 | -3,77335E-08 | 2,10988E-08 | 1,52165E-07 | -3,69103E-08 |
| 156 | G Vertical | -3,71416E-07 | -1,16476E-08 | 4,66444E-09 | -3,75493E-07 | -5,07168E-09 | 3,97084E-09 | -3,71601E-07 | 2,4854E-09 | 5,38516E-09 |
| 156 | G transversal | -2,40792E-07 | -1,62854E-09 | 5,54652E-10 | -1,88318E-07 | -6,67208E-10 | 5,70719E-10 | -1,37012E-07 | 2,20294E-10 | 4,0009E-10 |
| 157 | D Longitudinal | 2,74658E-06 | -3,03814E-15 | 3,1323E-10 | 2,33136E-06 | -4,27329E-14 | 3,1312E-10 | 1,91618E-06 | 3,65701E-11 | 4,09391E-10 |
| 157 | D Vertical | -1,56931E-07 | 1,95857E-14 | -8,87927E-09 | -1,24305E-07 | 1,39827E-12 | -8,87559E-09 | -9,19758E-08 | -1,17601E-10 | -9,1574E-09 |
| 157 | D transversal | 2,52869E-07 | 2,74236E-06 | -2,99505E-07 | 2,5195E-07 | 2,32925E-06 | -2,99504E-07 | 2,51397E-07 | 1,91614E-06 | -2,99515E-07 |
| 157 | G Longitudinal | 8,81427E-09 | 2,45163E-07 | -3,61468E-08 | 9,01134E-09 | 1,95306E-07 | -3,6147E-08 | 1,0085E-08 | 1,45447E-07 | -3,61523E-08 |
| 157 | G Vertical | -3,93795E-07 | 8,1212E-09 | -2,10666E-09 | -3,95169E-07 | 5,21608E-09 | -2,10551E-09 | -3,95792E-07 | 2,31226E-09 | -2,08385E-09 |
| 157 | G transversal | -2,46892E-07 | 2,06354E-15 | -3,55494E-11 | -1,97535E-07 | -4,75759E-14 | -3,56203E-11 | -1,4818E-07 | -7,89745E-11 | -2,5264E-10 |
| 158 | D Longitudinal | 2,48597E-06 | -4,47634E-09 | 8,65676E-10 | 2,07145E-06 | -2,92803E-09 | 8,65607E-10 | 1,65734E-06 | -1,37724E-09 | 8,72989E-10 |
| 158 | D Vertical | 1,559E-07 | -1,5656E-07 | 1,47029E-08 | 1,2356E-07 | -1,24073E-07 | 1,47028E-08 | 9,18078E-08 | -9,1586E-08 | 1,47004E-08 |
| 158 | D transversal | -2,56422E-07 | 2,74183E-06 | -2,99534E-07 | -2,54035E-07 | 2,32836E-06 | -2,99534E-07 | -2,51688E-07 | 1,91474E-06 | -2,99901E-07 |
| 158 | G Longitudinal | -1,67924E-08 | 2,47902E-07 | -3,58092E-08 | -1,74556E-08 | 1,98625E-07 | -3,57899E-08 | -1,80567E-08 | 1,49019E-07 | -3,65668E-08 |
| 158 | G Vertical | -3,60702E-07 | 1,02516E-08 | -4,10997E-09 | -3,642E-07 | 4,4705E-09 | -3,50906E-09 | -3,60801E-07 | -2,15294E-09 | -4,71188E-09 |
| 158 | G transversal | -2,30539E-07 | 1,25578E-10 | -1,77139E-10 | -1,81267E-07 | -1,78246E-10 | -1,89817E-10 | -1,32988E-07 | -4,15125E-10 | -3,20297E-11 |
| 159 | D Longitudinal | 2,99669E-06 | -4,47635E-09 | 1,37945E-09 | 2,58399E-06 | -2,92773E-09 | 1,38014E-09 | 2,1709E-06 | -1,39998E-09 | 1,32835E-09 |
| 159 | D Vertical | -1,57487E-07 | 1,5656E-07 | -3,24037E-08 | -1,24881E-07 | 1,24072E-07 | -3,24038E-08 | -9,16938E-08 | 9,15842E-08 | -3,24065E-08 |
| 159 | D transversal | 2,48036E-07 | 2,74183E-06 | -3,00003E-07 | 2,48605E-07 | 2,32836E-06 | -3,00002E-07 | 2,4992E-07 | 1,91505E-06 | -2,99563E-07 |
| 159 | G Longitudinal | 1,92395E-08 | 2,47902E-07 | -3,56534E-08 | 1,88622E-08 | 1,98609E-07 | -3,56775E-08 | 1,97391E-08 | 1,49452E-07 | -3,55936E-08 |
| 159 | G Vertical | -3,6493E-07 | -1,02491E-08 | 4,60053E-09 | -3,6032E-07 | -3,93271E-09 | 5,4326E-09 | -3,39125E-07 | 1,12323E-08 | 3,91913E-08 |
| 159 | G transversal | -2,63498E-07 | 1,25639E-10 | -2,56517E-10 | -2,13887E-07 | -1,66754E-10 | -2,3842E-10 | -1,63079E-07 | -4,13816E-10 | 8,93975E-11 |
| 160 | D Longitudinal | 2,48597E-06 | 4,47635E-09 | -8,65912E-10 | 2,07145E-06 | 2,92834E-09 | -8,64866E-10 | 1,65734E-06 | 1,37209E-09 | -8,84792E-10 |
| 160 | D Vertical | -1,559E-07 | -1,5656E-07 | 1,47029E-08 | -1,2356E-07 | -1,24072E-07 | 1,4703E-08 | -9,18078E-08 | -9,15868E-08 | 1,46986E-08 |
| 160 | D transversal | 2,56422E-07 | 2,74183E-06 | -2,99534E-07 | 2,54035E-07 | 2,32836E-06 | -2,99533E-07 | 2,51688E-07 | 1,91473E-06 | -2,99912E-07 |
| 160 | G Longitudinal | 1,67922E-08 | 2,47902E-07 | -3,58093E-08 | 1,74554E-08 | 1,98625E-07 | -3,57902E-08 | 1,80572E-08 | 1,4902E-07 | -3,65633E-08 |
| 160 | G Vertical | -3,60682E-07 | -1,02529E-08 | 4,11191E-09 | -3,64181E-07 | -4,47102E-09 | 3,50948E-09 | -3,60793E-07 | 2,15285E-09 | 4,71175E-09 |
| 160 | G transversal | -2,30538E-07 | -1,25551E-10 | 1,77088E-10 | -1,81266E-07 | 1,78366E-10 | 1,90063E-10 | -1,32988E-07 | 4,14178E-10 | 2,98565E-11 |
| 161 | D Longitudinal | 2,34281E-06 | -5,01585E-09 | 9,09465E-10 | 1,95762E-06 | -3,37824E-09 | 9,09734E-10 | 1,57234E-06 | -1,72945E-09 | 9,40956E-10 |
| 161 | D Vertical | 1,54202E-07 | -1,5433E-07 | 1,40566E-08 | 1,23133E-07 | -1,23169E-07 | 1,40565E-08 | 9,25914E-08 | -9,20095E-08 | 1,4055E-08 |
| 161 | D transversal | -2,51154E-07 | 2,59203E-06 | -2,78184E-07 | -2,48319E-07 | 2,20791E-06 | -2,78187E-07 | -2,45529E-07 | 1,82385E-06 | -2,78062E-07 |
| 161 | G Longitudinal | -1,53335E-08 | 2,39251E-07 | -3,36771E-08 | -1,62411E-08 | 1,92985E-07 | -3,36645E-08 | -1,72147E-08 | 1,46485E-07 | -3,42356E-08 |
| 161 | G Vertical | -3,48715E-07 | 8,88937E-09 | -3,61865E-09 | -3,51899E-07 | 3,82764E-09 | -3,09002E-09 | -3,48985E-07 | -1,99184E-09 | -4,19005E-09 |
| 161 | G transversal | -2,19875E-07 | -2,25693E-09 | 4,50866E-10 | -1,73771E-07 | -1,48298E-09 | 4,40548E-10 | -1,2852E-07 | -7,0482E-10 | 4,33152E-10 |
| 162 | D Longitudinal | 2,84032E-06 | -5,01585E-09 | 1,46496E-09 | 2,45712E-06 | -3,37826E-09 | 1,46508E-09 | 2,07401E-06 | -1,7807E-09 | 1,35773E-09 |

APOYO 2

| DESPLAZAMIENTOS (metros) | | C1 | | | C2 | | | C3 | | |
|---|---|---|---|---|---|---|---|---|---|---|
| Nudo | Desplazamiento | L | T | V | L | T | V | L | T | V |
| 162 | D Vertical | -1,54337E-07 | 1,5433E-07 | -3,1126E-08 | -1,23036E-07 | 1,23169E-07 | -3,11261E-08 | -9,12118E-08 | 9,2008E-08 | -3,11288E-08 |
| 162 | D transversal | 2,40686E-07 | 2,59203E-06 | -2,78791E-07 | 2,41531E-07 | 2,20791E-06 | -2,78788E-07 | 2,42152E-07 | 1,82374E-06 | -2,78906E-07 |
| 162 | G Longitudinal | 2,01362E-08 | 2,39251E-07 | -3,34154E-08 | 1,94542E-08 | 1,92974E-07 | -3,34321E-08 | 1,97096E-08 | 1,46777E-07 | -3,3415E-08 |
| 162 | G Vertical | -3,52759E-07 | -8,88721E-09 | 4,00936E-09 | -3,4862E-07 | -3,35455E-09 | 4,74131E-09 | -3,2993E-07 | 9,93467E-09 | 3,43629E-08 |
| 162 | G transversal | -2,58971E-07 | -2,25689E-09 | 6,76998E-10 | -2,12604E-07 | -1,47393E-09 | 6,90667E-10 | -1,652E-07 | -4,77466E-10 | 1,44301E-09 |
| 163 | D Longitudinal | 2,34281E-06 | 5,01585E-09 | -9,09706E-10 | 1,95762E-06 | 3,3786E-09 | -9,0885E-10 | 1,57234E-06 | 1,72379E-09 | -9,5395E-10 |
| 163 | D Vertical | -1,54202E-07 | -1,5433E-07 | 1,40566E-08 | -1,23133E-07 | -1,23169E-07 | 1,40567E-08 | -9,25914E-08 | -9,20102E-08 | 1,40534E-08 |
| 163 | D transversal | 2,51154E-07 | 2,59203E-06 | -2,78184E-07 | 2,48319E-07 | 2,20791E-06 | -2,78186E-07 | 2,45529E-07 | 1,82384E-06 | -2,78075E-07 |
| 163 | G Longitudinal | 1,53333E-08 | 2,39251E-07 | -3,36771E-08 | 1,62409E-08 | 1,92985E-07 | -3,36648E-08 | 1,72149E-08 | 1,46487E-07 | -3,4233E-08 |
| 163 | G Vertical | -3,48697E-07 | -8,89052E-09 | 3,62035E-09 | -3,51882E-07 | -3,82809E-09 | 3,0904E-09 | -3,48978E-07 | 1,99167E-09 | 4,18973E-09 |
| 163 | G transversal | -2,19876E-07 | 2,25695E-09 | -4,50906E-10 | -1,73772E-07 | 1,48308E-09 | -4,4035E-10 | -1,2852E-07 | 7,04088E-10 | -4,34831E-10 |
| 164 | D Longitudinal | 2,33899E-06 | 3,02096E-15 | -1,20666E-13 | 1,95491E-06 | 1,87524E-13 | 4,48731E-13 | 1,5707E-06 | -2,86148E-12 | -6,55964E-12 |
| 164 | D Vertical | 4,88754E-14 | -1,55071E-07 | 1,42153E-08 | 4,59822E-14 | -1,23644E-07 | 1,42157E-08 | -3,90067E-16 | -9,22198E-08 | 1,42103E-08 |
| 164 | D transversal | -2,26476E-14 | 2,59376E-06 | -2,7876E-07 | -2,00767E-14 | 2,20884E-06 | -2,7876E-07 | 2,81909E-14 | 1,82388E-06 | -2,78859E-07 |
| 164 | G Longitudinal | 4,95867E-14 | 2,38833E-07 | -3,35325E-08 | 5,14357E-14 | 1,92743E-07 | -3,35317E-08 | 1,6773E-13 | 1,46481E-07 | -3,39658E-08 |
| 164 | G Vertical | -3,81127E-07 | -1,83585E-14 | 1,88593E-13 | -3,76926E-07 | -2,8136E-13 | -6,53898E-13 | -3,7248E-07 | 4,17377E-12 | 9,56893E-12 |
| 164 | G transversal | -2,26609E-07 | -5,74774E-16 | -7,08323E-15 | -1,79977E-07 | 5,37902E-14 | 1,25984E-13 | -1,34114E-07 | -4,95189E-13 | -1,13523E-12 |
| 165 | D Longitudinal | 2,44478E-06 | 1,44833E-15 | 3,05366E-10 | 2,08809E-06 | 1,02859E-13 | 3,05646E-10 | 1,73139E-06 | -1,68487E-11 | 2,62072E-10 |
| 165 | D Vertical | -1,52392E-07 | -5,04185E-15 | -8,23862E-09 | -1,22405E-07 | -6,65803E-13 | -8,24037E-09 | -9,23356E-08 | 3,03458E-11 | -8,17362E-09 |
| 165 | D transversal | 2,39579E-07 | 2,43945E-06 | -2,57122E-07 | 2,38507E-07 | 2,0848E-06 | -2,57121E-07 | 2,36882E-07 | 1,73014E-06 | -2,57128E-07 |
| 165 | G Longitudinal | 8,78247E-09 | 2,27907E-07 | -3,18003E-08 | 8,91961E-09 | 1,84045E-07 | -3,18004E-08 | 9,72158E-09 | 1,40182E-07 | -3,17996E-08 |
| 165 | G Vertical | -3,58334E-07 | 8,43712E-09 | -1,93201E-09 | -3,59888E-07 | 5,77294E-09 | -1,93078E-09 | -3,62097E-07 | 3,12749E-09 | -1,86281E-09 |
| 165 | G transversal | -2,30132E-07 | -3,16009E-15 | 6,05572E-11 | -1,87056E-07 | -3,63392E-13 | 5,95477E-11 | -1,43982E-07 | 2,5622E-11 | 1,25648E-10 |
| 166 | D Longitudinal | 2,19816E-06 | -6,23849E-09 | 1,1369E-09 | 1,8419E-06 | -4,19735E-09 | 1,13778E-09 | 1,48512E-06 | -2,15826E-09 | 1,13437E-09 |
| 166 | D Vertical | 1,50873E-07 | -1,51499E-07 | 1,34096E-08 | 1,21194E-07 | -1,21696E-07 | 1,34095E-08 | 9,19793E-08 | -9,18913E-08 | 1,34123E-08 |
| 166 | D transversal | -2,45799E-07 | 2,43945E-06 | -2,57063E-07 | -2,42565E-07 | 2,08437E-06 | -2,57065E-07 | -2,38985E-07 | 1,72937E-06 | -2,56879E-07 |
| 166 | G Longitudinal | -1,57676E-08 | 2,30286E-07 | -3,14151E-08 | -1,63052E-08 | 1,87062E-07 | -3,14088E-08 | -1,75916E-08 | 1,43925E-07 | -3,11977E-08 |
| 166 | G Vertical | -3,35994E-07 | 7,61823E-09 | -3,16608E-09 | -3,38728E-07 | 3,21512E-09 | -2,70424E-09 | -3,36116E-07 | -1,85819E-09 | -3,6859E-09 |
| 166 | G transversal | -2,10426E-07 | -1,63691E-09 | 3,13808E-10 | -1,6745E-07 | -1,10086E-09 | 3,04422E-10 | -1,25189E-07 | -5,68987E-10 | 2,76472E-10 |
| 167 | D Longitudinal | 2,67949E-06 | -6,23849E-09 | 1,8223E-09 | 2,32535E-06 | -4,19804E-09 | 1,82119E-09 | 1,97174E-06 | -2,15373E-09 | 1,82659E-09 |
| 167 | D Vertical | -1,52336E-07 | 1,51499E-07 | -2,98048E-08 | -1,22461E-07 | 1,21696E-07 | -2,98049E-08 | -9,21181E-08 | 9,18936E-08 | -2,98022E-08 |
| 167 | D transversal | 2,32547E-07 | 2,43945E-06 | -2,57799E-07 | 2,33652E-07 | 2,08437E-06 | -2,57798E-07 | 2,34058E-07 | 1,72921E-06 | -2,58002E-07 |
| 167 | G Longitudinal | 1,99187E-08 | 2,30286E-07 | -3,12637E-08 | 1,95425E-08 | 1,87056E-07 | -3,12739E-08 | 1,92403E-08 | 1,43574E-07 | -3,20743E-08 |
| 167 | G Vertical | -3,39253E-07 | -7,61634E-09 | 3,47047E-09 | -3,35658E-07 | -2,8018E-09 | 4,10995E-09 | -3,19365E-07 | 8,77754E-09 | 2,99573E-08 |
| 167 | G transversal | -2,49816E-07 | -1,63688E-09 | 4,68598E-10 | -2,06643E-07 | -1,09257E-09 | 4,81229E-10 | -1,62596E-07 | -3,47046E-10 | 1,18309E-09 |
| 168 | D Longitudinal | 2,19816E-06 | 6,23849E-09 | -1,13714E-09 | 1,8419E-06 | 4,19777E-09 | -1,13677E-09 | 1,48512E-06 | 2,15217E-09 | -1,14832E-09 |
| 168 | D Vertical | -1,50873E-07 | -1,51499E-07 | 1,34096E-08 | -1,21194E-07 | -1,21696E-07 | 1,34096E-08 | -9,19793E-08 | -9,18919E-08 | 1,3411E-08 |
| 168 | D transversal | 2,45799E-07 | 2,43945E-06 | -2,57063E-07 | 2,42565E-07 | 2,08437E-06 | -2,57064E-07 | 2,38985E-07 | 1,72936E-06 | -2,56893E-07 |
| 168 | G Longitudinal | 1,57672E-08 | 2,30286E-07 | -3,14151E-08 | 1,63048E-08 | 1,87062E-07 | -3,14089E-08 | 1,75912E-08 | 1,43926E-07 | -3,11968E-08 |
| 168 | G Vertical | -3,35979E-07 | -7,61923E-09 | 3,16758E-09 | -3,38714E-07 | -3,21553E-09 | 2,70456E-09 | -3,3611E-07 | 1,85811E-09 | 3,68576E-09 |
| 168 | G transversal | -2,10426E-07 | 1,63693E-09 | -3,1384E-10 | -1,6745E-07 | 1,10094E-09 | -3,04267E-10 | -1,25189E-07 | 5,68445E-10 | -2,77716E-10 |
| 169 | D Longitudinal | 2,05689E-06 | 2,28585E-15 | -1,21538E-13 | 1,72844E-06 | 2,33006E-13 | 5,54719E-13 | 1,39908E-06 | -3,21976E-12 | -7,38102E-12 |
| 169 | D Vertical | 2,63165E-15 | -1,48055E-07 | 1,26388E-08 | 2,26088E-15 | -1,19808E-07 | 1,26386E-08 | 6,15135E-15 | -9,15631E-08 | 1,26344E-08 |
| 169 | D transversal | -2,91598E-15 | 2,29672E-06 | -2,38205E-07 | -3,34015E-15 | 1,96768E-06 | -2,38205E-07 | -2,24363E-14 | 1,63867E-06 | -2,38145E-07 |

APOYO 2

| DESPLAZAMIENTOS (metros) | | C1 | | | C2 | | | C3 | | |
|---|---|---|---|---|---|---|---|---|---|---|
| Nudo | Desplazamiento | L | T | V | L | T | V | L | T | V |
| 169 | G Longitudinal | -1,86591E-14 | 2,21415E-07 | -2,92395E-08 | -1,95304E-14 | 1,81058E-07 | -2,92412E-08 | -8,04984E-14 | 1,40778E-07 | -2,90578E-08 |
| 169 | G Vertical | -3,47651E-07 | 3,33579E-16 | 1,75381E-13 | -3,43124E-07 | -3,29517E-13 | -7,90589E-13 | -3,37444E-07 | 4,63529E-12 | 1,06257E-11 |
| 169 | G transversal | -2,0918E-07 | -6,18727E-16 | -3,56692E-15 | -1,68354E-07 | 3,72549E-14 | 8,73483E-14 | -1,28093E-07 | -3,29147E-13 | -7,54571E-13 |
| 170 | D Longitudinal | 2,05925E-06 | -6,39343E-09 | 1,11653E-09 | 1,73002E-06 | -4,38018E-09 | 1,11747E-09 | 1,39992E-06 | -2,37468E-09 | 1,09896E-09 |
| 170 | D Vertical | 1,48421E-07 | -1,48561E-07 | 1,2734E-08 | 1,20088E-07 | -1,20152E-07 | 1,27339E-08 | 9,21626E-08 | -9,17424E-08 | 1,27356E-08 |
| 170 | D transversal | -2,39424E-07 | 2,29249E-06 | -2,37347E-07 | -2,36109E-07 | 1,96459E-06 | -2,37346E-07 | -2,31883E-07 | 1,63669E-06 | -2,37354E-07 |
| 170 | G Longitudinal | -1,79381E-08 | 2,21861E-07 | -2,93338E-08 | -1,78449E-08 | 1,81363E-07 | -2,93269E-08 | -1,83868E-08 | 1,40948E-07 | -2,91148E-08 |
| 170 | G Vertical | -3,22751E-07 | 6,33641E-09 | -2,73318E-09 | -3,25163E-07 | 2,56144E-09 | -2,3298E-09 | -3,22912E-07 | -1,7986E-09 | -3,18702E-09 |
| 170 | G transversal | -2,02564E-07 | 2,51451E-10 | -1,22541E-10 | -1,62301E-07 | 2,94053E-11 | -1,31481E-10 | -1,22637E-07 | -1,80981E-10 | -1,15566E-10 |
| 171 | D Longitudinal | 2,52503E-06 | -6,39343E-09 | 1,8022E-09 | 2,19803E-06 | -4,38092E-09 | 1,80101E-09 | 1,87191E-06 | -2,3519E-09 | 1,84051E-09 |
| 171 | D Vertical | -1,48454E-07 | 1,48561E-07 | -2,84587E-08 | -1,19958E-07 | 1,20152E-07 | -2,84588E-08 | -9,10534E-08 | 9,17439E-08 | -2,84568E-08 |
| 171 | D transversal | 2,2494E-07 | 2,29249E-06 | -2,38108E-07 | 2,26027E-07 | 1,96459E-06 | -2,38109E-07 | 2,26256E-07 | 1,6367E-06 | -2,38103E-07 |
| 171 | G Longitudinal | 1,79293E-08 | 2,21861E-07 | -2,93921E-08 | 1,81332E-08 | 1,81356E-07 | -2,94025E-08 | 1,83703E-08 | 1,40623E-07 | -3,0144E-08 |
| 171 | G Vertical | -3,25677E-07 | -6,33476E-09 | 2,96066E-09 | -3,22541E-07 | -2,20042E-09 | 3,51925E-09 | -3,08322E-07 | 7,84295E-09 | 2,60967E-08 |
| 171 | G transversal | -2,39578E-07 | 2,5149E-10 | -1,94559E-10 | -1,99174E-07 | 3,74805E-11 | -1,81903E-10 | -1,58037E-07 | -5,66378E-11 | 2,87585E-10 |
| 172 | D Longitudinal | 2,05925E-06 | 6,39343E-09 | -1,11678E-09 | 1,73002E-06 | 4,38065E-09 | -1,11637E-09 | 1,39992E-06 | 2,3683E-09 | -1,1136E-09 |
| 172 | D Vertical | -1,48421E-07 | -1,48561E-07 | 1,2734E-08 | -1,20088E-07 | -1,20152E-07 | 1,2734E-08 | -9,21626E-08 | -9,17429E-08 | 1,27344E-08 |
| 172 | D transversal | 2,39424E-07 | 2,29249E-06 | -2,37347E-07 | 2,36109E-07 | 1,96459E-06 | -2,37345E-07 | 2,31883E-07 | 1,63668E-06 | -2,37368E-07 |
| 172 | G Longitudinal | 1,79378E-08 | 2,21861E-07 | -2,93339E-08 | 1,78445E-08 | 1,81363E-07 | -2,9327E-08 | 1,83865E-08 | 1,40948E-07 | -2,91143E-08 |
| 172 | G Vertical | -3,22738E-07 | -6,33728E-09 | 2,73448E-09 | -3,2515E-07 | -2,56179E-09 | 2,33009E-09 | -3,22906E-07 | 1,79845E-09 | 3,18673E-09 |
| 172 | G transversal | -2,02564E-07 | -2,51434E-10 | 1,22515E-10 | -1,62302E-07 | -2,93445E-11 | 1,31599E-10 | -1,22638E-07 | 1,80597E-10 | 1,14684E-10 |
| 173 | D Longitudinal | 1,92261E-06 | -5,88744E-09 | 9,48435E-10 | 1,61931E-06 | -4,1607E-09 | 9,49028E-10 | 1,31483E-06 | -2,43962E-09 | 9,35789E-10 |
| 173 | D Vertical | 1,44398E-07 | -1,44978E-07 | 1,20648E-08 | 1,17472E-07 | -1,17959E-07 | 1,20647E-08 | 9,08981E-08 | -9,094E-08 | 1,20644E-08 |
| 173 | D transversal | -2,31184E-07 | 2,14801E-06 | -2,18565E-07 | -2,28163E-07 | 1,84608E-06 | -2,18565E-07 | -2,23889E-07 | 1,54414E-06 | -2,1862E-07 |
| 173 | G Longitudinal | -1,9042E-08 | 2,12017E-07 | -2,71422E-08 | -1,8623E-08 | 1,7447E-07 | -2,71331E-08 | -1,84546E-08 | 1,36891E-07 | -2,7193E-08 |
| 173 | G Vertical | -3,08716E-07 | 5,60743E-09 | -2,44557E-09 | -3,1086E-07 | 2,2666E-09 | -2,09471E-09 | -3,08955E-07 | -1,57461E-09 | -2,82028E-09 |
| 173 | G transversal | -1,94502E-07 | 1,2687E-10 | -1,0975E-10 | -1,56829E-07 | -6,90602E-11 | -1,17566E-10 | -1,19648E-07 | -2,49756E-10 | -9,02888E-11 |
| 174 | D Longitudinal | 2,3732E-06 | -5,88745E-09 | 1,55504E-09 | 2,0722E-06 | -4,16108E-09 | 1,55453E-09 | 1,77237E-06 | -2,42712E-09 | 1,57457E-09 |
| 174 | D Vertical | -1,45756E-07 | 1,44978E-07 | -2,71128E-08 | -1,187E-07 | 1,17959E-07 | -2,71128E-08 | -9,12937E-08 | 9,09398E-08 | -2,71131E-08 |
| 174 | D transversal | 2,18293E-07 | 2,14801E-06 | -2,19223E-07 | 2,19019E-07 | 1,84608E-06 | -2,19223E-07 | 2,18629E-07 | 1,54419E-06 | -2,19156E-07 |
| 174 | G Longitudinal | 1,6347E-08 | 2,12017E-07 | -2,7305E-08 | 1,68255E-08 | 1,74462E-07 | -2,73171E-08 | 1,75556E-08 | 1,3682E-07 | -2,76948E-08 |
| 174 | G Vertical | -3,11732E-07 | -5,60599E-09 | 2,59012E-09 | -3,08928E-07 | -1,95252E-09 | 3,07614E-09 | -2,96448E-07 | 6,85277E-09 | 2,27484E-08 |
| 174 | G transversal | -2,30172E-07 | 1,26904E-10 | -1,70094E-10 | -1,92408E-07 | -6,20113E-11 | -1,59064E-10 | -1,54029E-07 | -1,55463E-10 | 2,26069E-10 |
| 175 | D Longitudinal | 1,92261E-06 | 5,88745E-09 | -9,48675E-10 | 1,61931E-06 | 4,16119E-09 | -9,4786E-10 | 1,31483E-06 | 2,43302E-09 | -9,50918E-10 |
| 175 | D Vertical | -1,44398E-07 | -1,44978E-07 | 1,20648E-08 | -1,17472E-07 | -1,17959E-07 | 1,20648E-08 | -9,08981E-08 | -9,09404E-08 | 1,20636E-08 |
| 175 | D transversal | 2,31184E-07 | 2,14801E-06 | -2,18565E-07 | 2,28163E-07 | 1,84608E-06 | -2,18564E-07 | 2,23889E-07 | 1,54413E-06 | -2,18635E-07 |
| 175 | G Longitudinal | 1,90417E-08 | 2,12017E-07 | -2,71423E-08 | 1,86228E-08 | 1,7447E-07 | -2,71332E-08 | 1,84546E-08 | 1,36891E-07 | -2,71924E-08 |
| 175 | G Vertical | -3,08704E-07 | -5,60819E-09 | 2,44671E-09 | -3,10849E-07 | -2,2669E-09 | 2,09495E-09 | -3,0895E-07 | 1,57458E-09 | 2,82024E-09 |
| 175 | G transversal | -1,94502E-07 | -1,26854E-10 | 1,0973E-10 | -1,56829E-07 | 6,91054E-11 | 1,17651E-10 | -1,19648E-07 | 2,49516E-10 | 8,9737E-11 |
| 176 | D Longitudinal | 2,14825E-06 | -7,88405E-16 | 3,23424E-10 | 1,84563E-06 | -1,10168E-13 | 3,23125E-10 | 1,54302E-06 | 5,08517E-12 | 3,35231E-10 |
| 176 | D Vertical | -1,43825E-07 | 4,74394E-16 | -7,45417E-09 | -1,17205E-07 | 2,31852E-13 | -7,45356E-09 | -9,05958E-08 | -2,59164E-12 | -7,45586E-09 |
| 176 | D transversal | 2,25186E-07 | 2,14196E-06 | -2,17836E-07 | 2,24029E-07 | 1,8415E-06 | -2,17836E-07 | 2,21649E-07 | 1,54103E-06 | -2,17844E-07 |
| 176 | G Longitudinal | 8,81644E-09 | 2,09128E-07 | -2,75342E-08 | 8,89899E-09 | 1,71149E-07 | -2,75343E-08 | 9,45091E-09 | 1,33171E-07 | -2,75348E-08 |
| 176 | G Vertical | -3,21204E-07 | 8,72355E-09 | -1,85086E-09 | -3,22816E-07 | 6,17135E-09 | -1,8495E-09 | -3,26024E-07 | 3,62407E-09 | -1,82093E-09 |

APOYO 2

| DESPLAZAMIENTOS (metros) | | C1 | | | C2 | | | C3 | | |
|---|---|---|---|---|---|---|---|---|---|---|
| Nudo | Desplazamiento | L | T | V | L | T | V | L | T | V |
| 176 | G transversal | -2,11572E-07 | 1,54807E-16 | -2,67737E-11 | -1,74099E-07 | 1,14746E-14 | -2,67256E-11 | -1,36628E-07 | -8,76752E-12 | -5,1272E-11 |
| 177 | D Longitudinal | 2,21507E-06 | -5,82707E-09 | 1,45102E-09 | 1,94031E-06 | -4,22558E-09 | 1,4504E-09 | 1,66698E-06 | -2,62338E-09 | 1,45045E-09 |
| 177 | D Vertical | -1,40975E-07 | 1,41034E-07 | -2,5625E-08 | -1,15418E-07 | 1,15558E-07 | -2,5625E-08 | -8,95688E-08 | 9,00811E-08 | -2,5625E-08 |
| 177 | D transversal | 2,1162E-07 | 1,99866E-06 | -2,0034E-07 | 2,11974E-07 | 1,72271E-06 | -2,00339E-07 | 2,10897E-07 | 1,44675E-06 | -2,00338E-07 |
| 177 | G Longitudinal | 1,58308E-08 | 1,99791E-07 | -2,48194E-08 | 1,61484E-08 | 1,65631E-07 | -2,4829E-08 | 1,66317E-08 | 1,31402E-07 | -2,51324E-08 |
| 177 | G Vertical | -2,9585E-07 | -3,99943E-09 | 2,05023E-09 | -2,93527E-07 | -1,06503E-09 | 2,46675E-09 | -2,82919E-07 | 6,28763E-09 | 1,93342E-08 |
| 177 | G transversal | -2,18386E-07 | -1,51755E-10 | -2,15473E-11 | -1,83903E-07 | -1,69924E-10 | -1,2812E-11 | -1,48941E-07 | -9,33004E-11 | 3,48538E-10 |
| 178 | D Longitudinal | 1,7804E-06 | 5,82707E-09 | -8,7169E-10 | 1,50331E-06 | 4,22563E-09 | -8,70918E-10 | 1,22478E-06 | 2,6199E-09 | -8,80303E-10 |
| 178 | D Vertical | -1,41061E-07 | -1,41034E-07 | 1,13162E-08 | -1,15599E-07 | -1,15558E-07 | 1,13162E-08 | -9,04299E-08 | -9,00814E-08 | 1,13156E-08 |
| 178 | D transversal | 2,22495E-07 | 1,99866E-06 | -1,99795E-07 | 2,19811E-07 | 1,72271E-06 | -1,99795E-07 | 2,15688E-07 | 1,44675E-06 | -1,99812E-07 |
| 178 | G Longitudinal | 1,76647E-08 | 1,99791E-07 | -2,47063E-08 | 1,73534E-08 | 1,65638E-07 | -2,46993E-08 | 1,71991E-08 | 1,31452E-07 | -2,47679E-08 |
| 178 | G Vertical | -2,93619E-07 | -4,00132E-09 | 1,98124E-09 | -2,95405E-07 | -1,33443E-09 | 1,67983E-09 | -2,93747E-07 | 1,75867E-09 | 2,29598E-09 |
| 178 | G transversal | -1,83504E-07 | 1,51795E-10 | 9,49499E-12 | -1,49054E-07 | 1,7562E-10 | 1,59181E-11 | -1,14975E-07 | 1,88326E-10 | -2,43434E-12 |
| 179 | D Longitudinal | 3,48489E-06 | -6,63964E-15 | 1,0483E-13 | 2,97224E-06 | -2,45246E-14 | -6,51482E-14 | 2,45726E-06 | 1,40155E-12 | 3,21282E-12 |
| 179 | D Vertical | 4,91742E-13 | 1,63386E-07 | -3,68503E-08 | 5,35966E-13 | 1,26222E-07 | -3,68483E-08 | 3,8478E-12 | 8,89023E-08 | -3,72627E-08 |
| 179 | D transversal | 7,65271E-14 | 3,22643E-06 | -3,73474E-07 | 8,3699E-14 | 2,71181E-06 | -3,73462E-07 | 4,97042E-13 | 2,19716E-06 | -3,73345E-07 |
| 179 | G Longitudinal | -4,69963E-14 | 2,71539E-07 | -4,27694E-08 | -5,13481E-14 | 2,12483E-07 | -4,27385E-08 | -1,75606E-13 | 1,53894E-07 | -4,104E-08 |
| 179 | G Vertical | -4,36836E-07 | -7,5942E-15 | 1,70422E-13 | -4,39838E-07 | -1,28608E-14 | -4,62019E-14 | -4,46189E-07 | 2,39252E-12 | 5,48443E-12 |
| 179 | G transversal | -2,77493E-07 | 9,79571E-16 | 1,57923E-14 | -2,17552E-07 | -9,33634E-14 | -2,19216E-13 | -1,56355E-07 | 9,08719E-13 | 2,08324E-12 |
| 180 | D Longitudinal | 3,06002E-06 | 6,37964E-15 | -3,11792E-10 | 2,58E-06 | 2,48262E-13 | -3,11122E-10 | 2,09988E-06 | 8,69485E-11 | -7,73645E-11 |
| 180 | D Vertical | 1,58945E-07 | 3,8703E-14 | -9,36695E-09 | 1,24557E-07 | -1,94404E-12 | -9,37219E-09 | 8,93825E-08 | 3,26523E-10 | -8,55258E-09 |
| 180 | D transversal | -2,65795E-07 | 3,05801E-06 | -3,4619E-07 | -2,6511E-07 | 2,58051E-06 | -3,4619E-07 | -2,65991E-07 | 2,10301E-06 | -3,46163E-07 |
| 180 | G Longitudinal | -9,36852E-09 | 2,61608E-07 | -4,07165E-08 | -9,63322E-09 | 2,05447E-07 | -4,07162E-08 | -1,10035E-08 | 1,49292E-07 | -4,06952E-08 |
| 180 | G Vertical | -4,24103E-07 | -8,14757E-09 | 2,38809E-09 | -4,25138E-07 | -4,85369E-09 | 2,38746E-09 | -4,23331E-07 | -1,62639E-09 | 2,17455E-09 |
| 180 | G transversal | -2,62126E-07 | 2,30333E-15 | -2,46053E-11 | -2,06283E-07 | -3,05862E-13 | -2,53986E-11 | -1,50444E-07 | -1,67801E-10 | -4,84172E-10 |
| 181 | D Longitudinal | 3,31695E-06 | 6,14944E-09 | -2,26954E-09 | 2,83924E-06 | 3,56291E-09 | -2,26792E-09 | 2,3599E-06 | 8,98751E-10 | -2,47059E-09 |
| 181 | D Vertical | 1,61514E-07 | 1,60296E-07 | -3,49368E-08 | 1,26273E-07 | 1,25184E-07 | -3,49366E-08 | 9,03222E-08 | 9,00718E-08 | -3,49347E-08 |
| 181 | D transversal | -2,59835E-07 | 3,05702E-06 | -3,46736E-07 | -2,61577E-07 | 2,5793E-06 | -3,46743E-07 | -2,64398E-07 | 2,10128E-06 | -3,47612E-07 |
| 181 | G Longitudinal | -1,65574E-08 | 2,6452E-07 | -4,04935E-08 | -1,80862E-08 | 2,08995E-07 | -4,05117E-08 | -1,849E-08 | 1,52428E-07 | -4,35272E-08 |
| 181 | G Vertical | -3,87379E-07 | 1,33271E-08 | -5,99804E-09 | -3,81342E-07 | 5,11868E-09 | -7,09413E-09 | -3,53228E-07 | -1,477E-08 | -5,16984E-08 |
| 181 | G transversal | -2,75204E-07 | 1,03684E-09 | -2,6832E-10 | -2,18998E-07 | 6,91332E-10 | -2,9403E-10 | -1,61108E-07 | -2,14371E-10 | -2,1135E-09 |
| 182 | D Longitudinal | 3,15542E-06 | -3,921E-15 | 1,15236E-13 | 2,71149E-06 | -1,18911E-13 | -2,8843E-13 | 2,26662E-06 | 2,2728E-12 | 5,21006E-12 |
| 182 | D Vertical | -1,67361E-13 | 1,57563E-07 | -3,32107E-08 | -1,75258E-13 | 1,24298E-07 | -3,32123E-08 | -1,32736E-12 | 9,10875E-08 | -3,30753E-08 |
| 182 | D transversal | -1,09305E-14 | 2,90269E-06 | -3,23833E-07 | -1,21329E-14 | 2,45645E-06 | -3,23836E-07 | -1,20572E-13 | 2,01014E-06 | -3,24051E-07 |
| 182 | G Longitudinal | 5,82394E-14 | 2,56072E-07 | -3,79319E-08 | 5,70751E-14 | 2,03907E-07 | -3,79364E-08 | 1,70811E-13 | 1,51375E-07 | -3,89794E-08 |
| 182 | G Vertical | -4,0161E-07 | -2,11066E-14 | 1,89943E-13 | -4,03431E-07 | -1,81251E-13 | -4,18076E-13 | -4,06615E-07 | 3,37959E-12 | 7,74836E-12 |
| 182 | G transversal | -2,60516E-07 | 8,93591E-16 | 1,1181E-14 | -2,07168E-07 | -7,30123E-14 | -1,71422E-13 | -1,52815E-07 | 6,93087E-13 | 1,5889E-12 |
| 183 | D Longitudinal | 3,15507E-06 | 5,48482E-09 | -1,89954E-09 | 2,71088E-06 | 3,3265E-09 | -1,89983E-09 | 2,26573E-06 | 1,07277E-09 | -2,16282E-09 |
| 183 | D Vertical | 1,58821E-07 | 1,58678E-07 | -3,36531E-08 | 1,24881E-07 | 1,24901E-07 | -3,36529E-08 | 9,0292E-08 | 9,11254E-08 | -3,36466E-08 |
| 183 | D transversal | -2,54493E-07 | 2,89688E-06 | -3,22626E-07 | -2,55271E-07 | 2,45222E-06 | -3,22631E-07 | -2,57434E-07 | 2,00773E-06 | -3,22216E-07 |
| 183 | G Longitudinal | -1,76471E-08 | 2,56381E-07 | -3,8031E-08 | -1,85164E-08 | 2,04104E-07 | -3,80584E-08 | -1,91464E-08 | 1,51169E-07 | -4,01711E-08 |
| 183 | G Vertical | -3,76563E-07 | 1,16449E-08 | -5,24814E-09 | -3,71259E-07 | 4,45546E-09 | -6,20095E-09 | -3,46743E-07 | -1,29018E-08 | -4,50132E-08 |
| 183 | G transversal | -2,67555E-07 | -1,62861E-09 | 8,30568E-10 | -2,14662E-07 | -6,81847E-10 | 8,07248E-10 | -1,60379E-07 | 2,19475E-10 | 4,33811E-10 |
| 184 | D Longitudinal | 2,74658E-06 | -1,76394E-15 | -3,13228E-10 | 2,33136E-06 | 4,08584E-14 | -3,13118E-10 | 1,91618E-06 | -3,66018E-11 | -4,09463E-10 |

APOYO 2

| DESPLAZAMIENTOS (metros) | | C1 | | | C2 | | | C3 | | |
|---|---|---|---|---|---|---|---|---|---|---|
| Nudo | Desplazamiento | L | T | V | L | T | V | L | T | V |
| 184 | D Vertical | 1,56931E-07 | -1,13679E-14 | -8,87926E-09 | 1,24305E-07 | 1,38769E-12 | -8,87557E-09 | 9,1976E-08 | -1,17808E-10 | -9,15787E-09 |
| 184 | D transversal | -2,52869E-07 | 2,74236E-06 | -2,99504E-07 | -2,5195E-07 | 2,32925E-06 | -2,99505E-07 | -2,51397E-07 | 1,91614E-06 | -2,99503E-07 |
| 184 | G Longitudinal | -8,81427E-09 | 2,45163E-07 | -3,61468E-08 | -9,01134E-09 | 1,95306E-07 | -3,61467E-08 | -1,0085E-08 | 1,45446E-07 | -3,6155E-08 |
| 184 | G Vertical | -3,93795E-07 | -8,12118E-09 | 2,1063E-09 | -3,95169E-07 | -5,21561E-09 | 2,10663E-09 | -3,95793E-07 | -2,32003E-09 | 2,06603E-09 |
| 184 | G transversal | -2,46893E-07 | -2,23793E-15 | 3,55495E-11 | -1,97536E-07 | 4,70153E-14 | 3,56192E-11 | -1,48183E-07 | 7,89742E-11 | 2,52639E-10 |
| 185 | D Longitudinal | 2,99669E-06 | 4,47634E-09 | -1,37922E-09 | 2,58399E-06 | 2,92742E-09 | -1,38088E-09 | 2,17089E-06 | 1,40513E-09 | -1,31654E-09 |
| 185 | D Vertical | 1,57487E-07 | 1,5656E-07 | -3,24037E-08 | 1,24881E-07 | 1,24072E-07 | -3,24036E-08 | 9,16938E-08 | 9,15834E-08 | -3,24083E-08 |
| 185 | D transversal | -2,48036E-07 | 2,74183E-06 | -3,00002E-07 | -2,48605E-07 | 2,32836E-06 | -3,00003E-07 | -2,4992E-07 | 1,91505E-06 | -2,99551E-07 |
| 185 | G Longitudinal | -1,92392E-08 | 2,47902E-07 | -3,56534E-08 | -1,88618E-08 | 1,98609E-07 | -3,56771E-08 | -1,97369E-08 | 1,49452E-07 | -3,55937E-08 |
| 185 | G Vertical | -3,64911E-07 | 1,02506E-08 | -4,59969E-09 | -3,60293E-07 | 3,93579E-09 | -5,42728E-09 | -3,38994E-07 | -1,12184E-08 | -3,91596E-08 |
| 185 | G transversal | -2,63499E-07 | -1,25605E-10 | 2,56544E-10 | -2,13887E-07 | 1,66711E-10 | 2,38278E-10 | -1,63083E-07 | 4,15073E-10 | -8,6518E-11 |
| 186 | D Longitudinal | 2,84032E-06 | 5,01584E-09 | -1,46472E-09 | 2,45712E-06 | 3,37789E-09 | -1,46596E-09 | 2,07401E-06 | 1,78637E-09 | -1,34473E-09 |
| 186 | D Vertical | 1,54337E-07 | 1,5433E-07 | -3,1126E-08 | 1,23036E-07 | 1,23169E-07 | -3,11259E-08 | 9,12118E-08 | 9,20073E-08 | -3,11304E-08 |
| 186 | D transversal | -2,40686E-07 | 2,59203E-06 | -2,7879E-07 | -2,41531E-07 | 2,20791E-06 | -2,78788E-07 | -2,42152E-07 | 1,82374E-06 | -2,78894E-07 |
| 186 | G Longitudinal | -2,01359E-08 | 2,39251E-07 | -3,34154E-08 | -1,94539E-08 | 1,92974E-07 | -3,34318E-08 | -1,97075E-08 | 1,46777E-07 | -3,3415E-08 |
| 186 | G Vertical | -3,52743E-07 | 8,88848E-09 | -4,00863E-09 | -3,48597E-07 | 3,35727E-09 | -4,73662E-09 | -3,29815E-07 | -9,92252E-09 | -3,43352E-08 |
| 186 | G transversal | -2,5897E-07 | 2,25692E-09 | -6,76978E-10 | -2,12603E-07 | 1,4739E-09 | -6,90774E-10 | -1,65195E-07 | 4,78456E-10 | -1,44074E-09 |
| 187 | D Longitudinal | 2,83625E-06 | -3,29332E-15 | 1,20774E-13 | 2,45417E-06 | -1,87648E-13 | -4,48626E-13 | 2,07223E-06 | 2,85971E-12 | 6,55561E-12 |
| 187 | D Vertical | 4,24609E-14 | 1,55071E-07 | -3,13532E-08 | 4,06928E-14 | 1,23645E-07 | -3,13523E-08 | 3,49667E-13 | 9,22057E-08 | -3,13822E-08 |
| 187 | D transversal | 1,87747E-14 | 2,59376E-06 | -2,79378E-07 | 1,97871E-14 | 2,20884E-06 | -2,79378E-07 | 1,85871E-13 | 1,82396E-06 | -2,79267E-07 |
| 187 | G Longitudinal | -4,93527E-14 | 2,38833E-07 | -3,32978E-08 | -5,24876E-14 | 1,92743E-07 | -3,32984E-08 | -1,97107E-13 | 1,46851E-07 | -3,27722E-08 |
| 187 | G Vertical | -3,64817E-07 | 8,84738E-15 | 1,77769E-13 | -3,66041E-07 | -2,64173E-13 | -6,52447E-13 | -3,6728E-07 | 4,343E-12 | 9,95489E-12 |
| 187 | G transversal | -2,46563E-07 | 9,03814E-16 | 6,9512E-15 | -1,99598E-07 | -5,35301E-14 | -1,25834E-13 | -1,51866E-07 | 4,97151E-13 | 1,13971E-12 |
| 188 | D Longitudinal | 2,44478E-06 | 1,88428E-16 | -3,05366E-10 | 2,08809E-06 | -1,02367E-13 | -3,05647E-10 | 1,73139E-06 | 1,68598E-11 | -2,62047E-10 |
| 188 | D Vertical | 1,52392E-07 | 1,84571E-15 | -8,23862E-09 | 1,22405E-07 | -6,64218E-13 | -8,24038E-09 | 9,23355E-08 | 3,0393E-11 | -8,17351E-09 |
| 188 | D transversal | -2,39579E-07 | 2,43945E-06 | -2,57122E-07 | -2,38507E-07 | 2,0848E-06 | -2,57122E-07 | -2,36882E-07 | 1,73015E-06 | -2,57114E-07 |
| 188 | G Longitudinal | -8,78247E-09 | 2,27907E-07 | -3,18003E-08 | -8,91961E-09 | 1,84045E-07 | -3,18002E-08 | -9,72157E-09 | 1,40182E-07 | -3,18014E-08 |
| 188 | G Vertical | -3,58334E-07 | -8,43711E-09 | 1,93166E-09 | -3,59888E-07 | -5,77233E-09 | 1,93225E-09 | -3,62096E-07 | -3,13638E-09 | 1,84244E-09 |
| 188 | G transversal | -2,30132E-07 | 1,99209E-15 | -6,05567E-11 | -1,87055E-07 | 3,62024E-13 | -5,95493E-11 | -1,43981E-07 | -2,56283E-11 | -1,25663E-10 |
| 189 | D Longitudinal | 2,67949E-06 | 6,23849E-09 | -1,82206E-09 | 2,32535E-06 | 4,19762E-09 | -1,82219E-09 | 1,97174E-06 | 2,15982E-09 | -1,81265E-09 |
| 189 | D Vertical | 1,52336E-07 | 1,51499E-07 | -2,98048E-08 | 1,22461E-07 | 1,21696E-07 | -2,98048E-08 | 9,21181E-08 | 9,1893E-08 | -2,98035E-08 |
| 189 | D transversal | -2,32547E-07 | 2,43945E-06 | -2,57799E-07 | -2,33652E-07 | 2,08437E-06 | -2,57799E-07 | -2,34058E-07 | 1,72922E-06 | -2,57988E-07 |
| 189 | G Longitudinal | -1,99183E-08 | 2,30286E-07 | -3,12636E-08 | -1,9542E-08 | 1,87056E-07 | -3,12736E-08 | -1,92379E-08 | 1,43574E-07 | -3,20754E-08 |
| 189 | G Vertical | -3,39238E-07 | 7,61745E-09 | -3,46982E-09 | -3,35638E-07 | 2,80417E-09 | -4,10587E-09 | -3,19266E-07 | -8,76683E-09 | -2,99328E-08 |
| 189 | G transversal | -2,49815E-07 | 1,6369E-09 | -4,68583E-10 | -2,06643E-07 | 1,09255E-09 | -4,81304E-10 | -1,62591E-07 | 3,47812E-10 | -1,18134E-09 |
| 190 | D Longitudinal | 2,52378E-06 | -2,17939E-15 | 1,21497E-13 | 2,19757E-06 | -2,32967E-13 | -5,54785E-13 | 1,87227E-06 | 3,22047E-12 | 7,38264E-12 |
| 190 | D Vertical | 2,56751E-15 | 1,48055E-07 | -2,83193E-08 | 5,64356E-15 | 1,19808E-07 | -2,83196E-08 | 9,52983E-15 | 9,15597E-08 | -2,83263E-08 |
| 190 | D transversal | 3,24282E-15 | 2,29672E-06 | -2,38901E-07 | 3,31836E-15 | 1,96768E-06 | -2,38901E-07 | -4,32824E-17 | 1,63862E-06 | -2,38965E-07 |
| 190 | G Longitudinal | 1,88272E-14 | 2,21415E-07 | -2,92764E-08 | 1,84203E-14 | 1,8106E-07 | -2,92747E-08 | 5,96177E-14 | 1,40626E-07 | -2,94667E-08 |
| 190 | G Vertical | -3,28564E-07 | -6,83531E-15 | 1,78169E-13 | -3,29882E-07 | -3,29208E-13 | -7,78728E-13 | -3,2985E-07 | 4,58287E-12 | 1,05061E-11 |
| 190 | G transversal | -2,28299E-07 | 5,62239E-16 | 3,58811E-15 | -1,87253E-07 | -3,71974E-14 | -8,71155E-14 | -1,45637E-07 | 3,28645E-13 | 7,53426E-13 |
| 191 | D Longitudinal | 2,52503E-06 | 6,39343E-09 | -1,80196E-09 | 2,19803E-06 | 4,38046E-09 | -1,80211E-09 | 1,87191E-06 | 2,35828E-09 | -1,82587E-09 |
| 191 | D Vertical | 1,48454E-07 | 1,48561E-07 | -2,84587E-08 | 1,19958E-07 | 1,20152E-07 | -2,84587E-08 | 9,10534E-08 | 9,17434E-08 | -2,84579E-08 |
| 191 | D transversal | -2,2494E-07 | 2,29249E-06 | -2,38108E-07 | -2,26027E-07 | 1,96459E-06 | -2,3811E-07 | -2,26256E-07 | 1,6367E-06 | -2,38088E-07 |

APOYO 2

| DESPLAZAMIENTOS (metros) | | C1 | | | C2 | | | C3 | | |
|---|---|---|---|---|---|---|---|---|---|---|
| Nudo | Desplazamiento | L | T | V | L | T | V | L | T | V |
| 191 | G Longitudinal | -1,7929E-08 | 2,21861E-07 | -2,93921E-08 | -1,81327E-08 | 1,81357E-07 | -2,94023E-08 | -1,83682E-08 | 1,40622E-07 | -3,01448E-08 |
| 191 | G Vertical | -3,25664E-07 | 6,33572E-09 | -2,9601E-09 | -3,22523E-07 | 2,2025E-09 | -3,51568E-09 | -3,08234E-07 | -7,83367E-09 | -2,60755E-08 |
| 191 | G transversal | -2,39578E-07 | -2,51468E-10 | 1,94569E-10 | -1,99173E-07 | -3,74897E-11 | 1,81854E-10 | -1,58035E-07 | 5,72243E-11 | -2,86242E-10 |
| 192 | D Longitudinal | 2,3732E-06 | 5,88744E-09 | -1,5548E-09 | 2,0722E-06 | 4,16059E-09 | -1,5557E-09 | 1,77237E-06 | 2,43372E-09 | -1,55944E-09 |
| 192 | D Vertical | 1,45756E-07 | 1,44978E-07 | -2,71128E-08 | 1,187E-07 | 1,17959E-07 | -2,71127E-08 | 9,12937E-08 | 9,09394E-08 | -2,7114E-08 |
| 192 | D transversal | -2,18293E-07 | 2,14801E-06 | -2,19223E-07 | -2,19019E-07 | 1,84608E-06 | -2,19224E-07 | -2,18629E-07 | 1,54419E-06 | -2,19141E-07 |
| 192 | G Longitudinal | -1,63468E-08 | 2,12017E-07 | -2,7305E-08 | -1,68252E-08 | 1,74462E-07 | -2,73169E-08 | -1,7554E-08 | 1,3682E-07 | -2,76948E-08 |
| 192 | G Vertical | -3,1172E-07 | 5,60683E-09 | -2,58962E-09 | -3,08913E-07 | 1,95432E-09 | -3,07303E-09 | -2,96372E-07 | -6,84463E-09 | -2,27298E-08 |
| 192 | G transversal | -2,30171E-07 | -1,26885E-10 | 1,701E-10 | -1,92407E-07 | 6,2012E-11 | 1,59042E-10 | -1,54029E-07 | 1,55883E-10 | -2,25107E-10 |
| 193 | D Longitudinal | 2,14825E-06 | 2,38016E-16 | -3,23424E-10 | 1,84563E-06 | 1,09896E-13 | -3,23125E-10 | 1,54302E-06 | -5,0887E-12 | -3,35239E-10 |
| 193 | D Vertical | 1,43825E-07 | 4,41754E-16 | -7,45417E-09 | 1,17205E-07 | 2,32318E-13 | -7,45356E-09 | 9,05958E-08 | -2,59258E-12 | -7,45586E-09 |
| 193 | D transversal | -2,25186E-07 | 2,14196E-06 | -2,17836E-07 | -2,24029E-07 | 1,8415E-06 | -2,17837E-07 | -2,21649E-07 | 1,54104E-06 | -2,17829E-07 |
| 193 | G Longitudinal | -8,81644E-09 | 2,09128E-07 | -2,75342E-08 | -8,89899E-09 | 1,71149E-07 | -2,75341E-08 | -9,4509E-09 | 1,33171E-07 | -2,7536E-08 |
| 193 | G Vertical | -3,21204E-07 | -8,72355E-09 | 1,85052E-09 | -3,22816E-07 | -6,17066E-09 | 1,85115E-09 | -3,26024E-07 | -3,63335E-09 | 1,79967E-09 |
| 193 | G transversal | -2,11572E-07 | -5,00662E-16 | 2,67739E-11 | -1,74099E-07 | -1,1983E-14 | 2,67248E-11 | -1,36628E-07 | 8,76584E-12 | 5,12682E-11 |
| 194 | D Longitudinal | 1,7804E-06 | -5,82707E-09 | 8,71454E-10 | 1,50331E-06 | -4,22512E-09 | 8,72138E-10 | 1,22478E-06 | -2,62661E-09 | 8,64902E-10 |
| 194 | D Vertical | 1,41061E-07 | -1,41034E-07 | 1,13162E-08 | 1,15599E-07 | -1,15558E-07 | 1,13162E-08 | 9,04299E-08 | -9,00811E-08 | 1,13162E-08 |
| 194 | D transversal | -2,22495E-07 | 1,99866E-06 | -1,99795E-07 | -2,19811E-07 | 1,72271E-06 | -1,99796E-07 | -2,15688E-07 | 1,44675E-06 | -1,99797E-07 |
| 194 | G Longitudinal | -1,76649E-08 | 1,99791E-07 | -2,47063E-08 | -1,73536E-08 | 1,65638E-07 | -2,46992E-08 | -1,71991E-08 | 1,31452E-07 | -2,47681E-08 |
| 194 | G Vertical | -2,93629E-07 | 4,00067E-09 | -1,98027E-09 | -2,95414E-07 | 1,33417E-09 | -1,67961E-09 | -2,93751E-07 | -1,75878E-09 | -2,29618E-09 |
| 194 | G transversal | -1,83503E-07 | -1,51782E-10 | -9,50847E-12 | -1,49053E-07 | -1,75593E-10 | -1,58724E-11 | -1,14975E-07 | -1,88403E-10 | 2,25786E-12 |
| 195 | D Longitudinal | 2,21507E-06 | 5,82707E-09 | -1,45079E-09 | 1,94031E-06 | 4,22507E-09 | -1,45162E-09 | 1,66698E-06 | 2,6301E-09 | -1,43505E-09 |
| 195 | D Vertical | 1,40975E-07 | 1,41034E-07 | -2,5625E-08 | 1,15418E-07 | 1,15558E-07 | -2,56249E-08 | 8,95688E-08 | 9,00808E-08 | -2,56257E-08 |
| 195 | D transversal | -2,1162E-07 | 1,99866E-06 | -2,0034E-07 | -2,11974E-07 | 1,72271E-06 | -2,0034E-07 | -2,10897E-07 | 1,44676E-06 | -2,00323E-07 |
| 195 | G Longitudinal | -1,58306E-08 | 1,99791E-07 | -2,48194E-08 | -1,61481E-08 | 1,65632E-07 | -2,48289E-08 | -1,66303E-08 | 1,31402E-07 | -2,51322E-08 |
| 195 | G Vertical | -2,9584E-07 | 4,00015E-09 | -2,04981E-09 | -2,93513E-07 | 1,06658E-09 | -2,46407E-09 | -2,82854E-07 | -6,28074E-09 | -1,93185E-08 |
| 195 | G transversal | -2,18386E-07 | 1,51772E-10 | 2,15487E-11 | -1,83902E-07 | 1,69936E-10 | 1,28201E-11 | -1,4894E-07 | 9,35294E-11 | -3,48014E-10 |
| 196 | D Longitudinal | 2,22872E-06 | -1,52538E-15 | 1,18358E-13 | 1,95207E-06 | -2,58047E-13 | -6,12958E-13 | 1,67686E-06 | 3,37604E-12 | 7,73933E-12 |
| 196 | D Vertical | -8,9114E-15 | 1,41521E-07 | -2,57977E-08 | -1,08939E-14 | 1,15869E-07 | -2,57975E-08 | -6,41787E-14 | 9,02214E-08 | -2,57867E-08 |
| 196 | D transversal | -4,0275E-15 | 2,01688E-06 | -2,02827E-07 | -4,29699E-15 | 1,73751E-06 | -2,02827E-07 | -1,70527E-14 | 1,45816E-06 | -2,02795E-07 |
| 196 | G Longitudinal | -1,26834E-14 | 2,01848E-07 | -2,52105E-08 | -1,46395E-14 | 1,67156E-07 | -2,52109E-08 | -6,10309E-14 | 1,32495E-07 | -2,51352E-08 |
| 196 | G Vertical | -2,96953E-07 | 1,40667E-15 | 1,63767E-13 | -2,97541E-07 | -3,50515E-13 | -8,37975E-13 | -2,9621E-07 | 4,67917E-12 | 1,07264E-11 |
| 196 | G transversal | -2,09325E-07 | 5,12088E-16 | 7,53337E-16 | -1,73612E-07 | -2,34942E-14 | -5,49943E-14 | -1,375E-07 | 1,9083E-13 | 4,37483E-13 |
| 197 | D Longitudinal | 1,79232E-06 | 1,49373E-15 | -1,18346E-13 | 1,51334E-06 | 2,5803E-13 | 6,12964E-13 | 1,23291E-06 | -3,37624E-12 | -7,73978E-12 |
| 197 | D Vertical | -9,96429E-15 | -1,41521E-07 | 1,13969E-08 | -9,24994E-15 | -1,15869E-07 | 1,1397E-08 | -4,88082E-15 | -9,02163E-08 | 1,14008E-08 |
| 197 | D transversal | 4,03804E-15 | 2,01688E-06 | -2,02259E-07 | 4,13141E-15 | 1,73751E-06 | -2,02259E-07 | 1,2806E-14 | 1,45813E-06 | -2,02286E-07 |
| 197 | G Longitudinal | 1,28243E-14 | 2,01848E-07 | -2,50916E-08 | 1,28793E-14 | 1,67157E-07 | -2,50911E-08 | 3,23236E-14 | 1,32442E-07 | -2,51452E-08 |
| 197 | G Vertical | -3,12835E-07 | -5,6344E-15 | 1,66536E-13 | -3,09019E-07 | -3,55542E-13 | -8,39826E-13 | -3,03222E-07 | 4,63636E-12 | 1,06287E-11 |
| 197 | G transversal | -1,92197E-07 | -4,09561E-16 | -7,93898E-16 | -1,56609E-07 | 2,35701E-14 | 5,50282E-14 | -1,21419E-07 | -1,90212E-13 | -4,36071E-13 |
| 198 | D Longitudinal | 2,08962E-06 | 5,57937E-09 | -1,34851E-09 | 1,83505E-06 | 4,09464E-09 | -1,34917E-09 | 1,58208E-06 | 2,61675E-09 | -1,33196E-09 |
| 198 | D Vertical | 1,39128E-07 | 1,38601E-07 | -2,47307E-08 | 1,14506E-07 | 1,14021E-07 | -2,47307E-08 | 8,96266E-08 | 8,9441E-08 | -2,47309E-08 |
| 198 | D transversal | -2,06098E-07 | 1,88029E-06 | -1,85751E-07 | -2,06223E-07 | 1,62441E-06 | -1,85751E-07 | -2,04739E-07 | 1,36853E-06 | -1,85754E-07 |
| 198 | G Longitudinal | -1,55484E-08 | 1,9447E-07 | -2,37876E-08 | -1,57946E-08 | 1,61719E-07 | -2,37952E-08 | -1,61268E-08 | 1,28885E-07 | -2,41111E-08 |
| 198 | G Vertical | -2,85457E-07 | 3,29724E-09 | -1,78073E-09 | -2,83373E-07 | 7,19556E-10 | -2,15498E-09 | -2,7375E-07 | -5,84547E-09 | -1,7381E-08 |

APOYO 2

| DESPLAZAMIENTOS (metros) | | C1 | | | C2 | | | C3 | | |
|---|---|---|---|---|---|---|---|---|---|---|
| Nudo | Desplazamiento | L | T | V | L | T | V | L | T | V |
| 198 | G transversal | -2,11761E-07 | -5,34568E-10 | 1,66466E-10 | -1,78997E-07 | -3,58247E-10 | 1,58641E-10 | -1,45828E-07 | -2,69328E-10 | -1,71736E-10 |
| 199 | D Longitudinal | 1,66815E-06 | -5,57937E-09 | 8,03783E-10 | 1,41124E-06 | -4,09459E-09 | 8,04572E-10 | 1,15274E-06 | -2,61273E-09 | 7,98832E-10 |
| 199 | D Vertical | 1,3831E-07 | -1,38601E-07 | 1,09103E-08 | 1,13762E-07 | -1,14021E-07 | 1,09102E-08 | 8,94704E-08 | -8,94409E-08 | 1,09106E-08 |
| 199 | D transversal | -2,15767E-07 | 1,88029E-06 | -1,85277E-07 | -2,13308E-07 | 1,62441E-06 | -1,85278E-07 | -2,09265E-07 | 1,36854E-06 | -1,8526E-07 |
| 199 | G Longitudinal | -1,69099E-08 | 1,9447E-07 | -2,36975E-08 | -1,66493E-08 | 1,61723E-07 | -2,3692E-08 | -1,65621E-08 | 1,28966E-07 | -2,37146E-08 |
| 199 | G Vertical | -2,83555E-07 | 3,2977E-09 | -1,7549E-09 | -2,85132E-07 | 9,61297E-10 | -1,4833E-09 | -2,83581E-07 | -1,76001E-09 | -2,0394E-09 |
| 199 | G transversal | -1,7753E-07 | 5,34558E-10 | -9,34246E-11 | -1,44774E-07 | 3,53178E-10 | -9,91281E-11 | -1,12329E-07 | 1,79981E-10 | -8,72351E-11 |
| 200 | D Longitudinal | 2,08962E-06 | -5,57937E-09 | 1,34874E-09 | 1,83505E-06 | -4,09516E-09 | 1,34792E-09 | 1,58208E-06 | -2,61001E-09 | 1,34742E-09 |
| 200 | D Vertical | -1,39128E-07 | 1,38601E-07 | -2,47307E-08 | -1,14506E-07 | 1,14021E-07 | -2,47308E-08 | -8,96266E-08 | 8,94413E-08 | -2,47304E-08 |
| 200 | D transversal | 2,06098E-07 | 1,88029E-06 | -1,85751E-07 | 2,06223E-07 | 1,62441E-06 | -1,8575E-07 | 2,04739E-07 | 1,36852E-06 | -1,8577E-07 |
| 200 | G Longitudinal | 1,55486E-08 | 1,9447E-07 | -2,37876E-08 | 1,57949E-08 | 1,61718E-07 | -2,37953E-08 | 1,61281E-08 | 1,28884E-07 | -2,41114E-08 |
| 200 | G Vertical | -2,85466E-07 | -3,29659E-09 | 1,78111E-09 | -2,83385E-07 | -7,1816E-10 | 2,15738E-09 | -2,73808E-07 | 5,85175E-09 | 1,73954E-08 |
| 200 | G transversal | -2,11761E-07 | 5,34582E-10 | -1,66467E-10 | -1,78998E-07 | 3,58263E-10 | -1,58621E-10 | -1,45829E-07 | 2,69467E-10 | 1,72054E-10 |
| 201 | D Longitudinal | 1,66815E-06 | 5,57937E-09 | -8,04014E-10 | 1,41124E-06 | 4,09512E-09 | -8,03326E-10 | 1,15274E-06 | 2,60599E-09 | -8,14295E-10 |
| 201 | D Vertical | -1,3831E-07 | -1,38601E-07 | 1,09103E-08 | -1,13762E-07 | -1,14021E-07 | 1,09103E-08 | -8,94704E-08 | -8,94412E-08 | 1,09101E-08 |
| 201 | D transversal | 2,15767E-07 | 1,88029E-06 | -1,85277E-07 | 2,13308E-07 | 1,62441E-06 | -1,85277E-07 | 2,09265E-07 | 1,36853E-06 | -1,85276E-07 |
| 201 | G Longitudinal | 1,69097E-08 | 1,9447E-07 | -2,36975E-08 | 1,66491E-08 | 1,61723E-07 | -2,3692E-08 | 1,6562E-08 | 1,28966E-07 | -2,37146E-08 |
| 201 | G Vertical | -2,83546E-07 | -3,29829E-09 | 1,75578E-09 | -2,85123E-07 | -9,61533E-10 | 1,48349E-09 | -2,83577E-07 | 1,75997E-09 | 2,03934E-09 |
| 201 | G transversal | -1,7753E-07 | -5,34547E-10 | 9,34148E-11 | -1,44774E-07 | -3,53159E-10 | 9,91564E-11 | -1,1233E-07 | -1,79985E-10 | 8,72244E-11 |
| 202 | D Longitudinal | 1,87772E-06 | -3,62048E-17 | 2,66484E-10 | 1,62195E-06 | -1,45668E-14 | 2,66448E-10 | 1,36618E-06 | -1,25024E-12 | 2,62692E-10 |
| 202 | D Vertical | -1,37709E-07 | 4,84168E-16 | -6,86243E-09 | -1,13407E-07 | -6,45009E-14 | -6,8626E-09 | -8,91107E-08 | -3,50871E-12 | -6,87305E-09 |
| 202 | D transversal | 2,10907E-07 | 1,87424E-06 | -1,84569E-07 | 2,09734E-07 | 1,61966E-06 | -1,84568E-07 | 2,06937E-07 | 1,36508E-06 | -1,84577E-07 |
| 202 | G Longitudinal | 7,01459E-09 | 1,91653E-07 | -2,40838E-08 | 7,05777E-09 | 1,58433E-07 | -2,40839E-08 | 7,42659E-09 | 1,25214E-07 | -2,4084E-08 |
| 202 | G Vertical | -2,88437E-07 | 7,35263E-09 | -1,40791E-09 | -2,90024E-07 | 5,41132E-09 | -1,40674E-09 | -2,93756E-07 | 3,47331E-09 | -1,38787E-09 |
| 202 | G transversal | -1,94171E-07 | -7,46328E-16 | -3,5747E-11 | -1,6156E-07 | -1,13684E-13 | -3,60561E-11 | -1,2895E-07 | -3,70613E-13 | -3,83678E-11 |
| 203 | D Longitudinal | 1,54704E-06 | 9,48709E-16 | -1,12257E-13 | 1,31169E-06 | 2,67094E-13 | 6,3357E-13 | 1,07457E-06 | -3,37465E-12 | -7,73617E-12 |
| 203 | D Vertical | 6,37385E-15 | -1,34869E-07 | 1,03156E-08 | 5,95729E-15 | -1,11536E-07 | 1,03156E-08 | 2,34949E-15 | -8,82025E-08 | 1,03137E-08 |
| 203 | D transversal | -1,33502E-15 | 1,75727E-06 | -1,70591E-07 | -1,31553E-15 | 1,52166E-06 | -1,70592E-07 | -3,55052E-15 | 1,28604E-06 | -1,70586E-07 |
| 203 | G Longitudinal | -6,99544E-16 | 1,87103E-07 | -2,2329E-08 | -7,49837E-16 | 1,56299E-07 | -2,23293E-08 | -6,32466E-15 | 1,25499E-07 | -2,23229E-08 |
| 203 | G Vertical | -2,81084E-07 | -1,89878E-15 | 1,51114E-13 | -2,77909E-07 | -3,54657E-13 | -8,40722E-13 | -2,72427E-07 | 4,49054E-12 | 1,02943E-11 |
| 203 | G transversal | -1,76934E-07 | -3,38644E-16 | 1,24799E-15 | -1,45637E-07 | 1,33334E-14 | 3,09874E-14 | -1,1461E-07 | -8,76557E-14 | -2,00961E-13 |
| 204 | D Longitudinal | 1,54935E-06 | -4,86516E-09 | 6,76466E-10 | 1,31342E-06 | -3,60975E-09 | 6,77283E-10 | 1,07574E-06 | -2,35785E-09 | 6,70063E-10 |
| 204 | D Vertical | 1,3582E-07 | -1,35799E-07 | 1,04425E-08 | 1,12258E-07 | -1,12234E-07 | 1,04425E-08 | 8,89149E-08 | -8,86687E-08 | 1,04427E-08 |
| 204 | D transversal | -2,08691E-07 | 1,75409E-06 | -1,70055E-07 | -2,06402E-07 | 1,51924E-06 | -1,70056E-07 | -2,02378E-07 | 1,2844E-06 | -1,70039E-07 |
| 204 | G Longitudinal | -1,5894E-08 | 1,87468E-07 | -2,24097E-08 | -1,58399E-08 | 1,56552E-07 | -2,24048E-08 | -1,59302E-08 | 1,25634E-07 | -2,24058E-08 |
| 204 | G Vertical | -2,71934E-07 | 2,83694E-09 | -1,5771E-09 | -2,73445E-07 | 7,64072E-10 | -1,33388E-09 | -2,7217E-07 | -1,65351E-09 | -1,83193E-09 |
| 204 | G transversal | -1,70446E-07 | 9,53036E-10 | -1,46941E-10 | -1,39656E-07 | 6,72035E-10 | -1,52072E-10 | -1,0911E-07 | 3,96945E-10 | -1,45092E-10 |
| 205 | D Longitudinal | 1,95635E-06 | -4,86516E-09 | 1,14344E-09 | 1,72273E-06 | -3,61036E-09 | 1,14258E-09 | 1,49086E-06 | -2,35287E-09 | 1,14651E-09 |
| 205 | D Vertical | -1,35688E-07 | 1,35799E-07 | -2,37268E-08 | -1,12073E-07 | 1,12234E-07 | -2,37268E-08 | -8,82386E-08 | 8,86689E-08 | -2,37266E-08 |
| 205 | D transversal | 1,99773E-07 | 1,75409E-06 | -1,70479E-07 | 1,99739E-07 | 1,51924E-06 | -1,70478E-07 | 1,97956E-07 | 1,28438E-06 | -1,70495E-07 |
| 205 | G Longitudinal | 1,61101E-08 | 1,87468E-07 | -2,24207E-08 | 1,61259E-08 | 1,56548E-07 | -2,24275E-08 | 1,6177E-08 | 1,25547E-07 | -2,2727E-08 |
| 205 | G Vertical | -2,74479E-07 | -2,83594E-09 | 1,5613E-09 | -2,72534E-07 | -5,46335E-10 | 1,89826E-09 | -2,63891E-07 | 5,31768E-09 | 1,55441E-08 |
| 205 | G transversal | -2,03641E-07 | 9,53058E-10 | -2,57714E-10 | -1,72872E-07 | 6,76628E-10 | -2,50595E-10 | -1,41779E-07 | 4,78237E-10 | 4,4475E-11 |
| 206 | D Longitudinal | 1,54935E-06 | 4,86516E-09 | -6,7669E-10 | 1,31342E-06 | 3,61028E-09 | -6,76023E-10 | 1,07574E-06 | 2,35113E-09 | -6,85473E-10 |

APOYO 2

| DESPLAZAMIENTOS (metros) | | C1 | | | C2 | | | C3 | | |
|---|---|---|---|---|---|---|---|---|---|---|
| Nudo | Desplazamiento | L | T | V | L | T | V | L | T | V |
| 206 | D Vertical | -1,3582E-07 | -1,35799E-07 | 1,04425E-08 | -1,12258E-07 | -1,12234E-07 | 1,04425E-08 | -8,89149E-08 | -8,86688E-08 | 1,04423E-08 |
| 206 | D transversal | 2,08691E-07 | 1,75409E-06 | -1,70055E-07 | 2,06402E-07 | 1,51924E-06 | -1,70055E-07 | 2,02378E-07 | 1,28439E-06 | -1,70055E-07 |
| 206 | G Longitudinal | 1,58938E-08 | 1,87468E-07 | -2,24097E-08 | 1,58397E-08 | 1,56552E-07 | -2,24049E-08 | 1,59301E-08 | 1,25634E-07 | -2,24059E-08 |
| 206 | G Vertical | -2,71926E-07 | -2,83747E-09 | 1,57788E-09 | -2,73438E-07 | -7,64278E-10 | 1,33406E-09 | -2,72167E-07 | 1,65342E-09 | 1,83176E-09 |
| 206 | G transversal | -1,70446E-07 | -9,53026E-10 | 1,46935E-10 | -1,39656E-07 | -6,72025E-10 | 1,52081E-10 | -1,0911E-07 | -3,96867E-10 | 1,45271E-10 |
| 207 | D Longitudinal | 1,63572E-06 | -8,60938E-17 | 2,36425E-10 | 1,41979E-06 | -2,17098E-14 | 2,36367E-10 | 1,20386E-06 | -5,39583E-13 | 2,34653E-10 |
| 207 | D Vertical | -1,32895E-07 | -3,29087E-16 | -6,38619E-09 | -1,10268E-07 | 7,69524E-15 | -6,38617E-09 | -8,7636E-08 | 2,60157E-12 | -6,37922E-09 |
| 207 | D transversal | 1,97742E-07 | 1,63186E-06 | -1,55679E-07 | 1,9659E-07 | 1,41713E-06 | -1,55678E-07 | 1,93575E-07 | 1,20239E-06 | -1,55687E-07 |
| 207 | G Longitudinal | 6,92693E-09 | 1,77057E-07 | -2,13324E-08 | 6,9414E-09 | 1,47633E-07 | -2,13324E-08 | 7,17547E-09 | 1,18209E-07 | -2,13329E-08 |
| 207 | G Vertical | -2,59562E-07 | 6,5821E-09 | -1,1566E-09 | -2,61067E-07 | 4,98739E-09 | -1,15547E-09 | -2,64962E-07 | 3,39398E-09 | -1,14319E-09 |
| 207 | G transversal | -1,79313E-07 | -2,32031E-16 | 7,50479E-12 | -1,50461E-07 | -2,52992E-14 | 7,43897E-12 | -1,2161E-07 | 8,15393E-14 | 7,16077E-12 |
| 208 | D Longitudinal | 1,43204E-06 | -4,39442E-09 | 5,80414E-10 | 1,2164E-06 | -3,30993E-09 | 5,81133E-10 | 9,98902E-07 | -2,22959E-09 | 5,72065E-10 |
| 208 | D Vertical | 1,3215E-07 | -1,32452E-07 | 9,96895E-09 | 1,0964E-07 | -1,0992E-07 | 9,96894E-09 | 8,7313E-08 | -8,73885E-08 | 9,96908E-09 |
| 208 | D transversal | -2,01863E-07 | 1,62933E-06 | -1,55322E-07 | -1,99568E-07 | 1,41479E-06 | -1,55323E-07 | -1,95422E-07 | 1,20025E-06 | -1,55314E-07 |
| 208 | G Longitudinal | -1,48478E-08 | 1,79138E-07 | -2,09277E-08 | -1,50371E-08 | 1,5033E-07 | -2,0923E-08 | -1,53125E-08 | 1,21519E-07 | -2,0922E-08 |
| 208 | G Vertical | -2,5963E-07 | 3,00999E-09 | -1,52622E-09 | -2,61151E-07 | 1,02396E-09 | -1,30915E-09 | -2,6017E-07 | -1,26941E-09 | -1,75319E-09 |
| 208 | G transversal | -1,63166E-07 | -4,57039E-10 | 2,59863E-11 | -1,34298E-07 | -4,11893E-10 | 2,13505E-11 | -1,05616E-07 | -3,60792E-10 | 2,92562E-11 |
| 209 | D Longitudinal | 1,82435E-06 | -4,39442E-09 | 9,91727E-10 | 1,611E-06 | -3,31045E-09 | 9,9101E-10 | 1,3995E-06 | -2,22132E-09 | 1,00316E-09 |
| 209 | D Vertical | -1,32906E-07 | 1,32452E-07 | -2,2702E-08 | -1,10364E-07 | 1,0992E-07 | -2,2702E-08 | -8,76399E-08 | 8,73886E-08 | -2,2702E-08 |
| 209 | D transversal | 1,92367E-07 | 1,62933E-06 | -1,55762E-07 | 1,92367E-07 | 1,41479E-06 | -1,55761E-07 | 1,90519E-07 | 1,20024E-06 | -1,55767E-07 |
| 209 | G Longitudinal | 1,6919E-08 | 1,79138E-07 | -2,08462E-08 | 1,66642E-08 | 1,50326E-07 | -2,08526E-08 | 1,64074E-08 | 1,21443E-07 | -2,1119E-08 |
| 209 | G Vertical | -2,63495E-07 | -3,0091E-09 | 1,47198E-09 | -2,6157E-07 | -8,2963E-10 | 1,77274E-09 | -2,5365E-07 | 4,54106E-09 | 1,39548E-08 |
| 209 | G transversal | -1,95248E-07 | -4,5702E-10 | 4,20016E-11 | -1,66429E-07 | -4,07743E-10 | 4,84407E-11 | -1,37352E-07 | -2,90179E-10 | 3,08746E-10 |
| 210 | D Longitudinal | 1,43204E-06 | 4,39442E-09 | -5,80631E-10 | 1,2164E-06 | 3,31046E-09 | -5,79871E-10 | 9,98902E-07 | 2,22295E-09 | -5,87298E-10 |
| 210 | D Vertical | -1,3215E-07 | -1,32452E-07 | 9,96896E-09 | -1,0964E-07 | -1,0992E-07 | 9,96898E-09 | -8,7313E-08 | -8,73886E-08 | 9,96884E-09 |
| 210 | D transversal | 2,01863E-07 | 1,62933E-06 | -1,55322E-07 | 1,99568E-07 | 1,41479E-06 | -1,55322E-07 | 1,95422E-07 | 1,20024E-06 | -1,55329E-07 |
| 210 | G Longitudinal | 1,48477E-08 | 1,79138E-07 | -2,09277E-08 | 1,50369E-08 | 1,5033E-07 | -2,0923E-08 | 1,53125E-08 | 1,21519E-07 | -2,09223E-08 |
| 210 | G Vertical | -2,59623E-07 | -3,01046E-09 | 1,52692E-09 | -2,61144E-07 | -1,02415E-09 | 1,3093E-09 | -2,60167E-07 | 1,26938E-09 | 1,75316E-09 |
| 210 | G transversal | -1,63166E-07 | 4,57048E-10 | -2,59895E-11 | -1,34299E-07 | 4,11895E-10 | -2,13603E-11 | -1,05616E-07 | 3,60947E-10 | -2,89017E-11 |
| 211 | D Longitudinal | 1,32405E-06 | 5,40903E-16 | -1,04584E-13 | 1,12684E-06 | 2,65383E-13 | 6,28876E-13 | 9,27686E-07 | -3,27131E-12 | -7,49927E-12 |
| 211 | D Vertical | -2,54978E-15 | -1,29988E-07 | 9,59107E-09 | -2,39333E-15 | -1,08293E-07 | 9,59107E-09 | -7,38727E-16 | -8,65983E-08 | 9,59163E-09 |
| 211 | D transversal | 1,13353E-15 | 1,51979E-06 | -1,42831E-07 | 1,0953E-15 | 1,32248E-06 | -1,42831E-07 | 1,19783E-15 | 1,12517E-06 | -1,42832E-07 |
| 211 | G Longitudinal | 2,92055E-15 | 1,71398E-07 | -1,95421E-08 | 2,80656E-15 | 1,44456E-07 | -1,95421E-08 | 1,87043E-15 | 1,17514E-07 | -1,95394E-08 |
| 211 | G Vertical | -2,53374E-07 | -1,3943E-15 | 1,35764E-13 | -2,50468E-07 | -3,40882E-13 | -8,07004E-13 | -2,45092E-07 | 4,20551E-12 | 9,64091E-12 |
| 211 | G transversal | -1,6258E-07 | -2,71406E-16 | 2,73135E-15 | -1,34988E-07 | 5,63328E-15 | 1,28919E-14 | -1,07568E-07 | -1,11713E-14 | -2,56215E-14 |
| 212 | D Longitudinal | 1,32469E-06 | -5,10681E-09 | 6,32019E-10 | 1,12722E-06 | -3,91492E-09 | 6,32748E-10 | 9,27831E-07 | -2,72715E-09 | 6,23787E-10 |
| 212 | D Vertical | 1,29273E-07 | -1,29208E-07 | 9,50448E-09 | 1,07728E-07 | -1,07683E-07 | 9,50447E-09 | 8,63327E-08 | -8,61584E-08 | 9,50456E-09 |
| 212 | D transversal | -1,95659E-07 | 1,51538E-06 | -1,42179E-07 | -1,93311E-07 | 1,31895E-06 | -1,42179E-07 | -1,89038E-07 | 1,12251E-06 | -1,42175E-07 |
| 212 | G Longitudinal | -1,51908E-08 | 1,71386E-07 | -1,95529E-08 | -1,52222E-08 | 1,44435E-07 | -1,95486E-08 | -1,52891E-08 | 1,17479E-07 | -1,95545E-08 |
| 212 | G Vertical | -2,48467E-07 | 2,49961E-09 | -1,35745E-09 | -2,4988E-07 | 7,53468E-10 | -1,1627E-09 | -2,49063E-07 | -1,26846E-09 | -1,5613E-09 |
| 212 | G transversal | -1,55843E-07 | -1,8622E-09 | 1,99713E-10 | -1,28795E-07 | -1,48841E-09 | 1,9551E-10 | -1,01878E-07 | -1,10808E-09 | 2,05601E-10 |
| 213 | D Longitudinal | 1,70355E-06 | -5,10681E-09 | 1,09584E-09 | 1,50833E-06 | -3,91545E-09 | 1,09511E-09 | 1,31504E-06 | -2,71975E-09 | 1,1047E-09 |
| 213 | D Vertical | -1,2911E-07 | 1,29208E-07 | -2,17063E-08 | -1,07552E-07 | 1,07683E-07 | -2,17063E-08 | -8,58447E-08 | 8,61585E-08 | -2,17062E-08 |
| 213 | D transversal | 1,85282E-07 | 1,51538E-06 | -1,42653E-07 | 1,8538E-07 | 1,31895E-06 | -1,42652E-07 | 1,83561E-07 | 1,12251E-06 | -1,42656E-07 |

APOYO 2

| DESPLAZAMIENTOS (metros) | | C1 | | | C2 | | | C3 | | |
|---|---|---|---|---|---|---|---|---|---|---|
| Nudo | Desplazamiento | L | T | V | L | T | V | L | T | V |
| 213 | G Longitudinal | 1,59937E-08 | 1,71386E-07 | -1,95279E-08 | 1,58749E-08 | 1,44432E-07 | -1,95338E-08 | 1,57246E-08 | 1,17416E-07 | -1,97679E-08 |
| 213 | G Vertical | -2,52356E-07 | -2,49881E-09 | 1,28073E-09 | -2,50597E-07 | -5,79125E-10 | 1,55055E-09 | -2,43474E-07 | 4,2035E-09 | 1,24795E-08 |
| 213 | G transversal | -1,87239E-07 | -1,86218E-09 | 3,44574E-10 | -1,60264E-07 | -1,48465E-09 | 3,50393E-10 | -1,3309E-07 | -1,04711E-09 | 5,81119E-10 |
| 214 | D Longitudinal | 1,32469E-06 | 5,10681E-09 | -6,32227E-10 | 1,12722E-06 | 3,91545E-09 | -6,31495E-10 | 9,27831E-07 | 2,72063E-09 | -6,38739E-10 |
| 214 | D Vertical | -1,29273E-07 | -1,29208E-07 | 9,50448E-09 | -1,07728E-07 | -1,07683E-07 | 9,50449E-09 | -8,63327E-08 | -8,61585E-08 | 9,50445E-09 |
| 214 | D transversal | 1,95659E-07 | 1,51538E-06 | -1,42179E-07 | 1,93311E-07 | 1,31895E-06 | -1,42178E-07 | 1,89038E-07 | 1,12251E-06 | -1,4219E-07 |
| 214 | G Longitudinal | 1,51907E-08 | 1,71386E-07 | -1,95529E-08 | 1,52221E-08 | 1,44435E-07 | -1,95486E-08 | 1,52891E-08 | 1,17479E-07 | -1,9555E-08 |
| 214 | G Vertical | -2,48461E-07 | -2,50003E-09 | 1,35807E-09 | -2,49874E-07 | -7,53633E-10 | 1,16285E-09 | -2,4906E-07 | 1,26839E-09 | 1,56116E-09 |
| 214 | G transversal | -1,55843E-07 | 1,86221E-09 | -1,99714E-10 | -1,28795E-07 | 1,4884E-09 | -1,95537E-10 | -1,01878E-07 | 1,10831E-09 | -2,05085E-10 |
| 215 | D Longitudinal | 1,40917E-06 | 2,77302E-17 | 2,47844E-10 | 1,22899E-06 | 7,49257E-15 | 2,47865E-10 | 1,0488E-06 | 3,67744E-13 | 2,4894E-10 |
| 215 | D Vertical | -1,25191E-07 | 1,10393E-16 | -5,81389E-09 | -1,04762E-07 | 2,41747E-15 | -5,81388E-09 | -8,43347E-08 | -1,1107E-12 | -5,81673E-09 |
| 215 | D transversal | 1,84298E-07 | 1,40568E-06 | -1,29894E-07 | 1,83199E-07 | 1,22652E-06 | -1,29893E-07 | 1,80125E-07 | 1,04735E-06 | -1,29901E-07 |
| 215 | G Longitudinal | 6,2029E-09 | 1,61738E-07 | -1,87253E-08 | 6,19414E-09 | 1,3591E-07 | -1,87253E-08 | 6,31574E-09 | 1,10082E-07 | -1,87256E-08 |
| 215 | G Vertical | -2,3266E-07 | 7,0873E-09 | -1,14618E-09 | -2,34048E-07 | 5,50689E-09 | -1,14518E-09 | -2,37897E-07 | 3,92602E-09 | -1,13998E-09 |
| 215 | G transversal | -1,64038E-07 | -1,74166E-16 | 3,4515E-11 | -1,388E-07 | -3,12203E-14 | 3,44318E-11 | -1,13563E-07 | -1,05291E-12 | 3,11379E-11 |
| 216 | D Longitudinal | 1,22226E-06 | -6,01584E-09 | 7,13107E-10 | 1,04181E-06 | -4,66223E-09 | 7,13816E-10 | 8,59405E-07 | -3,31227E-09 | 7,06022E-10 |
| 216 | D Vertical | 1,25445E-07 | -1,25614E-07 | 9,05724E-09 | 1,04891E-07 | -1,05073E-07 | 9,05724E-09 | 8,44544E-08 | -8,45315E-08 | 9,05723E-09 |
| 216 | D transversal | -1,88775E-07 | 1,40627E-06 | -1,29886E-07 | -1,86557E-07 | 1,22681E-06 | -1,29887E-07 | -1,82375E-07 | 1,04735E-06 | -1,29881E-07 |
| 216 | G Longitudinal | -1,57687E-08 | 1,64011E-07 | -1,82886E-08 | -1,55496E-08 | 1,38742E-07 | -1,82849E-08 | -1,53244E-08 | 1,13466E-07 | -1,82973E-08 |
| 216 | G Vertical | -2,37429E-07 | 2,13864E-09 | -1,22108E-09 | -2,38709E-07 | 5,86447E-10 | -1,0464E-09 | -2,37976E-07 | -1,21313E-09 | -1,40396E-09 |
| 216 | G transversal | -1,48445E-07 | -1,05657E-09 | 1,08376E-10 | -1,23135E-07 | -8,56037E-10 | 1,04557E-10 | -9,79084E-08 | -6,49542E-10 | 1,13784E-10 |
| 217 | D Longitudinal | 1,58764E-06 | -6,01584E-09 | 1,24925E-09 | 1,40939E-06 | -4,66274E-09 | 1,24855E-09 | 1,2331E-06 | -3,30614E-09 | 1,25602E-09 |
| 217 | D Vertical | -1,26064E-07 | 1,25614E-07 | -2,07277E-08 | -1,05514E-07 | 1,05073E-07 | -2,07277E-08 | -8,48449E-08 | 8,45315E-08 | -2,07277E-08 |
| 217 | D transversal | 1,78979E-07 | 1,40627E-06 | -1,30327E-07 | 1,79004E-07 | 1,22681E-06 | -1,30326E-07 | 1,77069E-07 | 1,04735E-06 | -1,30332E-07 |
| 217 | G Longitudinal | 1,46655E-08 | 1,64011E-07 | -1,8353E-08 | 1,47787E-08 | 1,38739E-07 | -1,83582E-08 | 1,48337E-08 | 1,13413E-07 | -1,85648E-08 |
| 217 | G Vertical | -2,41181E-07 | -2,13792E-09 | 1,12493E-09 | -2,39575E-07 | -4,3006E-10 | 1,36696E-09 | -2,33145E-07 | 3,84585E-09 | 1,11703E-08 |
| 217 | G transversal | -1,79764E-07 | -1,05655E-09 | 1,84477E-10 | -1,54547E-07 | -8,52625E-10 | 1,89757E-10 | -1,29186E-07 | -5,93909E-10 | 4,00066E-10 |
| 218 | D Longitudinal | 1,22226E-06 | 6,01584E-09 | -7,13307E-10 | 1,04181E-06 | 4,66275E-09 | -7,12583E-10 | 8,59405E-07 | 3,30591E-09 | -7,20597E-10 |
| 218 | D Vertical | -1,25445E-07 | -1,25614E-07 | 9,05725E-09 | -1,04891E-07 | -1,05073E-07 | 9,05725E-09 | -8,44544E-08 | -8,45315E-08 | 9,05724E-09 |
| 218 | D transversal | 1,88775E-07 | 1,40627E-06 | -1,29887E-07 | 1,86557E-07 | 1,22681E-06 | -1,29886E-07 | 1,82375E-07 | 1,04735E-06 | -1,29896E-07 |
| 218 | G Longitudinal | 1,57686E-08 | 1,64011E-07 | -1,82887E-08 | 1,55495E-08 | 1,38742E-07 | -1,82849E-08 | 1,53243E-08 | 1,13466E-07 | -1,82979E-08 |
| 218 | G Vertical | -2,37423E-07 | -2,13902E-09 | 1,22165E-09 | -2,38703E-07 | -5,86599E-10 | 1,04652E-09 | -2,37973E-07 | 1,21311E-09 | 1,40393E-09 |
| 218 | G transversal | -1,48446E-07 | 1,05658E-09 | -1,08375E-10 | -1,23135E-07 | 8,56024E-10 | -1,04598E-10 | -9,79084E-08 | 6,49827E-10 | -1,13131E-10 |
| 219 | D Longitudinal | 1,12483E-06 | -6,03792E-09 | 6,9288E-10 | 9,60294E-07 | -4,71577E-09 | 6,93541E-10 | 7,93783E-07 | -3,39702E-09 | 6,86303E-10 |
| 219 | D Vertical | 1,22122E-07 | -1,21971E-07 | 8,59896E-09 | 1,02531E-07 | -1,02424E-07 | 8,59896E-09 | 8,30297E-08 | -8,28781E-08 | 8,59889E-09 |
| 219 | D transversal | -1,81918E-07 | 1,30204E-06 | -1,18393E-07 | -1,79861E-07 | 1,13847E-06 | -1,18393E-07 | -1,75828E-07 | 9,74895E-07 | -1,18385E-07 |
| 219 | G Longitudinal | -1,46735E-08 | 1,56325E-07 | -1,70908E-08 | -1,46025E-08 | 1,32753E-07 | -1,70874E-08 | -1,44942E-08 | 1,09176E-07 | -1,7097E-08 |
| 219 | G Vertical | -2,26403E-07 | 1,71618E-09 | -1,0818E-09 | -2,27588E-07 | 3,6033E-10 | -9,25116E-10 | -2,26981E-07 | -1,21756E-09 | -1,24621E-09 |
| 219 | G transversal | -1,40942E-07 | 3,42873E-10 | -5,38975E-11 | -1,17337E-07 | 2,35183E-10 | -5,73517E-11 | -9,37724E-08 | 1,32475E-10 | -5,00722E-11 |
| 220 | D Longitudinal | 1,4764E-06 | -6,03792E-09 | 1,22389E-09 | 1,31398E-06 | -4,71624E-09 | 1,22324E-09 | 1,15355E-06 | -3,39086E-09 | 1,23179E-09 |
| 220 | D Vertical | -1,2183E-07 | 1,21971E-07 | -1,97431E-08 | -1,02259E-07 | 1,02424E-07 | -1,97431E-08 | -8,25999E-08 | 8,28781E-08 | -1,97431E-08 |
| 220 | D transversal | 1,72862E-07 | 1,30204E-06 | -1,18791E-07 | 1,72796E-07 | 1,13847E-06 | -1,1879E-07 | 1,70752E-07 | 9,74888E-07 | -1,18799E-07 |
| 220 | G Longitudinal | 1,50221E-08 | 1,56325E-07 | -1,70907E-08 | 1,49718E-08 | 1,3275E-07 | -1,70953E-08 | 1,48338E-08 | 1,09126E-07 | -1,72833E-08 |
| 220 | G Vertical | -2,30142E-07 | -1,71554E-09 | 9,69697E-10 | -2,28681E-07 | -2,20059E-10 | 1,18679E-09 | -2,22906E-07 | 3,57856E-09 | 9,97906E-09 |

APOYO 2

| DESPLAZAMIENTOS (metros) | | C1 | | | C2 | | | C3 | | |
|---|---|---|---|---|---|---|---|---|---|---|
| Nudo | Desplazamiento | L | T | V | L | T | V | L | T | V |
| 220 | G transversal | -1,72083E-07 | 3,42888E-10 | -1,00371E-10 | -1,4859E-07 | 2,38267E-10 | -9,56009E-11 | -1,25002E-07 | 1,84108E-10 | 9,69896E-11 |
| 221 | D Longitudinal | 1,12483E-06 | 6,03792E-09 | -6,93071E-10 | 9,60294E-07 | 4,71628E-09 | -6,92338E-10 | 7,93783E-07 | 3,39086E-09 | -7,00416E-10 |
| 221 | D Vertical | -1,22122E-07 | -1,21971E-07 | 8,59896E-09 | -1,02531E-07 | -1,02424E-07 | 8,59896E-09 | -8,30297E-08 | -8,28781E-08 | 8,59901E-09 |
| 221 | D transversal | 1,81918E-07 | 1,30204E-06 | -1,18393E-07 | 1,79861E-07 | 1,13847E-06 | -1,18392E-07 | 1,75828E-07 | 9,74889E-07 | -1,18399E-07 |
| 221 | G Longitudinal | 1,46734E-08 | 1,56326E-07 | -1,70908E-08 | 1,46024E-08 | 1,32753E-07 | -1,70874E-08 | 1,44942E-08 | 1,09175E-07 | -1,70977E-08 |
| 221 | G Vertical | -2,26397E-07 | -1,71652E-09 | 1,0823E-09 | -2,27583E-07 | -3,60462E-10 | 9,25233E-10 | -2,26979E-07 | 1,21749E-09 | 1,24608E-09 |
| 221 | G transversal | -1,40942E-07 | -3,42866E-10 | 5,39008E-11 | -1,17337E-07 | -2,35202E-10 | 5,72975E-11 | -9,37725E-08 | -1,32137E-10 | 5,08447E-11 |
| 222 | D Longitudinal | 1,11187E-06 | 2,03397E-16 | -9,51419E-14 | 9,49562E-07 | 2,54396E-13 | 6,02403E-13 | 7,85268E-07 | -3,07621E-12 | -7,05203E-12 |
| 222 | D Vertical | 1,6403E-16 | -1,20859E-07 | 8,47414E-09 | 1,45563E-16 | -1,01566E-07 | 8,47417E-09 | -8,89215E-17 | -8,22731E-08 | 8,4741E-09 |
| 222 | D transversal | -9,64197E-16 | 1,29499E-06 | -1,17757E-07 | -9,28184E-16 | 1,13226E-06 | -1,17757E-07 | -4,64916E-16 | 9,69529E-07 | -1,17757E-07 |
| 222 | G Longitudinal | 2,42957E-15 | 1,55474E-07 | -1,6946E-08 | 2,38647E-15 | 1,32102E-07 | -1,69462E-08 | 1,57126E-15 | 1,0873E-07 | -1,6948E-08 |
| 222 | G Vertical | -2,26786E-07 | -1,03833E-15 | 1,19256E-13 | -2,24155E-07 | -3,14894E-13 | -7,44758E-13 | -2,19074E-07 | 3,81011E-12 | 8,73449E-12 |
| 222 | G transversal | -1,46548E-07 | -2,00484E-16 | 3,98205E-15 | -1,22608E-07 | -1,23593E-15 | -3,25413E-15 | -9,87527E-08 | 5,64096E-14 | 1,29307E-13 |
| 223 | D Longitudinal | 1,01013E-06 | -5,06637E-09 | 5,57043E-10 | 8,63914E-07 | -3,99592E-09 | 5,57741E-10 | 7,15742E-07 | -2,92892E-09 | 5,50439E-10 |
| 223 | D Vertical | 1,16915E-07 | -1,17117E-07 | 8,05905E-09 | 9,85524E-08 | -9,8768E-08 | 8,05906E-09 | 8,02443E-08 | -8,0419E-08 | 8,05895E-09 |
| 223 | D transversal | -1,74328E-07 | 1,17896E-06 | -1,05109E-07 | -1,723E-07 | 1,03369E-06 | -1,05109E-07 | -1,68307E-07 | 8,88433E-07 | -1,05101E-07 |
| 223 | G Longitudinal | -1,39682E-08 | 1,47546E-07 | -1,57397E-08 | -1,39968E-08 | 1,25868E-07 | -1,57368E-08 | -1,3958E-08 | 1,04187E-07 | -1,57404E-08 |
| 223 | G Vertical | -2,13445E-07 | 4,65355E-10 | -8,15973E-10 | -2,14354E-07 | -5,00412E-10 | -6,79609E-10 | -2,1369E-07 | -1,65925E-09 | -9,58616E-10 |
| 223 | G transversal | -1,32364E-07 | 1,65696E-09 | -1,98965E-10 | -1,10705E-07 | 1,27181E-09 | -2,01918E-10 | -8,90417E-08 | 8,90859E-10 | -1,9584E-10 |
| 224 | D Longitudinal | 1,01013E-06 | 5,06637E-09 | -5,57222E-10 | 8,63914E-07 | 3,99641E-09 | -5,56584E-10 | 7,15742E-07 | 2,92305E-09 | -5,63888E-10 |
| 224 | D Vertical | -1,16915E-07 | -1,17117E-07 | 8,05906E-09 | -9,85524E-08 | -9,8768E-08 | 8,05905E-09 | -8,02443E-08 | -8,04189E-08 | 8,05919E-09 |
| 224 | D transversal | 1,74328E-07 | 1,17896E-06 | -1,05109E-07 | 1,723E-07 | 1,03369E-06 | -1,05108E-07 | 1,68307E-07 | 8,88427E-07 | -1,05115E-07 |
| 224 | G Longitudinal | 1,39681E-08 | 1,47546E-07 | -1,57397E-08 | 1,39967E-08 | 1,25868E-07 | -1,57367E-08 | 1,3958E-08 | 1,04187E-07 | -1,57412E-08 |
| 224 | G Vertical | -2,13441E-07 | -4,6565E-10 | 8,16413E-10 | -2,14349E-07 | 5,00294E-10 | 6,79703E-10 | -2,13689E-07 | 1,65924E-09 | 9,58601E-10 |
| 224 | G transversal | -1,32364E-07 | -1,65695E-09 | 1,9897E-10 | -1,10705E-07 | -1,27183E-09 | 2,01853E-10 | -8,90417E-08 | -8,90481E-10 | 1,96706E-10 |
| 225 | D Longitudinal | 1,87772E-06 | -1,80931E-17 | -2,66484E-10 | 1,62195E-06 | 1,44985E-14 | -2,66448E-10 | 1,36618E-06 | 1,24996E-12 | -2,62693E-10 |
| 225 | D Vertical | 1,37709E-07 | -6,6932E-16 | -6,86243E-09 | 1,13407E-07 | -6,5091E-14 | -6,8626E-09 | 8,91107E-08 | -3,51612E-12 | -6,87306E-09 |
| 225 | D transversal | -2,10907E-07 | 1,87424E-06 | -1,84569E-07 | -2,09734E-07 | 1,61966E-06 | -1,8457E-07 | -2,06937E-07 | 1,36509E-06 | -1,84561E-07 |
| 225 | G Longitudinal | -7,01459E-09 | 1,91653E-07 | -2,40838E-08 | -7,05777E-09 | 1,58434E-07 | -2,40838E-08 | -7,42659E-09 | 1,25214E-07 | -2,40846E-08 |
| 225 | G Vertical | -2,88437E-07 | -7,35263E-09 | 1,4076E-09 | -2,90024E-07 | -5,4106E-09 | 1,40844E-09 | -2,93756E-07 | -3,48247E-09 | 1,36686E-09 |
| 225 | G transversal | -1,94171E-07 | 3,6209E-16 | 3,57471E-11 | -1,6156E-07 | 1,13213E-13 | 3,60555E-11 | -1,2895E-07 | 3,68595E-13 | 3,83632E-11 |
| 226 | D Longitudinal | 1,95473E-06 | -9,58406E-16 | 1,1226E-13 | 1,72171E-06 | -2,67109E-13 | -6,33592E-13 | 1,49045E-06 | 3,37461E-12 | 7,73606E-12 |
| 226 | D Vertical | 5,68711E-15 | 1,34869E-07 | -2,35183E-08 | 6,57637E-15 | 1,11536E-07 | -2,35183E-08 | 4,22754E-14 | 8,81994E-08 | -2,35254E-08 |
| 226 | D transversal | 1,26375E-15 | 1,75727E-06 | -1,7105E-07 | 1,31577E-15 | 1,52166E-06 | -1,7105E-07 | 6,15514E-15 | 1,28604E-06 | -1,71055E-07 |
| 226 | G Longitudinal | 7,48143E-16 | 1,87103E-07 | -2,23367E-08 | 3,91728E-16 | 1,56299E-07 | -2,23363E-08 | -4,87714E-16 | 1,25493E-07 | -2,23398E-08 |
| 226 | G Vertical | -2,68164E-07 | -6,78049E-16 | 1,50612E-13 | -2,68234E-07 | -3,52268E-13 | -8,36561E-13 | -2,65969E-07 | 4,49551E-12 | 1,03056E-11 |
| 226 | G transversal | -1,92394E-07 | 3,89241E-16 | -1,26838E-15 | -1,6104E-07 | -1,32575E-14 | -3,08735E-14 | -1,29416E-07 | 8,78987E-14 | 2,01516E-13 |
| 227 | D Longitudinal | 1,95635E-06 | 4,86516E-09 | -1,14322E-09 | 1,72273E-06 | 3,60982E-09 | -1,14384E-09 | 1,49086E-06 | 2,35959E-09 | -1,1311E-09 |
| 227 | D Vertical | 1,35688E-07 | 1,35799E-07 | -2,37268E-08 | 1,12073E-07 | 1,12234E-07 | -2,37268E-08 | 8,82386E-08 | 8,86687E-08 | -2,3727E-08 |
| 227 | D transversal | -1,99773E-07 | 1,75409E-06 | -1,70479E-07 | -1,99739E-07 | 1,51924E-06 | -1,70479E-07 | -1,97956E-07 | 1,28439E-06 | -1,7048E-07 |
| 227 | G Longitudinal | -1,611E-08 | 1,87468E-07 | -2,24207E-08 | -1,61257E-08 | 1,56548E-07 | -2,24275E-08 | -1,61758E-08 | 1,25547E-07 | -2,27266E-08 |
| 227 | G Vertical | -2,74471E-07 | 2,83653E-09 | -1,56096E-09 | -2,72524E-07 | 5,4759E-10 | -1,8961E-09 | -2,63838E-07 | -5,31211E-09 | -1,55314E-08 |
| 227 | G transversal | -2,0364E-07 | -9,53045E-10 | 2,5771E-10 | -1,72872E-07 | -6,76607E-10 | 2,50627E-10 | -1,41777E-07 | -4,78197E-10 | -4,43847E-11 |
| 228 | D Longitudinal | 1,63572E-06 | 9,57945E-17 | -2,36425E-10 | 1,41979E-06 | 2,16508E-14 | -2,36367E-10 | 1,20386E-06 | 5,39753E-13 | -2,34653E-10 |

APOYO 2

| DESPLAZAMIENTOS (metros) | | C1 | | | C2 | | | C3 | | |
|---|---|---|---|---|---|---|---|---|---|---|
| Nudo | Desplazamiento | L | T | V | L | T | V | L | T | V |
| 228 | D Vertical | 1,32895E-07 | 3,41548E-16 | -6,38619E-09 | 1,10268E-07 | 7,944E-15 | -6,38617E-09 | 8,7636E-08 | 2,60603E-12 | -6,37921E-09 |
| 228 | D transversal | -1,97742E-07 | 1,63186E-06 | -1,55679E-07 | -1,9659E-07 | 1,41713E-06 | -1,5568E-07 | -1,93575E-07 | 1,2024E-06 | -1,55671E-07 |
| 228 | G Longitudinal | -6,92693E-09 | 1,77057E-07 | -2,13324E-08 | -6,9414E-09 | 1,47633E-07 | -2,13324E-08 | -7,17547E-09 | 1,18208E-07 | -2,13331E-08 |
| 228 | G Vertical | -2,59562E-07 | -6,5821E-09 | 1,15631E-09 | -2,61067E-07 | -4,98669E-09 | 1,15712E-09 | -2,64962E-07 | -3,40269E-09 | 1,12323E-09 |
| 228 | G transversal | -1,79313E-07 | 3,2455E-18 | -7,5047E-12 | -1,50461E-07 | 2,49826E-14 | -7,43941E-12 | -1,2161E-07 | -8,26825E-14 | -7,16338E-12 |
| 229 | D Longitudinal | 1,82435E-06 | 4,39442E-09 | -9,9151E-10 | 1,611E-06 | 3,30991E-09 | -9,92273E-10 | 1,3995E-06 | 2,22796E-09 | -9,87922E-10 |
| 229 | D Vertical | 1,32906E-07 | 1,32452E-07 | -2,2702E-08 | 1,10364E-07 | 1,0992E-07 | -2,2702E-08 | 8,76399E-08 | 8,73885E-08 | -2,27022E-08 |
| 229 | D transversal | -1,92367E-07 | 1,62933E-06 | -1,55762E-07 | -1,92367E-07 | 1,41479E-06 | -1,55763E-07 | -1,90519E-07 | 1,20025E-06 | -1,55751E-07 |
| 229 | G Longitudinal | -1,69188E-08 | 1,79138E-07 | -2,08462E-08 | -1,6664E-08 | 1,50326E-07 | -2,08526E-08 | -1,64064E-08 | 1,21443E-07 | -2,11184E-08 |
| 229 | G Vertical | -2,63488E-07 | 3,00962E-09 | -1,47168E-09 | -2,6156E-07 | 8,30746E-10 | -1,77082E-09 | -2,53604E-07 | -4,53603E-09 | -1,39433E-08 |
| 229 | G transversal | -1,95247E-07 | 4,57031E-10 | -4,20068E-11 | -1,66428E-07 | 4,07769E-10 | -4,83936E-11 | -1,37351E-07 | 2,90131E-10 | -3,08857E-10 |
| 230 | D Longitudinal | 1,70357E-06 | -5,24402E-16 | 1,04577E-13 | 1,50861E-06 | -2,65364E-13 | -6,28854E-13 | 1,31559E-06 | 3,2714E-12 | 7,49948E-12 |
| 230 | D Vertical | -2,26602E-15 | 1,29988E-07 | -2,18663E-08 | -2,49801E-15 | 1,08293E-07 | -2,18663E-08 | -1,72403E-14 | 8,65994E-08 | -2,18637E-08 |
| 230 | D transversal | -1,07456E-15 | 1,51979E-06 | -1,43265E-07 | -1,30105E-15 | 1,32248E-06 | -1,43265E-07 | -6,86418E-15 | 1,12517E-06 | -1,43262E-07 |
| 230 | G Longitudinal | -2,82567E-15 | 1,71398E-07 | -1,95246E-08 | -3,78713E-15 | 1,44456E-07 | -1,95244E-08 | -1,86877E-14 | 1,17515E-07 | -1,95173E-08 |
| 230 | G Vertical | -2,40843E-07 | -5,30176E-18 | 1,35211E-13 | -2,40847E-07 | -3,39137E-13 | -8,04731E-13 | -2,38374E-07 | 4,21273E-12 | 9,65738E-12 |
| 230 | G transversal | -1,76104E-07 | 2,98858E-16 | -2,74227E-15 | -1,48508E-07 | -5,59935E-15 | -1,28484E-14 | -1,20738E-07 | 1,13147E-14 | 2,59487E-14 |
| 231 | D Longitudinal | 1,70355E-06 | 5,10681E-09 | -1,09563E-09 | 1,50833E-06 | 3,91492E-09 | -1,09637E-09 | 1,31504E-06 | 2,72627E-09 | -1,08975E-09 |
| 231 | D Vertical | 1,2911E-07 | 1,29208E-07 | -2,17063E-08 | 1,07552E-07 | 1,07683E-07 | -2,17063E-08 | 8,58447E-08 | 8,61585E-08 | -2,17063E-08 |
| 231 | D transversal | -1,85282E-07 | 1,51538E-06 | -1,42652E-07 | -1,8538E-07 | 1,31895E-06 | -1,42653E-07 | -1,83561E-07 | 1,12252E-06 | -1,42641E-07 |
| 231 | G Longitudinal | -1,59935E-08 | 1,71386E-07 | -1,95279E-08 | -1,58747E-08 | 1,44432E-07 | -1,95338E-08 | -1,57237E-08 | 1,17416E-07 | -1,97672E-08 |
| 231 | G Vertical | -2,52349E-07 | 2,49927E-09 | -1,28046E-09 | -2,50588E-07 | 5,80129E-10 | -1,54882E-09 | -2,43432E-07 | -4,19904E-09 | -1,24693E-08 |
| 231 | G transversal | -1,87239E-07 | 1,86219E-09 | -3,4458E-10 | -1,60264E-07 | 1,48468E-09 | -3,50332E-10 | -1,33089E-07 | 1,04698E-09 | -5,81412E-10 |
| 232 | D Longitudinal | 1,40917E-06 | -3,57539E-17 | -2,47844E-10 | 1,22899E-06 | -7,46728E-15 | -2,47865E-10 | 1,0488E-06 | -3,67841E-13 | -2,4894E-10 |
| 232 | D Vertical | 1,25191E-07 | -1,13171E-16 | -5,81389E-09 | 1,04762E-07 | 2,37195E-15 | -5,81388E-09 | 8,43347E-08 | -1,11224E-12 | -5,81673E-09 |
| 232 | D transversal | -1,84298E-07 | 1,40568E-06 | -1,29894E-07 | -1,83199E-07 | 1,22652E-06 | -1,29895E-07 | -1,80125E-07 | 1,04736E-06 | -1,29887E-07 |
| 232 | G Longitudinal | -6,2029E-09 | 1,61738E-07 | -1,87253E-08 | -6,19414E-09 | 1,3591E-07 | -1,87253E-08 | -6,31574E-09 | 1,10082E-07 | -1,87255E-08 |
| 232 | G Vertical | -2,3266E-07 | -7,0873E-09 | 1,14593E-09 | -2,34048E-07 | -5,50623E-09 | 1,14674E-09 | -2,37897E-07 | -3,93407E-09 | 1,12152E-09 |
| 232 | G transversal | -1,64038E-07 | 8,40764E-17 | -3,4515E-11 | -1,388E-07 | 3,11063E-14 | -3,44319E-11 | -1,13563E-07 | 1,05244E-12 | -3,1139E-11 |
| 233 | D Longitudinal | 1,58764E-06 | 6,01584E-09 | -1,24905E-09 | 1,40939E-06 | 4,66222E-09 | -1,24978E-09 | 1,2331E-06 | 3,3125E-09 | -1,24144E-09 |
| 233 | D Vertical | 1,26064E-07 | 1,25614E-07 | -2,07277E-08 | 1,05514E-07 | 1,05073E-07 | -2,07277E-08 | 8,48449E-08 | 8,45316E-08 | -2,07277E-08 |
| 233 | D transversal | -1,78979E-07 | 1,40627E-06 | -1,30326E-07 | -1,79004E-07 | 1,22681E-06 | -1,30327E-07 | -1,77069E-07 | 1,04736E-06 | -1,30318E-07 |
| 233 | G Longitudinal | -1,46653E-08 | 1,64011E-07 | -1,8353E-08 | -1,47785E-08 | 1,38739E-07 | -1,83582E-08 | -1,48329E-08 | 1,13414E-07 | -1,8564E-08 |
| 233 | G Vertical | -2,41175E-07 | 2,13834E-09 | -1,12468E-09 | -2,39568E-07 | 4,30958E-10 | -1,36541E-09 | -2,33107E-07 | -3,84181E-09 | -1,1161E-08 |
| 233 | G transversal | -1,79764E-07 | 1,05656E-09 | -1,84486E-10 | -1,54547E-07 | 8,52661E-10 | -1,89684E-10 | -1,29185E-07 | 5,93713E-10 | -4,00516E-10 |
| 234 | D Longitudinal | 1,4764E-06 | 6,03792E-09 | -1,22369E-09 | 1,31398E-06 | 4,71574E-09 | -1,22444E-09 | 1,15355E-06 | 3,39702E-09 | -1,21767E-09 |
| 234 | D Vertical | 1,2183E-07 | 1,21971E-07 | -1,97431E-08 | 1,02259E-07 | 1,02424E-07 | -1,97431E-08 | 8,25999E-08 | 8,28782E-08 | -1,9743E-08 |
| 234 | D transversal | -1,72862E-07 | 1,30204E-06 | -1,18791E-07 | -1,72796E-07 | 1,13847E-06 | -1,18791E-07 | -1,70752E-07 | 9,74894E-07 | -1,18785E-07 |
| 234 | G Longitudinal | -1,5022E-08 | 1,56325E-07 | -1,70907E-08 | -1,49716E-08 | 1,3275E-07 | -1,70954E-08 | -1,48331E-08 | 1,09127E-07 | -1,72824E-08 |
| 234 | G Vertical | -2,30137E-07 | 1,71592E-09 | -9,69478E-10 | -2,28674E-07 | 2,20868E-10 | -1,18539E-09 | -2,22872E-07 | -3,57498E-09 | -9,97087E-09 |
| 234 | G transversal | -1,72083E-07 | -3,42879E-10 | 1,00361E-10 | -1,4859E-07 | -2,38227E-10 | 9,56833E-11 | -1,25001E-07 | -1,84365E-10 | -9,75791E-11 |
| 235 | D Longitudinal | 1,46275E-06 | -2,12416E-16 | 9,51453E-14 | 1,30257E-06 | -2,54407E-13 | -6,02418E-13 | 1,14437E-06 | 3,07616E-12 | 7,05192E-12 |
| 235 | D Vertical | 1,16212E-16 | 1,20859E-07 | -1,95006E-08 | 8,08765E-19 | 1,01566E-07 | -1,95005E-08 | 1,30985E-15 | 8,22733E-08 | -1,94998E-08 |
| 235 | D transversal | 9,15561E-16 | 1,29499E-06 | -1,18202E-07 | 1,20835E-15 | 1,13226E-06 | -1,18202E-07 | 6,28223E-15 | 9,69528E-07 | -1,18205E-07 |

APOYO 2

| DESPLAZAMIENTOS (metros) | | C1 | | | C2 | | | C3 | | |
|---|---|---|---|---|---|---|---|---|---|---|
| Nudo | Desplazamiento | L | T | V | L | T | V | L | T | V |
| 235 | G Longitudinal | -2,3488E-15 | 1,55474E-07 | -1,6943E-08 | -3,17967E-15 | 1,32102E-07 | -1,69428E-08 | -1,54058E-14 | 1,08733E-07 | -1,69331E-08 |
| 235 | G Vertical | -2,14586E-07 | 5,09105E-16 | 1,18635E-13 | -2,14592E-07 | -3,12931E-13 | -7,42182E-13 | -2,1214E-07 | 3,81813E-12 | 8,75279E-12 |
| 235 | G transversal | -1,60803E-07 | 2,23694E-16 | -3,99133E-15 | -1,36905E-07 | 1,26619E-15 | 3,29491E-15 | -1,12922E-07 | -5,62909E-14 | -1,29036E-13 |
| 236 | D Longitudinal | 1,34493E-06 | -5,06637E-09 | 9,94736E-10 | 1,20073E-06 | -3,99644E-09 | 9,94025E-10 | 1,0585E-06 | -2,92352E-09 | 9,99658E-10 |
| 236 | D Vertical | -1,17433E-07 | 1,17117E-07 | -1,8547E-08 | -9,91087E-08 | 9,8768E-08 | -1,85469E-08 | -8,07294E-08 | 8,0419E-08 | -1,8547E-08 |
| 236 | D transversal | 1,64616E-07 | 1,17896E-06 | -1,05526E-07 | 1,64621E-07 | 1,03369E-06 | -1,05525E-07 | 1,6266E-07 | 8,88425E-07 | -1,05538E-07 |
| 236 | G Longitudinal | 1,52054E-08 | 1,47546E-07 | -1,5695E-08 | 1,50399E-08 | 1,25866E-07 | -1,56991E-08 | 1,47563E-08 | 1,04141E-07 | -1,58662E-08 |
| 236 | G Vertical | -2,1581E-07 | -4,64795E-10 | 6,58808E-10 | -2,14647E-07 | 6,22494E-10 | 8,47749E-10 | -2,09716E-07 | 3,71437E-09 | 8,50019E-09 |
| 236 | G transversal | -1,62128E-07 | 1,65697E-09 | -3,57898E-10 | -1,40595E-07 | 1,27444E-09 | -3,53821E-10 | -1,19019E-07 | 9,34895E-10 | -1,89756E-10 |
| 237 | D Longitudinal | 1,34493E-06 | 5,06637E-09 | -9,94557E-10 | 1,20073E-06 | 3,99595E-09 | -9,95182E-10 | 1,0585E-06 | 2,92939E-09 | -9,8621E-10 |
| 237 | D Vertical | 1,17433E-07 | 1,17117E-07 | -1,85469E-08 | 9,91087E-08 | 9,8768E-08 | -1,8547E-08 | 8,07294E-08 | 8,04191E-08 | -1,85468E-08 |
| 237 | D transversal | -1,64616E-07 | 1,17896E-06 | -1,05526E-07 | -1,64621E-07 | 1,03369E-06 | -1,05526E-07 | -1,6266E-07 | 8,88431E-07 | -1,05524E-07 |
| 237 | G Longitudinal | -1,52053E-08 | 1,47546E-07 | -1,5695E-08 | -1,50398E-08 | 1,25866E-07 | -1,56991E-08 | -1,47556E-08 | 1,04141E-07 | -1,58652E-08 |
| 237 | G Vertical | -2,15806E-07 | 4,65122E-10 | -6,58616E-10 | -2,14641E-07 | -6,21794E-10 | -8,46543E-10 | -2,09686E-07 | -3,71121E-09 | -8,49297E-09 |
| 237 | G transversal | -1,62128E-07 | -1,65696E-09 | 3,57887E-10 | -1,40595E-07 | -1,2744E-09 | 3,5391E-10 | -1,19018E-07 | -9,35206E-10 | 1,89044E-10 |
| 238 | D Longitudinal | 1,20513E-06 | -1,08586E-17 | -2,18971E-10 | 1,05574E-06 | -1,27726E-14 | -2,19005E-10 | 9,06345E-07 | -4,69046E-14 | -2,19331E-10 |
| 238 | D Vertical | 1,18605E-07 | 1,64175E-17 | -5,3323E-09 | 9,99233E-08 | -2,65374E-15 | -5,33231E-09 | 8,12412E-08 | 2,80849E-13 | -5,33163E-09 |
| 238 | D transversal | -1,71191E-07 | 1,20194E-06 | -1,07648E-07 | -1,70166E-07 | 1,05346E-06 | -1,07649E-07 | -1,67162E-07 | 9,04984E-07 | -1,07641E-07 |
| 238 | G Longitudinal | -5,69135E-09 | 1,47179E-07 | -1,64044E-08 | -5,6646E-09 | 1,24552E-07 | -1,64044E-08 | -5,69639E-09 | 1,01926E-07 | -1,64045E-08 |
| 238 | G Vertical | -2,07998E-07 | -6,29267E-09 | 9,62028E-10 | -2,09248E-07 | -4,9653E-09 | 9,62783E-10 | -2,1289E-07 | -3,64526E-09 | 9,42633E-10 |
| 238 | G transversal | -1,49176E-07 | 5,60067E-17 | 6,16942E-11 | -1,27192E-07 | 3,42948E-14 | 6,17861E-11 | -1,05208E-07 | 3,30225E-13 | 6,31855E-11 |
| 239 | D Longitudinal | 1,20513E-06 | 1,05679E-16 | 2,1897E-10 | 1,05574E-06 | 1,28856E-14 | 2,19005E-10 | 9,06345E-07 | 4,74101E-14 | 2,19332E-10 |
| 239 | D Vertical | -1,18605E-07 | -1,57463E-17 | -5,3323E-09 | -9,99233E-08 | -2,64235E-15 | -5,33231E-09 | -8,12412E-08 | 2,80599E-13 | -5,33163E-09 |
| 239 | D transversal | 1,71191E-07 | 1,20194E-06 | -1,07648E-07 | 1,70166E-07 | 1,05346E-06 | -1,07647E-07 | 1,67162E-07 | 9,04979E-07 | -1,07655E-07 |
| 239 | G Longitudinal | 5,69135E-09 | 1,47179E-07 | -1,64044E-08 | 5,6646E-09 | 1,24552E-07 | -1,64044E-08 | 5,69639E-09 | 1,01926E-07 | -1,64048E-08 |
| 239 | G Vertical | -2,07998E-07 | 6,29267E-09 | -9,6225E-10 | -2,09248E-07 | 4,96591E-09 | -9,61352E-10 | -2,1289E-07 | 3,638E-09 | -9,59274E-10 |
| 239 | G transversal | -1,49176E-07 | -2,61308E-16 | -6,16942E-11 | -1,27192E-07 | -3,45653E-14 | -6,17865E-11 | -1,05208E-07 | -3,31273E-13 | -6,31879E-11 |
| 240 | D Longitudinal | 1,26877E-06 | 4,10897E-09 | -7,85808E-10 | 1,1349E-06 | 3,26558E-09 | -7,86489E-10 | 1,00298E-06 | 2,42506E-09 | -7,81046E-10 |
| 240 | D Vertical | 1,14617E-07 | 1,14694E-07 | -1,79387E-08 | 9,68918E-08 | 9,69524E-08 | -1,79387E-08 | 7,91281E-08 | 7,92112E-08 | -1,79385E-08 |
| 240 | D transversal | -1,59441E-07 | 1,10764E-06 | -9,79854E-08 | -1,59485E-07 | 9,72783E-07 | -9,79861E-08 | -1,57586E-07 | 8,37926E-07 | -9,7979E-08 |
| 240 | G Longitudinal | -1,5134E-08 | 1,43072E-07 | -1,50148E-08 | -1,50044E-08 | 1,2234E-07 | -1,50187E-08 | -1,47423E-08 | 1,01567E-07 | -1,51767E-08 |
| 240 | G Vertical | -2,11512E-07 | 6,52211E-10 | -6,4805E-10 | -2,10302E-07 | -4,27626E-10 | -8,26892E-10 | -2,05491E-07 | -3,41328E-09 | -8,10403E-09 |
| 240 | G transversal | -1,57032E-07 | -1,6475E-09 | 3,53995E-10 | -1,36451E-07 | -1,26959E-09 | 3,50251E-10 | -1,15848E-07 | -9,32243E-10 | 1,95748E-10 |
| 241 | D Longitudinal | 9,44119E-07 | -4,10897E-09 | 4,36572E-10 | 8,083E-07 | -3,2656E-09 | 4,37196E-10 | 6,70542E-07 | -2,42553E-09 | 4,30121E-10 |
| 241 | D Vertical | 1,14686E-07 | -1,14694E-07 | 7,78618E-09 | 9,69136E-08 | -9,69524E-08 | 7,78619E-09 | 7,91801E-08 | -7,92112E-08 | 7,78604E-09 |
| 241 | D transversal | -1,6943E-07 | 1,10764E-06 | -9,75613E-08 | -1,6743E-07 | 9,72783E-07 | -9,75619E-08 | -1,63486E-07 | 8,37926E-07 | -9,75548E-08 |
| 241 | G Longitudinal | -1,42257E-08 | 1,43072E-07 | -1,5044E-08 | -1,42116E-08 | 1,22343E-07 | -1,50412E-08 | -1,41132E-08 | 1,01611E-07 | -1,50447E-08 |
| 241 | G Vertical | -2,0812E-07 | 6,52432E-10 | -8,21179E-10 | -2,09092E-07 | -3,12111E-10 | -6,91404E-10 | -2,08575E-07 | -1,46035E-09 | -9,56807E-10 |
| 241 | G transversal | -1,28023E-07 | 1,6475E-09 | -1,9599E-10 | -1,07309E-07 | 1,26714E-09 | -1,98777E-10 | -8,65732E-08 | 8,90849E-10 | -1,92806E-10 |
| 242 | D Longitudinal | 1,26877E-06 | -4,10897E-09 | 7,8598E-10 | 1,1349E-06 | -3,26606E-09 | 7,85364E-10 | 1,00298E-06 | -2,41938E-09 | 7,94064E-10 |
| 242 | D Vertical | -1,14617E-07 | 1,14694E-07 | -1,79387E-08 | -9,68918E-08 | 9,69524E-08 | -1,79387E-08 | -7,91281E-08 | 7,92111E-08 | -1,79388E-08 |
| 242 | D transversal | 1,59441E-07 | 1,10764E-06 | -9,79856E-08 | 1,59485E-07 | 9,72783E-07 | -9,79849E-08 | 1,57586E-07 | 8,3792E-07 | -9,7992E-08 |
| 242 | G Longitudinal | 1,51341E-08 | 1,43072E-07 | -1,50148E-08 | 1,50045E-08 | 1,2234E-07 | -1,50186E-08 | 1,47429E-08 | 1,01567E-07 | -1,51778E-08 |
| 242 | G Vertical | -2,11516E-07 | -6,519E-10 | 6,48231E-10 | -2,10307E-07 | 4,28294E-10 | 8,28044E-10 | -2,05519E-07 | 3,41627E-09 | 8,11086E-09 |

APOYO 2

| DESPLAZAMIENTOS (metros) | | C1 | | | C2 | | | C3 | | |
|---|---|---|---|---|---|---|---|---|---|---|
| Nudo | Desplazamiento | L | T | V | L | T | V | L | T | V |
| 242 | G transversal | -1,57033E-07 | 1,64751E-09 | -3,54006E-10 | -1,36451E-07 | 1,26963E-09 | -3,5016E-10 | -1,15849E-07 | 9,31911E-10 | -1,96509E-10 |
| 243 | D Longitudinal | 9,44119E-07 | 4,10897E-09 | -4,36744E-10 | 8,083E-07 | 3,26608E-09 | -4,36071E-10 | 6,70542E-07 | 2,41986E-09 | -4,43138E-10 |
| 243 | D Vertical | -1,14686E-07 | -1,14694E-07 | 7,78618E-09 | -9,69136E-08 | -9,69524E-08 | 7,78617E-09 | -7,91801E-08 | -7,92111E-08 | 7,78634E-09 |
| 243 | D transversal | 1,6943E-07 | 1,10764E-06 | -9,75614E-08 | 1,6743E-07 | 9,72783E-07 | -9,75608E-08 | 1,63486E-07 | 8,3792E-07 | -9,75679E-08 |
| 243 | G Longitudinal | 1,42256E-08 | 1,43072E-07 | -1,5044E-08 | 1,42115E-08 | 1,22343E-07 | -1,50411E-08 | 1,41131E-08 | 1,0161E-07 | -1,50456E-08 |
| 243 | G Vertical | -2,08115E-07 | -6,52713E-10 | 8,21598E-10 | -2,09088E-07 | 3,12E-10 | 6,91497E-10 | -2,08573E-07 | 1,46032E-09 | 9,56751E-10 |
| 243 | G transversal | -1,28023E-07 | -1,64749E-09 | 1,95996E-10 | -1,07309E-07 | -1,26717E-09 | 1,98707E-10 | -8,65733E-08 | -8,90455E-10 | 1,9371E-10 |
| 244 | D Longitudinal | 9,2555E-07 | -9,99033E-18 | -8,49945E-14 | 7,92691E-07 | 2,36311E-13 | 5,59275E-13 | 6,57894E-07 | -2,81783E-12 | -6,45971E-12 |
| 244 | D Vertical | 7,40433E-16 | -1,12824E-07 | 7,57935E-09 | 7,11981E-16 | -9,55014E-08 | 7,5793E-09 | 3,52597E-16 | -7,81792E-08 | 7,57931E-09 |
| 244 | D transversal | -2,16184E-16 | 1,09167E-06 | -9,59739E-08 | -2,04465E-16 | 9,59002E-07 | -9,59739E-08 | -2,32494E-17 | 8,26335E-07 | -9,59738E-08 |
| 244 | G Longitudinal | -1,26464E-15 | 1,41548E-07 | -1,48099E-08 | -1,27393E-15 | 1,21146E-07 | -1,48099E-08 | -1,49215E-15 | 1,00745E-07 | -1,48087E-08 |
| 244 | G Vertical | -2,02552E-07 | -3,69564E-16 | 1,02745E-13 | -2,00155E-07 | -2,83716E-13 | -6,7103E-13 | -1,95437E-07 | 3,38374E-12 | 7,75704E-12 |
| 244 | G transversal | -1,3341E-07 | -1,45762E-16 | 4,69024E-15 | -1,1247E-07 | -5,66665E-15 | -1,36647E-14 | -9,15536E-08 | 9,89156E-14 | 2,26751E-13 |
| 245 | D Longitudinal | 1,00515E-06 | -1,61676E-17 | 1,83683E-10 | 8,84656E-07 | -1,71741E-15 | 1,83678E-10 | 7,64167E-07 | -1,30497E-14 | 1,8362E-10 |
| 245 | D Vertical | -1,11061E-07 | 1,21418E-17 | -4,83211E-09 | -9,41799E-08 | 3,76224E-15 | -4,8321E-09 | -7,72992E-08 | 4,31536E-14 | -4,83192E-09 |
| 245 | D transversal | 1,56857E-07 | 1,00065E-06 | -8,65634E-08 | 1,5593E-07 | 8,81252E-07 | -8,65628E-08 | 1,53103E-07 | 7,61852E-07 | -8,65695E-08 |
| 245 | G Longitudinal | 6,51715E-09 | 1,33101E-07 | -1,4208E-08 | 6,47535E-09 | 1,13504E-07 | -1,4208E-08 | 6,43006E-09 | 9,39065E-08 | -1,42086E-08 |
| 245 | G Vertical | -1,8354E-07 | 5,28158E-09 | -7,384E-10 | -1,84629E-07 | 4,26353E-09 | -7,37587E-10 | -1,87929E-07 | 3,24539E-09 | -7,32415E-10 |
| 245 | G transversal | -1,34841E-07 | -2,44462E-16 | 2,15132E-11 | -1,15748E-07 | -3,4337E-14 | 2,14218E-11 | -9,66561E-08 | -6,20385E-13 | 1,92282E-11 |
| 246 | D Longitudinal | 8,46249E-07 | -3,46656E-09 | 3,42779E-10 | 7,25597E-07 | -2,79635E-09 | 3,43361E-10 | 6,03057E-07 | -2,12925E-09 | 3,36676E-10 |
| 246 | D Vertical | 1,10442E-07 | -1,1067E-07 | 7,3858E-09 | 9,35945E-08 | -9,38397E-08 | 7,38582E-09 | 7,67625E-08 | -7,70098E-08 | 7,3856E-09 |
| 246 | D transversal | -1,61856E-07 | 1,00182E-06 | -8,65748E-08 | -1,5988E-07 | 8,82097E-07 | -8,65754E-08 | -1,56013E-07 | 7,62379E-07 | -8,65693E-08 |
| 246 | G Longitudinal | -1,38308E-08 | 1,34968E-07 | -1,38631E-08 | -1,39062E-08 | 1,15896E-07 | -1,38605E-08 | -1,3869E-08 | 9,68212E-08 | -1,38652E-08 |
| 246 | G Vertical | -2,00394E-07 | 6,46986E-10 | -7,87532E-10 | -2,01376E-07 | -2,58192E-10 | -6,67008E-10 | -2,00966E-07 | -1,33388E-09 | -9,13242E-10 |
| 246 | G transversal | -1,20498E-07 | -7,20508E-10 | 5,9054E-11 | -1,01319E-07 | -6,08972E-10 | 5,64479E-11 | -8,20885E-08 | -4,93552E-10 | 6,22451E-11 |
| 247 | D Longitudinal | 1,15564E-06 | -3,46656E-09 | 6,28721E-10 | 1,03683E-06 | -2,79677E-09 | 6,28152E-10 | 9,19915E-07 | -2,12331E-09 | 6,3681E-10 |
| 247 | D Vertical | -1,10999E-07 | 1,1067E-07 | -1,70177E-08 | -9,42105E-08 | 9,38397E-08 | -1,70177E-08 | -7,74062E-08 | 7,70096E-08 | -1,70179E-08 |
| 247 | D transversal | 1,51155E-07 | 1,00182E-06 | -8,70207E-08 | 1,51284E-07 | 8,82098E-07 | -8,702E-08 | 1,49523E-07 | 7,62375E-07 | -8,70234E-08 |
| 247 | G Longitudinal | 1,57914E-08 | 1,34968E-07 | -1,37921E-08 | 1,55619E-08 | 1,15894E-07 | -1,37956E-08 | 1,51782E-08 | 9,67816E-08 | -1,39421E-08 |
| 247 | G Vertical | -2,04542E-07 | -6,46492E-10 | 5,9075E-10 | -2,03334E-07 | 3,66093E-10 | 7,57744E-10 | -1,98794E-07 | 3,15053E-09 | 7,52159E-09 |
| 247 | G transversal | -1,49238E-07 | -7,20497E-10 | 1,04094E-10 | -1,30201E-07 | -6,06647E-10 | 1,07688E-10 | -1,11174E-07 | -4,55509E-10 | 2,50548E-10 |
| 248 | D Longitudinal | 8,46249E-07 | 3,46656E-09 | -3,4294E-10 | 7,25597E-07 | 2,7968E-09 | -3,42291E-10 | 6,03057E-07 | 2,12388E-09 | -3,48981E-10 |
| 248 | D Vertical | -1,10442E-07 | -1,1067E-07 | 7,38581E-09 | -9,35945E-08 | -9,38397E-08 | 7,38579E-09 | -7,67625E-08 | -7,70096E-08 | 7,38598E-09 |
| 248 | D transversal | 1,61856E-07 | 1,00182E-06 | -8,65749E-08 | 1,5988E-07 | 8,82098E-07 | -8,65744E-08 | 1,56013E-07 | 7,62374E-07 | -8,65816E-08 |
| 248 | G Longitudinal | 1,38307E-08 | 1,34968E-07 | -1,38631E-08 | 1,39061E-08 | 1,15896E-07 | -1,38604E-08 | 1,3869E-08 | 9,68207E-08 | -1,38662E-08 |
| 248 | G Vertical | -2,0039E-07 | -6,47247E-10 | 7,87922E-10 | -2,01372E-07 | 2,58087E-10 | 6,6709E-10 | -2,00965E-07 | 1,33387E-09 | 9,13238E-10 |
| 248 | G transversal | -1,20498E-07 | 7,20513E-10 | -5,9047E-11 | -1,01319E-07 | 6,08942E-10 | -5,65255E-11 | -8,20885E-08 | 4,93977E-10 | -6,12706E-11 |
| 249 | D Longitudinal | 7,55845E-07 | -1,61702E-16 | -7,45792E-14 | 6,49061E-07 | 2,14584E-13 | 5,0762E-13 | 5,40449E-07 | -2,52823E-12 | -5,79583E-12 |
| 249 | D Vertical | -6,5079E-16 | -1,08282E-07 | 7,14712E-09 | -6,25645E-16 | -9,20354E-08 | 7,14715E-09 | -2,6944E-16 | -7,57882E-08 | 7,14713E-09 |
| 249 | D transversal | 5,56496E-16 | 9,09717E-07 | -7,73278E-08 | 5,47726E-16 | 8,02726E-07 | -7,73278E-08 | 3,99807E-16 | 6,95736E-07 | -7,7328E-08 |
| 249 | G Longitudinal | 1,25351E-15 | 1,27586E-07 | -1,28116E-08 | 1,25129E-15 | 1,09946E-07 | -1,28117E-08 | 1,23977E-15 | 9,23066E-08 | -1,28122E-08 |
| 249 | G Vertical | -1,80135E-07 | -2,09429E-16 | 8,72216E-14 | -1,7788E-07 | -2,48803E-13 | -5,88114E-13 | -1,73511E-07 | 2,93249E-12 | 6,7226E-12 |
| 249 | G transversal | -1,19768E-07 | -1,10292E-16 | 5,2555E-15 | -1,01488E-07 | -9,28624E-15 | -2,21529E-14 | -8,31842E-08 | 1,33251E-13 | 3,05465E-13 |
| 250 | D Longitudinal | 7,52923E-07 | -4,81971E-09 | 4,61174E-10 | 6,4648E-07 | -3,91222E-09 | 4,61783E-10 | 5,38221E-07 | -3,00772E-09 | 4,55425E-10 |

APOYO 2

| DESPLAZAMIENTOS (metros) | | C1 | | | C2 | | | C3 | | |
|---|---|---|---|---|---|---|---|---|---|---|
| Nudo | Desplazamiento | L | T | V | L | T | V | L | T | V |
| 250 | D Vertical | 1,06636E-07 | -1,06551E-07 | 6,97067E-09 | 9,06937E-08 | -9,06581E-08 | 6,97069E-09 | 7,47459E-08 | -7,47657E-08 | 6,97043E-09 |
| 250 | D transversal | -1,5451E-07 | 9,00871E-07 | -7,63364E-08 | -1,52511E-07 | 7,95242E-07 | -7,6337E-08 | -1,48694E-07 | 6,89615E-07 | -7,63311E-08 |
| 250 | G Longitudinal | -1,3854E-08 | 1,27154E-07 | -1,27619E-08 | -1,38888E-08 | 1,0959E-07 | -1,27595E-08 | -1,37908E-08 | 9,20238E-08 | -1,27647E-08 |
| 250 | G Vertical | -1,93209E-07 | 1,97873E-10 | -6,85562E-10 | -1,94115E-07 | -5,65157E-10 | -5,73545E-10 | -1,93736E-07 | -1,48663E-09 | -8,02299E-10 |
| 250 | G transversal | -1,12988E-07 | -2,6154E-09 | 2,56169E-10 | -9,52582E-08 | -2,12055E-09 | 2,53715E-10 | -7,74532E-08 | -1,622E-09 | 2,59253E-10 |
| 251 | D Longitudinal | 1,04682E-06 | -4,81971E-09 | 8,54361E-10 | 9,42108E-07 | -3,91267E-09 | 8,53742E-10 | 8,39209E-07 | -3,00315E-09 | 8,58303E-10 |
| 251 | D Vertical | -1,06378E-07 | 1,06551E-07 | -1,60735E-08 | -9,05063E-08 | 9,06581E-08 | -1,60734E-08 | -7,46404E-08 | 7,47655E-08 | -1,60737E-08 |
| 251 | D transversal | 1,42549E-07 | 9,00871E-07 | -7,68262E-08 | 1,42818E-07 | 7,95242E-07 | -7,68256E-08 | 1,41268E-07 | 6,8961E-07 | -7,68315E-08 |
| 251 | G Longitudinal | 1,54527E-08 | 1,27154E-07 | -1,27059E-08 | 1,5257E-08 | 1,09588E-07 | -1,27092E-08 | 1,48907E-08 | 9,19875E-08 | -1,28446E-08 |
| 251 | G Vertical | -1,97179E-07 | -1,97414E-10 | 4,81963E-10 | -1,9607E-07 | 6,65441E-10 | 6,37168E-10 | -1,91872E-07 | 3,17504E-09 | 6,92341E-09 |
| 251 | G transversal | -1,41971E-07 | -2,61539E-09 | 4,62713E-10 | -1,24393E-07 | -2,11836E-09 | 4,66094E-10 | -1,06852E-07 | -1,58626E-09 | 6,00421E-10 |
| 252 | D Longitudinal | 7,52923E-07 | 4,81971E-09 | -4,61323E-10 | 6,4648E-07 | 3,91265E-09 | -4,60773E-10 | 5,38221E-07 | 3,00269E-09 | -4,66955E-10 |
| 252 | D Vertical | -1,06636E-07 | -1,06551E-07 | 6,97068E-09 | -9,06937E-08 | -9,06581E-08 | 6,97066E-09 | -7,47459E-08 | -7,47655E-08 | 6,97089E-09 |
| 252 | D transversal | 1,5451E-07 | 9,00871E-07 | -7,63366E-08 | 1,52511E-07 | 7,95242E-07 | -7,6336E-08 | 1,48694E-07 | 6,8961E-07 | -7,63426E-08 |
| 252 | G Longitudinal | 1,38539E-08 | 1,27154E-07 | -1,27619E-08 | 1,38887E-08 | 1,0959E-07 | -1,27595E-08 | 1,37908E-08 | 9,20234E-08 | -1,27657E-08 |
| 252 | G Vertical | -1,93206E-07 | -1,98115E-10 | 6,85924E-10 | -1,94112E-07 | 5,65061E-10 | 5,73625E-10 | -1,93735E-07 | 1,4866E-09 | 8,02246E-10 |
| 252 | G transversal | -1,12988E-07 | 2,61541E-09 | -2,56161E-10 | -9,52583E-08 | 2,12051E-09 | -2,53799E-10 | -7,74533E-08 | 1,62245E-09 | -2,58218E-10 |
| 253 | D Longitudinal | 6,73201E-07 | -6,41418E-09 | 6,02358E-10 | 5,78737E-07 | -5,22452E-09 | 6,02926E-10 | 4,82533E-07 | -4,03763E-09 | 5,9702E-10 |
| 253 | D Vertical | 1,02284E-07 | -1,02431E-07 | 6,60305E-09 | 8,71951E-08 | -8,7378E-08 | 6,60307E-09 | 7,20829E-08 | -7,23249E-08 | 6,6028E-09 |
| 253 | D transversal | -1,4732E-07 | 8,13994E-07 | -6,77149E-08 | -1,45392E-07 | 7,20255E-07 | -6,77154E-08 | -1,41724E-07 | 6,26519E-07 | -6,77093E-08 |
| 253 | G Longitudinal | -1,4374E-08 | 1,20679E-07 | -1,18691E-08 | -1,42615E-08 | 1,04305E-07 | -1,18669E-08 | -1,40038E-08 | 8,79269E-08 | -1,18716E-08 |
| 253 | G Vertical | -1,86506E-07 | 1,72775E-10 | -6,4986E-10 | -1,87404E-07 | -5,37525E-10 | -5,44808E-10 | -1,8709E-07 | -1,39635E-09 | -7,59103E-10 |
| 253 | G transversal | -1,06171E-07 | -2,05728E-09 | 1,79539E-10 | -8,97218E-08 | -1,70474E-09 | 1,7723E-10 | -7,31795E-08 | -1,34873E-09 | 1,82436E-10 |
| 254 | D Longitudinal | 9,52564E-07 | -6,41418E-09 | 1,12235E-09 | 8,59717E-07 | -5,22494E-09 | 1,12178E-09 | 7,68609E-07 | -4,03331E-09 | 1,12624E-09 |
| 254 | D Vertical | -1,02737E-07 | 1,02431E-07 | -1,52242E-08 | -8,77264E-08 | 8,7378E-08 | -1,52241E-08 | -7,27393E-08 | 7,23247E-08 | -1,52244E-08 |
| 254 | D transversal | 1,35139E-07 | 8,13994E-07 | -6,82061E-08 | 1,35449E-07 | 7,20255E-07 | -6,82056E-08 | 1,34017E-07 | 6,26514E-07 | -6,82111E-08 |
| 254 | G Longitudinal | 1,44831E-08 | 1,20679E-07 | -1,18752E-08 | 1,44317E-08 | 1,04303E-07 | -1,18783E-08 | 1,41994E-08 | 8,78929E-08 | -1,20047E-08 |
| 254 | G Vertical | -1,90991E-07 | -1,72344E-10 | 4,37405E-10 | -1,89896E-07 | 6,31574E-10 | 5,82959E-10 | -1,85898E-07 | 2,97981E-09 | 6,47821E-09 |
| 254 | G transversal | -1,3517E-07 | -2,05727E-09 | 3,32903E-10 | -1,18877E-07 | -1,70269E-09 | 3,36082E-10 | -1,0264E-07 | -1,31517E-09 | 4,62232E-10 |
| 255 | D Longitudinal | 6,73201E-07 | 6,41418E-09 | -6,02496E-10 | 5,78737E-07 | 5,22492E-09 | -6,01976E-10 | 4,82533E-07 | 4,03292E-09 | -6,07816E-10 |
| 255 | D Vertical | -1,02284E-07 | -1,02431E-07 | 6,60306E-09 | -8,71951E-08 | -8,7378E-08 | 6,60303E-09 | -7,20829E-08 | -7,23247E-08 | 6,60332E-09 |
| 255 | D transversal | 1,4732E-07 | 8,13994E-07 | -6,7715E-08 | 1,45392E-07 | 7,20255E-07 | -6,77145E-08 | 1,41724E-07 | 6,26514E-07 | -6,77201E-08 |
| 255 | G Longitudinal | 1,4374E-08 | 1,20679E-07 | -1,18691E-08 | 1,42614E-08 | 1,04305E-07 | -1,18668E-08 | 1,40038E-08 | 8,79265E-08 | -1,18727E-08 |
| 255 | G Vertical | -1,86502E-07 | -1,73002E-10 | 6,502E-10 | -1,874E-07 | 5,37434E-10 | 5,44879E-10 | -1,87088E-07 | 1,39634E-09 | 7,59096E-10 |
| 255 | G transversal | -1,06171E-07 | 2,05729E-09 | -1,79531E-10 | -8,97219E-08 | 1,70471E-09 | -1,77318E-10 | -7,31795E-08 | 1,3492E-09 | -1,81375E-10 |
| 256 | D Longitudinal | 8,09071E-07 | -8,13824E-17 | 2,42351E-10 | 7,15788E-07 | -1,19217E-14 | 2,42319E-10 | 6,22505E-07 | -2,07185E-13 | 2,4158E-10 |
| 256 | D Vertical | -1,01766E-07 | -4,32385E-17 | -4,27782E-09 | -8,68616E-08 | -7,43832E-15 | -4,27784E-09 | -7,19571E-08 | -1,60831E-13 | -4,27839E-09 |
| 256 | D transversal | 1,40862E-07 | 8,04341E-07 | -6,68921E-08 | 1,40056E-07 | 7,12076E-07 | -6,68916E-08 | 1,37508E-07 | 6,19809E-07 | -6,68975E-08 |
| 256 | G Longitudinal | 6,09266E-09 | 1,18127E-07 | -1,21432E-08 | 6,04124E-09 | 1,01378E-07 | -1,21432E-08 | 5,94149E-09 | 8,46281E-08 | -1,21438E-08 |
| 256 | G Vertical | -1,58727E-07 | 6,84117E-09 | -8,91164E-10 | -1,59641E-07 | 5,61234E-09 | -8,90473E-10 | -1,62513E-07 | 4,38359E-09 | -8,85566E-10 |
| 256 | G transversal | -1,19965E-07 | -8,63625E-17 | 6,64617E-11 | -1,03728E-07 | -1,40358E-14 | 6,64242E-11 | -8,74909E-08 | -2,35549E-13 | 6,5581E-11 |
| 257 | D Longitudinal | 8,45722E-07 | -7,24186E-09 | 1,22001E-09 | 7,65941E-07 | -5,95611E-09 | 1,21948E-09 | 6,87792E-07 | -4,66821E-09 | 1,22344E-09 |
| 257 | D Vertical | -9,71738E-08 | 9,73581E-08 | -1,41887E-08 | -8,3171E-08 | 8,3335E-08 | -1,41886E-08 | -6,92097E-08 | 6,93119E-08 | -1,4189E-08 |
| 257 | D transversal | 1,26736E-07 | 7,15824E-07 | -5,86424E-08 | 1,27015E-07 | 6,35255E-07 | -5,86419E-08 | 1,25659E-07 | 5,54682E-07 | -5,8648E-08 |

APOYO 2

| DESPLAZAMIENTOS (metros) | | C1 | | | C2 | | | C3 | | |
|---|---|---|---|---|---|---|---|---|---|---|
| Nudo | Desplazamiento | L | T | V | L | T | V | L | T | V |
| 257 | G Longitudinal | 1,40591E-08 | 1,12652E-07 | -1,08439E-08 | 1,40436E-08 | 9,77098E-08 | -1,08466E-08 | 1,38391E-08 | 8,27371E-08 | -1,09623E-08 |
| 257 | G Vertical | -1,83845E-07 | -1,08344E-10 | 3,83907E-10 | -1,82761E-07 | 6,23927E-10 | 5,19052E-10 | -1,78988E-07 | 2,79E-09 | 5,99246E-09 |
| 257 | G transversal | -1,27046E-07 | -1,91474E-10 | -2,32437E-11 | -1,122E-07 | -2,18429E-10 | -2,03091E-11 | -9,74317E-08 | -2,15051E-10 | 9,59135E-11 |
| 258 | D Longitudinal | 5,83973E-07 | 7,24186E-09 | -6,44741E-10 | 5,0271E-07 | 5,95609E-09 | -6,44265E-10 | 4,19814E-07 | 4,66782E-09 | -6,49602E-10 |
| 258 | D Vertical | -9,75275E-08 | -9,73581E-08 | 6,14472E-09 | -8,34376E-08 | -8,3335E-08 | 6,1447E-09 | -6,93061E-08 | -6,93119E-08 | 6,14502E-09 |
| 258 | D transversal | 1,38333E-07 | 7,15824E-07 | -5,81841E-08 | 1,3657E-07 | 6,35255E-07 | -5,81836E-08 | 1,33171E-07 | 5,54683E-07 | -5,81885E-08 |
| 258 | G Longitudinal | 1,43731E-08 | 1,12652E-07 | -1,08209E-08 | 1,42235E-08 | 9,77116E-08 | -1,08188E-08 | 1,39181E-08 | 8,27681E-08 | -1,08232E-08 |
| 258 | G Vertical | -1,78633E-07 | -1,08955E-10 | 6,05393E-10 | -1,7954E-07 | 5,36519E-10 | 5,07605E-10 | -1,79331E-07 | 1,31976E-09 | 7,06224E-10 |
| 258 | G transversal | -9,83418E-08 | 1,91487E-10 | 1,74296E-11 | -8,33376E-08 | 2,20293E-10 | 1,94627E-11 | -6,8223E-08 | 2,46446E-10 | 1,58406E-11 |
| 259 | D Longitudinal | 1,24822E-06 | 6,87133E-18 | 8,49955E-14 | 1,1173E-06 | -2,36315E-13 | -5,59281E-13 | 9,88319E-07 | 2,81781E-12 | 6,45967E-12 |
| 259 | D Vertical | 7,10042E-16 | 1,12824E-07 | -1,75378E-08 | 9,83279E-16 | 9,55014E-08 | -1,75379E-08 | 4,78935E-15 | 7,81785E-08 | -1,75403E-08 |
| 259 | D transversal | 2,0659E-16 | 1,09167E-06 | -9,63929E-08 | 2,97901E-16 | 9,59002E-07 | -9,63929E-08 | 1,46605E-15 | 8,26335E-07 | -9,63939E-08 |
| 259 | G Longitudinal | 1,23045E-15 | 1,41548E-07 | -1,47729E-08 | 1,61608E-15 | 1,21146E-07 | -1,47729E-08 | 7,39407E-15 | 1,00743E-07 | -1,47775E-08 |
| 259 | G Vertical | -1,90262E-07 | 3,88945E-16 | 1,02441E-13 | -1,90331E-07 | -2,82692E-13 | -6,69609E-13 | -1,88074E-07 | 3,38757E-12 | 7,76578E-12 |
| 259 | G transversal | -1,44115E-07 | 1,73664E-16 | -4,7014E-15 | -1,23244E-07 | 5,70373E-15 | 1,37155E-14 | -1,02349E-07 | -9,8774E-14 | -2,26428E-13 |
| 260 | D Longitudinal | 1,00515E-06 | 9,37511E-19 | -1,83683E-10 | 8,84656E-07 | 1,69596E-15 | -1,83678E-10 | 7,64167E-07 | 1,29762E-14 | -1,83621E-10 |
| 260 | D Vertical | 1,11061E-07 | 1,14657E-17 | -4,83211E-09 | 9,41799E-08 | 3,75675E-15 | -4,8321E-09 | 7,72992E-08 | 4,31582E-14 | -4,83192E-09 |
| 260 | D transversal | -1,56857E-07 | 1,00065E-06 | -8,65633E-08 | -1,5593E-07 | 8,81252E-07 | -8,65639E-08 | -1,53103E-07 | 7,61857E-07 | -8,65572E-08 |
| 260 | G Longitudinal | -6,51715E-09 | 1,33101E-07 | -1,4208E-08 | -6,47535E-09 | 1,13504E-07 | -1,42081E-08 | -6,43006E-09 | 9,39067E-08 | -1,42081E-08 |
| 260 | G Vertical | -1,8354E-07 | -5,28158E-09 | 7,38211E-10 | -1,84629E-07 | -4,26299E-09 | 7,38852E-10 | -1,87929E-07 | -3,25172E-09 | 7,179E-10 |
| 260 | G transversal | -1,34841E-07 | 5,90221E-17 | -2,15131E-11 | -1,15748E-07 | 3,40926E-14 | -2,14221E-11 | -9,66561E-08 | 6,19438E-13 | -1,92304E-11 |
| 261 | D Longitudinal | 1,15564E-06 | 3,46656E-09 | -6,2856E-10 | 1,03683E-06 | 2,79632E-09 | -6,29222E-10 | 9,19915E-07 | 2,12868E-09 | -6,24505E-10 |
| 261 | D Vertical | 1,10999E-07 | 1,1067E-07 | -1,70177E-08 | 9,42105E-08 | 9,38397E-08 | -1,70177E-08 | 7,74062E-08 | 7,70098E-08 | -1,70175E-08 |
| 261 | D transversal | -1,51155E-07 | 1,00182E-06 | -8,70205E-08 | -1,51284E-07 | 8,82097E-07 | -8,70211E-08 | -1,49523E-07 | 7,6238E-07 | -8,70111E-08 |
| 261 | G Longitudinal | -1,57914E-08 | 1,34968E-07 | -1,3792E-08 | -1,55618E-08 | 1,15894E-07 | -1,37957E-08 | -1,51777E-08 | 9,67821E-08 | -1,3941E-08 |
| 261 | G Vertical | -2,04538E-07 | 6,46781E-10 | -5,90581E-10 | -2,03329E-07 | -3,65474E-10 | -7,56678E-10 | -1,98768E-07 | -3,14774E-09 | -7,5152E-09 |
| 261 | G transversal | -1,49238E-07 | 7,20504E-10 | -1,04106E-10 | -1,30201E-07 | 6,06692E-10 | -1,0759E-10 | -1,11173E-07 | 4,55143E-10 | -2,51387E-10 |
| 262 | D Longitudinal | 1,05092E-06 | 1,63872E-16 | 7,45781E-14 | 9,45869E-07 | -2,14581E-13 | -5,07615E-13 | 8,42651E-07 | 2,52824E-12 | 5,79585E-12 |
| 262 | D Vertical | -6,19649E-16 | 1,08282E-07 | -1,64112E-08 | -8,31515E-16 | 9,20354E-08 | -1,64112E-08 | -4,27075E-15 | 7,57888E-08 | -1,64092E-08 |
| 262 | D transversal | -5,39928E-16 | 9,09717E-07 | -7,78087E-08 | -7,25097E-16 | 8,02726E-07 | -7,78086E-08 | -3,50152E-15 | 6,95736E-07 | -7,78067E-08 |
| 262 | G Longitudinal | -1,21754E-15 | 1,27586E-07 | -1,27654E-08 | -1,61708E-15 | 1,09946E-07 | -1,27654E-08 | -7,55446E-15 | 9,2308E-08 | -1,27613E-08 |
| 262 | G Vertical | -1,66835E-07 | 5,82298E-16 | 8,69044E-14 | -1,67074E-07 | -2,47781E-13 | -5,86749E-13 | -1,65195E-07 | 2,93657E-12 | 6,73189E-12 |
| 262 | G transversal | -1,31914E-07 | 1,18469E-16 | -5,25875E-15 | -1,13728E-07 | 9,29668E-15 | 2,21667E-14 | -9,55672E-08 | -1,33209E-13 | -3,05369E-13 |
| 263 | D Longitudinal | 1,04682E-06 | 4,81971E-09 | -8,54212E-10 | 9,42108E-07 | 3,91225E-09 | -8,54751E-10 | 8,39209E-07 | 3,00817E-09 | -8,46775E-10 |
| 263 | D Vertical | 1,06378E-07 | 1,06551E-07 | -1,60734E-08 | 9,05063E-08 | 9,06581E-08 | -1,60735E-08 | 7,46404E-08 | 7,47657E-08 | -1,60733E-08 |
| 263 | D transversal | -1,42549E-07 | 9,00871E-07 | -7,6826E-08 | -1,42818E-07 | 7,95242E-07 | -7,68266E-08 | -1,41268E-07 | 6,89615E-07 | -7,68199E-08 |
| 263 | G Longitudinal | -1,54526E-08 | 1,27154E-07 | -1,27059E-08 | -1,52569E-08 | 1,09588E-07 | -1,27093E-08 | -1,48902E-08 | 9,1988E-08 | -1,28434E-08 |
| 263 | G Vertical | -1,97176E-07 | 1,97682E-10 | -4,81806E-10 | -1,96065E-07 | -6,64865E-10 | -6,36174E-10 | -1,91848E-07 | -3,17246E-09 | -6,91752E-09 |
| 263 | G transversal | -1,41971E-07 | 2,6154E-09 | -4,62725E-10 | -1,24393E-07 | 2,1184E-09 | -4,6599E-10 | -1,06851E-07 | 1,58586E-09 | -6,01327E-10 |
| 264 | D Longitudinal | 9,52564E-07 | 6,41418E-09 | -1,12222E-09 | 8,59717E-07 | 5,22454E-09 | -1,12273E-09 | 7,68609E-07 | 4,03802E-09 | -1,11545E-09 |
| 264 | D Vertical | 1,02737E-07 | 1,02431E-07 | -1,52241E-08 | 8,77264E-08 | 8,7378E-08 | -1,52242E-08 | 7,27393E-08 | 7,23249E-08 | -1,52239E-08 |
| 264 | D transversal | -1,35139E-07 | 8,13994E-07 | -6,8206E-08 | -1,35449E-07 | 7,20255E-07 | -6,82065E-08 | -1,34017E-07 | 6,26519E-07 | -6,82003E-08 |
| 264 | G Longitudinal | -1,4483E-08 | 1,20679E-07 | -1,18752E-08 | -1,44316E-08 | 1,04303E-07 | -1,18783E-08 | -1,4199E-08 | 8,78934E-08 | -1,20036E-08 |
| 264 | G Vertical | -1,90988E-07 | 1,72596E-10 | -4,37258E-10 | -1,89892E-07 | -6,31034E-10 | -5,82029E-10 | -1,85875E-07 | -2,97738E-09 | -6,47264E-09 |

APOYO 2

| DESPLAZAMIENTOS (metros) | | C1 | | | C2 | | | C3 | | |
|---|---|---|---|---|---|---|---|---|---|---|
| Nudo | Desplazamiento | L | T | V | L | T | V | L | T | V |
| 264 | G transversal | -1,3517E-07 | 2,05728E-09 | -3,32916E-10 | -1,18877E-07 | 1,70273E-09 | -3,35975E-10 | -1,02639E-07 | 1,31476E-09 | -4,63173E-10 |
| 265 | D Longitudinal | 8,09071E-07 | 2,39817E-17 | -2,42351E-10 | 7,15788E-07 | 1,1846E-14 | -2,42319E-10 | 6,22505E-07 | 2,06894E-13 | -2,41581E-10 |
| 265 | D Vertical | 1,01766E-07 | -2,01758E-17 | -4,27782E-09 | 8,68616E-08 | -7,39691E-15 | -4,27784E-09 | 7,19571E-08 | -1,60731E-13 | -4,27839E-09 |
| 265 | D transversal | -1,40862E-07 | 8,04341E-07 | -6,6892E-08 | -1,40056E-07 | 7,12076E-07 | -6,68925E-08 | -1,37508E-07 | 6,19814E-07 | -6,68867E-08 |
| 265 | G Longitudinal | -6,09266E-09 | 1,18127E-07 | -1,21432E-08 | -6,04124E-09 | 1,01378E-07 | -1,21433E-08 | -5,94149E-09 | 8,46284E-08 | -1,21431E-08 |
| 265 | G Vertical | -1,58727E-07 | -6,84117E-09 | 8,91009E-10 | -1,59641E-07 | -5,61188E-09 | 8,9155E-10 | -1,62513E-07 | -4,38891E-09 | 8,73365E-10 |
| 265 | G transversal | -1,19965E-07 | 3,86608E-17 | -6,64617E-11 | -1,03728E-07 | 1,3973E-14 | -6,64243E-11 | -8,74909E-08 | 2,35306E-13 | -6,55816E-11 |
| 266 | D Longitudinal | 5,83973E-07 | -7,24186E-09 | 6,44616E-10 | 5,0271E-07 | -5,95572E-09 | 6,45141E-10 | 4,19814E-07 | -4,67214E-09 | 6,39704E-10 |
| 266 | D Vertical | 9,75275E-08 | -9,73581E-08 | 6,14471E-09 | 8,34376E-08 | -8,3335E-08 | 6,14474E-09 | 6,93061E-08 | -6,93121E-08 | 6,14445E-09 |
| 266 | D transversal | -1,38333E-07 | 7,15824E-07 | -5,8184E-08 | -1,3657E-07 | 6,35254E-07 | -5,81845E-08 | -1,33171E-07 | 5,54687E-07 | -5,81786E-08 |
| 266 | G Longitudinal | -1,43732E-08 | 1,12652E-07 | -1,08209E-08 | -1,42236E-08 | 9,77116E-08 | -1,08189E-08 | -1,39182E-08 | 8,27686E-08 | -1,08222E-08 |
| 266 | G Vertical | -1,78636E-07 | 1,08744E-10 | -6,05078E-10 | -1,79543E-07 | -5,36603E-10 | -5,07534E-10 | -1,79333E-07 | -1,31979E-09 | -7,06275E-10 |
| 266 | G transversal | -9,83417E-08 | -1,91483E-10 | -1,7421E-11 | -8,33375E-08 | -2,20329E-10 | -1,95538E-11 | -6,8223E-08 | -2,45976E-10 | -1,47629E-11 |
| 267 | D Longitudinal | 8,45722E-07 | 7,24186E-09 | -1,21989E-09 | 7,65941E-07 | 5,95574E-09 | -1,22035E-09 | 6,87792E-07 | 4,67252E-09 | -1,21354E-09 |
| 267 | D Vertical | 9,71738E-08 | 9,73581E-08 | -1,41887E-08 | 8,3171E-08 | 8,3335E-08 | -1,41887E-08 | 6,92097E-08 | 6,93121E-08 | -1,41884E-08 |
| 267 | D transversal | -1,26736E-07 | 7,15824E-07 | -5,86422E-08 | -1,27015E-07 | 6,35254E-07 | -5,86428E-08 | -1,25659E-07 | 5,54687E-07 | -5,86381E-08 |
| 267 | G Longitudinal | -1,40591E-08 | 1,12652E-07 | -1,08438E-08 | -1,40435E-08 | 9,77097E-08 | -1,08467E-08 | -1,38386E-08 | 8,27376E-08 | -1,09611E-08 |
| 267 | G Vertical | -1,83842E-07 | 1,08578E-10 | -3,83771E-10 | -1,82757E-07 | -6,23425E-10 | -5,18186E-10 | -1,78967E-07 | -2,78776E-09 | -5,98733E-09 |
| 267 | G transversal | -1,27046E-07 | 1,91479E-10 | 2,32314E-11 | -1,122E-07 | 2,18477E-10 | 2,0417E-11 | -9,74313E-08 | 2,14629E-10 | -9,68821E-11 |
| 268 | D Longitudinal | 8,48712E-07 | 2,63998E-16 | 6,27471E-14 | 7,68784E-07 | -1,86674E-13 | -4,41403E-13 | 6,90503E-07 | 2,17436E-12 | 4,9846E-12 |
| 268 | D Vertical | 3,42706E-16 | 9,73882E-08 | -1,42006E-08 | 4,58847E-16 | 8,33642E-08 | -1,42007E-08 | 2,3768E-15 | 6,93399E-08 | -1,42017E-08 |
| 268 | D transversal | -1,10553E-16 | 7,24817E-07 | -5,96251E-08 | -1,52508E-16 | 6,42907E-07 | -5,96251E-08 | -8,29071E-16 | 5,60996E-07 | -5,96247E-08 |
| 268 | G Longitudinal | -5,26002E-16 | 1,1296E-07 | -1,08764E-08 | -7,50736E-16 | 9,79719E-08 | -1,08763E-08 | -3,99037E-15 | 8,29847E-08 | -1,08742E-08 |
| 268 | G Vertical | -1,42699E-07 | 7,08954E-16 | 7,05569E-14 | -1,4301E-07 | -2,07483E-13 | -4,91226E-13 | -1,4148E-07 | 2,43468E-12 | 5,58135E-12 |
| 268 | G transversal | -1,17453E-07 | 8,45285E-17 | -5,56432E-15 | -1,02041E-07 | 1,20762E-14 | 2,86748E-14 | -8,66943E-08 | -1,58084E-13 | -3,62397E-13 |
| 269 | D Longitudinal | 5,85786E-07 | -2,71688E-16 | -6,27441E-14 | 5,04365E-07 | 1,86664E-13 | 4,4139E-13 | 4,21297E-07 | -2,1744E-12 | -4,98469E-12 |
| 269 | D Vertical | 3,60132E-16 | -9,73882E-08 | 6,13418E-09 | 3,45998E-16 | -8,33642E-08 | 6,13417E-09 | 1,37251E-16 | -6,93402E-08 | 6,13419E-09 |
| 269 | D transversal | 1,15328E-16 | 7,24817E-07 | -5,91452E-08 | 1,08972E-16 | 6,42907E-07 | -5,91452E-08 | -2,47585E-17 | 5,60996E-07 | -5,91451E-08 |
| 269 | G Longitudinal | 5,49744E-16 | 1,1296E-07 | -1,08559E-08 | 5,0968E-16 | 9,79719E-08 | -1,08559E-08 | -1,76469E-16 | 8,29842E-08 | -1,08556E-08 |
| 269 | G Vertical | -1,55786E-07 | -1,08126E-16 | 7,08846E-14 | -1,53806E-07 | -2,08564E-13 | -4,927E-13 | -1,49991E-07 | 2,43052E-12 | 5,57185E-12 |
| 269 | G transversal | -1,04949E-07 | -6,31544E-17 | 5,55577E-15 | -8,94266E-08 | -1,2048E-14 | -2,86364E-14 | -7,38386E-08 | 1,58193E-13 | 3,62646E-13 |
| 270 | D Longitudinal | 7,53389E-07 | 6,63234E-09 | -1,07452E-09 | 6,84583E-07 | 5,50561E-09 | -1,075E-09 | 6,17303E-07 | 4,38106E-09 | -1,07059E-09 |
| 270 | D Vertical | 9,26422E-08 | 9,23424E-08 | -1,32541E-08 | 7,95899E-08 | 7,92454E-08 | -1,32541E-08 | 6,65935E-08 | 6,61486E-08 | -1,32538E-08 |
| 270 | D transversal | -1,1894E-07 | 6,31821E-07 | -5,06429E-08 | -1,19208E-07 | 5,62268E-07 | -5,06433E-08 | -1,17947E-07 | 4,92716E-07 | -5,06386E-08 |
| 270 | G Longitudinal | -1,40731E-08 | 1,05192E-07 | -9,89452E-09 | -1,40008E-08 | 9,1544E-08 | -9,89722E-09 | -1,37325E-08 | 7,78684E-08 | -1,00036E-08 |
| 270 | G Vertical | -1,77811E-07 | 5,61604E-10 | -4,04864E-10 | -1,76681E-07 | -1,97718E-10 | -5,30747E-10 | -1,73011E-07 | -2,29838E-09 | -5,65248E-09 |
| 270 | G transversal | -1,19863E-07 | -1,2115E-09 | 2,38614E-10 | -1,06227E-07 | -9,6109E-10 | 2,36004E-10 | -9,26813E-08 | -7,39337E-10 | 1,27067E-10 |
| 271 | D Longitudinal | 5,07871E-07 | -6,63234E-09 | 5,58867E-10 | 4,37708E-07 | -5,50562E-09 | 5,59317E-10 | 3,66018E-07 | -4,3812E-09 | 5,54384E-10 |
| 271 | D Vertical | 9,22575E-08 | -9,23424E-08 | 5,73651E-09 | 7,91122E-08 | -7,92454E-08 | 5,73654E-09 | 6,5911E-08 | -6,61486E-08 | 5,73621E-09 |
| 271 | D transversal | -1,30087E-07 | 6,31821E-07 | -5,02095E-08 | -1,28459E-07 | 5,62268E-07 | -5,021E-08 | -1,25301E-07 | 4,92716E-07 | -5,02051E-08 |
| 271 | G Longitudinal | -1,38941E-08 | 1,05192E-07 | -9,8934E-09 | -1,38009E-08 | 9,15457E-08 | -9,89152E-09 | -1,35432E-08 | 7,78974E-08 | -9,89385E-09 |
| 271 | G Vertical | -1,71407E-07 | 5,61759E-10 | -6,28203E-10 | -1,72366E-07 | -1,16408E-10 | -5,36851E-10 | -1,72271E-07 | -9,23585E-10 | -7,22696E-10 |
| 271 | G transversal | -9,16013E-08 | 1,21149E-09 | -1,25871E-10 | -7,78056E-08 | 9,5937E-10 | -1,27856E-10 | -6,38879E-08 | 7,10242E-10 | -1,23357E-10 |
| 272 | D Longitudinal | 7,53389E-07 | -6,63234E-09 | 1,07464E-09 | 6,84583E-07 | -5,50595E-09 | 1,07419E-09 | 6,17303E-07 | -4,3771E-09 | 1,07965E-09 |

APOYO 2

| DESPLAZAMIENTOS (metros) | | C1 | | | C2 | | | C3 | | |
|---|---|---|---|---|---|---|---|---|---|---|
| Nudo | Desplazamiento | L | T | V | L | T | V | L | T | V |
| 272 | D Vertical | -9,26422E-08 | 9,23424E-08 | -1,32541E-08 | -7,95899E-08 | 7,92454E-08 | -1,3254E-08 | -6,65935E-08 | 6,61483E-08 | -1,32544E-08 |
| 272 | D transversal | 1,1894E-07 | 6,31821E-07 | -5,0643E-08 | 1,19208E-07 | 5,62268E-07 | -5,06425E-08 | 1,17947E-07 | 4,92712E-07 | -5,06477E-08 |
| 272 | G Longitudinal | 1,40731E-08 | 1,05192E-07 | -9,89454E-09 | 1,40009E-08 | 9,1544E-08 | -9,89715E-09 | 1,37329E-08 | 7,78679E-08 | -1,00048E-08 |
| 272 | G Vertical | -1,77814E-07 | -5,61385E-10 | 4,04992E-10 | -1,76685E-07 | 1,98188E-10 | 5,31555E-10 | -1,73031E-07 | 2,3005E-09 | 5,65732E-09 |
| 272 | G transversal | -1,19863E-07 | 1,2115E-09 | -2,38626E-10 | -1,06227E-07 | 9,61138E-10 | -2,35896E-10 | -9,26817E-08 | 7,38909E-10 | -1,28049E-10 |
| 273 | D Longitudinal | 5,07871E-07 | 6,63234E-09 | -5,5898E-10 | 4,37708E-07 | 5,50596E-09 | -5,58511E-10 | 3,66018E-07 | 4,37725E-09 | -5,6345E-10 |
| 273 | D Vertical | -9,22575E-08 | -9,23424E-08 | 5,73652E-09 | -7,91122E-08 | -7,92454E-08 | 5,73649E-09 | -6,5911E-08 | -6,61483E-08 | 5,73682E-09 |
| 273 | D transversal | 1,30087E-07 | 6,31821E-07 | -5,02096E-08 | 1,28459E-07 | 5,62268E-07 | -5,02092E-08 | 1,25301E-07 | 4,92712E-07 | -5,02142E-08 |
| 273 | G Longitudinal | 1,3894E-08 | 1,05192E-07 | -9,89342E-09 | 1,38009E-08 | 9,15457E-08 | -9,89143E-09 | 1,35431E-08 | 7,78969E-08 | -9,89493E-09 |
| 273 | G Vertical | -1,71404E-07 | -5,61957E-10 | 6,28499E-10 | -1,72363E-07 | 1,16328E-10 | 5,36914E-10 | -1,7227E-07 | 9,23575E-10 | 7,22685E-10 |
| 273 | G transversal | -9,16014E-08 | -1,21149E-09 | 1,2588E-10 | -7,78057E-08 | -9,59407E-10 | 1,27763E-10 | -6,38879E-08 | -7,0977E-10 | 1,24441E-10 |
| 274 | D Longitudinal | 6,34944E-07 | 8,68279E-18 | 2,49488E-10 | 5,64786E-07 | 1,04352E-15 | 2,49491E-10 | 4,94628E-07 | 1,33435E-14 | 2,49543E-10 |
| 274 | D Vertical | -9,21728E-08 | 7,9154E-17 | -3,75127E-09 | -7,9117E-08 | 1,1776E-14 | -3,75124E-09 | -6,6061E-08 | 2,24177E-13 | -3,75046E-09 |
| 274 | D transversal | 1,24914E-07 | 6,30497E-07 | -5,02039E-08 | 1,24234E-07 | 5,61251E-07 | -5,02034E-08 | 1,22018E-07 | 4,92002E-07 | -5,02083E-08 |
| 274 | G Longitudinal | 5,61123E-09 | 1,03272E-07 | -1,02381E-08 | 5,55444E-09 | 8,91507E-08 | -1,02381E-08 | 5,41778E-09 | 7,50289E-08 | -1,02387E-08 |
| 274 | G Vertical | -1,35356E-07 | 7,04767E-09 | -8,69145E-10 | -1,36102E-07 | 5,84914E-09 | -8,68583E-10 | -1,38515E-07 | 4,65044E-09 | -8,6543E-10 |
| 274 | G transversal | -1,05511E-07 | 1,32038E-17 | -4,31174E-11 | -9,18341E-08 | 3,70659E-15 | -4,31075E-11 | -7,81574E-08 | 7,01194E-14 | -4,28634E-11 |
| 275 | D Longitudinal | 4,37372E-07 | -5,49138E-09 | 4,44053E-10 | 3,77344E-07 | -4,58892E-09 | 4,44441E-10 | 3,15904E-07 | -3,68855E-09 | 4,39995E-10 |
| 275 | D Vertical | 8,73904E-08 | -8,72377E-08 | 5,31606E-09 | 7,51688E-08 | -7,50825E-08 | 5,31609E-09 | 6,28794E-08 | -6,29274E-08 | 5,31573E-09 |
| 275 | D transversal | -1,22187E-07 | 5,53558E-07 | -4,2934E-08 | -1,20639E-07 | 4,9404E-07 | -4,29344E-08 | -1,17675E-07 | 4,34525E-07 | -4,29305E-08 |
| 275 | G Longitudinal | -1,32373E-08 | 9,77624E-08 | -9,00633E-09 | -1,32291E-08 | 8,53664E-08 | -9,00456E-09 | -1,30476E-08 | 7,29681E-08 | -9,00778E-09 |
| 275 | G Vertical | -1,64358E-07 | 9,21842E-10 | -6,44273E-10 | -1,6539E-07 | 2,23696E-10 | -5,58461E-10 | -1,65437E-07 | -5,95551E-10 | -7,32732E-10 |
| 275 | G transversal | -8,39601E-08 | 1,00319E-09 | -8,93369E-11 | -7,14802E-08 | 8,17021E-10 | -9,12016E-11 | -5,88688E-08 | 6,33682E-10 | -8,69269E-11 |
| 276 | D Longitudinal | 6,66794E-07 | -5,49138E-09 | 8,64291E-10 | 6,07998E-07 | -4,58921E-09 | 8,63915E-10 | 5,50614E-07 | -3,68448E-09 | 8,7014E-10 |
| 276 | D Vertical | -8,70349E-08 | 8,72377E-08 | -1,2309E-08 | -7,49106E-08 | 7,50825E-08 | -1,2309E-08 | -6,28541E-08 | 6,29272E-08 | -1,23093E-08 |
| 276 | D transversal | 1,10948E-07 | 5,53558E-07 | -4,33658E-08 | 1,11261E-07 | 4,94041E-07 | -4,33654E-08 | 1,10159E-07 | 4,34522E-07 | -4,3369E-08 |
| 276 | G Longitudinal | 1,44328E-08 | 9,77624E-08 | -8,96885E-09 | 1,42758E-08 | 8,53648E-08 | -8,97134E-09 | 1,39159E-08 | 7,294E-08 | -9,07487E-09 |
| 276 | G Vertical | -1,72128E-07 | -9,2149E-10 | 4,14869E-10 | -1,70942E-07 | -1,46878E-10 | 5,33751E-10 | -1,67389E-07 | 1,88891E-09 | 5,34817E-09 |
| 276 | G transversal | -1,11701E-07 | 1,0032E-09 | -1,79597E-10 | -9,93803E-08 | 8,18681E-10 | -1,77034E-10 | -8,71612E-08 | 6,60499E-10 | -7,60189E-11 |
| 277 | D Longitudinal | 4,37372E-07 | 5,49138E-09 | -4,44155E-10 | 3,77344E-07 | 4,58924E-09 | -4,43705E-10 | 3,15904E-07 | 3,68495E-09 | -4,48228E-10 |
| 277 | D Vertical | -8,73904E-08 | -8,72377E-08 | 5,31607E-09 | -7,51688E-08 | -7,50825E-08 | 5,31604E-09 | -6,28794E-08 | -6,29272E-08 | 5,31638E-09 |
| 277 | D transversal | 1,22187E-07 | 5,53558E-07 | -4,29341E-08 | 1,20639E-07 | 4,94041E-07 | -4,29337E-08 | 1,17675E-07 | 4,34522E-07 | -4,29387E-08 |
| 277 | G Longitudinal | 1,32372E-08 | 9,77625E-08 | -9,00635E-09 | 1,3229E-08 | 8,53665E-08 | -9,00446E-09 | 1,30476E-08 | 7,29676E-08 | -9,00886E-09 |
| 277 | G Vertical | -1,64356E-07 | -9,22028E-10 | 6,4455E-10 | -1,65387E-07 | -2,2377E-10 | 5,58523E-10 | -1,65436E-07 | 5,95528E-10 | 7,32689E-10 |
| 277 | G transversal | -8,39601E-08 | -1,00319E-09 | 8,93455E-11 | -7,14803E-08 | -8,17058E-10 | 9,11081E-11 | -5,88689E-08 | -6,33212E-10 | 8,80058E-11 |
| 278 | D Longitudinal | 4,33019E-07 | -3,15109E-16 | -5,06626E-14 | 3,7365E-07 | 1,55341E-13 | 3,6718E-13 | 3,12869E-07 | -1,79125E-12 | -4,10636E-12 |
| 278 | D Vertical | -1,07401E-16 | -8,59612E-08 | 5,21347E-09 | -1,0422E-16 | -7,40164E-08 | 5,21348E-09 | -5,24247E-17 | -6,20717E-08 | 5,21347E-09 |
| 278 | D transversal | 1,40669E-16 | 5,55314E-07 | -4,31736E-08 | 1,41843E-16 | 4,9545E-07 | -4,31737E-08 | 1,40425E-16 | 4,35587E-07 | -4,31737E-08 |
| 278 | G Longitudinal | 2,63148E-16 | 9,74062E-08 | -8,9574E-09 | 2,69798E-16 | 8,50732E-08 | -8,95741E-09 | 3,51056E-16 | 7,27403E-08 | -8,95749E-09 |
| 278 | G Vertical | -1,32175E-07 | 2,14066E-17 | 5,53888E-14 | -1,30487E-07 | -1,68002E-13 | -3,96736E-13 | -1,27275E-07 | 1,93794E-12 | 4,44265E-12 |
| 278 | G transversal | -9,0007E-08 | -3,38144E-17 | 5,5308E-15 | -7,71359E-08 | -1,3487E-14 | -3,19892E-14 | -6,41725E-08 | 1,68928E-13 | 3,87255E-13 |
| 279 | D Longitudinal | 4,81886E-07 | -1,66415E-17 | 2,0226E-10 | 4,31159E-07 | -1,78639E-15 | 2,02255E-10 | 3,80433E-07 | -2,91977E-14 | 2,0215E-10 |
| 279 | D Vertical | -8,19785E-08 | -9,4263E-17 | -3,23678E-09 | -7,07387E-08 | -1,35944E-14 | -3,23682E-09 | -5,94991E-08 | -2,39624E-13 | -3,23766E-09 |
| 279 | D transversal | 1,0875E-07 | 4,77103E-07 | -3,61207E-08 | 1,08196E-07 | 4,27282E-07 | -3,61203E-08 | 1,06345E-07 | 3,77458E-07 | -3,61243E-08 |

APOYO 2

| DESPLAZAMIENTOS (metros) | | C1 | | | C2 | | | C3 | | |
|---|---|---|---|---|---|---|---|---|---|---|
| Nudo | Desplazamiento | L | T | V | L | T | V | L | T | V |
| 279 | G Longitudinal | 5,37529E-09 | 8,82108E-08 | -8,41177E-09 | 5,3167E-09 | 7,66084E-08 | -8,41173E-09 | 5,15765E-09 | 6,50058E-08 | -8,41223E-09 |
| 279 | G Vertical | -1,13579E-07 | 5,70031E-09 | -6,51891E-10 | -1,14166E-07 | 4,80138E-09 | -6,5144E-10 | -1,16113E-07 | 3,90258E-09 | -6,48025E-10 |
| 279 | G transversal | -8,95508E-08 | -2,04121E-16 | -1,61111E-12 | -7,84804E-08 | -3,0093E-14 | -1,69131E-12 | -6,74105E-08 | -5,10916E-13 | -3,52014E-12 |
| 280 | D Longitudinal | 3,68191E-07 | -5,02099E-09 | 3,9165E-10 | 3,17931E-07 | -4,21886E-09 | 3,92025E-10 | 2,66388E-07 | -3,4186E-09 | 3,88019E-10 |
| 280 | D Vertical | 8,13112E-08 | -8,14416E-08 | 4,8837E-09 | 7,01023E-08 | -7,02739E-08 | 4,88373E-09 | 5,88149E-08 | -5,91064E-08 | 4,88338E-09 |
| 280 | D transversal | -1,14156E-07 | 4,75661E-07 | -3,58524E-08 | -1,12631E-07 | 4,25892E-07 | -3,58528E-08 | -1,09821E-07 | 3,76124E-07 | -3,58487E-08 |
| 280 | G Longitudinal | -1,27944E-08 | 8,95011E-08 | -8,04614E-09 | -1,28368E-08 | 7,84476E-08 | -8,04445E-09 | -1,26999E-08 | 6,73915E-08 | -8,04849E-09 |
| 280 | G Vertical | -1,577E-07 | 8,90441E-10 | -6,14448E-10 | -1,58704E-07 | 2,3547E-10 | -5,33982E-10 | -1,5878E-07 | -5,32979E-10 | -6,97125E-10 |
| 280 | G transversal | -7,55375E-08 | -2,72335E-10 | 1,55932E-11 | -6,44627E-08 | -2,45592E-10 | 1,38147E-11 | -5,32504E-08 | -2,1614E-10 | 1,79056E-11 |
| 281 | D Longitudinal | 5,8082E-07 | -5,02099E-09 | 7,71243E-10 | 5,31658E-07 | -4,21914E-09 | 7,70868E-10 | 4,83779E-07 | -3,4154E-09 | 7,74855E-10 |
| 281 | D Vertical | -8,1656E-08 | 8,14416E-08 | -1,13094E-08 | -7,05474E-08 | 7,0274E-08 | -1,13094E-08 | -5,95171E-08 | 5,91061E-08 | -1,13098E-08 |
| 281 | D transversal | 1,01987E-07 | 4,75661E-07 | -3,63131E-08 | 1,0241E-07 | 4,25892E-07 | -3,63127E-08 | 1,01548E-07 | 3,76121E-07 | -3,63158E-08 |
| 281 | G Longitudinal | 1,47381E-08 | 8,95011E-08 | -7,98245E-09 | 1,45328E-08 | 7,84461E-08 | -7,98482E-09 | 1,41204E-08 | 6,73648E-08 | -8,08413E-09 |
| 281 | G Vertical | -1,65694E-07 | -8,90111E-10 | 3,79172E-10 | -1,6454E-07 | -1,63438E-10 | 4,90645E-10 | -1,61162E-07 | 1,74578E-09 | 5,0049E-09 |
| 281 | G transversal | -1,02577E-07 | -2,72328E-10 | 2,41539E-11 | -9,16576E-08 | -2,44009E-10 | 2,65977E-11 | -8,08477E-08 | -1,90596E-10 | 1,22846E-10 |
| 282 | D Longitudinal | 3,68191E-07 | 5,02099E-09 | -3,9174E-10 | 3,17931E-07 | 4,21914E-09 | -3,91365E-10 | 2,66388E-07 | 3,4154E-09 | -3,95366E-10 |
| 282 | D Vertical | -8,13112E-08 | -8,14416E-08 | 4,88371E-09 | -7,01023E-08 | -7,0274E-08 | 4,88368E-09 | -5,88149E-08 | -5,91061E-08 | 4,88404E-09 |
| 282 | D transversal | 1,14156E-07 | 4,75661E-07 | -3,58525E-08 | 1,12631E-07 | 4,25892E-07 | -3,58521E-08 | 1,09821E-07 | 3,76121E-07 | -3,5856E-08 |
| 282 | G Longitudinal | 1,27943E-08 | 8,95011E-08 | -8,04616E-09 | 1,28367E-08 | 7,84476E-08 | -8,04436E-09 | 1,26999E-08 | 6,73911E-08 | -8,04955E-09 |
| 282 | G Vertical | -1,57697E-07 | -8,90615E-10 | 6,14708E-10 | -1,58701E-07 | -2,3554E-10 | 5,34038E-10 | -1,58779E-07 | 5,32969E-10 | 6,97114E-10 |
| 282 | G transversal | -7,55375E-08 | 2,72339E-10 | -1,55849E-11 | -6,44628E-08 | 2,45555E-10 | -1,39071E-11 | -5,32504E-08 | 2,16601E-10 | -1,68496E-11 |
| 283 | D Longitudinal | 3,11905E-07 | -3,18117E-16 | -4,00389E-14 | 2,69524E-07 | 1,25963E-13 | 2,97647E-13 | 2,25969E-07 | -1,44029E-12 | -3,3018E-12 |
| 283 | D Vertical | 1,15047E-17 | -7,6291E-08 | 4,49223E-09 | 1,06963E-17 | -6,59967E-08 | 4,49223E-09 | -1,32307E-19 | -5,57024E-08 | 4,49223E-09 |
| 283 | D transversal | 1,06188E-16 | 4,17482E-07 | -3,07665E-08 | 9,08949E-17 | 3,74738E-07 | -3,07665E-08 | -1,57059E-16 | 3,31993E-07 | -3,07664E-08 |
| 283 | G Longitudinal | 4,78262E-16 | 8,26886E-08 | -7,22874E-09 | 4,69892E-16 | 7,27084E-08 | -7,22877E-09 | 3,0378E-16 | 6,27283E-08 | -7,22879E-09 |
| 283 | G Vertical | -1,11539E-07 | 1,23037E-16 | 4,23207E-14 | -1,10075E-07 | -1,31958E-13 | -3,11568E-13 | -1,07385E-07 | 1,5091E-12 | 3,45954E-12 |
| 283 | G transversal | -7,64255E-08 | -1,45351E-17 | 5,2245E-15 | -6,58557E-08 | -1,36659E-14 | -3,23756E-14 | -5,51822E-08 | 1,66656E-13 | 3,82048E-13 |
| 284 | D Longitudinal | 3,10388E-07 | -5,23636E-09 | 3,9401E-10 | 2,6816E-07 | -4,42269E-09 | 3,94385E-10 | 2,24771E-07 | -3,61076E-09 | 3,90731E-10 |
| 284 | D Vertical | 7,61107E-08 | -7,59965E-08 | 4,4725E-09 | 6,58088E-08 | -6,57567E-08 | 4,47253E-09 | 5,5421E-08 | -5,55171E-08 | 4,47218E-09 |
| 284 | D transversal | -1,06697E-07 | 4,10163E-07 | -3,00539E-08 | -1,05222E-07 | 3,68382E-07 | -3,00542E-08 | -1,02582E-07 | 3,26604E-07 | -3,00501E-08 |
| 284 | G Longitudinal | -1,36213E-08 | 8,22207E-08 | -7,18044E-09 | -1,3503E-08 | 7,23077E-08 | -7,17885E-09 | -1,32062E-08 | 6,23927E-08 | -7,18162E-09 |
| 284 | G Vertical | -1,52159E-07 | 5,07708E-10 | -5,4693E-10 | -1,53097E-07 | -5,34546E-11 | -4,7086E-10 | -1,53163E-07 | -7,21838E-10 | -6,24883E-10 |
| 284 | G transversal | -6,91561E-08 | -4,12697E-10 | 2,41528E-11 | -5,91191E-08 | -3,6673E-10 | 2,24448E-11 | -4,89419E-08 | -3,18169E-10 | 2,6354E-11 |
| 285 | D Longitudinal | 5,08031E-07 | -5,23636E-09 | 7,85601E-10 | 4,66782E-07 | -4,42298E-09 | 7,85211E-10 | 4,26695E-07 | -3,60851E-09 | 7,86536E-10 |
| 285 | D Vertical | -7,58027E-08 | 7,59965E-08 | -1,03752E-08 | -6,56025E-08 | 6,57567E-08 | -1,03751E-08 | -5,54883E-08 | 5,55168E-08 | -1,03755E-08 |
| 285 | D transversal | 9,40085E-08 | 4,10163E-07 | -3,0528E-08 | 9,45023E-08 | 3,68383E-07 | -3,05277E-08 | 9,38309E-08 | 3,266E-07 | -3,05322E-08 |
| 285 | G Longitudinal | 1,34879E-08 | 8,22207E-08 | -7,19428E-09 | 1,34486E-08 | 7,23063E-08 | -7,1965E-09 | 1,32045E-08 | 6,23675E-08 | -7,289E-09 |
| 285 | G Vertical | -1,59774E-07 | -5,07396E-10 | 3,0827E-10 | -1,58697E-07 | 1,21549E-10 | 4,13649E-10 | -1,55522E-07 | 1,86834E-09 | 4,68092E-09 |
| 285 | G transversal | -9,5647E-08 | -4,1269E-10 | 4,34295E-11 | -8,57614E-08 | -3,6521E-10 | 4,57756E-11 | -7,59896E-08 | -2,93649E-10 | 1,38142E-10 |
| 286 | D Longitudinal | 3,10388E-07 | 5,23636E-09 | -3,94089E-10 | 2,6816E-07 | 4,42294E-09 | -3,93794E-10 | 2,24771E-07 | 3,60791E-09 | -3,97283E-10 |
| 286 | D Vertical | -7,61107E-08 | -7,59965E-08 | 4,47251E-09 | -6,58088E-08 | -6,57567E-08 | 4,47247E-09 | -5,5421E-08 | -5,55168E-08 | 4,47285E-09 |
| 286 | D transversal | 1,06697E-07 | 4,10163E-07 | -3,0054E-08 | 1,05222E-07 | 3,68383E-07 | -3,00536E-08 | 1,02582E-07 | 3,26601E-07 | -3,00567E-08 |
| 286 | G Longitudinal | 1,36212E-08 | 8,22207E-08 | -7,18046E-09 | 1,35029E-08 | 7,23078E-08 | -7,17877E-09 | 1,32062E-08 | 6,23922E-08 | -7,18265E-09 |
| 286 | G Vertical | -1,52157E-07 | -5,07873E-10 | 5,47176E-10 | -1,53095E-07 | 5,33892E-11 | 4,70914E-10 | -1,53161E-07 | 7,21819E-10 | 6,2485E-10 |

APOYO 2

| DESPLAZAMIENTOS (metros) | | C1 | | | C2 | | | C3 | | |
|---|---|---|---|---|---|---|---|---|---|---|
| Nudo | Desplazamiento | L | T | V | L | T | V | L | T | V |
| 286 | G transversal | -6,91561E-08 | 4,127E-10 | -2,41447E-11 | -5,91192E-08 | 3,66694E-10 | -2,25357E-11 | -4,89419E-08 | 3,18618E-10 | -2,53234E-11 |
| 287 | D Longitudinal | 2,63789E-07 | -5,26506E-09 | 3,83939E-10 | 2,27985E-07 | -4,46662E-09 | 3,8424E-10 | 1,91126E-07 | -3,66968E-09 | 3,81035E-10 |
| 287 | D Vertical | 7,08554E-08 | -7,09098E-08 | 4,11936E-09 | 6,1368E-08 | -6,14719E-08 | 4,11939E-09 | 5,17904E-08 | -5,20341E-08 | 4,11903E-09 |
| 287 | D transversal | -9,92235E-08 | 3,57212E-07 | -2,55009E-08 | -9,79258E-08 | 3,21749E-07 | -2,55012E-08 | -9,55694E-08 | 2,86287E-07 | -2,54978E-08 |
| 287 | G Longitudinal | -1,44116E-08 | 7,61174E-08 | -6,47095E-09 | -1,41393E-08 | 6,71295E-08 | -6,46944E-09 | -1,36913E-08 | 5,81399E-08 | -6,47104E-09 |
| 287 | G Vertical | -1,4696E-07 | 8,65139E-10 | -5,71282E-10 | -1,4794E-07 | 2,77648E-10 | -4,98645E-10 | -1,48084E-07 | -4,12201E-10 | -6,4564E-10 |
| 287 | G transversal | -6,36805E-08 | -2,76216E-10 | 1,07558E-11 | -5,45025E-08 | -2,57089E-10 | 9,12381E-12 | -4,51831E-08 | -2,3548E-10 | 1,28609E-11 |
| 288 | D Longitudinal | 4,48136E-07 | -5,26506E-09 | 7,73635E-10 | 4,1321E-07 | -4,46684E-09 | 7,73335E-10 | 3,79339E-07 | -3,66712E-09 | 7,76558E-10 |
| 288 | D Vertical | -7,11003E-08 | 7,09098E-08 | -9,56563E-09 | -6,17141E-08 | 6,14719E-08 | -9,5656E-09 | -5,24182E-08 | 5,20338E-08 | -9,56596E-09 |
| 288 | D transversal | 8,78693E-08 | 3,57212E-07 | -2,59203E-08 | 8,82871E-08 | 3,21749E-07 | -2,592E-08 | 8,7646E-08 | 2,86285E-07 | -2,59231E-08 |
| 288 | G Longitudinal | 1,21768E-08 | 7,61174E-08 | -6,56235E-09 | 1,22971E-08 | 6,71282E-08 | -6,56445E-09 | 1,22166E-08 | 5,81161E-08 | -6,65125E-09 |
| 288 | G Vertical | -1,55556E-07 | -8,64841E-10 | 3,20221E-10 | -1,5444E-07 | -2,12627E-10 | 4,20843E-10 | -1,51317E-07 | 1,50697E-09 | 4,49549E-09 |
| 288 | G transversal | -9,00435E-08 | -2,7621E-10 | 1,78685E-11 | -8,10129E-08 | -2,55636E-10 | 2,01097E-11 | -7,20982E-08 | -2,12078E-10 | 1,08281E-10 |
| 289 | D Longitudinal | 2,63789E-07 | 5,26506E-09 | -3,8401E-10 | 2,27985E-07 | 4,46684E-09 | -3,83709E-10 | 1,91126E-07 | 3,66712E-09 | -3,86907E-10 |
| 289 | D Vertical | -7,08554E-08 | -7,09098E-08 | 4,11937E-09 | -6,1368E-08 | -6,14719E-08 | 4,11933E-09 | -5,17904E-08 | -5,20338E-08 | 4,11971E-09 |
| 289 | D transversal | 9,92235E-08 | 3,57212E-07 | -2,5501E-08 | 9,79258E-08 | 3,21749E-07 | -2,55006E-08 | 9,55694E-08 | 2,86285E-07 | -2,55037E-08 |
| 289 | G Longitudinal | 1,44116E-08 | 7,61174E-08 | -6,47097E-09 | 1,41393E-08 | 6,71296E-08 | -6,46935E-09 | 1,36913E-08 | 5,81395E-08 | -6,47203E-09 |
| 289 | G Vertical | -1,46957E-07 | -8,65296E-10 | 5,71516E-10 | -1,47938E-07 | -2,77711E-10 | 4,98695E-10 | -1,48083E-07 | 4,12192E-10 | 6,45627E-10 |
| 289 | G transversal | -6,36805E-08 | 2,7622E-10 | -1,0748E-11 | -5,45025E-08 | 2,57053E-10 | -9,21296E-12 | -4,51831E-08 | 2,35919E-10 | -1,18568E-11 |
| 290 | D Longitudinal | 3,52368E-07 | -6,66464E-18 | 1,9783E-10 | 3,17337E-07 | -1,1755E-15 | 1,97827E-10 | 2,82306E-07 | -2,12132E-14 | 1,97752E-10 |
| 290 | D Vertical | -6,90513E-08 | 9,34911E-17 | -2,64833E-09 | -5,99132E-08 | 1,33724E-14 | -2,64829E-09 | -5,07748E-08 | 2,27993E-13 | -2,64747E-09 |
| 290 | D transversal | 9,29578E-08 | 3,48301E-07 | -2,48713E-08 | 9,2525E-08 | 3,13996E-07 | -2,4871E-08 | 9,10465E-08 | 2,79689E-07 | -2,48742E-08 |
| 290 | G Longitudinal | 4,68488E-09 | 7,33014E-08 | -6,74907E-09 | 4,62836E-09 | 6,39923E-08 | -6,74903E-09 | 4,46337E-09 | 5,46831E-08 | -6,74963E-09 |
| 290 | G Vertical | -9,37056E-08 | 5,53378E-09 | -5,97288E-10 | -9,41493E-08 | 4,71011E-09 | -5,96945E-10 | -9,56568E-08 | 3,88654E-09 | -5,94348E-10 |
| 290 | G transversal | -7,56551E-08 | 1,12301E-16 | 1,17175E-11 | -6,67382E-08 | 1,58986E-14 | 1,17598E-11 | -5,78211E-08 | 2,69017E-13 | 1,27236E-11 |
| 291 | D Longitudinal | 3,7716E-07 | -5,56227E-09 | 7,92455E-10 | 3,49431E-07 | -4,74886E-09 | 7,92252E-10 | 3,22624E-07 | -3,93358E-09 | 7,97237E-10 |
| 291 | D Vertical | -6,40699E-08 | 6,42565E-08 | -8,51341E-09 | -5,57076E-08 | 5,58663E-08 | -8,51337E-09 | -4,74386E-08 | 4,7476E-08 | -8,51369E-09 |
| 291 | D transversal | 8,02242E-08 | 2,9542E-07 | -2,06735E-08 | 8,05303E-08 | 2,67141E-07 | -2,06732E-08 | 7,99127E-08 | 2,3886E-07 | -2,06753E-08 |
| 291 | G Longitudinal | 1,2982E-08 | 6,76232E-08 | -5,61388E-09 | 1,29509E-08 | 5,9892E-08 | -5,61587E-09 | 1,27237E-08 | 5,2139E-08 | -5,69859E-09 |
| 291 | G Vertical | -1,50552E-07 | -1,25809E-09 | 3,30708E-10 | -1,4938E-07 | -5,83065E-10 | 4,25895E-10 | -1,46313E-07 | 1,10165E-09 | 4,28032E-09 |
| 291 | G transversal | -8,12977E-08 | -8,71602E-10 | 1,00476E-10 | -7,35742E-08 | -7,66052E-10 | 1,02575E-10 | -6,59666E-08 | -6,38991E-10 | 1,85101E-10 |
| 292 | D Longitudinal | 2,10072E-07 | 5,56227E-09 | -3,87156E-10 | 1,81592E-07 | 4,7489E-09 | -3,86857E-10 | 1,52191E-07 | 3,93418E-09 | -3,89669E-10 |
| 292 | D Vertical | -6,44628E-08 | -6,42565E-08 | 3,65242E-09 | -5,60017E-08 | -5,58663E-08 | 3,65238E-09 | -4,74473E-08 | -4,74759E-08 | 3,65274E-09 |
| 292 | D transversal | 8,96143E-08 | 2,9542E-07 | -2,0332E-08 | 8,85528E-08 | 2,67141E-07 | -2,03318E-08 | 8,65672E-08 | 2,3886E-07 | -2,0335E-08 |
| 292 | G Longitudinal | 1,32845E-08 | 6,76232E-08 | -5,59533E-09 | 1,31719E-08 | 5,98933E-08 | -5,59381E-09 | 1,28869E-08 | 5,21611E-08 | -5,59716E-09 |
| 292 | G Vertical | -1,40605E-07 | -1,25852E-09 | 5,9702E-10 | -1,41651E-07 | -6,44634E-10 | 5,28132E-10 | -1,41909E-07 | 6,60019E-11 | 6,66981E-10 |
| 292 | G transversal | -5,49807E-08 | 8,71611E-10 | -5,14338E-11 | -4,71177E-08 | 7,67378E-10 | -4,99977E-11 | -3,91148E-08 | 6,61303E-10 | -5,24734E-11 |
| 293 | D Longitudinal | 6,34944E-07 | -7,62768E-19 | -2,49488E-10 | 5,64786E-07 | -1,03387E-15 | -2,49491E-10 | 4,94628E-07 | -1,33005E-14 | -2,49543E-10 |
| 293 | D Vertical | 9,21728E-08 | 2,53351E-17 | -3,75127E-09 | 7,9117E-08 | 1,16988E-14 | -3,75124E-09 | 6,6061E-08 | 2,23913E-13 | -3,75046E-09 |
| 293 | D transversal | -1,24914E-07 | 6,30497E-07 | -5,02038E-08 | -1,24234E-07 | 5,6125E-07 | -5,02042E-08 | -1,22018E-07 | 4,92006E-07 | -5,01992E-08 |
| 293 | G Longitudinal | -5,61123E-09 | 1,03272E-07 | -1,02381E-08 | -5,55444E-09 | 8,91507E-08 | -1,02381E-08 | -5,41778E-09 | 7,50293E-08 | -1,0238E-08 |
| 293 | G Vertical | -1,35356E-07 | -7,04767E-09 | 8,69022E-10 | -1,36102E-07 | -5,84877E-09 | 8,69471E-10 | -1,38515E-07 | -4,65479E-09 | 8,55467E-10 |
| 293 | G transversal | -1,05511E-07 | -1,96606E-17 | 4,31174E-11 | -9,18341E-08 | -3,71519E-15 | 4,31075E-11 | -7,81574E-08 | -7,01524E-14 | 4,28634E-11 |
| 294 | D Longitudinal | 6,66794E-07 | 5,49138E-09 | -8,6419E-10 | 6,07998E-07 | 4,5889E-09 | -8,64651E-10 | 5,50614E-07 | 3,68807E-09 | -8,61906E-10 |

APOYO 2

| DESPLAZAMIENTOS (metros) | | C1 | | | C2 | | | C3 | | |
|---|---|---|---|---|---|---|---|---|---|---|
| Nudo | Desplazamiento | L | T | V | L | T | V | L | T | V |
| 294 | D Vertical | 8,70349E-08 | 8,72377E-08 | -1,2309E-08 | 7,49106E-08 | 7,50825E-08 | -1,2309E-08 | 6,28541E-08 | 6,29274E-08 | -1,23087E-08 |
| 294 | D transversal | -1,10948E-07 | 5,53558E-07 | -4,33657E-08 | -1,11261E-07 | 4,9404E-07 | -4,33661E-08 | -1,10159E-07 | 4,34526E-07 | -4,33607E-08 |
| 294 | G Longitudinal | -1,44327E-08 | 9,77624E-08 | -8,96884E-09 | -1,42757E-08 | 8,53648E-08 | -8,97141E-09 | -1,39155E-08 | 7,29405E-08 | -9,07369E-09 |
| 294 | G Vertical | -1,72126E-07 | 9,21696E-10 | -4,14749E-10 | -1,70938E-07 | 1,4732E-10 | -5,32989E-10 | -1,6737E-07 | -1,88694E-09 | -5,34366E-09 |
| 294 | G transversal | -1,11701E-07 | -1,0032E-09 | 1,79585E-10 | -9,93802E-08 | -8,18633E-10 | 1,77142E-10 | -8,71608E-08 | -6,60928E-10 | 7,50367E-11 |
| 295 | D Longitudinal | 6,6284E-07 | 3,16498E-16 | 5,06619E-14 | 6,04699E-07 | -1,55339E-13 | -3,67177E-13 | 5,47971E-07 | 1,79126E-12 | 4,10638E-12 |
| 295 | D Vertical | -1,02394E-16 | 8,59612E-08 | -1,21064E-08 | -1,34696E-16 | 7,40164E-08 | -1,21064E-08 | -6,9976E-16 | 6,20718E-08 | -1,21061E-08 |
| 295 | D transversal | -1,37431E-16 | 5,55314E-07 | -4,36284E-08 | -1,80569E-16 | 4,9545E-07 | -4,36284E-08 | -8,49767E-16 | 4,35587E-07 | -4,3628E-08 |
| 295 | G Longitudinal | -2,56789E-16 | 9,74062E-08 | -8,92536E-09 | -3,36077E-16 | 8,50732E-08 | -8,92534E-09 | -1,49656E-15 | 7,27405E-08 | -8,92461E-09 |
| 295 | G Vertical | -1,19611E-07 | 6,65899E-16 | 5,51305E-14 | -1,19969E-07 | -1,67153E-13 | -3,95583E-13 | -1,188E-07 | 1,94123E-12 | 4,45015E-12 |
| 295 | G transversal | -1,01288E-07 | 4,83185E-17 | -5,5366E-15 | -8,85334E-08 | 1,3506E-14 | 3,20151E-14 | -7,58711E-08 | -1,68854E-13 | -3,87086E-13 |
| 296 | D Longitudinal | 4,81886E-07 | -7,50095E-19 | -2,0226E-10 | 4,31159E-07 | 1,76337E-15 | -2,02255E-10 | 3,80433E-07 | 2,91101E-14 | -2,0215E-10 |
| 296 | D Vertical | 8,19785E-08 | -2,68981E-17 | -3,23678E-09 | 7,07387E-08 | -1,35033E-14 | -3,23682E-09 | 5,94991E-08 | -2,39284E-13 | -3,23766E-09 |
| 296 | D transversal | -1,0875E-07 | 4,77103E-07 | -3,61206E-08 | -1,08196E-07 | 4,27281E-07 | -3,6121E-08 | -1,06345E-07 | 3,77462E-07 | -3,61169E-08 |
| 296 | G Longitudinal | -5,37529E-09 | 8,82108E-08 | -8,41176E-09 | -5,3167E-09 | 7,66084E-08 | -8,4118E-09 | -5,15765E-09 | 6,50061E-08 | -8,41145E-09 |
| 296 | G Vertical | -1,13579E-07 | -5,70031E-09 | 6,51795E-10 | -1,14166E-07 | -4,80108E-09 | 6,52145E-10 | -1,16113E-07 | -3,906E-09 | 6,40184E-10 |
| 296 | G transversal | -8,95508E-08 | 6,33968E-17 | 1,61117E-12 | -7,84804E-08 | 2,99075E-14 | 1,69106E-12 | -6,74105E-08 | 5,10197E-13 | 3,5185E-12 |
| 297 | D Longitudinal | 5,8082E-07 | 5,02099E-09 | -7,71153E-10 | 5,31658E-07 | 4,21886E-09 | -7,71527E-10 | 4,83779E-07 | 3,41861E-09 | -7,67509E-10 |
| 297 | D Vertical | 8,1656E-08 | 8,14416E-08 | -1,13094E-08 | 7,05474E-08 | 7,02739E-08 | -1,13094E-08 | 5,95171E-08 | 5,91064E-08 | -1,13091E-08 |
| 297 | D transversal | -1,01987E-07 | 4,75661E-07 | -3,6313E-08 | -1,0241E-07 | 4,25892E-07 | -3,63134E-08 | -1,01548E-07 | 3,76124E-07 | -3,63084E-08 |
| 297 | G Longitudinal | -1,4738E-08 | 8,95011E-08 | -7,98243E-09 | -1,45328E-08 | 7,8446E-08 | -7,98489E-09 | -1,412E-08 | 6,73653E-08 | -8,08297E-09 |
| 297 | G Vertical | -1,65691E-07 | 8,90304E-10 | -3,79059E-10 | -1,64536E-07 | 1,63852E-10 | -4,89933E-10 | -1,61145E-07 | -1,74392E-09 | -5,00064E-09 |
| 297 | G transversal | -1,02577E-07 | 2,72332E-10 | -2,41654E-11 | -9,16575E-08 | 2,44056E-10 | -2,64911E-11 | -8,08473E-08 | 1,90176E-10 | -1,23811E-10 |
| 298 | D Longitudinal | 5,10814E-07 | 3,18058E-16 | 4,00389E-14 | 4,6942E-07 | -1,25963E-13 | -2,97647E-13 | 4,29198E-07 | 1,44029E-12 | 3,3018E-12 |
| 298 | D Vertical | 1,0557E-17 | 7,6291E-08 | -1,04345E-08 | 1,34817E-17 | 6,59967E-08 | -1,04345E-08 | 8,049E-17 | 5,57024E-08 | -1,04345E-08 |
| 298 | D transversal | -1,00975E-16 | 4,17482E-07 | -3,12135E-08 | -1,50723E-16 | 3,74738E-07 | -3,12135E-08 | -8,929E-16 | 3,31993E-07 | -3,1213E-08 |
| 298 | G Longitudinal | -4,62688E-16 | 8,26886E-08 | -7,24246E-09 | -6,28039E-16 | 7,27085E-08 | -7,24242E-09 | -3,03791E-15 | 6,27288E-08 | -7,24082E-09 |
| 298 | G Vertical | -9,92564E-08 | 5,46165E-16 | 4,2151E-14 | -9,96858E-08 | -1,31401E-13 | -3,10812E-13 | -9,88864E-08 | 1,51126E-12 | 3,46447E-12 |
| 298 | G transversal | -8,53149E-08 | 2,26188E-17 | -5,22772E-15 | -7,48599E-08 | 1,36765E-14 | 3,239E-14 | -6,45085E-08 | -1,66614E-13 | -3,81954E-13 |
| 299 | D Longitudinal | 5,08031E-07 | 5,23636E-09 | -7,85522E-10 | 4,66782E-07 | 4,42273E-09 | -7,85802E-10 | 4,26695E-07 | 3,61137E-09 | -7,79986E-10 |
| 299 | D Vertical | 7,58027E-08 | 7,59965E-08 | -1,03751E-08 | 6,56025E-08 | 6,57567E-08 | -1,03752E-08 | 5,54883E-08 | 5,55171E-08 | -1,03748E-08 |
| 299 | D transversal | -9,40084E-08 | 4,10163E-07 | -3,05279E-08 | -9,45023E-08 | 3,68382E-07 | -3,05283E-08 | -9,38309E-08 | 3,26603E-07 | -3,05256E-08 |
| 299 | G Longitudinal | -1,34879E-08 | 8,22207E-08 | -7,19426E-09 | -1,34486E-08 | 7,23063E-08 | -7,19657E-09 | -1,32042E-08 | 6,2368E-08 | -7,28788E-09 |
| 299 | G Vertical | -1,59771E-07 | 5,07579E-10 | -3,08163E-10 | -1,58694E-07 | -1,21158E-10 | -4,12974E-10 | -1,55506E-07 | -1,86658E-09 | -4,67691E-09 |
| 299 | G transversal | -9,56469E-08 | 4,12694E-10 | -4,34405E-11 | -8,57614E-08 | 3,65256E-10 | -4,56712E-11 | -7,59892E-08 | 2,93238E-10 | -1,39085E-10 |
| 300 | D Longitudinal | 4,48136E-07 | 5,26506E-09 | -7,73564E-10 | 4,1321E-07 | 4,46662E-09 | -7,73866E-10 | 3,79339E-07 | 3,66968E-09 | -7,70687E-10 |
| 300 | D Vertical | 7,11003E-08 | 7,09098E-08 | -9,56562E-09 | 6,17141E-08 | 6,14719E-08 | -9,56566E-09 | 5,24182E-08 | 5,20341E-08 | -9,56529E-09 |
| 300 | D transversal | -8,78693E-08 | 3,57212E-07 | -2,59202E-08 | -8,82871E-08 | 3,21749E-07 | -2,59205E-08 | -8,7646E-08 | 2,86287E-07 | -2,59172E-08 |
| 300 | G Longitudinal | -1,21767E-08 | 7,61174E-08 | -6,56234E-09 | -1,2297E-08 | 6,71281E-08 | -6,56452E-09 | -1,22163E-08 | 5,81165E-08 | -6,65017E-09 |
| 300 | G Vertical | -1,55554E-07 | 8,65015E-10 | -3,20119E-10 | -1,54437E-07 | 2,13E-10 | -4,202E-10 | -1,51302E-07 | -1,50529E-09 | -4,49165E-09 |
| 300 | G transversal | -9,00434E-08 | 2,76214E-10 | -1,78792E-11 | -8,10128E-08 | 2,55682E-10 | -2,00077E-11 | -7,20979E-08 | 2,11677E-10 | -1,09201E-10 |
| 301 | D Longitudinal | 3,52368E-07 | 3,81095E-18 | -1,9783E-10 | 3,17337E-07 | 1,1717E-15 | -1,97827E-10 | 2,82306E-07 | 2,11994E-14 | -1,97752E-10 |
| 301 | D Vertical | 6,90513E-08 | 2,56291E-17 | -2,64833E-09 | 5,99132E-08 | 1,32825E-14 | -2,64829E-09 | 5,07747E-08 | 2,27648E-13 | -2,64748E-09 |
| 301 | D transversal | -9,29578E-08 | 3,48301E-07 | -2,48712E-08 | -9,2525E-08 | 3,13995E-07 | -2,48715E-08 | -9,10465E-08 | 2,79692E-07 | -2,48684E-08 |

APOYO 2

| DESPLAZAMIENTOS (metros) | | C1 | | | C2 | | | C3 | | |
|---|---|---|---|---|---|---|---|---|---|---|
| Nudo | Desplazamiento | L | T | V | L | T | V | L | T | V |
| 301 | G Longitudinal | -4,68488E-09 | 7,33014E-08 | -6,74906E-09 | -4,62836E-09 | 6,39923E-08 | -6,74909E-09 | -4,46337E-09 | 5,46834E-08 | -6,74888E-09 |
| 301 | G Vertical | -9,37056E-08 | -5,53378E-09 | 5,97217E-10 | -9,41493E-08 | -4,70988E-09 | 5,97483E-10 | -9,56568E-08 | -3,88912E-09 | 5,88412E-10 |
| 301 | G transversal | -7,56551E-08 | -2,90087E-17 | -1,17175E-11 | -6,67382E-08 | -1,57889E-14 | -1,17597E-11 | -5,78211E-08 | -2,68592E-13 | -1,27226E-11 |
| 302 | D Longitudinal | 2,10072E-07 | -5,56227E-09 | 3,87096E-10 | 1,81592E-07 | -4,7487E-09 | 3,87314E-10 | 1,52191E-07 | -3,93638E-09 | 3,84638E-10 |
| 302 | D Vertical | 6,44628E-08 | -6,42565E-08 | 3,65241E-09 | 5,60017E-08 | -5,58663E-08 | 3,65244E-09 | 4,74473E-08 | -4,74762E-08 | 3,65208E-09 |
| 302 | D transversal | -8,96143E-08 | 2,9542E-07 | -2,03319E-08 | -8,85528E-08 | 2,67141E-07 | -2,03322E-08 | -8,65672E-08 | 2,38862E-07 | -2,03299E-08 |
| 302 | G Longitudinal | -1,32846E-08 | 6,76232E-08 | -5,59531E-09 | -1,3172E-08 | 5,98933E-08 | -5,59389E-09 | -1,2887E-08 | 5,21615E-08 | -5,59622E-09 |
| 302 | G Vertical | -1,40607E-07 | 1,25837E-09 | -5,96798E-10 | -1,41653E-07 | 6,44574E-10 | -5,28083E-10 | -1,4191E-07 | -6,60173E-11 | -6,67007E-10 |
| 302 | G transversal | -5,49806E-08 | -8,71608E-10 | 5,1441E-11 | -4,71176E-08 | -7,67412E-10 | 4,99125E-11 | -3,91147E-08 | -6,60889E-10 | 5,34238E-11 |
| 303 | D Longitudinal | 3,7716E-07 | 5,56227E-09 | -7,92395E-10 | 3,49431E-07 | 4,74867E-09 | -7,92709E-10 | 3,22624E-07 | 3,93577E-09 | -7,92203E-10 |
| 303 | D Vertical | 6,40699E-08 | 6,42565E-08 | -8,5134E-09 | 5,57076E-08 | 5,58663E-08 | -8,51343E-09 | 4,74386E-08 | 4,74762E-08 | -8,51304E-09 |
| 303 | D transversal | -8,02242E-08 | 2,9542E-07 | -2,06734E-08 | -8,05303E-08 | 2,67141E-07 | -2,06737E-08 | -7,99127E-08 | 2,38862E-07 | -2,06702E-08 |
| 303 | G Longitudinal | -1,2982E-08 | 6,76232E-08 | -5,61387E-09 | -1,29508E-08 | 5,9892E-08 | -5,61594E-09 | -1,27234E-08 | 5,21395E-08 | -5,69757E-09 |
| 303 | G Vertical | -1,50549E-07 | 1,25825E-09 | -3,30611E-10 | -1,49377E-07 | 5,83418E-10 | -4,25285E-10 | -1,46298E-07 | -1,10007E-09 | -4,2767E-09 |
| 303 | G transversal | -8,12977E-08 | 8,71605E-10 | -1,00486E-10 | -7,35742E-08 | 7,66095E-10 | -1,02478E-10 | -6,59663E-08 | 6,38611E-10 | -1,85972E-10 |
| 304 | D Longitudinal | 3,79733E-07 | 2,89731E-16 | 3,02679E-14 | 3,51903E-07 | -9,76307E-14 | -2,30628E-13 | 3,25002E-07 | 1,10733E-12 | 2,5385E-12 |
| 304 | D Vertical | -6,80597E-17 | 6,5364E-08 | -8,67613E-09 | -9,27954E-17 | 5,68109E-08 | -8,67612E-09 | -4,56294E-16 | 4,8258E-08 | -8,67588E-09 |
| 304 | D transversal | 2,43098E-16 | 3,02628E-07 | -2,13585E-08 | 3,32858E-16 | 2,73428E-07 | -2,13586E-08 | 1,63311E-15 | 2,44228E-07 | -2,13594E-08 |
| 304 | G Longitudinal | -4,87867E-16 | 6,84075E-08 | -5,70061E-09 | -6,90907E-16 | 6,05682E-08 | -5,70057E-09 | -3,65284E-15 | 5,27294E-08 | -5,69866E-09 |
| 304 | G Vertical | -8,12598E-08 | 5,58495E-16 | 3,11039E-14 | -8,16363E-08 | -9,88445E-14 | -2,33879E-13 | -8,10641E-08 | 1,13174E-12 | 2,59444E-12 |
| 304 | G transversal | -7,19362E-08 | 4,89242E-18 | -4,8388E-15 | -6,36336E-08 | 1,34801E-14 | 3,18956E-14 | -5,54414E-08 | -1,60521E-13 | -3,67986E-13 |
| 305 | D Longitudinal | 2,11003E-07 | -2,93959E-16 | -3,02662E-14 | 1,82414E-07 | 9,76252E-14 | 2,30621E-13 | 1,52897E-07 | -1,10735E-12 | -2,53855E-12 |
| 305 | D Vertical | -7,03026E-17 | -6,5364E-08 | 3,72577E-09 | -6,8643E-17 | -5,68109E-08 | 3,72578E-09 | -3,51425E-17 | -4,82579E-08 | 3,72577E-09 |
| 305 | D transversal | -2,52448E-16 | 3,02628E-07 | -2,09815E-08 | -2,4531E-16 | 2,73428E-07 | -2,09815E-08 | -1,26852E-16 | 2,44228E-07 | -2,09815E-08 |
| 305 | G Longitudinal | 5,0942E-16 | 6,84075E-08 | -5,66638E-09 | 4,73139E-16 | 6,05682E-08 | -5,66641E-09 | -1,11485E-16 | 5,2729E-08 | -5,66616E-09 |
| 305 | G Vertical | -9,17854E-08 | 4,47897E-17 | 3,13099E-14 | -9,06352E-08 | -9,95217E-14 | -2,348E-13 | -8,85401E-08 | 1,12912E-12 | 2,58846E-12 |
| 305 | G transversal | -6,23598E-08 | 5,388E-18 | 4,83469E-15 | -5,39468E-08 | -1,34666E-14 | -3,18772E-14 | -4,54234E-08 | 1,60574E-13 | 3,68106E-13 |
| 306 | D Longitudinal | 3,20348E-07 | 5,88306E-09 | -8,20039E-10 | 2,9812E-07 | 5,04452E-09 | -8,20254E-10 | 2,76693E-07 | 4,20717E-09 | -8,17548E-10 |
| 306 | D Vertical | 5,92622E-08 | 5,91124E-08 | -7,73288E-09 | 5,16803E-08 | 5,14882E-08 | -7,73291E-09 | 4,4193E-08 | 4,38642E-08 | -7,73253E-09 |
| 306 | D transversal | -7,26301E-08 | 2,46233E-07 | -1,66539E-08 | -7,29792E-08 | 2,23497E-07 | -1,66542E-08 | -7,25205E-08 | 2,00762E-07 | -1,66537E-08 |
| 306 | G Longitudinal | -1,3608E-08 | 6,1618E-08 | -4,95864E-09 | -1,34779E-08 | 5,47568E-08 | -4,96065E-09 | -1,31555E-08 | 4,78747E-08 | -5,04073E-09 |
| 306 | G Vertical | -1,47542E-07 | 1,09021E-09 | -2,92966E-10 | -1,46394E-07 | 4,58389E-10 | -3,84924E-10 | -1,43392E-07 | -1,15313E-09 | -4,12582E-09 |
| 306 | G transversal | -7,45795E-08 | -1,00268E-10 | 3,04836E-11 | -6,77994E-08 | -7,26436E-11 | 2,85664E-11 | -6,1132E-08 | -6,61602E-11 | -5,17714E-11 |
| 307 | D Longitudinal | 1,68298E-07 | -5,88306E-09 | 3,95683E-10 | 1,45424E-07 | -5,04451E-09 | 3,95912E-10 | 1,21748E-07 | -4,20708E-09 | 3,93533E-10 |
| 307 | D Vertical | 5,91348E-08 | -5,91124E-08 | 3,32221E-09 | 5,14564E-08 | -5,14882E-08 | 3,32224E-09 | 4,36835E-08 | -4,38642E-08 | 3,32189E-09 |
| 307 | D transversal | -8,21132E-08 | 2,46233E-07 | -1,63122E-08 | -8,11138E-08 | 2,23497E-07 | -1,63124E-08 | -7,93071E-08 | 2,00763E-07 | -1,63103E-08 |
| 307 | G Longitudinal | -1,26303E-08 | 6,1618E-08 | -4,98903E-09 | -1,26231E-08 | 5,4758E-08 | -4,98766E-09 | -1,24468E-08 | 4,78961E-08 | -4,99084E-09 |
| 307 | G Vertical | -1,37645E-07 | 1,09032E-09 | -5,73531E-10 | -1,38668E-07 | 5,1779E-10 | -5,06789E-10 | -1,38924E-07 | -1,48758E-10 | -6,41739E-10 |
| 307 | G transversal | -4,8539E-08 | 1,00266E-10 | -1,0596E-11 | -4,16271E-08 | 7,13757E-11 | -1,20661E-11 | -3,45793E-08 | 4,47242E-11 | -8,68925E-12 |
| 308 | D Longitudinal | 3,20348E-07 | -5,88306E-09 | 8,20091E-10 | 2,9812E-07 | -5,04469E-09 | 8,19859E-10 | 2,76693E-07 | -4,20529E-09 | 8,21875E-10 |
| 308 | D Vertical | -5,92622E-08 | 5,91124E-08 | -7,73289E-09 | -5,16803E-08 | 5,14882E-08 | -7,73285E-09 | -4,4193E-08 | 4,38639E-08 | -7,73318E-09 |
| 308 | D transversal | 7,26301E-08 | 2,46233E-07 | -1,6654E-08 | 7,29792E-08 | 2,23497E-07 | -1,66538E-08 | 7,25206E-08 | 2,00761E-07 | -1,6658E-08 |
| 308 | G Longitudinal | 1,3608E-08 | 6,1618E-08 | -4,95865E-09 | 1,3478E-08 | 5,47568E-08 | -4,96058E-09 | 1,31558E-08 | 4,78742E-08 | -5,0417E-09 |
| 308 | G Vertical | -1,47544E-07 | -1,09005E-09 | 2,9306E-10 | -1,46397E-07 | -4,58046E-10 | 3,85515E-10 | -1,43406E-07 | 1,15467E-09 | 4,12935E-09 |

APOYO 2

| DESPLAZAMIENTOS (metros) | | C1 | | | C2 | | | C3 | | |
|---|---|---|---|---|---|---|---|---|---|---|
| Nudo | Desplazamiento | L | T | V | L | T | V | L | T | V |
| 308 | G transversal | -7,45796E-08 | 1,00272E-10 | -3,04927E-11 | -6,77995E-08 | 7,26847E-11 | -2,84738E-11 | -6,11323E-08 | 6,5801E-11 | 5,09478E-11 |
| 309 | D Longitudinal | 1,68298E-07 | 5,88306E-09 | -3,95735E-10 | 1,45424E-07 | 5,04468E-09 | -3,95518E-10 | 1,21748E-07 | 4,2052E-09 | -3,9786E-10 |
| 309 | D Vertical | -5,91348E-08 | -5,91124E-08 | 3,32222E-09 | -5,14564E-08 | -5,14882E-08 | 3,32219E-09 | -4,36835E-08 | -4,38639E-08 | 3,32254E-09 |
| 309 | D transversal | 8,21132E-08 | 2,46233E-07 | -1,63123E-08 | 8,11138E-08 | 2,23497E-07 | -1,6312E-08 | 7,93071E-08 | 2,00761E-07 | -1,63146E-08 |
| 309 | G Longitudinal | 1,26303E-08 | 6,1618E-08 | -4,98905E-09 | 1,2623E-08 | 5,47581E-08 | -4,98758E-09 | 1,24467E-08 | 4,78957E-08 | -4,99174E-09 |
| 309 | G Vertical | -1,37643E-07 | -1,09046E-09 | 5,73746E-10 | -1,38666E-07 | -5,17848E-10 | 5,06835E-10 | -1,38923E-07 | 1,48748E-10 | 6,41724E-10 |
| 309 | G transversal | -4,85391E-08 | -1,00263E-10 | 1,06025E-11 | -4,16271E-08 | -7,14084E-11 | 1,1985E-11 | -3,45793E-08 | -4,4332E-11 | 9,58826E-12 |
| 310 | D Longitudinal | 2,47385E-07 | 7,23623E-17 | 1,91834E-10 | 2,24424E-07 | 1,04446E-14 | 1,91862E-10 | 2,01464E-07 | 1,75852E-13 | 1,92492E-10 |
| 310 | D Vertical | -5,91004E-08 | -7,33186E-17 | -2,20678E-09 | -5,1477E-08 | -1,04836E-14 | -2,20681E-09 | -4,38538E-08 | -1,76547E-13 | -2,20744E-09 |
| 310 | D transversal | 7,75359E-08 | 2,44468E-07 | -1,62738E-08 | 7,72112E-08 | 2,22022E-07 | -1,62735E-08 | 7,60794E-08 | 1,99574E-07 | -1,62759E-08 |
| 310 | G Longitudinal | 4,34548E-09 | 5,98481E-08 | -5,31199E-09 | 4,29329E-09 | 5,25212E-08 | -5,31196E-09 | 4,13321E-09 | 4,51942E-08 | -5,31238E-09 |
| 310 | G Vertical | -7,56429E-08 | 5,26486E-09 | -5,3906E-10 | -7,59653E-08 | 4,52146E-09 | -5,38809E-10 | -7,70835E-08 | 3,77814E-09 | -5,36853E-10 |
| 310 | G transversal | -6,15745E-08 | -9,05634E-17 | -8,86334E-12 | -5,47294E-08 | -1,23564E-14 | -8,89626E-12 | -4,78846E-08 | -2,08211E-13 | -9,64288E-12 |
| 311 | D Longitudinal | 1,31186E-07 | -5,02293E-09 | 3,28257E-10 | 1,13264E-07 | -4,32252E-09 | 3,28439E-10 | 9,46545E-08 | -3,62304E-09 | 3,2645E-10 |
| 311 | D Vertical | 5,40112E-08 | -5,38326E-08 | 2,9785E-09 | 4,71076E-08 | -4,69922E-08 | 2,97854E-09 | 4,01105E-08 | -4,01518E-08 | 2,97821E-09 |
| 311 | D transversal | -7,4495E-08 | 2,01348E-07 | -1,27364E-08 | -7,35482E-08 | 1,83543E-07 | -1,27366E-08 | -7,19087E-08 | 1,65739E-07 | -1,27343E-08 |
| 311 | G Longitudinal | -1,26349E-08 | 5,58408E-08 | -4,39539E-09 | -1,26119E-08 | 4,97943E-08 | -4,39405E-09 | -1,24262E-08 | 4,37459E-08 | -4,39663E-09 |
| 311 | G Vertical | -1,34452E-07 | 1,44997E-09 | -6,01067E-10 | -1,35523E-07 | 8,42959E-10 | -5,36049E-10 | -1,35847E-07 | 1,4434E-10 | -6,67558E-10 |
| 311 | G transversal | -4,28716E-08 | 1,37825E-09 | -9,35748E-11 | -3,67772E-08 | 1,17162E-09 | -9,50008E-11 | -3,05522E-08 | 9,67152E-10 | -9,17403E-11 |
| 312 | D Longitudinal | 2,68083E-07 | -5,02293E-09 | 6,87241E-10 | 2,50708E-07 | -4,32266E-09 | 6,87063E-10 | 2,34021E-07 | -3,62133E-09 | 6,8947E-10 |
| 312 | D Vertical | -5,36375E-08 | 5,38326E-08 | -6,94015E-09 | -4,68264E-08 | 4,69922E-08 | -6,94012E-09 | -4,01088E-08 | 4,01516E-08 | -6,94044E-09 |
| 312 | D transversal | 6,48526E-08 | 2,01348E-07 | -1,30811E-08 | 6,52491E-08 | 1,83543E-07 | -1,30809E-08 | 6,49526E-08 | 1,65737E-07 | -1,30834E-08 |
| 312 | G Longitudinal | 1,34596E-08 | 5,58408E-08 | -4,37286E-09 | 1,33531E-08 | 4,97931E-08 | -4,37474E-09 | 1,30614E-08 | 4,37246E-08 | -4,45327E-09 |
| 312 | G Vertical | -1,45277E-07 | -1,44971E-09 | 3,14588E-10 | -1,44086E-07 | -7,84758E-10 | 4,04655E-10 | -1,411E-07 | 8,35585E-10 | 4,0518E-09 |
| 312 | G transversal | -6,85346E-08 | 1,37826E-09 | -2,05267E-10 | -6,25642E-08 | 1,17289E-09 | -2,03308E-10 | -5,67021E-08 | 9,87625E-10 | -1,26194E-10 |
| 313 | D Longitudinal | 1,31186E-07 | 5,02293E-09 | -3,283E-10 | 1,13264E-07 | 4,32266E-09 | -3,28104E-10 | 9,46545E-08 | 3,62144E-09 | -3,30112E-10 |
| 313 | D Vertical | -5,40112E-08 | -5,38326E-08 | 2,97851E-09 | -4,71076E-08 | -4,69922E-08 | 2,97848E-09 | -4,01105E-08 | -4,01516E-08 | 2,97882E-09 |
| 313 | D transversal | 7,4495E-08 | 2,01348E-07 | -1,27365E-08 | 7,35482E-08 | 1,83543E-07 | -1,27363E-08 | 7,19087E-08 | 1,65737E-07 | -1,2738E-08 |
| 313 | G Longitudinal | 1,26349E-08 | 5,58408E-08 | -4,3954E-09 | 1,26119E-08 | 4,97943E-08 | -4,39397E-09 | 1,24262E-08 | 4,37455E-08 | -4,39747E-09 |
| 313 | G Vertical | -1,3445E-07 | -1,45011E-09 | 6,01277E-10 | -1,35521E-07 | -8,43015E-10 | 5,36094E-10 | -1,35846E-07 | -1,44352E-10 | 6,67537E-10 |
| 313 | G transversal | -4,28717E-08 | -1,37825E-09 | 9,35808E-11 | -3,67772E-08 | -1,17165E-09 | 9,49241E-11 | -3,05523E-08 | -9,66782E-10 | 9,25868E-11 |
| 314 | D Longitudinal | 1,28194E-07 | -2,43579E-16 | -2,13054E-14 | 1,10679E-07 | 7,04741E-14 | 1,66432E-13 | 9,24798E-08 | -7,9299E-13 | -1,81789E-12 |
| 314 | D Vertical | 1,64127E-16 | -5,22906E-08 | 2,87615E-09 | 1,58179E-16 | -4,56649E-08 | 2,87614E-09 | 5,68354E-17 | -3,90391E-08 | 2,87617E-09 |
| 314 | D transversal | -3,53857E-16 | 2,03409E-07 | -1,29536E-08 | -3,42088E-16 | 1,85305E-07 | -1,29535E-08 | -1,42784E-16 | 1,672E-07 | -1,29536E-08 |
| 314 | G Longitudinal | -1,31919E-16 | 5,55568E-08 | -4,36077E-09 | -1,07949E-16 | 4,95543E-08 | -4,36076E-09 | 2,57544E-16 | 4,35518E-08 | -4,36096E-09 |
| 314 | G Vertical | -7,28136E-08 | 2,84941E-17 | 2,15444E-14 | -7,1899E-08 | -7,00252E-14 | -1,65118E-13 | -7,0305E-08 | 7,88056E-13 | 1,80659E-12 |
| 314 | G transversal | -4,94582E-08 | 1,69684E-17 | 4,22151E-15 | -4,29657E-08 | -1,22708E-14 | -2,90319E-14 | -3,63677E-08 | 1,44186E-13 | 3,30537E-13 |
| 315 | D Longitudinal | 1,61453E-07 | 6,28495E-17 | 1,59787E-10 | 1,47803E-07 | 9,26671E-15 | 1,59811E-10 | 1,34153E-07 | 1,55864E-13 | 1,60371E-10 |
| 315 | D Vertical | -4,81894E-08 | 5,37277E-17 | -1,75124E-09 | -4,21461E-08 | 7,67514E-15 | -1,75122E-09 | -3,61027E-08 | 1,28759E-13 | -1,75076E-09 |
| 315 | D transversal | 6,20496E-08 | 1,5842E-07 | -9,53905E-09 | 6,18231E-08 | 1,45262E-07 | -9,53889E-09 | 6,10163E-08 | 1,32104E-07 | -9,54057E-09 |
| 315 | G Longitudinal | 4,17472E-09 | 4,74859E-08 | -4,05284E-09 | 4,12859E-09 | 4,18958E-08 | -4,05281E-09 | 3,98166E-09 | 3,63055E-08 | -4,05327E-09 |
| 315 | G Vertical | -5,86307E-08 | 4,36057E-09 | -4,21663E-10 | -5,88495E-08 | 3,77905E-09 | -4,21484E-10 | -5,96238E-08 | 3,19794E-09 | -4,18925E-10 |
| 315 | G transversal | -4,94115E-08 | 4,19702E-17 | -1,91123E-11 | -4,42439E-08 | 5,64352E-15 | -1,90973E-11 | -3,90761E-08 | 9,48817E-14 | -1,87569E-11 |
| 316 | D Longitudinal | 9,69469E-08 | -3,96241E-09 | 2,47796E-10 | 8,35568E-08 | -3,42795E-09 | 2,47942E-10 | 6,95929E-08 | -2,89425E-09 | 2,46319E-10 |

APOYO 2

| DESPLAZAMIENTOS (metros) | | C1 | | | C2 | | | C3 | | |
|---|---|---|---|---|---|---|---|---|---|---|
| Nudo | Desplazamiento | L | T | V | L | T | V | L | T | V |
| 316 | D Vertical | 4,80299E-08 | -4,80459E-08 | 2,62874E-09 | 4,19543E-08 | -4,20132E-08 | 2,62877E-09 | 3,57884E-08 | -3,59806E-08 | 2,62846E-09 |
| 316 | D transversal | -6,6596E-08 | 1,59238E-07 | -9,48765E-09 | -6,5701E-08 | 1,4591E-07 | -9,4878E-09 | -6,42275E-08 | 1,32583E-07 | -9,48603E-09 |
| 316 | G Longitudinal | -1,24981E-08 | 4,91696E-08 | -3,73302E-09 | -1,24771E-08 | 4,40366E-08 | -3,7317E-09 | -1,23025E-08 | 3,89021E-08 | -3,73346E-09 |
| 316 | G Vertical | -1,31446E-07 | 1,73138E-09 | -6,2331E-10 | -1,32555E-07 | 1,10062E-09 | -5,59866E-10 | -1,32934E-07 | 3,80483E-10 | -6,88202E-10 |
| 316 | G transversal | -3,6723E-08 | 5,18018E-10 | -3,80156E-11 | -3,14838E-08 | 4,29688E-10 | -3,94114E-11 | -2,61213E-08 | 3,4347E-10 | -3,62405E-11 |
| 317 | D Longitudinal | 2,18113E-07 | -3,96241E-09 | 5,27093E-10 | 2,05172E-07 | -3,42806E-09 | 5,26952E-10 | 1,92804E-07 | -2,89279E-09 | 5,29157E-10 |
| 317 | D Vertical | -4,81343E-08 | 4,80459E-08 | -6,11866E-09 | -4,21457E-08 | 4,20132E-08 | -6,11863E-09 | -3,62474E-08 | 3,59804E-08 | -6,11892E-09 |
| 317 | D transversal | 5,66683E-08 | 1,59238E-07 | -9,8378E-09 | 5,71108E-08 | 1,45911E-07 | -9,83766E-09 | 5,69746E-08 | 1,32582E-07 | -9,83974E-09 |
| 317 | G Longitudinal | 1,33768E-08 | 4,91695E-08 | -3,71047E-09 | 1,32783E-08 | 4,40354E-08 | -3,7123E-09 | 1,30043E-08 | 3,88814E-08 | -3,78817E-09 |
| 317 | G Vertical | -1,43072E-07 | -1,73112E-09 | 3,25904E-10 | -1,41845E-07 | -1,04383E-09 | 4,13791E-10 | -1,38865E-07 | 5,75728E-10 | 3,97268E-09 |
| 317 | G transversal | -6,22382E-08 | 5,18024E-10 | -8,9301E-11 | -5,71141E-08 | 4,30932E-10 | -8,73829E-11 | -5,20914E-08 | 3,63559E-10 | -1,17677E-11 |
| 318 | D Longitudinal | 9,69469E-08 | 3,96241E-09 | -2,47831E-10 | 8,35568E-08 | 3,42807E-09 | -2,47665E-10 | 6,95929E-08 | 2,89294E-09 | -2,49326E-10 |
| 318 | D Vertical | -4,80299E-08 | -4,80459E-08 | 2,62875E-09 | -4,19543E-08 | -4,20132E-08 | 2,62872E-09 | -3,57884E-08 | -3,59804E-08 | 2,62904E-09 |
| 318 | D transversal | 6,6596E-08 | 1,59238E-07 | -9,48769E-09 | 6,5701E-08 | 1,45911E-07 | -9,48752E-09 | 6,42275E-08 | 1,32582E-07 | -9,48906E-09 |
| 318 | G Longitudinal | 1,2498E-08 | 4,91696E-08 | -3,73303E-09 | 1,2477E-08 | 4,40366E-08 | -3,73163E-09 | 1,23024E-08 | 3,89018E-08 | -3,73424E-09 |
| 318 | G Vertical | -1,31444E-07 | -1,73151E-09 | 6,23515E-10 | -1,32553E-07 | -1,10068E-09 | 5,5991E-10 | -1,32933E-07 | -3,80492E-10 | 6,88189E-10 |
| 318 | G transversal | -3,6723E-08 | -5,18015E-10 | 3,80207E-11 | -3,14839E-08 | -4,29717E-10 | 3,93396E-11 | -2,61213E-08 | -3,43127E-10 | 3,70275E-11 |
| 319 | D Longitudinal | 6,9001E-08 | -1,88294E-16 | -1,41173E-14 | 5,92904E-08 | 4,79363E-14 | 1,13174E-13 | 4,91038E-08 | -5,35008E-13 | -1,22648E-12 |
| 319 | D Vertical | -2,54143E-16 | -4,3106E-08 | 2,32375E-09 | -2,46549E-16 | -3,77661E-08 | 2,32377E-09 | -1,10822E-16 | -3,24262E-08 | 2,32374E-09 |
| 319 | D transversal | -3,6653E-16 | 1,28797E-07 | -7,27484E-09 | -3,53115E-16 | 1,18523E-07 | -7,27481E-09 | -1,26711E-16 | 1,08248E-07 | -7,27487E-09 |
| 319 | G Longitudinal | 2,98136E-16 | 4,30562E-08 | -3,1295E-09 | 2,6484E-16 | 3,87414E-08 | -3,12952E-09 | -2,55037E-16 | 3,44266E-08 | -3,12927E-09 |
| 319 | G Vertical | -5,64318E-08 | 1,46726E-17 | 1,40509E-14 | -5,56504E-08 | -4,66966E-14 | -1,10046E-13 | -5,44065E-08 | 5,21291E-13 | 1,19505E-12 |
| 319 | G transversal | -3,80007E-08 | 1,83115E-17 | 3,50882E-15 | -3,31307E-08 | -1,04968E-14 | -2,48222E-14 | -2,81678E-08 | 1,22089E-13 | 2,79883E-13 |
| 320 | D Longitudinal | 6,9071E-08 | -4,02649E-09 | 2,4039E-10 | 5,93604E-08 | -3,50203E-09 | 2,40483E-10 | 4,91784E-08 | -2,97816E-09 | 2,39218E-10 |
| 320 | D Vertical | 4,25295E-08 | -4,23749E-08 | 2,28178E-09 | 3,72334E-08 | -3,71327E-08 | 2,2818E-09 | 3,1852E-08 | -3,18906E-08 | 2,28151E-09 |
| 320 | D transversal | -5,89553E-08 | 1,24052E-07 | -6,87976E-09 | -5,81172E-08 | 1,14322E-07 | -6,8799E-09 | -5,6803E-08 | 1,04593E-07 | -6,87875E-09 |
| 320 | G Longitudinal | -1,25851E-08 | 4,25723E-08 | -3,09366E-09 | -1,25584E-08 | 3,83151E-08 | -3,09237E-09 | -1,2388E-08 | 3,40563E-08 | -3,09444E-09 |
| 320 | G Vertical | -1,28674E-07 | 2,04325E-09 | -6,51602E-10 | -1,29842E-07 | 1,38343E-09 | -5,89451E-10 | -1,30294E-07 | 6,36044E-10 | -7,15166E-10 |
| 320 | G transversal | -3,02506E-08 | -1,04642E-09 | 6,30004E-11 | -2,58823E-08 | -9,19084E-10 | 6,16312E-11 | -2,13998E-08 | -7,89685E-10 | 6,47167E-11 |
| 321 | D Longitudinal | 1,75095E-07 | -4,02649E-09 | 5,20021E-10 | 1,65747E-07 | -3,5021E-09 | 5,19941E-10 | 1,5687E-07 | -2,9766E-09 | 5,23123E-10 |
| 321 | D Vertical | -4,21898E-08 | 4,23749E-08 | -5,31946E-09 | -3,69741E-08 | 3,71327E-08 | -5,31943E-09 | -3,18436E-08 | 3,18903E-08 | -5,31968E-09 |
| 321 | D transversal | 4,89566E-08 | 1,24052E-07 | -7,22831E-09 | 4,94278E-08 | 1,14322E-07 | -7,22817E-09 | 4,94231E-08 | 1,04592E-07 | -7,2292E-09 |
| 321 | G Longitudinal | 1,31773E-08 | 4,25723E-08 | -3,07996E-09 | 1,30952E-08 | 3,8314E-08 | -3,08176E-09 | 1,2848E-08 | 3,4036E-08 | -3,15636E-09 |
| 321 | G Vertical | -1,41374E-07 | -2,04299E-09 | 3,39053E-10 | -1,40091E-07 | -1,32779E-09 | 4,25148E-10 | -1,37092E-07 | 3,00671E-10 | 3,91148E-09 |
| 321 | G transversal | -5,57459E-08 | -1,04642E-09 | 1,22386E-10 | -5,14823E-08 | -9,17863E-10 | 1,24269E-10 | -4,73112E-08 | -7,69916E-10 | 1,9862E-10 |
| 322 | D Longitudinal | 6,9071E-08 | 4,02649E-09 | -2,40418E-10 | 5,93604E-08 | 3,50213E-09 | -2,40259E-10 | 4,91784E-08 | 2,9771E-09 | -2,41648E-10 |
| 322 | D Vertical | -4,25295E-08 | -4,23749E-08 | 2,28178E-09 | -3,72334E-08 | -3,71327E-08 | 2,28176E-09 | -3,1852E-08 | -3,18903E-08 | 2,28205E-09 |
| 322 | D transversal | 5,89553E-08 | 1,24052E-07 | -6,87979E-09 | 5,81172E-08 | 1,14322E-07 | -6,87967E-09 | 5,6803E-08 | 1,04592E-07 | -6,88121E-09 |
| 322 | G Longitudinal | 1,2585E-08 | 4,25723E-08 | -3,09367E-09 | 1,25583E-08 | 3,83151E-08 | -3,0923E-09 | 1,2388E-08 | 3,4056E-08 | -3,09515E-09 |
| 322 | G Vertical | -1,28672E-07 | -2,04338E-09 | 6,51803E-10 | -1,2984E-07 | -1,38348E-09 | 5,89494E-10 | -1,30293E-07 | -6,36055E-10 | 7,1515E-10 |
| 322 | G transversal | -3,02506E-08 | 1,04642E-09 | -6,29962E-11 | -2,58823E-08 | 9,19057E-10 | -6,16971E-11 | -2,13998E-08 | 7,89998E-10 | -6,39985E-11 |
| 323 | D Longitudinal | 4,86736E-08 | -4,62859E-09 | 2,70888E-10 | 4,16338E-08 | -4,03406E-09 | 2,71E-10 | 3,4207E-08 | -3,44004E-09 | 2,699E-10 |
| 323 | D Vertical | 3,72754E-08 | -3,72376E-08 | 1,98841E-09 | 3,26693E-08 | -3,26735E-08 | 1,98844E-09 | 2,79838E-08 | -2,81095E-08 | 1,98817E-09 |
| 323 | D transversal | -5,21889E-08 | 9,72776E-08 | -4,9875E-09 | -5,14166E-08 | 9,01672E-08 | -4,98757E-09 | -5,0251E-08 | 8,30572E-08 | -4,98672E-09 |

APOYO 2

| DESPLAZAMIENTOS (metros) | | C1 | | | C2 | | | C3 | | |
|---|---|---|---|---|---|---|---|---|---|---|
| Nudo | Desplazamiento | L | T | V | L | T | V | L | T | V |
| 323 | G Longitudinal | -1,31699E-08 | 3,74995E-08 | -2,59478E-09 | -1,3076E-08 | 3,39024E-08 | -2,59351E-09 | -1,28468E-08 | 3,03037E-08 | -2,59607E-09 |
| 323 | G Vertical | -1,27014E-07 | 1,95857E-09 | -6,39559E-10 | -1,28166E-07 | 1,3186E-09 | -5,7836E-10 | -1,28612E-07 | 5,92388E-10 | -7,02191E-10 |
| 323 | G transversal | -2,48961E-08 | -7,26589E-10 | 4,97038E-11 | -2,12382E-08 | -6,31211E-10 | 4,83682E-11 | -1,74748E-08 | -5,33831E-10 | 5,13599E-11 |
| 324 | D Longitudinal | 1,41705E-07 | -4,62859E-09 | 5,91126E-10 | 1,34959E-07 | -4,03414E-09 | 5,9101E-10 | 1,286E-07 | -3,43934E-09 | 5,91516E-10 |
| 324 | D Vertical | -3,73412E-08 | 3,72376E-08 | -4,62958E-09 | -3,28085E-08 | 3,26735E-08 | -4,62956E-09 | -2,83553E-08 | 2,81093E-08 | -4,62979E-09 |
| 324 | D transversal | 4,25205E-08 | 9,72776E-08 | -5,32255E-09 | 4,29942E-08 | 9,01672E-08 | -5,3225E-09 | 4,30739E-08 | 8,30558E-08 | -5,32575E-09 |
| 324 | G Longitudinal | 1,25395E-08 | 3,74994E-08 | -2,62159E-09 | 1,25333E-08 | 3,39013E-08 | -2,62337E-09 | 1,23707E-08 | 3,02837E-08 | -2,69716E-09 |
| 324 | G Vertical | -1,39619E-07 | -1,95832E-09 | 3,21804E-10 | -1,38353E-07 | -1,26382E-09 | 4,0658E-10 | -1,35397E-07 | 3,29981E-10 | 3,83955E-09 |
| 324 | G transversal | -5,02772E-08 | -7,26583E-10 | 8,93223E-11 | -4,67146E-08 | -6,3002E-10 | 9,11595E-11 | -4,32363E-08 | -5,14494E-10 | 1,63837E-10 |
| 325 | D Longitudinal | 4,86736E-08 | 4,62859E-09 | -2,7091E-10 | 4,16338E-08 | 4,03413E-09 | -2,70818E-10 | 3,4207E-08 | 3,43919E-09 | -2,7187E-10 |
| 325 | D Vertical | -3,72754E-08 | -3,72376E-08 | 1,98842E-09 | -3,26693E-08 | -3,26735E-08 | 1,98839E-09 | -2,79838E-08 | -2,81092E-08 | 1,98866E-09 |
| 325 | D transversal | 5,21889E-08 | 9,72776E-08 | -4,98752E-09 | 5,14166E-08 | 9,01673E-08 | -4,98739E-09 | 5,0251E-08 | 8,30563E-08 | -4,98873E-09 |
| 325 | G Longitudinal | 1,31699E-08 | 3,74995E-08 | -2,59479E-09 | 1,3076E-08 | 3,39025E-08 | -2,59345E-09 | 1,28468E-08 | 3,03034E-08 | -2,59673E-09 |
| 325 | G Vertical | -1,27012E-07 | -1,95871E-09 | 6,39756E-10 | -1,28164E-07 | -1,31865E-09 | 5,78403E-10 | -1,28611E-07 | -5,92396E-10 | 7,02179E-10 |
| 325 | G transversal | -2,48962E-08 | 7,26592E-10 | -4,97003E-11 | -2,12382E-08 | 6,31187E-10 | -4,84287E-11 | -1,74748E-08 | 5,34117E-10 | -5,07049E-11 |
| 326 | D Longitudinal | 9,40292E-08 | 7,17185E-17 | 1,45184E-10 | 8,71773E-08 | 1,01022E-14 | 1,45211E-10 | 8,03256E-08 | 1,69928E-13 | 1,45821E-10 |
| 326 | D Vertical | -3,57731E-08 | -2,93227E-17 | -1,26892E-09 | -3,13969E-08 | -4,20765E-15 | -1,26893E-09 | -2,70208E-08 | -7,0535E-14 | -1,26918E-09 |
| 326 | D transversal | 4,65156E-08 | 9,13984E-08 | -4,67702E-09 | 4,63728E-08 | 8,49474E-08 | -4,67692E-09 | 4,58522E-08 | 7,84959E-08 | -4,67795E-09 |
| 326 | G Longitudinal | 3,80322E-09 | 3,50713E-08 | -2,86732E-09 | 3,7657E-09 | 3,11164E-08 | -2,86729E-09 | 3,64256E-09 | 2,71613E-08 | -2,86762E-09 |
| 326 | G Vertical | -4,26419E-08 | 3,96839E-09 | -3,6428E-10 | -4,27766E-08 | 3,46599E-09 | -3,64163E-10 | -4,32636E-08 | 2,96409E-09 | -3,61662E-10 |
| 326 | G transversal | -3,67952E-08 | -4,09445E-17 | 1,62556E-11 | -3,32913E-08 | -6,05946E-15 | 1,62395E-11 | -2,97874E-08 | -1,01891E-13 | 1,58739E-11 |
| 327 | D Longitudinal | 1,03137E-07 | -4,50247E-09 | 5,70619E-10 | 9,9138E-08 | -3,92958E-09 | 5,70563E-10 | 9,5427E-08 | -3,35613E-09 | 5,72082E-10 |
| 327 | D Vertical | -3,02587E-08 | 3,04464E-08 | -3,72526E-09 | -2,66015E-08 | 2,67767E-08 | -3,72524E-09 | -2,30135E-08 | 2,31069E-08 | -3,72545E-09 |
| 327 | D transversal | 3,44746E-08 | 6,71726E-08 | -3,26504E-09 | 3,48846E-08 | 6,28642E-08 | -3,26496E-09 | 3,50017E-08 | 5,85554E-08 | -3,26592E-09 |
| 327 | G Longitudinal | 1,26566E-08 | 3,11977E-08 | -2,03587E-09 | 1,26427E-08 | 2,84013E-08 | -2,03761E-09 | 1,24852E-08 | 2,55858E-08 | -2,11E-09 |
| 327 | G Vertical | -1,38383E-07 | -2,55485E-09 | 3,68951E-10 | -1,37048E-07 | -1,79547E-09 | 4,52324E-10 | -1,34052E-07 | -1,51679E-10 | 3,82849E-09 |
| 327 | G transversal | -4,36975E-08 | 4,40546E-11 | -1,36537E-11 | -4,09472E-08 | 3,6508E-11 | -1,18672E-11 | -3,827E-08 | 4,74516E-11 | 5,89672E-11 |
| 328 | D Longitudinal | 2,73052E-08 | 4,50247E-09 | -2,6012E-10 | 2,30928E-08 | 3,92959E-09 | -2,60032E-10 | 1,85927E-08 | 3,35632E-09 | -2,60837E-10 |
| 328 | D Vertical | -3,06507E-08 | -3,04464E-08 | 1,59584E-09 | -2,69307E-08 | -2,67767E-08 | 1,59582E-09 | -2,31415E-08 | -2,31069E-08 | 1,59605E-09 |
| 328 | D transversal | 4,27021E-08 | 6,71726E-08 | -2,98223E-09 | 4,20738E-08 | 6,28642E-08 | -2,98215E-09 | 4,11527E-08 | 5,85554E-08 | -2,98287E-09 |
| 328 | G Longitudinal | 1,2965E-08 | 3,11977E-08 | -2,01806E-09 | 1,28907E-08 | 2,84024E-08 | -2,01675E-09 | 1,26934E-08 | 2,56051E-08 | -2,01984E-09 |
| 328 | G Vertical | -1,24478E-07 | -2,55523E-09 | 6,87427E-10 | -1,25701E-07 | -1,8494E-09 | 6,2709E-10 | -1,26232E-07 | -1,05878E-09 | 7,48859E-10 |
| 328 | G transversal | -1,8547E-08 | -4,40467E-11 | -1,7458E-12 | -1,57136E-08 | -3,53716E-11 | -5,03866E-13 | -1,27869E-08 | -2,83362E-11 | -2,75809E-12 |
| 329 | D Longitudinal | 2,47385E-07 | -2,05026E-17 | -1,91834E-10 | 2,24424E-07 | -1,03762E-14 | -1,91862E-10 | 2,01464E-07 | -1,75587E-13 | -1,92492E-10 |
| 329 | D Vertical | 5,91004E-08 | -2,0003E-17 | -2,20678E-09 | 5,1477E-08 | -1,04134E-14 | -2,20681E-09 | 4,38538E-08 | -1,76275E-13 | -2,20744E-09 |
| 329 | D transversal | -7,75359E-08 | 2,44468E-07 | -1,62737E-08 | -7,72112E-08 | 2,22021E-07 | -1,62739E-08 | -7,60794E-08 | 1,99576E-07 | -1,62716E-08 |
| 329 | G Longitudinal | -4,34548E-09 | 5,98481E-08 | -5,31198E-09 | -4,29329E-09 | 5,25212E-08 | -5,31202E-09 | -4,13321E-09 | 4,51945E-08 | -5,31168E-09 |
| 329 | G Vertical | -7,56429E-08 | -5,26486E-09 | 5,39009E-10 | -7,59653E-08 | -4,52129E-09 | 5,39203E-10 | -7,70835E-08 | -3,78002E-09 | 5,32537E-10 |
| 329 | G transversal | -6,15745E-08 | 1,92521E-17 | 8,86337E-12 | -5,47294E-08 | 1,22625E-14 | 8,89614E-12 | -4,78846E-08 | 2,07847E-13 | 9,64205E-12 |
| 330 | D Longitudinal | 2,68083E-07 | 5,02293E-09 | -6,87198E-10 | 2,50708E-07 | 4,32251E-09 | -6,87397E-10 | 2,34021E-07 | 3,62293E-09 | -6,85808E-10 |
| 330 | D Vertical | 5,36375E-08 | 5,38326E-08 | -6,94014E-09 | 4,68264E-08 | 4,69922E-08 | -6,94017E-09 | 4,01088E-08 | 4,01519E-08 | -6,93982E-09 |
| 330 | D transversal | -6,48526E-08 | 2,01348E-07 | -1,30811E-08 | -6,52491E-08 | 1,83543E-07 | -1,30813E-08 | -6,49526E-08 | 1,65739E-07 | -1,30798E-08 |
| 330 | G Longitudinal | -1,34596E-08 | 5,58408E-08 | -4,37284E-09 | -1,3353E-08 | 4,9793E-08 | -4,3748E-09 | -1,30611E-08 | 4,3725E-08 | -4,45235E-09 |
| 330 | G Vertical | -1,45275E-07 | 1,44986E-09 | -3,14497E-10 | -1,44083E-07 | 7,85092E-10 | -4,04079E-10 | -1,41086E-07 | -8,34085E-10 | -4,04837E-09 |

APOYO 2

| DESPLAZAMIENTOS (metros) | | C1 | | | C2 | | | C3 | | |
|---|---|---|---|---|---|---|---|---|---|---|
| Nudo | Desplazamiento | L | T | V | L | T | V | L | T | V |
| 330 | G transversal | -6,85346E-08 | -1,37826E-09 | 2,05259E-10 | -6,25641E-08 | -1,17285E-09 | 2,03396E-10 | -5,67018E-08 | -9,87962E-10 | 1,2542E-10 |
| 331 | D Longitudinal | 2,65296E-07 | 2,42799E-16 | 2,13057E-14 | 2,48324E-07 | -7,04751E-14 | -1,66433E-13 | 2,32037E-07 | 7,92986E-13 | 1,81789E-12 |
| 331 | D Vertical | 1,58139E-16 | 5,22906E-08 | -6,73118E-09 | 2,18115E-16 | 4,56649E-08 | -6,7312E-09 | 1,08738E-15 | 3,9039E-08 | -6,73177E-09 |
| 331 | D transversal | 3,40839E-16 | 2,03409E-07 | -1,32979E-08 | 4,6864E-16 | 1,85305E-07 | -1,32979E-08 | 2,32423E-15 | 1,672E-07 | -1,32991E-08 |
| 331 | G Longitudinal | 1,23597E-16 | 5,55568E-08 | -4,34283E-09 | 1,90351E-16 | 4,95543E-08 | -4,34285E-09 | 1,16481E-15 | 4,35517E-08 | -4,34347E-09 |
| 331 | G Vertical | -6,33658E-08 | 4,63558E-16 | 2,137E-14 | -6,37407E-08 | -6,94522E-14 | -1,64339E-13 | -6,34332E-08 | 7,90276E-13 | 1,81166E-12 |
| 331 | G transversal | -5,78334E-08 | -5,06645E-18 | -4,22627E-15 | -5,14399E-08 | 1,22865E-14 | 2,90532E-14 | -4,51517E-08 | -1,44125E-13 | -3,30399E-13 |
| 332 | D Longitudinal | 1,61453E-07 | -1,95819E-17 | -1,59787E-10 | 1,47803E-07 | -9,20966E-15 | -1,59811E-10 | 1,34153E-07 | -1,55643E-13 | -1,6037E-10 |
| 332 | D Vertical | 4,81894E-08 | 1,45436E-17 | -1,75124E-09 | 4,21461E-08 | 7,62364E-15 | -1,75122E-09 | 3,61027E-08 | 1,28559E-13 | -1,75076E-09 |
| 332 | D transversal | -6,20496E-08 | 1,5842E-07 | -9,53902E-09 | -6,18231E-08 | 1,45262E-07 | -9,53917E-09 | -6,10163E-08 | 1,32106E-07 | -9,53754E-09 |
| 332 | G Longitudinal | -4,17472E-09 | 4,74859E-08 | -4,05283E-09 | -4,12859E-09 | 4,18958E-08 | -4,05286E-09 | -3,98165E-09 | 3,63058E-08 | -4,05265E-09 |
| 332 | G Vertical | -5,86307E-08 | -4,36057E-09 | 4,2163E-10 | -5,88495E-08 | -3,77894E-09 | 4,21754E-10 | -5,96238E-08 | -3,19922E-09 | 4,15993E-10 |
| 332 | G transversal | -4,94115E-08 | -8,18463E-18 | 1,91123E-11 | -4,42439E-08 | -5,59903E-15 | 1,90973E-11 | -3,90761E-08 | -9,47093E-14 | 1,87573E-11 |
| 333 | D Longitudinal | 2,18113E-07 | 3,96241E-09 | -5,27058E-10 | 2,05172E-07 | 3,42794E-09 | -5,27228E-10 | 1,92804E-07 | 2,8941E-09 | -5,2615E-10 |
| 333 | D Vertical | 4,81343E-08 | 4,80459E-08 | -6,11865E-09 | 4,21457E-08 | 4,20132E-08 | -6,11868E-09 | 3,62474E-08 | 3,59807E-08 | -6,11834E-09 |
| 333 | D transversal | -5,66683E-08 | 1,59238E-07 | -9,83777E-09 | -5,71108E-08 | 1,4591E-07 | -9,83794E-09 | -5,69746E-08 | 1,32583E-07 | -9,83671E-09 |
| 333 | G Longitudinal | -1,33768E-08 | 4,91696E-08 | -3,71046E-09 | -1,32782E-08 | 4,40354E-08 | -3,71236E-09 | -1,3004E-08 | 3,88817E-08 | -3,78731E-09 |
| 333 | G Vertical | -1,4307E-07 | 1,73127E-09 | -3,25815E-10 | -1,41842E-07 | 1,04416E-09 | -4,13229E-10 | -1,38852E-07 | -5,7426E-10 | -3,96932E-09 |
| 333 | G transversal | -6,22381E-08 | -5,1802E-10 | 8,92933E-11 | -5,7114E-08 | -4,30895E-10 | 8,74657E-11 | -5,20911E-08 | -3,63871E-10 | 1,10529E-11 |
| 334 | D Longitudinal | 1,76496E-07 | 1,871E-16 | 1,41178E-14 | 1,67151E-07 | -4,79379E-14 | -1,13176E-13 | 1,58283E-07 | 5,35002E-13 | 1,22647E-12 |
| 334 | D Vertical | -2,45333E-16 | 4,3106E-08 | -5,41913E-09 | -3,36477E-16 | 3,77661E-08 | -5,41911E-09 | -1,66277E-15 | 3,24264E-08 | -5,41824E-09 |
| 334 | D transversal | 3,5299E-16 | 1,28797E-07 | -7,62318E-09 | 4,86538E-16 | 1,18522E-07 | -7,62321E-09 | 2,42852E-15 | 1,08248E-07 | -7,62447E-09 |
| 334 | G Longitudinal | -2,83383E-16 | 4,30562E-08 | -3,12701E-09 | -4,13823E-16 | 3,87414E-08 | -3,12699E-09 | -2,32011E-15 | 3,44269E-08 | -3,12576E-09 |
| 334 | G Vertical | -4,71704E-08 | 3,58219E-16 | 1,39132E-14 | -4,75949E-08 | -4,62439E-14 | -1,09431E-13 | -4,75545E-08 | 5,23045E-13 | 1,19905E-12 |
| 334 | G transversal | -4,4932E-08 | -1,34123E-17 | -3,51077E-15 | -4,01458E-08 | 1,05032E-14 | 2,48309E-14 | -3,54527E-08 | -1,22064E-13 | -2,79826E-13 |
| 335 | D Longitudinal | 1,75095E-07 | 4,02649E-09 | -5,19993E-10 | 1,65747E-07 | 3,502E-09 | -5,20165E-10 | 1,5687E-07 | 2,97766E-09 | -5,20691E-10 |
| 335 | D Vertical | 4,21898E-08 | 4,23749E-08 | -5,31945E-09 | 3,69741E-08 | 3,71327E-08 | -5,31947E-09 | 3,18436E-08 | 3,18906E-08 | -5,31915E-09 |
| 335 | D transversal | -4,89566E-08 | 1,24052E-07 | -7,22829E-09 | -4,94278E-08 | 1,14322E-07 | -7,2284E-09 | -4,94231E-08 | 1,04593E-07 | -7,22674E-09 |
| 335 | G Longitudinal | -1,31773E-08 | 4,25723E-08 | -3,07995E-09 | -1,30951E-08 | 3,83139E-08 | -3,08181E-09 | -1,28477E-08 | 3,40363E-08 | -3,15557E-09 |
| 335 | G Vertical | -1,41372E-07 | 2,04314E-09 | -3,38966E-10 | -1,40089E-07 | 1,32811E-09 | -4,24597E-10 | -1,37079E-07 | -2,99235E-10 | -3,90819E-09 |
| 335 | G transversal | -5,57458E-08 | 1,04642E-09 | -1,22393E-10 | -5,14822E-08 | 9,17898E-10 | -1,24192E-10 | -4,73109E-08 | 7,69634E-10 | -1,99266E-10 |
| 336 | D Longitudinal | 1,41705E-07 | 4,62859E-09 | -5,91104E-10 | 1,34959E-07 | 4,03407E-09 | -5,91192E-10 | 1,286E-07 | 3,4402E-09 | -5,89546E-10 |
| 336 | D Vertical | 3,73412E-08 | 3,72376E-08 | -4,62958E-09 | 3,28085E-08 | 3,26735E-08 | -4,6296E-09 | 2,83553E-08 | 2,81095E-08 | -4,6293E-09 |
| 336 | D transversal | -4,25205E-08 | 9,72776E-08 | -5,32253E-09 | -4,29941E-08 | 9,01671E-08 | -5,32268E-09 | -4,30739E-08 | 8,30567E-08 | -5,32375E-09 |
| 336 | G Longitudinal | -1,25395E-08 | 3,74995E-08 | -2,62158E-09 | -1,25333E-08 | 3,39013E-08 | -2,62341E-09 | -1,23704E-08 | 3,0284E-08 | -2,69644E-09 |
| 336 | G Vertical | -1,39617E-07 | 1,95847E-09 | -3,21718E-10 | -1,38351E-07 | 1,26413E-09 | -4,06039E-10 | -1,35384E-07 | -3,28565E-10 | -3,83631E-09 |
| 336 | G transversal | -5,02772E-08 | 7,26586E-10 | -8,93283E-11 | -4,67145E-08 | 6,30052E-10 | -9,10884E-11 | -4,3236E-08 | 5,14238E-10 | -1,64422E-10 |
| 337 | D Longitudinal | 9,40292E-08 | -1,80994E-17 | -1,45184E-10 | 8,71773E-08 | -1,00315E-14 | -1,45211E-10 | 8,03256E-08 | -1,69654E-13 | -1,4582E-10 |
| 337 | D Vertical | 3,57731E-08 | -8,09741E-18 | -1,26892E-09 | 3,13969E-08 | -4,17973E-15 | -1,26893E-09 | 2,70208E-08 | -7,04265E-14 | -1,26918E-09 |
| 337 | D transversal | -4,65156E-08 | 9,13984E-08 | -4,67699E-09 | -4,63728E-08 | 8,49473E-08 | -4,67709E-09 | -4,58522E-08 | 7,84967E-08 | -4,67604E-09 |
| 337 | G Longitudinal | -3,80322E-09 | 3,50713E-08 | -2,86731E-09 | -3,7657E-09 | 3,11164E-08 | -2,86734E-09 | -3,64256E-09 | 2,71616E-08 | -2,86712E-09 |
| 337 | G Vertical | -4,26419E-08 | -3,96839E-09 | 3,64259E-10 | -4,27766E-08 | -3,46592E-09 | 3,6433E-10 | -4,32636E-08 | -2,96488E-09 | 3,59857E-10 |
| 337 | G transversal | -3,67952E-08 | 1,29565E-17 | -1,62556E-11 | -3,32913E-08 | 6,02258E-15 | -1,62395E-11 | -2,97875E-08 | 1,01748E-13 | -1,58742E-11 |
| 338 | D Longitudinal | 2,73052E-08 | -4,50247E-09 | 2,60104E-10 | 2,30928E-08 | -3,92953E-09 | 2,60166E-10 | 1,85927E-08 | -3,35695E-09 | 2,59403E-10 |

APOYO 2

| DESPLAZAMIENTOS (metros) | | C1 | | | C2 | | | C3 | | |
|---|---|---|---|---|---|---|---|---|---|---|
| Nudo | Desplazamiento | L | T | V | L | T | V | L | T | V |
| 338 | D Vertical | 3,06507E-08 | -3,04464E-08 | 1,59584E-09 | 2,69307E-08 | -2,67767E-08 | 1,59586E-09 | 2,31415E-08 | -2,3107E-08 | 1,59564E-09 |
| 338 | D transversal | -4,27021E-08 | 6,71726E-08 | -2,98221E-09 | -4,20738E-08 | 6,28641E-08 | -2,98228E-09 | -4,11527E-08 | 5,85561E-08 | -2,9814E-09 |
| 338 | G Longitudinal | -1,29651E-08 | 3,11977E-08 | -2,01805E-09 | -1,28908E-08 | 2,84024E-08 | -2,0168E-09 | -1,26934E-08 | 2,56054E-08 | -2,01927E-09 |
| 338 | G Vertical | -1,2448E-07 | 2,55509E-09 | -6,87233E-10 | -1,25703E-07 | 1,84934E-09 | -6,27048E-10 | -1,26233E-07 | 1,05877E-09 | -7,48873E-10 |
| 338 | G transversal | -1,8547E-08 | 4,40495E-11 | 1,74845E-12 | -1,57136E-08 | 3,53505E-11 | 4,50595E-13 | -1,27869E-08 | 2,85862E-11 | 3,33095E-12 |
| 339 | D Longitudinal | 1,03137E-07 | 4,50247E-09 | -5,70603E-10 | 9,9138E-08 | 3,92952E-09 | -5,70696E-10 | 9,5427E-08 | 3,35675E-09 | -5,70648E-10 |
| 339 | D Vertical | 3,02587E-08 | 3,04464E-08 | -3,72525E-09 | 2,66015E-08 | 2,67767E-08 | -3,72527E-09 | 2,30135E-08 | 2,3107E-08 | -3,72503E-09 |
| 339 | D transversal | -3,44746E-08 | 6,71726E-08 | -3,26502E-09 | -3,48846E-08 | 6,28641E-08 | -3,2651E-09 | -3,50017E-08 | 5,8556E-08 | -3,26446E-09 |
| 339 | G Longitudinal | -1,26566E-08 | 3,11977E-08 | -2,03586E-09 | -1,26427E-08 | 2,84013E-08 | -2,03766E-09 | -1,24849E-08 | 2,55861E-08 | -2,10935E-09 |
| 339 | G Vertical | -1,38381E-07 | 2,55499E-09 | -3,68867E-10 | -1,37046E-07 | 1,79578E-09 | -4,51791E-10 | -1,34039E-07 | 1,5307E-10 | -3,82531E-09 |
| 339 | G transversal | -4,36975E-08 | -4,40516E-11 | 1,36487E-11 | -4,09472E-08 | -3,64793E-11 | 1,19308E-11 | -3,82697E-08 | -4,76723E-11 | -5,94733E-11 |
| 340 | D Longitudinal | 1,03696E-07 | 1,27078E-16 | 8,10848E-15 | 9,98298E-08 | -2,84872E-14 | -6,72292E-14 | 9,62536E-08 | 3,14619E-13 | 7,2125E-13 |
| 340 | D Vertical | 1,65458E-16 | 3,10416E-08 | -3,80814E-09 | 2,2768E-16 | 2,72901E-08 | -3,80816E-09 | 1,13232E-15 | 2,35384E-08 | -3,80874E-09 |
| 340 | D transversal | 3,1749E-16 | 7,20959E-08 | -3,67551E-09 | 4,39835E-16 | 6,72481E-08 | -3,67554E-09 | 2,22047E-15 | 6,24E-08 | -3,6767E-09 |
| 340 | G Longitudinal | 3,21628E-16 | 3,15346E-08 | -2,06238E-09 | 4,61908E-16 | 2,87018E-08 | -2,06241E-09 | 2,50878E-15 | 2,58687E-08 | -2,06373E-09 |
| 340 | G Vertical | -3,21799E-08 | 3,2223E-16 | 8,137E-15 | -3,25885E-08 | -2,74019E-14 | -6,49546E-14 | -3,27113E-08 | 3,10523E-13 | 7,11849E-13 |
| 340 | G transversal | -3,35412E-08 | -1,33832E-17 | -2,73838E-15 | -3,03169E-08 | 8,50977E-15 | 2,01043E-14 | -2,71704E-08 | -9,75863E-14 | -2,23712E-13 |
| 341 | D Longitudinal | 2,6111E-08 | -1,29301E-16 | -8,1076E-15 | 2,20297E-08 | 2,84843E-14 | 6,72253E-14 | 1,76581E-08 | -3,1463E-13 | -7,21276E-13 |
| 341 | D Vertical | 1,71668E-16 | -3,10416E-08 | 1,63156E-09 | 1,6579E-16 | -2,72901E-08 | 1,63155E-09 | 6,48512E-17 | -2,35385E-08 | 1,63157E-09 |
| 341 | D transversal | -3,29985E-16 | 7,20959E-08 | -3,35376E-09 | -3,15767E-16 | 6,72481E-08 | -3,35374E-09 | -7,88658E-17 | 6,24003E-08 | -3,35381E-09 |
| 341 | G Longitudinal | -3,37136E-16 | 3,15346E-08 | -2,04517E-09 | -3,06858E-16 | 2,87018E-08 | -2,04515E-09 | 1,69334E-16 | 2,5869E-08 | -2,04537E-09 |
| 341 | G Vertical | -4,04875E-08 | -6,33329E-17 | 8,29159E-15 | -3,98678E-08 | -2,79099E-14 | -6,56449E-14 | -3,8965E-08 | 3,08556E-13 | 7,07362E-13 |
| 341 | G transversal | -2,59669E-08 | 2,40606E-17 | 2,7341E-15 | -2,26757E-08 | -8,49572E-15 | -2,00852E-14 | -1,93064E-08 | 9,76408E-14 | 2,23836E-13 |
| 342 | D Longitudinal | 7,44084E-08 | 4,68795E-09 | -5,80898E-10 | 7,22168E-08 | 4,10746E-09 | -5,8096E-10 | 7,02355E-08 | 3,52715E-09 | -5,80732E-10 |
| 342 | D Vertical | 2,481E-08 | 2,47532E-08 | -2,99886E-09 | 2,18749E-08 | 2,1797E-08 | -2,99888E-09 | 1,89993E-08 | 1,88409E-08 | -2,99868E-09 |
| 342 | D transversal | -2,68126E-08 | 4,58061E-08 | -1,93858E-09 | -2,72487E-08 | 4,33298E-08 | -1,93863E-09 | -2,7469E-08 | 4,08537E-08 | -1,93805E-09 |
| 342 | G Longitudinal | -1,37275E-08 | 2,52505E-08 | -1,4635E-09 | -1,35879E-08 | 2,31927E-08 | -1,46527E-09 | -1,33177E-08 | 2,11164E-08 | -1,53596E-09 |
| 342 | G Vertical | -1,37632E-07 | 2,86009E-09 | -3,90403E-10 | -1,3626E-07 | 2,06897E-09 | -4,7254E-10 | -1,33232E-07 | 4,02735E-10 | -3,81404E-09 |
| 342 | G transversal | -3,81029E-08 | 1,18875E-09 | -1,20571E-10 | -3,60353E-08 | 1,0654E-09 | -1,22277E-10 | -3,40288E-08 | 9,23477E-10 | -1,92975E-10 |
| 343 | D Longitudinal | 1,33017E-08 | -4,68795E-09 | 2,60768E-10 | 1,09571E-08 | -4,10747E-09 | 2,60816E-10 | 8,40208E-09 | -3,52724E-09 | 2,60263E-10 |
| 343 | D Vertical | 2,48009E-08 | -2,47532E-08 | 1,2876E-09 | 2,18128E-08 | -2,1797E-08 | 1,28762E-09 | 1,87653E-08 | -1,88409E-08 | 1,28743E-09 |
| 343 | D transversal | -3,52494E-08 | 4,58061E-08 | -1,65203E-09 | -3,46556E-08 | 4,33298E-08 | -1,65209E-09 | -3,3846E-08 | 4,08538E-08 | -1,6514E-09 |
| 343 | G Longitudinal | -1,1835E-08 | 2,52505E-08 | -1,51941E-09 | -1,18985E-08 | 2,31938E-08 | -1,51817E-09 | -1,18519E-08 | 2,11354E-08 | -1,52038E-09 |
| 343 | G Vertical | -1,23021E-07 | 2,8602E-09 | -7,12392E-10 | -1,24282E-07 | 2,12203E-09 | -6,52779E-10 | -1,24856E-07 | 1,29984E-09 | -7,73464E-10 |
| 343 | G transversal | -1,30337E-08 | -1,18875E-09 | 5,73734E-11 | -1,0894E-08 | -1,06652E-09 | 5,60912E-11 | -8,67279E-09 | -9,42384E-10 | 5,89081E-11 |
| 344 | D Longitudinal | 7,44084E-08 | -4,68795E-09 | 5,80909E-10 | 7,22168E-08 | -4,1075E-09 | 5,80864E-10 | 7,02355E-08 | -3,5267E-09 | 5,8176E-10 |
| 344 | D Vertical | -2,481E-08 | 2,47532E-08 | -2,99887E-09 | -2,18749E-08 | 2,1797E-08 | -2,99885E-09 | -1,89993E-08 | 1,88408E-08 | -2,99904E-09 |
| 344 | D transversal | 2,68126E-08 | 4,58061E-08 | -1,93859E-09 | 2,72487E-08 | 4,33298E-08 | -1,93854E-09 | 2,7469E-08 | 4,08533E-08 | -1,93911E-09 |
| 344 | G Longitudinal | 1,37276E-08 | 2,52505E-08 | -1,46351E-09 | 1,3588E-08 | 2,31927E-08 | -1,46524E-09 | 1,3318E-08 | 2,11161E-08 | -1,53653E-09 |
| 344 | G Vertical | -1,37634E-07 | -2,85995E-09 | 3,90487E-10 | -1,36263E-07 | -2,06866E-09 | 4,73068E-10 | -1,33244E-07 | -4,01357E-10 | 3,81719E-09 |
| 344 | G transversal | -3,8103E-08 | -1,18875E-09 | 1,20567E-10 | -3,60353E-08 | -1,06537E-09 | 1,22334E-10 | -3,40291E-08 | -9,23665E-10 | 1,92542E-10 |
| 345 | D Longitudinal | 1,33017E-08 | 4,68795E-09 | -2,6078E-10 | 1,09571E-08 | 4,10751E-09 | -2,6072E-10 | 8,40208E-09 | 3,52679E-09 | -2,61291E-10 |
| 345 | D Vertical | -2,48009E-08 | -2,47532E-08 | 1,28761E-09 | -2,18128E-08 | -2,1797E-08 | 1,28759E-09 | -1,87653E-08 | -1,88408E-08 | 1,28779E-09 |
| 345 | D transversal | 3,52494E-08 | 4,58061E-08 | -1,65205E-09 | 3,46556E-08 | 4,33298E-08 | -1,65199E-09 | 3,3846E-08 | 4,08533E-08 | -1,65246E-09 |

APOYO 2

| DESPLAZAMIENTOS (metros) | | C1 | | | C2 | | | C3 | | |
|---|---|---|---|---|---|---|---|---|---|---|
| Nudo | Desplazamiento | L | T | V | L | T | V | L | T | V |
| 345 | G Longitudinal | 1,1835E-08 | 2,52505E-08 | -1,51942E-09 | 1,18984E-08 | 2,31938E-08 | -1,51813E-09 | 1,18519E-08 | 2,11352E-08 | -1,52087E-09 |
| 345 | G Vertical | -1,23019E-07 | -2,86032E-09 | 7,12585E-10 | -1,2428E-07 | -2,12208E-09 | 6,5282E-10 | -1,24855E-07 | -1,29985E-09 | 7,73453E-10 |
| 345 | G transversal | -1,30337E-08 | 1,18876E-09 | -5,73717E-11 | -1,0894E-08 | 1,0665E-09 | -5,61379E-11 | -8,67281E-09 | 9,42601E-10 | -5,84093E-11 |
| 346 | D Longitudinal | 4,61315E-08 | 2,11326E-17 | 1,70587E-10 | 4,35955E-08 | 3,09422E-15 | 1,70595E-10 | 4,10595E-08 | 5,20858E-14 | 1,70782E-10 |
| 346 | D Vertical | -2,52332E-08 | 9,95365E-18 | -8,70299E-10 | -2,22259E-08 | 1,40856E-15 | -8,70295E-10 | -1,92185E-08 | 2,35952E-14 | -8,7021E-10 |
| 346 | D transversal | 3,1261E-08 | 4,41707E-08 | -1,63415E-09 | 3,11836E-08 | 4,19167E-08 | -1,6341E-09 | 3,08933E-08 | 3,96624E-08 | -1,63468E-09 |
| 346 | G Longitudinal | 3,47942E-09 | 2,33846E-08 | -1,8043E-09 | 3,45186E-09 | 2,08959E-08 | -1,80429E-09 | 3,35891E-09 | 1,84071E-08 | -1,80457E-09 |
| 346 | G Vertical | -2,79168E-08 | 4,61645E-09 | -4,04386E-10 | -2,79883E-08 | 4,05871E-09 | -4,04313E-10 | -2,82534E-08 | 3,50167E-09 | -4,014E-10 |
| 346 | G transversal | -2,53962E-08 | -1,58188E-17 | 3,0695E-11 | -2,33197E-08 | -1,75883E-15 | 3,06904E-11 | -2,12432E-08 | -2,95634E-14 | 3,05844E-11 |
| 347 | D Longitudinal | 3,50227E-09 | -5,75419E-09 | 3,00867E-10 | 2,5079E-09 | -5,07293E-09 | 3,009E-10 | 1,37103E-09 | -4,39185E-09 | 3,00529E-10 |
| 347 | D Vertical | 1,91338E-08 | -1,89214E-08 | 9,69179E-10 | 1,68672E-08 | -1,66953E-08 | 9,69194E-10 | 1,45529E-08 | -1,44692E-08 | 9,69047E-10 |
| 347 | D transversal | -2,83304E-08 | 2,89202E-08 | -7,01929E-10 | -2,77024E-08 | 2,77274E-08 | -7,01966E-10 | -2,69257E-08 | 2,65348E-08 | -7,01549E-10 |
| 347 | G Longitudinal | -1,15043E-08 | 1,93241E-08 | -1,0109E-09 | -1,16127E-08 | 1,79828E-08 | -1,00966E-09 | -1,16253E-08 | 1,66399E-08 | -1,01188E-09 |
| 347 | G Vertical | -1,21771E-07 | 3,16627E-09 | -7,38429E-10 | -1,23076E-07 | 2,39524E-09 | -6,79237E-10 | -1,23699E-07 | 1,54078E-09 | -7,99084E-10 |
| 347 | G transversal | -7,31774E-09 | -1,67195E-09 | 7,8535E-11 | -5,87344E-09 | -1,50006E-09 | 7,72574E-11 | -4,36114E-09 | -1,32629E-09 | 8,00289E-11 |
| 348 | D Longitudinal | 4,98458E-08 | -5,75419E-09 | 6,86937E-10 | 4,89526E-08 | -5,07296E-09 | 6,86904E-10 | 4,82019E-08 | -4,39152E-09 | 6,87401E-10 |
| 348 | D Vertical | -1,87517E-08 | 1,89214E-08 | -2,25869E-09 | -1,65271E-08 | 1,66953E-08 | -2,25867E-09 | -1,43502E-08 | 1,44691E-08 | -2,25882E-09 |
| 348 | D transversal | 1,86337E-08 | 2,89202E-08 | -1,02759E-09 | 1,91552E-08 | 2,77274E-08 | -1,02755E-09 | 1,95278E-08 | 2,65345E-08 | -1,02795E-09 |
| 348 | G Longitudinal | 1,40278E-08 | 1,93241E-08 | -9,3461E-10 | 1,3856E-08 | 1,79817E-08 | -9,36329E-10 | 1,35683E-08 | 1,66208E-08 | -1,00697E-09 |
| 348 | G Vertical | -1,37193E-07 | -3,16603E-09 | 4,11869E-10 | -1,35778E-07 | -2,34226E-09 | 4,93869E-10 | -1,32728E-07 | -6,48631E-10 | 3,81444E-09 |
| 348 | G transversal | -3,24167E-08 | -1,67195E-09 | 1,71409E-10 | -3,10323E-08 | -1,49892E-09 | 1,7317E-10 | -2,96955E-08 | -1,30754E-09 | 2,43397E-10 |
| 349 | D Longitudinal | 3,50227E-09 | 5,75419E-09 | -3,00874E-10 | 2,5079E-09 | 5,07296E-09 | -3,00836E-10 | 1,37103E-09 | 4,39155E-09 | -3,01209E-10 |
| 349 | D Vertical | -1,91338E-08 | -1,89214E-08 | 9,69183E-10 | -1,68672E-08 | -1,66953E-08 | 9,69169E-10 | -1,45529E-08 | -1,44691E-08 | 9,69328E-10 |
| 349 | D transversal | 2,83304E-08 | 2,89202E-08 | -7,01937E-10 | 2,77024E-08 | 2,77274E-08 | -7,01898E-10 | 2,69257E-08 | 2,65345E-08 | -7,02265E-10 |
| 349 | G Longitudinal | 1,15043E-08 | 1,93241E-08 | -1,01091E-09 | 1,16126E-08 | 1,79828E-08 | -1,00962E-09 | 1,16253E-08 | 1,66397E-08 | -1,01229E-09 |
| 349 | G Vertical | -1,21769E-07 | -3,1664E-09 | 7,38621E-10 | -1,23074E-07 | -2,39529E-09 | 6,79277E-10 | -1,23699E-07 | -1,54079E-09 | 7,99071E-10 |
| 349 | G transversal | -7,31778E-09 | 1,67195E-09 | -7,85344E-11 | -5,87348E-09 | 1,50004E-09 | -7,7297E-11 | -4,36116E-09 | 1,32647E-09 | -7,96115E-11 |
| 350 | D Longitudinal | 9,64284E-10 | -6,7188E-17 | -3,45652E-15 | 2,79378E-10 | 1,27826E-14 | 3,01494E-14 | -5,40704E-10 | -1,39025E-13 | -3,1871E-13 |
| 350 | D Vertical | -9,13529E-17 | -1,94104E-08 | 9,83596E-10 | -8,92039E-17 | -1,71424E-08 | 9,83601E-10 | -4,9007E-17 | -1,48744E-08 | 9,83596E-10 |
| 350 | D transversal | -6,0481E-17 | 3,04444E-08 | -8,69295E-10 | -6,41006E-17 | 2,9039E-08 | -8,69291E-10 | -1,1326E-16 | 2,76335E-08 | -8,69248E-10 |
| 350 | G Longitudinal | 5,63603E-18 | 1,90725E-08 | -9,71392E-10 | -3,36592E-18 | 1,77669E-08 | -9,71392E-10 | -1,37539E-16 | 1,64613E-08 | -9,71311E-10 |
| 350 | G Vertical | -2,50801E-08 | -8,6352E-17 | 3,872E-15 | -2,45414E-08 | -1,3191E-14 | -3,09325E-14 | -2,3865E-08 | 1,43958E-13 | 3,30028E-13 |
| 350 | G transversal | -1,42112E-08 | 1,97253E-17 | 1,76852E-15 | -1,24149E-08 | -5,6922E-15 | -1,34514E-14 | -1,05647E-08 | 6,46738E-14 | 1,48262E-13 |
| 351 | D Longitudinal | 1,61241E-08 | 2,406E-17 | 1,60292E-10 | 1,56915E-08 | 3,45015E-15 | 1,60302E-10 | 1,52588E-08 | 5,80225E-14 | 1,6051E-10 |
| 351 | D Vertical | -1,18769E-08 | 8,92963E-18 | -4,00391E-10 | -1,0485E-08 | 1,26312E-15 | -4,00388E-10 | -9,09314E-09 | 2,12636E-14 | -4,00312E-10 |
| 351 | D transversal | 1,57759E-08 | 1,33198E-08 | -6,24919E-11 | 1,57471E-08 | 1,32337E-08 | -6,24712E-11 | 1,56347E-08 | 1,31474E-08 | -6,26376E-11 |
| 351 | G Longitudinal | 3,47316E-09 | 1,21766E-08 | -8,11323E-10 | 3,4567E-09 | 1,10575E-08 | -8,11312E-10 | 3,39888E-09 | 9,93838E-09 | -8,11525E-10 |
| 351 | G Vertical | -1,38566E-08 | 4,17126E-09 | -3,4741E-10 | -1,38846E-08 | 3,69209E-09 | -3,47366E-10 | -1,39901E-08 | 3,21382E-09 | -3,43978E-10 |
| 351 | G transversal | -1,34058E-08 | 3,77345E-17 | -3,93602E-11 | -1,2761E-08 | 4,82534E-15 | -3,93474E-11 | -1,2116E-08 | 8,11105E-14 | -3,90564E-11 |
| 352 | D Longitudinal | -2,11782E-09 | -6,01004E-09 | 3,01545E-10 | -2,24523E-09 | -5,31937E-09 | 3,01566E-10 | -2,45275E-09 | -4,62879E-09 | 3,01359E-10 |
| 352 | D Vertical | 1,23167E-08 | -1,22196E-08 | 6,22888E-10 | 1,08655E-08 | -1,07933E-08 | 6,22898E-10 | 9,38173E-09 | -9,36712E-09 | 6,22798E-10 |
| 352 | D transversal | -2,03213E-08 | 1,5149E-08 | -9,02176E-11 | -1,96839E-08 | 1,47844E-08 | -9,02314E-11 | -1,89599E-08 | 1,44199E-08 | -9,00379E-11 |
| 352 | G Longitudinal | -1,28078E-08 | 1,35101E-08 | -4,69833E-10 | -1,27744E-08 | 1,28545E-08 | -4,68591E-10 | -1,26601E-08 | 1,21972E-08 | -4,70958E-10 |
| 352 | G Vertical | -1,20693E-07 | 3,50821E-09 | -7,67184E-10 | -1,22045E-07 | 2,7005E-09 | -7,08303E-10 | -1,22719E-07 | 1,8098E-09 | -8,27522E-10 |

APOYO 2

| DESPLAZAMIENTOS (metros) | | C1 | | | C2 | | | C3 | | |
|---|---|---|---|---|---|---|---|---|---|---|
| Nudo | Desplazamiento | L | T | V | L | T | V | L | T | V |
| 352 | G transversal | -4,68432E-10 | 1,21132E-09 | -5,67542E-11 | 1,65027E-10 | 1,06638E-09 | -5,80372E-11 | 8,48628E-10 | 9,2331E-10 | -5,52997E-11 |
| 353 | D Longitudinal | 2,7774E-08 | -6,01004E-09 | 6,99921E-10 | 2,77016E-08 | -5,31938E-09 | 6,99899E-10 | 2,77094E-08 | -4,62865E-09 | 7,00015E-10 |
| 353 | D Vertical | -1,23273E-08 | 1,22196E-08 | -1,44517E-09 | -1,09045E-08 | 1,07933E-08 | -1,44516E-09 | -9,51429E-09 | 9,36704E-09 | -1,44526E-09 |
| 353 | D transversal | 9,84998E-09 | 1,5149E-08 | -4,38459E-10 | 1,04267E-08 | 1,47844E-08 | -4,38449E-10 | 1,09166E-08 | 1,44196E-08 | -4,39124E-10 |
| 353 | G Longitudinal | 1,26899E-08 | 1,35101E-08 | -4,81449E-10 | 1,26729E-08 | 1,28534E-08 | -4,83177E-10 | 1,25549E-08 | 1,21781E-08 | -5,53989E-10 |
| 353 | G Vertical | -1,36965E-07 | -3,50797E-09 | 4,36127E-10 | -1,35504E-07 | -2,64779E-09 | 5,17696E-10 | -1,32417E-07 | -9,22336E-10 | 3,82082E-09 |
| 353 | G transversal | -2,56328E-08 | 1,21132E-09 | -1,52704E-10 | -2,50436E-08 | 1,06753E-09 | -1,50933E-10 | -2,44841E-08 | 9,42262E-10 | -8,00525E-11 |
| 354 | D Longitudinal | -2,11782E-09 | 6,01004E-09 | -3,01549E-10 | -2,24523E-09 | 5,31938E-09 | -3,01531E-10 | -2,45275E-09 | 4,62863E-09 | -3,01729E-10 |
| 354 | D Vertical | -1,23167E-08 | -1,22196E-08 | 6,2289E-10 | -1,08655E-08 | -1,07933E-08 | 6,22881E-10 | -9,38173E-09 | -9,36703E-09 | 6,22987E-10 |
| 354 | D transversal | 2,03213E-08 | 1,5149E-08 | -9,0222E-11 | 1,96839E-08 | 1,47844E-08 | -9,01928E-11 | 1,89599E-08 | 1,44197E-08 | -9,04453E-11 |
| 354 | G Longitudinal | 1,28078E-08 | 1,35101E-08 | -4,69841E-10 | 1,27744E-08 | 1,28545E-08 | -4,68562E-10 | 1,26601E-08 | 1,21971E-08 | -4,7128E-10 |
| 354 | G Vertical | -1,20691E-07 | -3,50834E-09 | 7,67375E-10 | -1,22043E-07 | -2,70055E-09 | 7,08343E-10 | -1,22718E-07 | -1,80981E-09 | 8,2751E-10 |
| 354 | G transversal | -4,68474E-10 | -1,21131E-09 | 5,67536E-11 | 1,64987E-10 | -1,06639E-09 | 5,80069E-11 | 8,4861E-10 | -9,23173E-10 | 5,56132E-11 |
| 355 | D Longitudinal | -2,46593E-09 | -3,66657E-09 | 1,81532E-10 | -2,36455E-09 | -3,24941E-09 | 1,81529E-10 | -2,30007E-09 | -2,83228E-09 | 1,81461E-10 |
| 355 | D Vertical | 6,42019E-09 | -6,25212E-09 | 3,10415E-10 | 5,68436E-09 | -5,53859E-09 | 3,1042E-10 | 4,93119E-09 | -4,82508E-09 | 3,10367E-10 |
| 355 | D transversal | -1,14433E-08 | 6,5003E-09 | 9,05325E-11 | -1,09877E-08 | 6,44967E-09 | 9,05194E-11 | -1,04916E-08 | 6,39909E-09 | 9,06212E-11 |
| 355 | G Longitudinal | -1,59434E-08 | 9,52909E-09 | -3,38314E-11 | -1,55588E-08 | 9,33128E-09 | -3,25635E-11 | -1,51038E-08 | 9,13173E-09 | -3,50296E-11 |
| 355 | G Vertical | -1,19911E-07 | 3,82571E-09 | -7,95311E-10 | -1,21315E-07 | 2,98342E-09 | -7,36572E-10 | -1,22042E-07 | 2,05833E-09 | -8,55507E-10 |
| 355 | G transversal | 4,65409E-09 | 4,03301E-09 | -1,88249E-10 | 4,69181E-09 | 3,57991E-09 | -1,89539E-10 | 4,76573E-09 | 3,12867E-09 | -1,86825E-10 |
| 356 | D Longitudinal | -5,31389E-09 | -1,82707E-17 | -5,98853E-16 | -4,89148E-09 | 2,53777E-15 | 5,97746E-15 | -4,49823E-09 | -2,6571E-14 | -6,09134E-14 |
| 356 | D Vertical | 1,72193E-17 | -1,5652E-09 | 8,35975E-11 | 1,63916E-17 | -1,37396E-09 | 8,35965E-11 | 2,71257E-18 | -1,18272E-09 | 8,36011E-11 |
| 356 | D transversal | -5,80495E-17 | 7,09903E-09 | -1,70739E-11 | -5,55164E-17 | 6,9802E-09 | -1,70704E-11 | -1,3228E-17 | 6,86137E-09 | -1,70838E-11 |
| 356 | G Longitudinal | -1,97374E-16 | 9,81729E-09 | -5,24777E-11 | -1,90139E-16 | 9,59444E-09 | -5,24657E-11 | -6,63558E-17 | 9,37156E-09 | -5,24989E-11 |
| 356 | G Vertical | -9,20432E-09 | -1,08161E-16 | 1,1718E-15 | -8,92731E-09 | -3,69335E-15 | -8,5494E-15 | -8,61033E-09 | 3,95621E-14 | 9,07023E-14 |
| 356 | G transversal | -3,38969E-09 | 1,32469E-17 | 7,47864E-16 | -2,91013E-09 | -2,58106E-15 | -6,09619E-15 | -2,40473E-09 | 2,87166E-14 | 6,58314E-14 |
| 357 | D Longitudinal | 1,26314E-08 | -3,66657E-09 | 4,23347E-10 | 1,27574E-08 | -3,24941E-09 | 4,23355E-10 | 1,29206E-08 | -2,83202E-09 | 4,24125E-10 |
| 357 | D Vertical | -6,06469E-09 | 6,25212E-09 | -7,24209E-10 | -5,34374E-09 | 5,53859E-09 | -7,24204E-10 | -4,64011E-09 | 4,82504E-09 | -7,24244E-10 |
| 357 | D transversal | 3,75011E-09 | 6,5003E-09 | -1,63939E-10 | 4,17774E-09 | 6,44968E-09 | -1,63924E-10 | 4,56482E-09 | 6,39905E-09 | -1,63864E-10 |
| 357 | G Longitudinal | 9,48674E-09 | 9,52909E-09 | -2,53684E-10 | 9,83033E-09 | 9,33015E-09 | -2,55446E-10 | 1,00829E-08 | 9,1123E-09 | -3,27502E-10 |
| 357 | G Vertical | -1,37114E-07 | -3,82547E-09 | 4,58071E-10 | -1,35602E-07 | -2,93083E-09 | 5,39442E-10 | -1,32466E-07 | -1,17301E-09 | 3,83458E-09 |
| 357 | G transversal | -2,05966E-08 | 4,03302E-09 | -4,68046E-10 | -2,05911E-08 | 3,58106E-09 | -4,66264E-10 | -2,06013E-08 | 3,14782E-09 | -3,94733E-10 |
| 358 | D Longitudinal | -2,46593E-09 | 3,66657E-09 | -1,81534E-10 | -2,36455E-09 | 3,24942E-09 | -1,81513E-10 | -2,30007E-09 | 2,83221E-09 | -1,81626E-10 |
| 358 | D Vertical | -6,42019E-09 | -6,25212E-09 | 3,10416E-10 | -5,68436E-09 | -5,53859E-09 | 3,10411E-10 | -4,93119E-09 | -4,82503E-09 | 3,10467E-10 |
| 358 | D transversal | 1,14433E-08 | 6,5003E-09 | 9,05305E-11 | 1,09877E-08 | 6,44968E-09 | 9,05373E-11 | 1,04916E-08 | 6,39901E-09 | 9,04335E-11 |
| 358 | G Longitudinal | 1,59433E-08 | 9,5291E-09 | -3,38383E-11 | 1,55587E-08 | 9,3313E-09 | -3,25397E-11 | 1,51038E-08 | 9,13162E-09 | -3,52892E-11 |
| 358 | G Vertical | -1,19909E-07 | -3,82584E-09 | 7,95501E-10 | -1,21313E-07 | -2,98347E-09 | 7,36612E-10 | -1,22041E-07 | -2,05834E-09 | 8,55494E-10 |
| 358 | G transversal | 4,65405E-09 | -4,03301E-09 | 1,88247E-10 | 4,69177E-09 | -3,57992E-09 | 1,89516E-10 | 4,76571E-09 | -3,12856E-09 | 1,87058E-10 |
| 359 | D Longitudinal | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 359 | D Vertical | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 359 | D transversal | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 359 | G Longitudinal | -1,80004E-08 | 7,74797E-09 | 1,80259E-10 | -1,7384E-08 | 7,75133E-09 | 1,81543E-10 | -1,67021E-08 | 7,75293E-09 | 1,79037E-10 |
| 359 | G Vertical | -1,19662E-07 | 3,87949E-09 | -8,00227E-10 | -1,21075E-07 | 3,03169E-09 | -7,41558E-10 | -1,21813E-07 | 2,10119E-09 | -8,60352E-10 |
| 359 | G transversal | 6,72666E-09 | 4,71999E-09 | -2,19638E-10 | 6,52505E-09 | 4,19302E-09 | -2,20931E-10 | 6,35406E-09 | 3,66791E-09 | -2,18222E-10 |
| 360 | D Longitudinal | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |

APOYO 2

| DESPLAZAMIENTOS (metros) | | C1 | | | C2 | | | C3 | | |
|---|---|---|---|---|---|---|---|---|---|---|
| Nudo | Desplazamiento | L | T | V | L | T | V | L | T | V |
| 360 | D Vertical | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 360 | D transversal | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 360 | G Longitudinal | 7,36903E-09 | 7,74796E-09 | -1,76079E-10 | 7,94871E-09 | 7,75018E-09 | -1,77863E-10 | 8,44203E-09 | 7,73329E-09 | -2,50724E-10 |
| 360 | G Vertical | -1,37041E-07 | -3,87925E-09 | 4,61108E-10 | -1,35519E-07 | -2,97917E-09 | 5,42383E-10 | -1,32376E-07 | -1,21692E-09 | 3,83362E-09 |
| 360 | G transversal | -1,85786E-08 | 4,72E-09 | -5,43768E-10 | -1,88077E-08 | 4,19417E-09 | -5,41982E-10 | -1,90468E-08 | 3,68713E-09 | -4,70207E-10 |
| 361 | D Longitudinal | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 361 | D Vertical | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 361 | D transversal | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 361 | G Longitudinal | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 361 | G Vertical | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 361 | G transversal | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 362 | D Longitudinal | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 362 | D Vertical | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 362 | D transversal | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 362 | G Longitudinal | 1,80004E-08 | 7,74797E-09 | 1,80252E-10 | 1,73839E-08 | 7,75134E-09 | 1,81564E-10 | 1,67021E-08 | 7,75283E-09 | 1,78806E-10 |
| 362 | G Vertical | -1,1966E-07 | -3,87962E-09 | 8,00417E-10 | -1,21073E-07 | -3,03174E-09 | 7,41598E-10 | -1,21813E-07 | -2,10119E-09 | 8,60339E-10 |
| 362 | G transversal | 6,72662E-09 | -4,71999E-09 | 2,19636E-10 | 6,52501E-09 | -4,19303E-09 | 2,2091E-10 | 6,35404E-09 | -3,66782E-09 | 2,18423E-10 |
| 363 | D Longitudinal | 4,61315E-08 | -6,38786E-18 | -1,70587E-10 | 4,35955E-08 | -3,07478E-15 | -1,70595E-10 | 4,10595E-08 | -5,20105E-14 | -1,70782E-10 |
| 363 | D Vertical | 2,52332E-08 | 2,56593E-18 | -8,70299E-10 | 2,22259E-08 | 1,39885E-15 | -8,70295E-10 | 1,92185E-08 | 2,35575E-14 | -8,7021E-10 |
| 363 | D transversal | -3,1261E-08 | 4,41707E-08 | -1,63414E-09 | -3,11836E-08 | 4,19167E-08 | -1,6342E-09 | -3,08933E-08 | 3,96629E-08 | -1,63364E-09 |
| 363 | G Longitudinal | -3,47942E-09 | 2,33846E-08 | -1,8043E-09 | -3,45186E-09 | 2,08959E-08 | -1,80432E-09 | -3,35891E-09 | 1,84072E-08 | -1,8042E-09 |
| 363 | G Vertical | -2,79168E-08 | -4,61645E-09 | 4,04375E-10 | -2,79883E-08 | -4,05867E-09 | 4,04403E-10 | -2,82534E-08 | -3,50209E-09 | 4,00441E-10 |
| 363 | G transversal | -2,53962E-08 | -2,21536E-19 | -3,0695E-11 | -2,33197E-08 | 1,7377E-15 | -3,06904E-11 | -2,12432E-08 | 2,94815E-14 | -3,05845E-11 |
| 364 | D Longitudinal | 4,98458E-08 | 5,75419E-09 | -6,86929E-10 | 4,89526E-08 | 5,07293E-09 | -6,86968E-10 | 4,82019E-08 | 4,39181E-09 | -6,86721E-10 |
| 364 | D Vertical | 1,87517E-08 | 1,89214E-08 | -2,25868E-09 | 1,65271E-08 | 1,66953E-08 | -2,2587E-09 | 1,43502E-08 | 1,44692E-08 | -2,25854E-09 |
| 364 | D transversal | -1,86337E-08 | 2,89202E-08 | -1,02758E-09 | -1,91552E-08 | 2,77274E-08 | -1,02762E-09 | -1,95278E-08 | 2,65348E-08 | -1,02723E-09 |
| 364 | G Longitudinal | -1,40277E-08 | 1,93241E-08 | -9,34603E-10 | -1,38559E-08 | 1,79817E-08 | -9,36356E-10 | -1,3568E-08 | 1,6621E-08 | -1,0065E-09 |
| 364 | G Vertical | -1,37191E-07 | 3,16617E-09 | -4,11787E-10 | -1,35775E-07 | 2,34256E-09 | -4,93345E-10 | -1,32715E-07 | 6,5E-10 | -3,81131E-09 |
| 364 | G transversal | -3,24167E-08 | 1,67195E-09 | -1,71412E-10 | -3,10322E-08 | 1,49894E-09 | -1,73121E-10 | -2,96952E-08 | 1,30739E-09 | -2,43748E-10 |
| 365 | D Longitudinal | 4,69608E-08 | 7,00485E-17 | 3,45537E-15 | 4,63707E-08 | -1,27789E-14 | -3,01443E-14 | 4,59158E-08 | 1,3904E-13 | 3,18743E-13 |
| 365 | D Vertical | -8,82853E-17 | 1,94104E-08 | -2,305E-09 | -1,2044E-16 | 1,71424E-08 | -2,30499E-09 | -5,88919E-16 | 1,48745E-08 | -2,30468E-09 |
| 365 | D transversal | 5,92722E-17 | 3,04444E-08 | -1,16863E-09 | 7,5644E-17 | 2,9039E-08 | -1,16863E-09 | 3,12022E-16 | 2,76335E-08 | -1,16879E-09 |
| 365 | G Longitudinal | -3,89489E-18 | 1,90725E-08 | -9,2177E-10 | -1,44868E-17 | 1,77669E-08 | -9,21769E-10 | -1,71388E-16 | 1,64613E-08 | -9,21673E-10 |
| 365 | G Vertical | -1,67082E-08 | 2,30987E-16 | 3,74476E-15 | -1,71484E-08 | -1,27729E-14 | -3,03644E-14 | -1,74486E-08 | 1,45578E-13 | 3,33722E-13 |
| 365 | G transversal | -2,10627E-08 | -1,29909E-17 | -1,77121E-15 | -1,93107E-08 | 5,70107E-15 | 1,34634E-14 | -1,76127E-08 | -6,46395E-14 | -1,48183E-13 |
| 366 | D Longitudinal | 1,61241E-08 | -6,62054E-18 | -1,60292E-10 | 1,56915E-08 | -3,42717E-15 | -1,60302E-10 | 1,52588E-08 | -5,79335E-14 | -1,6051E-10 |
| 366 | D Vertical | 1,18769E-08 | 2,30225E-18 | -4,00391E-10 | 1,0485E-08 | 1,25439E-15 | -4,00388E-10 | 9,09313E-09 | 2,12298E-14 | -4,00312E-10 |
| 366 | D transversal | -1,57759E-08 | 1,33198E-08 | -6,24878E-11 | -1,57471E-08 | 1,32336E-08 | -6,2508E-11 | -1,56347E-08 | 1,31476E-08 | -6,22511E-11 |
| 366 | G Longitudinal | -3,47316E-09 | 1,21766E-08 | -8,1132E-10 | -3,4567E-09 | 1,10575E-08 | -8,11332E-10 | -3,39888E-09 | 9,93848E-09 | -8,11305E-10 |
| 366 | G Vertical | -1,38566E-08 | -4,17126E-09 | 3,47406E-10 | -1,38846E-08 | -3,69208E-09 | 3,47403E-10 | -1,39901E-08 | -3,21398E-09 | 3,43604E-10 |
| 366 | G transversal | -1,34058E-08 | -5,12614E-18 | 3,93602E-11 | -1,2761E-08 | -4,78238E-15 | 3,93474E-11 | -1,2116E-08 | -8,09441E-14 | 3,90568E-11 |
| 367 | D Longitudinal | 2,7774E-08 | 6,01004E-09 | -6,99917E-10 | 2,77016E-08 | 5,31937E-09 | -6,99934E-10 | 2,77094E-08 | 4,62881E-09 | -6,99645E-10 |
| 367 | D Vertical | 1,23273E-08 | 1,22196E-08 | -1,44517E-09 | 1,09045E-08 | 1,07933E-08 | -1,44518E-09 | 9,51429E-09 | 9,36712E-09 | -1,44507E-09 |
| 367 | D transversal | -9,84998E-09 | 1,5149E-08 | -4,38455E-10 | -1,04267E-08 | 1,47844E-08 | -4,38487E-10 | -1,09166E-08 | 1,44198E-08 | -4,38716E-10 |

APOYO 2

| DESPLAZAMIENTOS (metros) | | C1 | | | C2 | | | C3 | | |
|---|---|---|---|---|---|---|---|---|---|---|
| Nudo | Desplazamiento | L | T | V | L | T | V | L | T | V |
| 367 | G Longitudinal | -1,26898E-08 | 1,35101E-08 | -4,81444E-10 | -1,26729E-08 | 1,28534E-08 | -4,83196E-10 | -1,25546E-08 | 1,21783E-08 | -5,536E-10 |
| 367 | G Vertical | -1,36964E-07 | 3,50811E-09 | -4,36044E-10 | -1,35502E-07 | 2,64809E-09 | -5,17174E-10 | -1,32404E-07 | 9,23698E-10 | -3,81771E-09 |
| 367 | G transversal | -2,56328E-08 | -1,21132E-09 | 1,52702E-10 | -2,50436E-08 | -1,06751E-09 | 1,50974E-10 | -2,44838E-08 | -9,4237E-10 | 7,98065E-11 |
| 368 | D Longitudinal | 1,00589E-08 | 1,94788E-17 | 5,98369E-16 | 1,04993E-08 | -2,53618E-15 | -5,9753E-15 | 1,0969E-08 | 2,65772E-14 | 6,09274E-14 |
| 368 | D Vertical | 1,65556E-17 | 1,5652E-09 | -1,937E-10 | 2,30238E-17 | 1,37396E-09 | -1,93701E-10 | 1,1723E-16 | 1,1827E-09 | -1,93762E-10 |
| 368 | D transversal | 5,5856E-17 | 7,09903E-09 | -1,55227E-10 | 7,7407E-17 | 6,9802E-09 | -1,55232E-10 | 3,91283E-16 | 6,86132E-09 | -1,55436E-10 |
| 368 | G Longitudinal | 1,90185E-16 | 9,81729E-09 | -2,7067E-10 | 2,62131E-16 | 9,59443E-09 | -2,70687E-10 | 1,30997E-15 | 9,37138E-09 | -2,71369E-10 |
| 368 | G Vertical | -4,54175E-09 | 1,61528E-16 | 1,06367E-15 | -4,79155E-09 | -3,33805E-15 | -8,0666E-15 | -4,99948E-09 | 4,09384E-14 | 9,38412E-14 |
| 368 | G transversal | -9,40449E-09 | -7,71576E-18 | -7,5008E-16 | -8,94455E-09 | 2,58834E-15 | 6,10609E-15 | -8,51042E-09 | -2,86884E-14 | -6,57671E-14 |
| 369 | D Longitudinal | 1,26314E-08 | 3,66657E-09 | -4,23345E-10 | 1,27574E-08 | 3,2494E-09 | -4,23371E-10 | 1,29206E-08 | 2,8321E-09 | -4,23959E-10 |
| 369 | D Vertical | 6,06469E-09 | 6,25212E-09 | -7,24208E-10 | 5,34374E-09 | 5,53859E-09 | -7,24213E-10 | 4,64011E-09 | 4,82508E-09 | -7,24144E-10 |
| 369 | D transversal | -3,75011E-09 | 6,5003E-09 | -1,63937E-10 | -4,17774E-09 | 6,44967E-09 | -1,63942E-10 | -4,56482E-09 | 6,39913E-09 | -1,63676E-10 |
| 369 | G Longitudinal | -9,4867E-09 | 9,52909E-09 | -2,5368E-10 | -9,83027E-09 | 9,33014E-09 | -2,55459E-10 | -1,00827E-08 | 9,11244E-09 | -3,27174E-10 |
| 369 | G Vertical | -1,37113E-07 | 3,82561E-09 | -4,57988E-10 | -1,35599E-07 | 2,93114E-09 | -5,38922E-10 | -1,32453E-07 | 1,17437E-09 | -3,83148E-09 |
| 369 | G transversal | -2,05965E-08 | -4,03301E-09 | 4,68045E-10 | -2,05911E-08 | -3,58105E-09 | 4,66298E-10 | -2,06011E-08 | -3,14789E-09 | 3,94567E-10 |
| 370 | D Longitudinal | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 370 | D Vertical | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 370 | D transversal | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 370 | G Longitudinal | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 370 | G Vertical | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 370 | G transversal | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 371 | D Longitudinal | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 371 | D Vertical | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 371 | D transversal | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 371 | G Longitudinal | -7,36899E-09 | 7,74797E-09 | -1,76075E-10 | -7,94865E-09 | 7,75018E-09 | -1,77873E-10 | -8,44175E-09 | 7,73342E-09 | -2,50424E-10 |
| 371 | G Vertical | -1,3704E-07 | 3,87939E-09 | -4,61025E-10 | -1,35517E-07 | 2,97947E-09 | -5,41863E-10 | -1,32363E-07 | 1,21828E-09 | -3,83051E-09 |
| 371 | G transversal | -1,85786E-08 | -4,71999E-09 | 5,43767E-10 | -1,88076E-08 | -4,19416E-09 | 5,42012E-10 | -1,90465E-08 | -3,68719E-09 | 4,70073E-10 |

| DESPLAZAMIENTOS (metros) | | C4 | | | C5 | | | C6 | | |
|---|---|---|---|---|---|---|---|---|---|---|
| Nudo | Desplazamiento | L | T | V | L | T | V | L | T | V |
| 1 | D Longitudinal | 8,01006E-06 | -2,15385E-12 | 1,01763E-10 | 5,8334E-06 | -2,4127E-12 | 4,99674E-12 | 4,15341E-06 | -2,32853E-12 | 5,31435E-12 |
| 1 | D Vertical | 2,26259E-08 | 2,31514E-08 | -1,34554E-08 | 1,41508E-08 | 1,41014E-08 | -1,02264E-08 | 8,7759E-09 | 8,78177E-09 | -8,12684E-09 |
| 1 | D transversal | 4,54662E-08 | 8,06548E-06 | 1,76305E-06 | 3,70587E-08 | 5,88802E-06 | 1,43549E-06 | 2,89319E-08 | 4,19793E-06 | 1,09278E-06 |
| 1 | G Longitudinal | -9,79749E-09 | 3,87639E-07 | 1,4773E-07 | 1,38025E-09 | 2,36774E-07 | 8,89319E-08 | -8,10945E-11 | 1,47464E-07 | 5,32216E-08 |
| 1 | G Vertical | 7,42671E-07 | 2,44524E-10 | 4,0882E-09 | 6,18964E-07 | 5,93751E-11 | -1,24895E-09 | 4,81892E-07 | 3,25484E-12 | -1,29101E-11 |
| 1 | G transversal | -3,75176E-07 | 5,07326E-11 | 5,66366E-10 | -2,36287E-07 | 8,70725E-12 | -1,96419E-10 | -1,46257E-07 | 1,45765E-13 | -1,19442E-12 |
| 2 | D Longitudinal | 8,10125E-06 | 8,12394E-12 | -1,70899E-10 | 5,90749E-06 | -1,90199E-12 | 3,30426E-12 | 4,21125E-06 | -1,81055E-12 | 4,13046E-12 |
| 2 | D Vertical | 2,36899E-08 | -2,33609E-08 | -3,10815E-08 | 1,39875E-08 | -1,43105E-08 | -2,09218E-08 | 8,78424E-09 | -8,91393E-09 | -1,45135E-08 |
| 2 | D transversal | 4,55764E-08 | 8,06548E-06 | 1,76304E-06 | 3,70429E-08 | 5,88802E-06 | 1,43549E-06 | 2,89327E-08 | 4,19793E-06 | 1,09278E-06 |
| 2 | G Longitudinal | -9,46992E-09 | 3,8631E-07 | 1,5443E-07 | 1,54648E-09 | 2,36744E-07 | 8,93866E-08 | -8,33455E-11 | 1,47463E-07 | 5,32266E-08 |
| 2 | G Vertical | 7,30131E-07 | -8,20666E-09 | 4,70281E-08 | 6,22235E-07 | -1,3077E-10 | 1,62687E-09 | 4,81761E-07 | -1,96091E-12 | 1,88609E-11 |
| 2 | G transversal | -3,95564E-07 | 1,25856E-09 | -7,14841E-09 | -2,3313E-07 | 2,23326E-11 | -2,59199E-10 | -1,4641E-07 | 1,29662E-12 | -5,23991E-12 |
| 3 | D Longitudinal | 8,05564E-06 | 2,8632E-12 | -3,3155E-11 | 5,87045E-06 | -2,15776E-12 | 4,16413E-12 | 4,18233E-06 | -2,06958E-12 | 4,72257E-12 |
| 3 | D Vertical | 6,10595E-11 | -1,05323E-10 | -2,22655E-08 | -1,0693E-11 | -1,04518E-10 | -1,55741E-08 | 1,20329E-13 | -6,60583E-11 | -1,13202E-08 |
| 3 | D transversal | -1,49293E-10 | 8,06548E-06 | 1,76318E-06 | 2,03526E-11 | 5,88802E-06 | 1,4355E-06 | 9,57412E-12 | 4,19793E-06 | 1,09278E-06 |
| 3 | G Longitudinal | 2,16038E-10 | 3,87622E-07 | 1,46535E-07 | 2,49278E-11 | 2,36765E-07 | 8,91275E-08 | -3,28511E-13 | 1,47464E-07 | 5,32221E-08 |
| 3 | G Vertical | 7,60723E-07 | 8,65208E-11 | -2,28444E-09 | 6,17251E-07 | 4,22014E-12 | -1,40725E-11 | 4,82042E-07 | 4,31648E-12 | -9,86523E-12 |
| 3 | G transversal | -3,84954E-07 | -9,28133E-12 | 4,87004E-11 | -2,34664E-07 | 4,49206E-13 | -8,53992E-13 | -1,46333E-07 | 3,09427E-13 | -7,07946E-13 |
| 4 | D Longitudinal | 8,30429E-06 | 3,50209E-11 | -8,304E-10 | 6,07084E-06 | -8,35058E-13 | -5,25443E-13 | 4,339E-06 | -6,66254E-13 | 1,51556E-12 |
| 4 | D Vertical | -1,63693E-10 | -1,26086E-07 | -6,98624E-08 | 5,28526E-12 | -7,70533E-08 | -4,45404E-08 | -1,05605E-12 | -4,79919E-08 | -2,86174E-08 |
| 4 | D transversal | -1,58507E-10 | 8,06548E-06 | 1,76318E-06 | 2,20928E-11 | 5,88802E-06 | 1,4355E-06 | 9,47299E-12 | 4,19793E-06 | 1,09278E-06 |
| 4 | G Longitudinal | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 4 | G Vertical | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 4 | G transversal | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 5 | D Longitudinal | 8,01009E-06 | -2,13839E-12 | 1,01526E-10 | 5,8334E-06 | -2,41501E-12 | 5,01479E-12 | 4,15341E-06 | -2,32851E-12 | 5,31437E-12 |
| 5 | D Vertical | -2,24782E-08 | 2,31536E-08 | -1,34975E-08 | -1,41692E-08 | 1,41014E-08 | -1,02266E-08 | -8,7757E-09 | 8,78181E-09 | -8,12692E-09 |
| 5 | D transversal | -4,57964E-08 | 8,06547E-06 | 1,76332E-06 | -3,70139E-08 | 5,88802E-06 | 1,4355E-06 | -2,8913E-08 | 4,19793E-06 | 1,09278E-06 |
| 5 | G Longitudinal | 1,13176E-08 | 3,87722E-07 | 1,45906E-07 | -1,43773E-09 | 2,36774E-07 | 8,89219E-08 | 8,67418E-11 | 1,47464E-07 | 5,32216E-08 |
| 5 | G Vertical | 7,36711E-07 | -3,51894E-10 | -4,68699E-10 | 6,19536E-07 | -5,17311E-11 | 1,28042E-09 | 4,81856E-07 | 5,35947E-12 | -6,73703E-12 |
| 5 | G transversal | -3,75627E-07 | -4,3168E-11 | -1,62415E-10 | -2,36275E-07 | -8,8622E-12 | 2,02953E-10 | -1,46258E-07 | 4,78185E-13 | -2,19704E-13 |
| 6 | D Longitudinal | 8,10132E-06 | 8,18048E-12 | -1,72267E-10 | 5,90747E-06 | -1,90639E-12 | 3,32214E-12 | 4,21125E-06 | -1,81059E-12 | 4,13074E-12 |
| 6 | D Vertical | -2,35934E-08 | -2,33654E-08 | -3,10275E-08 | -1,40119E-08 | -1,43104E-08 | -2,09218E-08 | -8,78396E-09 | -8,91389E-09 | -1,45136E-08 |
| 6 | D transversal | -4,58774E-08 | 8,06547E-06 | 1,76332E-06 | -3,70012E-08 | 5,88802E-06 | 1,4355E-06 | -2,89137E-08 | 4,19793E-06 | 1,09278E-06 |
| 6 | G Longitudinal | 1,03071E-08 | 3,86439E-07 | 1,52348E-07 | -1,47777E-09 | 2,36744E-07 | 8,93756E-08 | 8,16175E-11 | 1,47463E-07 | 5,32266E-08 |
| 6 | G Vertical | 7,34497E-07 | 7,72238E-09 | -4,07388E-08 | 6,21035E-07 | 1,37874E-10 | -1,58653E-09 | 4,81825E-07 | 1,04968E-11 | -3,83187E-11 |
| 6 | G transversal | -3,95853E-07 | -1,25598E-09 | 6,70077E-09 | -2,33006E-07 | -2,01219E-11 | 2,48228E-10 | -1,46416E-07 | -6,69473E-13 | 3,78621E-12 |
| 7 | D Longitudinal | 7,9509E-06 | -7,14081E-13 | 9,21723E-11 | 5,79329E-06 | -2,49403E-12 | 5,13238E-12 | 4,1267E-06 | -2,37291E-12 | 5,41629E-12 |
| 7 | D Vertical | 2,95089E-08 | 3,05153E-08 | -1,06554E-08 | 1,86746E-08 | 1,85999E-08 | -8,53297E-09 | 1,15528E-08 | 1,15836E-08 | -7,1156E-09 |
| 7 | D transversal | 6,07634E-08 | 8,01897E-06 | 1,7454E-06 | 4,86523E-08 | 5,85961E-06 | 1,4248E-06 | 3,80976E-08 | 4,18024E-06 | 1,08639E-06 |
| 7 | G Longitudinal | -1,02807E-08 | 3,87638E-07 | 1,47786E-07 | 1,43428E-09 | 2,36775E-07 | 8,89286E-08 | -8,3724E-11 | 1,47464E-07 | 5,32216E-08 |
| 7 | G Vertical | 7,42769E-07 | 2,50368E-10 | 4,21045E-09 | 6,18928E-07 | 6,0648E-11 | -1,27779E-09 | 4,81892E-07 | 3,23134E-12 | -1,29841E-11 |
| 7 | G transversal | -3,75427E-07 | 5,24685E-11 | 5,71619E-10 | -2,36242E-07 | 8,91996E-12 | -2,00919E-10 | -1,4626E-07 | 1,41992E-13 | -1,20503E-12 |
| 8 | D Longitudinal | 8,06768E-06 | 3,79039E-12 | -1,38926E-10 | 5,89133E-06 | -1,70185E-12 | 3,01327E-12 | 4,20283E-06 | -1,6917E-12 | 3,85792E-12 |

APOYO 2

| DESPLAZAMIENTOS (metros) | | C4 | | | C5 | | | C6 | | |
|---|---|---|---|---|---|---|---|---|---|---|
| Nudo | Desplazamiento | L | T | V | L | T | V | L | T | V |
| 8 | D Vertical | 3,13391E-08 | -3,07248E-08 | -3,38791E-08 | 1,83952E-08 | -1,88091E-08 | -2,26152E-08 | 1,15672E-08 | -1,17158E-08 | -1,55247E-08 |
| 8 | D transversal | 6,06795E-08 | 8,01897E-06 | 1,7454E-06 | 4,8666E-08 | 5,85961E-06 | 1,4248E-06 | 3,80969E-08 | 4,18024E-06 | 1,08639E-06 |
| 8 | G Longitudinal | -1,15276E-08 | 3,86272E-07 | 1,54722E-07 | 1,84525E-09 | 2,36744E-07 | 8,93927E-08 | -9,8695E-11 | 1,47463E-07 | 5,32267E-08 |
| 8 | G Vertical | 7,30655E-07 | -8,39284E-09 | 4,81049E-08 | 6,22165E-07 | -1,33921E-10 | 1,66453E-09 | 4,81764E-07 | -2,1042E-12 | 1,9519E-11 |
| 8 | G transversal | -3,94763E-07 | 1,29788E-09 | -7,38984E-09 | -2,33264E-07 | 2,28664E-11 | -2,66653E-10 | -1,46402E-07 | 1,32864E-12 | -5,38051E-12 |
| 9 | D Longitudinal | 7,951E-06 | -5,62909E-13 | 9,05767E-11 | 5,79327E-06 | -2,49756E-12 | 5,12048E-12 | 4,1267E-06 | -2,37288E-12 | 5,41615E-12 |
| 9 | D Vertical | -2,94168E-08 | 3,05195E-08 | -1,07292E-08 | -1,86825E-08 | 1,86E-08 | -8,53323E-09 | -1,15532E-08 | 1,15836E-08 | -7,11572E-09 |
| 9 | D transversal | -6,11879E-08 | 8,01895E-06 | 1,74582E-06 | -4,86075E-08 | 5,85961E-06 | 1,4248E-06 | -3,80789E-08 | 4,18024E-06 | 1,08639E-06 |
| 9 | G Longitudinal | 1,21266E-08 | 3,87726E-07 | 1,45851E-07 | -1,54315E-09 | 2,36774E-07 | 8,89173E-08 | 9,21649E-11 | 1,47464E-07 | 5,32216E-08 |
| 9 | G Vertical | 7,36763E-07 | -3,61716E-10 | -4,44E-10 | 6,19497E-07 | -5,30544E-11 | 1,31023E-09 | 4,81857E-07 | 5,38305E-12 | -6,66291E-12 |
| 9 | G transversal | -3,7601E-07 | -4,26425E-11 | -1,69872E-10 | -2,36211E-07 | -9,08314E-12 | 2,08883E-10 | -1,46263E-07 | 4,83207E-13 | -2,06416E-13 |
| 10 | D Longitudinal | 8,06783E-06 | 4,15867E-12 | -1,42933E-10 | 5,8913E-06 | -1,70582E-12 | 2,99216E-12 | 4,20284E-06 | -1,69157E-12 | 3,85744E-12 |
| 10 | D Vertical | -3,13703E-08 | -3,07318E-08 | -3,37909E-08 | -1,84027E-08 | -1,88089E-08 | -2,26152E-08 | -1,15678E-08 | -1,17157E-08 | -1,55248E-08 |
| 10 | D transversal | -6,1094E-08 | 8,01895E-06 | 1,74582E-06 | -4,86204E-08 | 5,85961E-06 | 1,4248E-06 | -3,80783E-08 | 4,18024E-06 | 1,08639E-06 |
| 10 | G Longitudinal | 1,11054E-08 | 3,8642E-07 | 1,52403E-07 | -1,58237E-09 | 2,36744E-07 | 8,93801E-08 | 8,68261E-11 | 1,47463E-07 | 5,32267E-08 |
| 10 | G Vertical | 7,3485E-07 | 7,90216E-09 | -4,16701E-08 | 6,2098E-07 | 1,40936E-10 | -1,62318E-09 | 4,81827E-07 | 1,06381E-11 | -3,89709E-11 |
| 10 | G transversal | -3,94811E-07 | -1,28167E-09 | 6,82128E-09 | -2,33171E-07 | -2,0634E-11 | 2,53833E-10 | -1,46407E-07 | -6,90284E-13 | 3,88359E-12 |
| 11 | D Longitudinal | 7,84121E-06 | 3,19089E-12 | 6,45912E-11 | 5,71894E-06 | -2,65661E-12 | 5,91997E-12 | 4,07722E-06 | -2,45343E-12 | 5,60333E-12 |
| 11 | D Vertical | -4,22084E-08 | 4,40888E-08 | -5,63603E-09 | -2,69911E-08 | 2,68867E-08 | -5,41377E-09 | -1,66699E-08 | 1,67449E-08 | -5,25297E-09 |
| 11 | D transversal | -8,98647E-08 | 7,9325E-06 | 1,71332E-06 | -6,99218E-08 | 5,80681E-06 | 1,40493E-06 | -5,49656E-08 | 4,14735E-06 | 1,07453E-06 |
| 11 | G Longitudinal | 1,29164E-08 | 3,87732E-07 | 1,45787E-07 | -1,6136E-09 | 2,36774E-07 | 8,8911E-08 | 9,49344E-11 | 1,47464E-07 | 5,32216E-08 |
| 11 | G Vertical | 7,3725E-07 | -3,80165E-10 | -4,02604E-10 | 6,19366E-07 | -5,55671E-11 | 1,36643E-09 | 4,81861E-07 | 5,42707E-12 | -6,52262E-12 |
| 11 | G transversal | -3,77414E-07 | -4,14136E-11 | -1,96782E-10 | -2,35965E-07 | -9,3796E-12 | 2,17833E-10 | -1,46277E-07 | 4,90132E-13 | -1,83507E-13 |
| 12 | D Longitudinal | 8,00586E-06 | -3,62239E-12 | -9,10874E-11 | 5,86099E-06 | -1,36976E-12 | 2,61584E-12 | 4,18705E-06 | -1,47272E-12 | 3,35722E-12 |
| 12 | D Vertical | -4,55317E-08 | -4,43021E-08 | -3,88772E-08 | -2,65198E-08 | -2,70957E-08 | -2,57345E-08 | -1,66944E-08 | -1,68769E-08 | -1,73876E-08 |
| 12 | D transversal | -8,95741E-08 | 7,9325E-06 | 1,71332E-06 | -6,99644E-08 | 5,80681E-06 | 1,40493E-06 | -5,49634E-08 | 4,14735E-06 | 1,07453E-06 |
| 12 | G Longitudinal | 1,30351E-08 | 3,86393E-07 | 1,52426E-07 | -1,82271E-09 | 2,36743E-07 | 8,93872E-08 | 9,82364E-11 | 1,47463E-07 | 5,32269E-08 |
| 12 | G Vertical | 7,36308E-07 | 8,24419E-09 | -4,34639E-08 | 6,2076E-07 | 1,46688E-10 | -1,69249E-09 | 4,81838E-07 | 1,0901E-11 | -4,01884E-11 |
| 12 | G transversal | -3,92297E-07 | -1,32978E-09 | 7,05951E-09 | -2,33588E-07 | -2,15722E-11 | 2,64552E-10 | -1,46384E-07 | -7,35001E-13 | 4,08522E-12 |
| 13 | D Longitudinal | 8,00555E-06 | 7,22472E-13 | -1,14497E-10 | 5,86103E-06 | -1,30777E-12 | 1,71161E-12 | 4,18705E-06 | -1,4677E-12 | 3,33671E-12 |
| 13 | D Vertical | 4,55219E-08 | -4,42897E-08 | -3,904E-08 | 2,65051E-08 | -2,70959E-08 | -2,57345E-08 | 1,6694E-08 | -1,6877E-08 | -1,73874E-08 |
| 13 | D transversal | 8,93468E-08 | 7,93254E-06 | 1,71256E-06 | 6,99565E-08 | 5,80681E-06 | 1,40492E-06 | 5,49844E-08 | 4,14735E-06 | 1,07452E-06 |
| 13 | G Longitudinal | -1,41522E-08 | 3,86221E-07 | 1,55088E-07 | 2,19201E-09 | 2,36743E-07 | 8,9401E-08 | -1,15737E-10 | 1,47463E-07 | 5,32269E-08 |
| 13 | G Vertical | 7,32604E-07 | -8,74073E-09 | 5,00991E-08 | 6,21891E-07 | -1,39894E-10 | 1,73544E-09 | 4,81777E-07 | -2,3708E-12 | 2,07477E-11 |
| 13 | G transversal | -3,92169E-07 | 1,35931E-09 | -7,7668E-09 | -2,337E-07 | 2,36325E-11 | -2,78019E-10 | -1,46378E-07 | 1,37811E-12 | -5,59725E-12 |
| 14 | D Longitudinal | 7,84107E-06 | 2,13039E-12 | 6,96433E-11 | 5,71897E-06 | -2,62784E-12 | 5,15133E-12 | 4,07722E-06 | -2,45441E-12 | 5,60289E-12 |
| 14 | D Vertical | 4,23271E-08 | 4,40804E-08 | -5,4958E-09 | 2,69829E-08 | 2,68867E-08 | -5,41333E-09 | 1,66697E-08 | 1,67448E-08 | -5,25281E-09 |
| 14 | D transversal | 8,92106E-08 | 7,93253E-06 | 1,71258E-06 | 6,99764E-08 | 5,80681E-06 | 1,40492E-06 | 5,49834E-08 | 4,14735E-06 | 1,07452E-06 |
| 14 | G Longitudinal | -1,13014E-08 | 3,87632E-07 | 1,47941E-07 | 1,53372E-09 | 2,36775E-07 | 8,89233E-08 | -8,78977E-11 | 1,47464E-07 | 5,32216E-08 |
| 14 | G Vertical | 7,43327E-07 | 2,62902E-10 | 4,42253E-09 | 6,18806E-07 | 6,30421E-11 | -1,33235E-09 | 4,81896E-07 | 3,18784E-12 | -1,31254E-11 |
| 14 | G transversal | -3,76575E-07 | 5,24824E-11 | 5,92036E-10 | -2,36035E-07 | 9,3381E-12 | -2,0964E-10 | -1,46272E-07 | 1,32966E-13 | -1,22011E-12 |
| 15 | D Longitudinal | 7,6316E-06 | 8,57814E-12 | 9,0182E-12 | 5,57773E-06 | -2,84786E-12 | 5,12092E-12 | 3,98305E-06 | -2,61211E-12 | 5,96479E-12 |
| 15 | D Vertical | -6,7187E-08 | 7,0064E-08 | 4,1155E-09 | -4,28111E-08 | 4,275E-08 | 5,57586E-10 | -2,64696E-08 | 2,6625E-08 | -1,68713E-09 |
| 15 | D transversal | -1,44276E-07 | 7,76851E-06 | 1,65167E-06 | -1,10818E-07 | 5,70666E-06 | 1,36723E-06 | -8,72858E-08 | 4,08497E-06 | 1,05201E-06 |

APOYO 2

| DESPLAZAMIENTOS (metros) | | C4 | | | C5 | | | C6 | | |
|---|---|---|---|---|---|---|---|---|---|---|
| Nudo | Desplazamiento | L | T | V | L | T | V | L | T | V |
| 15 | G Longitudinal | 1,04889E-08 | 3,8774E-07 | 1,45775E-07 | -1,16212E-09 | 2,36775E-07 | 8,88935E-08 | 7,01072E-11 | 1,47464E-07 | 5,32215E-08 |
| 15 | G Vertical | 7,37562E-07 | -4,12093E-10 | -3,358E-10 | 6,19213E-07 | -6,02742E-11 | 1,47293E-09 | 4,81864E-07 | 5,51287E-12 | -6,26208E-12 |
| 15 | G transversal | -3,80357E-07 | -6,40384E-11 | -1,65648E-10 | -2,35481E-07 | -9,83457E-12 | 2,26162E-10 | -1,46304E-07 | 4,88815E-13 | -1,2923E-13 |
| 16 | D Longitudinal | 7,88973E-06 | -1,7952E-11 | 1,02001E-11 | 5,80368E-06 | -7,45727E-13 | 2,12565E-12 | 4,15742E-06 | -1,05892E-12 | 2,41609E-12 |
| 16 | D Vertical | -7,22131E-08 | -7,02784E-08 | -4,8617E-08 | -4,21335E-08 | -4,29589E-08 | -3,17059E-08 | -2,65038E-08 | -2,6757E-08 | -2,09535E-08 |
| 16 | D transversal | -1,4447E-07 | 7,76851E-06 | 1,65171E-06 | -1,10788E-07 | 5,70666E-06 | 1,36723E-06 | -8,72874E-08 | 4,08497E-06 | 1,05201E-06 |
| 16 | G Longitudinal | 1,16885E-08 | 3,86211E-07 | 1,53359E-07 | -1,56736E-09 | 2,3674E-07 | 8,94238E-08 | 8,28418E-11 | 1,47463E-07 | 5,32271E-08 |
| 16 | G Vertical | 7,3746E-07 | 8,87144E-09 | -4,67028E-08 | 6,20578E-07 | 1,57447E-10 | -1,82055E-09 | 4,81846E-07 | 1,14126E-11 | -4,25339E-11 |
| 16 | G transversal | -3,89958E-07 | -1,44422E-09 | 7,67673E-09 | -2,34009E-07 | -2,36231E-11 | 2,88448E-10 | -1,4636E-07 | -8,31442E-13 | 4,52425E-12 |
| 17 | D Longitudinal | 7,88953E-06 | -1,81354E-11 | 1,44278E-11 | 5,80371E-06 | -7,62904E-13 | 1,92272E-12 | 4,15742E-06 | -1,05363E-12 | 2,39747E-12 |
| 17 | D Vertical | 7,21132E-08 | -7,02569E-08 | -4,89155E-08 | 4,21255E-08 | -4,29592E-08 | -3,17061E-08 | 2,6503E-08 | -2,67571E-08 | -2,09533E-08 |
| 17 | D transversal | 1,4369E-07 | 7,76857E-06 | 1,65036E-06 | 1,10822E-07 | 5,70666E-06 | 1,36722E-06 | 8,73054E-08 | 4,08497E-06 | 1,05201E-06 |
| 17 | G Longitudinal | -1,0248E-08 | 3,86123E-07 | 1,55606E-07 | 1,53457E-09 | 2,36741E-07 | 8,94229E-08 | -7,9644E-11 | 1,47463E-07 | 5,32273E-08 |
| 17 | G Vertical | 7,34576E-07 | -9,40548E-09 | 5,39391E-08 | 6,21627E-07 | -1,51091E-10 | 1,86988E-09 | 4,81789E-07 | -2,89025E-12 | 2,3123E-11 |
| 17 | G transversal | -3,88894E-07 | 1,41172E-09 | -7,99564E-09 | -2,34252E-07 | 2,5E-11 | -2,89839E-10 | -1,46347E-07 | 1,39557E-12 | -5,72831E-12 |
| 18 | D Longitudinal | 7,63146E-06 | 5,51642E-12 | 3,02121E-11 | 5,57776E-06 | -2,8504E-12 | 4,89782E-12 | 3,98305E-06 | -2,61329E-12 | 5,9668E-12 |
| 18 | D Vertical | 6,7306E-08 | 7,00476E-08 | 4,38717E-09 | 4,28102E-08 | 4,275E-08 | 5,58453E-10 | 2,64692E-08 | 2,66249E-08 | -1,68688E-09 |
| 18 | D transversal | 1,43653E-07 | 7,76859E-06 | 1,65025E-06 | 1,10819E-07 | 5,70666E-06 | 1,36722E-06 | 8,73056E-08 | 4,08497E-06 | 1,05201E-06 |
| 18 | G Longitudinal | -9,49187E-09 | 3,87614E-07 | 1,4823E-07 | 1,20197E-09 | 2,36776E-07 | 8,88935E-08 | -7,01099E-11 | 1,47464E-07 | 5,32215E-08 |
| 18 | G Vertical | 7,43547E-07 | 2,84577E-10 | 4,8484E-09 | 6,18694E-07 | 6,75098E-11 | -1,433E-09 | 4,81897E-07 | 3,10255E-12 | -1,33801E-11 |
| 18 | G transversal | -3,79212E-07 | 5,36393E-11 | 6,64533E-10 | -2,3558E-07 | 1,0281E-11 | -2,28606E-10 | -1,46299E-07 | 1,14263E-13 | -1,25832E-12 |
| 19 | D Longitudinal | 7,34139E-06 | 3,8987E-12 | -4,28853E-11 | 5,38388E-06 | -2,9469E-12 | -9,00586E-13 | 3,85356E-06 | -2,83884E-12 | 6,46952E-12 |
| 19 | D Vertical | -1,0236E-07 | 1,0573E-07 | 1,74966E-08 | -6,43865E-08 | 6,45325E-08 | 8,75547E-09 | -3,9934E-08 | 4,01917E-08 | 3,20923E-09 |
| 19 | D transversal | -2,17426E-07 | 7,54288E-06 | 1,56697E-06 | -1,67254E-07 | 5,56886E-06 | 1,31536E-06 | -1,3165E-07 | 3,99915E-06 | 1,02104E-06 |
| 19 | G Longitudinal | 7,16927E-09 | 3,87757E-07 | 1,45336E-07 | -5,54575E-10 | 2,36777E-07 | 8,8854E-08 | 3,82035E-11 | 1,47464E-07 | 5,32214E-08 |
| 19 | G Vertical | 7,37939E-07 | -4,57157E-10 | -3,12693E-10 | 6,1901E-07 | -6,66564E-11 | 1,61572E-09 | 4,81867E-07 | 5,63241E-12 | -5,9138E-12 |
| 19 | G transversal | -3,83919E-07 | -7,50449E-11 | -1,49309E-10 | -2,34895E-07 | -1,06443E-11 | 2,47389E-10 | -1,46338E-07 | 5,03532E-13 | -6,73688E-14 |
| 20 | D Longitudinal | 7,73147E-06 | -3,57565E-11 | 1,51079E-10 | 5,72444E-06 | -2,99859E-14 | 9,39457E-13 | 4,11658E-06 | -4,74605E-13 | 1,06824E-12 |
| 20 | D Vertical | -1,07937E-07 | -1,05937E-07 | -6,20509E-08 | -6,37247E-08 | -6,47412E-08 | -3,99072E-08 | -3,9965E-08 | -4,03237E-08 | -2,585E-08 |
| 20 | D transversal | -2,17662E-07 | 7,54295E-06 | 1,5666E-06 | -1,67202E-07 | 5,56886E-06 | 1,31535E-06 | -1,31653E-07 | 3,99915E-06 | 1,02104E-06 |
| 20 | G Longitudinal | 6,43756E-09 | 3,8606E-07 | 1,54181E-07 | -7,06654E-10 | 2,36738E-07 | 8,94536E-08 | 3,59771E-11 | 1,47463E-07 | 5,32276E-08 |
| 20 | G Vertical | 7,38451E-07 | 9,75368E-09 | -5,12512E-08 | 6,20422E-07 | 1,72471E-10 | -2,00109E-09 | 4,81851E-07 | 1,21242E-11 | -4,58009E-11 |
| 20 | G transversal | -3,86731E-07 | -1,54881E-09 | 8,22101E-09 | -2,34554E-07 | -2,59858E-11 | 3,08841E-10 | -1,46329E-07 | -8,61671E-13 | 4,73099E-12 |
| 21 | D Longitudinal | 7,73157E-06 | -7,5729E-11 | 4,27206E-10 | 5,72443E-06 | -2,06983E-13 | 7,66407E-12 | 4,11658E-06 | -5,24866E-13 | 1,25672E-12 |
| 21 | D Vertical | 1,07684E-07 | -1,05904E-07 | -6,25529E-08 | 6,37291E-08 | -6,47416E-08 | -3,99075E-08 | 3,99635E-08 | -4,03239E-08 | -2,58497E-08 |
| 21 | D transversal | 2,16192E-07 | 7,54301E-06 | 1,56451E-06 | 1,6728E-07 | 5,56887E-06 | 1,31535E-06 | 1,31667E-07 | 3,99915E-06 | 1,02103E-06 |
| 21 | G Longitudinal | -6,00227E-09 | 3,85863E-07 | 1,57534E-07 | 8,93494E-10 | 2,36738E-07 | 8,94709E-08 | -4,40896E-11 | 1,47463E-07 | 5,32276E-08 |
| 21 | G Vertical | 7,37154E-07 | -1,02924E-08 | 5,89745E-08 | 6,2127E-07 | -1,6633E-10 | 2,05056E-09 | 4,81806E-07 | -3,61186E-12 | 2,64079E-11 |
| 21 | G transversal | -3,86225E-07 | 1,54579E-09 | -8,73317E-09 | -2,34732E-07 | 2,72087E-11 | -3,16861E-10 | -1,4632E-07 | 1,50043E-12 | -6,21101E-12 |
| 22 | D Longitudinal | 7,34145E-06 | 1,74782E-11 | -8,05388E-11 | 5,38388E-06 | -3,04734E-12 | 5,07754E-12 | 3,85356E-06 | -2,82916E-12 | 6,46396E-12 |
| 22 | D Vertical | 1,02535E-07 | 1,05702E-07 | 1,79732E-08 | 6,43897E-08 | 6,45324E-08 | 8,75692E-09 | 3,99336E-08 | 4,01916E-08 | 3,20961E-09 |
| 22 | D transversal | 2,1625E-07 | 7,54302E-06 | 1,56441E-06 | 1,67254E-07 | 5,56886E-06 | 1,31536E-06 | 1,31669E-07 | 3,99915E-06 | 1,02103E-06 |
| 22 | G Longitudinal | -4,87979E-09 | 3,87624E-07 | 1,48281E-07 | 4,20575E-10 | 2,36777E-07 | 8,88699E-08 | -2,82539E-11 | 1,47464E-07 | 5,32214E-08 |
| 22 | G Vertical | 7,43455E-07 | 3,0456E-10 | 5,51906E-09 | 6,18606E-07 | 7,3761E-11 | -1,57517E-09 | 4,81894E-07 | 2,98335E-12 | -1,37376E-11 |

APOYO 2

| DESPLAZAMIENTOS (metros) | | C4 | | | C5 | | | C6 | | |
|---|---|---|---|---|---|---|---|---|---|---|
| Nudo | Desplazamiento | L | T | V | L | T | V | L | T | V |
| 22 | G transversal | -3,8277E-07 | 8,6963E-11 | 5,489E-10 | -2,35008E-07 | 1,1343E-11 | -2,43939E-10 | -1,46331E-07 | 1,09714E-13 | -1,32005E-12 |
| 23 | D Longitudinal | 7,03472E-06 | 2,46659E-11 | -1,67384E-10 | 5,18087E-06 | -3,13981E-12 | 4,4409E-12 | 3,71773E-06 | -3,05594E-12 | 6,98469E-12 |
| 23 | D Vertical | -1,39938E-07 | 1,42949E-07 | 3,14651E-08 | -8,67502E-08 | 8,72621E-08 | 1,73121E-08 | -5,39925E-08 | 5,43483E-08 | 8,31849E-09 |
| 23 | D transversal | -2,91505E-07 | 7,30563E-06 | 1,47782E-06 | -2,26523E-07 | 5,42396E-06 | 1,26081E-06 | -1,77922E-07 | 3,9089E-06 | 9,88468E-07 |
| 23 | G Longitudinal | 2,46621E-09 | 3,87723E-07 | 1,46798E-07 | 2,04422E-10 | 2,36776E-07 | 8,88935E-08 | -6,14764E-12 | 1,47464E-07 | 5,32216E-08 |
| 23 | G Vertical | 7,38076E-07 | -5,29158E-10 | 8,01157E-13 | 6,18815E-07 | -7,35942E-11 | 1,76915E-09 | 4,8187E-07 | 5,73936E-12 | -5,50315E-12 |
| 23 | G transversal | -3,87423E-07 | 3,97952E-12 | -3,6058E-10 | -2,34252E-07 | -1,20253E-11 | 3,06835E-10 | -1,46381E-07 | 5,82139E-13 | -5,01164E-14 |
| 24 | D Longitudinal | 7,56676E-06 | -5,67067E-11 | 3,17253E-10 | 5,64026E-06 | 6,19831E-13 | 7,89116E-13 | 4,07329E-06 | 1,27317E-13 | -3,06529E-13 |
| 24 | D Vertical | -1,44246E-07 | -1,43167E-07 | -7,59527E-08 | -8,6421E-08 | -8,74708E-08 | -4,8461E-08 | -5,40023E-08 | -5,44802E-08 | -3,09594E-08 |
| 24 | D transversal | -2,91383E-07 | 7,30563E-06 | 1,47783E-06 | -2,26543E-07 | 5,42396E-06 | 1,26081E-06 | -1,77921E-07 | 3,9089E-06 | 9,88468E-07 |
| 24 | G Longitudinal | 2,10315E-09 | 3,8636E-07 | 1,5235E-07 | 1,24221E-10 | 2,36741E-07 | 8,93967E-08 | -8,49318E-12 | 1,47463E-07 | 5,32289E-08 |
| 24 | G Vertical | 7,39746E-07 | 1,07555E-08 | -5,64713E-08 | 6,20235E-07 | 1,89165E-10 | -2,20412E-09 | 4,81859E-07 | 1,27768E-11 | -4,89382E-11 |
| 24 | G transversal | -3,82649E-07 | -1,78905E-09 | 9,50863E-09 | -2,35281E-07 | -2,88348E-11 | 3,63827E-10 | -1,46286E-07 | -1,20704E-12 | 6,12547E-12 |
| 25 | D Longitudinal | 7,56689E-06 | -5,51873E-11 | 3,06299E-10 | 5,64024E-06 | 6,1897E-13 | 5,44939E-13 | 4,07329E-06 | 1,29428E-13 | -3,14318E-13 |
| 25 | D Vertical | 1,43974E-07 | -1,43116E-07 | -7,6671E-08 | 8,64167E-08 | -8,74711E-08 | -4,84631E-08 | 5,4001E-08 | -5,44805E-08 | -3,09589E-08 |
| 25 | D transversal | 2,89837E-07 | 7,30581E-06 | 1,47439E-06 | 2,26548E-07 | 5,42397E-06 | 1,2608E-06 | 1,77938E-07 | 3,9089E-06 | 9,88461E-07 |
| 25 | G Longitudinal | -2,55911E-09 | 3,86169E-07 | 1,54305E-07 | 8,55943E-11 | 2,36739E-07 | 8,94275E-08 | -6,08058E-13 | 1,47463E-07 | 5,32288E-08 |
| 25 | G Vertical | 7,4008E-07 | -1,12502E-08 | 6,45876E-08 | 6,20884E-07 | -1,82831E-10 | 2,24471E-09 | 4,81824E-07 | -4,27225E-12 | 2,95324E-11 |
| 25 | G transversal | -3,82845E-07 | 1,94065E-09 | -1,13185E-08 | -2,35396E-07 | 3,03286E-11 | -3,8661E-10 | -1,46279E-07 | 1,93475E-12 | -7,91851E-12 |
| 26 | D Longitudinal | 7,03484E-06 | 2,41497E-11 | -1,66215E-10 | 5,18085E-06 | -3,14227E-12 | 4,2222E-12 | 3,71773E-06 | -3,0563E-12 | 6,98488E-12 |
| 26 | D Vertical | 1,402E-07 | 1,42913E-07 | 3,21036E-08 | 8,67495E-08 | 8,72617E-08 | 1,73154E-08 | 5,39923E-08 | 5,43481E-08 | 8,319E-09 |
| 26 | D transversal | 2,89716E-07 | 7,30581E-06 | 1,47439E-06 | 2,26568E-07 | 5,42397E-06 | 1,2608E-06 | 1,77937E-07 | 3,9089E-06 | 9,88461E-07 |
| 26 | G Longitudinal | -1,47913E-09 | 3,87714E-07 | 1,4762E-07 | -3,05551E-10 | 2,36775E-07 | 8,89196E-08 | 1,5271E-11 | 1,47464E-07 | 5,32216E-08 |
| 26 | G Vertical | 7,43598E-07 | 3,27673E-10 | 6,24781E-09 | 6,1849E-07 | 8,07407E-11 | -1,73555E-09 | 4,81892E-07 | 2,87646E-12 | -1,41797E-11 |
| 26 | G transversal | -3,86488E-07 | -2,09695E-11 | 1,38409E-09 | -2,34319E-07 | 1,2737E-11 | -2,90298E-10 | -1,46375E-07 | 4,01427E-14 | -1,33567E-12 |
| 27 | D Longitudinal | 6,35595E-06 | 4,11278E-11 | -3,74141E-10 | 4,73696E-06 | -3,00245E-12 | 2,07098E-12 | 3,41988E-06 | -3,56144E-12 | 8,1478E-12 |
| 27 | D Vertical | -2,25366E-07 | 2,24703E-07 | 6,30776E-08 | -1,35504E-07 | 1,3722E-07 | 3,6119E-08 | -8,49135E-08 | 8,54633E-08 | 1,95482E-08 |
| 27 | D transversal | -4,44763E-07 | 6,78645E-06 | 1,27684E-06 | -3,57942E-07 | 5,1067E-06 | 1,14137E-06 | -2,7956E-07 | 3,7113E-06 | 9,17153E-07 |
| 27 | G Longitudinal | -5,05732E-09 | 3,87278E-07 | 1,5218E-07 | 7,92568E-10 | 2,36787E-07 | 8,85672E-08 | -1,88131E-11 | 1,47464E-07 | 5,32202E-08 |
| 27 | G Vertical | 7,3859E-07 | -6,35439E-10 | 4,26523E-10 | 6,18358E-07 | -8,69981E-11 | 2,06803E-09 | 4,81877E-07 | 6,10438E-12 | -4,97915E-12 |
| 27 | G transversal | -3,92648E-07 | -3,90016E-10 | 7,94813E-10 | -2,33766E-07 | -1,1937E-11 | 2,05675E-10 | -1,46385E-07 | 3,66151E-13 | 2,75798E-13 |
| 28 | D Longitudinal | 7,2136E-06 | 9,9967E-11 | -7,02823E-10 | 5,45531E-06 | 2,53527E-12 | -1,09556E-11 | 3,97897E-06 | 1,45563E-12 | -3,33588E-12 |
| 28 | D Vertical | -2,21744E-07 | -2,24935E-07 | -1,06876E-07 | -1,36687E-07 | -1,37428E-07 | -6,72676E-08 | -8,4834E-08 | -8,55951E-08 | -4,21894E-08 |
| 28 | D transversal | -4,47406E-07 | 6,78616E-06 | 1,28256E-06 | -3,57951E-07 | 5,1067E-06 | 1,14139E-06 | -2,7956E-07 | 3,7113E-06 | 9,17153E-07 |
| 28 | G Longitudinal | -1,2561E-09 | 3,84115E-07 | 1,65098E-07 | 2,48163E-10 | 2,36716E-07 | 8,98244E-08 | -1,88547E-11 | 1,47464E-07 | 5,32268E-08 |
| 28 | G Vertical | 7,42532E-07 | 1,26329E-08 | -6,6126E-08 | 6,19764E-07 | 2,2096E-10 | -2,58836E-09 | 4,81874E-07 | 1,48558E-11 | -5,78952E-11 |
| 28 | G transversal | -3,79706E-07 | -1,18299E-09 | 5,4233E-09 | -2,35585E-07 | -3,15704E-11 | 2,78242E-10 | -1,46281E-07 | -2,81532E-13 | 2,90043E-12 |
| 29 | D Longitudinal | 7,21363E-06 | -9,41482E-11 | 6,32867E-10 | 5,4553E-06 | 1,72448E-12 | 5,18506E-13 | 3,97897E-06 | 1,45681E-12 | -3,35168E-12 |
| 29 | D Vertical | 2,21738E-07 | -2,24936E-07 | -1,06905E-07 | 1,36682E-07 | -1,37429E-07 | -6,72675E-08 | 8,48323E-08 | -8,55955E-08 | -4,21886E-08 |
| 29 | D transversal | 4,47437E-07 | 6,78617E-06 | 1,28258E-06 | 3,57967E-07 | 5,1067E-06 | 1,14138E-06 | 2,79574E-07 | 3,7113E-06 | 9,17142E-07 |
| 29 | G Longitudinal | 9,77714E-10 | 3,84185E-07 | 1,64167E-07 | -2,59659E-10 | 2,36716E-07 | 8,98198E-08 | 2,13049E-11 | 1,47464E-07 | 5,32269E-08 |
| 29 | G Vertical | 7,46223E-07 | -1,31127E-08 | 7,5289E-08 | 6,20003E-07 | -2,1505E-10 | 2,62343E-09 | 4,81862E-07 | -6,37916E-12 | 3,8524E-11 |
| 29 | G transversal | -3,79987E-07 | 1,24086E-09 | -6,06419E-09 | -2,35586E-07 | 3,23223E-11 | -2,82356E-10 | -1,46281E-07 | 8,93236E-13 | -4,27493E-12 |
| 30 | D Longitudinal | 6,35598E-06 | -4,27515E-11 | 4,33433E-10 | 4,73696E-06 | -3,47997E-12 | 1,23301E-11 | 3,41988E-06 | -3,55932E-12 | 8,13643E-12 |

APOYO 2

| DESPLAZAMIENTOS (metros) | | C4 | | | C5 | | | C6 | | |
|---|---|---|---|---|---|---|---|---|---|---|
| Nudo | Desplazamiento | L | T | V | L | T | V | L | T | V |
| 30 | D Vertical | 2,25366E-07 | 2,24702E-07 | 6,31098E-08 | 1,35505E-07 | 1,37219E-07 | 3,61211E-08 | 8,49137E-08 | 8,5463E-08 | 1,9549E-08 |
| 30 | D transversal | 4,44737E-07 | 6,78645E-06 | 1,27688E-06 | 3,57968E-07 | 5,1067E-06 | 1,14136E-06 | 2,79574E-07 | 3,7113E-06 | 9,17142E-07 |
| 30 | G Longitudinal | 4,61918E-09 | 3,87327E-07 | 1,51356E-07 | -7,77007E-10 | 2,36786E-07 | 8,85645E-08 | 1,9851E-11 | 1,47464E-07 | 5,32202E-08 |
| 30 | G Vertical | 7,43738E-07 | 3,61474E-10 | 7,63013E-09 | 6,18215E-07 | 9,39699E-11 | -2,03832E-09 | 4,81888E-07 | 2,51196E-12 | -1,47399E-11 |
| 30 | G transversal | -3,9244E-07 | 3,53847E-10 | -2,46689E-10 | -2,3376E-07 | 1,32887E-11 | -2,06008E-10 | -1,46385E-07 | 2,40075E-13 | -1,66128E-12 |
| 31 | D Longitudinal | 5,96634E-06 | -1,3501E-10 | -3,89395E-10 | 4,50366E-06 | -3,55648E-12 | 2,90572E-11 | 3,27346E-06 | -3,26039E-12 | 7,47029E-12 |
| 31 | D Vertical | -2,26839E-07 | 2,24825E-07 | 5,99827E-08 | -1,35034E-07 | 1,3722E-07 | 3,61124E-08 | -8,49402E-08 | 8,54633E-08 | 1,95482E-08 |
| 31 | D transversal | -4,35821E-07 | 6,39776E-06 | 1,12667E-06 | -3,58952E-07 | 4,86993E-06 | 1,05232E-06 | -2,79496E-07 | 3,56383E-06 | 8,63931E-07 |
| 31 | G Longitudinal | -1,61617E-08 | 3,91685E-07 | 1,45541E-07 | 1,62102E-09 | 2,36727E-07 | 9,02254E-08 | -1,75739E-10 | 1,47464E-07 | 5,32274E-08 |
| 31 | G Vertical | 7,26748E-07 | 2,11568E-10 | -8,28519E-10 | 6,16908E-07 | -3,23759E-11 | 8,7014E-10 | 4,81734E-07 | 1,7404E-11 | -2,95325E-11 |
| 31 | G transversal | -3,83066E-07 | 4,86334E-10 | -2,33116E-09 | -2,3223E-07 | 2,06769E-11 | -2,30628E-10 | -1,46522E-07 | 3,36695E-13 | -2,69707E-12 |
| 32 | D Longitudinal | 6,59046E-06 | -1,21468E-10 | 2,52422E-10 | 4,97881E-06 | -1,07785E-12 | 1,08514E-11 | 3,62626E-06 | -8,96238E-13 | 2,0449E-12 |
| 32 | D Vertical | -2,23689E-07 | -6,63847E-10 | -1,82636E-08 | -1,36113E-07 | -1,05878E-10 | -1,55367E-08 | -8,48736E-08 | -6,58728E-11 | -1,13207E-08 |
| 32 | D transversal | -4,42134E-07 | 6,59249E-06 | 1,20014E-06 | -3,58234E-07 | 4,98831E-06 | 1,09682E-06 | -2,79539E-07 | 3,63756E-06 | 8,90542E-07 |
| 32 | G Longitudinal | -5,35691E-09 | 3,87652E-07 | 1,48022E-07 | 1,22946E-09 | 2,36766E-07 | 8,91257E-08 | -7,96383E-11 | 1,47464E-07 | 5,32221E-08 |
| 32 | G Vertical | 7,40203E-07 | -1,12019E-10 | 1,00405E-09 | 6,1811E-07 | 3,90861E-12 | -8,59921E-12 | 4,82047E-07 | 4,42036E-12 | -1,02173E-11 |
| 32 | G transversal | -3,8864E-07 | -3,72088E-10 | 1,52358E-09 | -2,3464E-07 | -1,37287E-12 | 2,64286E-11 | -1,46333E-07 | 2,46859E-13 | -4,74838E-13 |
| 33 | D Longitudinal | 6,82594E-06 | -4,91955E-10 | 2,47605E-09 | 5,21932E-06 | -2,87741E-13 | 2,3233E-11 | 3,83273E-06 | 1,78126E-12 | -4,10259E-12 |
| 33 | D Vertical | -2,22759E-07 | -2,24871E-07 | -1,00995E-07 | -1,37144E-07 | -1,37428E-07 | -6,72731E-08 | -8,48073E-08 | -8,55951E-08 | -4,21894E-08 |
| 33 | D transversal | -4,40153E-07 | 6,39953E-06 | 1,12221E-06 | -3,58889E-07 | 4,86993E-06 | 1,05219E-06 | -2,79496E-07 | 3,56383E-06 | 8,63931E-07 |
| 33 | G Longitudinal | -1,98394E-08 | 3,92842E-07 | 1,44102E-07 | 2,70558E-09 | 2,3687E-07 | 8,77166E-08 | -1,71018E-10 | 1,47465E-07 | 5,32143E-08 |
| 33 | G Vertical | 7,27055E-07 | 5,65728E-09 | -2,69425E-08 | 6,17552E-07 | 9,64126E-11 | -1,12041E-09 | 4,81619E-07 | 7,26268E-11 | -2,57695E-10 |
| 33 | G transversal | -4,02812E-07 | 2,97101E-11 | 2,08542E-09 | -2,37064E-07 | 5,25427E-11 | -3,48272E-10 | -1,46146E-07 | 6,82192E-13 | -4,87793E-12 |
| 34 | D Longitudinal | 7,02021E-06 | 1,65945E-12 | -1,69366E-11 | 5,33751E-06 | 2,22251E-12 | -5,30574E-12 | 3,90584E-06 | 1,61348E-12 | -3,70283E-12 |
| 34 | D Vertical | -2,04433E-11 | -2,24563E-07 | -1,05766E-07 | -8,46124E-13 | -1,37427E-07 | -6,72901E-08 | -9,42035E-13 | -8,55953E-08 | -4,2189E-08 |
| 34 | D transversal | 6,40455E-12 | 6,59285E-06 | 1,2024E-06 | 8,64782E-12 | 4,98832E-06 | 1,09679E-06 | 6,5999E-12 | 3,63757E-06 | 8,90536E-07 |
| 34 | G Longitudinal | 1,373E-11 | 3,86673E-07 | 1,60191E-07 | -7,2186E-13 | 2,36763E-07 | 8,91895E-08 | 1,00434E-12 | 1,47464E-07 | 5,32224E-08 |
| 34 | G Vertical | 7,65081E-07 | 2,25193E-12 | 2,66565E-11 | 6,17978E-07 | 4,34285E-12 | -9,66189E-12 | 4,81956E-07 | 4,30018E-12 | -9,8468E-12 |
| 34 | G transversal | -3,8511E-07 | -6,92544E-13 | 2,49101E-11 | -2,36024E-07 | 5,94931E-14 | 8,2022E-14 | -1,46242E-07 | 3,16056E-13 | -7,21889E-13 |
| 35 | D Longitudinal | 6,82591E-06 | 4,92656E-10 | -2,48381E-09 | 5,21932E-06 | 4,69182E-12 | -3,35524E-11 | 3,83273E-06 | 1,76337E-12 | -4,02884E-12 |
| 35 | D Vertical | 2,22757E-07 | -2,24872E-07 | -1,01013E-07 | 1,37139E-07 | -1,37428E-07 | -6,72734E-08 | 8,48056E-08 | -8,55955E-08 | -4,21886E-08 |
| 35 | D transversal | 4,40148E-07 | 6,39953E-06 | 1,12223E-06 | 3,58907E-07 | 4,86994E-06 | 1,05218E-06 | 2,79508E-07 | 3,56384E-06 | 8,6392E-07 |
| 35 | G Longitudinal | 1,99351E-08 | 3,92832E-07 | 1,44367E-07 | -2,70051E-09 | 2,36867E-07 | 8,77234E-08 | 1,72683E-10 | 1,47465E-07 | 5,32142E-08 |
| 35 | G Vertical | 7,28347E-07 | -5,82507E-09 | 3,01176E-08 | 6,17633E-07 | -1,09847E-10 | 1,16681E-09 | 4,81615E-07 | -6,49553E-11 | 2,40106E-10 |
| 35 | G transversal | -4,02752E-07 | -4,52812E-11 | -1,8603E-09 | -2,37059E-07 | -5,32531E-11 | 3,51056E-10 | -1,46146E-07 | -1,52365E-14 | 3,3468E-12 |
| 36 | D Longitudinal | 6,59046E-06 | 1,22478E-10 | -2,55334E-10 | 4,97881E-06 | 4,63835E-13 | -9,89198E-12 | 3,62626E-06 | -9,01023E-13 | 2,05384E-12 |
| 36 | D Vertical | 2,23707E-07 | -6,61659E-10 | -1,82701E-08 | 1,36107E-07 | -1,06425E-10 | -1,55356E-08 | 8,48731E-08 | -6,62293E-11 | -1,13199E-08 |
| 36 | D transversal | 4,42135E-07 | 6,59249E-06 | 1,20016E-06 | 3,58253E-07 | 4,98832E-06 | 1,09681E-06 | 2,79553E-07 | 3,63757E-06 | 8,90531E-07 |
| 36 | G Longitudinal | 5,35892E-09 | 3,87656E-07 | 1,48053E-07 | -1,22488E-09 | 2,36765E-07 | 8,91277E-08 | 8,13115E-11 | 1,47464E-07 | 5,32221E-08 |
| 36 | G Vertical | 7,40204E-07 | 1,15082E-10 | -1,04628E-09 | 6,1811E-07 | 4,59729E-12 | -1,07902E-11 | 4,82047E-07 | 4,24351E-12 | -9,6215E-12 |
| 36 | G transversal | -3,88689E-07 | 3,69769E-10 | -1,51785E-09 | -2,34634E-07 | 2,39651E-12 | -2,85341E-11 | -1,46333E-07 | 3,68067E-13 | -9,26822E-13 |
| 37 | D Longitudinal | 5,96634E-06 | 1,34154E-10 | 3,96177E-10 | 4,50366E-06 | -1,08099E-12 | -1,88641E-11 | 3,27346E-06 | -3,26495E-12 | 7,45946E-12 |
| 37 | D Vertical | 2,26838E-07 | 2,24825E-07 | 5,99999E-08 | 1,35034E-07 | 1,37219E-07 | 3,61152E-08 | 8,49405E-08 | 8,5463E-08 | 1,9549E-08 |
| 37 | D transversal | 4,35829E-07 | 6,39776E-06 | 1,12667E-06 | 3,58968E-07 | 4,86993E-06 | 1,0523E-06 | 2,79508E-07 | 3,56384E-06 | 8,63919E-07 |

APOYO 2

| DESPLAZAMIENTOS (metros) | | C4 | | | C5 | | | C6 | | |
|---|---|---|---|---|---|---|---|---|---|---|
| Nudo | Desplazamiento | L | T | V | L | T | V | L | T | V |
| 37 | G Longitudinal | 1,62588E-08 | 3,91677E-07 | 1,4579E-07 | -1,61553E-09 | 2,36726E-07 | 9,02284E-08 | 1,77383E-10 | 1,47464E-07 | 5,32273E-08 |
| 37 | G Vertical | 7,28512E-07 | -3,03861E-10 | 3,62463E-09 | 6,1686E-07 | 4,03079E-11 | -8,71297E-10 | 4,81738E-07 | -8,79932E-12 | 9,81993E-12 |
| 37 | G transversal | -3,83143E-07 | -4,76062E-10 | 2,13093E-09 | -2,32228E-07 | -1,80533E-11 | 2,23952E-10 | -1,46522E-07 | 2,26242E-13 | 1,42011E-12 |
| 38 | D Longitudinal | 6,16179E-06 | -3,88956E-13 | 1,32958E-11 | 4,62011E-06 | -2,84049E-12 | 6,27325E-12 | 3,34668E-06 | -3,41075E-12 | 7,80161E-12 |
| 38 | D Vertical | -9,45229E-12 | 2,24866E-07 | 6,15361E-08 | 1,8054E-12 | 1,3722E-07 | 3,61001E-08 | 2,82352E-14 | 8,54632E-08 | 1,95486E-08 |
| 38 | D transversal | -4,59421E-12 | 6,5921E-06 | 1,20177E-06 | 1,06141E-11 | 4,98831E-06 | 1,09684E-06 | 6,49185E-12 | 3,63757E-06 | 8,90536E-07 |
| 38 | G Longitudinal | -2,21432E-11 | 3,88696E-07 | 1,50174E-07 | 5,19723E-12 | 2,36768E-07 | 8,90617E-08 | 6,71754E-13 | 1,47464E-07 | 5,32224E-08 |
| 38 | G Vertical | 7,5905E-07 | 1,95298E-12 | 2,81706E-11 | 6,18027E-07 | 4,39834E-12 | -9,78067E-12 | 4,81956E-07 | 4,30128E-12 | -9,84952E-12 |
| 38 | G transversal | -3,89745E-07 | 1,51543E-13 | -2,33969E-11 | -2,33253E-07 | 9,32705E-13 | -2,12097E-12 | -1,46425E-07 | 2,97797E-13 | -6,77443E-13 |
| 39 | D Longitudinal | 7,95438E-06 | 1,69313E-09 | -3,73826E-09 | 6,05458E-06 | 7,0146E-12 | -1,29325E-11 | 4,46489E-06 | 6,60213E-12 | -1,51282E-11 |
| 39 | D Vertical | 1,1853E-07 | -6,59181E-07 | -3,77923E-07 | 6,84321E-08 | -4,12072E-07 | -1,70749E-07 | 4,24097E-08 | -2,56654E-07 | -1,03926E-07 |
| 39 | D transversal | 2,3065E-07 | 6,59856E-06 | 1,18981E-06 | 1,78991E-07 | 4,98832E-06 | 1,09678E-06 | 1,3979E-07 | 3,63757E-06 | 8,90533E-07 |
| 39 | G Longitudinal | -1,23721E-08 | 3,75948E-07 | 2,20305E-07 | -1,07533E-10 | 2,36773E-07 | 8,90812E-08 | 5,12141E-12 | 1,47465E-07 | 5,32195E-08 |
| 39 | G Vertical | 8,19363E-07 | -2,99428E-09 | 7,67939E-09 | 6,18151E-07 | -1,51121E-11 | 2,03483E-10 | 4,8195E-07 | 3,43344E-12 | -5,84392E-12 |
| 39 | G transversal | -4,0515E-07 | 8,2087E-09 | -3,27549E-08 | -2,35863E-07 | 4,55305E-11 | -4,97297E-10 | -1,46264E-07 | 2,32612E-12 | -1,00023E-11 |
| 40 | D Longitudinal | 7,95438E-06 | 1,69316E-09 | -3,73647E-09 | 6,05458E-06 | 7,01474E-12 | -1,29344E-11 | 4,46489E-06 | 6,60213E-12 | -1,51282E-11 |
| 40 | D Vertical | -1,18383E-07 | -6,57532E-07 | -3,81565E-07 | -6,84363E-08 | -4,12072E-07 | -1,70746E-07 | -4,24136E-08 | -2,56654E-07 | -1,03927E-07 |
| 40 | D transversal | -2,30545E-07 | 6,60009E-06 | 1,1864E-06 | -1,78975E-07 | 4,98832E-06 | 1,09679E-06 | -1,39777E-07 | 3,63757E-06 | 8,90539E-07 |
| 40 | G Longitudinal | 1,20479E-08 | 3,73263E-07 | 2,26676E-07 | 9,6429E-11 | 2,36774E-07 | 8,90779E-08 | -2,63507E-12 | 1,47465E-07 | 5,32196E-08 |
| 40 | G Vertical | 8,19044E-07 | 1,86416E-10 | -6,84599E-10 | 6,18131E-07 | 2,41191E-11 | -2,24432E-10 | 4,81951E-07 | 5,16101E-12 | -1,38342E-11 |
| 40 | G transversal | -4,04381E-07 | 6,63066E-10 | 1,14536E-08 | -2,35821E-07 | -4,61809E-11 | 5,05302E-10 | -1,46267E-07 | -1,68083E-12 | 8,52167E-12 |
| 41 | D Longitudinal | 7,72405E-06 | 6,11087E-09 | -1,3507E-08 | 5,93695E-06 | 6,27002E-12 | -3,05939E-12 | 4,39174E-06 | 6,76089E-12 | -1,54963E-11 |
| 41 | D Vertical | 1,1853E-07 | -6,59181E-07 | -3,77924E-07 | 6,84322E-08 | -4,12072E-07 | -1,70749E-07 | 4,24097E-08 | -2,56654E-07 | -1,03926E-07 |
| 41 | D transversal | 2,32932E-07 | 6,40454E-06 | 1,1101E-06 | 1,79332E-07 | 4,86994E-06 | 1,05217E-06 | 1,39766E-07 | 3,56384E-06 | 8,63923E-07 |
| 41 | G Longitudinal | -1,04545E-08 | 3,75359E-07 | 2,34361E-07 | -3,06678E-11 | 2,36759E-07 | 8,9203E-08 | 6,64089E-12 | 1,47464E-07 | 5,32221E-08 |
| 41 | G Vertical | 8,16662E-07 | -2,04643E-09 | 5,23848E-09 | 6,18226E-07 | 3,56147E-12 | 7,80252E-14 | 4,81939E-07 | 4,30268E-12 | -9,85811E-12 |
| 41 | G transversal | -4,1871E-07 | 5,7443E-09 | -2,03705E-08 | -2,3663E-07 | -1,3281E-11 | -9,40189E-13 | -1,46191E-07 | 2,20593E-13 | 2,77053E-13 |
| 42 | D Longitudinal | 8,72407E-06 | 8,53901E-11 | -1,50309E-10 | 6,65357E-06 | 1,24811E-11 | -2,80741E-11 | 4,95083E-06 | 1,17475E-11 | -2,69071E-11 |
| 42 | D Vertical | 1,50309E-10 | -1,09183E-06 | -6,56396E-07 | -1,75398E-12 | -6,86716E-07 | -2,74223E-07 | -3,0999E-12 | -4,27712E-07 | -1,65664E-07 |
| 42 | D transversal | 8,53901E-11 | 6,41248E-06 | 1,09183E-06 | 8,12518E-12 | 4,86994E-06 | 1,05218E-06 | 6,1581E-12 | 3,56384E-06 | 8,63925E-07 |
| 42 | G Longitudinal | -6,60033E-11 | 3,73685E-07 | 2,35978E-07 | -3,00701E-13 | 2,36762E-07 | 8,92029E-08 | 9,69724E-13 | 1,47464E-07 | 5,32219E-08 |
| 42 | G Vertical | 8,7363E-07 | -7,02577E-09 | 1,55692E-08 | 6,1766E-07 | 5,68711E-12 | -2,56743E-11 | 4,81979E-07 | 4,29829E-12 | -9,8334E-12 |
| 42 | G transversal | -4,44862E-07 | 7,58411E-09 | -1,67867E-08 | -2,35541E-07 | -1,31207E-12 | 1,6961E-11 | -1,46276E-07 | 3,18396E-13 | -7,36904E-13 |
| 43 | D Longitudinal | 7,72411E-06 | 6,10435E-09 | -1,34916E-08 | 5,93694E-06 | 6,26939E-12 | -3,05391E-12 | 4,39174E-06 | 6,7609E-12 | -1,54964E-11 |
| 43 | D Vertical | -1,18382E-07 | -6,57532E-07 | -3,81566E-07 | -6,84364E-08 | -4,12072E-07 | -1,70746E-07 | -4,24136E-08 | -2,56654E-07 | -1,03927E-07 |
| 43 | D transversal | -2,32745E-07 | 6,40758E-06 | 1,10336E-06 | -1,79316E-07 | 4,86993E-06 | 1,05219E-06 | -1,39754E-07 | 3,56383E-06 | 8,63928E-07 |
| 43 | G Longitudinal | 1,03378E-08 | 3,73131E-07 | 2,39273E-07 | 3,08498E-11 | 2,36759E-07 | 8,91976E-08 | -4,72697E-12 | 1,47464E-07 | 5,32221E-08 |
| 43 | G Vertical | 8,16642E-07 | 1,66748E-09 | -4,36663E-09 | 6,18226E-07 | 5,40186E-12 | -2,0909E-11 | 4,81939E-07 | 4,29606E-12 | -9,83085E-12 |
| 43 | G transversal | -4,18764E-07 | 1,27366E-09 | 4,95761E-09 | -2,36633E-07 | 1,14327E-11 | 1,88062E-11 | -1,46191E-07 | 4,36084E-13 | -1,79083E-12 |
| 44 | D Longitudinal | 5,28392E-06 | 1,58008E-11 | 5,0744E-11 | 3,90296E-06 | -7,8558E-12 | 1,46175E-11 | 2,78763E-06 | -8,39847E-12 | 1,92212E-11 |
| 44 | D Vertical | -1,12625E-07 | 6,75688E-07 | 2,36314E-07 | -6,76553E-08 | 4,11872E-07 | 1,39412E-07 | -4,24608E-08 | 2,56522E-07 | 8,12862E-08 |
| 44 | D transversal | -2,22716E-07 | 6,59207E-06 | 1,20207E-06 | -1,78968E-07 | 4,98831E-06 | 1,09685E-06 | -1,39777E-07 | 3,63757E-06 | 8,90539E-07 |
| 44 | G Longitudinal | -1,38527E-09 | 3,88642E-07 | 1,50535E-07 | 4,46865E-11 | 2,36764E-07 | 8,9145E-08 | -2,66273E-12 | 1,47464E-07 | 5,32225E-08 |
| 44 | G Vertical | 7,56697E-07 | -1,48581E-10 | 2,2618E-10 | 6,18083E-07 | -3,61163E-12 | 1,55639E-10 | 4,81951E-07 | 4,4441E-12 | -9,41152E-12 |

APOYO 2

| DESPLAZAMIENTOS (metros) | | C4 | | | C5 | | | C6 | | |
|---|---|---|---|---|---|---|---|---|---|---|
| Nudo | Desplazamiento | L | T | V | L | T | V | L | T | V |
| 44 | G transversal | -3,91207E-07 | -3,72189E-10 | 8,4473E-10 | -2,33717E-07 | -1,79298E-11 | 3,84361E-10 | -1,46399E-07 | 6,33365E-13 | 3,2469E-13 |
| 45 | D Longitudinal | 5,28392E-06 | 1,57888E-11 | 5,08138E-11 | 3,90296E-06 | -7,85588E-12 | 1,46192E-11 | 2,78763E-06 | -8,39847E-12 | 1,92212E-11 |
| 45 | D Vertical | 1,12597E-07 | 6,7567E-07 | 2,36266E-07 | 6,76669E-08 | 4,11871E-07 | 1,39417E-07 | 4,24627E-08 | 2,56522E-07 | 8,12866E-08 |
| 45 | D transversal | 2,22695E-07 | 6,59208E-06 | 1,20214E-06 | 1,78991E-07 | 4,98832E-06 | 1,09684E-06 | 1,3979E-07 | 3,63757E-06 | 8,90533E-07 |
| 45 | G Longitudinal | 1,10887E-09 | 3,8863E-07 | 1,50016E-07 | -2,94533E-11 | 2,36764E-07 | 8,91476E-08 | 3,6151E-12 | 1,47464E-07 | 5,32225E-08 |
| 45 | G Vertical | 7,57143E-07 | 1,537E-10 | 6,45726E-10 | 6,18072E-07 | 1,25322E-11 | -1,76264E-10 | 4,81952E-07 | 4,16004E-12 | -1,02938E-11 |
| 45 | G transversal | -3,90197E-07 | 4,01006E-10 | 1,12596E-09 | -2,33739E-07 | 1,99333E-11 | -3,94449E-10 | -1,46397E-07 | -2,74679E-14 | -1,71253E-12 |
| 46 | D Longitudinal | 5,09293E-06 | 6,46179E-11 | 1,89623E-10 | 3,78593E-06 | -7,08186E-12 | 5,35416E-12 | 2,71444E-06 | -8,24763E-12 | 1,88738E-11 |
| 46 | D Vertical | -1,12625E-07 | 6,75688E-07 | 2,36313E-07 | -6,76552E-08 | 4,11872E-07 | 1,39412E-07 | -4,24608E-08 | 2,56522E-07 | 8,12862E-08 |
| 46 | D transversal | -2,19176E-07 | 6,39771E-06 | 1,12652E-06 | -1,79337E-07 | 4,86993E-06 | 1,05232E-06 | -1,39754E-07 | 3,56383E-06 | 8,63928E-07 |
| 46 | G Longitudinal | 1,48173E-09 | 3,88845E-07 | 1,51039E-07 | -8,36429E-12 | 2,3677E-07 | 8,90569E-08 | -5,11482E-12 | 1,47464E-07 | 5,32222E-08 |
| 46 | G Vertical | 7,57082E-07 | -4,55782E-11 | -1,25478E-10 | 6,18292E-07 | 4,04896E-12 | -1,58306E-12 | 4,81939E-07 | 4,30031E-12 | -9,84325E-12 |
| 46 | G transversal | -3,85948E-07 | 6,2169E-10 | -1,72253E-09 | -2,32805E-07 | 5,57969E-12 | 2,18942E-11 | -1,46476E-07 | 3,07566E-13 | -1,03249E-12 |
| 47 | D Longitudinal | 4,20948E-06 | -4,36657E-12 | -2,80753E-11 | 3,06927E-06 | -1,27062E-11 | 2,82478E-11 | 2,15536E-06 | -1,32378E-11 | 3,03064E-11 |
| 47 | D Vertical | -2,79603E-11 | 1,12657E-06 | 4,11523E-07 | 1,13697E-11 | 6,86523E-07 | 2,42713E-07 | 1,7534E-12 | 4,2758E-07 | 1,43024E-07 |
| 47 | D transversal | -4,38477E-12 | 6,39772E-06 | 1,12657E-06 | 8,90336E-12 | 4,86993E-06 | 1,05232E-06 | 6,09674E-12 | 3,56384E-06 | 8,63925E-07 |
| 47 | G Longitudinal | -1,2129E-11 | 3,88703E-07 | 1,51062E-07 | 4,80594E-12 | 2,36769E-07 | 8,9051E-08 | 7,04067E-13 | 1,47464E-07 | 5,32223E-08 |
| 47 | G Vertical | 7,62867E-07 | 7,95995E-11 | 2,50939E-10 | 6,17684E-07 | 4,98843E-12 | -2,31716E-11 | 4,81979E-07 | 4,30252E-12 | -9,85886E-12 |
| 47 | G transversal | -3,84046E-07 | 8,28808E-11 | 2,54796E-10 | -2,33791E-07 | 1,50532E-12 | -1,62139E-11 | -1,4639E-07 | 3,00276E-13 | -6,90335E-13 |
| 48 | D Longitudinal | 5,09293E-06 | 6,46405E-11 | 1,89684E-10 | 3,78593E-06 | -7,08143E-12 | 5,34939E-12 | 2,71444E-06 | -8,24763E-12 | 1,88738E-11 |
| 48 | D Vertical | 1,12597E-07 | 6,7567E-07 | 2,36265E-07 | 6,76668E-08 | 4,11871E-07 | 1,39417E-07 | 4,24627E-08 | 2,56522E-07 | 8,12866E-08 |
| 48 | D transversal | 2,19166E-07 | 6,39774E-06 | 1,12663E-06 | 1,79355E-07 | 4,86993E-06 | 1,05231E-06 | 1,39766E-07 | 3,56384E-06 | 8,63922E-07 |
| 48 | G Longitudinal | -1,49272E-09 | 3,88819E-07 | 1,50987E-07 | 1,766E-11 | 2,3677E-07 | 8,90613E-08 | 6,54001E-12 | 1,47464E-07 | 5,32222E-08 |
| 48 | G Vertical | 7,57079E-07 | 5,39009E-11 | 1,64856E-10 | 6,18293E-07 | 4,96389E-12 | -1,9294E-11 | 4,81939E-07 | 4,29862E-12 | -9,84725E-12 |
| 48 | G transversal | -3,85999E-07 | -5,39167E-10 | 1,83295E-09 | -2,32804E-07 | -2,72359E-12 | -4,07215E-11 | -1,46477E-07 | 2,68925E-13 | -2,83222E-13 |
| 49 | D Longitudinal | 5,59E-06 | -4,56511E-10 | -4,01391E-09 | 4,27226E-06 | 9,54721E-12 | -1,37489E-10 | 3,12686E-06 | -2,99284E-12 | 6,27916E-12 |
| 49 | D Vertical | -2,25007E-07 | 2,23471E-07 | 5,31088E-08 | -1,3491E-07 | 1,37218E-07 | 3,61896E-08 | -8,49189E-08 | 8,54634E-08 | 1,95479E-08 |
| 49 | D transversal | -4,13796E-07 | 6,00366E-06 | 9,90472E-07 | -3,6181E-07 | 4,6332E-06 | 9,62344E-07 | -2,79229E-07 | 3,41637E-06 | 8,10711E-07 |
| 49 | G Longitudinal | -2,31889E-08 | 3,94334E-07 | 1,2476E-07 | 4,3208E-09 | 2,36804E-07 | 8,7613E-08 | -2,69651E-10 | 1,47465E-07 | 5,31977E-08 |
| 49 | G Vertical | 6,9846E-07 | -3,61971E-10 | -1,80758E-09 | 6,14317E-07 | 7,16991E-12 | 1,12923E-10 | 4,81233E-07 | 4,57944E-11 | -8,15225E-11 |
| 49 | G transversal | -3,72954E-07 | -3,05013E-09 | -2,36314E-09 | -2,31415E-07 | -3,32015E-11 | 2,98684E-10 | -1,46602E-07 | -3,17537E-14 | 4,9608E-12 |
| 50 | D Longitudinal | 6,19836E-06 | -5,70267E-11 | 7,17159E-10 | 4,74415E-06 | 8,22032E-12 | -7,049E-11 | 3,47993E-06 | -6,07469E-13 | 1,15967E-12 |
| 50 | D Vertical | -2,26494E-07 | 8,19494E-10 | -2,24062E-08 | -1,3587E-07 | -8,5285E-11 | -1,60299E-08 | -8,48745E-08 | -6,59553E-11 | -1,13196E-08 |
| 50 | D transversal | -4,24719E-07 | 6,20028E-06 | 1,05503E-06 | -3,60485E-07 | 4,75155E-06 | 1,00769E-06 | -2,79353E-07 | 3,4901E-06 | 8,3732E-07 |
| 50 | G Longitudinal | -1,2847E-08 | 3,90335E-07 | 1,31529E-07 | 2,52888E-09 | 2,36765E-07 | 8,913E-08 | -1,69531E-10 | 1,47464E-07 | 5,32221E-08 |
| 50 | G Vertical | 7,24443E-07 | 4,08882E-10 | 4,96679E-09 | 6,14133E-07 | 9,20008E-12 | -2,8812E-11 | 4,82352E-07 | 4,70157E-12 | -1,10343E-11 |
| 50 | G transversal | -3,95547E-07 | 5,16427E-10 | -6,73785E-10 | -2,34677E-07 | 2,0187E-11 | -1,9394E-10 | -1,46333E-07 | 6,78122E-14 | -2,52639E-13 |
| 51 | D Longitudinal | 6,41116E-06 | 8,55369E-10 | 4,79589E-09 | 4,98137E-06 | 2,71783E-11 | -1,96762E-10 | 3,68666E-06 | 2,0421E-12 | -5,00817E-12 |
| 51 | D Vertical | -2,2205E-07 | -2,23459E-07 | -9,09984E-08 | -1,37371E-07 | -1,37429E-07 | -6,72021E-08 | -8,48283E-08 | -8,55951E-08 | -4,21896E-08 |
| 51 | D transversal | -4,10074E-07 | 6,00257E-06 | 9,95281E-07 | -3,62592E-07 | 4,63313E-06 | 9,63902E-07 | -2,79227E-07 | 3,41637E-06 | 8,10707E-07 |
| 51 | G Longitudinal | -3,13506E-08 | 3,95279E-07 | 1,20326E-07 | 2,84296E-09 | 2,3649E-07 | 9,17774E-08 | -2,9533E-10 | 1,47463E-07 | 5,32539E-08 |
| 51 | G Vertical | 6,99679E-07 | 1,50652E-09 | -1,18025E-08 | 6,14604E-07 | 2,61478E-11 | -2,50164E-10 | 4,80852E-07 | 2,19876E-10 | -7,79469E-10 |
| 51 | G transversal | -4,16374E-07 | 3,34747E-09 | 2,63324E-09 | -2,37967E-07 | -1,04896E-10 | 5,5851E-10 | -1,46064E-07 | -5,67325E-13 | 1,11799E-11 |
| 52 | D Longitudinal | 6,61824E-06 | 5,59405E-13 | 2,97052E-12 | 5,10044E-06 | 1,89504E-12 | -4,37249E-12 | 3,7597E-06 | 1,94936E-12 | -4,47103E-12 |

APOYO 2

| DESPLAZAMIENTOS (metros) | | C4 | | | C5 | | | C6 | | |
|---|---|---|---|---|---|---|---|---|---|---|
| Nudo | Desplazamiento | L | T | V | L | T | V | L | T | V |
| 52 | D Vertical | 1,4229E-11 | -2,24945E-07 | -9,73404E-08 | -2,72651E-12 | -1,37445E-07 | -6,71096E-08 | -8,22359E-13 | -8,55952E-08 | -4,2189E-08 |
| 52 | D transversal | -1,39139E-13 | 6,20105E-06 | 1,05875E-06 | 7,44923E-12 | 4,75154E-06 | 1,00804E-06 | 5,70438E-12 | 3,4901E-06 | 8,37313E-07 |
| 52 | G Longitudinal | -5,5302E-12 | 3,96947E-07 | 1,26934E-07 | 2,81082E-12 | 2,36796E-07 | 8,83034E-08 | 8,07402E-13 | 1,47464E-07 | 5,32259E-08 |
| 52 | G Vertical | 7,32901E-07 | -1,22098E-12 | 5,05744E-12 | 6,21954E-07 | 5,72151E-12 | -1,29399E-11 | 4,81666E-07 | 4,25723E-12 | -9,74527E-12 |
| 52 | G transversal | -3,96798E-07 | 3,84175E-13 | 1,04274E-11 | -2,37205E-07 | -3,27815E-13 | 9,04692E-13 | -1,46163E-07 | 3,25055E-13 | -7,43302E-13 |
| 53 | D Longitudinal | 6,41118E-06 | -8,54149E-10 | -4,78464E-09 | 4,98137E-06 | -2,40616E-11 | 1,89676E-10 | 3,68666E-06 | 2,19451E-12 | -4,70736E-12 |
| 53 | D Vertical | 2,22049E-07 | -2,23459E-07 | -9,10064E-08 | 1,37366E-07 | -1,37429E-07 | -6,72026E-08 | 8,48266E-08 | -8,55955E-08 | -4,21888E-08 |
| 53 | D transversal | 4,10078E-07 | 6,00257E-06 | 9,95269E-07 | 3,62604E-07 | 4,63314E-06 | 9,63884E-07 | 2,79237E-07 | 3,41637E-06 | 8,10696E-07 |
| 53 | G Longitudinal | 3,13217E-08 | 3,95281E-07 | 1,20275E-07 | -2,8375E-09 | 2,36489E-07 | 9,17783E-08 | 2,96972E-10 | 1,47463E-07 | 5,32537E-08 |
| 53 | G Vertical | 7,00233E-07 | -1,58564E-09 | 1,31705E-08 | 6,1464E-07 | -8,81459E-11 | 3,95001E-10 | 4,80853E-07 | -2,14272E-10 | 7,66527E-10 |
| 53 | G transversal | -4,16369E-07 | -3,34278E-09 | -2,67622E-09 | -2,37973E-07 | 1,0352E-10 | -5,55345E-10 | -1,46064E-07 | 1,25833E-12 | -1,27602E-11 |
| 54 | D Longitudinal | 6,19836E-06 | 5,70482E-11 | -7,17438E-10 | 4,74415E-06 | -7,86893E-12 | 6,94696E-11 | 3,47993E-06 | -5,75818E-13 | 1,53942E-12 |
| 54 | D Vertical | 2,26487E-07 | 8,1754E-10 | -2,24024E-08 | 1,35869E-07 | -8,61658E-11 | -1,6028E-08 | 8,48737E-08 | -6,63102E-11 | -1,13187E-08 |
| 54 | D transversal | 4,2472E-07 | 6,20028E-06 | 1,05503E-06 | 3,60499E-07 | 4,75155E-06 | 1,00768E-06 | 2,79364E-07 | 3,49011E-06 | 8,37308E-07 |
| 54 | G Longitudinal | 1,28476E-08 | 3,90335E-07 | 1,3155E-07 | -2,52426E-09 | 2,36763E-07 | 8,91337E-08 | 1,71204E-10 | 1,47464E-07 | 5,3222E-08 |
| 54 | G Vertical | 7,24444E-07 | -4,07704E-10 | -4,95367E-09 | 6,14133E-07 | -3,40823E-12 | 1,58134E-11 | 4,82352E-07 | 4,04166E-12 | -8,99366E-12 |
| 54 | G transversal | -3,95519E-07 | -5,16285E-10 | 6,74615E-10 | -2,34678E-07 | -1,91705E-11 | 1,91852E-10 | -1,46333E-07 | 5,49646E-13 | -1,155E-12 |
| 55 | D Longitudinal | 5,59E-06 | 4,55532E-10 | 4,00252E-09 | 4,27226E-06 | -1,1025E-11 | 1,40619E-10 | 3,12686E-06 | -2,9962E-12 | 7,43442E-12 |
| 55 | D Vertical | 2,25006E-07 | 2,23471E-07 | 5,31167E-08 | 1,3491E-07 | 1,37217E-07 | 3,61921E-08 | 8,49192E-08 | 8,5463E-08 | 1,95487E-08 |
| 55 | D transversal | 4,13792E-07 | 6,00366E-06 | 9,90465E-07 | 3,61822E-07 | 4,6332E-06 | 9,62328E-07 | 2,7924E-07 | 3,41637E-06 | 8,10699E-07 |
| 55 | G Longitudinal | 2,3168E-08 | 3,94338E-07 | 1,24708E-07 | -4,31747E-09 | 2,36801E-07 | 8,76204E-08 | 2,71364E-10 | 1,47465E-07 | 5,31975E-08 |
| 55 | G Vertical | 6,99227E-07 | 3,28721E-10 | 3,02202E-09 | 6,14296E-07 | 1,19803E-12 | -1,21677E-10 | 4,81235E-07 | -3,72396E-11 | 6,18922E-11 |
| 55 | G transversal | -3,7293E-07 | 3,0474E-09 | 2,40033E-09 | -2,31417E-07 | 3,63652E-11 | -3,05501E-10 | -1,46602E-07 | 5,69257E-13 | -6,18015E-12 |
| 56 | D Longitudinal | 5,77738E-06 | -5,7648E-13 | -3,14889E-12 | 4,38791E-06 | -1,51271E-12 | 3,28443E-12 | 3,20015E-06 | -3,13275E-12 | 7,1704E-12 |
| 56 | D Vertical | 1,65556E-12 | 2,24334E-07 | 5,86443E-08 | -3,0089E-13 | 1,37212E-07 | 3,62467E-08 | 1,49426E-13 | 8,54632E-08 | 1,95488E-08 |
| 56 | D transversal | 9,81847E-13 | 6,20071E-06 | 1,05857E-06 | 7,21847E-12 | 4,75157E-06 | 1,00732E-06 | 5,71421E-12 | 3,4901E-06 | 8,37315E-07 |
| 56 | G Longitudinal | 4,17983E-12 | 3,94091E-07 | 1,36197E-07 | 1,7786E-12 | 2,3673E-07 | 8,99698E-08 | 8,68543E-13 | 1,47464E-07 | 5,32202E-08 |
| 56 | G Vertical | 7,32366E-07 | -5,43623E-13 | 3,04876E-12 | 6,21327E-07 | 5,38399E-12 | -1,22028E-11 | 4,81669E-07 | 4,26279E-12 | -9,75822E-12 |
| 56 | G transversal | -3,839E-07 | -1,68791E-13 | -1,00728E-11 | -2,32152E-07 | 1,2641E-12 | -2,81954E-12 | -1,46504E-07 | 2,89074E-13 | -6,56787E-13 |
| 57 | D Longitudinal | 6,39397E-06 | 9,06882E-13 | -2,38472E-12 | 4,86152E-06 | -3,72802E-14 | -7,78969E-14 | 3,55309E-06 | -7,45291E-13 | 1,69987E-12 |
| 57 | D Vertical | -6,39875E-13 | -2,3269E-11 | -2,05065E-08 | -1,16888E-12 | -1,04396E-10 | -1,55797E-08 | -3,62409E-13 | -6,60591E-11 | -1,13202E-08 |
| 57 | D transversal | 7,34237E-12 | 6,39846E-06 | 1,12588E-06 | 8,50677E-12 | 4,86993E-06 | 1,05225E-06 | 6,12731E-12 | 3,56384E-06 | 8,63925E-07 |
| 57 | G Longitudinal | 4,64692E-13 | 3,877E-07 | 1,38847E-07 | 2,28017E-12 | 2,36766E-07 | 8,91253E-08 | 8,36651E-13 | 1,47464E-07 | 5,32221E-08 |
| 57 | G Vertical | 7,48086E-07 | 6,23645E-14 | 9,10374E-13 | 6,17896E-07 | 4,27434E-12 | -9,67278E-12 | 4,82013E-07 | 4,31798E-12 | -9,88772E-12 |
| 57 | G transversal | -3,87634E-07 | 6,8868E-14 | 2,65218E-13 | -2,3463E-07 | 5,02071E-13 | -1,03164E-12 | -1,46333E-07 | 3,06957E-13 | -6,99769E-13 |
| 58 | D Longitudinal | 5,22011E-06 | -4,21763E-09 | -3,48706E-09 | 4,04044E-06 | -2,01027E-11 | 2,58498E-10 | 2,98039E-06 | -2,70826E-12 | 7,46802E-12 |
| 58 | D Vertical | -2,19475E-07 | 2,18827E-07 | 4,60927E-08 | -1,35541E-07 | 1,37221E-07 | 3,60979E-08 | -8,47847E-08 | 8,54634E-08 | 1,9548E-08 |
| 58 | D transversal | -3,9048E-07 | 5,61244E-06 | 8,76129E-07 | -3,65853E-07 | 4,39633E-06 | 8,7565E-07 | -2,79092E-07 | 3,2689E-06 | 7,57485E-07 |
| 58 | G Longitudinal | -2,70891E-08 | 3,86919E-07 | 1,07042E-07 | 1,79623E-09 | 2,36862E-07 | 8,93264E-08 | 4,36392E-11 | 1,47461E-07 | 5,33199E-08 |
| 58 | G Vertical | 6,6276E-07 | -1,5891E-09 | -1,49589E-09 | 6,09111E-07 | 3,87199E-12 | 2,79866E-10 | 4,80165E-07 | 1,04428E-10 | -1,86027E-10 |
| 58 | G transversal | -3,63839E-07 | -5,29531E-10 | 2,49392E-09 | -2,31769E-07 | 6,25515E-11 | -2,76258E-10 | -1,46283E-07 | 1,44613E-12 | -1,7161E-11 |
| 59 | D Longitudinal | 5,80536E-06 | 4,98767E-11 | 7,92057E-10 | 4,50948E-06 | -9,01274E-12 | 7,4647E-11 | 3,33359E-06 | -2,8014E-13 | 9,89353E-13 |
| 59 | D Vertical | -2,22152E-07 | -4,7305E-10 | -1,67298E-08 | -1,36804E-07 | -1,62754E-10 | -1,41555E-08 | -8,4872E-08 | -6,56943E-11 | -1,1323E-08 |
| 59 | D transversal | -3,99078E-07 | 5,80592E-06 | 9,30775E-07 | -3,63921E-07 | 4,51478E-06 | 9,18569E-07 | -2,79103E-07 | 3,34264E-06 | 7,84098E-07 |

APOYO 2

| DESPLAZAMIENTOS (metros) | | C4 | | | C5 | | | C6 | | |
|---|---|---|---|---|---|---|---|---|---|---|
| Nudo | Desplazamiento | L | T | V | L | T | V | L | T | V |
| 59 | G Longitudinal | -1,17197E-08 | 3,85185E-07 | 1,16543E-07 | 2,08903E-09 | 2,36767E-07 | 8,91191E-08 | -3,56034E-11 | 1,47464E-07 | 5,32219E-08 |
| 59 | G Vertical | 6,90158E-07 | 4,10396E-09 | 7,78855E-09 | 6,08851E-07 | -6,62643E-12 | 2,50323E-11 | 4,82696E-07 | 5,35407E-12 | -1,3137E-11 |
| 59 | G transversal | -3,90433E-07 | -2,95559E-10 | 7,87967E-10 | -2,34671E-07 | -5,40637E-11 | 4,79863E-10 | -1,46332E-07 | -7,96897E-15 | 2,22934E-12 |
| 60 | D Longitudinal | 6,00019E-06 | 4,01828E-09 | 5,8733E-09 | 4,74385E-06 | -5,26738E-11 | 3,7434E-10 | 3,54046E-06 | 2,53844E-12 | -4,7816E-12 |
| 60 | D Vertical | -2,18156E-07 | -2,18862E-07 | -8,01954E-08 | -1,36621E-07 | -1,37427E-07 | -6,72902E-08 | -8,49626E-08 | -8,55951E-08 | -4,21894E-08 |
| 60 | D transversal | -3,83371E-07 | 5,61297E-06 | 8,76554E-07 | -3,6424E-07 | 4,39646E-06 | 8,72385E-07 | -2,79096E-07 | 3,2689E-06 | 7,57489E-07 |
| 60 | G Longitudinal | -2,50781E-08 | 3,85721E-07 | 1,11582E-07 | 1,97341E-09 | 2,37577E-07 | 8,45963E-08 | 1,50877E-10 | 1,47471E-07 | 5,30966E-08 |
| 60 | G Vertical | 6,65214E-07 | -6,3784E-10 | -6,20037E-09 | 6,09266E-07 | 1,4421E-11 | -3,77827E-10 | 4,79239E-07 | 5,248E-10 | -1,86372E-09 |
| 60 | G transversal | -4,08899E-07 | 1,0676E-10 | -2,43021E-09 | -2,37501E-07 | 2,10097E-10 | -8,33485E-10 | -1,46387E-07 | 3,86099E-12 | -4,19079E-11 |
| 61 | D Longitudinal | 6,204E-06 | 7,15501E-13 | 7,631E-12 | 4,86228E-06 | 1,22134E-12 | -2,7153E-12 | 3,61362E-06 | 2,28719E-12 | -5,24433E-12 |
| 61 | D Vertical | -9,07794E-12 | -2,22991E-07 | -8,62221E-08 | -3,03219E-12 | -1,37382E-07 | -6,75759E-08 | -8,54604E-13 | -8,55954E-08 | -4,21897E-08 |
| 61 | D transversal | 5,85293E-13 | 5,80777E-06 | 9,35912E-07 | 4,92356E-12 | 4,5148E-06 | 9,18134E-07 | 4,877E-12 | 3,34264E-06 | 7,84092E-07 |
| 61 | G Longitudinal | 2,44623E-12 | 3,89619E-07 | 1,18685E-07 | 2,13284E-12 | 2,36672E-07 | 9,14928E-08 | 8,62081E-13 | 1,47464E-07 | 5,32213E-08 |
| 61 | G Vertical | 6,83984E-07 | -7,39627E-13 | -7,66838E-12 | 6,26528E-07 | 6,72919E-12 | -1,5337E-11 | 4,81314E-07 | 4,21639E-12 | -9,64824E-12 |
| 61 | G transversal | -3,92913E-07 | 1,32022E-13 | 2,93189E-12 | -2,36762E-07 | -5,35086E-15 | 1,32357E-13 | -1,46297E-07 | 2,87987E-13 | -6,57477E-13 |
| 62 | D Longitudinal | 6,00018E-06 | -4,01691E-09 | -5,8595E-09 | 4,74384E-06 | 5,51467E-11 | -3,7974E-10 | 3,54046E-06 | 2,31594E-12 | -6,34616E-12 |
| 62 | D Vertical | 2,18154E-07 | -2,18862E-07 | -8,0197E-08 | 1,36616E-07 | -1,37428E-07 | -6,72888E-08 | 8,4961E-08 | -8,55954E-08 | -4,21888E-08 |
| 62 | D transversal | 3,83369E-07 | 5,61297E-06 | 8,76544E-07 | 3,64248E-07 | 4,39647E-06 | 8,72366E-07 | 2,79105E-07 | 3,26891E-06 | 7,57478E-07 |
| 62 | G Longitudinal | 2,50892E-08 | 3,85721E-07 | 1,11592E-07 | -1,96997E-09 | 2,37573E-07 | 8,46052E-08 | -1,49182E-10 | 1,4747E-07 | 5,30971E-08 |
| 62 | G Vertical | 6,65447E-07 | 5,89629E-10 | 6,7572E-09 | 6,09282E-07 | -1,76464E-10 | 7,40909E-10 | 4,79244E-07 | -5,23479E-10 | 1,86041E-09 |
| 62 | G transversal | -4,08916E-07 | -1,07974E-10 | 2,44182E-09 | -2,3749E-07 | -2,09674E-10 | 8,32793E-10 | -1,46387E-07 | -3,36278E-12 | 4,07716E-11 |
| 63 | D Longitudinal | 5,80537E-06 | -4,96283E-11 | -7,91999E-10 | 4,50948E-06 | 1,03078E-11 | -7,75984E-11 | 3,33359E-06 | -2,88958E-13 | 3,0952E-13 |
| 63 | D Vertical | 2,22155E-07 | -4,72014E-10 | -1,67321E-08 | 1,36801E-07 | -1,62328E-10 | -1,41565E-08 | 8,48713E-08 | -6,60533E-11 | -1,13222E-08 |
| 63 | D transversal | 3,99078E-07 | 5,80592E-06 | 9,30761E-07 | 3,63931E-07 | 4,51479E-06 | 9,18549E-07 | 2,79113E-07 | 3,34264E-06 | 7,84087E-07 |
| 63 | G Longitudinal | 1,17199E-08 | 3,85185E-07 | 1,16549E-07 | -2,08443E-09 | 2,36766E-07 | 8,91214E-08 | 3,72763E-11 | 1,47464E-07 | 5,3222E-08 |
| 63 | G Vertical | 6,90164E-07 | -4,10232E-09 | -7,76341E-09 | 6,0885E-07 | 8,97903E-12 | -3,01576E-11 | 4,82696E-07 | 3,4527E-12 | -7,0449E-12 |
| 63 | G transversal | -3,9045E-07 | 2,95822E-10 | -7,87542E-10 | -2,34671E-07 | 5,51802E-11 | -4,8217E-10 | -1,46332E-07 | 6,29061E-13 | -3,64517E-12 |
| 64 | D Longitudinal | 5,2201E-06 | 4,21702E-09 | 3,47362E-09 | 4,04044E-06 | 2,11711E-11 | -2,60948E-10 | 2,98039E-06 | -2,67008E-12 | 4,85717E-12 |
| 64 | D Vertical | 2,19474E-07 | 2,18827E-07 | 4,60938E-08 | 1,35541E-07 | 1,3722E-07 | 3,6099E-08 | 8,4785E-08 | 8,5463E-08 | 1,9549E-08 |
| 64 | D transversal | 3,90482E-07 | 5,61244E-06 | 8,76116E-07 | 3,65861E-07 | 4,39634E-06 | 8,75626E-07 | 2,79101E-07 | 3,26891E-06 | 7,57474E-07 |
| 64 | G Longitudinal | 2,70917E-08 | 3,86917E-07 | 1,07058E-07 | -1,79006E-09 | 2,36861E-07 | 8,93274E-08 | -4,19886E-11 | 1,47461E-07 | 5,33201E-08 |
| 64 | G Vertical | 6,63075E-07 | 1,59063E-09 | 2,01237E-09 | 6,09101E-07 | 4,86872E-12 | -2,88646E-10 | 4,80165E-07 | -9,59787E-11 | 1,66578E-10 |
| 64 | G transversal | -3,63846E-07 | 5,309E-10 | -2,5032E-09 | -2,31768E-07 | -6,07139E-11 | 2,72275E-10 | -1,46283E-07 | -7,1796E-13 | 1,55014E-11 |
| 65 | D Longitudinal | 5,40267E-06 | -4,38255E-13 | -7,66346E-12 | 4,15662E-06 | 3,63996E-14 | -1,54539E-13 | 3,05357E-06 | -2,85624E-12 | 6,54307E-12 |
| 65 | D Vertical | -1,35349E-12 | 2,23326E-07 | 4,92975E-08 | 3,68145E-13 | 1,37237E-07 | 3,59139E-08 | 1,12772E-13 | 8,54632E-08 | 1,95473E-08 |
| 65 | D transversal | -3,75884E-13 | 5,80805E-06 | 9,33295E-07 | 5,13609E-12 | 4,51477E-06 | 9,18987E-07 | 4,86873E-12 | 3,34264E-06 | 7,84092E-07 |
| 65 | G Longitudinal | -3,75396E-12 | 3,91218E-07 | 1,14356E-07 | 2,45186E-12 | 2,36869E-07 | 8,67105E-08 | 8,16619E-13 | 1,47464E-07 | 5,32264E-08 |
| 65 | G Vertical | 6,93298E-07 | -1,04584E-12 | -6,59338E-12 | 6,27245E-07 | 7,51034E-12 | -1,70422E-11 | 4,81317E-07 | 4,22661E-12 | -9,67104E-12 |
| 65 | G transversal | -3,77514E-07 | 1,18934E-13 | -2,66547E-12 | -2,32581E-07 | 9,55363E-13 | -2,07722E-12 | -1,4637E-07 | 3,26253E-13 | -7,42848E-13 |
| 66 | D Longitudinal | 4,86206E-06 | -1,2512E-09 | -9,55171E-10 | 3,80664E-06 | 3,46892E-11 | -3,91637E-10 | 2,83425E-06 | -2,24084E-12 | 2,97789E-12 |
| 66 | D Vertical | -2,11152E-07 | 2,11517E-07 | 3,92458E-08 | -1,37168E-07 | 1,37215E-07 | 3,62161E-08 | -8,45363E-08 | 8,54634E-08 | 1,95484E-08 |
| 66 | D transversal | -3,6497E-07 | 5,23266E-06 | 7,74466E-07 | -3,64676E-07 | 4,15978E-06 | 7,82082E-07 | -2,79284E-07 | 3,12144E-06 | 7,04261E-07 |
| 66 | G Longitudinal | -1,49071E-08 | 3,71002E-07 | 9,50912E-08 | -2,90975E-09 | 2,36003E-07 | 9,58685E-08 | 2,60227E-10 | 1,47476E-07 | 5,28717E-08 |
| 66 | G Vertical | 6,22474E-07 | -3,06163E-09 | -2,3005E-09 | 5,97508E-07 | 1,00507E-10 | -1,06783E-09 | 4,7775E-07 | 2,35627E-10 | -4,17615E-10 |

APOYO 2

| DESPLAZAMIENTOS (metros) | | C4 | | | C5 | | | C6 | | |
|---|---|---|---|---|---|---|---|---|---|---|
| Nudo | Desplazamiento | L | T | V | L | T | V | L | T | V |
| 66 | G transversal | -3,55538E-07 | 2,78475E-09 | 1,56E-09 | -2,38384E-07 | -1,41705E-10 | 4,42753E-11 | -1,46098E-07 | -3,50281E-12 | 5,38323E-11 |
| 67 | D Longitudinal | 5,4201E-06 | -4,43807E-11 | 6,86078E-10 | 4,2748E-06 | 1,43534E-11 | -9,06837E-11 | 3,18726E-06 | 6,60183E-14 | -8,58697E-13 |
| 67 | D Vertical | -2,1387E-07 | 1,58159E-10 | -1,62873E-08 | -1,34903E-07 | 1,00248E-11 | -1,80578E-08 | -8,48744E-08 | -6,59887E-11 | -1,13213E-08 |
| 67 | D transversal | -3,74849E-07 | 5,41952E-06 | 8,21906E-07 | -3,66176E-07 | 4,27802E-06 | 8,29411E-07 | -2,79083E-07 | 3,19517E-06 | 7,30876E-07 |
| 67 | G Longitudinal | -1,00252E-08 | 3,74867E-07 | 1,01599E-07 | 1,54687E-10 | 2,36757E-07 | 8,91646E-08 | 2,92564E-10 | 1,47464E-07 | 5,32221E-08 |
| 67 | G Vertical | 6,53432E-07 | 4,61697E-09 | 4,97703E-09 | 6,05599E-07 | 1,28201E-11 | -4,42151E-11 | 4,82638E-07 | 6,56753E-12 | -1,77314E-11 |
| 67 | G transversal | -3,80086E-07 | 1,10845E-10 | -1,0155E-09 | -2,34683E-07 | 1,00261E-10 | -8,11379E-10 | -1,46332E-07 | -6,32934E-13 | -4,7667E-13 |
| 68 | D Longitudinal | 5,59806E-06 | 1,27303E-09 | 1,31324E-09 | 4,50829E-06 | 9,55007E-11 | -6,03937E-10 | 3,39394E-06 | 2,67473E-12 | -9,09909E-12 |
| 68 | D Vertical | -2,11978E-07 | -2,11513E-07 | -7,01634E-08 | -1,35132E-07 | -1,37431E-07 | -6,71742E-08 | -8,52118E-08 | -8,55952E-08 | -4,21888E-08 |
| 68 | D transversal | -3,62422E-07 | 5,23261E-06 | 7,75003E-07 | -3,67252E-07 | 4,15952E-06 | 7,87526E-07 | -2,79286E-07 | 3,12144E-06 | 7,04268E-07 |
| 68 | G Longitudinal | -1,12736E-08 | 3,71721E-07 | 9,4176E-08 | 3,24407E-09 | 2,34052E-07 | 9,89738E-08 | -1,31355E-10 | 1,4744E-07 | 5,36768E-08 |
| 68 | G Vertical | 6,26791E-07 | -2,96381E-09 | -3,45173E-09 | 5,97631E-07 | -7,94512E-11 | 8,99586E-10 | 4,75603E-07 | 1,21091E-09 | -4,30518E-09 |
| 68 | G transversal | -3,87313E-07 | -2,52146E-09 | -3,35744E-09 | -2,31274E-07 | -5,30997E-10 | 1,55559E-09 | -1,46558E-07 | -1,29884E-11 | 1,44287E-10 |
| 69 | D Longitudinal | 5,79647E-06 | 6,31966E-13 | 6,33543E-12 | 4,62543E-06 | 1,24859E-12 | -2,67739E-12 | 3,46731E-06 | 2,56785E-12 | -5,88494E-12 |
| 69 | D Vertical | 2,65159E-12 | -2,13599E-07 | -7,25419E-08 | -1,0594E-12 | -1,37515E-07 | -6,66653E-08 | -8,53806E-13 | -8,55952E-08 | -4,21867E-08 |
| 69 | D transversal | -4,28587E-13 | 5,42279E-06 | 8,25775E-07 | 2,82483E-12 | 4,278E-06 | 8,29945E-07 | 4,03284E-12 | 3,19517E-06 | 7,30873E-07 |
| 69 | G Longitudinal | -1,23912E-12 | 3,80352E-07 | 1,01549E-07 | 2,02282E-12 | 2,36937E-07 | 8,49106E-08 | 8,48067E-13 | 1,47462E-07 | 5,32304E-08 |
| 69 | G Vertical | 6,42904E-07 | -8,04514E-13 | -6,51191E-12 | 6,30484E-07 | 7,55188E-12 | -1,7166E-11 | 4,81354E-07 | 4,26708E-12 | -9,76333E-12 |
| 69 | G transversal | -3,8416E-07 | -4,10419E-14 | -1,02097E-12 | -2,34816E-07 | 9,22881E-13 | -2,00008E-12 | -1,46626E-07 | 2,09469E-13 | -4,75221E-13 |
| 70 | D Longitudinal | 5,59806E-06 | -1,27191E-09 | -1,30441E-09 | 4,50829E-06 | -9,18237E-11 | 5,95979E-10 | 3,39394E-06 | 2,64205E-12 | -3,0802E-12 |
| 70 | D Vertical | 2,11977E-07 | -2,11513E-07 | -7,01619E-08 | 1,35127E-07 | -1,37433E-07 | -6,71698E-08 | 8,52101E-08 | -8,55954E-08 | -4,21885E-08 |
| 70 | D transversal | 3,62422E-07 | 5,23261E-06 | 7,74997E-07 | 3,67256E-07 | 4,15953E-06 | 7,87502E-07 | 2,79293E-07 | 3,12145E-06 | 7,04256E-07 |
| 70 | G Longitudinal | 1,12698E-08 | 3,7172E-07 | 9,41679E-08 | -3,23808E-09 | 2,3406E-07 | 9,89549E-08 | 1,33065E-10 | 1,47441E-07 | 5,3676E-08 |
| 70 | G Vertical | 6,26867E-07 | 2,91123E-09 | 3,6021E-09 | 5,9764E-07 | -3,07181E-10 | -3,90726E-11 | 4,75617E-07 | -1,21921E-09 | 4,32353E-09 |
| 70 | G transversal | -3,87305E-07 | 2,52135E-09 | 3,34666E-09 | -2,31303E-07 | 5,32363E-10 | -1,5586E-09 | -1,46558E-07 | 1,35452E-11 | -1,45553E-10 |
| 71 | D Longitudinal | 5,4201E-06 | 4,4871E-11 | -6,85743E-10 | 4,2748E-06 | -1,21229E-11 | 8,58195E-11 | 3,18726E-06 | -2,10962E-14 | 7,57738E-13 |
| 71 | D Vertical | 2,13868E-07 | 1,57311E-10 | -1,6287E-08 | 1,349E-07 | 7,7049E-12 | -1,80528E-08 | 8,48737E-08 | -6,63433E-11 | -1,13205E-08 |
| 71 | D transversal | 3,74849E-07 | 5,41951E-06 | 8,21896E-07 | 3,66181E-07 | 4,27803E-06 | 8,29389E-07 | 2,79091E-07 | 3,19518E-06 | 7,30864E-07 |
| 71 | G Longitudinal | 1,00255E-08 | 3,74867E-07 | 1,01597E-07 | -1,50049E-10 | 2,36758E-07 | 8,91624E-08 | -2,90891E-10 | 1,47464E-07 | 5,32225E-08 |
| 71 | G Vertical | 6,53429E-07 | -4,61575E-09 | -4,95663E-09 | 6,056E-07 | -1,19347E-11 | 4,23908E-11 | 4,82638E-07 | 2,09666E-12 | -2,12713E-12 |
| 71 | G transversal | -3,8008E-07 | -1,10551E-10 | 1,01594E-09 | -2,3468E-07 | -9,89732E-11 | 8,087E-10 | -1,46332E-07 | 1,26216E-12 | -9,5761E-13 |
| 72 | D Longitudinal | 4,86206E-06 | 1,25129E-09 | 9,47317E-10 | 3,80664E-06 | -3,29858E-11 | 3,87988E-10 | 2,83425E-06 | -2,37229E-12 | 7,60014E-12 |
| 72 | D Vertical | 2,11151E-07 | 2,11517E-07 | 3,92442E-08 | 1,37168E-07 | 1,37216E-07 | 3,62135E-08 | 8,45365E-08 | 8,54629E-08 | 1,95496E-08 |
| 72 | D transversal | 3,6497E-07 | 5,23266E-06 | 7,74459E-07 | 3,64678E-07 | 4,15979E-06 | 7,82066E-07 | 2,79292E-07 | 3,12145E-06 | 7,04249E-07 |
| 72 | G Longitudinal | 1,49079E-08 | 3,71002E-07 | 9,50792E-08 | 2,91196E-09 | 2,36008E-07 | 9,58564E-08 | -2,58595E-10 | 1,47476E-07 | 5,28722E-08 |
| 72 | G Vertical | 6,22576E-07 | 3,09907E-09 | 2,49419E-09 | 5,97503E-07 | -9,10323E-11 | 1,06624E-09 | 4,7775E-07 | -2,27412E-10 | 3,98564E-10 |
| 72 | G transversal | -3,55539E-07 | -2,78431E-09 | -1,54944E-09 | -2,38385E-07 | 1,40734E-10 | -4,18631E-11 | -1,46098E-07 | 4,18024E-12 | -5,53809E-11 |
| 73 | D Longitudinal | 5,0375E-06 | -1,62397E-13 | -5,9194E-12 | 3,92424E-06 | 1,03057E-12 | -2,29335E-12 | 2,90721E-06 | -2,52273E-12 | 5,78355E-12 |
| 73 | D Vertical | 1,33949E-13 | 2,13456E-07 | 4,12055E-08 | 1,46267E-13 | 1,37186E-07 | 3,65325E-08 | 1,18593E-13 | 8,54631E-08 | 1,95508E-08 |
| 73 | D transversal | 4,25366E-13 | 5,42255E-06 | 8,25292E-07 | 2,61858E-12 | 4,27806E-06 | 8,28856E-07 | 4,03984E-12 | 3,19517E-06 | 7,30867E-07 |
| 73 | G Longitudinal | 1,04452E-12 | 3,79784E-07 | 1,01657E-07 | 2,60603E-12 | 2,36548E-07 | 9,35611E-08 | 8,37661E-13 | 1,47464E-07 | 5,32239E-08 |
| 73 | G Vertical | 6,51185E-07 | -3,6579E-13 | -7,65202E-12 | 6,29671E-07 | 7,46431E-12 | -1,69705E-11 | 4,81356E-07 | 4,28841E-12 | -9,81203E-12 |
| 73 | G transversal | -3,6561E-07 | 2,71115E-13 | 1,32219E-12 | -2,34545E-07 | 5,04587E-16 | 1,13309E-13 | -1,46041E-07 | 4,04295E-13 | -9,24039E-13 |
| 74 | D Longitudinal | 4,51263E-06 | -1,30656E-09 | -8,83059E-10 | 3,56893E-06 | -9,49743E-11 | -3,24276E-10 | 2,68882E-06 | -2,26487E-12 | 1,55195E-11 |

APOYO 2

| DESPLAZAMIENTOS (metros) | | C4 | | | C5 | | | C6 | | |
|---|---|---|---|---|---|---|---|---|---|---|
| Nudo | Desplazamiento | L | T | V | L | T | V | L | T | V |
| 74 | D Vertical | -2,0219E-07 | 2,02481E-07 | 3,30693E-08 | -1,38808E-07 | 1,37343E-07 | 3,31144E-08 | -8,41041E-08 | 8,54636E-08 | 1,95434E-08 |
| 74 | D transversal | -3,5583E-07 | 4,87026E-06 | 6,86745E-07 | -3,565E-07 | 3,92194E-06 | 6,89162E-07 | -2,79967E-07 | 2,97398E-06 | 6,51083E-07 |
| 74 | G Longitudinal | -1,71959E-08 | 3,55614E-07 | 8,073E-08 | -1,81663E-08 | 2,42287E-07 | 8,66508E-08 | 1,5487E-09 | 1,47421E-07 | 5,44012E-08 |
| 74 | G Vertical | 5,66898E-07 | -4,72729E-09 | -2,73229E-09 | 5,61329E-07 | -7,11141E-10 | -2,18456E-09 | 4,69773E-07 | 6,77074E-10 | -1,28684E-09 |
| 74 | G transversal | -3,36445E-07 | -1,8972E-09 | -9,35449E-10 | -2,29231E-07 | 2,80235E-10 | -1,65028E-09 | -1,44044E-07 | 1,42494E-11 | -1,74775E-10 |
| 75 | D Longitudinal | 5,04881E-06 | 4,56578E-12 | 1,61703E-10 | 4,03848E-06 | -1,21571E-10 | 2,54536E-10 | 3,04093E-06 | 1,03861E-13 | 5,74199E-12 |
| 75 | D Vertical | -2,07084E-07 | -1,38608E-11 | -1,47229E-08 | -1,36253E-07 | -6,42235E-10 | -1,19559E-08 | -8,48854E-08 | -6,62605E-11 | -1,1298E-08 |
| 75 | D transversal | -3,59126E-07 | 5,04756E-06 | 7,27587E-07 | -3,62496E-07 | 4,04125E-06 | 7,33966E-07 | -2,79431E-07 | 3,04771E-06 | 6,77654E-07 |
| 75 | G Longitudinal | -3,5511E-09 | 3,5923E-07 | 8,78586E-08 | -4,3111E-09 | 2,3681E-07 | 9,06236E-08 | 8,25862E-10 | 1,47464E-07 | 5,32205E-08 |
| 75 | G Vertical | 6,23127E-07 | 2,18096E-09 | 1,83785E-09 | 6,0459E-07 | -1,58233E-10 | 1,04498E-09 | 4,81685E-07 | 9,15371E-12 | -2,23965E-11 |
| 75 | G transversal | -3,62505E-07 | -1,21377E-11 | -3,69962E-11 | -2,37973E-07 | -3,72118E-10 | 1,50189E-09 | -1,46321E-07 | -2,78403E-12 | 2,6928E-11 |
| 76 | D Longitudinal | 5,22249E-06 | 1,303E-09 | 1,1718E-09 | 4,27006E-06 | -5,21501E-10 | 2,33799E-09 | 3,24671E-06 | 2,24643E-12 | 1,35696E-11 |
| 76 | D Vertical | -2,0287E-07 | -2,02481E-07 | -6,13573E-08 | -1,35966E-07 | -1,37373E-07 | -6,13211E-08 | -8,5633E-08 | -8,55953E-08 | -4,2192E-08 |
| 76 | D transversal | -3,53157E-07 | 4,87026E-06 | 6,87011E-07 | -3,60862E-07 | 3,92369E-06 | 6,84791E-07 | -2,7992E-07 | 2,97398E-06 | 6,51006E-07 |
| 76 | G Longitudinal | -2,0464E-08 | 3,55495E-07 | 8,03386E-08 | -2,50291E-08 | 2,44546E-07 | 8,22894E-08 | 2,86132E-09 | 1,4755E-07 | 5,16512E-08 |
| 76 | G Vertical | 5,71734E-07 | -4,70728E-09 | -3,19284E-09 | 5,5915E-07 | 1,33216E-10 | -4,7728E-09 | 4,63416E-07 | 3,49815E-09 | -1,23202E-08 |
| 76 | G transversal | -3,749E-07 | 1,85432E-09 | 1,77822E-09 | -2,58847E-07 | 5,16836E-10 | 4,7333E-10 | -1,48622E-07 | 4,54134E-11 | -4,74163E-10 |
| 77 | D Longitudinal | 5,40636E-06 | 3,62486E-13 | 2,76101E-12 | 4,38953E-06 | 1,18512E-12 | -2,51774E-12 | 3,32051E-06 | 2,73394E-12 | -6,26168E-12 |
| 77 | D Vertical | -1,6479E-12 | -2,07015E-07 | -6,56798E-08 | -9,9232E-12 | -1,37047E-07 | -6,59433E-08 | -8,02411E-13 | -8,5595E-08 | -4,22035E-08 |
| 77 | D transversal | -9,63533E-14 | 5,05144E-06 | 7,31005E-07 | 6,50424E-13 | 4,04161E-06 | 7,36154E-07 | 3,20144E-12 | 3,04771E-06 | 6,77631E-07 |
| 77 | G Longitudinal | 2,60589E-13 | 3,62361E-07 | 8,79845E-08 | 2,31646E-12 | 2,35856E-07 | 1,02657E-07 | 8,67271E-13 | 1,47457E-07 | 5,32814E-08 |
| 77 | G Vertical | 6,16834E-07 | -2,58866E-13 | -3,47689E-12 | 6,27565E-07 | 3,39679E-12 | -7,72626E-12 | 4,82027E-07 | 4,43275E-12 | -1,0153E-11 |
| 77 | G transversal | -3,65277E-07 | -2,02887E-13 | -2,19854E-12 | -2,35637E-07 | 1,14397E-13 | -2,4628E-13 | -1,47256E-07 | 6,3939E-14 | -1,41981E-13 |
| 78 | D Longitudinal | 5,22249E-06 | -1,30273E-09 | -1,16968E-09 | 4,27004E-06 | 5,21912E-10 | -2,33866E-09 | 3,24671E-06 | 3,20766E-12 | -2,60599E-11 |
| 78 | D Vertical | 2,0287E-07 | -2,02481E-07 | -6,13557E-08 | 1,35965E-07 | -1,37375E-07 | -6,13183E-08 | 8,56313E-08 | -8,55952E-08 | -4,2192E-08 |
| 78 | D transversal | 3,53157E-07 | 4,87026E-06 | 6,87009E-07 | 3,60861E-07 | 3,92369E-06 | 6,84795E-07 | 2,79926E-07 | 2,97398E-06 | 6,50994E-07 |
| 78 | G Longitudinal | 2,0464E-08 | 3,55495E-07 | 8,03362E-08 | 2,50278E-08 | 2,44549E-07 | 8,22828E-08 | -2,85985E-09 | 1,47547E-07 | 5,16572E-08 |
| 78 | G Vertical | 5,71761E-07 | 4,6896E-09 | 3,23304E-09 | 5,59164E-07 | -2,39486E-10 | 5,00446E-09 | 4,63457E-07 | -3,53874E-09 | 1,24128E-08 |
| 78 | G transversal | -3,74897E-07 | -1,85449E-09 | -1,7807E-09 | -2,58814E-07 | -5,15531E-10 | -4,76196E-10 | -1,48621E-07 | -4,63155E-11 | 4,76241E-10 |
| 79 | D Longitudinal | 5,04881E-06 | -4,18273E-12 | -1,61425E-10 | 4,03847E-06 | 1,22979E-10 | -2,57471E-10 | 3,04093E-06 | 5,58478E-13 | -7,25171E-12 |
| 79 | D Vertical | 2,07084E-07 | -1,34822E-11 | -1,47227E-08 | 1,36252E-07 | -6,4031E-10 | -1,19602E-08 | 8,48847E-08 | -6,66037E-11 | -1,12972E-08 |
| 79 | D transversal | 3,59126E-07 | 5,04756E-06 | 7,27583E-07 | 3,62497E-07 | 4,04125E-06 | 7,33956E-07 | 2,79438E-07 | 3,04771E-06 | 6,77642E-07 |
| 79 | G Longitudinal | 3,551E-09 | 3,59229E-07 | 8,78551E-08 | 4,31378E-09 | 2,36815E-07 | 9,06117E-08 | -8,24189E-10 | 1,47464E-07 | 5,32215E-08 |
| 79 | G Vertical | 6,23128E-07 | -2,18044E-09 | -1,82854E-09 | 6,04581E-07 | 1,58887E-10 | -1,04634E-09 | 4,81685E-07 | -1,0675E-12 | 3,86237E-12 |
| 79 | G transversal | -3,62509E-07 | 1,16147E-11 | 3,65385E-11 | -2,37988E-07 | 3,69164E-10 | -1,49529E-09 | -1,46321E-07 | 3,45013E-12 | -2,84493E-11 |
| 80 | D Longitudinal | 4,51263E-06 | 1,30662E-09 | 8,81076E-10 | 3,56893E-06 | 9,48141E-11 | 3,24811E-10 | 2,68882E-06 | -1,2435E-12 | -7,46694E-12 |
| 80 | D Vertical | 2,0219E-07 | 2,02481E-07 | 3,30677E-08 | 1,38808E-07 | 1,37344E-07 | 3,31113E-08 | 8,41043E-08 | 8,54628E-08 | 1,95451E-08 |
| 80 | D transversal | 3,5583E-07 | 4,87026E-06 | 6,86744E-07 | 3,56502E-07 | 3,92194E-06 | 6,89159E-07 | 2,79973E-07 | 2,97398E-06 | 6,5107E-07 |
| 80 | G Longitudinal | 1,71961E-08 | 3,55614E-07 | 8,07287E-08 | 1,81691E-08 | 2,42292E-07 | 8,66389E-08 | -1,54678E-09 | 1,47421E-07 | 5,44027E-08 |
| 80 | G Vertical | 5,66919E-07 | 4,74082E-09 | 2,78681E-09 | 5,61318E-07 | 7,15584E-10 | 2,18454E-09 | 4,6977E-07 | -6,69557E-10 | 1,2698E-09 |
| 80 | G transversal | -3,36441E-07 | 1,8975E-09 | 9,37986E-10 | -2,2923E-07 | -2,81762E-10 | 1,6539E-09 | -1,44044E-07 | -1,20757E-11 | 1,69796E-10 |
| 81 | D Longitudinal | 4,68349E-06 | 6,95712E-14 | -2,45543E-12 | 3,68849E-06 | 4,41046E-13 | -8,94966E-13 | 2,76135E-06 | -2,07427E-12 | 4,7582E-12 |
| 81 | D Vertical | -1,47984E-12 | 2,07031E-07 | 3,61168E-08 | -1,68357E-13 | 1,37354E-07 | 3,46261E-08 | 1,7028E-13 | 8,54635E-08 | 1,95387E-08 |
| 81 | D transversal | -5,4266E-14 | 5,05146E-06 | 7,30604E-07 | 1,13644E-12 | 4,04086E-06 | 7,35617E-07 | 3,19832E-12 | 3,04771E-06 | 6,77666E-07 |

APOYO 2

| DESPLAZAMIENTOS (metros) | | C4 | | | C5 | | | C6 | | |
|---|---|---|---|---|---|---|---|---|---|---|
| Nudo | Desplazamiento | L | T | V | L | T | V | L | T | V |
| 81 | G Longitudinal | -5,51158E-13 | 3,62409E-07 | 8,77203E-08 | 3,59358E-13 | 2,37851E-07 | 9,29058E-08 | 8,41442E-13 | 1,47464E-07 | 5,31839E-08 |
| 81 | G Vertical | 6,21287E-07 | -2,05801E-13 | -3,35625E-12 | 6,21582E-07 | 3,74208E-12 | -8,46282E-12 | 4,82086E-07 | 4,51716E-12 | -1,03453E-11 |
| 81 | G transversal | -3,53387E-07 | 1,14252E-13 | 2,06573E-12 | -2,37825E-07 | -9,83643E-13 | 2,27795E-12 | -1,45401E-07 | 5,55747E-13 | -1,27199E-12 |
| 82 | D Longitudinal | 6,12234E-06 | 1,78362E-10 | 1,59604E-10 | 5,1646E-06 | 1,68956E-09 | -3,76592E-09 | 3,87983E-06 | 7,91268E-12 | -1,5563E-11 |
| 82 | D Vertical | 1,0473E-07 | -6,28965E-07 | -1,69375E-07 | 7,51406E-08 | -3,96734E-07 | -2,71287E-07 | 4,2699E-08 | -2,56653E-07 | -1,03982E-07 |
| 82 | D transversal | 1,81537E-07 | 5,05231E-06 | 7,31868E-07 | 1,90484E-07 | 4,04732E-06 | 7,23567E-07 | 1,39665E-07 | 3,04771E-06 | 6,77624E-07 |
| 82 | G Longitudinal | -3,3464E-09 | 3,6331E-07 | 8,88609E-08 | -1,2056E-08 | 2,24524E-07 | 1,66128E-07 | 2,98923E-10 | 1,47517E-07 | 5,30786E-08 |
| 82 | G Vertical | 6,18676E-07 | -4,47769E-10 | -3,78122E-10 | 6,81357E-07 | -1,94518E-09 | 1,62487E-09 | 4,81545E-07 | -8,78457E-11 | 3,16591E-10 |
| 82 | G transversal | -3,80452E-07 | 2,25268E-09 | 2,10021E-09 | -2,54115E-07 | 5,77207E-09 | -1,8741E-08 | -1,45602E-07 | 2,14365E-10 | -7,59449E-10 |
| 83 | D Longitudinal | 6,12234E-06 | 1,78599E-10 | 1,5986E-10 | 5,1646E-06 | 1,68959E-09 | -3,7641E-09 | 3,87983E-06 | 7,91268E-12 | -1,5564E-11 |
| 83 | D Vertical | -1,04702E-07 | -6,28791E-07 | -1,6922E-07 | -7,49476E-08 | -3,95088E-07 | -2,74954E-07 | -4,27039E-08 | -2,56653E-07 | -1,0398E-07 |
| 83 | D transversal | -1,81524E-07 | 5,05247E-06 | 7,32016E-07 | -1,90394E-07 | 4,04885E-06 | 7,20167E-07 | -1,39659E-07 | 3,04771E-06 | 6,77632E-07 |
| 83 | G Longitudinal | 3,31998E-09 | 3,63027E-07 | 8,8617E-08 | 1,18875E-08 | 2,21856E-07 | 1,72073E-07 | -2,96815E-10 | 1,47516E-07 | 5,30761E-08 |
| 83 | G Vertical | 6,18673E-07 | 1,51633E-10 | 1,21777E-10 | 6,8136E-07 | -8,34401E-10 | 4,56873E-09 | 4,81543E-07 | 9,55895E-11 | -3,38568E-10 |
| 83 | G transversal | -3,80444E-07 | -1,31906E-09 | -1,30303E-09 | -2,54119E-07 | 3,03448E-09 | -8,8308E-10 | -1,456E-07 | -2,11233E-10 | 7,65679E-10 |
| 84 | D Longitudinal | 5,9312E-06 | 6,44497E-10 | 5,77881E-10 | 5,00941E-06 | 6,09694E-09 | -1,35866E-08 | 3,80645E-06 | 7,84031E-12 | -8,70382E-12 |
| 84 | D Vertical | 1,04728E-07 | -6,28963E-07 | -1,69373E-07 | 7,51396E-08 | -3,96734E-07 | -2,71288E-07 | 4,2699E-08 | -2,56653E-07 | -1,03982E-07 |
| 84 | D transversal | 1,78303E-07 | 4,86978E-06 | 6,86571E-07 | 1,93157E-07 | 3,92871E-06 | 6,72716E-07 | 1,39883E-07 | 2,97398E-06 | 6,50989E-07 |
| 84 | G Longitudinal | -5,40564E-09 | 3,65615E-07 | 9,11013E-08 | -1,09177E-08 | 2,24559E-07 | 1,76693E-07 | -1,07231E-10 | 1,47461E-07 | 5,32772E-08 |
| 84 | G Vertical | 6,16807E-07 | 4,61099E-10 | 4,11587E-10 | 6,79361E-07 | -2,056E-09 | 5,16944E-09 | 4,82262E-07 | 4,37418E-12 | -3,39408E-12 |
| 84 | G transversal | -3,69735E-07 | -1,87928E-09 | -1,95786E-09 | -2,70948E-07 | 5,81251E-09 | -2,02684E-08 | -1,48108E-07 | -1,19807E-11 | 4,01652E-11 |
| 85 | D Longitudinal | 6,65357E-06 | 8,12517E-12 | 1,75398E-12 | 5,84962E-06 | 8,70592E-11 | -1,94169E-10 | 4,36553E-06 | 1,32576E-11 | -3,02455E-11 |
| 85 | D Vertical | 2,80741E-11 | -1,05218E-06 | -2,74223E-07 | 1,94169E-10 | -6,54434E-07 | -4,82857E-07 | -4,04432E-12 | -4,27711E-07 | -1,65771E-07 |
| 85 | D transversal | 1,24811E-11 | 4,86994E-06 | 6,86716E-07 | 8,70592E-11 | 3,93665E-06 | 6,54434E-07 | 2,23493E-12 | 2,97398E-06 | 6,50995E-07 |
| 85 | G Longitudinal | -1,21986E-11 | 3,64916E-07 | 9,04536E-08 | -8,42064E-11 | 2,22867E-07 | 1,78299E-07 | 1,37435E-12 | 1,47464E-07 | 5,32665E-08 |
| 85 | G Vertical | 6,23705E-07 | -7,42391E-10 | -6,71089E-10 | 7,3572E-07 | -7,00781E-09 | 1,56159E-08 | 4,81893E-07 | 4,7174E-12 | -2,14612E-11 |
| 85 | G transversal | -3,72389E-07 | 8,00766E-10 | 7,18194E-10 | -2,94778E-07 | 7,56596E-09 | -1,68597E-08 | -1,46935E-07 | -1,12546E-13 | 1,17613E-11 |
| 86 | D Longitudinal | 5,93121E-06 | 6,44727E-10 | 5,78086E-10 | 5,00948E-06 | 6,09041E-09 | -1,35713E-08 | 3,80645E-06 | 7,84013E-12 | -8,70009E-12 |
| 86 | D Vertical | -1,047E-07 | -6,28789E-07 | -1,69218E-07 | -7,49466E-08 | -3,95088E-07 | -2,74954E-07 | -4,27039E-08 | -2,56653E-07 | -1,0398E-07 |
| 86 | D transversal | -1,78276E-07 | 4,8701E-06 | 6,86861E-07 | -1,92967E-07 | 3,93175E-06 | 6,65954E-07 | -1,39878E-07 | 2,97398E-06 | 6,51E-07 |
| 86 | G Longitudinal | 5,38234E-09 | 3,6538E-07 | 9,08897E-08 | 1,07587E-08 | 2,22334E-07 | 1,81651E-07 | 1,10096E-10 | 1,47461E-07 | 5,32733E-08 |
| 86 | G Vertical | 6,16804E-07 | -5,01941E-10 | -4,53791E-10 | 6,79344E-07 | 1,67964E-09 | -4,331E-09 | 4,82262E-07 | 4,72938E-12 | -1,80404E-11 |
| 86 | G transversal | -3,69739E-07 | 2,62102E-09 | 2,62161E-09 | -2,70983E-07 | 1,19816E-09 | 4,64601E-09 | -1,48109E-07 | 1,11439E-11 | -2,7584E-11 |
| 87 | D Longitudinal | 3,96741E-06 | 1,7898E-10 | 1,21376E-10 | 2,96972E-06 | 9,96061E-12 | 5,13506E-11 | 2,20196E-06 | -7,28932E-12 | 1,52908E-11 |
| 87 | D Vertical | -1,01576E-07 | 6,29035E-07 | 1,39007E-07 | -6,86014E-08 | 4,13196E-07 | 1,4298E-07 | -4,21704E-08 | 2,56523E-07 | 8,12291E-08 |
| 87 | D transversal | -1,84646E-07 | 5,05233E-06 | 7,31196E-07 | -1,82606E-07 | 4,04083E-06 | 7,35951E-07 | -1,39657E-07 | 3,04771E-06 | 6,77671E-07 |
| 87 | G Longitudinal | 2,17572E-09 | 3,63367E-07 | 8,83506E-08 | -1,27698E-09 | 2,37819E-07 | 9,31191E-08 | -1,94813E-10 | 1,47475E-07 | 5,31543E-08 |
| 87 | G Vertical | 6,22064E-07 | 4,55208E-10 | 2,67067E-10 | 6,19476E-07 | -7,38498E-11 | -1,10724E-11 | 4,81759E-07 | 2,16068E-11 | -4,62445E-11 |
| 87 | G transversal | -3,4966E-07 | 2,25339E-09 | 1,52866E-09 | -2,39103E-07 | -1,99849E-10 | 3,58667E-10 | -1,46671E-07 | 4,00758E-11 | -8,33924E-11 |
| 88 | D Longitudinal | 3,96741E-06 | 1,7921E-10 | 1,21567E-10 | 2,96972E-06 | 9,95167E-12 | 5,14155E-11 | 2,20196E-06 | -7,28935E-12 | 1,52915E-11 |
| 88 | D Vertical | 1,01604E-07 | 6,2886E-07 | 1,38888E-07 | 6,86208E-08 | 4,13183E-07 | 1,42936E-07 | 4,21712E-08 | 2,56522E-07 | 8,12314E-08 |
| 88 | D transversal | 1,84633E-07 | 5,0525E-06 | 7,31302E-07 | 1,826E-07 | 4,04084E-06 | 7,35982E-07 | 1,39664E-07 | 3,04771E-06 | 6,77664E-07 |
| 88 | G Longitudinal | -2,1559E-09 | 3,63084E-07 | 8,81505E-08 | 1,29358E-09 | 2,37798E-07 | 9,30486E-08 | 1,95347E-10 | 1,47475E-07 | 5,31566E-08 |
| 88 | G Vertical | 6,22072E-07 | -1,60244E-10 | -6,01299E-11 | 6,19476E-07 | 1,02706E-10 | 6,80278E-11 | 4,81759E-07 | -1,25432E-11 | 2,31569E-11 |

APOYO 2

| DESPLAZAMIENTOS (metros) | | C4 | | | C5 | | | C6 | | |
|---|---|---|---|---|---|---|---|---|---|---|
| Nudo | Desplazamiento | L | T | V | L | T | V | L | T | V |
| 88 | G transversal | -3,4964E-07 | -1,31919E-09 | -8,61E-10 | -2,39103E-07 | 2,6777E-10 | -1,2597E-10 | -1,46671E-07 | -3,90395E-11 | 7,36565E-11 |
| 89 | D Longitudinal | 3,79837E-06 | 6,46507E-10 | 4,37653E-10 | 2,85433E-06 | 4,46256E-11 | 1,65859E-10 | 2,129E-06 | -6,90107E-12 | 1,07122E-11 |
| 89 | D Vertical | -1,01574E-07 | 6,29033E-07 | 1,39006E-07 | -6,86015E-08 | 4,13196E-07 | 1,42979E-07 | -4,21703E-08 | 2,56523E-07 | 8,12291E-08 |
| 89 | D transversal | -1,79789E-07 | 4,86977E-06 | 6,86415E-07 | -1,79403E-07 | 3,92191E-06 | 6,89041E-07 | -1,39894E-07 | 2,97398E-06 | 6,51084E-07 |
| 89 | G Longitudinal | 2,20397E-09 | 3,65671E-07 | 8,99014E-08 | 1,61502E-09 | 2,37993E-07 | 9,37711E-08 | 6,39177E-11 | 1,47465E-07 | 5,31915E-08 |
| 89 | G Vertical | 6,2191E-07 | -4,62778E-10 | -3,15126E-10 | 6,19803E-07 | -3,04035E-11 | -1,22134E-10 | 4,82313E-07 | 4,39205E-12 | -6,40525E-12 |
| 89 | G transversal | -3,42259E-07 | -1,89127E-09 | -1,39841E-09 | -2,33626E-07 | 6,86754E-10 | -1,61588E-09 | -1,44717E-07 | 1,95814E-12 | 5,78672E-11 |
| 90 | D Longitudinal | 3,06927E-06 | 8,90064E-12 | 1,13869E-11 | 2,1306E-06 | -7,01025E-12 | 1,94417E-11 | 1,56988E-06 | -1,2352E-11 | 2,82341E-11 |
| 90 | D Vertical | 2,8248E-11 | 1,05232E-06 | 2,42713E-07 | 1,94417E-11 | 6,89079E-07 | 2,51737E-07 | 6,99893E-13 | 4,27582E-07 | 1,42915E-07 |
| 90 | D transversal | -1,27062E-11 | 4,86993E-06 | 6,86523E-07 | -7,01024E-12 | 3,92192E-06 | 6,89079E-07 | 3,37447E-12 | 2,97398E-06 | 6,5108E-07 |
| 90 | G Longitudinal | 1,22749E-11 | 3,64974E-07 | 8,94531E-08 | 8,37696E-12 | 2,37836E-07 | 9,37748E-08 | 2,51951E-13 | 1,47465E-07 | 5,31763E-08 |
| 90 | G Vertical | 6,30248E-07 | 7,43957E-10 | 4,98363E-10 | 6,25062E-07 | 5,9017E-11 | 1,73602E-10 | 4,81915E-07 | 4,75081E-12 | -1,67581E-11 |
| 90 | G transversal | -3,42676E-07 | 8,03138E-10 | 5,43535E-10 | -2,32675E-07 | 5,91609E-11 | 1,97647E-10 | -1,45745E-07 | 7,75217E-13 | -8,11589E-12 |
| 91 | D Longitudinal | 3,79836E-06 | 6,46737E-10 | 4,3781E-10 | 2,85433E-06 | 4,46404E-11 | 1,65921E-10 | 2,129E-06 | -6,90086E-12 | 1,07098E-11 |
| 91 | D Vertical | 1,01602E-07 | 6,28858E-07 | 1,38887E-07 | 6,86209E-08 | 4,13183E-07 | 1,42935E-07 | 4,21711E-08 | 2,56522E-07 | 8,12314E-08 |
| 91 | D transversal | 1,79761E-07 | 4,87009E-06 | 6,86631E-07 | 1,79387E-07 | 3,92193E-06 | 6,89117E-07 | 1,39901E-07 | 2,97398E-06 | 6,51075E-07 |
| 91 | G Longitudinal | -2,18069E-09 | 3,65435E-07 | 8,9742E-08 | -1,59874E-09 | 2,37976E-07 | 9,37136E-08 | -6,33523E-11 | 1,47465E-07 | 5,31937E-08 |
| 91 | G Vertical | 6,21908E-07 | 5,03018E-10 | 3,36873E-10 | 6,19802E-07 | 3,97396E-11 | 1,17759E-10 | 4,82313E-07 | 4,76956E-12 | -1,49008E-11 |
| 91 | G transversal | -3,42255E-07 | 2,6355E-09 | 1,90352E-09 | -2,33624E-07 | -6,33445E-10 | 1,80245E-09 | -1,44717E-07 | -5,44643E-14 | -6,81043E-11 |
| 92 | D Longitudinal | 4,1828E-06 | -3,73652E-09 | -1,86636E-09 | 3,3434E-06 | -3,41714E-10 | -2,18803E-09 | 2,54509E-06 | 4,87232E-12 | -6,95555E-11 |
| 92 | D Vertical | -1,95017E-07 | 1,95053E-07 | 2,92142E-08 | -1,37749E-07 | 1,36558E-07 | 2,91975E-08 | -8,40645E-08 | 8,54631E-08 | 1,95775E-08 |
| 92 | D transversal | -3,34937E-07 | 4,51855E-06 | 6,09133E-07 | -3,34865E-07 | 3,67815E-06 | 6,07864E-07 | -2,82246E-07 | 2,82652E-06 | 5,97277E-07 |
| 92 | G Longitudinal | -2,08657E-08 | 3,4559E-07 | 7,36284E-08 | -2,35849E-08 | 2,4439E-07 | 7,38494E-08 | 3,28452E-09 | 1,47537E-07 | 5,18871E-08 |
| 92 | G Vertical | 5,37474E-07 | -6,40576E-09 | -3,06297E-09 | 5,3549E-07 | -1,89778E-09 | -2,78003E-09 | 4,62918E-07 | 1,06875E-09 | -2,20987E-09 |
| 92 | G transversal | -3,23332E-07 | -3,19834E-09 | -8,94718E-10 | -2,23649E-07 | -1,57422E-09 | -1,10804E-09 | -1,43821E-07 | -1,60541E-11 | 2,08941E-10 |
| 93 | D Longitudinal | 4,69166E-06 | -5,81513E-13 | 3,26761E-10 | 3,79685E-06 | -6,62367E-11 | 5,13316E-10 | 2,89459E-06 | 3,65258E-12 | -5,61521E-11 |
| 93 | D Vertical | -2,00171E-07 | 1,51884E-12 | -1,38887E-08 | -1,39209E-07 | 7,80177E-10 | -1,59405E-08 | -8,46876E-08 | -5,87082E-11 | -1,16395E-08 |
| 93 | D transversal | -3,42986E-07 | 4,69121E-06 | 6,46194E-07 | -3,45833E-07 | 3,7999E-06 | 6,46231E-07 | -2,81222E-07 | 2,90024E-06 | 6,24428E-07 |
| 93 | G Longitudinal | -9,69367E-09 | 3,46543E-07 | 7,72532E-08 | -1,20777E-08 | 2,39974E-07 | 7,73044E-08 | 1,90139E-09 | 1,47464E-07 | 5,32283E-08 |
| 93 | G Vertical | 5,92851E-07 | 4,3014E-09 | 2,90854E-09 | 5,8724E-07 | 2,53202E-10 | 3,02311E-09 | 4,78623E-07 | 1,54897E-11 | -8,7779E-11 |
| 93 | G transversal | -3,51794E-07 | 2,3488E-12 | 3,64479E-10 | -2,45279E-07 | 4,8285E-10 | -9,8373E-10 | -1,4634E-07 | 4,55558E-12 | -1,30307E-10 |
| 94 | D Longitudinal | 4,84871E-06 | 3,73776E-09 | 2,88466E-09 | 4,00502E-06 | 6,93242E-10 | 2,22758E-09 | 3,09775E-06 | 9,75646E-12 | -1,84142E-10 |
| 94 | D Vertical | -1,95191E-07 | -1,95052E-07 | -5,5613E-08 | -1,35565E-07 | -1,36547E-07 | -5,56258E-08 | -8,57215E-08 | -8,55956E-08 | -4,21648E-08 |
| 94 | D transversal | -3,27585E-07 | 4,51855E-06 | 6,10148E-07 | -3,31669E-07 | 3,67719E-06 | 6,11378E-07 | -2,82866E-07 | 2,8265E-06 | 5,98342E-07 |
| 94 | G Longitudinal | -2,7495E-08 | 3,45626E-07 | 7,3015E-08 | -2,81315E-08 | 2,45085E-07 | 7,08389E-08 | 1,84711E-09 | 1,47281E-07 | 5,56382E-08 |
| 94 | G Vertical | 5,43037E-07 | -6,39701E-09 | -3,51139E-09 | 5,33698E-07 | -1,39767E-09 | -4,4917E-09 | 4,52763E-07 | 5,48411E-09 | -1,9101E-08 |
| 94 | G transversal | -3,68E-07 | 3,213E-09 | 1,36372E-09 | -2,65784E-07 | 1,81213E-09 | 8,53126E-10 | -1,48918E-07 | -9,31364E-11 | 6,45088E-10 |
| 95 | D Longitudinal | 5,0323E-06 | 1,10253E-13 | 4,93113E-13 | 4,13737E-06 | 5,95003E-13 | -1,19424E-12 | 3,17227E-06 | 2,40494E-12 | -5,50406E-12 |
| 95 | D Vertical | 1,48793E-12 | -2,00176E-07 | -5,94762E-08 | 1,12443E-11 | -1,37663E-07 | -5,84092E-08 | -8,98237E-13 | -8,56002E-08 | -4,20632E-08 |
| 95 | D transversal | -8,18984E-14 | 4,69441E-06 | 6,48579E-07 | 3,68258E-14 | 3,80044E-06 | 6,48086E-07 | 2,38754E-12 | 2,90024E-06 | 6,24666E-07 |
| 95 | G Longitudinal | -3,73151E-13 | 3,51711E-07 | 7,68616E-08 | -1,0816E-12 | 2,46494E-07 | 7,3437E-08 | 8,37669E-13 | 1,47468E-07 | 5,26965E-08 |
| 95 | G Vertical | 5,86739E-07 | -1,30202E-13 | -9,53968E-13 | 5,96804E-07 | -1,06644E-12 | 2,44075E-12 | 4,85053E-07 | 5,45736E-12 | -1,25104E-11 |
| 95 | G transversal | -3,56209E-07 | -2,82415E-14 | -9,80763E-13 | -2,47269E-07 | 6,92236E-13 | -1,51905E-12 | -1,48247E-07 | -2,59989E-13 | 6,01025E-13 |
| 96 | D Longitudinal | 4,84872E-06 | -3,73752E-09 | -2,88421E-09 | 4,00504E-06 | -6,91798E-10 | -2,23049E-09 | 3,09775E-06 | -5,536E-12 | 1,74489E-10 |

APOYO 2

| DESPLAZAMIENTOS (metros) | | C4 | | | C5 | | | C6 | | |
|---|---|---|---|---|---|---|---|---|---|---|
| Nudo | Desplazamiento | L | T | V | L | T | V | L | T | V |
| 96 | D Vertical | 1,95191E-07 | -1,95052E-07 | -5,56121E-08 | 1,35565E-07 | -1,36547E-07 | -5,56244E-08 | 8,57197E-08 | -8,55957E-08 | -4,21648E-08 |
| 96 | D transversal | 3,27585E-07 | 4,51855E-06 | 6,10148E-07 | 3,3167E-07 | 3,67719E-06 | 6,11379E-07 | 2,8287E-07 | 2,82651E-06 | 5,98324E-07 |
| 96 | G Longitudinal | 2,74947E-08 | 3,45626E-07 | 7,30138E-08 | 2,81311E-08 | 2,45084E-07 | 7,08414E-08 | -1,84517E-09 | 1,47281E-07 | 5,56384E-08 |
| 96 | G Vertical | 5,43059E-07 | 6,38261E-09 | 3,53449E-09 | 5,33714E-07 | 1,33103E-09 | 4,63184E-09 | 4,52828E-07 | -5,55297E-09 | 1,92583E-08 |
| 96 | G transversal | -3,67999E-07 | -3,21297E-09 | -1,36478E-09 | -2,65774E-07 | -1,81155E-09 | -8,54363E-10 | -1,48921E-07 | 9,17749E-11 | -6,4196E-10 |
| 97 | D Longitudinal | 4,69166E-06 | 7,85463E-13 | -3,26677E-10 | 3,79685E-06 | 6,6367E-11 | -5,1333E-10 | 2,89459E-06 | -2,38154E-12 | 5,32532E-11 |
| 97 | D Vertical | 2,00171E-07 | 1,10209E-12 | -1,3889E-08 | 1,39207E-07 | 7,78572E-10 | -1,59371E-08 | 8,46868E-08 | -5,92845E-11 | -1,16382E-08 |
| 97 | D transversal | 3,42986E-07 | 4,69121E-06 | 6,46193E-07 | 3,45833E-07 | 3,7999E-06 | 6,46233E-07 | 2,81227E-07 | 2,90025E-06 | 6,24414E-07 |
| 97 | G Longitudinal | 9,69365E-09 | 3,46543E-07 | 7,72512E-08 | 1,20779E-08 | 2,39975E-07 | 7,73012E-08 | -1,89972E-09 | 1,47463E-07 | 5,32309E-08 |
| 97 | G Vertical | 5,92851E-07 | -4,30133E-09 | -2,90633E-09 | 5,87235E-07 | -2,52004E-10 | -3,02577E-09 | 4,78623E-07 | -9,46641E-12 | 7,39749E-11 |
| 97 | G transversal | -3,51789E-07 | -2,27238E-12 | -3,64452E-10 | -2,45258E-07 | -4,82907E-10 | 9,8399E-10 | -1,4634E-07 | -3,91384E-12 | 1,28843E-10 |
| 98 | D Longitudinal | 4,1828E-06 | 3,73678E-09 | 1,86611E-09 | 3,3434E-06 | 3,4054E-10 | 2,19103E-09 | 2,54509E-06 | -5,95433E-12 | 7,20507E-11 |
| 98 | D Vertical | 1,95017E-07 | 1,95052E-07 | 2,92132E-08 | 1,37749E-07 | 1,36558E-07 | 2,91961E-08 | 8,40647E-08 | 8,54625E-08 | 1,95789E-08 |
| 98 | D transversal | 3,34937E-07 | 4,51855E-06 | 6,09132E-07 | 3,34865E-07 | 3,67815E-06 | 6,07869E-07 | 2,8225E-07 | 2,82653E-06 | 5,97261E-07 |
| 98 | G Longitudinal | 2,08658E-08 | 3,4559E-07 | 7,36271E-08 | 2,35853E-08 | 2,44391E-07 | 7,38473E-08 | -3,28326E-09 | 1,47534E-07 | 5,18935E-08 |
| 98 | G Vertical | 5,37481E-07 | 6,4176E-09 | 3,09765E-09 | 5,35478E-07 | 1,90213E-09 | 2,78122E-09 | 4,62914E-07 | -1,06173E-09 | 2,19415E-09 |
| 98 | G transversal | -3,23331E-07 | 3,19847E-09 | 8,95836E-10 | -2,23649E-07 | 1,57374E-09 | 1,10928E-09 | -1,43821E-07 | 1,84035E-11 | -2,14322E-10 |
| 99 | D Longitudinal | 4,34463E-06 | 8,89583E-14 | -4,12855E-13 | 3,45571E-06 | -4,9478E-13 | 1,2491E-12 | 2,61693E-06 | -1,12138E-12 | 2,57656E-12 |
| 99 | D Vertical | 1,46501E-12 | 2,00173E-07 | 3,17106E-08 | 1,90698E-13 | 1,37093E-07 | 3,22341E-08 | 4,41146E-14 | 8,54596E-08 | 1,96089E-08 |
| 99 | D transversal | -5,33232E-15 | 4,6944E-06 | 6,47938E-07 | 3,02447E-13 | 3,80005E-06 | 6,48514E-07 | 2,33986E-12 | 2,90025E-06 | 6,24173E-07 |
| 99 | G Longitudinal | 3,17254E-13 | 3,51707E-07 | 7,76101E-08 | 1,30059E-12 | 2,43792E-07 | 8,12876E-08 | 8,70271E-13 | 1,47449E-07 | 5,3806E-08 |
| 99 | G Vertical | 5,95315E-07 | 4,07667E-14 | -8,34228E-13 | 5,95817E-07 | -1,7144E-13 | 4,49046E-13 | 4,84589E-07 | 5,28891E-12 | -1,21256E-11 |
| 99 | G transversal | -3,3705E-07 | 1,13559E-13 | 1,01271E-12 | -2,3292E-07 | -6,8074E-13 | 1,62149E-12 | -1,44445E-07 | 8,57852E-13 | -1,96463E-12 |
| 100 | D Longitudinal | 4,86889E-06 | 2,71396E-13 | 1,8067E-13 | 3,91731E-06 | 9,56341E-13 | -1,98314E-12 | 2,96779E-06 | 4,99786E-13 | -1,13928E-12 |
| 100 | D Vertical | -1,43201E-13 | -9,35176E-14 | -1,4144E-08 | -2,57063E-13 | -1,50949E-11 | -1,41034E-08 | -3,73544E-13 | -6,60294E-11 | -1,13239E-08 |
| 100 | D transversal | -3,92334E-14 | 4,87156E-06 | 6,87902E-07 | 6,46497E-12 | 3,9226E-06 | 6,88306E-07 | 2,78434E-12 | 2,97398E-06 | 6,51042E-07 |
| 100 | G Longitudinal | -1,03158E-14 | 3,49164E-07 | 8,14043E-08 | 2,54985E-13 | 2,36873E-07 | 8,14364E-08 | 8,33106E-13 | 1,47464E-07 | 5,32185E-08 |
| 100 | G Vertical | 6,11572E-07 | -1,30054E-15 | 3,11548E-14 | 6,11414E-07 | 9,63266E-14 | -1,84433E-13 | 4,81805E-07 | 4,26237E-12 | -9,77015E-12 |
| 100 | G transversal | -3,49247E-07 | 3,90848E-14 | 1,39505E-14 | -2,36948E-07 | -1,92963E-14 | 1,09477E-13 | -1,4632E-07 | 3,15476E-13 | -7,19554E-13 |
| 101 | D Longitudinal | 3,86741E-06 | -5,76827E-09 | -2,09154E-09 | 3,12169E-06 | -2,23278E-09 | -1,94337E-09 | 2,4011E-06 | -1,14394E-11 | 1,44052E-10 |
| 101 | D Vertical | -1,85533E-07 | 1,85693E-07 | 2,52861E-08 | -1,3456E-07 | 1,33985E-07 | 2,53116E-08 | -8,44301E-08 | 8,54643E-08 | 1,9526E-08 |
| 101 | D transversal | -3,1356E-07 | 4,18121E-06 | 5,40245E-07 | -3,10121E-07 | 3,43512E-06 | 5,4078E-07 | -2,85617E-07 | 2,679E-06 | 5,45944E-07 |
| 101 | G Longitudinal | -2,61458E-08 | 3,29173E-07 | 6,42562E-08 | -2,6624E-08 | 2,40609E-07 | 6,30993E-08 | 2,26049E-09 | 1,47358E-07 | 5,34662E-08 |
| 101 | G Vertical | 5,00833E-07 | -9,22511E-09 | -3,91203E-09 | 5,01868E-07 | -3,62254E-09 | -3,37046E-09 | 4,52053E-07 | 1,67953E-09 | -3,41257E-09 |
| 101 | G transversal | -3,05891E-07 | 1,30681E-09 | 8,89312E-10 | -2,17909E-07 | -3,96049E-10 | 1,22558E-09 | -1,43823E-07 | 2,24477E-11 | -2,75489E-10 |
| 102 | D Longitudinal | 4,34705E-06 | 3,51012E-13 | 5,10348E-10 | 3,55298E-06 | 4,88554E-11 | 3,73996E-10 | 2,74825E-06 | -5,35522E-12 | 7,47438E-11 |
| 102 | D Vertical | -1,91693E-07 | 3,29655E-13 | -1,27023E-08 | -1,35417E-07 | -3,9885E-10 | -1,16715E-08 | -8,54638E-08 | -9,63339E-11 | -1,02596E-08 |
| 102 | D transversal | -3,19423E-07 | 4,34585E-06 | 5,73078E-07 | -3,2059E-07 | 3,5554E-06 | 5,73076E-07 | -2,83905E-07 | 2,75278E-06 | 5,71227E-07 |
| 102 | G Longitudinal | -9,90403E-09 | 3,32113E-07 | 6,88763E-08 | -1,13943E-08 | 2,37114E-07 | 6,88661E-08 | 1,62625E-09 | 1,47467E-07 | 5,31968E-08 |
| 102 | G Vertical | 5,54931E-07 | 8,13785E-09 | 4,26359E-09 | 5,52328E-07 | 2,28704E-09 | 4,17636E-09 | 4,74313E-07 | 1,38874E-11 | 7,80297E-12 |
| 102 | G transversal | -3,37429E-07 | -4,99474E-13 | 2,42458E-12 | -2,42469E-07 | -2,52302E-10 | 7,04216E-10 | -1,46324E-07 | -2,9025E-11 | 4,15586E-10 |
| 103 | D Longitudinal | 4,48925E-06 | 5,76843E-09 | 3,11463E-09 | 3,7418E-06 | 2,07668E-09 | 3,39981E-09 | 2,94907E-06 | -2,46103E-11 | 4,08621E-10 |
| 103 | D Vertical | -1,85948E-07 | -1,85693E-07 | -4,96762E-08 | -1,33525E-07 | -1,34002E-07 | -4,96597E-08 | -8,52886E-08 | -8,55943E-08 | -4,22104E-08 |
| 103 | D transversal | -3,01817E-07 | 4,18121E-06 | 5,41278E-07 | -3,06694E-07 | 3,43553E-06 | 5,4076E-07 | -2,84206E-07 | 2,67908E-06 | 5,43352E-07 |

APOYO 2

| DESPLAZAMIENTOS (metros) | | C4 | | | C5 | | | C6 | | |
|---|---|---|---|---|---|---|---|---|---|---|
| Nudo | Desplazamiento | L | T | V | L | T | V | L | T | V |
| 103 | G Longitudinal | -2,35703E-08 | 3,29164E-07 | 6,47995E-08 | -2,4942E-08 | 2,39588E-07 | 6,64489E-08 | 2,60745E-09 | 1,4801E-07 | 4,87553E-08 |
| 103 | G Vertical | 5,07864E-07 | -9,22522E-09 | -4,44435E-09 | 4,99986E-07 | -3,0179E-09 | -5,48119E-09 | 4,35949E-07 | 8,64254E-09 | -3,01239E-08 |
| 103 | G transversal | -3,52802E-07 | -1,3114E-09 | -1,40513E-09 | -2,62799E-07 | 2,84326E-11 | -7,00825E-10 | -1,48638E-07 | 2,46634E-10 | -9,21448E-10 |
| 104 | D Longitudinal | 4,66501E-06 | 1,22658E-13 | -4,16891E-14 | 3,87253E-06 | 8,52363E-13 | -1,72437E-12 | 3,02323E-06 | 1,82035E-12 | -4,16017E-12 |
| 104 | D Vertical | -9,08328E-13 | -1,91548E-07 | -5,27775E-08 | -5,92974E-12 | -1,36075E-07 | -5,33207E-08 | -1,05017E-12 | -8,55754E-08 | -4,25299E-08 |
| 104 | D transversal | -3,976E-15 | 4,34988E-06 | 5,75713E-07 | 2,04282E-13 | 3,55636E-06 | 5,7607E-07 | 1,4987E-12 | 2,75279E-06 | 5,70838E-07 |
| 104 | G Longitudinal | 2,09203E-13 | 3,3735E-07 | 6,88729E-08 | 7,59457E-13 | 2,41667E-07 | 7,06052E-08 | 1,03881E-12 | 1,4741E-07 | 5,50048E-08 |
| 104 | G Vertical | 5,42505E-07 | 8,5062E-15 | 1,06321E-13 | 5,50164E-07 | -9,04771E-13 | 2,05207E-12 | 4,88668E-07 | 6,34095E-12 | -1,45413E-11 |
| 104 | G transversal | -3,41739E-07 | 1,59269E-14 | -4,69128E-13 | -2,45301E-07 | 2,14353E-13 | -4,2456E-13 | -1,4796E-07 | 3,01034E-14 | -6,49821E-14 |
| 105 | D Longitudinal | 4,48925E-06 | -5,76814E-09 | -3,11483E-09 | 3,74179E-06 | -2,07515E-09 | -3,40279E-09 | 2,94907E-06 | 2,81878E-11 | -4,16793E-10 |
| 105 | D Vertical | 1,85948E-07 | -1,85693E-07 | -4,96758E-08 | 1,33525E-07 | -1,34002E-07 | -4,96594E-08 | 8,52869E-08 | -8,55949E-08 | -4,22089E-08 |
| 105 | D transversal | 3,01816E-07 | 4,18121E-06 | 5,41279E-07 | 3,06694E-07 | 3,43553E-06 | 5,40764E-07 | 2,84208E-07 | 2,67909E-06 | 5,43335E-07 |
| 105 | G Longitudinal | 2,35704E-08 | 3,29164E-07 | 6,47993E-08 | 2,4943E-08 | 2,39589E-07 | 6,64469E-08 | -2,60602E-09 | 1,48006E-07 | 4,87641E-08 |
| 105 | G Vertical | 5,07886E-07 | 9,21105E-09 | 4,45523E-09 | 5,00009E-07 | 2,97672E-09 | 5,55963E-09 | 4,3605E-07 | -8,75611E-09 | 3,03834E-08 |
| 105 | G transversal | -3,52803E-07 | 1,31154E-09 | 1,40491E-09 | -2,62812E-07 | -2,87154E-11 | 7,01694E-10 | -1,48627E-07 | -2,45915E-10 | 9,1981E-10 |
| 106 | D Longitudinal | 4,34705E-06 | -5,73041E-14 | -5,1023E-10 | 3,55298E-06 | -4,87022E-11 | -3,73929E-10 | 2,74825E-06 | 7,23748E-12 | -7,90368E-11 |
| 106 | D Vertical | 1,91693E-07 | 5,49441E-13 | -1,27021E-08 | 1,35417E-07 | -3,98047E-10 | -1,16732E-08 | 8,54633E-08 | -9,5948E-11 | -1,02605E-08 |
| 106 | D transversal | 3,19423E-07 | 4,34585E-06 | 5,73079E-07 | 3,2059E-07 | 3,5554E-06 | 5,73079E-07 | 2,83908E-07 | 2,75278E-06 | 5,71209E-07 |
| 106 | G Longitudinal | 9,904E-09 | 3,32113E-07 | 6,88753E-08 | 1,13944E-08 | 2,37114E-07 | 6,88652E-08 | -1,62459E-09 | 1,47467E-07 | 5,31982E-08 |
| 106 | G Vertical | 5,54931E-07 | -8,13791E-09 | -4,26348E-09 | 5,52332E-07 | -2,28485E-09 | -4,1813E-09 | 4,74313E-07 | -1,06072E-11 | -1,53167E-11 |
| 106 | G transversal | -3,37432E-07 | 5,95485E-13 | -2,3886E-12 | -2,42479E-07 | 2,52298E-10 | -7,04058E-10 | -1,46325E-07 | 2,97243E-11 | -4,1718E-10 |
| 107 | D Longitudinal | 3,86741E-06 | 5,76866E-09 | 2,09201E-09 | 3,12169E-06 | 2,2316E-09 | 1,94654E-09 | 2,4011E-06 | 1,22524E-11 | -1,45894E-10 |
| 107 | D Vertical | 1,85533E-07 | 1,85693E-07 | 2,52856E-08 | 1,3456E-07 | 1,33985E-07 | 2,53112E-08 | 8,44303E-08 | 8,54642E-08 | 1,95263E-08 |
| 107 | D transversal | 3,1356E-07 | 4,18121E-06 | 5,40246E-07 | 3,10122E-07 | 3,43512E-06 | 5,40782E-07 | 2,85619E-07 | 2,67901E-06 | 5,45923E-07 |
| 107 | G Longitudinal | 2,61456E-08 | 3,29173E-07 | 6,42559E-08 | 2,66234E-08 | 2,40608E-07 | 6,31022E-08 | -2,2581E-09 | 1,47357E-07 | 5,34667E-08 |
| 107 | G Vertical | 5,00827E-07 | 9,23778E-09 | 3,93421E-09 | 5,01851E-07 | 3,6277E-09 | 3,37317E-09 | 4,52047E-07 | -1,67331E-09 | 3,39896E-09 |
| 107 | G transversal | -3,05892E-07 | -1,30664E-09 | -8,88968E-10 | -2,17908E-07 | 3,96439E-10 | -1,22623E-09 | -1,43822E-07 | -2,10549E-11 | 2,72309E-10 |
| 108 | D Longitudinal | 4,02103E-06 | 1,72278E-13 | 1,62264E-13 | 3,23117E-06 | -6,80183E-13 | 1,74553E-12 | 2,47325E-06 | 4,22244E-14 | -8,79127E-14 |
| 108 | D Vertical | -9,42466E-13 | 1,91548E-07 | 2,73803E-08 | -2,86478E-13 | 1,36366E-07 | 2,71126E-08 | 1,2691E-13 | 8,54735E-08 | 1,94273E-08 |
| 108 | D transversal | -5,42868E-14 | 4,34988E-06 | 5,74689E-07 | -1,14435E-14 | 3,55664E-06 | 5,74324E-07 | 1,56081E-12 | 2,75277E-06 | 5,71601E-07 |
| 108 | G Longitudinal | -2,64027E-13 | 3,37348E-07 | 6,88898E-08 | -6,80986E-13 | 2,4303E-07 | 6,70985E-08 | 6,82758E-13 | 1,47521E-07 | 5,13493E-08 |
| 108 | G Vertical | 5,58894E-07 | 3,69468E-14 | 7,88056E-14 | 5,55873E-07 | -1,22815E-12 | 2,90401E-12 | 4,89407E-07 | 7,02207E-12 | -1,60951E-11 |
| 108 | G transversal | -3,2266E-07 | 7,7755E-14 | 5,05087E-13 | -2,29192E-07 | -1,78636E-13 | 4,78533E-13 | -1,44712E-07 | 5,88652E-13 | -1,34626E-12 |
| 109 | D Longitudinal | 3,56969E-06 | -1,78602E-09 | -5,72346E-10 | 2,90676E-06 | -8,04962E-10 | -5,85225E-10 | 2,25594E-06 | 2,0863E-11 | -2,54121E-10 |
| 109 | D Vertical | -1,74298E-07 | 1,74945E-07 | 2,14395E-08 | -1,29645E-07 | 1,29857E-07 | 2,14368E-08 | -8,5328E-08 | 8,54592E-08 | 1,96083E-08 |
| 109 | D transversal | -2,86575E-07 | 3,86126E-06 | 4,8013E-07 | -2,85861E-07 | 3,19884E-06 | 4,80089E-07 | -2,84882E-07 | 2,53172E-06 | 4,88607E-07 |
| 109 | G Longitudinal | -1,96298E-08 | 3,09595E-07 | 5,63539E-08 | -1,69231E-08 | 2,31097E-07 | 5,70803E-08 | -4,42063E-09 | 1,47432E-07 | 6,02585E-08 |
| 109 | G Vertical | 4,57576E-07 | -1,37132E-08 | -5,45391E-09 | 4,61678E-07 | -5,93836E-09 | -4,74035E-09 | 4,34882E-07 | 2,66499E-09 | -5,77368E-09 |
| 109 | G transversal | -2,92458E-07 | 3,82208E-09 | 1,2191E-09 | -2,14631E-07 | 1,76886E-09 | 1,0136E-09 | -1,48328E-07 | -2,57839E-11 | 3,39489E-10 |
| 110 | D Longitudinal | 4,01832E-06 | 1,43442E-13 | 3,23487E-10 | 3,31344E-06 | -3,55686E-11 | 4,225E-10 | 2,60191E-06 | 1,68514E-11 | -1,25794E-10 |
| 110 | D Vertical | -1,77913E-07 | -1,20864E-13 | -1,1499E-08 | -1,31471E-07 | 1,2384E-10 | -1,18168E-08 | -8,37626E-08 | 2,73619E-11 | -1,35407E-08 |
| 110 | D transversal | -2,96106E-07 | 4,01661E-06 | 5,08449E-07 | -2,96378E-07 | 3,3153E-06 | 5,0845E-07 | -2,85878E-07 | 2,60532E-06 | 5,17914E-07 |
| 110 | G Longitudinal | -9,24522E-09 | 3,14757E-07 | 6,04965E-08 | -1,00656E-08 | 2,31312E-07 | 6,05026E-08 | 5,12917E-10 | 1,47453E-07 | 5,33264E-08 |
| 110 | G Vertical | 5,16685E-07 | 6,44278E-09 | 2,822E-09 | 5,15722E-07 | 2,53238E-09 | 2,87561E-09 | 4,71182E-07 | 5,00009E-11 | -2,14586E-10 |

APOYO 2

| DESPLAZAMIENTOS (metros) | | C4 | | | C5 | | | C6 | | |
|---|---|---|---|---|---|---|---|---|---|---|
| Nudo | Desplazamiento | L | T | V | L | T | V | L | T | V |
| 110 | G transversal | -3,20029E-07 | 1,29227E-13 | -3,75139E-10 | -2,36601E-07 | 8,39073E-11 | -6,07446E-10 | -1,46346E-07 | 6,18384E-11 | -7,73415E-10 |
| 111 | D Longitudinal | 4,14692E-06 | 1,78642E-09 | 8,43205E-10 | 3,4835E-06 | 8,18794E-10 | 8,1879E-10 | 2,80151E-06 | 8,25921E-11 | -8,01728E-10 |
| 111 | D Vertical | -1,757E-07 | -1,74945E-07 | -4,39406E-08 | -1,30243E-07 | -1,29855E-07 | -4,39418E-08 | -8,44787E-08 | -8,55971E-08 | -4,21285E-08 |
| 111 | D transversal | -2,83323E-07 | 3,86126E-06 | 4,8039E-07 | -2,84241E-07 | 3,19881E-06 | 4,80427E-07 | -2,87337E-07 | 2,53148E-06 | 4,93754E-07 |
| 111 | G Longitudinal | -1,10013E-08 | 3,09596E-07 | 5,70624E-08 | -1,4379E-08 | 2,31689E-07 | 5,6219E-08 | 1,13476E-09 | 1,45738E-07 | 6,31065E-08 |
| 111 | G Vertical | 4,6698E-07 | -1,37221E-08 | -6,18573E-09 | 4,59115E-07 | -5,25305E-09 | -7,29989E-09 | 4,09396E-07 | 1,3623E-08 | -4,7154E-08 |
| 111 | G transversal | -3,26175E-07 | -3,82088E-09 | -1,86703E-09 | -2,47566E-07 | -1,54921E-09 | -2,27603E-09 | -1,45262E-07 | -6,75086E-10 | 1,18853E-09 |
| 112 | D Longitudinal | 4,31368E-06 | 1,63966E-13 | -1,54592E-13 | 3,61124E-06 | 6,75828E-13 | -1,25984E-12 | 2,87494E-06 | 1,72772E-12 | -3,94463E-12 |
| 112 | D Vertical | 2,83023E-13 | -1,78015E-07 | -4,54937E-08 | 1,79945E-12 | -1,31201E-07 | -4,53067E-08 | 1,73904E-13 | -8,56581E-08 | -4,14681E-08 |
| 112 | D transversal | -2,88915E-14 | 4,02123E-06 | 5,10834E-07 | -5,0901E-14 | 3,31717E-06 | 5,10595E-07 | 7,32289E-13 | 2,60529E-06 | 5,18543E-07 |
| 112 | G Longitudinal | -1,52503E-13 | 3,19963E-07 | 6,08946E-08 | -2,23209E-13 | 2,36719E-07 | 6,03475E-08 | 6,51485E-13 | 1,47578E-07 | 4,97053E-08 |
| 112 | G Vertical | 5,04328E-07 | 3,18576E-14 | 3,45194E-13 | 5,09274E-07 | -9,93082E-13 | 2,35316E-12 | 4,92419E-07 | 7,34808E-12 | -1,68429E-11 |
| 112 | G transversal | -3,24799E-07 | 3,58401E-14 | -1,26924E-13 | -2,40562E-07 | -9,74754E-14 | 2,84718E-13 | -1,46864E-07 | 6,64767E-13 | -1,52083E-12 |
| 113 | D Longitudinal | 4,14692E-06 | -1,78604E-09 | -8,43364E-10 | 3,48351E-06 | -8,17805E-10 | -8,20429E-10 | 2,80151E-06 | -7,8457E-11 | 7,92282E-10 |
| 113 | D Vertical | 1,757E-07 | -1,74945E-07 | -4,39405E-08 | 1,30243E-07 | -1,29855E-07 | -4,39421E-08 | 8,44768E-08 | -8,55986E-08 | -4,21249E-08 |
| 113 | D transversal | 2,83323E-07 | 3,86126E-06 | 4,8039E-07 | 2,84241E-07 | 3,19881E-06 | 4,80429E-07 | 2,87338E-07 | 2,53149E-06 | 4,93731E-07 |
| 113 | G Longitudinal | 1,10013E-08 | 3,09597E-07 | 5,70626E-08 | 1,43787E-08 | 2,31688E-07 | 5,62218E-08 | -1,13325E-09 | 1,45746E-07 | 6,30889E-08 |
| 113 | G Vertical | 4,67006E-07 | 1,37051E-08 | 6,1867E-09 | 4,59148E-07 | 5,22854E-09 | 7,33335E-09 | 4,09556E-07 | -1,38072E-08 | 4,75752E-08 |
| 113 | G transversal | -3,26178E-07 | 3,82071E-09 | 1,86715E-09 | -2,47562E-07 | 1,5484E-09 | 2,27761E-09 | -1,45293E-07 | 6,73313E-10 | -1,18448E-09 |
| 114 | D Longitudinal | 4,01832E-06 | 2,36439E-13 | -3,23336E-10 | 3,31344E-06 | 3,57479E-11 | -4,22367E-10 | 2,60191E-06 | -1,43895E-11 | 1,20179E-10 |
| 114 | D Vertical | 1,77912E-07 | -4,65661E-13 | -1,14991E-08 | 1,3147E-07 | 1,23477E-10 | -1,18164E-08 | 8,37615E-08 | 2,5423E-11 | -1,35363E-08 |
| 114 | D transversal | 2,96106E-07 | 4,01661E-06 | 5,0845E-07 | 2,96378E-07 | 3,3153E-06 | 5,08452E-07 | 2,85879E-07 | 2,60533E-06 | 5,17894E-07 |
| 114 | G Longitudinal | 9,24519E-09 | 3,14757E-07 | 6,04962E-08 | 1,00658E-08 | 2,31311E-07 | 6,05031E-08 | -5,11213E-10 | 1,47453E-07 | 5,33244E-08 |
| 114 | G Vertical | 5,16685E-07 | -6,44286E-09 | -2,82252E-09 | 5,15719E-07 | -2,53058E-09 | -2,87969E-09 | 4,71183E-07 | -4,79089E-11 | 2,09795E-10 |
| 114 | G transversal | -3,20028E-07 | -4,20722E-14 | 3,75171E-10 | -2,36597E-07 | -8,39161E-11 | 6,07602E-10 | -1,46345E-07 | -6,1196E-11 | 7,7195E-10 |
| 115 | D Longitudinal | 3,56969E-06 | 1,78647E-09 | 5,72835E-10 | 2,90676E-06 | 8,04348E-10 | 5,87211E-10 | 2,25594E-06 | -1,95411E-11 | 2,51121E-10 |
| 115 | D Vertical | 1,74298E-07 | 1,74945E-07 | 2,14393E-08 | 1,29645E-07 | 1,29857E-07 | 2,1437E-08 | 8,53282E-08 | 8,54602E-08 | 1,96061E-08 |
| 115 | D transversal | 2,86575E-07 | 3,86126E-06 | 4,8013E-07 | 2,85861E-07 | 3,19884E-06 | 4,80091E-07 | 2,84882E-07 | 2,53173E-06 | 4,88592E-07 |
| 115 | G Longitudinal | 1,96297E-08 | 3,09595E-07 | 5,63541E-08 | 1,69235E-08 | 2,31097E-07 | 5,70804E-08 | 4,42073E-09 | 1,47437E-07 | 6,02474E-08 |
| 115 | G Vertical | 4,57555E-07 | 1,37294E-08 | 5,46829E-09 | 4,61654E-07 | 5,94542E-09 | 4,74517E-09 | 4,34872E-07 | -2,66001E-09 | 5,76334E-09 |
| 115 | G transversal | -2,92461E-07 | -3,8223E-09 | -1,21938E-09 | -2,14635E-07 | -1,76826E-09 | -1,01524E-09 | -1,48328E-07 | 2,5075E-11 | -3,37877E-10 |
| 116 | D Longitudinal | 3,71371E-06 | 2,18286E-13 | 3,05155E-13 | 3,01211E-06 | -5,0761E-13 | 1,42464E-12 | 2,32891E-06 | 7,67495E-13 | -1,74638E-12 |
| 116 | D Vertical | 2,89293E-13 | 1,78014E-07 | 2,24834E-08 | 1,09087E-13 | 1,31095E-07 | 2,25878E-08 | 1,48024E-13 | 8,54434E-08 | 1,97968E-08 |
| 116 | D transversal | 3,10751E-15 | 4,02123E-06 | 5,10188E-07 | 1,22933E-13 | 3,31698E-06 | 5,10435E-07 | 6,5099E-13 | 2,60537E-06 | 5,17266E-07 |
| 116 | G Longitudinal | 1,04696E-13 | 3,19964E-07 | 6,01218E-08 | 3,92912E-13 | 2,36283E-07 | 6,0691E-08 | 1,12513E-12 | 1,47274E-07 | 5,73385E-08 |
| 116 | G Vertical | 5,17181E-07 | 3,53431E-14 | 3,77387E-13 | 5,13619E-07 | -6,5108E-13 | 1,50194E-12 | 4,91622E-07 | 6,86122E-12 | -1,57322E-11 |
| 116 | G transversal | -3,0488E-07 | 4,63171E-14 | 1,57429E-13 | -2,22289E-07 | 1,15275E-13 | -2,03383E-13 | -1,4584E-07 | -1,01274E-13 | 2,35623E-13 |
| 117 | D Longitudinal | 3,28574E-06 | -9,50863E-10 | -3,26545E-10 | 2,69495E-06 | -4,32608E-10 | -3,25176E-10 | 2,10837E-06 | -5,37647E-11 | 5,22237E-11 |
| 117 | D Vertical | -1,62705E-07 | 1,63477E-07 | 1,78189E-08 | -1,24005E-07 | 1,2451E-07 | 1,78192E-08 | -8,62002E-08 | 8,55411E-08 | 1,78266E-08 |
| 117 | D transversal | -2,77369E-07 | 3,56407E-06 | 4,27662E-07 | -2,76426E-07 | 2,97409E-06 | 4,27664E-07 | -2,77707E-07 | 2,38322E-06 | 4,30038E-07 |
| 117 | G Longitudinal | -3,87084E-09 | 2,83852E-07 | 4,80795E-08 | -6,73771E-09 | 2,18112E-07 | 4,79274E-08 | -8,27084E-09 | 1,50267E-07 | 5,32191E-08 |
| 117 | G Vertical | 3,98638E-07 | -2,18632E-08 | -8,6229E-09 | 4,07052E-07 | -9,64917E-09 | -7,31118E-09 | 4,00101E-07 | 4,45747E-09 | -1,00677E-08 |
| 117 | G transversal | -2,69302E-07 | -2,15716E-09 | -4,75967E-10 | -2,0381E-07 | -1,28541E-09 | -4,2997E-10 | -1,41066E-07 | -4,49953E-11 | -1,36079E-09 |
| 118 | D Longitudinal | 3,70962E-06 | 1,08202E-13 | 9,2485E-11 | 3,08269E-06 | 3,22189E-12 | 8,37534E-11 | 2,45412E-06 | -1,15378E-10 | 1,48841E-10 |

APOYO 2

| DESPLAZAMIENTOS (metros) | | C4 | | | C5 | | | C6 | | |
|---|---|---|---|---|---|---|---|---|---|---|
| Nudo | Desplazamiento | L | T | V | L | T | V | L | T | V |
| 118 | D Vertical | -1,69157E-07 | -1,12326E-13 | -1,08119E-08 | -1,27166E-07 | -9,04916E-12 | -1,0789E-08 | -8,47729E-08 | -5,99314E-10 | -8,09366E-09 |
| 118 | D transversal | -2,80386E-07 | 3,70774E-06 | 4,52092E-07 | -2,80298E-07 | 3,08416E-06 | 4,52092E-07 | -2,83012E-07 | 2,45784E-06 | 4,58392E-07 |
| 118 | G Longitudinal | -3,1226E-09 | 2,94062E-07 | 5,25286E-08 | -3,53251E-09 | 2,21609E-07 | 5,25273E-08 | -3,17997E-09 | 1,47506E-07 | 5,62164E-08 |
| 118 | G Vertical | 4,85847E-07 | 2,27305E-09 | 8,98759E-10 | 4,85729E-07 | 1,03544E-09 | 8,92575E-10 | 4,68687E-07 | -1,30669E-10 | 2,93318E-10 |
| 118 | G transversal | -2,97377E-07 | -2,05716E-13 | -8,51988E-11 | -2,24883E-07 | -7,73799E-12 | -6,4469E-11 | -1,49178E-07 | -3,4396E-10 | 1,39221E-09 |
| 119 | D Longitudinal | 3,83612E-06 | 9,50887E-10 | 4,25626E-10 | 3,24555E-06 | 4,31664E-10 | 4,26625E-10 | 2,65067E-06 | -5,11203E-10 | 1,59899E-09 |
| 119 | D Vertical | -1,64282E-07 | -1,63477E-07 | -3,86833E-08 | -1,25124E-07 | -1,24511E-07 | -3,86826E-08 | -8,50744E-08 | -8,55592E-08 | -3,86324E-08 |
| 119 | D transversal | -2,74426E-07 | 3,56407E-06 | 4,27819E-07 | -2,75112E-07 | 2,97409E-06 | 4,27818E-07 | -2,81884E-07 | 2,38491E-06 | 4,25707E-07 |
| 119 | G Longitudinal | -1,45804E-08 | 2,83852E-07 | 4,73289E-08 | -1,226E-08 | 2,17988E-07 | 4,75043E-08 | -1,40564E-08 | 1,51542E-07 | 5,17855E-08 |
| 119 | G Vertical | 4,11771E-07 | -2,1861E-08 | -9,80153E-09 | 4,01285E-07 | -8,48256E-09 | -1,16063E-08 | 3,54436E-07 | 2,40896E-08 | -8,49557E-08 |
| 119 | G transversal | -3,01858E-07 | 2,15688E-09 | 8,12645E-10 | -2,35636E-07 | 1,23941E-09 | 8,92997E-10 | -1,65498E-07 | 9,9026E-10 | -2,46307E-10 |
| 120 | D Longitudinal | 3,98661E-06 | 1,03149E-13 | -1,0291E-13 | 3,36233E-06 | 3,17926E-13 | -5,51523E-13 | 2,72634E-06 | 1,21349E-12 | -2,77219E-12 |
| 120 | D Vertical | -1,00258E-12 | -1,68729E-07 | -4,10707E-08 | -1,24115E-12 | -1,26959E-07 | -4,10855E-08 | -7,73554E-12 | -8,52369E-08 | -4,17633E-08 |
| 120 | D transversal | -6,5647E-14 | 3,71266E-06 | 4,54104E-07 | -6,11715E-14 | 3,08645E-06 | 4,54123E-07 | -1,56165E-13 | 2,4582E-06 | 4,59726E-07 |
| 120 | G Longitudinal | 2,55145E-13 | 2,97202E-07 | 5,25785E-08 | 2,96897E-13 | 2,24735E-07 | 5,26173E-08 | 1,39526E-12 | 1,46559E-07 | 6,807E-08 |
| 120 | G Vertical | 4,80674E-07 | 1,13772E-14 | 2,49318E-13 | 4,82006E-07 | -3,80021E-13 | 8,7904E-13 | 4,90342E-07 | 3,25695E-12 | -7,46729E-12 |
| 120 | G transversal | -3,00638E-07 | -7,15881E-14 | -3,86735E-14 | -2,27736E-07 | -2,14904E-13 | 3,83836E-13 | -1,48163E-07 | -4,95912E-14 | 1,07583E-13 |
| 121 | D Longitudinal | 3,83612E-06 | -9,5089E-10 | -4,25799E-10 | 3,24555E-06 | -4,3144E-10 | -4,27117E-10 | 2,65065E-06 | 5,11727E-10 | -1,60019E-09 |
| 121 | D Vertical | 1,64282E-07 | -1,63477E-07 | -3,86833E-08 | 1,25124E-07 | -1,24511E-07 | -3,8683E-08 | 8,5075E-08 | -8,55605E-08 | -3,86294E-08 |
| 121 | D transversal | 2,74425E-07 | 3,56407E-06 | 4,27819E-07 | 2,75112E-07 | 2,97409E-06 | 4,27818E-07 | 2,81883E-07 | 2,38491E-06 | 4,25712E-07 |
| 121 | G Longitudinal | 1,45808E-08 | 2,83852E-07 | 4,7329E-08 | 1,22607E-08 | 2,17987E-07 | 4,75049E-08 | 1,40597E-08 | 1,51546E-07 | 5,17778E-08 |
| 121 | G Vertical | 4,11813E-07 | 2,18578E-08 | 9,80332E-09 | 4,01341E-07 | 8,47576E-09 | 1,16181E-08 | 3,54717E-07 | -2,4119E-08 | 8,50229E-08 |
| 121 | G transversal | -3,01852E-07 | -2,15689E-09 | -8,12704E-10 | -2,3563E-07 | -1,2396E-09 | -8,9258E-10 | -1,65452E-07 | -9,88605E-10 | 2,42509E-10 |
| 122 | D Longitudinal | 3,70961E-06 | 1,06906E-13 | -9,24001E-11 | 3,08269E-06 | -3,12504E-12 | -8,36661E-11 | 2,45412E-06 | 1,16779E-10 | -1,52036E-10 |
| 122 | D Vertical | 1,69157E-07 | 1,8699E-13 | -1,08118E-08 | 1,27166E-07 | -8,90145E-12 | -1,07889E-08 | 8,47736E-08 | -5,97383E-10 | -8,09806E-09 |
| 122 | D transversal | 2,80386E-07 | 3,70774E-06 | 4,52093E-07 | 2,80298E-07 | 3,08416E-06 | 4,52093E-07 | 2,83011E-07 | 2,45785E-06 | 4,58383E-07 |
| 122 | G Longitudinal | 3,12258E-09 | 2,94062E-07 | 5,25286E-08 | 3,5325E-09 | 2,21609E-07 | 5,25281E-08 | 3,18066E-09 | 1,47511E-07 | 5,62049E-08 |
| 122 | G Vertical | 4,85847E-07 | -2,2731E-09 | -8,99171E-10 | 4,85729E-07 | -1,03458E-09 | -8,94507E-10 | 4,68679E-07 | 1,32069E-10 | -2,96526E-10 |
| 122 | G transversal | -2,9738E-07 | -2,38048E-13 | 8,50232E-11 | -2,24887E-07 | 7,52462E-12 | 6,43232E-11 | -1,49191E-07 | 3,41092E-10 | -1,38566E-09 |
| 123 | D Longitudinal | 3,28574E-06 | 9,5089E-10 | 3,26728E-10 | 2,69494E-06 | 4,32397E-10 | 3,2567E-10 | 2,10837E-06 | 5,33873E-11 | -5,13583E-11 |
| 123 | D Vertical | 1,62705E-07 | 1,63477E-07 | 1,78189E-08 | 1,24006E-07 | 1,2451E-07 | 1,78196E-08 | 8,62002E-08 | 8,55424E-08 | 1,78235E-08 |
| 123 | D transversal | 2,77369E-07 | 3,56407E-06 | 4,27662E-07 | 2,76427E-07 | 2,97409E-06 | 4,27664E-07 | 2,77708E-07 | 2,38322E-06 | 4,30035E-07 |
| 123 | G Longitudinal | 3,87046E-09 | 2,83852E-07 | 4,80796E-08 | 6,73726E-09 | 2,18111E-07 | 4,79283E-08 | 8,27181E-09 | 1,50272E-07 | 5,32071E-08 |
| 123 | G Vertical | 3,98595E-07 | 2,18661E-08 | 8,62708E-09 | 4,07011E-07 | 9,65026E-09 | 7,31224E-09 | 4,00083E-07 | -4,45607E-09 | 1,00646E-08 |
| 123 | G transversal | -2,69296E-07 | 2,15713E-09 | 4,76008E-10 | -2,03803E-07 | 1,28568E-09 | 4,2929E-10 | -1,41065E-07 | 4,28872E-11 | 1,36562E-09 |
| 124 | D Longitudinal | 3,42273E-06 | 1,32606E-13 | 1,96146E-13 | 2,79843E-06 | -2,10325E-13 | 6,43525E-13 | 2,18253E-06 | 3,19714E-13 | -7,24696E-13 |
| 124 | D Vertical | -1,14518E-12 | 1,68729E-07 | 1,94871E-08 | -1,04872E-12 | 1,26969E-07 | 1,94775E-08 | -1,24993E-13 | 8,55434E-08 | 1,85403E-08 |
| 124 | D transversal | 6,21236E-14 | 3,71266E-06 | 4,53896E-07 | 5,46374E-14 | 3,08646E-06 | 4,53877E-07 | 3,3961E-13 | 2,45747E-06 | 4,59318E-07 |
| 124 | G Longitudinal | -2,78596E-13 | 2,97202E-07 | 5,24757E-08 | -2,95242E-13 | 2,24767E-07 | 5,24338E-08 | -5,19258E-13 | 1,48509E-07 | 5,85627E-08 |
| 124 | G Vertical | 4,85912E-07 | 2,92011E-14 | 2,54249E-13 | 4,84525E-07 | -3,74657E-13 | 8,9231E-13 | 4,84752E-07 | 3,37409E-12 | -7,73446E-12 |
| 124 | G transversal | -2,87718E-07 | -7,9323E-14 | -2,07304E-14 | -2,15746E-07 | 1,49332E-13 | -4,51015E-13 | -1,4774E-07 | -9,36814E-13 | 2,14218E-12 |
| 125 | D Longitudinal | 4,54539E-06 | 1,30092E-10 | 5,83336E-11 | 3,92114E-06 | 5,89639E-11 | 5,85879E-11 | 3,34286E-06 | 1,69074E-09 | -3,86679E-09 |
| 125 | D Vertical | 8,57649E-08 | -5,15727E-07 | -1,03101E-07 | 6,51434E-08 | -3,88696E-07 | -1,03155E-07 | 4,96529E-08 | -2,41375E-07 | -2,06571E-07 |
| 125 | D transversal | 1,41634E-07 | 3,71389E-06 | 4,54664E-07 | 1,42974E-07 | 3,08702E-06 | 4,54686E-07 | 1,50442E-07 | 2,46391E-06 | 4,46969E-07 |

APOYO 2

| DESPLAZAMIENTOS (metros) | | C4 | | | C5 | | | C6 | | |
|---|---|---|---|---|---|---|---|---|---|---|
| Nudo | Desplazamiento | L | T | V | L | T | V | L | T | V |
| 125 | G Longitudinal | -2,20051E-09 | 2,97763E-07 | 5,28142E-08 | -2,28366E-09 | 2,25051E-07 | 5,28286E-08 | -9,86074E-09 | 1,35892E-07 | 1,29067E-07 |
| 125 | G Vertical | 4,80976E-07 | 1,70435E-10 | 1,11438E-10 | 4,81749E-07 | -2,10223E-11 | 1,57241E-10 | 5,40601E-07 | -3,02013E-09 | 5,1909E-09 |
| 125 | G transversal | -3,12632E-07 | 1,22596E-09 | 5,05237E-10 | -2,36246E-07 | 7,90168E-10 | 3,80501E-10 | -1,57651E-07 | 8,25461E-09 | -2,72511E-08 |
| 126 | D Longitudinal | 4,54539E-06 | 1,30454E-10 | 5,8508E-11 | 3,92114E-06 | 5,91274E-11 | 5,87539E-11 | 3,34286E-06 | 1,69076E-09 | -3,86498E-09 |
| 126 | D Vertical | -8,5738E-08 | -5,156E-07 | -1,03044E-07 | -6,51132E-08 | -3,88639E-07 | -1,03098E-07 | -4,94558E-08 | -2,39728E-07 | -2,10336E-07 |
| 126 | D transversal | -1,41622E-07 | 3,71401E-06 | 4,54717E-07 | -1,42961E-07 | 3,08708E-06 | 4,54738E-07 | -1,50355E-07 | 2,46544E-06 | 4,43476E-07 |
| 126 | G Longitudinal | 2,17639E-09 | 2,97558E-07 | 5,27225E-08 | 2,25713E-09 | 2,24957E-07 | 5,27378E-08 | 9,68422E-09 | 1,33231E-07 | 1,35151E-07 |
| 126 | G Vertical | 4,80975E-07 | -3,84609E-10 | -2,06291E-10 | 4,81748E-07 | -7,80258E-11 | -2,48982E-10 | 5,40592E-07 | 2,53227E-10 | 1,13552E-09 |
| 126 | G transversal | -3,12629E-07 | -5,48195E-10 | -2,03154E-10 | -2,36244E-07 | -4,8026E-10 | -8,19927E-11 | -1,57628E-07 | 5,22365E-10 | 7,18272E-09 |
| 127 | D Longitudinal | 4,38718E-06 | 4,70404E-10 | 2,10706E-10 | 3,79831E-06 | 2,1336E-10 | 2,1147E-10 | 3,23188E-06 | 6,10173E-09 | -1,39517E-08 |
| 127 | D Vertical | 8,57627E-08 | -5,15725E-07 | -1,031E-07 | 6,51426E-08 | -3,88695E-07 | -1,03154E-07 | 4,96518E-08 | -2,41375E-07 | -2,06572E-07 |
| 127 | D transversal | 1,38802E-07 | 3,56372E-06 | 4,2766E-07 | 1,39382E-07 | 2,97393E-06 | 4,27658E-07 | 1,53529E-07 | 2,38993E-06 | 4,13909E-07 |
| 127 | G Longitudinal | -4,81302E-09 | 3,00942E-07 | 5,43315E-08 | -4,8138E-09 | 2,26434E-07 | 5,43721E-08 | -1,04544E-08 | 1,35134E-07 | 1,41085E-07 |
| 127 | G Vertical | 4,80467E-07 | 3,36667E-10 | 1,50907E-10 | 4,82692E-07 | 1,5251E-10 | 1,51777E-10 | 5,4258E-07 | -2,05279E-09 | 4,90875E-09 |
| 127 | G transversal | -3,01143E-07 | -3,01215E-09 | -1,19761E-09 | -2,32988E-07 | -1,57934E-09 | -1,21962E-09 | -1,81501E-07 | 5,15267E-09 | -1,94837E-08 |
| 128 | D Longitudinal | 4,95083E-06 | 6,1581E-12 | 3,0999E-12 | 4,36553E-06 | 2,23493E-12 | 4,04433E-12 | 3,91283E-06 | 8,62525E-11 | -1,97256E-10 |
| 128 | D Vertical | 2,69071E-11 | -8,63925E-07 | -1,65664E-07 | 3,02455E-11 | -6,50995E-07 | -1,65771E-07 | 1,97256E-10 | -3,95537E-07 | -3,77018E-07 |
| 128 | D transversal | 1,17475E-11 | 3,56384E-06 | 4,27712E-07 | 1,32576E-11 | 2,97398E-06 | 4,27711E-07 | 8,62525E-11 | 2,39787E-06 | 3,95537E-07 |
| 128 | G Longitudinal | -1,16037E-11 | 3,00225E-07 | 5,39576E-08 | -1,30433E-11 | 2,26144E-07 | 5,40031E-08 | -8,50915E-11 | 1,33611E-07 | 1,42803E-07 |
| 128 | G Vertical | 4,86712E-07 | -5,41633E-10 | -2,42271E-10 | 4,90078E-07 | -2,46223E-10 | -2,42218E-10 | 5,98251E-07 | -7,01415E-09 | 1,60377E-08 |
| 128 | G transversal | -3,06484E-07 | 5,84403E-10 | 2,61593E-10 | -2,35814E-07 | 2,65193E-10 | 2,6241E-10 | -2,06271E-07 | 7,57174E-09 | -1,73126E-08 |
| 129 | D Longitudinal | 4,38719E-06 | 4,70572E-10 | 2,10781E-10 | 3,79832E-06 | 2,13436E-10 | 2,11545E-10 | 3,23194E-06 | 6,0952E-09 | -1,39364E-08 |
| 129 | D Vertical | -8,57358E-08 | -5,15598E-07 | -1,03043E-07 | -6,51124E-08 | -3,88638E-07 | -1,03097E-07 | -4,94547E-08 | -2,39728E-07 | -2,10337E-07 |
| 129 | D transversal | -1,38777E-07 | 3,56395E-06 | 4,27765E-07 | -1,39353E-07 | 2,97403E-06 | 4,27763E-07 | -1,53341E-07 | 2,39297E-06 | 4,06965E-07 |
| 129 | G Longitudinal | 4,79121E-09 | 3,0077E-07 | 5,42545E-08 | 4,78918E-09 | 2,26356E-07 | 5,4295E-08 | 1,02951E-08 | 1,32907E-07 | 1,46177E-07 |
| 129 | G Vertical | 4,80465E-07 | -3,66202E-10 | -1,63767E-10 | 4,82689E-07 | -1,6648E-10 | -1,63753E-10 | 5,42564E-07 | 1,67528E-09 | -4,04563E-09 |
| 129 | G transversal | -3,01149E-07 | 3,55355E-09 | 1,43994E-09 | -2,32993E-07 | 1,82489E-09 | 1,46303E-09 | -1,81543E-07 | 1,8636E-09 | 3,44117E-09 |
| 130 | D Longitudinal | 2,8642E-06 | 1,30079E-10 | 4,45902E-11 | 2,2402E-06 | 5,92564E-11 | 4,43032E-11 | 1,6222E-06 | 4,56295E-12 | -7,47696E-13 |
| 130 | D Vertical | -8,2307E-08 | 5,15727E-07 | 8,10629E-08 | -6,19226E-08 | 3,88739E-07 | 8,10074E-08 | -4,25002E-08 | 2,57785E-07 | 8,68634E-08 |
| 130 | D transversal | -1,45792E-07 | 3,71389E-06 | 4,54276E-07 | -1,44649E-07 | 3,08704E-06 | 4,54255E-07 | -1,42759E-07 | 2,45745E-06 | 4,59552E-07 |
| 130 | G Longitudinal | 9,28061E-10 | 2,97763E-07 | 5,26111E-08 | 7,99562E-10 | 2,25063E-07 | 5,25948E-08 | -2,32538E-09 | 1,48616E-07 | 5,83995E-08 |
| 130 | G Vertical | 4,84478E-07 | -1,70833E-10 | -1,36655E-10 | 4,83434E-07 | -1,71733E-11 | -8,94331E-11 | 4,80861E-07 | 1,6142E-10 | -3,71852E-10 |
| 130 | G transversal | -2,90428E-07 | 1,22495E-09 | 2,04227E-10 | -2,15344E-07 | 6,9192E-10 | 3,2353E-10 | -1,54057E-07 | 3,54633E-10 | -6,33603E-10 |
| 131 | D Longitudinal | 2,8642E-06 | 1,3044E-10 | 4,47074E-11 | 2,2402E-06 | 5,9415E-11 | 4,44253E-11 | 1,6222E-06 | 4,55774E-12 | -7,0031E-13 |
| 131 | D Vertical | 8,23373E-08 | 5,156E-07 | 8,10192E-08 | 6,19508E-08 | 3,88681E-07 | 8,09641E-08 | 4,25158E-08 | 2,57778E-07 | 8,68696E-08 |
| 131 | D transversal | 1,45779E-07 | 3,71401E-06 | 4,54317E-07 | 1,44637E-07 | 3,08709E-06 | 4,54296E-07 | 1,42753E-07 | 2,45746E-06 | 4,59538E-07 |
| 131 | G Longitudinal | -9,01271E-10 | 2,97557E-07 | 5,25403E-08 | -7,74293E-10 | 2,24969E-07 | 5,25247E-08 | 2,33883E-09 | 1,48605E-07 | 5,84106E-08 |
| 131 | G Vertical | 4,84477E-07 | 3,85014E-10 | 2,11274E-10 | 4,83432E-07 | 1,13899E-10 | 1,6422E-10 | 4,80861E-07 | -1,42814E-10 | 3,45186E-10 |
| 131 | G transversal | -2,9043E-07 | -5,47365E-10 | 2,99148E-11 | -2,15348E-07 | -3,83273E-10 | -9,28679E-11 | -1,54058E-07 | -3,16556E-10 | 5,96908E-10 |
| 132 | D Longitudinal | 2,72829E-06 | 4,70381E-10 | 1,61475E-10 | 2,13958E-06 | 2,14089E-10 | 1,60662E-10 | 1,55153E-06 | 2,44466E-11 | -2,09047E-11 |
| 132 | D Vertical | -8,23041E-08 | 5,15725E-07 | 8,10621E-08 | -6,1921E-08 | 3,88738E-07 | 8,10066E-08 | -4,25002E-08 | 2,57785E-07 | 8,6863E-08 |
| 132 | D transversal | -1,40639E-07 | 3,56372E-06 | 4,2754E-07 | -1,40023E-07 | 2,97392E-06 | 4,27542E-07 | -1,39888E-07 | 2,3832E-06 | 4,30058E-07 |
| 132 | G Longitudinal | 2,34024E-09 | 3,00942E-07 | 5,3681E-08 | 2,39711E-09 | 2,26468E-07 | 5,36359E-08 | 1,45607E-09 | 1,48549E-07 | 5,88685E-08 |
| 132 | G Vertical | 4,86986E-07 | -3,3663E-10 | -1,15454E-10 | 4,84733E-07 | -1,53416E-10 | -1,14519E-10 | 4,83426E-07 | -1,61246E-11 | 1,1818E-11 |

APOYO 2

| DESPLAZAMIENTOS (metros) | | C4 | | | C5 | | | C6 | | |
|---|---|---|---|---|---|---|---|---|---|---|
| Nudo | Desplazamiento | L | T | V | L | T | V | L | T | V |
| 132 | G transversal | -2,73859E-07 | -3,01223E-09 | -8,68713E-10 | -2,06375E-07 | -1,59033E-09 | -8,59755E-10 | -1,43509E-07 | 2,03893E-10 | -1,38827E-09 |
| 133 | D Longitudinal | 2,15536E-06 | 6,09689E-12 | 1,75252E-12 | 1,56988E-06 | 3,37447E-12 | 6,99893E-13 | 9,86482E-07 | -6,56848E-12 | 1,55152E-11 |
| 133 | D Vertical | 3,03064E-11 | 8,63925E-07 | 1,43024E-07 | 2,82341E-11 | 6,5108E-07 | 1,42915E-07 | 1,55152E-11 | 4,3005E-07 | 1,55296E-07 |
| 133 | D transversal | -1,32378E-11 | 3,56384E-06 | 4,2758E-07 | -1,2352E-11 | 2,97398E-06 | 4,27582E-07 | -6,56847E-12 | 2,3832E-06 | 4,3005E-07 |
| 133 | G Longitudinal | 1,30699E-11 | 3,00225E-07 | 5,34336E-08 | 1,21764E-11 | 2,2618E-07 | 5,33869E-08 | 6,66708E-12 | 1,48507E-07 | 5,89897E-08 |
| 133 | G Vertical | 4,95723E-07 | 5,41666E-10 | 1,86285E-10 | 4,92732E-07 | 2,4594E-10 | 1,8638E-10 | 4,88126E-07 | 3,50816E-11 | -3,99617E-11 |
| 133 | G transversal | -2,76281E-07 | 5,84391E-10 | 2,00787E-10 | -2,0606E-07 | 2,65873E-10 | 1,99858E-10 | -1,43158E-07 | 3,37397E-11 | -3,36924E-11 |
| 134 | D Longitudinal | 2,72828E-06 | 4,70549E-10 | 1,61533E-10 | 2,13957E-06 | 2,14165E-10 | 1,60719E-10 | 1,55152E-06 | 2,44542E-11 | -2,09097E-11 |
| 134 | D Vertical | 8,23344E-08 | 5,15598E-07 | 8,10184E-08 | 6,19492E-08 | 3,8868E-07 | 8,09633E-08 | 4,25158E-08 | 2,57778E-07 | 8,68693E-08 |
| 134 | D transversal | 1,4061E-07 | 3,56395E-06 | 4,2762E-07 | 1,39996E-07 | 2,97403E-06 | 4,27623E-07 | 1,39873E-07 | 2,38321E-06 | 4,30042E-07 |
| 134 | G Longitudinal | -2,3157E-09 | 3,0077E-07 | 5,3622E-08 | -2,37426E-09 | 2,2639E-07 | 5,35771E-08 | -1,44317E-09 | 1,48539E-07 | 5,8879E-08 |
| 134 | G Vertical | 4,86984E-07 | 3,6623E-10 | 1,25986E-10 | 4,84731E-07 | 1,66277E-10 | 1,26024E-10 | 4,83425E-07 | 2,34772E-11 | -2,64647E-11 |
| 134 | G transversal | -2,73853E-07 | 3,55361E-09 | 1,05474E-09 | -2,06369E-07 | 1,83683E-09 | 1,04445E-09 | -1,43507E-07 | -1,74404E-10 | 1,36111E-09 |
| 135 | D Longitudinal | 3,5624E-06 | 1,39648E-13 | 5,52349E-14 | 2,9709E-06 | 6,34508E-14 | 5,52338E-14 | 2,37743E-06 | 9,08709E-13 | -2,07256E-12 |
| 135 | D Vertical | 3,84797E-14 | 2,59433E-17 | -1,04322E-08 | 3,88562E-14 | -1,92431E-13 | -1,04317E-08 | 1,43769E-13 | -9,07006E-12 | -1,04029E-08 |
| 135 | D transversal | -1,01797E-13 | 3,56502E-06 | 4,28116E-07 | 6,07147E-14 | 2,97452E-06 | 4,28116E-07 | 5,43892E-12 | 2,38383E-06 | 4,28646E-07 |
| 135 | G Longitudinal | 5,78187E-15 | 2,81887E-07 | 4,87062E-08 | 8,48374E-16 | 2,14706E-07 | 4,87065E-08 | -2,98668E-13 | 1,47529E-07 | 4,86998E-08 |
| 135 | G Vertical | 4,75076E-07 | -2,64129E-17 | -5,70679E-16 | 4,75063E-07 | 6,20704E-15 | -1,38859E-14 | 4,74949E-07 | 2,77828E-14 | -6,36704E-14 |
| 135 | G transversal | -2,8195E-07 | -5,90156E-16 | -2,95584E-16 | -2,14821E-07 | -6,82149E-16 | 7,98215E-16 | -1,47711E-07 | -3,24544E-15 | 7,40203E-15 |
| 136 | D Longitudinal | 3,74536E-06 | -4,88826E-15 | -9,23492E-14 | 3,17532E-06 | 7,27031E-14 | -1,58441E-13 | 2,60154E-06 | 5,62556E-13 | -1,2892E-12 |
| 136 | D Vertical | 2,08036E-12 | -1,64403E-07 | -3,85178E-08 | 2,34434E-12 | -1,25591E-07 | -3,85187E-08 | 1,61814E-11 | -8,74019E-08 | -3,68117E-08 |
| 136 | D transversal | -1,52004E-13 | 3,47729E-06 | 4,13574E-07 | -1,65045E-13 | 2,90714E-06 | 4,13558E-07 | -8,45926E-13 | 2,33754E-06 | 4,11874E-07 |
| 136 | G Longitudinal | -3,07371E-13 | 2,80702E-07 | 4,60395E-08 | -3,28137E-13 | 2,16602E-07 | 4,60849E-08 | -1,35079E-12 | 1,53378E-07 | 4,45396E-08 |
| 136 | G Vertical | 4,63841E-07 | -1,37513E-13 | 9,5216E-14 | 4,66048E-07 | -1,95438E-13 | 2,26116E-13 | 4,76096E-07 | -2,04193E-12 | 4,66939E-12 |
| 136 | G transversal | -2,84492E-07 | -5,36933E-16 | -1,97191E-14 | -2,19099E-07 | -1,13791E-13 | 2,64682E-13 | -1,52197E-07 | 1,07123E-12 | -2,45592E-12 |
| 137 | D Longitudinal | 3,3934E-06 | 7,59827E-15 | 1,78295E-10 | 2,84031E-06 | 2,56554E-13 | 1,77578E-10 | 2,28718E-06 | -6,44558E-11 | 3,5042E-10 |
| 137 | D Vertical | -1,65077E-07 | 8,80421E-14 | -1,03046E-08 | -1,26395E-07 | -6,89907E-13 | -1,03026E-08 | -8,91954E-08 | 6,36928E-10 | -1,19618E-08 |
| 137 | D transversal | -2,74202E-07 | 3,39228E-06 | 3,98853E-07 | -2,73852E-07 | 2,84213E-06 | 3,98854E-07 | -2,76661E-07 | 2,29198E-06 | 3,989E-07 |
| 137 | G Longitudinal | -6,43999E-09 | 2,76437E-07 | 4,581E-08 | -6,78316E-09 | 2,13251E-07 | 4,58099E-08 | -8,50935E-09 | 1,50044E-07 | 4,58856E-08 |
| 137 | G Vertical | 4,56319E-07 | 4,51139E-09 | 1,43765E-09 | 4,56819E-07 | 2,52879E-09 | 1,43624E-09 | 4,51519E-07 | 5,27717E-10 | 1,4467E-09 |
| 137 | G transversal | -2,78556E-07 | -9,11718E-15 | 2,27729E-10 | -2,16102E-07 | 1,31811E-12 | 2,24272E-10 | -1,53624E-07 | 3,57562E-10 | -7,64845E-10 |
| 138 | D Longitudinal | 3,65453E-06 | -2,36851E-09 | -9,27996E-10 | 3,10429E-06 | -1,32112E-09 | -9,30267E-10 | 2,55086E-06 | -5,0603E-10 | -3,03984E-10 |
| 138 | D Vertical | 1,6412E-07 | -1,62706E-07 | -3,74243E-08 | 1,26271E-07 | -1,25025E-07 | -3,74248E-08 | 8,75781E-08 | -8,73477E-08 | -3,74202E-08 |
| 138 | D transversal | 2,7005E-07 | 3,38853E-06 | 3,99001E-07 | 2,72E-07 | 2,83865E-06 | 3,98971E-07 | 2,77043E-07 | 2,28904E-06 | 3,97825E-07 |
| 138 | G Longitudinal | 1,73045E-08 | 2,78437E-07 | 4,51964E-08 | 1,53485E-08 | 2,15578E-07 | 4,52103E-08 | 1,70016E-08 | 1,53816E-07 | 4,24236E-08 |
| 138 | G Vertical | 4,04387E-07 | 1,82032E-08 | 8,20018E-09 | 3,95972E-07 | 7,01916E-09 | 9,72931E-09 | 3,57027E-07 | -2,04488E-08 | 7,18291E-08 |
| 138 | G transversal | -2,95451E-07 | -3,825E-09 | -1,42444E-09 | -2,32495E-07 | -2,21015E-09 | -1,44449E-09 | -1,67673E-07 | -8,37068E-10 | -1,07803E-09 |
| 139 | D Longitudinal | 3,11402E-06 | -2,36851E-09 | -5,89566E-10 | 2,56313E-06 | -1,32216E-09 | -5,8895E-10 | 2,01546E-06 | -1,98934E-10 | -7,96465E-10 |
| 139 | D Vertical | -1,61689E-07 | 1,62706E-07 | 1,72132E-08 | -1,24257E-07 | 1,25025E-07 | 1,72127E-08 | -8,76539E-08 | 8,73368E-08 | 1,72323E-08 |
| 139 | D transversal | -2,79808E-07 | 3,38853E-06 | 3,98332E-07 | -2,772E-07 | 2,83863E-06 | 3,98359E-07 | -2,7772E-07 | 2,28887E-06 | 3,98097E-07 |
| 139 | G Longitudinal | -6,80111E-09 | 2,78437E-07 | 4,59422E-08 | -9,38073E-09 | 2,15585E-07 | 4,59359E-08 | -1,02298E-08 | 1,51551E-07 | 4,90419E-08 |
| 139 | G Vertical | 3,95443E-07 | -1,82078E-08 | -7,19286E-09 | 4,02074E-07 | -8,00765E-09 | -6,08813E-09 | 3,95935E-07 | 3,72719E-09 | -8,25646E-09 |
| 139 | G transversal | -2,62275E-07 | -3,82509E-09 | -9,06E-10 | -2,00003E-07 | -2,22419E-09 | -8,89282E-10 | -1,39265E-07 | -3,77303E-10 | -1,51636E-09 |
| 140 | D Longitudinal | 3,65453E-06 | 2,36849E-09 | 9,27803E-10 | 3,10429E-06 | 1,32119E-09 | 9,30108E-10 | 2,55085E-06 | 5,07694E-10 | 3,00168E-10 |

APOYO 2

| DESPLAZAMIENTOS (metros) | | C4 | | | C5 | | | C6 | | |
|---|---|---|---|---|---|---|---|---|---|---|
| Nudo | Desplazamiento | L | T | V | L | T | V | L | T | V |
| 140 | D Vertical | -1,6412E-07 | -1,62706E-07 | -3,74244E-08 | -1,26271E-07 | -1,25025E-07 | -3,74245E-08 | -8,75779E-08 | -8,73464E-08 | -3,7423E-08 |
| 140 | D transversal | -2,7005E-07 | 3,38853E-06 | 3,99001E-07 | -2,72E-07 | 2,83865E-06 | 3,98971E-07 | -2,77043E-07 | 2,28905E-06 | 3,97819E-07 |
| 140 | G Longitudinal | -1,73042E-08 | 2,78437E-07 | 4,51966E-08 | -1,5348E-08 | 2,15578E-07 | 4,52098E-08 | -1,69983E-08 | 1,53818E-07 | 4,24194E-08 |
| 140 | G Vertical | 4,04352E-07 | -1,82059E-08 | -8,19867E-09 | 3,95923E-07 | -7,02487E-09 | -9,71944E-09 | 3,56786E-07 | 2,0424E-08 | -7,17725E-08 |
| 140 | G transversal | -2,95455E-07 | 3,82507E-09 | 1,42437E-09 | -2,32499E-07 | 2,21009E-09 | 1,44473E-09 | -1,67701E-07 | 8,39695E-10 | 1,07201E-09 |
| 141 | D Longitudinal | 2,95205E-06 | -4,66894E-09 | -1,13077E-09 | 2,43778E-06 | -2,67138E-09 | -1,13235E-09 | 1,92594E-06 | -5,98538E-10 | -1,3378E-09 |
| 141 | D Vertical | -1,61371E-07 | 1,61789E-07 | 1,65858E-08 | -1,25158E-07 | 1,254E-07 | 1,65856E-08 | -8,97213E-08 | 8,90129E-08 | 1,65812E-08 |
| 141 | D transversal | -2,78479E-07 | 3,222E-06 | 3,71415E-07 | -2,74979E-07 | 2,70905E-06 | 3,71421E-07 | -2,74936E-07 | 2,19659E-06 | 3,7016E-07 |
| 141 | G Longitudinal | -1,49829E-08 | 2,72151E-07 | 4,30629E-08 | -1,55225E-08 | 2,128E-07 | 4,30788E-08 | -1,66496E-08 | 1,53427E-07 | 4,32113E-08 |
| 141 | G Vertical | 3,89517E-07 | -1,5259E-08 | -6,06458E-09 | 3,95065E-07 | -6,66777E-09 | -5,12767E-09 | 3,89784E-07 | 3,23764E-09 | -7,00305E-09 |
| 141 | G transversal | -2,55952E-07 | -4,18346E-09 | -1,07512E-09 | -1,97008E-07 | -2,38207E-09 | -1,05596E-09 | -1,39614E-07 | -7,03822E-10 | -6,89779E-10 |
| 142 | D Longitudinal | 3,48414E-06 | 4,66894E-09 | 1,76466E-09 | 2,97088E-06 | 2,67272E-09 | 1,76268E-09 | 2,45519E-06 | 8,9537E-10 | 1,1478E-09 |
| 142 | D Vertical | -1,62208E-07 | -1,61789E-07 | -3,61781E-08 | -1,25617E-07 | -1,254E-07 | -3,61781E-08 | -8,82611E-08 | -8,90056E-08 | -3,61953E-08 |
| 142 | D transversal | -2,64899E-07 | 3,222E-06 | 3,72358E-07 | -2,67356E-07 | 2,70905E-06 | 3,72352E-07 | -2,71021E-07 | 2,19565E-06 | 3,73493E-07 |
| 142 | G Longitudinal | -1,70224E-08 | 2,72151E-07 | 4,29864E-08 | -1,70317E-08 | 2,12811E-07 | 4,29746E-08 | -1,80761E-08 | 1,53711E-07 | 4,20853E-08 |
| 142 | G Vertical | 3,96685E-07 | -1,52574E-08 | -6,90271E-09 | 3,89583E-07 | -5,83427E-09 | -8,19247E-09 | 3,56379E-07 | 1,73668E-08 | -6,07722E-08 |
| 142 | G transversal | -2,84893E-07 | 4,18345E-09 | 1,54737E-09 | -2,25363E-07 | 2,36536E-09 | 1,57237E-09 | -1,63942E-07 | -1,94851E-10 | 3,9105E-09 |
| 143 | D Longitudinal | 3,19948E-06 | 9,05575E-15 | 9,40145E-14 | 2,62898E-06 | -7,01717E-14 | 1,5847E-13 | 2,06219E-06 | -5,36481E-13 | 1,22972E-12 |
| 143 | D Vertical | 2,37463E-12 | 1,64403E-07 | 1,77585E-08 | 2,20019E-12 | 1,25591E-07 | 1,77592E-08 | 4,02681E-13 | 8,65731E-08 | 1,83181E-08 |
| 143 | D transversal | 1,62788E-13 | 3,47729E-06 | 4,13161E-07 | 1,64716E-13 | 2,90713E-06 | 4,13176E-07 | 3,11915E-13 | 2,33657E-06 | 4,14263E-07 |
| 143 | G Longitudinal | 3,10414E-13 | 2,80702E-07 | 4,68807E-08 | 3,02429E-13 | 2,16635E-07 | 4,68395E-08 | 9,57181E-13 | 1,50944E-07 | 5,10498E-08 |
| 143 | G Vertical | 4,74553E-07 | 1,60441E-13 | 2,14641E-13 | 4,71576E-07 | -3,83607E-14 | 2,89443E-13 | 4,73123E-07 | -1,36417E-13 | 3,23365E-13 |
| 143 | G transversal | -2,73723E-07 | -3,09845E-15 | 1,82727E-14 | -2,09065E-07 | 1,11725E-13 | -2,65072E-13 | -1,45888E-07 | -1,09422E-12 | 2,50836E-12 |
| 144 | D Longitudinal | 3,3934E-06 | 2,11437E-15 | -1,78292E-10 | 2,84031E-06 | -2,51001E-13 | -1,77577E-10 | 2,28718E-06 | 6,45172E-11 | -3,5056E-10 |
| 144 | D Vertical | 1,65077E-07 | -1,09038E-13 | -1,03047E-08 | 1,26395E-07 | -7,75634E-13 | -1,03026E-08 | 8,91945E-08 | 6,3564E-10 | -1,19589E-08 |
| 144 | D transversal | 2,74202E-07 | 3,39228E-06 | 3,98854E-07 | 2,73852E-07 | 2,84213E-06 | 3,98854E-07 | 2,76661E-07 | 2,29198E-06 | 3,98904E-07 |
| 144 | G Longitudinal | 6,43999E-09 | 2,76437E-07 | 4,581E-08 | 6,78316E-09 | 2,13251E-07 | 4,58104E-08 | 8,50915E-09 | 1,50046E-07 | 4,58808E-08 |
| 144 | G Vertical | 4,56319E-07 | -4,51141E-09 | -1,43796E-09 | 4,56819E-07 | -2,52864E-09 | -1,43656E-09 | 4,51514E-07 | -5,25171E-10 | -1,45254E-09 |
| 144 | G transversal | -2,78552E-07 | -6,40293E-16 | -2,27733E-10 | -2,16098E-07 | -1,32503E-12 | -2,2427E-10 | -1,5361E-07 | -3,57621E-10 | 7,6498E-10 |
| 145 | D Longitudinal | 3,11402E-06 | 2,36852E-09 | 5,89759E-10 | 2,56313E-06 | 1,32209E-09 | 5,89108E-10 | 2,01546E-06 | 1,97264E-10 | 8,00295E-10 |
| 145 | D Vertical | 1,6169E-07 | 1,62706E-07 | 1,72132E-08 | 1,24257E-07 | 1,25025E-07 | 1,7213E-08 | 8,76539E-08 | 8,7338E-08 | 1,72295E-08 |
| 145 | D transversal | 2,79808E-07 | 3,38853E-06 | 3,98332E-07 | 2,772E-07 | 2,83863E-06 | 3,9836E-07 | 2,7772E-07 | 2,28887E-06 | 3,98101E-07 |
| 145 | G Longitudinal | 6,80086E-09 | 2,78437E-07 | 4,59424E-08 | 9,38054E-09 | 2,15585E-07 | 4,59365E-08 | 1,02315E-08 | 1,51555E-07 | 4,90317E-08 |
| 145 | G Vertical | 3,95406E-07 | 1,82101E-08 | 7,19638E-09 | 4,02038E-07 | 8,00857E-09 | 6,08899E-09 | 3,9592E-07 | -3,72627E-09 | 8,25449E-09 |
| 145 | G transversal | -2,62271E-07 | 3,82515E-09 | 9,06119E-10 | -1,99999E-07 | 2,22441E-09 | 8,88852E-10 | -1,39264E-07 | 3,75388E-10 | 1,52076E-09 |
| 146 | D Longitudinal | 3,48414E-06 | -4,66895E-09 | -1,76487E-09 | 2,97089E-06 | -2,67275E-09 | -1,76257E-09 | 2,4552E-06 | -8,92595E-10 | -1,15416E-09 |
| 146 | D Vertical | 1,62208E-07 | -1,61789E-07 | -3,61781E-08 | 1,25617E-07 | -1,254E-07 | -3,61784E-08 | 8,8261E-08 | -8,90067E-08 | -3,61927E-08 |
| 146 | D transversal | 2,64899E-07 | 3,222E-06 | 3,72358E-07 | 2,67356E-07 | 2,70905E-06 | 3,72352E-07 | 2,71022E-07 | 2,19565E-06 | 3,73498E-07 |
| 146 | G Longitudinal | 1,7023E-08 | 2,72151E-07 | 4,29864E-08 | 1,70325E-08 | 2,12811E-07 | 4,29752E-08 | 1,80803E-08 | 1,53711E-07 | 4,2086E-08 |
| 146 | G Vertical | 3,96714E-07 | 1,52551E-08 | 6,90401E-09 | 3,89624E-07 | 5,82944E-09 | 8,20081E-09 | 3,56582E-07 | -1,73879E-08 | 6,08202E-08 |
| 146 | G transversal | -2,84897E-07 | -4,1834E-09 | -1,54742E-09 | -2,25367E-07 | -2,36544E-09 | -1,57212E-09 | -1,6397E-07 | 1,96919E-10 | -3,91524E-09 |
| 147 | D Longitudinal | 2,95206E-06 | 4,66895E-09 | 1,13098E-09 | 2,43779E-06 | 2,67142E-09 | 1,13225E-09 | 1,92594E-06 | 5,95784E-10 | 1,34411E-09 |
| 147 | D Vertical | 1,61371E-07 | 1,61789E-07 | 1,65858E-08 | 1,25158E-07 | 1,254E-07 | 1,65858E-08 | 8,97213E-08 | 8,9014E-08 | 1,65786E-08 |
| 147 | D transversal | 2,78479E-07 | 3,222E-06 | 3,71415E-07 | 2,74979E-07 | 2,70905E-06 | 3,7142E-07 | 2,74935E-07 | 2,19659E-06 | 3,70169E-07 |

APOYO 2

| DESPLAZAMIENTOS (metros) | | C4 | | | C5 | | | C6 | | |
|---|---|---|---|---|---|---|---|---|---|---|
| Nudo | Desplazamiento | L | T | V | L | T | V | L | T | V |
| 147 | G Longitudinal | 1,49823E-08 | 2,72151E-07 | 4,3063E-08 | 1,55219E-08 | 2,128E-07 | 4,30792E-08 | 1,66496E-08 | 1,53429E-07 | 4,32067E-08 |
| 147 | G Vertical | 3,89487E-07 | 1,5261E-08 | 6,06757E-09 | 3,95035E-07 | 6,66855E-09 | 5,12838E-09 | 3,89771E-07 | -3,23697E-09 | 7,00164E-09 |
| 147 | G transversal | -2,55956E-07 | 4,1835E-09 | 1,07521E-09 | -1,97011E-07 | 2,38227E-09 | 1,05555E-09 | -1,39615E-07 | 7,02188E-10 | 6,93526E-10 |
| 148 | D Longitudinal | 3,48489E-06 | -6,58671E-15 | -1,05156E-13 | 2,97224E-06 | -2,4526E-14 | 6,51495E-14 | 2,45726E-06 | 1,40155E-12 | -3,21282E-12 |
| 148 | D Vertical | -4,91729E-13 | -1,63386E-07 | -3,68503E-08 | -5,35968E-13 | -1,26222E-07 | -3,68483E-08 | -3,8478E-12 | -8,89023E-08 | -3,72627E-08 |
| 148 | D transversal | 7,65089E-14 | 3,22643E-06 | 3,73474E-07 | 8,37036E-14 | 2,71181E-06 | 3,73462E-07 | 4,97043E-13 | 2,19716E-06 | 3,73345E-07 |
| 148 | G Longitudinal | -4,70236E-14 | 2,71539E-07 | 4,27694E-08 | -5,13439E-14 | 2,12483E-07 | 4,27385E-08 | -1,75607E-13 | 1,53894E-07 | 4,104E-08 |
| 148 | G Vertical | 4,36836E-07 | 7,50965E-15 | 1,70962E-13 | 4,39838E-07 | 1,28608E-14 | -4,6201E-14 | 4,46189E-07 | -2,39252E-12 | 5,48443E-12 |
| 148 | G transversal | -2,77493E-07 | 9,88951E-16 | -1,58523E-14 | -2,17552E-07 | -9,33633E-14 | 2,19216E-13 | -1,56355E-07 | 9,08719E-13 | -2,08324E-12 |
| 149 | D Longitudinal | 3,06002E-06 | 6,38084E-15 | 3,11792E-10 | 2,58E-06 | 2,48261E-13 | 3,11122E-10 | 2,09988E-06 | 8,69485E-11 | 7,73645E-11 |
| 149 | D Vertical | -1,58945E-07 | -3,8703E-14 | -9,36695E-09 | -1,24557E-07 | 1,94404E-12 | -9,37219E-09 | -8,93825E-08 | -3,26523E-10 | -8,55258E-09 |
| 149 | D transversal | -2,65795E-07 | 3,05801E-06 | 3,4619E-07 | -2,6511E-07 | 2,58051E-06 | 3,4619E-07 | -2,65991E-07 | 2,10301E-06 | 3,46163E-07 |
| 149 | G Longitudinal | -9,36852E-09 | 2,61608E-07 | 4,07165E-08 | -9,63322E-09 | 2,05447E-07 | 4,07162E-08 | -1,10035E-08 | 1,49292E-07 | 4,06952E-08 |
| 149 | G Vertical | 4,24103E-07 | 8,14757E-09 | 2,38809E-09 | 4,25138E-07 | 4,85369E-09 | 2,38746E-09 | 4,23331E-07 | 1,62639E-09 | 2,17455E-09 |
| 149 | G transversal | -2,62126E-07 | 2,30304E-15 | 2,46053E-11 | -2,06283E-07 | -3,05862E-13 | 2,53986E-11 | -1,50444E-07 | -1,67801E-10 | 4,84172E-10 |
| 150 | D Longitudinal | 3,31695E-06 | -6,14945E-09 | -2,26977E-09 | 2,83924E-06 | -3,56306E-09 | -2,26756E-09 | 2,3599E-06 | -8,95059E-10 | -2,47905E-09 |
| 150 | D Vertical | 1,61514E-07 | -1,60296E-07 | -3,49368E-08 | 1,26273E-07 | -1,25184E-07 | -3,49369E-08 | 9,03221E-08 | -9,00728E-08 | -3,49324E-08 |
| 150 | D transversal | 2,59835E-07 | 3,05702E-06 | 3,46736E-07 | 2,61577E-07 | 2,5793E-06 | 3,46742E-07 | 2,64399E-07 | 2,10128E-06 | 3,47619E-07 |
| 150 | G Longitudinal | 1,65583E-08 | 2,64521E-07 | 4,04936E-08 | 1,80873E-08 | 2,08995E-07 | 4,05123E-08 | 1,84949E-08 | 1,5243E-07 | 4,35214E-08 |
| 150 | G Vertical | 3,87404E-07 | 1,33251E-08 | 5,99915E-09 | 3,81376E-07 | 5,11457E-09 | 7,10121E-09 | 3,53401E-07 | -1,47882E-08 | 5,17399E-08 |
| 150 | G transversal | -2,75206E-07 | -1,0368E-09 | -2,6836E-10 | -2,19001E-07 | -6,91408E-10 | -2,93804E-10 | -1,61128E-07 | 2,16127E-10 | -2,11752E-09 |
| 151 | D Longitudinal | 2,7916E-06 | -6,14943E-09 | -1,48155E-09 | 2,31256E-06 | -3,56196E-09 | -1,48267E-09 | 1,83516E-06 | -1,00145E-09 | -1,41219E-09 |
| 151 | D Vertical | -1,59394E-07 | 1,60296E-07 | 1,59758E-08 | -1,24493E-07 | 1,25184E-07 | 1,59758E-08 | -9,02949E-08 | 9,00705E-08 | 1,59785E-08 |
| 151 | D transversal | -2,71689E-07 | 3,05702E-06 | 3,45961E-07 | -2,6859E-07 | 2,5793E-06 | 3,45956E-07 | -2,67634E-07 | 2,10179E-06 | 3,45394E-07 |
| 151 | G Longitudinal | -2,16856E-08 | 2,64521E-07 | 4,00081E-08 | -2,05767E-08 | 2,09007E-07 | 3,99962E-08 | -2,21828E-08 | 1,54207E-07 | 3,8162E-08 |
| 151 | G Vertical | 3,81633E-07 | -1,33284E-08 | -5,31243E-09 | 3,86265E-07 | -5,82691E-09 | -4,51645E-09 | 3,81732E-07 | 2,81463E-09 | -6,17164E-09 |
| 151 | G transversal | -2,49038E-07 | -1,03686E-09 | -2,18754E-10 | -1,93335E-07 | -7,07815E-10 | -2,00463E-10 | -1,39027E-07 | -4,67372E-10 | 6,97213E-11 |
| 152 | D Longitudinal | 3,31695E-06 | 6,14944E-09 | 2,26954E-09 | 2,83924E-06 | 3,56291E-09 | 2,26792E-09 | 2,3599E-06 | 8,98751E-10 | 2,47059E-09 |
| 152 | D Vertical | -1,61514E-07 | -1,60296E-07 | -3,49368E-08 | -1,26273E-07 | -1,25184E-07 | -3,49366E-08 | -9,03222E-08 | -9,00718E-08 | -3,49347E-08 |
| 152 | D transversal | -2,59835E-07 | 3,05702E-06 | 3,46736E-07 | -2,61577E-07 | 2,5793E-06 | 3,46743E-07 | -2,64398E-07 | 2,10128E-06 | 3,47612E-07 |
| 152 | G Longitudinal | -1,65574E-08 | 2,6452E-07 | 4,04935E-08 | -1,80862E-08 | 2,08995E-07 | 4,05117E-08 | -1,849E-08 | 1,52428E-07 | 4,35272E-08 |
| 152 | G Vertical | 3,87379E-07 | -1,33271E-08 | -5,99804E-09 | 3,81342E-07 | -5,11868E-09 | -7,09413E-09 | 3,53228E-07 | 1,477E-08 | -5,16984E-08 |
| 152 | G transversal | -2,75204E-07 | 1,03684E-09 | 2,6832E-10 | -2,18998E-07 | 6,91332E-10 | 2,9403E-10 | -1,61108E-07 | -2,14371E-10 | 2,1135E-09 |
| 153 | D Longitudinal | 3,15542E-06 | -3,86103E-15 | -1,15607E-13 | 2,71149E-06 | -1,18913E-13 | 2,88431E-13 | 2,26662E-06 | 2,2728E-12 | -5,21006E-12 |
| 153 | D Vertical | 1,67353E-13 | -1,57563E-07 | -3,32107E-08 | 1,75259E-13 | -1,24298E-07 | -3,32123E-08 | 1,32736E-12 | -9,10875E-08 | -3,30753E-08 |
| 153 | D transversal | -1,0923E-14 | 2,90269E-06 | 3,23833E-07 | -1,21324E-14 | 2,45645E-06 | 3,23836E-07 | -1,20571E-13 | 2,01014E-06 | 3,24051E-07 |
| 153 | G Longitudinal | 5,82675E-14 | 2,56072E-07 | 3,79319E-08 | 5,7071E-14 | 2,03907E-07 | 3,79364E-08 | 1,70811E-13 | 1,51375E-07 | 3,89794E-08 |
| 153 | G Vertical | 4,0161E-07 | 2,10132E-14 | 1,90534E-13 | 4,03431E-07 | 1,81251E-13 | -4,18075E-13 | 4,06615E-07 | -3,37959E-12 | 7,74836E-12 |
| 153 | G transversal | -2,60516E-07 | 9,00343E-16 | -1,12243E-14 | -2,07168E-07 | -7,30122E-14 | 1,71421E-13 | -1,52815E-07 | 6,93087E-13 | -1,5889E-12 |
| 154 | D Longitudinal | 3,15507E-06 | -5,48483E-09 | -1,89977E-09 | 2,71088E-06 | -3,32673E-09 | -1,89926E-09 | 2,26573E-06 | -1,06829E-09 | -2,1731E-09 |
| 154 | D Vertical | 1,58821E-07 | -1,58678E-07 | -3,36531E-08 | 1,24881E-07 | -1,24901E-07 | -3,36531E-08 | 9,02921E-08 | -9,11263E-08 | -3,36445E-08 |
| 154 | D transversal | 2,54493E-07 | 2,89688E-06 | 3,22626E-07 | 2,55271E-07 | 2,45222E-06 | 3,2263E-07 | 2,57433E-07 | 2,00773E-06 | 3,22227E-07 |
| 154 | G Longitudinal | 1,76477E-08 | 2,56381E-07 | 3,80311E-08 | 1,85172E-08 | 2,04104E-07 | 3,80588E-08 | 1,91501E-08 | 1,5117E-07 | 4,0167E-08 |
| 154 | G Vertical | 3,76586E-07 | 1,16432E-08 | 5,24911E-09 | 3,71289E-07 | 4,4519E-09 | 6,2071E-09 | 3,46894E-07 | -1,29176E-08 | 4,50494E-08 |

APOYO 2

| DESPLAZAMIENTOS (metros) | | C4 | | | C5 | | | C6 | | |
|---|---|---|---|---|---|---|---|---|---|---|
| Nudo | Desplazamiento | L | T | V | L | T | V | L | T | V |
| 154 | G transversal | -2,67554E-07 | 1,62865E-09 | 8,30535E-10 | -2,14661E-07 | 6,81791E-10 | 8,07428E-10 | -1,60374E-07 | -2,17951E-10 | 4,30319E-10 |
| 155 | D Longitudinal | 2,63589E-06 | -5,48482E-09 | -1,22966E-09 | 2,1901E-06 | -3,32652E-09 | -1,22995E-09 | 1,74527E-06 | -1,20538E-09 | -1,13103E-09 |
| 155 | D Vertical | -1,58401E-07 | 1,58678E-07 | 1,53241E-08 | -1,24763E-07 | 1,24901E-07 | 1,5324E-08 | -9,17665E-08 | 9,11211E-08 | 1,53296E-08 |
| 155 | D transversal | -2,63123E-07 | 2,89688E-06 | 3,22131E-07 | -2,60737E-07 | 2,45222E-06 | 3,22126E-07 | -2,58879E-07 | 2,00738E-06 | 3,22555E-07 |
| 155 | G Longitudinal | -2,05089E-08 | 2,56381E-07 | 3,77548E-08 | -1,99818E-08 | 2,04123E-07 | 3,77333E-08 | -2,10996E-08 | 1,52164E-07 | 3,69113E-08 |
| 155 | G Vertical | 3,71439E-07 | -1,16461E-08 | -4,66221E-09 | 3,75515E-07 | -5,07109E-09 | -3,97034E-09 | 3,7161E-07 | 2,4857E-09 | -5,38575E-09 |
| 155 | G transversal | -2,40793E-07 | 1,62857E-09 | 5,54713E-10 | -1,88319E-07 | 6,67354E-10 | 5,7042E-10 | -1,37012E-07 | -2,21463E-10 | 4,02773E-10 |
| 156 | D Longitudinal | 3,15507E-06 | 5,48482E-09 | 1,89954E-09 | 2,71088E-06 | 3,3265E-09 | 1,89983E-09 | 2,26573E-06 | 1,07277E-09 | 2,16282E-09 |
| 156 | D Vertical | -1,58821E-07 | -1,58678E-07 | -3,36531E-08 | -1,24881E-07 | -1,24901E-07 | -3,36529E-08 | -9,0292E-08 | -9,11254E-08 | -3,36466E-08 |
| 156 | D transversal | -2,54493E-07 | 2,89688E-06 | 3,22626E-07 | -2,55271E-07 | 2,45222E-06 | 3,22631E-07 | -2,57434E-07 | 2,00773E-06 | 3,22216E-07 |
| 156 | G Longitudinal | -1,76471E-08 | 2,56381E-07 | 3,8031E-08 | -1,85164E-08 | 2,04104E-07 | 3,80584E-08 | -1,91464E-08 | 1,51169E-07 | 4,01711E-08 |
| 156 | G Vertical | 3,76563E-07 | -1,16449E-08 | -5,24814E-09 | 3,71259E-07 | -4,45546E-09 | -6,20095E-09 | 3,46743E-07 | 1,29018E-08 | -4,50132E-08 |
| 156 | G transversal | -2,67555E-07 | -1,62861E-09 | -8,30569E-10 | -2,14662E-07 | -6,81847E-10 | -8,07248E-10 | -1,60379E-07 | 2,19475E-10 | -4,33811E-10 |
| 157 | D Longitudinal | 2,74658E-06 | -1,76288E-15 | 3,13228E-10 | 2,33136E-06 | 4,08573E-14 | 3,13118E-10 | 1,91618E-06 | -3,66019E-11 | 4,09463E-10 |
| 157 | D Vertical | -1,56931E-07 | 1,13678E-14 | -8,87926E-09 | -1,24305E-07 | -1,38769E-12 | -8,87557E-09 | -9,1976E-08 | 1,17808E-10 | -9,15787E-09 |
| 157 | D transversal | -2,52869E-07 | 2,74236E-06 | 2,99504E-07 | -2,5195E-07 | 2,32925E-06 | 2,99505E-07 | -2,51397E-07 | 1,91614E-06 | 2,99503E-07 |
| 157 | G Longitudinal | -8,81427E-09 | 2,45163E-07 | 3,61468E-08 | -9,01134E-09 | 1,95306E-07 | 3,61467E-08 | -1,0085E-08 | 1,45446E-07 | 3,6155E-08 |
| 157 | G Vertical | 3,93795E-07 | 8,12118E-09 | 2,1063E-09 | 3,95169E-07 | 5,21561E-09 | 2,10663E-09 | 3,95793E-07 | 2,32003E-09 | 2,06603E-09 |
| 157 | G transversal | -2,46893E-07 | -2,23808E-15 | -3,55495E-11 | -1,97536E-07 | 4,70154E-14 | -3,56192E-11 | -1,48183E-07 | 7,89742E-11 | -2,52639E-10 |
| 158 | D Longitudinal | 2,99669E-06 | -4,47635E-09 | -1,37945E-09 | 2,58399E-06 | -2,92773E-09 | -1,38014E-09 | 2,1709E-06 | -1,39998E-09 | -1,32835E-09 |
| 158 | D Vertical | 1,57487E-07 | -1,5656E-07 | -3,24037E-08 | 1,24881E-07 | -1,24072E-07 | -3,24038E-08 | 9,16938E-08 | -9,15842E-08 | -3,24065E-08 |
| 158 | D transversal | 2,48036E-07 | 2,74183E-06 | 3,00003E-07 | 2,48605E-07 | 2,32836E-06 | 3,00002E-07 | 2,4992E-07 | 1,91505E-06 | 2,99563E-07 |
| 158 | G Longitudinal | 1,92395E-08 | 2,47902E-07 | 3,56534E-08 | 1,88622E-08 | 1,98609E-07 | 3,56775E-08 | 1,97391E-08 | 1,49452E-07 | 3,55936E-08 |
| 158 | G Vertical | 3,6493E-07 | 1,02491E-08 | 4,60054E-09 | 3,6032E-07 | 3,93271E-09 | 5,4326E-09 | 3,39125E-07 | -1,12323E-08 | 3,91913E-08 |
| 158 | G transversal | -2,63498E-07 | 1,25639E-10 | 2,56517E-10 | -2,13887E-07 | -1,66754E-10 | 2,3842E-10 | -1,63079E-07 | -4,13816E-10 | -8,93975E-11 |
| 159 | D Longitudinal | 2,48597E-06 | -4,47634E-09 | -8,65675E-10 | 2,07145E-06 | -2,92803E-09 | -8,65607E-10 | 1,65734E-06 | -1,37724E-09 | -8,72989E-10 |
| 159 | D Vertical | -1,559E-07 | 1,5656E-07 | 1,47029E-08 | -1,2356E-07 | 1,24073E-07 | 1,47028E-08 | -9,18078E-08 | 9,1586E-08 | 1,47004E-08 |
| 159 | D transversal | -2,56422E-07 | 2,74183E-06 | 2,99534E-07 | -2,54035E-07 | 2,32836E-06 | 2,99534E-07 | -2,51688E-07 | 1,91474E-06 | 2,99901E-07 |
| 159 | G Longitudinal | -1,67924E-08 | 2,47902E-07 | 3,58092E-08 | -1,74556E-08 | 1,98625E-07 | 3,57899E-08 | -1,80567E-08 | 1,49019E-07 | 3,65668E-08 |
| 159 | G Vertical | 3,60702E-07 | -1,02516E-08 | -4,10997E-09 | 3,642E-07 | -4,4705E-09 | -3,50906E-09 | 3,60801E-07 | 2,15294E-09 | -4,71188E-09 |
| 159 | G transversal | -2,30539E-07 | 1,25578E-10 | 1,77139E-10 | -1,81267E-07 | -1,78246E-10 | 1,89817E-10 | -1,32988E-07 | -4,15125E-10 | 3,20297E-11 |
| 160 | D Longitudinal | 2,99669E-06 | 4,47634E-09 | 1,37922E-09 | 2,58399E-06 | 2,92742E-09 | 1,38088E-09 | 2,17089E-06 | 1,40513E-09 | 1,31654E-09 |
| 160 | D Vertical | -1,57487E-07 | -1,5656E-07 | -3,24037E-08 | -1,24881E-07 | -1,24072E-07 | -3,24036E-08 | -9,16938E-08 | -9,15834E-08 | -3,24083E-08 |
| 160 | D transversal | -2,48036E-07 | 2,74183E-06 | 3,00002E-07 | -2,48605E-07 | 2,32836E-06 | 3,00003E-07 | -2,4992E-07 | 1,91505E-06 | 2,99551E-07 |
| 160 | G Longitudinal | -1,92392E-08 | 2,47902E-07 | 3,56534E-08 | -1,88618E-08 | 1,98609E-07 | 3,56771E-08 | -1,97369E-08 | 1,49452E-07 | 3,55937E-08 |
| 160 | G Vertical | 3,64911E-07 | -1,02506E-08 | -4,59969E-09 | 3,60293E-07 | -3,93579E-09 | -5,42728E-09 | 3,38994E-07 | 1,12184E-08 | -3,91596E-08 |
| 160 | G transversal | -2,63499E-07 | -1,25605E-10 | -2,56544E-10 | -2,13887E-07 | 1,66711E-10 | -2,38278E-10 | -1,63083E-07 | 4,15073E-10 | 8,6518E-11 |
| 161 | D Longitudinal | 2,84032E-06 | -5,01585E-09 | -1,46496E-09 | 2,45712E-06 | -3,37826E-09 | -1,46508E-09 | 2,07401E-06 | -1,7807E-09 | -1,35773E-09 |
| 161 | D Vertical | 1,54337E-07 | -1,5433E-07 | -3,1126E-08 | 1,23036E-07 | -1,23169E-07 | -3,11261E-08 | 9,12118E-08 | -9,2008E-08 | -3,11288E-08 |
| 161 | D transversal | 2,40686E-07 | 2,59203E-06 | 2,78791E-07 | 2,41531E-07 | 2,20791E-06 | 2,78788E-07 | 2,42152E-07 | 1,82374E-06 | 2,78906E-07 |
| 161 | G Longitudinal | 2,01362E-08 | 2,39251E-07 | 3,34154E-08 | 1,94542E-08 | 1,92974E-07 | 3,34321E-08 | 1,97096E-08 | 1,46777E-07 | 3,3415E-08 |
| 161 | G Vertical | 3,52759E-07 | 8,88721E-09 | 4,00937E-09 | 3,4862E-07 | 3,35455E-09 | 4,74131E-09 | 3,2993E-07 | -9,93467E-09 | 3,43629E-08 |
| 161 | G transversal | -2,58971E-07 | -2,25689E-09 | -6,76998E-10 | -2,12604E-07 | -1,47393E-09 | -6,90667E-10 | -1,652E-07 | -4,77466E-10 | -1,44301E-09 |
| 162 | D Longitudinal | 2,34281E-06 | -5,01585E-09 | -9,09465E-10 | 1,95762E-06 | -3,37824E-09 | -9,09734E-10 | 1,57234E-06 | -1,72945E-09 | -9,40956E-10 |

APOYO 2

| DESPLAZAMIENTOS (metros) | | C4 | | | C5 | | | C6 | | |
|---|---|---|---|---|---|---|---|---|---|---|
| Nudo | Desplazamiento | L | T | V | L | T | V | L | T | V |
| 162 | D Vertical | -1,54202E-07 | 1,5433E-07 | 1,40566E-08 | -1,23133E-07 | 1,23169E-07 | 1,40565E-08 | -9,25914E-08 | 9,20095E-08 | 1,4055E-08 |
| 162 | D transversal | -2,51154E-07 | 2,59203E-06 | 2,78184E-07 | -2,48319E-07 | 2,20791E-06 | 2,78187E-07 | -2,45529E-07 | 1,82385E-06 | 2,78062E-07 |
| 162 | G Longitudinal | -1,53335E-08 | 2,39251E-07 | 3,36771E-08 | -1,62411E-08 | 1,92985E-07 | 3,36645E-08 | -1,72147E-08 | 1,46485E-07 | 3,42356E-08 |
| 162 | G Vertical | 3,48715E-07 | -8,88937E-09 | -3,61865E-09 | 3,51899E-07 | -3,82764E-09 | -3,09002E-09 | 3,48985E-07 | 1,99184E-09 | -4,19005E-09 |
| 162 | G transversal | -2,19875E-07 | -2,25693E-09 | -4,50866E-10 | -1,73771E-07 | -1,48298E-09 | -4,40548E-10 | -1,2852E-07 | -7,0482E-10 | -4,33152E-10 |
| 163 | D Longitudinal | 2,84032E-06 | 5,01584E-09 | 1,46472E-09 | 2,45712E-06 | 3,37789E-09 | 1,46596E-09 | 2,07401E-06 | 1,78637E-09 | 1,34473E-09 |
| 163 | D Vertical | -1,54337E-07 | -1,5433E-07 | -3,1126E-08 | -1,23036E-07 | -1,23169E-07 | -3,11259E-08 | -9,12118E-08 | -9,20073E-08 | -3,11304E-08 |
| 163 | D transversal | -2,40686E-07 | 2,59203E-06 | 2,7879E-07 | -2,41531E-07 | 2,20791E-06 | 2,78788E-07 | -2,42152E-07 | 1,82374E-06 | 2,78894E-07 |
| 163 | G Longitudinal | -2,01359E-08 | 2,39251E-07 | 3,34154E-08 | -1,94539E-08 | 1,92974E-07 | 3,34318E-08 | -1,97075E-08 | 1,46777E-07 | 3,3415E-08 |
| 163 | G Vertical | 3,52742E-07 | -8,88848E-09 | -4,00863E-09 | 3,48597E-07 | -3,35727E-09 | -4,73662E-09 | 3,29815E-07 | 9,92252E-09 | -3,43352E-08 |
| 163 | G transversal | -2,5897E-07 | 2,25692E-09 | 6,76978E-10 | -2,12603E-07 | 1,4739E-09 | 6,90774E-10 | -1,65195E-07 | 4,78456E-10 | 1,44074E-09 |
| 164 | D Longitudinal | 2,83625E-06 | -3,22955E-15 | -1,2117E-13 | 2,45417E-06 | -1,87649E-13 | 4,48626E-13 | 2,07223E-06 | 2,85971E-12 | -6,55561E-12 |
| 164 | D Vertical | -4,24581E-14 | -1,55071E-07 | -3,13532E-08 | -4,06933E-14 | -1,23645E-07 | -3,13523E-08 | -3,49667E-13 | -9,22057E-08 | -3,13822E-08 |
| 164 | D transversal | 1,87738E-14 | 2,59376E-06 | 2,79378E-07 | 1,97888E-14 | 2,20884E-06 | 2,79378E-07 | 1,85872E-13 | 1,82396E-06 | 2,79267E-07 |
| 164 | G Longitudinal | -4,9345E-14 | 2,38833E-07 | 3,32978E-08 | -5,24886E-14 | 1,92743E-07 | 3,32984E-08 | -1,97107E-13 | 1,46851E-07 | 3,27722E-08 |
| 164 | G Vertical | 3,64817E-07 | -8,94242E-15 | 1,7837E-13 | 3,66041E-07 | 2,64173E-13 | -6,52446E-13 | 3,6728E-07 | -4,343E-12 | 9,95489E-12 |
| 164 | G transversal | -2,46563E-07 | 9,08173E-16 | -6,97934E-15 | -1,99598E-07 | -5,353E-14 | 1,25834E-13 | -1,51866E-07 | 4,97151E-13 | -1,13971E-12 |
| 165 | D Longitudinal | 2,44478E-06 | 1,89359E-16 | 3,05366E-10 | 2,08809E-06 | -1,02368E-13 | 3,05647E-10 | 1,73139E-06 | 1,68598E-11 | 2,62047E-10 |
| 165 | D Vertical | -1,52392E-07 | -1,84574E-15 | -8,23862E-09 | -1,22405E-07 | 6,64218E-13 | -8,24038E-09 | -9,23355E-08 | -3,0393E-11 | -8,17351E-09 |
| 165 | D transversal | -2,39579E-07 | 2,43945E-06 | 2,57122E-07 | -2,38507E-07 | 2,0848E-06 | 2,57122E-07 | -2,36882E-07 | 1,73015E-06 | 2,57114E-07 |
| 165 | G Longitudinal | -8,78247E-09 | 2,27907E-07 | 3,18003E-08 | -8,91961E-09 | 1,84045E-07 | 3,18002E-08 | -9,72157E-09 | 1,40182E-07 | 3,18014E-08 |
| 165 | G Vertical | 3,58334E-07 | 8,43711E-09 | 1,93165E-09 | 3,59888E-07 | 5,77233E-09 | 1,93225E-09 | 3,62096E-07 | 3,13638E-09 | 1,84244E-09 |
| 165 | G transversal | -2,30132E-07 | 1,99191E-15 | 6,05567E-11 | -1,87055E-07 | 3,62024E-13 | 5,95493E-11 | -1,43981E-07 | -2,56283E-11 | 1,25663E-10 |
| 166 | D Longitudinal | 2,67949E-06 | -6,23849E-09 | -1,8223E-09 | 2,32535E-06 | -4,19804E-09 | -1,82119E-09 | 1,97174E-06 | -2,15373E-09 | -1,82659E-09 |
| 166 | D Vertical | 1,52336E-07 | -1,51499E-07 | -2,98048E-08 | 1,22461E-07 | -1,21696E-07 | -2,98049E-08 | 9,21181E-08 | -9,18936E-08 | -2,98022E-08 |
| 166 | D transversal | 2,32547E-07 | 2,43945E-06 | 2,57799E-07 | 2,33652E-07 | 2,08437E-06 | 2,57798E-07 | 2,34058E-07 | 1,72921E-06 | 2,58002E-07 |
| 166 | G Longitudinal | 1,99187E-08 | 2,30286E-07 | 3,12637E-08 | 1,95425E-08 | 1,87056E-07 | 3,12739E-08 | 1,92403E-08 | 1,43574E-07 | 3,20743E-08 |
| 166 | G Vertical | 3,39253E-07 | 7,61634E-09 | 3,47047E-09 | 3,35658E-07 | 2,8018E-09 | 4,10995E-09 | 3,19365E-07 | -8,77754E-09 | 2,99573E-08 |
| 166 | G transversal | -2,49816E-07 | -1,63688E-09 | -4,68598E-10 | -2,06643E-07 | -1,09257E-09 | -4,81229E-10 | -1,62596E-07 | -3,47046E-10 | -1,18309E-09 |
| 167 | D Longitudinal | 2,19816E-06 | -6,23849E-09 | -1,1369E-09 | 1,8419E-06 | -4,19735E-09 | -1,13778E-09 | 1,48512E-06 | -2,15826E-09 | -1,13437E-09 |
| 167 | D Vertical | -1,50873E-07 | 1,51499E-07 | 1,34096E-08 | -1,21194E-07 | 1,21696E-07 | 1,34095E-08 | -9,19793E-08 | 9,18913E-08 | 1,34123E-08 |
| 167 | D transversal | -2,45799E-07 | 2,43945E-06 | 2,57063E-07 | -2,42565E-07 | 2,08437E-06 | 2,57065E-07 | -2,38985E-07 | 1,72937E-06 | 2,56879E-07 |
| 167 | G Longitudinal | -1,57676E-08 | 2,30286E-07 | 3,14151E-08 | -1,63052E-08 | 1,87062E-07 | 3,14088E-08 | -1,75916E-08 | 1,43925E-07 | 3,11977E-08 |
| 167 | G Vertical | 3,35994E-07 | -7,61823E-09 | -3,16608E-09 | 3,38728E-07 | -3,21512E-09 | -2,70424E-09 | 3,36116E-07 | 1,85819E-09 | -3,6859E-09 |
| 167 | G transversal | -2,10426E-07 | -1,63691E-09 | -3,13808E-10 | -1,6745E-07 | -1,10086E-09 | -3,04422E-10 | -1,25189E-07 | -5,68987E-10 | -2,76472E-10 |
| 168 | D Longitudinal | 2,67949E-06 | 6,23849E-09 | 1,82206E-09 | 2,32535E-06 | 4,19762E-09 | 1,82219E-09 | 1,97174E-06 | 2,15982E-09 | 1,81265E-09 |
| 168 | D Vertical | -1,52336E-07 | -1,51499E-07 | -2,98048E-08 | -1,22461E-07 | -1,21696E-07 | -2,98048E-08 | -9,21181E-08 | -9,1893E-08 | -2,98035E-08 |
| 168 | D transversal | -2,32547E-07 | 2,43945E-06 | 2,57799E-07 | -2,33652E-07 | 2,08437E-06 | 2,57799E-07 | -2,34058E-07 | 1,72922E-06 | 2,57988E-07 |
| 168 | G Longitudinal | -1,99183E-08 | 2,30286E-07 | 3,12636E-08 | -1,9542E-08 | 1,87056E-07 | 3,12736E-08 | -1,92379E-08 | 1,43574E-07 | 3,20754E-08 |
| 168 | G Vertical | 3,39238E-07 | -7,61745E-09 | -3,46982E-09 | 3,35638E-07 | -2,80417E-09 | -4,10587E-09 | 3,19266E-07 | 8,76683E-09 | -2,99328E-08 |
| 168 | G transversal | -2,49815E-07 | 1,6369E-09 | 4,68583E-10 | -2,06643E-07 | 1,09255E-09 | 4,81304E-10 | -1,62591E-07 | 3,47812E-10 | 1,18134E-09 |
| 169 | D Longitudinal | 2,52378E-06 | -2,11448E-15 | -1,21901E-13 | 2,19757E-06 | -2,32968E-13 | 5,54786E-13 | 1,87227E-06 | 3,22046E-12 | -7,38264E-12 |
| 169 | D Vertical | -2,56753E-15 | -1,48055E-07 | -2,83193E-08 | -5,64364E-15 | -1,19808E-07 | -2,83196E-08 | -9,52988E-15 | -9,15597E-08 | -2,83263E-08 |
| 169 | D transversal | 3,24695E-15 | 2,29672E-06 | 2,38901E-07 | 3,31907E-15 | 1,96768E-06 | 2,38901E-07 | -4,24892E-17 | 1,63862E-06 | 2,38965E-07 |

APOYO 2

| DESPLAZAMIENTOS (metros) | | C4 | | | C5 | | | C6 | | |
|---|---|---|---|---|---|---|---|---|---|---|
| Nudo | Desplazamiento | L | T | V | L | T | V | L | T | V |
| 169 | G Longitudinal | 1,88327E-14 | 2,21415E-07 | 2,92764E-08 | 1,84196E-14 | 1,8106E-07 | 2,92747E-08 | 5,96178E-14 | 1,40626E-07 | 2,94667E-08 |
| 169 | G Vertical | 3,28564E-07 | 6,74222E-15 | 1,78756E-13 | 3,29882E-07 | 3,29208E-13 | -7,78727E-13 | 3,2985E-07 | -4,58287E-12 | 1,05061E-11 |
| 169 | G transversal | -2,28299E-07 | 5,64606E-16 | -3,60363E-15 | -1,87253E-07 | -3,71973E-14 | 8,71154E-14 | -1,45637E-07 | 3,28645E-13 | -7,53426E-13 |
| 170 | D Longitudinal | 2,52503E-06 | -6,39343E-09 | -1,8022E-09 | 2,19803E-06 | -4,38092E-09 | -1,80101E-09 | 1,87191E-06 | -2,3519E-09 | -1,84051E-09 |
| 170 | D Vertical | 1,48454E-07 | -1,48561E-07 | -2,84587E-08 | 1,19958E-07 | -1,20152E-07 | -2,84588E-08 | 9,10534E-08 | -9,17439E-08 | -2,84568E-08 |
| 170 | D transversal | 2,2494E-07 | 2,29249E-06 | 2,38108E-07 | 2,26027E-07 | 1,96459E-06 | 2,38109E-07 | 2,26256E-07 | 1,6367E-06 | 2,38103E-07 |
| 170 | G Longitudinal | 1,79293E-08 | 2,21861E-07 | 2,93921E-08 | 1,81332E-08 | 1,81356E-07 | 2,94025E-08 | 1,83703E-08 | 1,40623E-07 | 3,0144E-08 |
| 170 | G Vertical | 3,25677E-07 | 6,33475E-09 | 2,96066E-09 | 3,22541E-07 | 2,20042E-09 | 3,51925E-09 | 3,08322E-07 | -7,84295E-09 | 2,60967E-08 |
| 170 | G transversal | -2,39578E-07 | 2,5149E-10 | 1,94559E-10 | -1,99174E-07 | 3,74805E-11 | 1,81903E-10 | -1,58037E-07 | -5,66378E-11 | -2,87585E-10 |
| 171 | D Longitudinal | 2,05925E-06 | -6,39343E-09 | -1,11653E-09 | 1,73002E-06 | -4,38018E-09 | -1,11747E-09 | 1,39992E-06 | -2,37468E-09 | -1,09896E-09 |
| 171 | D Vertical | -1,48421E-07 | 1,48561E-07 | 1,2734E-08 | -1,20088E-07 | 1,20152E-07 | 1,27339E-08 | -9,21626E-08 | 9,17424E-08 | 1,27356E-08 |
| 171 | D transversal | -2,39424E-07 | 2,29249E-06 | 2,37347E-07 | -2,36109E-07 | 1,96459E-06 | 2,37346E-07 | -2,31883E-07 | 1,63669E-06 | 2,37354E-07 |
| 171 | G Longitudinal | -1,79381E-08 | 2,21861E-07 | 2,93338E-08 | -1,78449E-08 | 1,81363E-07 | 2,93269E-08 | -1,83868E-08 | 1,40948E-07 | 2,91148E-08 |
| 171 | G Vertical | 3,22751E-07 | -6,33641E-09 | -2,73318E-09 | 3,25163E-07 | -2,56144E-09 | -2,3298E-09 | 3,22912E-07 | 1,7986E-09 | -3,18702E-09 |
| 171 | G transversal | -2,02564E-07 | 2,51451E-10 | 1,22541E-10 | -1,62301E-07 | 2,94053E-11 | 1,31481E-10 | -1,22637E-07 | -1,80981E-10 | 1,15566E-10 |
| 172 | D Longitudinal | 2,52503E-06 | 6,39343E-09 | 1,80196E-09 | 2,19803E-06 | 4,38046E-09 | 1,80211E-09 | 1,87191E-06 | 2,35828E-09 | 1,82587E-09 |
| 172 | D Vertical | -1,48454E-07 | -1,48561E-07 | -2,84587E-08 | -1,19958E-07 | -1,20152E-07 | -2,84587E-08 | -9,10534E-08 | -9,17434E-08 | -2,84579E-08 |
| 172 | D transversal | -2,2494E-07 | 2,29249E-06 | 2,38108E-07 | -2,26027E-07 | 1,96459E-06 | 2,3811E-07 | -2,26256E-07 | 1,6367E-06 | 2,38088E-07 |
| 172 | G Longitudinal | -1,7929E-08 | 2,21861E-07 | 2,93921E-08 | -1,81327E-08 | 1,81357E-07 | 2,94023E-08 | -1,83682E-08 | 1,40622E-07 | 3,01448E-08 |
| 172 | G Vertical | 3,25664E-07 | -6,33572E-09 | -2,9601E-09 | 3,22523E-07 | -2,2025E-09 | -3,51567E-09 | 3,08234E-07 | 7,83367E-09 | -2,60755E-08 |
| 172 | G transversal | -2,39578E-07 | -2,51468E-10 | -1,94569E-10 | -1,99173E-07 | -3,74897E-11 | -1,81854E-10 | -1,58035E-07 | 5,72243E-11 | 2,86242E-10 |
| 173 | D Longitudinal | 2,3732E-06 | -5,88745E-09 | -1,55504E-09 | 2,0722E-06 | -4,16108E-09 | -1,55453E-09 | 1,77237E-06 | -2,42712E-09 | -1,57457E-09 |
| 173 | D Vertical | 1,45756E-07 | -1,44978E-07 | -2,71128E-08 | 1,187E-07 | -1,17959E-07 | -2,71128E-08 | 9,12937E-08 | -9,09398E-08 | -2,71131E-08 |
| 173 | D transversal | 2,18293E-07 | 2,14801E-06 | 2,19223E-07 | 2,19019E-07 | 1,84608E-06 | 2,19223E-07 | 2,18629E-07 | 1,54419E-06 | 2,19156E-07 |
| 173 | G Longitudinal | 1,6347E-08 | 2,12017E-07 | 2,7305E-08 | 1,68255E-08 | 1,74462E-07 | 2,73171E-08 | 1,75556E-08 | 1,3682E-07 | 2,76948E-08 |
| 173 | G Vertical | 3,11732E-07 | 5,60599E-09 | 2,59012E-09 | 3,08928E-07 | 1,95252E-09 | 3,07614E-09 | 2,96448E-07 | -6,85277E-09 | 2,27484E-08 |
| 173 | G transversal | -2,30172E-07 | 1,26904E-10 | 1,70094E-10 | -1,92408E-07 | -6,20113E-11 | 1,59064E-10 | -1,54029E-07 | -1,55463E-10 | -2,26069E-10 |
| 174 | D Longitudinal | 1,92261E-06 | -5,88744E-09 | -9,48434E-10 | 1,61931E-06 | -4,1607E-09 | -9,49028E-10 | 1,31483E-06 | -2,43962E-09 | -9,35789E-10 |
| 174 | D Vertical | -1,44398E-07 | 1,44978E-07 | 1,20648E-08 | -1,17472E-07 | 1,17959E-07 | 1,20647E-08 | -9,08981E-08 | 9,094E-08 | 1,20644E-08 |
| 174 | D transversal | -2,31184E-07 | 2,14801E-06 | 2,18565E-07 | -2,28163E-07 | 1,84608E-06 | 2,18565E-07 | -2,23889E-07 | 1,54414E-06 | 2,1862E-07 |
| 174 | G Longitudinal | -1,9042E-08 | 2,12017E-07 | 2,71422E-08 | -1,8623E-08 | 1,7447E-07 | 2,71331E-08 | -1,84546E-08 | 1,36891E-07 | 2,7193E-08 |
| 174 | G Vertical | 3,08716E-07 | -5,60743E-09 | -2,44558E-09 | 3,1086E-07 | -2,2666E-09 | -2,09471E-09 | 3,08955E-07 | 1,57461E-09 | -2,82028E-09 |
| 174 | G transversal | -1,94502E-07 | 1,2687E-10 | 1,0975E-10 | -1,56829E-07 | -6,90602E-11 | 1,17566E-10 | -1,19648E-07 | -2,49756E-10 | 9,02888E-11 |
| 175 | D Longitudinal | 2,3732E-06 | 5,88744E-09 | 1,5548E-09 | 2,0722E-06 | 4,16059E-09 | 1,5557E-09 | 1,77237E-06 | 2,43372E-09 | 1,55944E-09 |
| 175 | D Vertical | -1,45756E-07 | -1,44978E-07 | -2,71128E-08 | -1,187E-07 | -1,17959E-07 | -2,71127E-08 | -9,12937E-08 | -9,09394E-08 | -2,7114E-08 |
| 175 | D transversal | -2,18293E-07 | 2,14801E-06 | 2,19223E-07 | -2,19019E-07 | 1,84608E-06 | 2,19224E-07 | -2,18629E-07 | 1,54419E-06 | 2,19141E-07 |
| 175 | G Longitudinal | -1,63468E-08 | 2,12017E-07 | 2,7305E-08 | -1,68252E-08 | 1,74462E-07 | 2,73169E-08 | -1,7554E-08 | 1,3682E-07 | 2,76948E-08 |
| 175 | G Vertical | 3,1172E-07 | -5,60683E-09 | -2,58962E-09 | 3,08913E-07 | -1,95432E-09 | -3,07303E-09 | 2,96372E-07 | 6,84463E-09 | -2,27298E-08 |
| 175 | G transversal | -2,30171E-07 | -1,26885E-10 | -1,701E-10 | -1,92407E-07 | 6,2012E-11 | -1,59042E-10 | -1,54029E-07 | 1,55883E-10 | 2,25107E-10 |
| 176 | D Longitudinal | 2,14825E-06 | 2,38822E-16 | 3,23424E-10 | 1,84563E-06 | 1,09896E-13 | 3,23125E-10 | 1,54302E-06 | -5,0887E-12 | 3,35239E-10 |
| 176 | D Vertical | -1,43825E-07 | -4,41812E-16 | -7,45417E-09 | -1,17205E-07 | -2,32318E-13 | -7,45356E-09 | -9,05958E-08 | 2,59258E-12 | -7,45586E-09 |
| 176 | D transversal | -2,25186E-07 | 2,14196E-06 | 2,17836E-07 | -2,24029E-07 | 1,8415E-06 | 2,17837E-07 | -2,21649E-07 | 1,54104E-06 | 2,17829E-07 |
| 176 | G Longitudinal | -8,81644E-09 | 2,09128E-07 | 2,75342E-08 | -8,89899E-09 | 1,71149E-07 | 2,75341E-08 | -9,4509E-09 | 1,33171E-07 | 2,7536E-08 |
| 176 | G Vertical | 3,21204E-07 | 8,72355E-09 | 1,85052E-09 | 3,22816E-07 | 6,17066E-09 | 1,85115E-09 | 3,26024E-07 | 3,63335E-09 | 1,79967E-09 |

APOYO 2

| DESPLAZAMIENTOS (metros) | | C4 | | | C5 | | | C6 | | |
|---|---|---|---|---|---|---|---|---|---|---|
| Nudo | Desplazamiento | L | T | V | L | T | V | L | T | V |
| 176 | G transversal | -2,11572E-07 | -5,00785E-16 | -2,67739E-11 | -1,74099E-07 | -1,19829E-14 | -2,67248E-11 | -1,36628E-07 | 8,76584E-12 | -5,12682E-11 |
| 177 | D Longitudinal | 1,7804E-06 | -5,82707E-09 | -8,71454E-10 | 1,50331E-06 | -4,22512E-09 | -8,72138E-10 | 1,22478E-06 | -2,62661E-09 | -8,64902E-10 |
| 177 | D Vertical | -1,41061E-07 | 1,41034E-07 | 1,13162E-08 | -1,15599E-07 | 1,15558E-07 | 1,13162E-08 | -9,04299E-08 | 9,00811E-08 | 1,13162E-08 |
| 177 | D transversal | -2,22495E-07 | 1,99866E-06 | 1,99795E-07 | -2,19811E-07 | 1,72271E-06 | 1,99796E-07 | -2,15688E-07 | 1,44675E-06 | 1,99797E-07 |
| 177 | G Longitudinal | -1,76649E-08 | 1,99791E-07 | 2,47063E-08 | -1,73536E-08 | 1,65638E-07 | 2,46992E-08 | -1,71991E-08 | 1,31452E-07 | 2,47681E-08 |
| 177 | G Vertical | 2,93629E-07 | -4,00067E-09 | -1,98027E-09 | 2,95414E-07 | -1,33417E-09 | -1,67961E-09 | 2,93751E-07 | 1,75878E-09 | -2,29618E-09 |
| 177 | G transversal | -1,83503E-07 | -1,51782E-10 | 9,50843E-12 | -1,49053E-07 | -1,75593E-10 | 1,58724E-11 | -1,14975E-07 | -1,88403E-10 | -2,25786E-12 |
| 178 | D Longitudinal | 2,21507E-06 | 5,82707E-09 | 1,45079E-09 | 1,94031E-06 | 4,22507E-09 | 1,45162E-09 | 1,66698E-06 | 2,6301E-09 | 1,43505E-09 |
| 178 | D Vertical | -1,40975E-07 | -1,41034E-07 | -2,5625E-08 | -1,15418E-07 | -1,15558E-07 | -2,56249E-08 | -8,95688E-08 | -9,00808E-08 | -2,56257E-08 |
| 178 | D transversal | -2,1162E-07 | 1,99866E-06 | 2,0034E-07 | -2,11974E-07 | 1,72271E-06 | 2,0034E-07 | -2,10897E-07 | 1,44676E-06 | 2,00323E-07 |
| 178 | G Longitudinal | -1,58306E-08 | 1,99791E-07 | 2,48194E-08 | -1,61481E-08 | 1,65632E-07 | 2,48289E-08 | -1,66303E-08 | 1,31402E-07 | 2,51322E-08 |
| 178 | G Vertical | 2,9584E-07 | -4,00015E-09 | -2,04981E-09 | 2,93513E-07 | -1,06658E-09 | -2,46407E-09 | 2,82854E-07 | 6,28074E-09 | -1,93185E-08 |
| 178 | G transversal | -2,18386E-07 | 1,51772E-10 | -2,15487E-11 | -1,83902E-07 | 1,69936E-10 | -1,28201E-11 | -1,4894E-07 | 9,35294E-11 | 3,48014E-10 |
| 179 | D Longitudinal | 2,95131E-06 | 4,69984E-15 | 1,04405E-13 | 2,43762E-06 | 2,35403E-14 | -6,55789E-14 | 1,92629E-06 | -1,41365E-12 | 3,24041E-12 |
| 179 | D Vertical | -5,61405E-13 | 1,63386E-07 | 1,70398E-08 | -5,22616E-13 | 1,26221E-07 | 1,70405E-08 | -9,50214E-14 | 8,91025E-08 | 1,69125E-08 |
| 179 | D transversal | -8,30414E-14 | 3,22643E-06 | 3,72739E-07 | -7,62231E-14 | 2,7118E-06 | 3,7275E-07 | -1,02813E-13 | 2,19734E-06 | 3,72331E-07 |
| 179 | G Longitudinal | 4,84669E-14 | 2,71539E-07 | 4,28793E-08 | 5,97153E-14 | 2,1246E-07 | 4,29077E-08 | 1,57308E-13 | 1,53324E-07 | 4,31505E-08 |
| 179 | G Vertical | 4,54586E-07 | 1,01554E-14 | 1,73378E-13 | 4,49947E-07 | 4,09574E-14 | -1,12908E-13 | 4,49622E-07 | -2,4174E-12 | 5,5412E-12 |
| 179 | G transversal | -2,59845E-07 | -1,2026E-15 | 1,57816E-14 | -2,00514E-07 | 9,37026E-14 | -2,20402E-13 | -1,42422E-07 | -9,10802E-13 | 2,08799E-12 |
| 180 | D Longitudinal | 3,06002E-06 | 7,26942E-15 | -3,11786E-10 | 2,58E-06 | -2,42341E-13 | -3,11116E-10 | 2,09988E-06 | -8,68593E-11 | -7,7568E-11 |
| 180 | D Vertical | 1,58945E-07 | 5,49454E-14 | -9,36691E-09 | 1,24557E-07 | 1,98108E-12 | -9,37214E-09 | 8,93831E-08 | -3,25906E-10 | -8,55399E-09 |
| 180 | D transversal | 2,65795E-07 | 3,05801E-06 | 3,4619E-07 | 2,6511E-07 | 2,58051E-06 | 3,4619E-07 | 2,65991E-07 | 2,10301E-06 | 3,46172E-07 |
| 180 | G Longitudinal | 9,36852E-09 | 2,61608E-07 | 4,07164E-08 | 9,63322E-09 | 2,05447E-07 | 4,07166E-08 | 1,10035E-08 | 1,49294E-07 | 4,06916E-08 |
| 180 | G Vertical | 4,24103E-07 | -8,14758E-09 | -2,38843E-09 | 4,25138E-07 | -4,85391E-09 | -2,38691E-09 | 4,23334E-07 | -1,62065E-09 | -2,18769E-09 |
| 180 | G transversal | -2,62128E-07 | -4,91571E-15 | -2,46064E-11 | -2,06285E-07 | 3,03111E-13 | -2,53957E-11 | -1,50451E-07 | 1,67786E-10 | -4,84139E-10 |
| 181 | D Longitudinal | 2,7916E-06 | 6,14944E-09 | 1,48178E-09 | 2,31256E-06 | 3,5621E-09 | 1,48231E-09 | 1,83516E-06 | 9,97756E-10 | 1,42067E-09 |
| 181 | D Vertical | 1,59394E-07 | 1,60296E-07 | 1,59758E-08 | 1,24493E-07 | 1,25184E-07 | 1,5976E-08 | 9,02949E-08 | 9,00715E-08 | 1,59762E-08 |
| 181 | D transversal | 2,71689E-07 | 3,05702E-06 | 3,45962E-07 | 2,6859E-07 | 2,5793E-06 | 3,45955E-07 | 2,67634E-07 | 2,10179E-06 | 3,45404E-07 |
| 181 | G Longitudinal | 2,16847E-08 | 2,6452E-07 | 4,0008E-08 | 2,05758E-08 | 2,09007E-07 | 3,99964E-08 | 2,21812E-08 | 1,54207E-07 | 3,81622E-08 |
| 181 | G Vertical | 3,81607E-07 | 1,33301E-08 | 5,31498E-09 | 3,8624E-07 | 5,82758E-09 | 4,51704E-09 | 3,81722E-07 | -2,81426E-09 | 6,1709E-09 |
| 181 | G transversal | -2,49041E-07 | 1,03689E-09 | 2,18823E-10 | -1,93338E-07 | 7,07988E-10 | 2,001E-10 | -1,39028E-07 | 4,65971E-10 | -6,65089E-11 |
| 182 | D Longitudinal | 2,6368E-06 | 4,63188E-15 | 1,1591E-13 | 2,19126E-06 | 1,1924E-13 | -2,88076E-13 | 1,74666E-06 | -2,26777E-12 | 5,19858E-12 |
| 182 | D Vertical | 1,91403E-13 | 1,57563E-07 | 1,50215E-08 | 1,7891E-13 | 1,24299E-07 | 1,50209E-08 | 2,50149E-14 | 9,10206E-08 | 1,50611E-08 |
| 182 | D transversal | 1,34699E-14 | 2,90269E-06 | 3,23217E-07 | 1,06161E-14 | 2,45645E-06 | 3,23214E-07 | -2,62984E-14 | 2,01024E-06 | 3,23117E-07 |
| 182 | G Longitudinal | -5,7763E-14 | 2,56072E-07 | 3,77057E-08 | -6,33471E-14 | 2,0391E-07 | 3,77015E-08 | -2,57212E-13 | 1,52033E-07 | 3,69461E-08 |
| 182 | G Vertical | 4,17692E-07 | -7,64702E-15 | 1,78883E-13 | 4,13381E-07 | 1,704E-13 | -4,35003E-13 | 4,10813E-07 | -3,57005E-12 | 8,18276E-12 |
| 182 | G transversal | -2,44825E-07 | -9,32677E-16 | 1,12076E-14 | -1,91943E-07 | 7,30674E-14 | -1,71612E-13 | -1,40065E-07 | -6,93415E-13 | 1,58965E-12 |
| 183 | D Longitudinal | 2,63589E-06 | 5,48482E-09 | 1,22989E-09 | 2,1901E-06 | 3,32676E-09 | 1,22939E-09 | 1,74527E-06 | 1,20089E-09 | 1,14133E-09 |
| 183 | D Vertical | 1,58401E-07 | 1,58678E-07 | 1,53241E-08 | 1,24763E-07 | 1,24901E-07 | 1,53242E-08 | 9,17665E-08 | 9,1122E-08 | 1,53275E-08 |
| 183 | D transversal | 2,63123E-07 | 2,89688E-06 | 3,22131E-07 | 2,60737E-07 | 2,45222E-06 | 3,22126E-07 | 2,58879E-07 | 2,00738E-06 | 3,22565E-07 |
| 183 | G Longitudinal | 2,05083E-08 | 2,56381E-07 | 3,77547E-08 | 1,99812E-08 | 2,04123E-07 | 3,77335E-08 | 2,10988E-08 | 1,52165E-07 | 3,69103E-08 |
| 183 | G Vertical | 3,71416E-07 | 1,16476E-08 | 4,66444E-09 | 3,75493E-07 | 5,07168E-09 | 3,97084E-09 | 3,71601E-07 | -2,4854E-09 | 5,38516E-09 |
| 183 | G transversal | -2,40792E-07 | -1,62854E-09 | -5,54652E-10 | -1,88318E-07 | -6,67208E-10 | -5,70719E-10 | -1,37012E-07 | 2,20294E-10 | -4,0009E-10 |
| 184 | D Longitudinal | 2,74658E-06 | -3,03707E-15 | -3,1323E-10 | 2,33136E-06 | -4,27341E-14 | -3,1312E-10 | 1,91618E-06 | 3,65701E-11 | -4,09391E-10 |

APOYO 2

| DESPLAZAMIENTOS (metros) | | C4 | | | C5 | | | C6 | | |
|---|---|---|---|---|---|---|---|---|---|---|
| Nudo | Desplazamiento | L | T | V | L | T | V | L | T | V |
| 184 | D Vertical | 1,56931E-07 | -1,95855E-14 | -8,87927E-09 | 1,24305E-07 | -1,39827E-12 | -8,87559E-09 | 9,19758E-08 | 1,17601E-10 | -9,1574E-09 |
| 184 | D transversal | 2,52869E-07 | 2,74236E-06 | 2,99505E-07 | 2,5195E-07 | 2,32925E-06 | 2,99504E-07 | 2,51397E-07 | 1,91614E-06 | 2,99515E-07 |
| 184 | G Longitudinal | 8,81427E-09 | 2,45163E-07 | 3,61468E-08 | 9,01134E-09 | 1,95306E-07 | 3,6147E-08 | 1,0085E-08 | 1,45447E-07 | 3,61523E-08 |
| 184 | G Vertical | 3,93795E-07 | -8,1212E-09 | -2,10666E-09 | 3,95169E-07 | -5,21608E-09 | -2,10551E-09 | 3,95792E-07 | -2,31226E-09 | -2,08385E-09 |
| 184 | G transversal | -2,46892E-07 | 2,06338E-15 | 3,55494E-11 | -1,97535E-07 | -4,75758E-14 | 3,56203E-11 | -1,4818E-07 | -7,89745E-11 | 2,5264E-10 |
| 185 | D Longitudinal | 2,48597E-06 | 4,47635E-09 | 8,65913E-10 | 2,07145E-06 | 2,92834E-09 | 8,64866E-10 | 1,65734E-06 | 1,37209E-09 | 8,84792E-10 |
| 185 | D Vertical | 1,559E-07 | 1,5656E-07 | 1,47029E-08 | 1,2356E-07 | 1,24072E-07 | 1,4703E-08 | 9,18078E-08 | 9,15868E-08 | 1,46986E-08 |
| 185 | D transversal | 2,56422E-07 | 2,74183E-06 | 2,99534E-07 | 2,54035E-07 | 2,32836E-06 | 2,99533E-07 | 2,51688E-07 | 1,91473E-06 | 2,99912E-07 |
| 185 | G Longitudinal | 1,67922E-08 | 2,47902E-07 | 3,58093E-08 | 1,74554E-08 | 1,98625E-07 | 3,57902E-08 | 1,80572E-08 | 1,4902E-07 | 3,65633E-08 |
| 185 | G Vertical | 3,60683E-07 | 1,02529E-08 | 4,1119E-09 | 3,64181E-07 | 4,47102E-09 | 3,50948E-09 | 3,60793E-07 | -2,15285E-09 | 4,71175E-09 |
| 185 | G transversal | -2,30538E-07 | -1,25551E-10 | -1,77088E-10 | -1,81266E-07 | 1,78366E-10 | -1,90063E-10 | -1,32988E-07 | 4,14178E-10 | -2,98565E-11 |
| 186 | D Longitudinal | 2,34281E-06 | 5,01585E-09 | 9,09706E-10 | 1,95762E-06 | 3,3786E-09 | 9,0885E-10 | 1,57234E-06 | 1,72379E-09 | 9,5395E-10 |
| 186 | D Vertical | 1,54202E-07 | 1,5433E-07 | 1,40566E-08 | 1,23133E-07 | 1,23169E-07 | 1,40567E-08 | 9,25914E-08 | 9,20102E-08 | 1,40534E-08 |
| 186 | D transversal | 2,51154E-07 | 2,59203E-06 | 2,78184E-07 | 2,48319E-07 | 2,20791E-06 | 2,78186E-07 | 2,45529E-07 | 1,82384E-06 | 2,78075E-07 |
| 186 | G Longitudinal | 1,53333E-08 | 2,39251E-07 | 3,36771E-08 | 1,62409E-08 | 1,92985E-07 | 3,36648E-08 | 1,72149E-08 | 1,46487E-07 | 3,4233E-08 |
| 186 | G Vertical | 3,48697E-07 | 8,89052E-09 | 3,62035E-09 | 3,51882E-07 | 3,82809E-09 | 3,0904E-09 | 3,48978E-07 | -1,99167E-09 | 4,18973E-09 |
| 186 | G transversal | -2,19876E-07 | 2,25695E-09 | 4,50906E-10 | -1,73772E-07 | 1,48308E-09 | 4,4035E-10 | -1,2852E-07 | 7,04088E-10 | 4,34831E-10 |
| 187 | D Longitudinal | 2,33899E-06 | 2,95918E-15 | 1,21063E-13 | 1,95491E-06 | 1,87522E-13 | -4,48729E-13 | 1,5707E-06 | -2,86148E-12 | 6,55964E-12 |
| 187 | D Vertical | -4,88782E-14 | 1,55071E-07 | 1,42153E-08 | -4,59817E-14 | 1,23644E-07 | 1,42157E-08 | 3,90102E-16 | 9,22198E-08 | 1,42103E-08 |
| 187 | D transversal | -2,26485E-14 | 2,59376E-06 | 2,7876E-07 | -2,00751E-14 | 2,20884E-06 | 2,7876E-07 | 2,81917E-14 | 1,82388E-06 | 2,78859E-07 |
| 187 | G Longitudinal | 4,95944E-14 | 2,38833E-07 | 3,35325E-08 | 5,14347E-14 | 1,92743E-07 | 3,35317E-08 | 1,6773E-13 | 1,46481E-07 | 3,39658E-08 |
| 187 | G Vertical | 3,81127E-07 | 1,82645E-14 | 1,8918E-13 | 3,76926E-07 | 2,8136E-13 | -6,53897E-13 | 3,7248E-07 | -4,17377E-12 | 9,56893E-12 |
| 187 | G transversal | -2,26609E-07 | -5,793E-16 | 7,11097E-15 | -1,79977E-07 | 5,37903E-14 | -1,25984E-13 | -1,34114E-07 | -4,95189E-13 | 1,13523E-12 |
| 188 | D Longitudinal | 2,44478E-06 | 1,44926E-15 | -3,05366E-10 | 2,08809E-06 | 1,02858E-13 | -3,05646E-10 | 1,73139E-06 | -1,68487E-11 | -2,62072E-10 |
| 188 | D Vertical | 1,52392E-07 | 5,04189E-15 | -8,23862E-09 | 1,22405E-07 | 6,65803E-13 | -8,24037E-09 | 9,23356E-08 | -3,03458E-11 | -8,17362E-09 |
| 188 | D transversal | 2,39579E-07 | 2,43945E-06 | 2,57122E-07 | 2,38507E-07 | 2,0848E-06 | 2,57121E-07 | 2,36882E-07 | 1,73014E-06 | 2,57128E-07 |
| 188 | G Longitudinal | 8,78247E-09 | 2,27907E-07 | 3,18003E-08 | 8,91961E-09 | 1,84045E-07 | 3,18004E-08 | 9,72158E-09 | 1,40182E-07 | 3,17996E-08 |
| 188 | G Vertical | 3,58334E-07 | -8,43712E-09 | -1,93201E-09 | 3,59888E-07 | -5,77294E-09 | -1,93078E-09 | 3,62097E-07 | -3,12749E-09 | -1,86281E-09 |
| 188 | G transversal | -2,30132E-07 | -3,16028E-15 | -6,05572E-11 | -1,87056E-07 | -3,63392E-13 | -5,95477E-11 | -1,43982E-07 | 2,5622E-11 | -1,25648E-10 |
| 189 | D Longitudinal | 2,19816E-06 | 6,23849E-09 | 1,13714E-09 | 1,8419E-06 | 4,19777E-09 | 1,13677E-09 | 1,48512E-06 | 2,15217E-09 | 1,14832E-09 |
| 189 | D Vertical | 1,50873E-07 | 1,51499E-07 | 1,34096E-08 | 1,21194E-07 | 1,21696E-07 | 1,34096E-08 | 9,19793E-08 | 9,18919E-08 | 1,3411E-08 |
| 189 | D transversal | 2,45799E-07 | 2,43945E-06 | 2,57063E-07 | 2,42565E-07 | 2,08437E-06 | 2,57064E-07 | 2,38985E-07 | 1,72936E-06 | 2,56893E-07 |
| 189 | G Longitudinal | 1,57672E-08 | 2,30286E-07 | 3,14151E-08 | 1,63048E-08 | 1,87062E-07 | 3,14089E-08 | 1,75912E-08 | 1,43926E-07 | 3,11968E-08 |
| 189 | G Vertical | 3,35979E-07 | 7,61923E-09 | 3,16757E-09 | 3,38714E-07 | 3,21553E-09 | 2,70456E-09 | 3,3611E-07 | -1,85811E-09 | 3,68576E-09 |
| 189 | G transversal | -2,10426E-07 | 1,63693E-09 | 3,1384E-10 | -1,6745E-07 | 1,10094E-09 | 3,04267E-10 | -1,25189E-07 | 5,68445E-10 | 2,77716E-10 |
| 190 | D Longitudinal | 2,05689E-06 | 2,22269E-15 | 1,21943E-13 | 1,72844E-06 | 2,33005E-13 | -5,54717E-13 | 1,39908E-06 | -3,21976E-12 | 7,38102E-12 |
| 190 | D Vertical | -2,63162E-15 | 1,48055E-07 | 1,26388E-08 | -2,26079E-15 | 1,19808E-07 | 1,26386E-08 | -6,1513E-15 | 9,15631E-08 | 1,26344E-08 |
| 190 | D transversal | -2,91185E-15 | 2,29672E-06 | 2,38205E-07 | -3,33944E-15 | 1,96768E-06 | 2,38205E-07 | -2,24355E-14 | 1,63867E-06 | 2,38145E-07 |
| 190 | G Longitudinal | -1,86536E-14 | 2,21415E-07 | 2,92395E-08 | -1,9531E-14 | 1,81058E-07 | 2,92412E-08 | -8,04983E-14 | 1,40778E-07 | 2,90578E-08 |
| 190 | G Vertical | 3,47651E-07 | -4,25914E-16 | 1,75958E-13 | 3,43124E-07 | 3,29517E-13 | -7,90588E-13 | 3,37444E-07 | -4,63529E-12 | 1,06257E-11 |
| 190 | G transversal | -2,0918E-07 | -6,2125E-16 | 3,58211E-15 | -1,68354E-07 | 3,7255E-14 | -8,73484E-14 | -1,28093E-07 | -3,29147E-13 | 7,54571E-13 |
| 191 | D Longitudinal | 2,05925E-06 | 6,39343E-09 | 1,11678E-09 | 1,73002E-06 | 4,38065E-09 | 1,11637E-09 | 1,39992E-06 | 2,3683E-09 | 1,1136E-09 |
| 191 | D Vertical | 1,48421E-07 | 1,48561E-07 | 1,2734E-08 | 1,20088E-07 | 1,20152E-07 | 1,2734E-08 | 9,21626E-08 | 9,17429E-08 | 1,27344E-08 |
| 191 | D transversal | 2,39424E-07 | 2,29249E-06 | 2,37347E-07 | 2,36109E-07 | 1,96459E-06 | 2,37345E-07 | 2,31883E-07 | 1,63668E-06 | 2,37368E-07 |

APOYO 2

| DESPLAZAMIENTOS (metros) | | C4 | | | C5 | | | C6 | | |
|---|---|---|---|---|---|---|---|---|---|---|
| Nudo | Desplazamiento | L | T | V | L | T | V | L | T | V |
| 191 | G Longitudinal | 1,79378E-08 | 2,21861E-07 | 2,93339E-08 | 1,78445E-08 | 1,81363E-07 | 2,9327E-08 | 1,83865E-08 | 1,40948E-07 | 2,91143E-08 |
| 191 | G Vertical | 3,22738E-07 | 6,33728E-09 | 2,73448E-09 | 3,2515E-07 | 2,56179E-09 | 2,33009E-09 | 3,22906E-07 | -1,79845E-09 | 3,18673E-09 |
| 191 | G transversal | -2,02564E-07 | -2,51434E-10 | -1,22515E-10 | -1,62302E-07 | -2,93445E-11 | -1,31599E-10 | -1,22638E-07 | 1,80597E-10 | -1,14684E-10 |
| 192 | D Longitudinal | 1,92261E-06 | 5,88745E-09 | 9,48675E-10 | 1,61931E-06 | 4,16119E-09 | 9,4786E-10 | 1,31483E-06 | 2,43302E-09 | 9,50918E-10 |
| 192 | D Vertical | 1,44398E-07 | 1,44978E-07 | 1,20648E-08 | 1,17472E-07 | 1,17959E-07 | 1,20648E-08 | 9,08981E-08 | 9,09404E-08 | 1,20636E-08 |
| 192 | D transversal | 2,31184E-07 | 2,14801E-06 | 2,18565E-07 | 2,28163E-07 | 1,84608E-06 | 2,18564E-07 | 2,23889E-07 | 1,54413E-06 | 2,18635E-07 |
| 192 | G Longitudinal | 1,90417E-08 | 2,12017E-07 | 2,71423E-08 | 1,86228E-08 | 1,7447E-07 | 2,71332E-08 | 1,84546E-08 | 1,36891E-07 | 2,71924E-08 |
| 192 | G Vertical | 3,08704E-07 | 5,60819E-09 | 2,44671E-09 | 3,10849E-07 | 2,2669E-09 | 2,09495E-09 | 3,0895E-07 | -1,57458E-09 | 2,82024E-09 |
| 192 | G transversal | -1,94502E-07 | -1,26854E-10 | -1,0973E-10 | -1,56829E-07 | 6,91054E-11 | -1,17651E-10 | -1,19648E-07 | 2,49516E-10 | -8,9737E-11 |
| 193 | D Longitudinal | 2,14825E-06 | -7,87592E-16 | -3,23424E-10 | 1,84563E-06 | -1,10169E-13 | -3,23125E-10 | 1,54302E-06 | 5,08517E-12 | -3,35231E-10 |
| 193 | D Vertical | 1,43825E-07 | -4,74325E-16 | -7,45417E-09 | 1,17205E-07 | -2,31852E-13 | -7,45356E-09 | 9,05958E-08 | 2,59164E-12 | -7,45586E-09 |
| 193 | D transversal | 2,25186E-07 | 2,14196E-06 | 2,17836E-07 | 2,24029E-07 | 1,8415E-06 | 2,17836E-07 | 2,21649E-07 | 1,54103E-06 | 2,17844E-07 |
| 193 | G Longitudinal | 8,81644E-09 | 2,09128E-07 | 2,75342E-08 | 8,89899E-09 | 1,71149E-07 | 2,75343E-08 | 9,45091E-09 | 1,33171E-07 | 2,75348E-08 |
| 193 | G Vertical | 3,21204E-07 | -8,72355E-09 | -1,85086E-09 | 3,22816E-07 | -6,17135E-09 | -1,8495E-09 | 3,26024E-07 | -3,62407E-09 | -1,82093E-09 |
| 193 | G transversal | -2,11572E-07 | 1,54681E-16 | 2,67737E-11 | -1,74099E-07 | 1,14747E-14 | 2,67256E-11 | -1,36628E-07 | -8,76752E-12 | 5,1272E-11 |
| 194 | D Longitudinal | 2,21507E-06 | -5,82707E-09 | -1,45102E-09 | 1,94031E-06 | -4,22558E-09 | -1,4504E-09 | 1,66698E-06 | -2,62338E-09 | -1,45045E-09 |
| 194 | D Vertical | 1,40975E-07 | -1,41034E-07 | -2,5625E-08 | 1,15418E-07 | -1,15558E-07 | -2,5625E-08 | 8,95688E-08 | -9,00811E-08 | -2,5625E-08 |
| 194 | D transversal | 2,1162E-07 | 1,99866E-06 | 2,0034E-07 | 2,11974E-07 | 1,72271E-06 | 2,00339E-07 | 2,10897E-07 | 1,44675E-06 | 2,00338E-07 |
| 194 | G Longitudinal | 1,58308E-08 | 1,99791E-07 | 2,48194E-08 | 1,61484E-08 | 1,65631E-07 | 2,4829E-08 | 1,66317E-08 | 1,31402E-07 | 2,51324E-08 |
| 194 | G Vertical | 2,9585E-07 | 3,99943E-09 | 2,05023E-09 | 2,93527E-07 | 1,06503E-09 | 2,46675E-09 | 2,82919E-07 | -6,28763E-09 | 1,93342E-08 |
| 194 | G transversal | -2,18386E-07 | -1,51755E-10 | 2,15472E-11 | -1,83903E-07 | -1,69924E-10 | 1,2812E-11 | -1,48941E-07 | -9,33004E-11 | -3,48538E-10 |
| 195 | D Longitudinal | 1,7804E-06 | 5,82707E-09 | 8,7169E-10 | 1,50331E-06 | 4,22563E-09 | 8,70918E-10 | 1,22478E-06 | 2,6199E-09 | 8,80303E-10 |
| 195 | D Vertical | 1,41061E-07 | 1,41034E-07 | 1,13162E-08 | 1,15599E-07 | 1,15558E-07 | 1,13162E-08 | 9,04299E-08 | 9,00814E-08 | 1,13156E-08 |
| 195 | D transversal | 2,22495E-07 | 1,99866E-06 | 1,99795E-07 | 2,19811E-07 | 1,72271E-06 | 1,99795E-07 | 2,15688E-07 | 1,44675E-06 | 1,99812E-07 |
| 195 | G Longitudinal | 1,76647E-08 | 1,99791E-07 | 2,47063E-08 | 1,73534E-08 | 1,65638E-07 | 2,46993E-08 | 1,71991E-08 | 1,31452E-07 | 2,47679E-08 |
| 195 | G Vertical | 2,93619E-07 | 4,00132E-09 | 1,98123E-09 | 2,95405E-07 | 1,33443E-09 | 1,67983E-09 | 2,93747E-07 | -1,75867E-09 | 2,29598E-09 |
| 195 | G transversal | -1,83504E-07 | 1,51795E-10 | -9,49501E-12 | -1,49054E-07 | 1,7562E-10 | -1,59181E-11 | -1,14975E-07 | 1,88326E-10 | 2,43434E-12 |
| 196 | D Longitudinal | 1,79232E-06 | 1,43154E-15 | 1,18744E-13 | 1,51334E-06 | 2,58029E-13 | -6,12963E-13 | 1,23291E-06 | -3,37624E-12 | 7,73978E-12 |
| 196 | D Vertical | 9,96579E-15 | 1,41521E-07 | 1,13969E-08 | 9,24981E-15 | 1,15869E-07 | 1,1397E-08 | 4,88089E-15 | 9,02163E-08 | 1,14008E-08 |
| 196 | D transversal | 4,04135E-15 | 2,01688E-06 | 2,02259E-07 | 4,13207E-15 | 1,73751E-06 | 2,02259E-07 | 1,28067E-14 | 1,45813E-06 | 2,02286E-07 |
| 196 | G Longitudinal | 1,28339E-14 | 2,01848E-07 | 2,50916E-08 | 1,2878E-14 | 1,67157E-07 | 2,50911E-08 | 3,23238E-14 | 1,32442E-07 | 2,51452E-08 |
| 196 | G Vertical | 3,12835E-07 | 5,54702E-15 | 1,67083E-13 | 3,09019E-07 | 3,55542E-13 | -8,39825E-13 | 3,03222E-07 | -4,63636E-12 | 1,06287E-11 |
| 196 | G transversal | -1,92197E-07 | -4,10454E-16 | 7,98925E-16 | -1,56609E-07 | 2,35702E-14 | -5,50283E-14 | -1,21419E-07 | -1,90212E-13 | 4,36071E-13 |
| 197 | D Longitudinal | 2,22872E-06 | -1,46165E-15 | -1,18755E-13 | 1,95207E-06 | -2,58048E-13 | 6,12959E-13 | 1,67686E-06 | 3,37604E-12 | -7,73933E-12 |
| 197 | D Vertical | 8,9099E-15 | -1,41521E-07 | -2,57977E-08 | 1,0894E-14 | -1,15869E-07 | -2,57975E-08 | 6,41787E-14 | -9,02214E-08 | -2,57867E-08 |
| 197 | D transversal | -4,02418E-15 | 2,01688E-06 | 2,02827E-07 | -4,29633E-15 | 1,73751E-06 | 2,02827E-07 | -1,7052E-14 | 1,45816E-06 | 2,02795E-07 |
| 197 | G Longitudinal | -1,26738E-14 | 2,01848E-07 | 2,52105E-08 | -1,46408E-14 | 1,67156E-07 | 2,52109E-08 | -6,10307E-14 | 1,32495E-07 | 2,51352E-08 |
| 197 | G Vertical | 2,96953E-07 | -1,49455E-15 | 1,64321E-13 | 2,97541E-07 | 3,50515E-13 | -8,37974E-13 | 2,9621E-07 | -4,67917E-12 | 1,07264E-11 |
| 197 | G transversal | -2,09325E-07 | 5,12831E-16 | -7,58543E-16 | -1,73612E-07 | -2,34941E-14 | 5,49941E-14 | -1,375E-07 | 1,90831E-13 | -4,37483E-13 |
| 198 | D Longitudinal | 1,66815E-06 | 5,57937E-09 | 8,04014E-10 | 1,41124E-06 | 4,09512E-09 | 8,03326E-10 | 1,15274E-06 | 2,60599E-09 | 8,14295E-10 |
| 198 | D Vertical | 1,3831E-07 | 1,38601E-07 | 1,09103E-08 | 1,13762E-07 | 1,14021E-07 | 1,09103E-08 | 8,94704E-08 | 8,94412E-08 | 1,09101E-08 |
| 198 | D transversal | 2,15767E-07 | 1,88029E-06 | 1,85277E-07 | 2,13308E-07 | 1,62441E-06 | 1,85277E-07 | 2,09265E-07 | 1,36853E-06 | 1,85276E-07 |
| 198 | G Longitudinal | 1,69097E-08 | 1,9447E-07 | 2,36975E-08 | 1,66491E-08 | 1,61723E-07 | 2,3692E-08 | 1,6562E-08 | 1,28966E-07 | 2,37146E-08 |
| 198 | G Vertical | 2,83546E-07 | 3,29829E-09 | 1,75578E-09 | 2,85123E-07 | 9,61533E-10 | 1,48349E-09 | 2,83577E-07 | -1,75997E-09 | 2,03934E-09 |

APOYO 2

| DESPLAZAMIENTOS (metros) | | C4 | | | C5 | | | C6 | | |
|---|---|---|---|---|---|---|---|---|---|---|
| Nudo | Desplazamiento | L | T | V | L | T | V | L | T | V |
| 198 | G transversal | -1,7753E-07 | -5,34547E-10 | -9,34148E-11 | -1,44774E-07 | -3,53159E-10 | -9,91564E-11 | -1,1233E-07 | -1,79985E-10 | -8,72244E-11 |
| 199 | D Longitudinal | 2,08962E-06 | -5,57937E-09 | -1,34874E-09 | 1,83505E-06 | -4,09516E-09 | -1,34792E-09 | 1,58208E-06 | -2,61001E-09 | -1,34742E-09 |
| 199 | D Vertical | 1,39128E-07 | -1,38601E-07 | -2,47307E-08 | 1,14506E-07 | -1,14021E-07 | -2,47308E-08 | 8,96266E-08 | -8,94413E-08 | -2,47304E-08 |
| 199 | D transversal | 2,06098E-07 | 1,88029E-06 | 1,85751E-07 | 2,06223E-07 | 1,62441E-06 | 1,8575E-07 | 2,04739E-07 | 1,36852E-06 | 1,8577E-07 |
| 199 | G Longitudinal | 1,55486E-08 | 1,9447E-07 | 2,37876E-08 | 1,57949E-08 | 1,61718E-07 | 2,37953E-08 | 1,61281E-08 | 1,28884E-07 | 2,41114E-08 |
| 199 | G Vertical | 2,85466E-07 | 3,29659E-09 | 1,78111E-09 | 2,83385E-07 | 7,1816E-10 | 2,15738E-09 | 2,73808E-07 | -5,85175E-09 | 1,73954E-08 |
| 199 | G transversal | -2,11761E-07 | 5,34582E-10 | 1,66467E-10 | -1,78998E-07 | 3,58263E-10 | 1,58621E-10 | -1,45829E-07 | 2,69467E-10 | -1,72054E-10 |
| 200 | D Longitudinal | 1,66815E-06 | -5,57937E-09 | -8,03783E-10 | 1,41124E-06 | -4,09459E-09 | -8,04572E-10 | 1,15274E-06 | -2,61273E-09 | -7,98832E-10 |
| 200 | D Vertical | -1,3831E-07 | 1,38601E-07 | 1,09103E-08 | -1,13762E-07 | 1,14021E-07 | 1,09102E-08 | -8,94704E-08 | 8,94409E-08 | 1,09106E-08 |
| 200 | D transversal | -2,15767E-07 | 1,88029E-06 | 1,85277E-07 | -2,13308E-07 | 1,62441E-06 | 1,85278E-07 | -2,09265E-07 | 1,36854E-06 | 1,8526E-07 |
| 200 | G Longitudinal | -1,69099E-08 | 1,9447E-07 | 2,36975E-08 | -1,66493E-08 | 1,61723E-07 | 2,3692E-08 | -1,65621E-08 | 1,28966E-07 | 2,37146E-08 |
| 200 | G Vertical | 2,83555E-07 | -3,2977E-09 | -1,7549E-09 | 2,85132E-07 | -9,61297E-10 | -1,4833E-09 | 2,83581E-07 | 1,76001E-09 | -2,0394E-09 |
| 200 | G transversal | -1,7753E-07 | 5,34558E-10 | 9,34246E-11 | -1,44774E-07 | 3,53178E-10 | 9,91281E-11 | -1,12329E-07 | 1,79981E-10 | 8,72351E-11 |
| 201 | D Longitudinal | 2,08962E-06 | 5,57937E-09 | 1,34851E-09 | 1,83505E-06 | 4,09464E-09 | 1,34917E-09 | 1,58208E-06 | 2,61675E-09 | 1,33196E-09 |
| 201 | D Vertical | -1,39128E-07 | -1,38601E-07 | -2,47307E-08 | -1,14506E-07 | -1,14021E-07 | -2,47307E-08 | -8,96266E-08 | -8,9441E-08 | -2,47309E-08 |
| 201 | D transversal | -2,06098E-07 | 1,88029E-06 | 1,85751E-07 | -2,06223E-07 | 1,62441E-06 | 1,85751E-07 | -2,04739E-07 | 1,36853E-06 | 1,85754E-07 |
| 201 | G Longitudinal | -1,55484E-08 | 1,9447E-07 | 2,37876E-08 | -1,57946E-08 | 1,61719E-07 | 2,37952E-08 | -1,61268E-08 | 1,28885E-07 | 2,41111E-08 |
| 201 | G Vertical | 2,85457E-07 | -3,29724E-09 | -1,78073E-09 | 2,83373E-07 | -7,19556E-10 | -2,15498E-09 | 2,7375E-07 | 5,84547E-09 | -1,7381E-08 |
| 201 | G transversal | -2,11761E-07 | -5,34568E-10 | -1,66466E-10 | -1,78997E-07 | -3,58247E-10 | -1,58641E-10 | -1,45828E-07 | -2,69328E-10 | 1,71736E-10 |
| 202 | D Longitudinal | 1,87772E-06 | -1,73824E-17 | 2,66484E-10 | 1,62195E-06 | 1,44977E-14 | 2,66448E-10 | 1,36618E-06 | 1,24996E-12 | 2,62693E-10 |
| 202 | D Vertical | -1,37709E-07 | 6,69272E-16 | -6,86243E-09 | -1,13407E-07 | 6,5091E-14 | -6,8626E-09 | -8,91107E-08 | 3,51612E-12 | -6,87306E-09 |
| 202 | D transversal | -2,10907E-07 | 1,87424E-06 | 1,84569E-07 | -2,09734E-07 | 1,61966E-06 | 1,8457E-07 | -2,06937E-07 | 1,36509E-06 | 1,84561E-07 |
| 202 | G Longitudinal | -7,01459E-09 | 1,91653E-07 | 2,40838E-08 | -7,05777E-09 | 1,58434E-07 | 2,40838E-08 | -7,42659E-09 | 1,25214E-07 | 2,40846E-08 |
| 202 | G Vertical | 2,88437E-07 | 7,35263E-09 | 1,4076E-09 | 2,90024E-07 | 5,4106E-09 | 1,40844E-09 | 2,93756E-07 | 3,48247E-09 | 1,36686E-09 |
| 202 | G transversal | -1,94171E-07 | 3,61981E-16 | -3,57471E-11 | -1,6156E-07 | 1,13213E-13 | -3,60555E-11 | -1,2895E-07 | 3,68595E-13 | -3,83632E-11 |
| 203 | D Longitudinal | 1,95473E-06 | -8,97598E-16 | -1,1264E-13 | 1,72171E-06 | -2,6711E-13 | 6,33593E-13 | 1,49045E-06 | 3,37461E-12 | -7,73606E-12 |
| 203 | D Vertical | -5,68579E-15 | -1,34869E-07 | -2,35183E-08 | -6,57664E-15 | -1,11536E-07 | -2,35183E-08 | -4,22754E-14 | -8,81994E-08 | -2,35254E-08 |
| 203 | D transversal | 1,26575E-15 | 1,75727E-06 | 1,7105E-07 | 1,31647E-15 | 1,52166E-06 | 1,7105E-07 | 6,15573E-15 | 1,28604E-06 | 1,71055E-07 |
| 203 | G Longitudinal | 7,50179E-16 | 1,87103E-07 | 2,23367E-08 | 3,91535E-16 | 1,56299E-07 | 2,23363E-08 | -4,87634E-16 | 1,25493E-07 | 2,23398E-08 |
| 203 | G Vertical | 2,68164E-07 | 5,97141E-16 | 1,51122E-13 | 2,68234E-07 | 3,52268E-13 | -8,3656E-13 | 2,65969E-07 | -4,49551E-12 | 1,03056E-11 |
| 203 | G transversal | -1,92394E-07 | 3,88794E-16 | 1,27069E-15 | -1,6104E-07 | -1,32574E-14 | 3,08734E-14 | -1,29416E-07 | 8,78988E-14 | -2,01516E-13 |
| 204 | D Longitudinal | 1,95635E-06 | -4,86516E-09 | -1,14345E-09 | 1,72273E-06 | -3,61036E-09 | -1,14258E-09 | 1,49086E-06 | -2,35287E-09 | -1,14651E-09 |
| 204 | D Vertical | 1,35688E-07 | -1,35799E-07 | -2,37268E-08 | 1,12073E-07 | -1,12234E-07 | -2,37268E-08 | 8,82386E-08 | -8,86689E-08 | -2,37266E-08 |
| 204 | D transversal | 1,99773E-07 | 1,75409E-06 | 1,70479E-07 | 1,99739E-07 | 1,51924E-06 | 1,70478E-07 | 1,97956E-07 | 1,28438E-06 | 1,70495E-07 |
| 204 | G Longitudinal | 1,61101E-08 | 1,87468E-07 | 2,24207E-08 | 1,61259E-08 | 1,56548E-07 | 2,24275E-08 | 1,6177E-08 | 1,25547E-07 | 2,2727E-08 |
| 204 | G Vertical | 2,74479E-07 | 2,83594E-09 | 1,5613E-09 | 2,72534E-07 | 5,46335E-10 | 1,89826E-09 | 2,63891E-07 | -5,31768E-09 | 1,55441E-08 |
| 204 | G transversal | -2,03641E-07 | 9,53058E-10 | 2,57714E-10 | -1,72872E-07 | 6,76628E-10 | 2,50595E-10 | -1,41779E-07 | 4,78237E-10 | -4,4475E-11 |
| 205 | D Longitudinal | 1,54935E-06 | -4,86516E-09 | -6,76465E-10 | 1,31342E-06 | -3,60975E-09 | -6,77283E-10 | 1,07574E-06 | -2,35785E-09 | -6,70063E-10 |
| 205 | D Vertical | -1,3582E-07 | 1,35799E-07 | 1,04425E-08 | -1,12258E-07 | 1,12234E-07 | 1,04425E-08 | -8,89149E-08 | 8,86687E-08 | 1,04427E-08 |
| 205 | D transversal | -2,08691E-07 | 1,75409E-06 | 1,70055E-07 | -2,06402E-07 | 1,51924E-06 | 1,70056E-07 | -2,02378E-07 | 1,2844E-06 | 1,70039E-07 |
| 205 | G Longitudinal | -1,5894E-08 | 1,87468E-07 | 2,24097E-08 | -1,58399E-08 | 1,56552E-07 | 2,24048E-08 | -1,59302E-08 | 1,25634E-07 | 2,24058E-08 |
| 205 | G Vertical | 2,71934E-07 | -2,83694E-09 | -1,5771E-09 | 2,73445E-07 | -7,64072E-10 | -1,33388E-09 | 2,7217E-07 | 1,65351E-09 | -1,83193E-09 |
| 205 | G transversal | -1,70446E-07 | 9,53036E-10 | 1,46941E-10 | -1,39656E-07 | 6,72035E-10 | 1,52072E-10 | -1,0911E-07 | 3,96945E-10 | 1,45092E-10 |
| 206 | D Longitudinal | 1,95635E-06 | 4,86516E-09 | 1,14322E-09 | 1,72273E-06 | 3,60982E-09 | 1,14384E-09 | 1,49086E-06 | 2,35959E-09 | 1,1311E-09 |

APOYO 2

| DESPLAZAMIENTOS (metros) | | C4 | | | C5 | | | C6 | | |
|---|---|---|---|---|---|---|---|---|---|---|
| Nudo | Desplazamiento | L | T | V | L | T | V | L | T | V |
| 206 | D Vertical | -1,35688E-07 | -1,35799E-07 | -2,37268E-08 | -1,12073E-07 | -1,12234E-07 | -2,37268E-08 | -8,82386E-08 | -8,86687E-08 | -2,3727E-08 |
| 206 | D transversal | -1,99773E-07 | 1,75409E-06 | 1,70479E-07 | -1,99739E-07 | 1,51924E-06 | 1,70479E-07 | -1,97956E-07 | 1,28439E-06 | 1,7048E-07 |
| 206 | G Longitudinal | -1,611E-08 | 1,87468E-07 | 2,24207E-08 | -1,61257E-08 | 1,56548E-07 | 2,24275E-08 | -1,61758E-08 | 1,25547E-07 | 2,27266E-08 |
| 206 | G Vertical | 2,74471E-07 | -2,83653E-09 | -1,56096E-09 | 2,72524E-07 | -5,4759E-10 | -1,8961E-09 | 2,63838E-07 | 5,31211E-09 | -1,55314E-08 |
| 206 | G transversal | -2,0364E-07 | -9,53045E-10 | -2,5771E-10 | -1,72872E-07 | -6,76607E-10 | -2,50627E-10 | -1,41777E-07 | -4,78197E-10 | 4,43847E-11 |
| 207 | D Longitudinal | 1,63572E-06 | 9,64071E-17 | 2,36425E-10 | 1,41979E-06 | 2,16501E-14 | 2,36367E-10 | 1,20386E-06 | 5,39752E-13 | 2,34653E-10 |
| 207 | D Vertical | -1,32895E-07 | -3,4159E-16 | -6,38619E-09 | -1,10268E-07 | -7,94395E-15 | -6,38617E-09 | -8,7636E-08 | -2,60603E-12 | -6,37921E-09 |
| 207 | D transversal | -1,97742E-07 | 1,63186E-06 | 1,55679E-07 | -1,9659E-07 | 1,41713E-06 | 1,5568E-07 | -1,93575E-07 | 1,2024E-06 | 1,55671E-07 |
| 207 | G Longitudinal | -6,92693E-09 | 1,77057E-07 | 2,13324E-08 | -6,9414E-09 | 1,47633E-07 | 2,13324E-08 | -7,17547E-09 | 1,18208E-07 | 2,13331E-08 |
| 207 | G Vertical | 2,59562E-07 | 6,5821E-09 | 1,15631E-09 | 2,61067E-07 | 4,98669E-09 | 1,15712E-09 | 2,64962E-07 | 3,40269E-09 | 1,12323E-09 |
| 207 | G transversal | -1,79313E-07 | 3,15206E-18 | 7,5047E-12 | -1,50461E-07 | 2,49826E-14 | 7,43941E-12 | -1,2161E-07 | -8,26824E-14 | 7,16338E-12 |
| 208 | D Longitudinal | 1,82435E-06 | -4,39442E-09 | -9,91727E-10 | 1,611E-06 | -3,31045E-09 | -9,9101E-10 | 1,3995E-06 | -2,22132E-09 | -1,00316E-09 |
| 208 | D Vertical | 1,32906E-07 | -1,32452E-07 | -2,2702E-08 | 1,10364E-07 | -1,0992E-07 | -2,2702E-08 | 8,76399E-08 | -8,73886E-08 | -2,2702E-08 |
| 208 | D transversal | 1,92367E-07 | 1,62933E-06 | 1,55762E-07 | 1,92367E-07 | 1,41479E-06 | 1,55761E-07 | 1,90519E-07 | 1,20024E-06 | 1,55767E-07 |
| 208 | G Longitudinal | 1,6919E-08 | 1,79138E-07 | 2,08462E-08 | 1,66642E-08 | 1,50326E-07 | 2,08526E-08 | 1,64074E-08 | 1,21443E-07 | 2,1119E-08 |
| 208 | G Vertical | 2,63495E-07 | 3,0091E-09 | 1,47198E-09 | 2,6157E-07 | 8,2963E-10 | 1,77274E-09 | 2,5365E-07 | -4,54106E-09 | 1,39548E-08 |
| 208 | G transversal | -1,95248E-07 | -4,5702E-10 | -4,20016E-11 | -1,66429E-07 | -4,07743E-10 | -4,84407E-11 | -1,37352E-07 | -2,90179E-10 | -3,08746E-10 |
| 209 | D Longitudinal | 1,43204E-06 | -4,39442E-09 | -5,80414E-10 | 1,2164E-06 | -3,30993E-09 | -5,81133E-10 | 9,98902E-07 | -2,22959E-09 | -5,72065E-10 |
| 209 | D Vertical | -1,3215E-07 | 1,32452E-07 | 9,96895E-09 | -1,0964E-07 | 1,0992E-07 | 9,96894E-09 | -8,7313E-08 | 8,73885E-08 | 9,96908E-09 |
| 209 | D transversal | -2,01863E-07 | 1,62933E-06 | 1,55322E-07 | -1,99568E-07 | 1,41479E-06 | 1,55323E-07 | -1,95422E-07 | 1,20025E-06 | 1,55314E-07 |
| 209 | G Longitudinal | -1,48478E-08 | 1,79138E-07 | 2,09277E-08 | -1,50371E-08 | 1,5033E-07 | 2,0923E-08 | -1,53125E-08 | 1,21519E-07 | 2,0922E-08 |
| 209 | G Vertical | 2,5963E-07 | -3,00999E-09 | -1,52622E-09 | 2,61151E-07 | -1,02396E-09 | -1,30915E-09 | 2,6017E-07 | 1,26941E-09 | -1,75319E-09 |
| 209 | G transversal | -1,63166E-07 | -4,57039E-10 | -2,59864E-11 | -1,34298E-07 | -4,11893E-10 | -2,13505E-11 | -1,05616E-07 | -3,60792E-10 | -2,92562E-11 |
| 210 | D Longitudinal | 1,82435E-06 | 4,39442E-09 | 9,91509E-10 | 1,611E-06 | 3,30991E-09 | 9,92273E-10 | 1,3995E-06 | 2,22796E-09 | 9,87922E-10 |
| 210 | D Vertical | -1,32906E-07 | -1,32452E-07 | -2,2702E-08 | -1,10364E-07 | -1,0992E-07 | -2,2702E-08 | -8,76399E-08 | -8,73885E-08 | -2,27022E-08 |
| 210 | D transversal | -1,92367E-07 | 1,62933E-06 | 1,55762E-07 | -1,92367E-07 | 1,41479E-06 | 1,55763E-07 | -1,90519E-07 | 1,20025E-06 | 1,55751E-07 |
| 210 | G Longitudinal | -1,69188E-08 | 1,79138E-07 | 2,08462E-08 | -1,6664E-08 | 1,50326E-07 | 2,08526E-08 | -1,64064E-08 | 1,21443E-07 | 2,11184E-08 |
| 210 | G Vertical | 2,63488E-07 | -3,00962E-09 | -1,47168E-09 | 2,6156E-07 | -8,30746E-10 | -1,77082E-09 | 2,53604E-07 | 4,53603E-09 | -1,39433E-08 |
| 210 | G transversal | -1,95247E-07 | 4,57031E-10 | 4,20068E-11 | -1,66428E-07 | 4,07769E-10 | 4,83936E-11 | -1,37351E-07 | 2,90131E-10 | 3,08857E-10 |
| 211 | D Longitudinal | 1,70357E-06 | -4,67493E-16 | -1,04933E-13 | 1,50861E-06 | -2,65365E-13 | 6,28854E-13 | 1,31559E-06 | 3,2714E-12 | -7,49948E-12 |
| 211 | D Vertical | 2,26532E-15 | -1,29988E-07 | -2,18663E-08 | 2,49804E-15 | -1,08293E-07 | -2,18663E-08 | 1,72402E-14 | -8,65994E-08 | -2,18637E-08 |
| 211 | D transversal | -1,07218E-15 | 1,51979E-06 | 1,43265E-07 | -1,30054E-15 | 1,32248E-06 | 1,43265E-07 | -6,86366E-15 | 1,12517E-06 | 1,43262E-07 |
| 211 | G Longitudinal | -2,82029E-15 | 1,71398E-07 | 1,95246E-08 | -3,78784E-15 | 1,44456E-07 | 1,95244E-08 | -1,86876E-14 | 1,17515E-07 | 1,95173E-08 |
| 211 | G Vertical | 2,40843E-07 | -6,78326E-17 | 1,35671E-13 | 2,40847E-07 | 3,39137E-13 | -8,04731E-13 | 2,38374E-07 | -4,21273E-12 | 9,65738E-12 |
| 211 | G transversal | -1,76104E-07 | 2,97549E-16 | 2,75007E-15 | -1,48508E-07 | -5,59927E-15 | 1,28483E-14 | -1,20738E-07 | 1,13148E-14 | -2,59487E-14 |
| 212 | D Longitudinal | 1,70355E-06 | -5,10681E-09 | -1,09584E-09 | 1,50833E-06 | -3,91545E-09 | -1,09511E-09 | 1,31504E-06 | -2,71975E-09 | -1,1047E-09 |
| 212 | D Vertical | 1,2911E-07 | -1,29208E-07 | -2,17063E-08 | 1,07552E-07 | -1,07683E-07 | -2,17063E-08 | 8,58447E-08 | -8,61585E-08 | -2,17062E-08 |
| 212 | D transversal | 1,85282E-07 | 1,51538E-06 | 1,42653E-07 | 1,8538E-07 | 1,31895E-06 | 1,42652E-07 | 1,83561E-07 | 1,12251E-06 | 1,42656E-07 |
| 212 | G Longitudinal | 1,59937E-08 | 1,71386E-07 | 1,95279E-08 | 1,58749E-08 | 1,44432E-07 | 1,95338E-08 | 1,57246E-08 | 1,17416E-07 | 1,97679E-08 |
| 212 | G Vertical | 2,52356E-07 | 2,49881E-09 | 1,28073E-09 | 2,50597E-07 | 5,79125E-10 | 1,55055E-09 | 2,43474E-07 | -4,2035E-09 | 1,24795E-08 |
| 212 | G transversal | -1,87239E-07 | -1,86218E-09 | -3,44574E-10 | -1,60264E-07 | -1,48465E-09 | -3,50393E-10 | -1,3309E-07 | -1,04711E-09 | -5,81119E-10 |
| 213 | D Longitudinal | 1,32469E-06 | -5,10681E-09 | -6,32018E-10 | 1,12722E-06 | -3,91492E-09 | -6,32748E-10 | 9,27831E-07 | -2,72715E-09 | -6,23787E-10 |
| 213 | D Vertical | -1,29273E-07 | 1,29208E-07 | 9,50448E-09 | -1,07728E-07 | 1,07683E-07 | 9,50447E-09 | -8,63327E-08 | 8,61584E-08 | 9,50456E-09 |
| 213 | D transversal | -1,95659E-07 | 1,51538E-06 | 1,42179E-07 | -1,93311E-07 | 1,31895E-06 | 1,42179E-07 | -1,89038E-07 | 1,12251E-06 | 1,42175E-07 |

APOYO 2

| DESPLAZAMIENTOS (metros) | | C4 | | | C5 | | | C6 | | |
|---|---|---|---|---|---|---|---|---|---|---|
| Nudo | Desplazamiento | L | T | V | L | T | V | L | T | V |
| 213 | G Longitudinal | -1,51908E-08 | 1,71386E-07 | 1,95529E-08 | -1,52222E-08 | 1,44435E-07 | 1,95486E-08 | -1,52891E-08 | 1,17479E-07 | 1,95545E-08 |
| 213 | G Vertical | 2,48467E-07 | -2,49961E-09 | -1,35745E-09 | 2,4988E-07 | -7,53468E-10 | -1,1627E-09 | 2,49063E-07 | 1,26846E-09 | -1,5613E-09 |
| 213 | G transversal | -1,55843E-07 | -1,8622E-09 | -1,99713E-10 | -1,28795E-07 | -1,48841E-09 | -1,9551E-10 | -1,01878E-07 | -1,10808E-09 | -2,05601E-10 |
| 214 | D Longitudinal | 1,70355E-06 | 5,10681E-09 | 1,09563E-09 | 1,50833E-06 | 3,91492E-09 | 1,09637E-09 | 1,31504E-06 | 2,72627E-09 | 1,08975E-09 |
| 214 | D Vertical | -1,2911E-07 | -1,29208E-07 | -2,17063E-08 | -1,07552E-07 | -1,07683E-07 | -2,17063E-08 | -8,58447E-08 | -8,61585E-08 | -2,17063E-08 |
| 214 | D transversal | -1,85282E-07 | 1,51538E-06 | 1,42652E-07 | -1,8538E-07 | 1,31895E-06 | 1,42653E-07 | -1,83561E-07 | 1,12252E-06 | 1,42641E-07 |
| 214 | G Longitudinal | -1,59935E-08 | 1,71386E-07 | 1,95279E-08 | -1,58747E-08 | 1,44432E-07 | 1,95338E-08 | -1,57237E-08 | 1,17416E-07 | 1,97672E-08 |
| 214 | G Vertical | 2,52349E-07 | -2,49927E-09 | -1,28046E-09 | 2,50588E-07 | -5,80129E-10 | -1,54882E-09 | 2,43432E-07 | 4,19904E-09 | -1,24693E-08 |
| 214 | G transversal | -1,87239E-07 | 1,86219E-09 | 3,4458E-10 | -1,60264E-07 | 1,48468E-09 | 3,50332E-10 | -1,33089E-07 | 1,04698E-09 | 5,81412E-10 |
| 215 | D Longitudinal | 1,40917E-06 | -3,52166E-17 | 2,47844E-10 | 1,22899E-06 | -7,46788E-15 | 2,47865E-10 | 1,0488E-06 | -3,67842E-13 | 2,4894E-10 |
| 215 | D Vertical | -1,25191E-07 | 1,13127E-16 | -5,81389E-09 | -1,04762E-07 | -2,3719E-15 | -5,81388E-09 | -8,43347E-08 | 1,11224E-12 | -5,81673E-09 |
| 215 | D transversal | -1,84298E-07 | 1,40568E-06 | 1,29894E-07 | -1,83199E-07 | 1,22652E-06 | 1,29895E-07 | -1,80125E-07 | 1,04736E-06 | 1,29887E-07 |
| 215 | G Longitudinal | -6,2029E-09 | 1,61738E-07 | 1,87253E-08 | -6,19414E-09 | 1,3591E-07 | 1,87253E-08 | -6,31574E-09 | 1,10082E-07 | 1,87255E-08 |
| 215 | G Vertical | 2,3266E-07 | 7,0873E-09 | 1,14593E-09 | 2,34048E-07 | 5,50623E-09 | 1,14674E-09 | 2,37897E-07 | 3,93407E-09 | 1,12152E-09 |
| 215 | G transversal | -1,64038E-07 | 8,40049E-17 | 3,4515E-11 | -1,388E-07 | 3,11064E-14 | 3,44319E-11 | -1,13563E-07 | 1,05244E-12 | 3,1139E-11 |
| 216 | D Longitudinal | 1,58764E-06 | -6,01584E-09 | -1,24925E-09 | 1,40939E-06 | -4,66274E-09 | -1,24855E-09 | 1,2331E-06 | -3,30614E-09 | -1,25602E-09 |
| 216 | D Vertical | 1,26064E-07 | -1,25614E-07 | -2,07277E-08 | 1,05514E-07 | -1,05073E-07 | -2,07277E-08 | 8,48449E-08 | -8,45315E-08 | -2,07277E-08 |
| 216 | D transversal | 1,78979E-07 | 1,40627E-06 | 1,30327E-07 | 1,79004E-07 | 1,22681E-06 | 1,30326E-07 | 1,77069E-07 | 1,04735E-06 | 1,30332E-07 |
| 216 | G Longitudinal | 1,46655E-08 | 1,64011E-07 | 1,8353E-08 | 1,47787E-08 | 1,38739E-07 | 1,83582E-08 | 1,48337E-08 | 1,13413E-07 | 1,85648E-08 |
| 216 | G Vertical | 2,41181E-07 | 2,13792E-09 | 1,12493E-09 | 2,39575E-07 | 4,3006E-10 | 1,36696E-09 | 2,33145E-07 | -3,84585E-09 | 1,11703E-08 |
| 216 | G transversal | -1,79764E-07 | -1,05655E-09 | -1,84477E-10 | -1,54547E-07 | -8,52625E-10 | -1,89757E-10 | -1,29186E-07 | -5,93909E-10 | -4,00066E-10 |
| 217 | D Longitudinal | 1,22226E-06 | -6,01584E-09 | -7,13107E-10 | 1,04181E-06 | -4,66223E-09 | -7,13816E-10 | 8,59405E-07 | -3,31227E-09 | -7,06022E-10 |
| 217 | D Vertical | -1,25445E-07 | 1,25614E-07 | 9,05724E-09 | -1,04891E-07 | 1,05073E-07 | 9,05724E-09 | -8,44544E-08 | 8,45315E-08 | 9,05723E-09 |
| 217 | D transversal | -1,88775E-07 | 1,40627E-06 | 1,29886E-07 | -1,86557E-07 | 1,22681E-06 | 1,29887E-07 | -1,82375E-07 | 1,04735E-06 | 1,29881E-07 |
| 217 | G Longitudinal | -1,57687E-08 | 1,64011E-07 | 1,82886E-08 | -1,55496E-08 | 1,38742E-07 | 1,82849E-08 | -1,53244E-08 | 1,13466E-07 | 1,82973E-08 |
| 217 | G Vertical | 2,37429E-07 | -2,13864E-09 | -1,22108E-09 | 2,38709E-07 | -5,86447E-10 | -1,0464E-09 | 2,37976E-07 | 1,21313E-09 | -1,40396E-09 |
| 217 | G transversal | -1,48445E-07 | -1,05657E-09 | -1,08376E-10 | -1,23135E-07 | -8,56037E-10 | -1,04557E-10 | -9,79084E-08 | -6,49542E-10 | -1,13784E-10 |
| 218 | D Longitudinal | 1,58764E-06 | 6,01584E-09 | 1,24905E-09 | 1,40939E-06 | 4,66222E-09 | 1,24978E-09 | 1,2331E-06 | 3,3125E-09 | 1,24144E-09 |
| 218 | D Vertical | -1,26064E-07 | -1,25614E-07 | -2,07277E-08 | -1,05514E-07 | -1,05073E-07 | -2,07277E-08 | -8,48449E-08 | -8,45316E-08 | -2,07277E-08 |
| 218 | D transversal | -1,78979E-07 | 1,40627E-06 | 1,30326E-07 | -1,79004E-07 | 1,22681E-06 | 1,30327E-07 | -1,77069E-07 | 1,04736E-06 | 1,30318E-07 |
| 218 | G Longitudinal | -1,46653E-08 | 1,64011E-07 | 1,8353E-08 | -1,47785E-08 | 1,38739E-07 | 1,83582E-08 | -1,48329E-08 | 1,13414E-07 | 1,8564E-08 |
| 218 | G Vertical | 2,41175E-07 | -2,13834E-09 | -1,12468E-09 | 2,39568E-07 | -4,30958E-10 | -1,36541E-09 | 2,33107E-07 | 3,84181E-09 | -1,1161E-08 |
| 218 | G transversal | -1,79764E-07 | 1,05656E-09 | 1,84486E-10 | -1,54547E-07 | 8,52661E-10 | 1,89684E-10 | -1,29185E-07 | 5,93713E-10 | 4,00516E-10 |
| 219 | D Longitudinal | 1,4764E-06 | -6,03792E-09 | -1,22389E-09 | 1,31398E-06 | -4,71624E-09 | -1,22324E-09 | 1,15355E-06 | -3,39086E-09 | -1,23179E-09 |
| 219 | D Vertical | 1,2183E-07 | -1,21971E-07 | -1,97431E-08 | 1,02259E-07 | -1,02424E-07 | -1,97431E-08 | 8,25999E-08 | -8,28781E-08 | -1,97431E-08 |
| 219 | D transversal | 1,72862E-07 | 1,30204E-06 | 1,18791E-07 | 1,72796E-07 | 1,13847E-06 | 1,1879E-07 | 1,70752E-07 | 9,74888E-07 | 1,18799E-07 |
| 219 | G Longitudinal | 1,50221E-08 | 1,56325E-07 | 1,70907E-08 | 1,49718E-08 | 1,3275E-07 | 1,70953E-08 | 1,48338E-08 | 1,09126E-07 | 1,72833E-08 |
| 219 | G Vertical | 2,30142E-07 | 1,71554E-09 | 9,69697E-10 | 2,28681E-07 | 2,20059E-10 | 1,18679E-09 | 2,22906E-07 | -3,57856E-09 | 9,97906E-09 |
| 219 | G transversal | -1,72083E-07 | 3,42888E-10 | 1,00371E-10 | -1,4859E-07 | 2,38267E-10 | 9,56009E-11 | -1,25002E-07 | 1,84108E-10 | -9,69896E-11 |
| 220 | D Longitudinal | 1,12483E-06 | -6,03792E-09 | -6,9288E-10 | 9,60294E-07 | -4,71577E-09 | -6,93541E-10 | 7,93783E-07 | -3,39702E-09 | -6,86303E-10 |
| 220 | D Vertical | -1,22122E-07 | 1,21971E-07 | 8,59896E-09 | -1,02531E-07 | 1,02424E-07 | 8,59896E-09 | -8,30297E-08 | 8,28781E-08 | 8,59889E-09 |
| 220 | D transversal | -1,81918E-07 | 1,30204E-06 | 1,18393E-07 | -1,79861E-07 | 1,13847E-06 | 1,18393E-07 | -1,75828E-07 | 9,74895E-07 | 1,18385E-07 |
| 220 | G Longitudinal | -1,46735E-08 | 1,56325E-07 | 1,70908E-08 | -1,46025E-08 | 1,32753E-07 | 1,70874E-08 | -1,44942E-08 | 1,09176E-07 | 1,7097E-08 |
| 220 | G Vertical | 2,26403E-07 | -1,71618E-09 | -1,0818E-09 | 2,27588E-07 | -3,6033E-10 | -9,25116E-10 | 2,26981E-07 | 1,21756E-09 | -1,24621E-09 |

APOYO 2

| DESPLAZAMIENTOS (metros) | | C4 | | | C5 | | | C6 | | |
|---|---|---|---|---|---|---|---|---|---|---|
| Nudo | Desplazamiento | L | T | V | L | T | V | L | T | V |
| 220 | G transversal | -1,40942E-07 | 3,42873E-10 | 5,38975E-11 | -1,17337E-07 | 2,35183E-10 | 5,73517E-11 | -9,37724E-08 | 1,32475E-10 | 5,00722E-11 |
| 221 | D Longitudinal | 1,4764E-06 | 6,03792E-09 | 1,22369E-09 | 1,31398E-06 | 4,71574E-09 | 1,22444E-09 | 1,15355E-06 | 3,39702E-09 | 1,21767E-09 |
| 221 | D Vertical | -1,2183E-07 | -1,21971E-07 | -1,97431E-08 | -1,02259E-07 | -1,02424E-07 | -1,97431E-08 | -8,25999E-08 | -8,28782E-08 | -1,9743E-08 |
| 221 | D transversal | -1,72862E-07 | 1,30204E-06 | 1,18791E-07 | -1,72796E-07 | 1,13847E-06 | 1,18791E-07 | -1,70752E-07 | 9,74894E-07 | 1,18785E-07 |
| 221 | G Longitudinal | -1,5022E-08 | 1,56325E-07 | 1,70907E-08 | -1,49716E-08 | 1,3275E-07 | 1,70954E-08 | -1,48331E-08 | 1,09127E-07 | 1,72824E-08 |
| 221 | G Vertical | 2,30137E-07 | -1,71592E-09 | -9,69478E-10 | 2,28674E-07 | -2,20868E-10 | -1,18539E-09 | 2,22872E-07 | 3,57498E-09 | -9,97087E-09 |
| 221 | G transversal | -1,72083E-07 | -3,42879E-10 | -1,00361E-10 | -1,4859E-07 | -2,38227E-10 | -9,56833E-11 | -1,25001E-07 | -1,84365E-10 | 9,75791E-11 |
| 222 | D Longitudinal | 1,46275E-06 | -1,60433E-16 | -9,54701E-14 | 1,30257E-06 | -2,54407E-13 | 6,02418E-13 | 1,14437E-06 | 3,07616E-12 | -7,05192E-12 |
| 222 | D Vertical | -1,16831E-16 | -1,20859E-07 | -1,95006E-08 | -7,81638E-19 | -1,01566E-07 | -1,95005E-08 | -1,3099E-15 | -8,22733E-08 | -1,94998E-08 |
| 222 | D transversal | 9,15195E-16 | 1,29499E-06 | 1,18202E-07 | 1,20914E-15 | 1,13226E-06 | 1,18202E-07 | 6,28265E-15 | 9,69528E-07 | 1,18205E-07 |
| 222 | G Longitudinal | -2,34443E-15 | 1,55474E-07 | 1,6943E-08 | -3,18023E-15 | 1,32102E-07 | 1,69428E-08 | -1,54057E-14 | 1,08733E-07 | 1,69331E-08 |
| 222 | G Vertical | 2,14586E-07 | -5,73559E-16 | 1,19041E-13 | 2,14592E-07 | 3,12931E-13 | -7,42181E-13 | 2,1214E-07 | -3,81813E-12 | 8,75279E-12 |
| 222 | G transversal | -1,60803E-07 | 2,21648E-16 | 4,00382E-15 | -1,36905E-07 | 1,26626E-15 | -3,29498E-15 | -1,12922E-07 | -5,62908E-14 | 1,29036E-13 |
| 223 | D Longitudinal | 1,34493E-06 | -5,06637E-09 | -9,94737E-10 | 1,20073E-06 | -3,99644E-09 | -9,94025E-10 | 1,0585E-06 | -2,92352E-09 | -9,99658E-10 |
| 223 | D Vertical | 1,17433E-07 | -1,17117E-07 | -1,8547E-08 | 9,91087E-08 | -9,8768E-08 | -1,85469E-08 | 8,07294E-08 | -8,0419E-08 | -1,8547E-08 |
| 223 | D transversal | 1,64616E-07 | 1,17896E-06 | 1,05526E-07 | 1,64621E-07 | 1,03369E-06 | 1,05525E-07 | 1,6266E-07 | 8,88425E-07 | 1,05538E-07 |
| 223 | G Longitudinal | 1,52054E-08 | 1,47546E-07 | 1,5695E-08 | 1,50399E-08 | 1,25866E-07 | 1,56991E-08 | 1,47563E-08 | 1,04141E-07 | 1,58662E-08 |
| 223 | G Vertical | 2,1581E-07 | 4,64795E-10 | 6,58809E-10 | 2,14647E-07 | -6,22494E-10 | 8,47749E-10 | 2,09716E-07 | -3,71437E-09 | 8,50019E-09 |
| 223 | G transversal | -1,62128E-07 | 1,65697E-09 | 3,57898E-10 | -1,40595E-07 | 1,27444E-09 | 3,53821E-10 | -1,19019E-07 | 9,34895E-10 | 1,89756E-10 |
| 224 | D Longitudinal | 1,34493E-06 | 5,06637E-09 | 9,94557E-10 | 1,20073E-06 | 3,99595E-09 | 9,95182E-10 | 1,0585E-06 | 2,92939E-09 | 9,8621E-10 |
| 224 | D Vertical | -1,17433E-07 | -1,17117E-07 | -1,85469E-08 | -9,91087E-08 | -9,8768E-08 | -1,8547E-08 | -8,07294E-08 | -8,04191E-08 | -1,85468E-08 |
| 224 | D transversal | -1,64616E-07 | 1,17896E-06 | 1,05526E-07 | -1,64621E-07 | 1,03369E-06 | 1,05526E-07 | -1,6266E-07 | 8,88431E-07 | 1,05524E-07 |
| 224 | G Longitudinal | -1,52053E-08 | 1,47546E-07 | 1,5695E-08 | -1,50398E-08 | 1,25866E-07 | 1,56991E-08 | -1,47556E-08 | 1,04141E-07 | 1,58652E-08 |
| 224 | G Vertical | 2,15806E-07 | -4,65122E-10 | -6,58616E-10 | 2,14641E-07 | 6,21794E-10 | -8,46543E-10 | 2,09686E-07 | 3,71121E-09 | -8,49297E-09 |
| 224 | G transversal | -1,62128E-07 | -1,65696E-09 | -3,57887E-10 | -1,40595E-07 | -1,2744E-09 | -3,5391E-10 | -1,19018E-07 | -9,35206E-10 | -1,89044E-10 |
| 225 | D Longitudinal | 1,87772E-06 | -3,54961E-17 | -2,66484E-10 | 1,62195E-06 | -1,45676E-14 | -2,66448E-10 | 1,36618E-06 | -1,25024E-12 | -2,62692E-10 |
| 225 | D Vertical | 1,37709E-07 | -4,84104E-16 | -6,86243E-09 | 1,13407E-07 | 6,45008E-14 | -6,8626E-09 | 8,91107E-08 | 3,50871E-12 | -6,87305E-09 |
| 225 | D transversal | 2,10907E-07 | 1,87424E-06 | 1,84569E-07 | 2,09734E-07 | 1,61966E-06 | 1,84568E-07 | 2,06937E-07 | 1,36508E-06 | 1,84577E-07 |
| 225 | G Longitudinal | 7,01459E-09 | 1,91653E-07 | 2,40838E-08 | 7,05777E-09 | 1,58433E-07 | 2,40839E-08 | 7,42659E-09 | 1,25214E-07 | 2,4084E-08 |
| 225 | G Vertical | 2,88437E-07 | -7,35263E-09 | -1,40791E-09 | 2,90024E-07 | -5,41132E-09 | -1,40674E-09 | 2,93756E-07 | -3,47331E-09 | -1,38787E-09 |
| 225 | G transversal | -1,94171E-07 | -7,46438E-16 | 3,5747E-11 | -1,6156E-07 | -1,13684E-13 | 3,60561E-11 | -1,2895E-07 | -3,70613E-13 | 3,83678E-11 |
| 226 | D Longitudinal | 1,54704E-06 | 8,89232E-16 | 1,12637E-13 | 1,31169E-06 | 2,67094E-13 | -6,33568E-13 | 1,07457E-06 | -3,37466E-12 | 7,73617E-12 |
| 226 | D Vertical | -6,37517E-15 | 1,34869E-07 | 1,03156E-08 | -5,95701E-15 | 1,11536E-07 | 1,03156E-08 | -2,34946E-15 | 8,82025E-08 | 1,03137E-08 |
| 226 | D transversal | -1,33303E-15 | 1,75727E-06 | 1,70591E-07 | -1,31482E-15 | 1,52166E-06 | 1,70592E-07 | -3,54992E-15 | 1,28604E-06 | 1,70586E-07 |
| 226 | G Longitudinal | -6,97507E-16 | 1,87103E-07 | 2,2329E-08 | -7,5003E-16 | 1,56299E-07 | 2,23293E-08 | -6,32458E-15 | 1,25499E-07 | 2,23229E-08 |
| 226 | G Vertical | 2,81084E-07 | 1,81828E-15 | 1,51618E-13 | 2,77909E-07 | 3,54657E-13 | -8,40721E-13 | 2,72427E-07 | -4,49054E-12 | 1,02943E-11 |
| 226 | G transversal | -1,76934E-07 | -3,38329E-16 | -1,25054E-15 | -1,45637E-07 | 1,33334E-14 | -3,09875E-14 | -1,1461E-07 | -8,76556E-14 | 2,00961E-13 |
| 227 | D Longitudinal | 1,54935E-06 | 4,86516E-09 | 6,7669E-10 | 1,31342E-06 | 3,61028E-09 | 6,76023E-10 | 1,07574E-06 | 2,35113E-09 | 6,85473E-10 |
| 227 | D Vertical | 1,3582E-07 | 1,35799E-07 | 1,04425E-08 | 1,12258E-07 | 1,12234E-07 | 1,04425E-08 | 8,89149E-08 | 8,86688E-08 | 1,04423E-08 |
| 227 | D transversal | 2,08691E-07 | 1,75409E-06 | 1,70055E-07 | 2,06402E-07 | 1,51924E-06 | 1,70055E-07 | 2,02378E-07 | 1,28439E-06 | 1,70055E-07 |
| 227 | G Longitudinal | 1,58938E-08 | 1,87468E-07 | 2,24097E-08 | 1,58397E-08 | 1,56552E-07 | 2,24049E-08 | 1,59301E-08 | 1,25634E-07 | 2,24059E-08 |
| 227 | G Vertical | 2,71926E-07 | 2,83747E-09 | 1,57788E-09 | 2,73438E-07 | 7,64278E-10 | 1,33406E-09 | 2,72167E-07 | -1,65342E-09 | 1,83176E-09 |
| 227 | G transversal | -1,70446E-07 | -9,53026E-10 | -1,46935E-10 | -1,39656E-07 | -6,72025E-10 | -1,52081E-10 | -1,0911E-07 | -3,96867E-10 | -1,45271E-10 |
| 228 | D Longitudinal | 1,63572E-06 | -8,54778E-17 | -2,36425E-10 | 1,41979E-06 | -2,17105E-14 | -2,36367E-10 | 1,20386E-06 | -5,39584E-13 | -2,34653E-10 |

APOYO 2

| DESPLAZAMIENTOS (metros) | | C4 | | | C5 | | | C6 | | |
|---|---|---|---|---|---|---|---|---|---|---|
| Nudo | Desplazamiento | L | T | V | L | T | V | L | T | V |
| 228 | D Vertical | 1,32895E-07 | 3,2914E-16 | -6,38619E-09 | 1,10268E-07 | -7,6953E-15 | -6,38617E-09 | 8,7636E-08 | -2,60157E-12 | -6,37922E-09 |
| 228 | D transversal | 1,97742E-07 | 1,63186E-06 | 1,55679E-07 | 1,9659E-07 | 1,41713E-06 | 1,55678E-07 | 1,93575E-07 | 1,20239E-06 | 1,55687E-07 |
| 228 | G Longitudinal | 6,92693E-09 | 1,77057E-07 | 2,13324E-08 | 6,9414E-09 | 1,47633E-07 | 2,13324E-08 | 7,17547E-09 | 1,18209E-07 | 2,13329E-08 |
| 228 | G Vertical | 2,59562E-07 | -6,5821E-09 | -1,1566E-09 | 2,61067E-07 | -4,98739E-09 | -1,15547E-09 | 2,64962E-07 | -3,39398E-09 | -1,14319E-09 |
| 228 | G transversal | -1,79313E-07 | -2,32125E-16 | -7,50479E-12 | -1,50461E-07 | -2,52991E-14 | -7,43897E-12 | -1,2161E-07 | 8,15394E-14 | -7,16077E-12 |
| 229 | D Longitudinal | 1,43204E-06 | 4,39442E-09 | 5,80631E-10 | 1,2164E-06 | 3,31046E-09 | 5,79871E-10 | 9,98902E-07 | 2,22295E-09 | 5,87298E-10 |
| 229 | D Vertical | 1,3215E-07 | 1,32452E-07 | 9,96896E-09 | 1,0964E-07 | 1,0992E-07 | 9,96898E-09 | 8,7313E-08 | 8,73886E-08 | 9,96884E-09 |
| 229 | D transversal | 2,01863E-07 | 1,62933E-06 | 1,55322E-07 | 1,99568E-07 | 1,41479E-06 | 1,55322E-07 | 1,95422E-07 | 1,20024E-06 | 1,55329E-07 |
| 229 | G Longitudinal | 1,48477E-08 | 1,79138E-07 | 2,09277E-08 | 1,50369E-08 | 1,5033E-07 | 2,0923E-08 | 1,53125E-08 | 1,21519E-07 | 2,09223E-08 |
| 229 | G Vertical | 2,59623E-07 | 3,01046E-09 | 1,52692E-09 | 2,61144E-07 | 1,02415E-09 | 1,3093E-09 | 2,60167E-07 | -1,26938E-09 | 1,75316E-09 |
| 229 | G transversal | -1,63166E-07 | 4,57048E-10 | 2,59895E-11 | -1,34299E-07 | 4,11895E-10 | 2,13603E-11 | -1,05616E-07 | 3,60947E-10 | 2,89017E-11 |
| 230 | D Longitudinal | 1,32405E-06 | 4,85145E-16 | 1,0494E-13 | 1,12684E-06 | 2,65382E-13 | -6,28875E-13 | 9,27686E-07 | -3,27131E-12 | 7,49927E-12 |
| 230 | D Vertical | 2,55049E-15 | 1,29988E-07 | 9,59107E-09 | 2,39331E-15 | 1,08293E-07 | 9,59107E-09 | 7,38776E-16 | 8,65983E-08 | 9,59163E-09 |
| 230 | D transversal | 1,13591E-15 | 1,51979E-06 | 1,42831E-07 | 1,0958E-15 | 1,32248E-06 | 1,42831E-07 | 1,19835E-15 | 1,12517E-06 | 1,42832E-07 |
| 230 | G Longitudinal | 2,92593E-15 | 1,71398E-07 | 1,95421E-08 | 2,80585E-15 | 1,44456E-07 | 1,95421E-08 | 1,87053E-15 | 1,17514E-07 | 1,95394E-08 |
| 230 | G Vertical | 2,53374E-07 | 1,32143E-15 | 1,36221E-13 | 2,50468E-07 | 3,40882E-13 | -8,07004E-13 | 2,45092E-07 | -4,20551E-12 | 9,64091E-12 |
| 230 | G transversal | -1,6258E-07 | -2,70224E-16 | -2,73929E-15 | -1,34988E-07 | 5,63335E-15 | -1,2892E-14 | -1,07568E-07 | -1,11712E-14 | 2,56215E-14 |
| 231 | D Longitudinal | 1,32469E-06 | 5,10681E-09 | 6,32228E-10 | 1,12722E-06 | 3,91545E-09 | 6,31495E-10 | 9,27831E-07 | 2,72063E-09 | 6,38739E-10 |
| 231 | D Vertical | 1,29273E-07 | 1,29208E-07 | 9,50448E-09 | 1,07728E-07 | 1,07683E-07 | 9,50449E-09 | 8,63327E-08 | 8,61585E-08 | 9,50445E-09 |
| 231 | D transversal | 1,95659E-07 | 1,51538E-06 | 1,42179E-07 | 1,93311E-07 | 1,31895E-06 | 1,42178E-07 | 1,89038E-07 | 1,12251E-06 | 1,4219E-07 |
| 231 | G Longitudinal | 1,51907E-08 | 1,71386E-07 | 1,95529E-08 | 1,52221E-08 | 1,44435E-07 | 1,95486E-08 | 1,52891E-08 | 1,17479E-07 | 1,9555E-08 |
| 231 | G Vertical | 2,48461E-07 | 2,50003E-09 | 1,35807E-09 | 2,49874E-07 | 7,53633E-10 | 1,16285E-09 | 2,4906E-07 | -1,26839E-09 | 1,56116E-09 |
| 231 | G transversal | -1,55843E-07 | 1,86221E-09 | 1,99714E-10 | -1,28795E-07 | 1,4884E-09 | 1,95537E-10 | -1,01878E-07 | 1,10831E-09 | 2,05085E-10 |
| 232 | D Longitudinal | 1,40917E-06 | 2,82665E-17 | -2,47844E-10 | 1,22899E-06 | 7,49198E-15 | -2,47865E-10 | 1,0488E-06 | 3,67743E-13 | -2,4894E-10 |
| 232 | D Vertical | 1,25191E-07 | -1,10332E-16 | -5,81389E-09 | 1,04762E-07 | -2,41753E-15 | -5,81388E-09 | 8,43347E-08 | 1,1107E-12 | -5,81673E-09 |
| 232 | D transversal | 1,84298E-07 | 1,40568E-06 | 1,29894E-07 | 1,83199E-07 | 1,22652E-06 | 1,29893E-07 | 1,80125E-07 | 1,04735E-06 | 1,29901E-07 |
| 232 | G Longitudinal | 6,2029E-09 | 1,61738E-07 | 1,87253E-08 | 6,19414E-09 | 1,3591E-07 | 1,87253E-08 | 6,31574E-09 | 1,10082E-07 | 1,87256E-08 |
| 232 | G Vertical | 2,3266E-07 | -7,0873E-09 | -1,14618E-09 | 2,34048E-07 | -5,50689E-09 | -1,14518E-09 | 2,37897E-07 | -3,92602E-09 | -1,13998E-09 |
| 232 | G transversal | -1,64038E-07 | -1,74238E-16 | -3,4515E-11 | -1,388E-07 | -3,12202E-14 | -3,44318E-11 | -1,13563E-07 | -1,05291E-12 | -3,11379E-11 |
| 233 | D Longitudinal | 1,22226E-06 | 6,01584E-09 | 7,13307E-10 | 1,04181E-06 | 4,66275E-09 | 7,12583E-10 | 8,59405E-07 | 3,30591E-09 | 7,20597E-10 |
| 233 | D Vertical | 1,25445E-07 | 1,25614E-07 | 9,05725E-09 | 1,04891E-07 | 1,05073E-07 | 9,05725E-09 | 8,44544E-08 | 8,45315E-08 | 9,05724E-09 |
| 233 | D transversal | 1,88775E-07 | 1,40627E-06 | 1,29887E-07 | 1,86557E-07 | 1,22681E-06 | 1,29886E-07 | 1,82375E-07 | 1,04735E-06 | 1,29896E-07 |
| 233 | G Longitudinal | 1,57686E-08 | 1,64011E-07 | 1,82887E-08 | 1,55495E-08 | 1,38742E-07 | 1,82849E-08 | 1,53243E-08 | 1,13466E-07 | 1,82979E-08 |
| 233 | G Vertical | 2,37423E-07 | 2,13902E-09 | 1,22165E-09 | 2,38703E-07 | 5,86599E-10 | 1,04652E-09 | 2,37973E-07 | -1,21311E-09 | 1,40393E-09 |
| 233 | G transversal | -1,48446E-07 | 1,05658E-09 | 1,08375E-10 | -1,23135E-07 | 8,56024E-10 | 1,04598E-10 | -9,79084E-08 | 6,49827E-10 | 1,13131E-10 |
| 234 | D Longitudinal | 1,12483E-06 | 6,03792E-09 | 6,93072E-10 | 9,60294E-07 | 4,71628E-09 | 6,92338E-10 | 7,93783E-07 | 3,39086E-09 | 7,00416E-10 |
| 234 | D Vertical | 1,22122E-07 | 1,21971E-07 | 8,59896E-09 | 1,02531E-07 | 1,02424E-07 | 8,59896E-09 | 8,30297E-08 | 8,28781E-08 | 8,59901E-09 |
| 234 | D transversal | 1,81918E-07 | 1,30204E-06 | 1,18393E-07 | 1,79861E-07 | 1,13847E-06 | 1,18392E-07 | 1,75828E-07 | 9,74889E-07 | 1,18399E-07 |
| 234 | G Longitudinal | 1,46734E-08 | 1,56326E-07 | 1,70908E-08 | 1,46024E-08 | 1,32753E-07 | 1,70874E-08 | 1,44942E-08 | 1,09175E-07 | 1,70977E-08 |
| 234 | G Vertical | 2,26397E-07 | 1,71652E-09 | 1,0823E-09 | 2,27583E-07 | 3,60462E-10 | 9,25233E-10 | 2,26979E-07 | -1,21749E-09 | 1,24608E-09 |
| 234 | G transversal | -1,40942E-07 | -3,42866E-10 | -5,39009E-11 | -1,17337E-07 | -2,35202E-10 | -5,72975E-11 | -9,37725E-08 | -1,32137E-10 | -5,08447E-11 |
| 235 | D Longitudinal | 1,11187E-06 | 1,52387E-16 | 9,54673E-14 | 9,49562E-07 | 2,54395E-13 | -6,02402E-13 | 7,85268E-07 | -3,07621E-12 | 7,05202E-12 |
| 235 | D Vertical | -1,63409E-16 | 1,20859E-07 | 8,47414E-09 | -1,45579E-16 | 1,01566E-07 | 8,47417E-09 | 8,8967E-17 | 8,22731E-08 | 8,4741E-09 |
| 235 | D transversal | -9,64564E-16 | 1,29499E-06 | 1,17757E-07 | -9,27397E-16 | 1,13226E-06 | 1,17757E-07 | -4,645E-16 | 9,69529E-07 | 1,17757E-07 |

APOYO 2

| DESPLAZAMIENTOS (metros) | | C4 | | | C5 | | | C6 | | |
|---|---|---|---|---|---|---|---|---|---|---|
| Nudo | Desplazamiento | L | T | V | L | T | V | L | T | V |
| 235 | G Longitudinal | 2,43395E-15 | 1,55474E-07 | 1,6946E-08 | 2,38591E-15 | 1,32102E-07 | 1,69462E-08 | 1,57134E-15 | 1,0873E-07 | 1,6948E-08 |
| 235 | G Vertical | 2,26786E-07 | 9,74169E-16 | 1,19658E-13 | 2,24155E-07 | 3,14894E-13 | -7,44757E-13 | 2,19074E-07 | -3,81011E-12 | 8,73449E-12 |
| 235 | G transversal | -1,46548E-07 | -1,98553E-16 | -3,99466E-15 | -1,22608E-07 | -1,23586E-15 | 3,25403E-15 | -9,87527E-08 | 5,64097E-14 | -1,29307E-13 |
| 236 | D Longitudinal | 1,01013E-06 | -5,06637E-09 | -5,57043E-10 | 8,63914E-07 | -3,99592E-09 | -5,57741E-10 | 7,15742E-07 | -2,92892E-09 | -5,50439E-10 |
| 236 | D Vertical | -1,16915E-07 | 1,17117E-07 | 8,05905E-09 | -9,85524E-08 | 9,8768E-08 | 8,05906E-09 | -8,02443E-08 | 8,0419E-08 | 8,05895E-09 |
| 236 | D transversal | -1,74328E-07 | 1,17896E-06 | 1,05109E-07 | -1,723E-07 | 1,03369E-06 | 1,05109E-07 | -1,68307E-07 | 8,88433E-07 | 1,05101E-07 |
| 236 | G Longitudinal | -1,39682E-08 | 1,47546E-07 | 1,57397E-08 | -1,39968E-08 | 1,25868E-07 | 1,57368E-08 | -1,3958E-08 | 1,04187E-07 | 1,57404E-08 |
| 236 | G Vertical | 2,13445E-07 | -4,65355E-10 | -8,15973E-10 | 2,14354E-07 | 5,00412E-10 | -6,79609E-10 | 2,1369E-07 | 1,65925E-09 | -9,58616E-10 |
| 236 | G transversal | -1,32364E-07 | 1,65696E-09 | 1,98965E-10 | -1,10705E-07 | 1,27181E-09 | 2,01918E-10 | -8,90417E-08 | 8,90859E-10 | 1,9584E-10 |
| 237 | D Longitudinal | 1,01013E-06 | 5,06637E-09 | 5,57222E-10 | 8,63914E-07 | 3,99641E-09 | 5,56584E-10 | 7,15742E-07 | 2,92305E-09 | 5,63888E-10 |
| 237 | D Vertical | 1,16915E-07 | 1,17117E-07 | 8,05906E-09 | 9,85524E-08 | 9,8768E-08 | 8,05905E-09 | 8,02443E-08 | 8,04189E-08 | 8,05919E-09 |
| 237 | D transversal | 1,74328E-07 | 1,17896E-06 | 1,05109E-07 | 1,723E-07 | 1,03369E-06 | 1,05108E-07 | 1,68307E-07 | 8,88427E-07 | 1,05115E-07 |
| 237 | G Longitudinal | 1,39681E-08 | 1,47546E-07 | 1,57397E-08 | 1,39967E-08 | 1,25868E-07 | 1,57367E-08 | 1,3958E-08 | 1,04187E-07 | 1,57412E-08 |
| 237 | G Vertical | 2,13441E-07 | 4,6565E-10 | 8,16413E-10 | 2,14349E-07 | -5,00294E-10 | 6,79703E-10 | 2,13689E-07 | -1,65924E-09 | 9,58601E-10 |
| 237 | G transversal | -1,32364E-07 | -1,65695E-09 | -1,9897E-10 | -1,10705E-07 | -1,27183E-09 | -2,01853E-10 | -8,90417E-08 | -8,90481E-10 | -1,96706E-10 |
| 238 | D Longitudinal | 1,20513E-06 | 1,06142E-16 | -2,1897E-10 | 1,05574E-06 | 1,28851E-14 | -2,19005E-10 | 9,06345E-07 | 4,74094E-14 | -2,19332E-10 |
| 238 | D Vertical | 1,18605E-07 | 1,57946E-17 | -5,3323E-09 | 9,99233E-08 | 2,64229E-15 | -5,33231E-09 | 8,12412E-08 | -2,80599E-13 | -5,33163E-09 |
| 238 | D transversal | 1,71191E-07 | 1,20194E-06 | 1,07648E-07 | 1,70166E-07 | 1,05346E-06 | 1,07647E-07 | 1,67162E-07 | 9,04979E-07 | 1,07655E-07 |
| 238 | G Longitudinal | 5,69135E-09 | 1,47179E-07 | 1,64044E-08 | 5,6646E-09 | 1,24552E-07 | 1,64044E-08 | 5,69639E-09 | 1,01926E-07 | 1,64048E-08 |
| 238 | G Vertical | 2,07998E-07 | -6,29267E-09 | -9,6225E-10 | 2,09248E-07 | -4,96591E-09 | -9,61352E-10 | 2,1289E-07 | -3,638E-09 | -9,59274E-10 |
| 238 | G transversal | -1,49176E-07 | -2,61386E-16 | 6,16942E-11 | -1,27192E-07 | -3,45653E-14 | 6,17865E-11 | -1,05208E-07 | -3,31273E-13 | 6,31879E-11 |
| 239 | D Longitudinal | 1,20513E-06 | -1,03984E-17 | 2,18971E-10 | 1,05574E-06 | -1,27731E-14 | 2,19005E-10 | 9,06345E-07 | -4,69053E-14 | 2,19331E-10 |
| 239 | D Vertical | -1,18605E-07 | -1,64586E-17 | -5,3323E-09 | -9,99233E-08 | 2,65379E-15 | -5,33231E-09 | -8,12412E-08 | -2,80849E-13 | -5,33163E-09 |
| 239 | D transversal | -1,71191E-07 | 1,20194E-06 | 1,07648E-07 | -1,70166E-07 | 1,05346E-06 | 1,07649E-07 | -1,67162E-07 | 9,04984E-07 | 1,07641E-07 |
| 239 | G Longitudinal | -5,69135E-09 | 1,47179E-07 | 1,64044E-08 | -5,6646E-09 | 1,24552E-07 | 1,64044E-08 | -5,69639E-09 | 1,01926E-07 | 1,64045E-08 |
| 239 | G Vertical | 2,07998E-07 | 6,29267E-09 | 9,62028E-10 | 2,09248E-07 | 4,9653E-09 | 9,62783E-10 | 2,1289E-07 | 3,64526E-09 | 9,42633E-10 |
| 239 | G transversal | -1,49176E-07 | 5,59292E-17 | -6,16942E-11 | -1,27192E-07 | 3,42948E-14 | -6,17861E-11 | -1,05208E-07 | 3,30225E-13 | -6,31855E-11 |
| 240 | D Longitudinal | 9,44119E-07 | 4,10897E-09 | 4,36745E-10 | 8,083E-07 | 3,26608E-09 | 4,36071E-10 | 6,70542E-07 | 2,41986E-09 | 4,43138E-10 |
| 240 | D Vertical | 1,14686E-07 | 1,14694E-07 | 7,78618E-09 | 9,69136E-08 | 9,69524E-08 | 7,78617E-09 | 7,91801E-08 | 7,92111E-08 | 7,78634E-09 |
| 240 | D transversal | 1,6943E-07 | 1,10764E-06 | 9,75614E-08 | 1,6743E-07 | 9,72783E-07 | 9,75608E-08 | 1,63486E-07 | 8,3792E-07 | 9,75679E-08 |
| 240 | G Longitudinal | 1,42256E-08 | 1,43072E-07 | 1,5044E-08 | 1,42115E-08 | 1,22343E-07 | 1,50411E-08 | 1,41131E-08 | 1,0161E-07 | 1,50456E-08 |
| 240 | G Vertical | 2,08115E-07 | 6,52713E-10 | 8,21598E-10 | 2,09088E-07 | -3,12E-10 | 6,91497E-10 | 2,08573E-07 | -1,46032E-09 | 9,56751E-10 |
| 240 | G transversal | -1,28023E-07 | -1,64749E-09 | -1,95996E-10 | -1,07309E-07 | -1,26717E-09 | -1,98707E-10 | -8,65733E-08 | -8,90455E-10 | -1,9371E-10 |
| 241 | D Longitudinal | 1,26877E-06 | -4,10897E-09 | -7,8598E-10 | 1,1349E-06 | -3,26606E-09 | -7,85364E-10 | 1,00298E-06 | -2,41938E-09 | -7,94064E-10 |
| 241 | D Vertical | 1,14617E-07 | -1,14694E-07 | -1,79387E-08 | 9,68918E-08 | -9,69524E-08 | -1,79387E-08 | 7,91281E-08 | -7,92111E-08 | -1,79388E-08 |
| 241 | D transversal | 1,59441E-07 | 1,10764E-06 | 9,79856E-08 | 1,59485E-07 | 9,72783E-07 | 9,79849E-08 | 1,57586E-07 | 8,3792E-07 | 9,7992E-08 |
| 241 | G Longitudinal | 1,51341E-08 | 1,43072E-07 | 1,50148E-08 | 1,50045E-08 | 1,2234E-07 | 1,50186E-08 | 1,47429E-08 | 1,01567E-07 | 1,51778E-08 |
| 241 | G Vertical | 2,11516E-07 | 6,519E-10 | 6,48232E-10 | 2,10307E-07 | -4,28294E-10 | 8,28044E-10 | 2,05519E-07 | -3,41627E-09 | 8,11086E-09 |
| 241 | G transversal | -1,57033E-07 | 1,64751E-09 | 3,54006E-10 | -1,36451E-07 | 1,26963E-09 | 3,5016E-10 | -1,15849E-07 | 9,31911E-10 | 1,96509E-10 |
| 242 | D Longitudinal | 9,44119E-07 | -4,10897E-09 | -4,36572E-10 | 8,083E-07 | -3,2656E-09 | -4,37196E-10 | 6,70542E-07 | -2,42553E-09 | -4,30121E-10 |
| 242 | D Vertical | -1,14686E-07 | 1,14694E-07 | 7,78618E-09 | -9,69136E-08 | 9,69524E-08 | 7,78619E-09 | -7,91801E-08 | 7,92112E-08 | 7,78604E-09 |
| 242 | D transversal | -1,6943E-07 | 1,10764E-06 | 9,75613E-08 | -1,6743E-07 | 9,72783E-07 | 9,75619E-08 | -1,63486E-07 | 8,37926E-07 | 9,75548E-08 |
| 242 | G Longitudinal | -1,42257E-08 | 1,43072E-07 | 1,5044E-08 | -1,42116E-08 | 1,22343E-07 | 1,50412E-08 | -1,41132E-08 | 1,01611E-07 | 1,50447E-08 |
| 242 | G Vertical | 2,0812E-07 | -6,52432E-10 | -8,2118E-10 | 2,09092E-07 | 3,12111E-10 | -6,91404E-10 | 2,08575E-07 | 1,46035E-09 | -9,56807E-10 |

APOYO 2

| DESPLAZAMIENTOS (metros) | | C4 | | | C5 | | | C6 | | |
|---|---|---|---|---|---|---|---|---|---|---|
| Nudo | Desplazamiento | L | T | V | L | T | V | L | T | V |
| 242 | G transversal | -1,28023E-07 | 1,6475E-09 | 1,9599E-10 | -1,07309E-07 | 1,26714E-09 | 1,98777E-10 | -8,65732E-08 | 8,90849E-10 | 1,92806E-10 |
| 243 | D Longitudinal | 1,26877E-06 | 4,10897E-09 | 7,85808E-10 | 1,1349E-06 | 3,26558E-09 | 7,86489E-10 | 1,00298E-06 | 2,42506E-09 | 7,81046E-10 |
| 243 | D Vertical | -1,14617E-07 | -1,14694E-07 | -1,79387E-08 | -9,68918E-08 | -9,69524E-08 | -1,79387E-08 | -7,91281E-08 | -7,92112E-08 | -1,79385E-08 |
| 243 | D transversal | -1,59441E-07 | 1,10764E-06 | 9,79854E-08 | -1,59485E-07 | 9,72783E-07 | 9,79861E-08 | -1,57586E-07 | 8,37926E-07 | 9,7979E-08 |
| 243 | G Longitudinal | -1,5134E-08 | 1,43072E-07 | 1,50148E-08 | -1,50044E-08 | 1,2234E-07 | 1,50187E-08 | -1,47423E-08 | 1,01567E-07 | 1,51767E-08 |
| 243 | G Vertical | 2,11512E-07 | -6,52211E-10 | -6,4805E-10 | 2,10302E-07 | 4,27626E-10 | -8,26892E-10 | 2,05491E-07 | 3,41328E-09 | -8,10403E-09 |
| 243 | G transversal | -1,57032E-07 | -1,6475E-09 | -3,53995E-10 | -1,36451E-07 | -1,26959E-09 | -3,50251E-10 | -1,15848E-07 | -9,32243E-10 | -1,95748E-10 |
| 244 | D Longitudinal | 1,24822E-06 | 5,34498E-17 | -8,52868E-14 | 1,1173E-06 | -2,36315E-13 | 5,59281E-13 | 9,88319E-07 | 2,81781E-12 | -6,45967E-12 |
| 244 | D Vertical | -7,0888E-16 | -1,12824E-07 | -1,75378E-08 | -9,83514E-16 | -9,55014E-08 | -1,75379E-08 | -4,78938E-15 | -7,81785E-08 | -1,75403E-08 |
| 244 | D transversal | 2,07075E-16 | 1,09167E-06 | 9,63929E-08 | 2,98441E-16 | 9,59002E-07 | 9,63929E-08 | 1,4664E-15 | 8,26335E-07 | 9,63939E-08 |
| 244 | G Longitudinal | 1,22875E-15 | 1,41548E-07 | 1,47729E-08 | 1,61642E-15 | 1,21146E-07 | 1,47729E-08 | 7,3941E-15 | 1,00743E-07 | 1,47775E-08 |
| 244 | G Vertical | 1,90262E-07 | -4,44837E-16 | 1,02793E-13 | 1,90331E-07 | 2,82692E-13 | -6,69609E-13 | 1,88074E-07 | -3,38757E-12 | 7,76578E-12 |
| 244 | G transversal | -1,44115E-07 | 1,7119E-16 | 4,71662E-15 | -1,23244E-07 | 5,70379E-15 | -1,37156E-14 | -1,02349E-07 | -9,87739E-14 | 2,26428E-13 |
| 245 | D Longitudinal | 1,00515E-06 | 1,3137E-18 | 1,83683E-10 | 8,84656E-07 | 1,69553E-15 | 1,83678E-10 | 7,64167E-07 | 1,29755E-14 | 1,83621E-10 |
| 245 | D Vertical | -1,11061E-07 | -1,1501E-17 | -4,83211E-09 | -9,41799E-08 | -3,7567E-15 | -4,8321E-09 | -7,72992E-08 | -4,31581E-14 | -4,83192E-09 |
| 245 | D transversal | -1,56857E-07 | 1,00065E-06 | 8,65633E-08 | -1,5593E-07 | 8,81252E-07 | 8,65639E-08 | -1,53103E-07 | 7,61857E-07 | 8,65572E-08 |
| 245 | G Longitudinal | -6,51715E-09 | 1,33101E-07 | 1,4208E-08 | -6,47535E-09 | 1,13504E-07 | 1,42081E-08 | -6,43006E-09 | 9,39067E-08 | 1,42081E-08 |
| 245 | G Vertical | 1,8354E-07 | 5,28158E-09 | 7,38211E-10 | 1,84629E-07 | 4,26299E-09 | 7,38852E-10 | 1,87929E-07 | 3,25172E-09 | 7,179E-10 |
| 245 | G transversal | -1,34841E-07 | 5,89523E-17 | 2,15131E-11 | -1,15748E-07 | 3,40927E-14 | 2,14221E-11 | -9,66561E-08 | 6,19439E-13 | 1,92304E-11 |
| 246 | D Longitudinal | 1,15564E-06 | -3,46656E-09 | -6,28721E-10 | 1,03683E-06 | -2,79677E-09 | -6,28152E-10 | 9,19915E-07 | -2,12331E-09 | -6,3681E-10 |
| 246 | D Vertical | 1,10999E-07 | -1,1067E-07 | -1,70177E-08 | 9,42105E-08 | -9,38397E-08 | -1,70177E-08 | 7,74062E-08 | -7,70096E-08 | -1,70179E-08 |
| 246 | D transversal | 1,51155E-07 | 1,00182E-06 | 8,70207E-08 | 1,51284E-07 | 8,82098E-07 | 8,702E-08 | 1,49523E-07 | 7,62375E-07 | 8,70234E-08 |
| 246 | G Longitudinal | 1,57914E-08 | 1,34968E-07 | 1,37921E-08 | 1,55619E-08 | 1,15894E-07 | 1,37956E-08 | 1,51782E-08 | 9,67816E-08 | 1,39421E-08 |
| 246 | G Vertical | 2,04542E-07 | 6,46492E-10 | 5,90751E-10 | 2,03334E-07 | -3,66093E-10 | 7,57744E-10 | 1,98794E-07 | -3,15053E-09 | 7,52159E-09 |
| 246 | G transversal | -1,49238E-07 | -7,20497E-10 | -1,04094E-10 | -1,30201E-07 | -6,06647E-10 | -1,07688E-10 | -1,11174E-07 | -4,55509E-10 | -2,50548E-10 |
| 247 | D Longitudinal | 8,46249E-07 | -3,46656E-09 | -3,42779E-10 | 7,25597E-07 | -2,79635E-09 | -3,43361E-10 | 6,03057E-07 | -2,12925E-09 | -3,36676E-10 |
| 247 | D Vertical | -1,10442E-07 | 1,1067E-07 | 7,3858E-09 | -9,35945E-08 | 9,38397E-08 | 7,38582E-09 | -7,67625E-08 | 7,70098E-08 | 7,3856E-09 |
| 247 | D transversal | -1,61856E-07 | 1,00182E-06 | 8,65748E-08 | -1,5988E-07 | 8,82097E-07 | 8,65754E-08 | -1,56013E-07 | 7,62379E-07 | 8,65693E-08 |
| 247 | G Longitudinal | -1,38308E-08 | 1,34968E-07 | 1,38631E-08 | -1,39062E-08 | 1,15896E-07 | 1,38605E-08 | -1,3869E-08 | 9,68212E-08 | 1,38652E-08 |
| 247 | G Vertical | 2,00394E-07 | -6,46986E-10 | -7,87532E-10 | 2,01376E-07 | 2,58192E-10 | -6,67008E-10 | 2,00966E-07 | 1,33388E-09 | -9,13242E-10 |
| 247 | G transversal | -1,20498E-07 | -7,20508E-10 | -5,90541E-11 | -1,01319E-07 | -6,08972E-10 | -5,64479E-11 | -8,20885E-08 | -4,93552E-10 | -6,22451E-11 |
| 248 | D Longitudinal | 1,15564E-06 | 3,46656E-09 | 6,2856E-10 | 1,03683E-06 | 2,79632E-09 | 6,29222E-10 | 9,19915E-07 | 2,12868E-09 | 6,24505E-10 |
| 248 | D Vertical | -1,10999E-07 | -1,1067E-07 | -1,70177E-08 | -9,42105E-08 | -9,38397E-08 | -1,70177E-08 | -7,74062E-08 | -7,70098E-08 | -1,70175E-08 |
| 248 | D transversal | -1,51155E-07 | 1,00182E-06 | 8,70205E-08 | -1,51284E-07 | 8,82097E-07 | 8,70211E-08 | -1,49523E-07 | 7,6238E-07 | 8,70111E-08 |
| 248 | G Longitudinal | -1,57914E-08 | 1,34968E-07 | 1,3792E-08 | -1,55618E-08 | 1,15894E-07 | 1,37957E-08 | -1,51777E-08 | 9,67821E-08 | 1,3941E-08 |
| 248 | G Vertical | 2,04538E-07 | -6,46781E-10 | -5,90581E-10 | 2,03329E-07 | 3,65474E-10 | -7,56678E-10 | 1,98768E-07 | 3,14774E-09 | -7,5152E-09 |
| 248 | G transversal | -1,49238E-07 | 7,20504E-10 | 1,04106E-10 | -1,30201E-07 | 6,06692E-10 | 1,0759E-10 | -1,11173E-07 | 4,55143E-10 | 2,51387E-10 |
| 249 | D Longitudinal | 1,05092E-06 | 2,04852E-16 | -7,48345E-14 | 9,45869E-07 | -2,14581E-13 | 5,07615E-13 | 8,42651E-07 | 2,52824E-12 | -5,79585E-12 |
| 249 | D Vertical | 6,18519E-16 | -1,08282E-07 | -1,64112E-08 | 8,31626E-16 | -9,20354E-08 | -1,64112E-08 | 4,2707E-15 | -7,57888E-08 | -1,64092E-08 |
| 249 | D transversal | -5,38194E-16 | 9,09717E-07 | 7,78087E-08 | -7,24845E-16 | 8,02726E-07 | 7,78086E-08 | -3,50122E-15 | 6,95736E-07 | 7,78067E-08 |
| 249 | G Longitudinal | -1,21548E-15 | 1,27586E-07 | 1,27654E-08 | -1,61732E-15 | 1,09946E-07 | 1,27654E-08 | -7,5544E-15 | 9,2308E-08 | 1,27613E-08 |
| 249 | G Vertical | 1,66835E-07 | -6,29867E-16 | 8,72037E-14 | 1,67074E-07 | 2,47781E-13 | -5,86748E-13 | 1,65195E-07 | -2,93657E-12 | 6,73189E-12 |
| 249 | G transversal | -1,31914E-07 | 1,1566E-16 | 5,27613E-15 | -1,13728E-07 | 9,29674E-15 | -2,21668E-14 | -9,55672E-08 | -1,33209E-13 | 3,05369E-13 |
| 250 | D Longitudinal | 1,04682E-06 | -4,81971E-09 | -8,54361E-10 | 9,42108E-07 | -3,91267E-09 | -8,53742E-10 | 8,39209E-07 | -3,00315E-09 | -8,58303E-10 |

APOYO 2

| DESPLAZAMIENTOS (metros) | | C4 | | | C5 | | | C6 | | |
|---|---|---|---|---|---|---|---|---|---|---|
| Nudo | Desplazamiento | L | T | V | L | T | V | L | T | V |
| 250 | D Vertical | 1,06378E-07 | -1,06551E-07 | -1,60735E-08 | 9,05063E-08 | -9,06581E-08 | -1,60734E-08 | 7,46404E-08 | -7,47655E-08 | -1,60737E-08 |
| 250 | D transversal | 1,42549E-07 | 9,00871E-07 | 7,68262E-08 | 1,42818E-07 | 7,95242E-07 | 7,68256E-08 | 1,41268E-07 | 6,8961E-07 | 7,68315E-08 |
| 250 | G Longitudinal | 1,54527E-08 | 1,27154E-07 | 1,27059E-08 | 1,5257E-08 | 1,09588E-07 | 1,27092E-08 | 1,48907E-08 | 9,19875E-08 | 1,28446E-08 |
| 250 | G Vertical | 1,97179E-07 | 1,97413E-10 | 4,81963E-10 | 1,9607E-07 | -6,65441E-10 | 6,37168E-10 | 1,91872E-07 | -3,17504E-09 | 6,92341E-09 |
| 250 | G transversal | -1,41971E-07 | -2,61539E-09 | -4,62713E-10 | -1,24393E-07 | -2,11836E-09 | -4,66094E-10 | -1,06852E-07 | -1,58626E-09 | -6,00421E-10 |
| 251 | D Longitudinal | 7,52923E-07 | -4,81971E-09 | -4,61174E-10 | 6,4648E-07 | -3,91222E-09 | -4,61783E-10 | 5,38221E-07 | -3,00772E-09 | -4,55425E-10 |
| 251 | D Vertical | -1,06636E-07 | 1,06551E-07 | 6,97067E-09 | -9,06937E-08 | 9,06581E-08 | 6,97069E-09 | -7,47459E-08 | 7,47657E-08 | 6,97043E-09 |
| 251 | D transversal | -1,5451E-07 | 9,00871E-07 | 7,63364E-08 | -1,52511E-07 | 7,95242E-07 | 7,6337E-08 | -1,48694E-07 | 6,89615E-07 | 7,63311E-08 |
| 251 | G Longitudinal | -1,3854E-08 | 1,27154E-07 | 1,27619E-08 | -1,38888E-08 | 1,0959E-07 | 1,27595E-08 | -1,37908E-08 | 9,20238E-08 | 1,27647E-08 |
| 251 | G Vertical | 1,93209E-07 | -1,97873E-10 | -6,85563E-10 | 1,94115E-07 | 5,65157E-10 | -5,73545E-10 | 1,93736E-07 | 1,48663E-09 | -8,02299E-10 |
| 251 | G transversal | -1,12988E-07 | -2,6154E-09 | -2,56169E-10 | -9,52582E-08 | -2,12055E-09 | -2,53715E-10 | -7,74532E-08 | -1,622E-09 | -2,59253E-10 |
| 252 | D Longitudinal | 1,04682E-06 | 4,81971E-09 | 8,54212E-10 | 9,42108E-07 | 3,91225E-09 | 8,54751E-10 | 8,39209E-07 | 3,00817E-09 | 8,46775E-10 |
| 252 | D Vertical | -1,06378E-07 | -1,06551E-07 | -1,60734E-08 | -9,05063E-08 | -9,06581E-08 | -1,60735E-08 | -7,46404E-08 | -7,47657E-08 | -1,60733E-08 |
| 252 | D transversal | -1,42549E-07 | 9,00871E-07 | 7,6826E-08 | -1,42818E-07 | 7,95242E-07 | 7,68266E-08 | -1,41268E-07 | 6,89615E-07 | 7,68199E-08 |
| 252 | G Longitudinal | -1,54526E-08 | 1,27154E-07 | 1,27059E-08 | -1,52569E-08 | 1,09588E-07 | 1,27093E-08 | -1,48902E-08 | 9,1988E-08 | 1,28434E-08 |
| 252 | G Vertical | 1,97176E-07 | -1,97682E-10 | -4,81806E-10 | 1,96065E-07 | 6,64865E-10 | -6,36174E-10 | 1,91848E-07 | 3,17246E-09 | -6,91752E-09 |
| 252 | G transversal | -1,41971E-07 | 2,6154E-09 | 4,62725E-10 | -1,24393E-07 | 2,1184E-09 | 4,6599E-10 | -1,06851E-07 | 1,58586E-09 | 6,01327E-10 |
| 253 | D Longitudinal | 9,52564E-07 | -6,41418E-09 | -1,12235E-09 | 8,59717E-07 | -5,22494E-09 | -1,12178E-09 | 7,68609E-07 | -4,03331E-09 | -1,12624E-09 |
| 253 | D Vertical | 1,02737E-07 | -1,02431E-07 | -1,52242E-08 | 8,77264E-08 | -8,7378E-08 | -1,52241E-08 | 7,27393E-08 | -7,23247E-08 | -1,52244E-08 |
| 253 | D transversal | 1,35139E-07 | 8,13994E-07 | 6,82061E-08 | 1,35449E-07 | 7,20255E-07 | 6,82056E-08 | 1,34017E-07 | 6,26514E-07 | 6,82111E-08 |
| 253 | G Longitudinal | 1,44831E-08 | 1,20679E-07 | 1,18752E-08 | 1,44317E-08 | 1,04303E-07 | 1,18783E-08 | 1,41994E-08 | 8,78929E-08 | 1,20047E-08 |
| 253 | G Vertical | 1,90991E-07 | 1,72344E-10 | 4,37406E-10 | 1,89896E-07 | -6,31574E-10 | 5,82959E-10 | 1,85898E-07 | -2,97981E-09 | 6,47821E-09 |
| 253 | G transversal | -1,3517E-07 | -2,05727E-09 | -3,32903E-10 | -1,18877E-07 | -1,70269E-09 | -3,36082E-10 | -1,0264E-07 | -1,31517E-09 | -4,62232E-10 |
| 254 | D Longitudinal | 6,73201E-07 | -6,41418E-09 | -6,02358E-10 | 5,78737E-07 | -5,22452E-09 | -6,02926E-10 | 4,82533E-07 | -4,03763E-09 | -5,9702E-10 |
| 254 | D Vertical | -1,02284E-07 | 1,02431E-07 | 6,60305E-09 | -8,71951E-08 | 8,7378E-08 | 6,60307E-09 | -7,20829E-08 | 7,23249E-08 | 6,6028E-09 |
| 254 | D transversal | -1,4732E-07 | 8,13994E-07 | 6,77149E-08 | -1,45392E-07 | 7,20255E-07 | 6,77154E-08 | -1,41724E-07 | 6,26519E-07 | 6,77093E-08 |
| 254 | G Longitudinal | -1,4374E-08 | 1,20679E-07 | 1,18691E-08 | -1,42615E-08 | 1,04305E-07 | 1,18669E-08 | -1,40038E-08 | 8,79269E-08 | 1,18716E-08 |
| 254 | G Vertical | 1,86506E-07 | -1,72775E-10 | -6,49861E-10 | 1,87404E-07 | 5,37525E-10 | -5,44808E-10 | 1,8709E-07 | 1,39635E-09 | -7,59103E-10 |
| 254 | G transversal | -1,06171E-07 | -2,05728E-09 | -1,79539E-10 | -8,97218E-08 | -1,70474E-09 | -1,7723E-10 | -7,31795E-08 | -1,34873E-09 | -1,82436E-10 |
| 255 | D Longitudinal | 9,52564E-07 | 6,41418E-09 | 1,12222E-09 | 8,59717E-07 | 5,22454E-09 | 1,12273E-09 | 7,68609E-07 | 4,03802E-09 | 1,11545E-09 |
| 255 | D Vertical | -1,02737E-07 | -1,02431E-07 | -1,52241E-08 | -8,77264E-08 | -8,7378E-08 | -1,52242E-08 | -7,27393E-08 | -7,23249E-08 | -1,52239E-08 |
| 255 | D transversal | -1,35139E-07 | 8,13994E-07 | 6,8206E-08 | -1,35449E-07 | 7,20255E-07 | 6,82065E-08 | -1,34017E-07 | 6,26519E-07 | 6,82003E-08 |
| 255 | G Longitudinal | -1,4483E-08 | 1,20679E-07 | 1,18752E-08 | -1,44316E-08 | 1,04303E-07 | 1,18783E-08 | -1,4199E-08 | 8,78934E-08 | 1,20036E-08 |
| 255 | G Vertical | 1,90988E-07 | -1,72596E-10 | -4,37257E-10 | 1,89892E-07 | 6,31034E-10 | -5,82029E-10 | 1,85875E-07 | 2,97738E-09 | -6,47264E-09 |
| 255 | G transversal | -1,3517E-07 | 2,05728E-09 | 3,32916E-10 | -1,18877E-07 | 1,70273E-09 | 3,35975E-10 | -1,02639E-07 | 1,31476E-09 | 4,63173E-10 |
| 256 | D Longitudinal | 8,09071E-07 | 2,42797E-17 | 2,42351E-10 | 7,15788E-07 | 1,18457E-14 | 2,42319E-10 | 6,22505E-07 | 2,06894E-13 | 2,41581E-10 |
| 256 | D Vertical | -1,01766E-07 | 2,01376E-17 | -4,27782E-09 | -8,68616E-08 | 7,39695E-15 | -4,27784E-09 | -7,19571E-08 | 1,60731E-13 | -4,27839E-09 |
| 256 | D transversal | -1,40862E-07 | 8,04341E-07 | 6,6892E-08 | -1,40056E-07 | 7,12076E-07 | 6,68925E-08 | -1,37508E-07 | 6,19814E-07 | 6,68867E-08 |
| 256 | G Longitudinal | -6,09266E-09 | 1,18127E-07 | 1,21432E-08 | -6,04124E-09 | 1,01378E-07 | 1,21433E-08 | -5,94149E-09 | 8,46284E-08 | 1,21431E-08 |
| 256 | G Vertical | 1,58727E-07 | 6,84117E-09 | 8,91009E-10 | 1,59641E-07 | 5,61188E-09 | 8,9155E-10 | 1,62513E-07 | 4,38891E-09 | 8,73365E-10 |
| 256 | G transversal | -1,19965E-07 | 3,86103E-17 | 6,64617E-11 | -1,03728E-07 | 1,3973E-14 | 6,64243E-11 | -8,74909E-08 | 2,35306E-13 | 6,55816E-11 |
| 257 | D Longitudinal | 5,83973E-07 | -7,24186E-09 | -6,44616E-10 | 5,0271E-07 | -5,95572E-09 | -6,45141E-10 | 4,19814E-07 | -4,67214E-09 | -6,39704E-10 |
| 257 | D Vertical | -9,75275E-08 | 9,73581E-08 | 6,14471E-09 | -8,34376E-08 | 8,3335E-08 | 6,14474E-09 | -6,93061E-08 | 6,93121E-08 | 6,14445E-09 |
| 257 | D transversal | -1,38333E-07 | 7,15824E-07 | 5,8184E-08 | -1,3657E-07 | 6,35254E-07 | 5,81845E-08 | -1,33171E-07 | 5,54687E-07 | 5,81786E-08 |

APOYO 2

| DESPLAZAMIENTOS (metros) | | C4 | | | C5 | | | C6 | | |
|---|---|---|---|---|---|---|---|---|---|---|
| Nudo | Desplazamiento | L | T | V | L | T | V | L | T | V |
| 257 | G Longitudinal | -1,43732E-08 | 1,12652E-07 | 1,08209E-08 | -1,42236E-08 | 9,77116E-08 | 1,08189E-08 | -1,39182E-08 | 8,27686E-08 | 1,08222E-08 |
| 257 | G Vertical | 1,78636E-07 | -1,08744E-10 | -6,05079E-10 | 1,79543E-07 | 5,36603E-10 | -5,07534E-10 | 1,79333E-07 | 1,31979E-09 | -7,06275E-10 |
| 257 | G transversal | -9,83417E-08 | -1,91483E-10 | 1,7421E-11 | -8,33375E-08 | -2,20329E-10 | 1,95538E-11 | -6,8223E-08 | -2,45976E-10 | 1,47629E-11 |
| 258 | D Longitudinal | 8,45722E-07 | 7,24186E-09 | 1,21989E-09 | 7,65941E-07 | 5,95574E-09 | 1,22035E-09 | 6,87792E-07 | 4,67252E-09 | 1,21354E-09 |
| 258 | D Vertical | -9,71738E-08 | -9,73581E-08 | -1,41887E-08 | -8,3171E-08 | -8,3335E-08 | -1,41887E-08 | -6,92097E-08 | -6,93121E-08 | -1,41884E-08 |
| 258 | D transversal | -1,26736E-07 | 7,15824E-07 | 5,86422E-08 | -1,27015E-07 | 6,35254E-07 | 5,86428E-08 | -1,25659E-07 | 5,54687E-07 | 5,86381E-08 |
| 258 | G Longitudinal | -1,40591E-08 | 1,12652E-07 | 1,08438E-08 | -1,40435E-08 | 9,77097E-08 | 1,08467E-08 | -1,38386E-08 | 8,27376E-08 | 1,09611E-08 |
| 258 | G Vertical | 1,83842E-07 | -1,08578E-10 | -3,83771E-10 | 1,82757E-07 | 6,23425E-10 | -5,18186E-10 | 1,78967E-07 | 2,78776E-09 | -5,98733E-09 |
| 258 | G transversal | -1,27046E-07 | 1,91479E-10 | -2,32314E-11 | -1,122E-07 | 2,18477E-10 | -2,0417E-11 | -9,74313E-08 | 2,14629E-10 | 9,68821E-11 |
| 259 | D Longitudinal | 9,2555E-07 | -5,57492E-17 | 8,52862E-14 | 7,92691E-07 | 2,3631E-13 | -5,59274E-13 | 6,57894E-07 | -2,81783E-12 | 6,45971E-12 |
| 259 | D Vertical | -7,41592E-16 | 1,12824E-07 | 7,57935E-09 | -7,11736E-16 | 9,55014E-08 | 7,5793E-09 | -3,52569E-16 | 7,81792E-08 | 7,57931E-09 |
| 259 | D transversal | -2,157E-16 | 1,09167E-06 | 9,59739E-08 | -2,03923E-16 | 9,59002E-07 | 9,59739E-08 | -2,28972E-17 | 8,26335E-07 | 9,59738E-08 |
| 259 | G Longitudinal | -1,26634E-15 | 1,41548E-07 | 1,48099E-08 | -1,27359E-15 | 1,21146E-07 | 1,48099E-08 | -1,49211E-15 | 1,00745E-07 | 1,48087E-08 |
| 259 | G Vertical | 2,02552E-07 | 3,13833E-16 | 1,03094E-13 | 2,00155E-07 | 2,83716E-13 | -6,71029E-13 | 1,95437E-07 | -3,38374E-12 | 7,75704E-12 |
| 259 | G transversal | -1,3341E-07 | -1,43389E-16 | -4,70559E-15 | -1,1247E-07 | -5,66659E-15 | 1,36646E-14 | -9,15536E-08 | 9,89157E-14 | -2,26751E-13 |
| 260 | D Longitudinal | 1,00515E-06 | -1,57906E-17 | -1,83683E-10 | 8,84656E-07 | -1,71783E-15 | -1,83678E-10 | 7,64167E-07 | -1,30503E-14 | -1,8362E-10 |
| 260 | D Vertical | 1,11061E-07 | -1,2093E-17 | -4,83211E-09 | 9,41799E-08 | -3,76229E-15 | -4,8321E-09 | 7,72992E-08 | -4,31536E-14 | -4,83192E-09 |
| 260 | D transversal | 1,56857E-07 | 1,00065E-06 | 8,65634E-08 | 1,5593E-07 | 8,81252E-07 | 8,65628E-08 | 1,53103E-07 | 7,61852E-07 | 8,65695E-08 |
| 260 | G Longitudinal | 6,51715E-09 | 1,33101E-07 | 1,4208E-08 | 6,47535E-09 | 1,13504E-07 | 1,4208E-08 | 6,43006E-09 | 9,39065E-08 | 1,42086E-08 |
| 260 | G Vertical | 1,8354E-07 | -5,28158E-09 | -7,384E-10 | 1,84629E-07 | -4,26353E-09 | -7,37587E-10 | 1,87929E-07 | -3,24539E-09 | -7,32415E-10 |
| 260 | G transversal | -1,34841E-07 | -2,44533E-16 | -2,15132E-11 | -1,15748E-07 | -3,4337E-14 | -2,14218E-11 | -9,66561E-08 | -6,20385E-13 | -1,92282E-11 |
| 261 | D Longitudinal | 8,46249E-07 | 3,46656E-09 | 3,4294E-10 | 7,25597E-07 | 2,7968E-09 | 3,42291E-10 | 6,03057E-07 | 2,12388E-09 | 3,48981E-10 |
| 261 | D Vertical | 1,10442E-07 | 1,1067E-07 | 7,38581E-09 | 9,35945E-08 | 9,38397E-08 | 7,38579E-09 | 7,67625E-08 | 7,70096E-08 | 7,38598E-09 |
| 261 | D transversal | 1,61856E-07 | 1,00182E-06 | 8,65749E-08 | 1,5988E-07 | 8,82098E-07 | 8,65744E-08 | 1,56013E-07 | 7,62374E-07 | 8,65816E-08 |
| 261 | G Longitudinal | 1,38307E-08 | 1,34968E-07 | 1,38631E-08 | 1,39061E-08 | 1,15896E-07 | 1,38604E-08 | 1,3869E-08 | 9,68207E-08 | 1,38662E-08 |
| 261 | G Vertical | 2,0039E-07 | 6,47247E-10 | 7,87921E-10 | 2,01372E-07 | -2,58087E-10 | 6,6709E-10 | 2,00965E-07 | -1,33387E-09 | 9,13238E-10 |
| 261 | G transversal | -1,20498E-07 | 7,20513E-10 | 5,9047E-11 | -1,01319E-07 | 6,08942E-10 | 5,65255E-11 | -8,20885E-08 | 4,93977E-10 | 6,12706E-11 |
| 262 | D Longitudinal | 7,55845E-07 | -2,02003E-16 | 7,48359E-14 | 6,49061E-07 | 2,14583E-13 | -5,07619E-13 | 5,40449E-07 | -2,52823E-12 | 5,79583E-12 |
| 262 | D Vertical | 6,51924E-16 | 1,08282E-07 | 7,14712E-09 | 6,25544E-16 | 9,20354E-08 | 7,14715E-09 | 2,69484E-16 | 7,57882E-08 | 7,14713E-09 |
| 262 | D transversal | 5,58234E-16 | 9,09717E-07 | 7,73278E-08 | 5,47974E-16 | 8,02726E-07 | 7,73278E-08 | 4,00111E-16 | 6,95736E-07 | 7,7328E-08 |
| 262 | G Longitudinal | 1,25558E-15 | 1,27586E-07 | 1,28116E-08 | 1,25105E-15 | 1,09946E-07 | 1,28117E-08 | 1,23983E-15 | 9,23066E-08 | 1,28122E-08 |
| 262 | G Vertical | 1,80135E-07 | 1,62017E-16 | 8,75188E-14 | 1,7788E-07 | 2,48803E-13 | -5,88113E-13 | 1,73511E-07 | -2,93249E-12 | 6,7226E-12 |
| 262 | G transversal | -1,19768E-07 | -1,07578E-16 | -5,27295E-15 | -1,01488E-07 | -9,28619E-15 | 2,21528E-14 | -8,31842E-08 | 1,33251E-13 | -3,05465E-13 |
| 263 | D Longitudinal | 7,52923E-07 | 4,81971E-09 | 4,61323E-10 | 6,4648E-07 | 3,91265E-09 | 4,60773E-10 | 5,38221E-07 | 3,00269E-09 | 4,66955E-10 |
| 263 | D Vertical | 1,06636E-07 | 1,06551E-07 | 6,97068E-09 | 9,06937E-08 | 9,06581E-08 | 6,97066E-09 | 7,47459E-08 | 7,47655E-08 | 6,97089E-09 |
| 263 | D transversal | 1,5451E-07 | 9,00871E-07 | 7,63366E-08 | 1,52511E-07 | 7,95242E-07 | 7,6336E-08 | 1,48694E-07 | 6,8961E-07 | 7,63426E-08 |
| 263 | G Longitudinal | 1,38539E-08 | 1,27154E-07 | 1,27619E-08 | 1,38887E-08 | 1,0959E-07 | 1,27595E-08 | 1,37908E-08 | 9,20234E-08 | 1,27657E-08 |
| 263 | G Vertical | 1,93206E-07 | 1,98115E-10 | 6,85924E-10 | 1,94112E-07 | -5,65061E-10 | 5,73625E-10 | 1,93735E-07 | -1,4866E-09 | 8,02246E-10 |
| 263 | G transversal | -1,12988E-07 | 2,61541E-09 | 2,56161E-10 | -9,52583E-08 | 2,12051E-09 | 2,53799E-10 | -7,74533E-08 | 1,62245E-09 | 2,58218E-10 |
| 264 | D Longitudinal | 6,73201E-07 | 6,41418E-09 | 6,02496E-10 | 5,78737E-07 | 5,22492E-09 | 6,01976E-10 | 4,82533E-07 | 4,03292E-09 | 6,07816E-10 |
| 264 | D Vertical | 1,02284E-07 | 1,02431E-07 | 6,60306E-09 | 8,71951E-08 | 8,7378E-08 | 6,60303E-09 | 7,20829E-08 | 7,23247E-08 | 6,60332E-09 |
| 264 | D transversal | 1,4732E-07 | 8,13994E-07 | 6,7715E-08 | 1,45392E-07 | 7,20255E-07 | 6,77145E-08 | 1,41724E-07 | 6,26514E-07 | 6,77201E-08 |
| 264 | G Longitudinal | 1,4374E-08 | 1,20679E-07 | 1,18691E-08 | 1,42614E-08 | 1,04305E-07 | 1,18668E-08 | 1,40038E-08 | 8,79265E-08 | 1,18727E-08 |
| 264 | G Vertical | 1,86502E-07 | 1,73002E-10 | 6,502E-10 | 1,874E-07 | -5,37434E-10 | 5,44879E-10 | 1,87088E-07 | -1,39634E-09 | 7,59096E-10 |

APOYO 2

| DESPLAZAMIENTOS (metros) | | C4 | | | C5 | | | C6 | | |
|---|---|---|---|---|---|---|---|---|---|---|
| Nudo | Desplazamiento | L | T | V | L | T | V | L | T | V |
| 264 | G transversal | -1,06171E-07 | 2,05729E-09 | 1,7953E-10 | -8,97219E-08 | 1,70471E-09 | 1,77318E-10 | -7,31795E-08 | 1,3492E-09 | 1,81375E-10 |
| 265 | D Longitudinal | 8,09071E-07 | -8,10816E-17 | -2,42351E-10 | 7,15788E-07 | -1,1922E-14 | -2,42319E-10 | 6,22505E-07 | -2,07186E-13 | -2,4158E-10 |
| 265 | D Vertical | 1,01766E-07 | 4,3285E-17 | -4,27782E-09 | 8,68616E-08 | 7,43827E-15 | -4,27784E-09 | 7,19571E-08 | 1,60831E-13 | -4,27839E-09 |
| 265 | D transversal | 1,40862E-07 | 8,04341E-07 | 6,68921E-08 | 1,40056E-07 | 7,12076E-07 | 6,68916E-08 | 1,37508E-07 | 6,19809E-07 | 6,68975E-08 |
| 265 | G Longitudinal | 6,09266E-09 | 1,18127E-07 | 1,21432E-08 | 6,04124E-09 | 1,01378E-07 | 1,21432E-08 | 5,94149E-09 | 8,46281E-08 | 1,21438E-08 |
| 265 | G Vertical | 1,58727E-07 | -6,84117E-09 | -8,91164E-10 | 1,59641E-07 | -5,61234E-09 | -8,90473E-10 | 1,62513E-07 | -4,38359E-09 | -8,85566E-10 |
| 265 | G transversal | -1,19965E-07 | -8,6413E-17 | -6,64617E-11 | -1,03728E-07 | -1,40357E-14 | -6,64242E-11 | -8,74909E-08 | -2,35549E-13 | -6,5581E-11 |
| 266 | D Longitudinal | 8,45722E-07 | -7,24186E-09 | -1,22001E-09 | 7,65941E-07 | -5,95611E-09 | -1,21948E-09 | 6,87792E-07 | -4,66821E-09 | -1,22344E-09 |
| 266 | D Vertical | 9,71738E-08 | -9,73581E-08 | -1,41887E-08 | 8,3171E-08 | -8,3335E-08 | -1,41886E-08 | 6,92097E-08 | -6,93119E-08 | -1,4189E-08 |
| 266 | D transversal | 1,26736E-07 | 7,15824E-07 | 5,86424E-08 | 1,27015E-07 | 6,35255E-07 | 5,86419E-08 | 1,25659E-07 | 5,54682E-07 | 5,8648E-08 |
| 266 | G Longitudinal | 1,40591E-08 | 1,12652E-07 | 1,08439E-08 | 1,40436E-08 | 9,77098E-08 | 1,08466E-08 | 1,38391E-08 | 8,27371E-08 | 1,09623E-08 |
| 266 | G Vertical | 1,83845E-07 | 1,08344E-10 | 3,83908E-10 | 1,82761E-07 | -6,23927E-10 | 5,19052E-10 | 1,78988E-07 | -2,79E-09 | 5,99246E-09 |
| 266 | G transversal | -1,27046E-07 | -1,91474E-10 | 2,32438E-11 | -1,122E-07 | -2,18429E-10 | 2,03091E-11 | -9,74317E-08 | -2,15051E-10 | -9,59135E-11 |
| 267 | D Longitudinal | 5,83973E-07 | 7,24186E-09 | 6,44741E-10 | 5,0271E-07 | 5,95609E-09 | 6,44265E-10 | 4,19814E-07 | 4,66782E-09 | 6,49602E-10 |
| 267 | D Vertical | 9,75275E-08 | 9,73581E-08 | 6,14472E-09 | 8,34376E-08 | 8,3335E-08 | 6,1447E-09 | 6,93061E-08 | 6,93119E-08 | 6,14502E-09 |
| 267 | D transversal | 1,38333E-07 | 7,15824E-07 | 5,81841E-08 | 1,3657E-07 | 6,35255E-07 | 5,81836E-08 | 1,33171E-07 | 5,54683E-07 | 5,81885E-08 |
| 267 | G Longitudinal | 1,43731E-08 | 1,12652E-07 | 1,08209E-08 | 1,42235E-08 | 9,77116E-08 | 1,08188E-08 | 1,39181E-08 | 8,27681E-08 | 1,08232E-08 |
| 267 | G Vertical | 1,78633E-07 | 1,08955E-10 | 6,05393E-10 | 1,7954E-07 | -5,36519E-10 | 5,07605E-10 | 1,79331E-07 | -1,31976E-09 | 7,06224E-10 |
| 267 | G transversal | -9,83418E-08 | 1,91487E-10 | -1,74296E-11 | -8,33376E-08 | 2,20293E-10 | -1,94627E-11 | -6,8223E-08 | 2,46446E-10 | -1,58406E-11 |
| 268 | D Longitudinal | 5,85786E-07 | -3,05724E-16 | 6,29609E-14 | 5,04365E-07 | 1,86664E-13 | -4,41389E-13 | 4,21297E-07 | -2,1744E-12 | 4,98469E-12 |
| 268 | D Vertical | -3,60633E-16 | 9,73882E-08 | 6,13418E-09 | -3,45862E-16 | 8,33642E-08 | 6,13417E-09 | -1,37222E-16 | 6,93402E-08 | 6,13419E-09 |
| 268 | D transversal | 1,16188E-16 | 7,24817E-07 | 5,91452E-08 | 1,09245E-16 | 6,42907E-07 | 5,91452E-08 | -2,45232E-17 | 5,60996E-07 | 5,91451E-08 |
| 268 | G Longitudinal | 5,5113E-16 | 1,1296E-07 | 1,08559E-08 | 5,09537E-16 | 9,79719E-08 | 1,08559E-08 | -1,76421E-16 | 8,29842E-08 | 1,08556E-08 |
| 268 | G Vertical | 1,55786E-07 | 6,95568E-17 | 7,11262E-14 | 1,53806E-07 | 2,08564E-13 | -4,927E-13 | 1,49991E-07 | -2,43052E-12 | 5,57185E-12 |
| 268 | G transversal | -1,04949E-07 | -6,02293E-17 | -5,57453E-15 | -8,94266E-08 | -1,2048E-14 | 2,86363E-14 | -7,38386E-08 | 1,58193E-13 | -3,62646E-13 |
| 269 | D Longitudinal | 8,48712E-07 | 2,98569E-16 | -6,29635E-14 | 7,68784E-07 | -1,86674E-13 | 4,41403E-13 | 6,90503E-07 | 2,17436E-12 | -4,9846E-12 |
| 269 | D Vertical | -3,42203E-16 | -9,73882E-08 | -1,42006E-08 | -4,58974E-16 | -8,33642E-08 | -1,42007E-08 | -2,37683E-15 | -6,93399E-08 | -1,42017E-08 |
| 269 | D transversal | -1,09688E-16 | 7,24817E-07 | 5,96251E-08 | -1,52235E-16 | 6,42907E-07 | 5,96251E-08 | -8,28832E-16 | 5,60996E-07 | 5,96247E-08 |
| 269 | G Longitudinal | -5,24617E-16 | 1,1296E-07 | 1,08764E-08 | -7,50878E-16 | 9,79719E-08 | 1,08763E-08 | -3,99032E-15 | 8,29847E-08 | 1,08742E-08 |
| 269 | G Vertical | 1,42699E-07 | -7,47691E-16 | 7,08008E-14 | 1,4301E-07 | 2,07483E-13 | -4,91226E-13 | 1,4148E-07 | -2,43468E-12 | 5,58135E-12 |
| 269 | G transversal | -1,17453E-07 | 8,15226E-17 | 5,58297E-15 | -1,02041E-07 | 1,20763E-14 | -2,86748E-14 | -8,66943E-08 | -1,58084E-13 | 3,62397E-13 |
| 270 | D Longitudinal | 5,07871E-07 | 6,63234E-09 | 5,5898E-10 | 4,37708E-07 | 5,50596E-09 | 5,58511E-10 | 3,66018E-07 | 4,37725E-09 | 5,6345E-10 |
| 270 | D Vertical | 9,22575E-08 | 9,23424E-08 | 5,73652E-09 | 7,91122E-08 | 7,92454E-08 | 5,73649E-09 | 6,5911E-08 | 6,61483E-08 | 5,73682E-09 |
| 270 | D transversal | 1,30087E-07 | 6,31821E-07 | 5,02096E-08 | 1,28459E-07 | 5,62268E-07 | 5,02092E-08 | 1,25301E-07 | 4,92712E-07 | 5,02142E-08 |
| 270 | G Longitudinal | 1,3894E-08 | 1,05192E-07 | 9,89342E-09 | 1,38009E-08 | 9,15457E-08 | 9,89143E-09 | 1,35431E-08 | 7,78969E-08 | 9,89493E-09 |
| 270 | G Vertical | 1,71404E-07 | 5,61957E-10 | 6,28498E-10 | 1,72363E-07 | -1,16328E-10 | 5,36914E-10 | 1,7227E-07 | -9,23575E-10 | 7,22685E-10 |
| 270 | G transversal | -9,16014E-08 | -1,21149E-09 | -1,2588E-10 | -7,78057E-08 | -9,59407E-10 | -1,27763E-10 | -6,38879E-08 | -7,0977E-10 | -1,24441E-10 |
| 271 | D Longitudinal | 7,53389E-07 | -6,63234E-09 | -1,07464E-09 | 6,84583E-07 | -5,50595E-09 | -1,07419E-09 | 6,17303E-07 | -4,3771E-09 | -1,07965E-09 |
| 271 | D Vertical | 9,26422E-08 | -9,23424E-08 | -1,32541E-08 | 7,95899E-08 | -7,92454E-08 | -1,3254E-08 | 6,65935E-08 | -6,61483E-08 | -1,32544E-08 |
| 271 | D transversal | 1,1894E-07 | 6,31821E-07 | 5,0643E-08 | 1,19208E-07 | 5,62268E-07 | 5,06425E-08 | 1,17947E-07 | 4,92712E-07 | 5,06477E-08 |
| 271 | G Longitudinal | 1,40731E-08 | 1,05192E-07 | 9,89454E-09 | 1,40009E-08 | 9,1544E-08 | 9,89715E-09 | 1,37329E-08 | 7,78679E-08 | 1,00048E-08 |
| 271 | G Vertical | 1,77814E-07 | 5,61385E-10 | 4,04993E-10 | 1,76685E-07 | -1,98188E-10 | 5,31555E-10 | 1,73031E-07 | -2,3005E-09 | 5,65732E-09 |
| 271 | G transversal | -1,19863E-07 | 1,2115E-09 | 2,38626E-10 | -1,06227E-07 | 9,61138E-10 | 2,35896E-10 | -9,26817E-08 | 7,38909E-10 | 1,28049E-10 |
| 272 | D Longitudinal | 5,07871E-07 | -6,63234E-09 | -5,58866E-10 | 4,37708E-07 | -5,50562E-09 | -5,59317E-10 | 3,66018E-07 | -4,3812E-09 | -5,54384E-10 |

APOYO 2

| DESPLAZAMIENTOS (metros) | | C4 | | | C5 | | | C6 | | |
|---|---|---|---|---|---|---|---|---|---|---|
| Nudo | Desplazamiento | L | T | V | L | T | V | L | T | V |
| 272 | D Vertical | -9,22575E-08 | 9,23424E-08 | 5,73651E-09 | -7,91122E-08 | 7,92454E-08 | 5,73654E-09 | -6,5911E-08 | 6,61486E-08 | 5,73621E-09 |
| 272 | D transversal | -1,30087E-07 | 6,31821E-07 | 5,02095E-08 | -1,28459E-07 | 5,62268E-07 | 5,021E-08 | -1,25301E-07 | 4,92716E-07 | 5,02051E-08 |
| 272 | G Longitudinal | -1,38941E-08 | 1,05192E-07 | 9,8934E-09 | -1,38009E-08 | 9,15457E-08 | 9,89152E-09 | -1,35432E-08 | 7,78974E-08 | 9,89385E-09 |
| 272 | G Vertical | 1,71407E-07 | -5,61759E-10 | -6,28204E-10 | 1,72366E-07 | 1,16408E-10 | -5,36851E-10 | 1,72271E-07 | 9,23585E-10 | -7,22696E-10 |
| 272 | G transversal | -9,16013E-08 | 1,21149E-09 | 1,25871E-10 | -7,78056E-08 | 9,5937E-10 | 1,27856E-10 | -6,38879E-08 | 7,10242E-10 | 1,23357E-10 |
| 273 | D Longitudinal | 7,53389E-07 | 6,63234E-09 | 1,07452E-09 | 6,84583E-07 | 5,50561E-09 | 1,075E-09 | 6,17303E-07 | 4,38106E-09 | 1,07059E-09 |
| 273 | D Vertical | -9,26422E-08 | -9,23424E-08 | -1,32541E-08 | -7,95899E-08 | -7,92454E-08 | -1,32541E-08 | -6,65935E-08 | -6,61486E-08 | -1,32538E-08 |
| 273 | D transversal | -1,1894E-07 | 6,31821E-07 | 5,06429E-08 | -1,19208E-07 | 5,62268E-07 | 5,06433E-08 | -1,17947E-07 | 4,92716E-07 | 5,06386E-08 |
| 273 | G Longitudinal | -1,40731E-08 | 1,05192E-07 | 9,89452E-09 | -1,40008E-08 | 9,1544E-08 | 9,89722E-09 | -1,37325E-08 | 7,78684E-08 | 1,00036E-08 |
| 273 | G Vertical | 1,77811E-07 | -5,61604E-10 | -4,04864E-10 | 1,76681E-07 | 1,97718E-10 | -5,30747E-10 | 1,73011E-07 | 2,29838E-09 | -5,65248E-09 |
| 273 | G transversal | -1,19863E-07 | -1,2115E-09 | -2,38614E-10 | -1,06227E-07 | -9,6109E-10 | -2,36004E-10 | -9,26813E-08 | -7,39337E-10 | -1,27067E-10 |
| 274 | D Longitudinal | 6,34944E-07 | -5,22836E-19 | 2,49488E-10 | 5,64786E-07 | -1,03414E-15 | 2,49491E-10 | 4,94628E-07 | -1,33009E-14 | 2,49543E-10 |
| 274 | D Vertical | -9,21728E-08 | -2,53606E-17 | -3,75127E-09 | -7,9117E-08 | -1,16987E-14 | -3,75124E-09 | -6,6061E-08 | -2,23913E-13 | -3,75046E-09 |
| 274 | D transversal | -1,24914E-07 | 6,30497E-07 | 5,02038E-08 | -1,24234E-07 | 5,6125E-07 | 5,02042E-08 | -1,22018E-07 | 4,92006E-07 | 5,01992E-08 |
| 274 | G Longitudinal | -5,61123E-09 | 1,03272E-07 | 1,02381E-08 | -5,55444E-09 | 8,91507E-08 | 1,02381E-08 | -5,41778E-09 | 7,50293E-08 | 1,0238E-08 |
| 274 | G Vertical | 1,35356E-07 | 7,04767E-09 | 8,69021E-10 | 1,36102E-07 | 5,84877E-09 | 8,69471E-10 | 1,38515E-07 | 4,65479E-09 | 8,55467E-10 |
| 274 | G transversal | -1,05511E-07 | -1,97012E-17 | -4,31174E-11 | -9,18341E-08 | -3,71515E-15 | -4,31075E-11 | -7,81574E-08 | -7,01523E-14 | -4,28634E-11 |
| 275 | D Longitudinal | 6,66794E-07 | -5,49137E-09 | -8,64291E-10 | 6,07998E-07 | -4,58921E-09 | -8,63915E-10 | 5,50614E-07 | -3,68448E-09 | -8,7014E-10 |
| 275 | D Vertical | 8,70349E-08 | -8,72377E-08 | -1,2309E-08 | 7,49106E-08 | -7,50825E-08 | -1,2309E-08 | 6,28541E-08 | -6,29272E-08 | -1,23093E-08 |
| 275 | D transversal | 1,10948E-07 | 5,53558E-07 | 4,33658E-08 | 1,11261E-07 | 4,94041E-07 | 4,33654E-08 | 1,10159E-07 | 4,34522E-07 | 4,3369E-08 |
| 275 | G Longitudinal | 1,44328E-08 | 9,77624E-08 | 8,96885E-09 | 1,42758E-08 | 8,53648E-08 | 8,97134E-09 | 1,39159E-08 | 7,294E-08 | 9,07487E-09 |
| 275 | G Vertical | 1,72128E-07 | 9,2149E-10 | 4,14869E-10 | 1,70942E-07 | 1,46878E-10 | 5,33751E-10 | 1,67389E-07 | -1,88891E-09 | 5,34817E-09 |
| 275 | G transversal | -1,11701E-07 | 1,0032E-09 | 1,79597E-10 | -9,93803E-08 | 8,18681E-10 | 1,77034E-10 | -8,71612E-08 | 6,60499E-10 | 7,60189E-11 |
| 276 | D Longitudinal | 4,37372E-07 | -5,49138E-09 | -4,44053E-10 | 3,77344E-07 | -4,58892E-09 | -4,44441E-10 | 3,15904E-07 | -3,68855E-09 | -4,39995E-10 |
| 276 | D Vertical | -8,73904E-08 | 8,72377E-08 | 5,31606E-09 | -7,51688E-08 | 7,50825E-08 | 5,31609E-09 | -6,28794E-08 | 6,29274E-08 | 5,31573E-09 |
| 276 | D transversal | -1,22187E-07 | 5,53558E-07 | 4,2934E-08 | -1,20639E-07 | 4,9404E-07 | 4,29344E-08 | -1,17675E-07 | 4,34525E-07 | 4,29305E-08 |
| 276 | G Longitudinal | -1,32373E-08 | 9,77624E-08 | 9,00633E-09 | -1,32291E-08 | 8,53664E-08 | 9,00456E-09 | -1,30476E-08 | 7,29681E-08 | 9,00778E-09 |
| 276 | G Vertical | 1,64358E-07 | -9,21842E-10 | -6,44274E-10 | 1,6539E-07 | -2,23696E-10 | -5,58461E-10 | 1,65437E-07 | 5,95551E-10 | -7,32732E-10 |
| 276 | G transversal | -8,39601E-08 | 1,00319E-09 | 8,93368E-11 | -7,14802E-08 | 8,17021E-10 | 9,12016E-11 | -5,88688E-08 | 6,33682E-10 | 8,69269E-11 |
| 277 | D Longitudinal | 6,66794E-07 | 5,49138E-09 | 8,64189E-10 | 6,07998E-07 | 4,5889E-09 | 8,64651E-10 | 5,50614E-07 | 3,68807E-09 | 8,61906E-10 |
| 277 | D Vertical | -8,70349E-08 | -8,72377E-08 | -1,2309E-08 | -7,49106E-08 | -7,50825E-08 | -1,2309E-08 | -6,28541E-08 | -6,29274E-08 | -1,23087E-08 |
| 277 | D transversal | -1,10948E-07 | 5,53558E-07 | 4,33657E-08 | -1,11261E-07 | 4,9404E-07 | 4,33661E-08 | -1,10159E-07 | 4,34526E-07 | 4,33607E-08 |
| 277 | G Longitudinal | -1,44327E-08 | 9,77624E-08 | 8,96884E-09 | -1,42757E-08 | 8,53648E-08 | 8,97141E-09 | -1,39155E-08 | 7,29405E-08 | 9,07369E-09 |
| 277 | G Vertical | 1,72126E-07 | -9,21696E-10 | -4,14748E-10 | 1,70938E-07 | -1,4732E-10 | -5,32989E-10 | 1,6737E-07 | 1,88694E-09 | -5,34366E-09 |
| 277 | G transversal | -1,11701E-07 | -1,0032E-09 | -1,79585E-10 | -9,93802E-08 | -8,18633E-10 | -1,77142E-10 | -8,71608E-08 | -6,60928E-10 | -7,50367E-11 |
| 278 | D Longitudinal | 6,6284E-07 | 3,44479E-16 | -5,08372E-14 | 6,04699E-07 | -1,55339E-13 | 3,67177E-13 | 5,47971E-07 | 1,79126E-12 | -4,10638E-12 |
| 278 | D Vertical | 1,02155E-16 | -8,59612E-08 | -1,21064E-08 | 1,34686E-16 | -7,40164E-08 | -1,21064E-08 | 6,99729E-16 | -6,20718E-08 | -1,21061E-08 |
| 278 | D transversal | -1,36737E-16 | 5,55314E-07 | 4,36284E-08 | -1,80366E-16 | 4,9545E-07 | 4,36284E-08 | -8,49588E-16 | 4,35587E-07 | 4,3628E-08 |
| 278 | G Longitudinal | -2,56349E-16 | 9,74062E-08 | 8,92536E-09 | -3,36087E-16 | 8,50732E-08 | 8,92534E-09 | -1,49653E-15 | 7,27405E-08 | 8,92461E-09 |
| 278 | G Vertical | 1,19611E-07 | -6,96265E-16 | 5,53216E-14 | 1,19969E-07 | 1,67153E-13 | -3,95582E-13 | 1,188E-07 | -1,94123E-12 | 4,45015E-12 |
| 278 | G transversal | -1,01288E-07 | 4,53053E-17 | 5,55534E-15 | -8,85334E-08 | 1,35061E-14 | -3,20152E-14 | -7,58711E-08 | -1,68854E-13 | 3,87086E-13 |
| 279 | D Longitudinal | 4,81886E-07 | -5,72715E-19 | 2,0226E-10 | 4,31159E-07 | 1,76317E-15 | 2,02255E-10 | 3,80433E-07 | 2,91098E-14 | 2,0215E-10 |
| 279 | D Vertical | -8,19785E-08 | 2,68641E-17 | -3,23678E-09 | -7,07387E-08 | 1,35034E-14 | -3,23682E-09 | -5,94991E-08 | 2,39284E-13 | -3,23766E-09 |
| 279 | D transversal | -1,0875E-07 | 4,77103E-07 | 3,61206E-08 | -1,08196E-07 | 4,27281E-07 | 3,6121E-08 | -1,06345E-07 | 3,77462E-07 | 3,61169E-08 |

APOYO 2

| DESPLAZAMIENTOS (metros) | | C4 | | | C5 | | | C6 | | |
|---|---|---|---|---|---|---|---|---|---|---|
| Nudo | Desplazamiento | L | T | V | L | T | V | L | T | V |
| 279 | G Longitudinal | -5,37529E-09 | 8,82108E-08 | 8,41176E-09 | -5,3167E-09 | 7,66084E-08 | 8,4118E-09 | -5,15765E-09 | 6,50061E-08 | 8,41145E-09 |
| 279 | G Vertical | 1,13579E-07 | 5,70031E-09 | 6,51795E-10 | 1,14166E-07 | 4,80108E-09 | 6,52145E-10 | 1,16113E-07 | 3,906E-09 | 6,40184E-10 |
| 279 | G transversal | -8,95508E-08 | 6,33492E-17 | -1,61117E-12 | -7,84804E-08 | 2,99076E-14 | -1,69106E-12 | -6,74105E-08 | 5,10197E-13 | -3,5185E-12 |
| 280 | D Longitudinal | 5,8082E-07 | -5,02099E-09 | -7,71243E-10 | 5,31658E-07 | -4,21914E-09 | -7,70868E-10 | 4,83779E-07 | -3,4154E-09 | -7,74855E-10 |
| 280 | D Vertical | 8,1656E-08 | -8,14416E-08 | -1,13094E-08 | 7,05474E-08 | -7,0274E-08 | -1,13094E-08 | 5,95171E-08 | -5,91061E-08 | -1,13098E-08 |
| 280 | D transversal | 1,01987E-07 | 4,75661E-07 | 3,63131E-08 | 1,0241E-07 | 4,25892E-07 | 3,63127E-08 | 1,01548E-07 | 3,76121E-07 | 3,63158E-08 |
| 280 | G Longitudinal | 1,47381E-08 | 8,95011E-08 | 7,98245E-09 | 1,45328E-08 | 7,84461E-08 | 7,98482E-09 | 1,41204E-08 | 6,73648E-08 | 8,08413E-09 |
| 280 | G Vertical | 1,65694E-07 | 8,90111E-10 | 3,79173E-10 | 1,6454E-07 | 1,63438E-10 | 4,90645E-10 | 1,61162E-07 | -1,74578E-09 | 5,0049E-09 |
| 280 | G transversal | -1,02577E-07 | -2,72328E-10 | -2,41539E-11 | -9,16576E-08 | -2,44009E-10 | -2,65977E-11 | -8,08477E-08 | -1,90596E-10 | -1,22846E-10 |
| 281 | D Longitudinal | 3,68191E-07 | -5,02099E-09 | -3,9165E-10 | 3,17931E-07 | -4,21886E-09 | -3,92025E-10 | 2,66388E-07 | -3,4186E-09 | -3,88019E-10 |
| 281 | D Vertical | -8,13112E-08 | 8,14416E-08 | 4,8837E-09 | -7,01023E-08 | 7,02739E-08 | 4,88373E-09 | -5,88149E-08 | 5,91064E-08 | 4,88338E-09 |
| 281 | D transversal | -1,14156E-07 | 4,75661E-07 | 3,58524E-08 | -1,12631E-07 | 4,25892E-07 | 3,58528E-08 | -1,09821E-07 | 3,76124E-07 | 3,58487E-08 |
| 281 | G Longitudinal | -1,27944E-08 | 8,95011E-08 | 8,04614E-09 | -1,28368E-08 | 7,84476E-08 | 8,04445E-09 | -1,26999E-08 | 6,73915E-08 | 8,04849E-09 |
| 281 | G Vertical | 1,577E-07 | -8,90441E-10 | -6,14449E-10 | 1,58704E-07 | -2,3547E-10 | -5,33982E-10 | 1,5878E-07 | 5,32979E-10 | -6,97125E-10 |
| 281 | G transversal | -7,55375E-08 | -2,72335E-10 | -1,55933E-11 | -6,44627E-08 | -2,45592E-10 | -1,38147E-11 | -5,32504E-08 | -2,1614E-10 | -1,79056E-11 |
| 282 | D Longitudinal | 5,8082E-07 | 5,02099E-09 | 7,71153E-10 | 5,31658E-07 | 4,21886E-09 | 7,71527E-10 | 4,83779E-07 | 3,41861E-09 | 7,67509E-10 |
| 282 | D Vertical | -8,1656E-08 | -8,14416E-08 | -1,13094E-08 | -7,05474E-08 | -7,02739E-08 | -1,13094E-08 | -5,95171E-08 | -5,91064E-08 | -1,13091E-08 |
| 282 | D transversal | -1,01987E-07 | 4,75661E-07 | 3,6313E-08 | -1,0241E-07 | 4,25892E-07 | 3,63134E-08 | -1,01548E-07 | 3,76124E-07 | 3,63084E-08 |
| 282 | G Longitudinal | -1,4738E-08 | 8,95011E-08 | 7,98243E-09 | -1,45328E-08 | 7,8446E-08 | 7,98489E-09 | -1,412E-08 | 6,73653E-08 | 8,08297E-09 |
| 282 | G Vertical | 1,65691E-07 | -8,90304E-10 | -3,79059E-10 | 1,64536E-07 | -1,63852E-10 | -4,89933E-10 | 1,61145E-07 | 1,74392E-09 | -5,00064E-09 |
| 282 | G transversal | -1,02577E-07 | 2,72332E-10 | 2,41654E-11 | -9,16575E-08 | 2,44056E-10 | 2,64911E-11 | -8,08473E-08 | 1,90176E-10 | 1,23811E-10 |
| 283 | D Longitudinal | 5,10814E-07 | 3,40216E-16 | -4,01778E-14 | 4,6942E-07 | -1,25963E-13 | 2,97647E-13 | 4,29198E-07 | 1,44029E-12 | -3,3018E-12 |
| 283 | D Vertical | -1,06067E-17 | -7,6291E-08 | -1,04345E-08 | -1,3514E-17 | -6,59967E-08 | -1,04345E-08 | -8,05158E-17 | -5,57024E-08 | -1,04345E-08 |
| 283 | D transversal | -1,00291E-16 | 4,17482E-07 | 3,12135E-08 | -1,50596E-16 | 3,74738E-07 | 3,12135E-08 | -8,92766E-16 | 3,31993E-07 | 3,1213E-08 |
| 283 | G Longitudinal | -4,61772E-16 | 8,26886E-08 | 7,24246E-09 | -6,28129E-16 | 7,27085E-08 | 7,24242E-09 | -3,03788E-15 | 6,27288E-08 | 7,24082E-09 |
| 283 | G Vertical | 9,92564E-08 | -5,69461E-16 | 4,22976E-14 | 9,96858E-08 | 1,31401E-13 | -3,10812E-13 | 9,88864E-08 | -1,51126E-12 | 3,46447E-12 |
| 283 | G transversal | -8,53149E-08 | 1,97596E-17 | 5,24553E-15 | -7,48599E-08 | 1,36766E-14 | -3,239E-14 | -6,45085E-08 | -1,66614E-13 | 3,81954E-13 |
| 284 | D Longitudinal | 5,08031E-07 | -5,23636E-09 | -7,85602E-10 | 4,66782E-07 | -4,42298E-09 | -7,85211E-10 | 4,26695E-07 | -3,60851E-09 | -7,86536E-10 |
| 284 | D Vertical | 7,58027E-08 | -7,59965E-08 | -1,03752E-08 | 6,56025E-08 | -6,57567E-08 | -1,03751E-08 | 5,54883E-08 | -5,55168E-08 | -1,03755E-08 |
| 284 | D transversal | 9,40085E-08 | 4,10163E-07 | 3,0528E-08 | 9,45023E-08 | 3,68383E-07 | 3,05277E-08 | 9,38309E-08 | 3,266E-07 | 3,05322E-08 |
| 284 | G Longitudinal | 1,34879E-08 | 8,22207E-08 | 7,19428E-09 | 1,34486E-08 | 7,23063E-08 | 7,1965E-09 | 1,32045E-08 | 6,23675E-08 | 7,289E-09 |
| 284 | G Vertical | 1,59774E-07 | 5,07396E-10 | 3,0827E-10 | 1,58697E-07 | -1,21549E-10 | 4,13649E-10 | 1,55522E-07 | -1,86834E-09 | 4,68092E-09 |
| 284 | G transversal | -9,5647E-08 | -4,1269E-10 | -4,34295E-11 | -8,57614E-08 | -3,6521E-10 | -4,57756E-11 | -7,59896E-08 | -2,93649E-10 | -1,38142E-10 |
| 285 | D Longitudinal | 3,10388E-07 | -5,23636E-09 | -3,9401E-10 | 2,6816E-07 | -4,42269E-09 | -3,94385E-10 | 2,24771E-07 | -3,61076E-09 | -3,90731E-10 |
| 285 | D Vertical | -7,61107E-08 | 7,59965E-08 | 4,4725E-09 | -6,58088E-08 | 6,57567E-08 | 4,47253E-09 | -5,5421E-08 | 5,55171E-08 | 4,47218E-09 |
| 285 | D transversal | -1,06697E-07 | 4,10163E-07 | 3,00539E-08 | -1,05222E-07 | 3,68382E-07 | 3,00542E-08 | -1,02582E-07 | 3,26604E-07 | 3,00501E-08 |
| 285 | G Longitudinal | -1,36213E-08 | 8,22207E-08 | 7,18044E-09 | -1,3503E-08 | 7,23077E-08 | 7,17885E-09 | -1,32062E-08 | 6,23927E-08 | 7,18162E-09 |
| 285 | G Vertical | 1,52159E-07 | -5,07708E-10 | -5,4693E-10 | 1,53097E-07 | 5,34546E-11 | -4,7086E-10 | 1,53163E-07 | 7,21838E-10 | -6,24883E-10 |
| 285 | G transversal | -6,91561E-08 | -4,12697E-10 | -2,41528E-11 | -5,91191E-08 | -3,6673E-10 | -2,24448E-11 | -4,89419E-08 | -3,18169E-10 | -2,6354E-11 |
| 286 | D Longitudinal | 5,08031E-07 | 5,23636E-09 | 7,85522E-10 | 4,66782E-07 | 4,42273E-09 | 7,85802E-10 | 4,26695E-07 | 3,61137E-09 | 7,79986E-10 |
| 286 | D Vertical | -7,58027E-08 | -7,59965E-08 | -1,03751E-08 | -6,56025E-08 | -6,57567E-08 | -1,03752E-08 | -5,54883E-08 | -5,55171E-08 | -1,03748E-08 |
| 286 | D transversal | -9,40084E-08 | 4,10163E-07 | 3,05279E-08 | -9,45023E-08 | 3,68382E-07 | 3,05283E-08 | -9,38309E-08 | 3,26603E-07 | 3,05256E-08 |
| 286 | G Longitudinal | -1,34879E-08 | 8,22207E-08 | 7,19426E-09 | -1,34486E-08 | 7,23063E-08 | 7,19657E-09 | -1,32042E-08 | 6,2368E-08 | 7,28788E-09 |
| 286 | G Vertical | 1,59771E-07 | -5,07579E-10 | -3,08163E-10 | 1,58694E-07 | 1,21158E-10 | -4,12974E-10 | 1,55506E-07 | 1,86658E-09 | -4,67691E-09 |

APOYO 2

| DESPLAZAMIENTOS (metros) | | C4 | | | C5 | | | C6 | | |
|---|---|---|---|---|---|---|---|---|---|---|
| Nudo | Desplazamiento | L | T | V | L | T | V | L | T | V |
| 286 | G transversal | -9,56469E-08 | 4,12694E-10 | 4,34405E-11 | -8,57614E-08 | 3,65256E-10 | 4,56712E-11 | -7,59892E-08 | 2,93238E-10 | 1,39085E-10 |
| 287 | D Longitudinal | 4,48136E-07 | -5,26506E-09 | -7,73635E-10 | 4,1321E-07 | -4,46684E-09 | -7,73335E-10 | 3,79339E-07 | -3,66712E-09 | -7,76558E-10 |
| 287 | D Vertical | 7,11003E-08 | -7,09098E-08 | -9,56563E-09 | 6,17141E-08 | -6,14719E-08 | -9,5656E-09 | 5,24182E-08 | -5,20338E-08 | -9,56596E-09 |
| 287 | D transversal | 8,78693E-08 | 3,57212E-07 | 2,59203E-08 | 8,82871E-08 | 3,21749E-07 | 2,592E-08 | 8,7646E-08 | 2,86285E-07 | 2,59231E-08 |
| 287 | G Longitudinal | 1,21768E-08 | 7,61174E-08 | 6,56235E-09 | 1,22971E-08 | 6,71282E-08 | 6,56445E-09 | 1,22166E-08 | 5,81161E-08 | 6,65125E-09 |
| 287 | G Vertical | 1,55556E-07 | 8,64841E-10 | 3,20221E-10 | 1,5444E-07 | 2,12627E-10 | 4,20843E-10 | 1,51317E-07 | -1,50697E-09 | 4,49549E-09 |
| 287 | G transversal | -9,00435E-08 | -2,7621E-10 | -1,78685E-11 | -8,10129E-08 | -2,55636E-10 | -2,01097E-11 | -7,20982E-08 | -2,12078E-10 | -1,08281E-10 |
| 288 | D Longitudinal | 2,63789E-07 | -5,26506E-09 | -3,83939E-10 | 2,27985E-07 | -4,46662E-09 | -3,8424E-10 | 1,91126E-07 | -3,66968E-09 | -3,81035E-10 |
| 288 | D Vertical | -7,08554E-08 | 7,09098E-08 | 4,11936E-09 | -6,1368E-08 | 6,14719E-08 | 4,11939E-09 | -5,17904E-08 | 5,20341E-08 | 4,11903E-09 |
| 288 | D transversal | -9,92235E-08 | 3,57212E-07 | 2,55009E-08 | -9,79258E-08 | 3,21749E-07 | 2,55012E-08 | -9,55694E-08 | 2,86287E-07 | 2,54978E-08 |
| 288 | G Longitudinal | -1,44116E-08 | 7,61174E-08 | 6,47095E-09 | -1,41393E-08 | 6,71295E-08 | 6,46944E-09 | -1,36913E-08 | 5,81399E-08 | 6,47104E-09 |
| 288 | G Vertical | 1,4696E-07 | -8,65139E-10 | -5,71282E-10 | 1,4794E-07 | -2,77648E-10 | -4,98645E-10 | 1,48084E-07 | 4,12201E-10 | -6,4564E-10 |
| 288 | G transversal | -6,36805E-08 | -2,76216E-10 | -1,07558E-11 | -5,45025E-08 | -2,57089E-10 | -9,12381E-12 | -4,51831E-08 | -2,3548E-10 | -1,28609E-11 |
| 289 | D Longitudinal | 4,48136E-07 | 5,26506E-09 | 7,73564E-10 | 4,1321E-07 | 4,46662E-09 | 7,73866E-10 | 3,79339E-07 | 3,66968E-09 | 7,70687E-10 |
| 289 | D Vertical | -7,11003E-08 | -7,09098E-08 | -9,56562E-09 | -6,17141E-08 | -6,14719E-08 | -9,56566E-09 | -5,24182E-08 | -5,20341E-08 | -9,56529E-09 |
| 289 | D transversal | -8,78693E-08 | 3,57212E-07 | 2,59202E-08 | -8,82871E-08 | 3,21749E-07 | 2,59205E-08 | -8,7646E-08 | 2,86287E-07 | 2,59172E-08 |
| 289 | G Longitudinal | -1,21767E-08 | 7,61174E-08 | 6,56234E-09 | -1,2297E-08 | 6,71281E-08 | 6,56452E-09 | -1,22163E-08 | 5,81165E-08 | 6,65017E-09 |
| 289 | G Vertical | 1,55554E-07 | -8,65015E-10 | -3,20119E-10 | 1,54437E-07 | -2,13E-10 | -4,202E-10 | 1,51302E-07 | 1,50529E-09 | -4,49165E-09 |
| 289 | G transversal | -9,00434E-08 | 2,76214E-10 | 1,78792E-11 | -8,10128E-08 | 2,55682E-10 | 2,00077E-11 | -7,20979E-08 | 2,11677E-10 | 1,09201E-10 |
| 290 | D Longitudinal | 3,52368E-07 | 3,94233E-18 | 1,9783E-10 | 3,17337E-07 | 1,17156E-15 | 1,97827E-10 | 2,82306E-07 | 2,11992E-14 | 1,97752E-10 |
| 290 | D Vertical | -6,90513E-08 | -2,56463E-17 | -2,64833E-09 | -5,99132E-08 | -1,32825E-14 | -2,64829E-09 | -5,07747E-08 | -2,27648E-13 | -2,64748E-09 |
| 290 | D transversal | -9,29578E-08 | 3,48301E-07 | 2,48712E-08 | -9,2525E-08 | 3,13995E-07 | 2,48715E-08 | -9,10465E-08 | 2,79692E-07 | 2,48684E-08 |
| 290 | G Longitudinal | -4,68488E-09 | 7,33014E-08 | 6,74906E-09 | -4,62836E-09 | 6,39923E-08 | 6,74909E-09 | -4,46337E-09 | 5,46834E-08 | 6,74888E-09 |
| 290 | G Vertical | 9,37056E-08 | 5,53378E-09 | 5,97217E-10 | 9,41493E-08 | 4,70988E-09 | 5,97483E-10 | 9,56568E-08 | 3,88912E-09 | 5,88412E-10 |
| 290 | G transversal | -7,56551E-08 | -2,9029E-17 | 1,17175E-11 | -6,67382E-08 | -1,57889E-14 | 1,17597E-11 | -5,78211E-08 | -2,68592E-13 | 1,27226E-11 |
| 291 | D Longitudinal | 2,10072E-07 | -5,56227E-09 | -3,87096E-10 | 1,81592E-07 | -4,7487E-09 | -3,87314E-10 | 1,52191E-07 | -3,93638E-09 | -3,84638E-10 |
| 291 | D Vertical | -6,44628E-08 | 6,42565E-08 | 3,65241E-09 | -5,60017E-08 | 5,58663E-08 | 3,65244E-09 | -4,74473E-08 | 4,74762E-08 | 3,65208E-09 |
| 291 | D transversal | -8,96143E-08 | 2,9542E-07 | 2,03319E-08 | -8,85528E-08 | 2,67141E-07 | 2,03322E-08 | -8,65672E-08 | 2,38862E-07 | 2,03299E-08 |
| 291 | G Longitudinal | -1,32846E-08 | 6,76232E-08 | 5,59531E-09 | -1,3172E-08 | 5,98933E-08 | 5,59389E-09 | -1,2887E-08 | 5,21615E-08 | 5,59622E-09 |
| 291 | G Vertical | 1,40607E-07 | -1,25837E-09 | -5,96798E-10 | 1,41653E-07 | -6,44574E-10 | -5,28083E-10 | 1,4191E-07 | 6,60173E-11 | -6,67007E-10 |
| 291 | G transversal | -5,49806E-08 | -8,71608E-10 | -5,1441E-11 | -4,71176E-08 | -7,67412E-10 | -4,99125E-11 | -3,91147E-08 | -6,60889E-10 | -5,34238E-11 |
| 292 | D Longitudinal | 3,7716E-07 | 5,56227E-09 | 7,92395E-10 | 3,49431E-07 | 4,74867E-09 | 7,92709E-10 | 3,22624E-07 | 3,93577E-09 | 7,92203E-10 |
| 292 | D Vertical | -6,40699E-08 | -6,42565E-08 | -8,5134E-09 | -5,57076E-08 | -5,58663E-08 | -8,51343E-09 | -4,74386E-08 | -4,74762E-08 | -8,51304E-09 |
| 292 | D transversal | -8,02242E-08 | 2,9542E-07 | 2,06734E-08 | -8,05303E-08 | 2,67141E-07 | 2,06737E-08 | -7,99127E-08 | 2,38862E-07 | 2,06702E-08 |
| 292 | G Longitudinal | -1,2982E-08 | 6,76232E-08 | 5,61387E-09 | -1,29508E-08 | 5,9892E-08 | 5,61594E-09 | -1,27234E-08 | 5,21395E-08 | 5,69757E-09 |
| 292 | G Vertical | 1,50549E-07 | -1,25825E-09 | -3,30611E-10 | 1,49377E-07 | -5,83418E-10 | -4,25285E-10 | 1,46298E-07 | 1,10007E-09 | -4,2767E-09 |
| 292 | G transversal | -8,12977E-08 | 8,71605E-10 | 1,00486E-10 | -7,35742E-08 | 7,66095E-10 | 1,02478E-10 | -6,59663E-08 | 6,38611E-10 | 1,85972E-10 |
| 293 | D Longitudinal | 6,34944E-07 | 8,92194E-18 | -2,49488E-10 | 5,64786E-07 | 1,04326E-15 | -2,49491E-10 | 4,94628E-07 | 1,33431E-14 | -2,49543E-10 |
| 293 | D Vertical | 9,21728E-08 | -7,912E-17 | -3,75127E-09 | 7,9117E-08 | -1,1776E-14 | -3,75124E-09 | 6,6061E-08 | -2,24177E-13 | -3,75046E-09 |
| 293 | D transversal | 1,24914E-07 | 6,30497E-07 | 5,02039E-08 | 1,24234E-07 | 5,61251E-07 | 5,02034E-08 | 1,22018E-07 | 4,92002E-07 | 5,02083E-08 |
| 293 | G Longitudinal | 5,61123E-09 | 1,03272E-07 | 1,02381E-08 | 5,55444E-09 | 8,91507E-08 | 1,02381E-08 | 5,41778E-09 | 7,50289E-08 | 1,02387E-08 |
| 293 | G Vertical | 1,35356E-07 | -7,04767E-09 | -8,69146E-10 | 1,36102E-07 | -5,84914E-09 | -8,68583E-10 | 1,38515E-07 | -4,65044E-09 | -8,6543E-10 |
| 293 | G transversal | -1,05511E-07 | 1,31631E-17 | 4,31174E-11 | -9,18341E-08 | 3,70663E-15 | 4,31075E-11 | -7,81574E-08 | 7,01195E-14 | 4,28634E-11 |
| 294 | D Longitudinal | 4,37372E-07 | 5,49138E-09 | 4,44155E-10 | 3,77344E-07 | 4,58924E-09 | 4,43705E-10 | 3,15904E-07 | 3,68495E-09 | 4,48228E-10 |

APOYO 2

| DESPLAZAMIENTOS (metros) | | C4 | | | C5 | | | C6 | | |
|---|---|---|---|---|---|---|---|---|---|---|
| Nudo | Desplazamiento | L | T | V | L | T | V | L | T | V |
| 294 | D Vertical | 8,73904E-08 | 8,72377E-08 | 5,31607E-09 | 7,51688E-08 | 7,50825E-08 | 5,31604E-09 | 6,28794E-08 | 6,29272E-08 | 5,31638E-09 |
| 294 | D transversal | 1,22187E-07 | 5,53558E-07 | 4,29341E-08 | 1,20639E-07 | 4,94041E-07 | 4,29337E-08 | 1,17675E-07 | 4,34522E-07 | 4,29387E-08 |
| 294 | G Longitudinal | 1,32372E-08 | 9,77625E-08 | 9,00635E-09 | 1,3229E-08 | 8,53665E-08 | 9,00446E-09 | 1,30476E-08 | 7,29676E-08 | 9,00886E-09 |
| 294 | G Vertical | 1,64356E-07 | 9,22028E-10 | 6,4455E-10 | 1,65387E-07 | 2,2377E-10 | 5,58523E-10 | 1,65436E-07 | -5,95528E-10 | 7,32689E-10 |
| 294 | G transversal | -8,39601E-08 | -1,00319E-09 | -8,93455E-11 | -7,14803E-08 | -8,17058E-10 | -9,11081E-11 | -5,88689E-08 | -6,33212E-10 | -8,80058E-11 |
| 295 | D Longitudinal | 4,33019E-07 | -3,4268E-16 | 5,08381E-14 | 3,7365E-07 | 1,55341E-13 | -3,67179E-13 | 3,12869E-07 | -1,79125E-12 | 4,10636E-12 |
| 295 | D Vertical | 1,07643E-16 | 8,59612E-08 | 5,21347E-09 | 1,04236E-16 | 7,40164E-08 | 5,21348E-09 | 5,24542E-17 | 6,20717E-08 | 5,21347E-09 |
| 295 | D transversal | 1,41362E-16 | 5,55314E-07 | 4,31736E-08 | 1,42045E-16 | 4,9545E-07 | 4,31737E-08 | 1,40604E-16 | 4,35587E-07 | 4,31737E-08 |
| 295 | G Longitudinal | 2,63588E-16 | 9,74062E-08 | 8,9574E-09 | 2,69787E-16 | 8,50732E-08 | 8,95741E-09 | 3,51091E-16 | 7,27403E-08 | 8,95749E-09 |
| 295 | G Vertical | 1,32175E-07 | -5,16401E-17 | 5,55782E-14 | 1,30487E-07 | 1,68002E-13 | -3,96736E-13 | 1,27275E-07 | -1,93794E-12 | 4,44265E-12 |
| 295 | G transversal | -9,0007E-08 | -3,08713E-17 | -5,54962E-15 | -7,71359E-08 | -1,34869E-14 | 3,19892E-14 | -6,41725E-08 | 1,68928E-13 | -3,87255E-13 |
| 296 | D Longitudinal | 4,81886E-07 | -1,64655E-17 | -2,0226E-10 | 4,31159E-07 | -1,78659E-15 | -2,02255E-10 | 3,80433E-07 | -2,9198E-14 | -2,0215E-10 |
| 296 | D Vertical | 8,19785E-08 | 9,43047E-17 | -3,23678E-09 | 7,07387E-08 | 1,35944E-14 | -3,23682E-09 | 5,94991E-08 | 2,39624E-13 | -3,23766E-09 |
| 296 | D transversal | 1,0875E-07 | 4,77103E-07 | 3,61207E-08 | 1,08196E-07 | 4,27282E-07 | 3,61203E-08 | 1,06345E-07 | 3,77458E-07 | 3,61243E-08 |
| 296 | G Longitudinal | 5,37529E-09 | 8,82108E-08 | 8,41177E-09 | 5,3167E-09 | 7,66084E-08 | 8,41173E-09 | 5,15765E-09 | 6,50058E-08 | 8,41223E-09 |
| 296 | G Vertical | 1,13579E-07 | -5,70031E-09 | -6,51891E-10 | 1,14166E-07 | -4,80138E-09 | -6,5144E-10 | 1,16113E-07 | -3,90258E-09 | -6,48025E-10 |
| 296 | G transversal | -8,95508E-08 | -2,04169E-16 | 1,61111E-12 | -7,84804E-08 | -3,00929E-14 | 1,69131E-12 | -6,74105E-08 | -5,10916E-13 | 3,52014E-12 |
| 297 | D Longitudinal | 3,68191E-07 | 5,02099E-09 | 3,9174E-10 | 3,17931E-07 | 4,21914E-09 | 3,91365E-10 | 2,66388E-07 | 3,4154E-09 | 3,95366E-10 |
| 297 | D Vertical | 8,13112E-08 | 8,14416E-08 | 4,88371E-09 | 7,01023E-08 | 7,0274E-08 | 4,88368E-09 | 5,88149E-08 | 5,91061E-08 | 4,88404E-09 |
| 297 | D transversal | 1,14156E-07 | 4,75661E-07 | 3,58525E-08 | 1,12631E-07 | 4,25892E-07 | 3,58521E-08 | 1,09821E-07 | 3,76121E-07 | 3,5856E-08 |
| 297 | G Longitudinal | 1,27943E-08 | 8,95011E-08 | 8,04616E-09 | 1,28367E-08 | 7,84476E-08 | 8,04436E-09 | 1,26999E-08 | 6,73911E-08 | 8,04955E-09 |
| 297 | G Vertical | 1,57697E-07 | 8,90615E-10 | 6,14708E-10 | 1,58701E-07 | 2,3554E-10 | 5,34038E-10 | 1,58779E-07 | -5,32969E-10 | 6,97114E-10 |
| 297 | G transversal | -7,55375E-08 | 2,72339E-10 | 1,55849E-11 | -6,44628E-08 | 2,45555E-10 | 1,39071E-11 | -5,32504E-08 | 2,16601E-10 | 1,68496E-11 |
| 298 | D Longitudinal | 3,11905E-07 | -3,39969E-16 | 4,0178E-14 | 2,69524E-07 | 1,25963E-13 | -2,97647E-13 | 2,25969E-07 | -1,44029E-12 | 3,3018E-12 |
| 298 | D Vertical | -1,14536E-17 | 7,6291E-08 | 4,49223E-09 | -1,06569E-17 | 6,59967E-08 | 4,49223E-09 | 1,56873E-19 | 5,57024E-08 | 4,49223E-09 |
| 298 | D transversal | 1,06873E-16 | 4,17482E-07 | 3,07665E-08 | 9,10219E-17 | 3,74738E-07 | 3,07665E-08 | -1,56925E-16 | 3,31993E-07 | 3,07664E-08 |
| 298 | G Longitudinal | 4,79178E-16 | 8,26886E-08 | 7,22874E-09 | 4,69802E-16 | 7,27084E-08 | 7,22877E-09 | 3,03814E-16 | 6,27283E-08 | 7,22879E-09 |
| 298 | G Vertical | 1,11539E-07 | -1,46244E-16 | 4,24661E-14 | 1,10075E-07 | 1,31958E-13 | -3,11568E-13 | 1,07385E-07 | -1,5091E-12 | 3,45954E-12 |
| 298 | G transversal | -7,64255E-08 | -1,17358E-17 | -5,24236E-15 | -6,58557E-08 | -1,36659E-14 | 3,23755E-14 | -5,51822E-08 | 1,66656E-13 | -3,82047E-13 |
| 299 | D Longitudinal | 3,10388E-07 | 5,23636E-09 | 3,94089E-10 | 2,6816E-07 | 4,42294E-09 | 3,93794E-10 | 2,24771E-07 | 3,60791E-09 | 3,97283E-10 |
| 299 | D Vertical | 7,61107E-08 | 7,59965E-08 | 4,47251E-09 | 6,58088E-08 | 6,57567E-08 | 4,47247E-09 | 5,5421E-08 | 5,55168E-08 | 4,47285E-09 |
| 299 | D transversal | 1,06697E-07 | 4,10163E-07 | 3,0054E-08 | 1,05222E-07 | 3,68383E-07 | 3,00536E-08 | 1,02582E-07 | 3,26601E-07 | 3,00567E-08 |
| 299 | G Longitudinal | 1,36212E-08 | 8,22207E-08 | 7,18046E-09 | 1,35029E-08 | 7,23078E-08 | 7,17877E-09 | 1,32062E-08 | 6,23922E-08 | 7,18265E-09 |
| 299 | G Vertical | 1,52157E-07 | 5,07873E-10 | 5,47175E-10 | 1,53095E-07 | -5,33892E-11 | 4,70914E-10 | 1,53161E-07 | -7,21819E-10 | 6,2485E-10 |
| 299 | G transversal | -6,91561E-08 | 4,127E-10 | 2,41447E-11 | -5,91192E-08 | 3,66694E-10 | 2,25357E-11 | -4,89419E-08 | 3,18618E-10 | 2,53234E-11 |
| 300 | D Longitudinal | 2,63789E-07 | 5,26506E-09 | 3,8401E-10 | 2,27985E-07 | 4,46684E-09 | 3,83709E-10 | 1,91126E-07 | 3,66712E-09 | 3,86907E-10 |
| 300 | D Vertical | 7,08554E-08 | 7,09098E-08 | 4,11937E-09 | 6,1368E-08 | 6,14719E-08 | 4,11933E-09 | 5,17904E-08 | 5,20338E-08 | 4,11971E-09 |
| 300 | D transversal | 9,92235E-08 | 3,57212E-07 | 2,5501E-08 | 9,79258E-08 | 3,21749E-07 | 2,55006E-08 | 9,55694E-08 | 2,86285E-07 | 2,55037E-08 |
| 300 | G Longitudinal | 1,44116E-08 | 7,61174E-08 | 6,47097E-09 | 1,41393E-08 | 6,71296E-08 | 6,46935E-09 | 1,36913E-08 | 5,81395E-08 | 6,47203E-09 |
| 300 | G Vertical | 1,46957E-07 | 8,65296E-10 | 5,71516E-10 | 1,47938E-07 | 2,77711E-10 | 4,98695E-10 | 1,48083E-07 | -4,12192E-10 | 6,45627E-10 |
| 300 | G transversal | -6,36805E-08 | 2,7622E-10 | 1,0748E-11 | -5,45025E-08 | 2,57053E-10 | 9,21296E-12 | -4,51831E-08 | 2,35919E-10 | 1,18568E-11 |
| 301 | D Longitudinal | 3,52368E-07 | -6,53434E-18 | -1,9783E-10 | 3,17337E-07 | -1,17565E-15 | -1,97827E-10 | 2,82306E-07 | -2,12134E-14 | -1,97752E-10 |
| 301 | D Vertical | 6,90513E-08 | -9,34684E-17 | -2,64833E-09 | 5,99132E-08 | -1,33724E-14 | -2,64829E-09 | 5,07748E-08 | -2,27993E-13 | -2,64747E-09 |
| 301 | D transversal | 9,29578E-08 | 3,48301E-07 | 2,48713E-08 | 9,2525E-08 | 3,13996E-07 | 2,4871E-08 | 9,10465E-08 | 2,79689E-07 | 2,48742E-08 |

APOYO 2

| DESPLAZAMIENTOS (metros) | | C4 | | | C5 | | | C6 | | |
|---|---|---|---|---|---|---|---|---|---|---|
| Nudo | Desplazamiento | L | T | V | L | T | V | L | T | V |
| 301 | G Longitudinal | 4,68488E-09 | 7,33014E-08 | 6,74907E-09 | 4,62836E-09 | 6,39923E-08 | 6,74903E-09 | 4,46337E-09 | 5,46831E-08 | 6,74963E-09 |
| 301 | G Vertical | 9,37056E-08 | -5,53378E-09 | -5,97288E-10 | 9,41493E-08 | -4,71011E-09 | -5,96945E-10 | 9,56568E-08 | -3,88654E-09 | -5,94348E-10 |
| 301 | G transversal | -7,56551E-08 | 1,12281E-16 | -1,17175E-11 | -6,67382E-08 | 1,58987E-14 | -1,17598E-11 | -5,78211E-08 | 2,69017E-13 | -1,27236E-11 |
| 302 | D Longitudinal | 3,7716E-07 | -5,56227E-09 | -7,92455E-10 | 3,49431E-07 | -4,74886E-09 | -7,92252E-10 | 3,22624E-07 | -3,93358E-09 | -7,97237E-10 |
| 302 | D Vertical | 6,40699E-08 | -6,42565E-08 | -8,51341E-09 | 5,57076E-08 | -5,58663E-08 | -8,51337E-09 | 4,74386E-08 | -4,7476E-08 | -8,51369E-09 |
| 302 | D transversal | 8,02242E-08 | 2,9542E-07 | 2,06735E-08 | 8,05303E-08 | 2,67141E-07 | 2,06732E-08 | 7,99127E-08 | 2,3886E-07 | 2,06753E-08 |
| 302 | G Longitudinal | 1,2982E-08 | 6,76232E-08 | 5,61388E-09 | 1,29509E-08 | 5,9892E-08 | 5,61587E-09 | 1,27237E-08 | 5,2139E-08 | 5,69859E-09 |
| 302 | G Vertical | 1,50552E-07 | 1,25809E-09 | 3,30708E-10 | 1,4938E-07 | 5,83065E-10 | 4,25895E-10 | 1,46313E-07 | -1,10165E-09 | 4,28032E-09 |
| 302 | G transversal | -8,12977E-08 | -8,71602E-10 | -1,00476E-10 | -7,35742E-08 | -7,66052E-10 | -1,02575E-10 | -6,59666E-08 | -6,38991E-10 | -1,85101E-10 |
| 303 | D Longitudinal | 2,10072E-07 | 5,56227E-09 | 3,87156E-10 | 1,81592E-07 | 4,7489E-09 | 3,86857E-10 | 1,52191E-07 | 3,93418E-09 | 3,89669E-10 |
| 303 | D Vertical | 6,44628E-08 | 6,42565E-08 | 3,65242E-09 | 5,60017E-08 | 5,58663E-08 | 3,65238E-09 | 4,74473E-08 | 4,74759E-08 | 3,65274E-09 |
| 303 | D transversal | 8,96143E-08 | 2,9542E-07 | 2,0332E-08 | 8,85528E-08 | 2,67141E-07 | 2,03318E-08 | 8,65672E-08 | 2,3886E-07 | 2,0335E-08 |
| 303 | G Longitudinal | 1,32845E-08 | 6,76232E-08 | 5,59533E-09 | 1,31719E-08 | 5,98933E-08 | 5,59381E-09 | 1,28869E-08 | 5,21611E-08 | 5,59716E-09 |
| 303 | G Vertical | 1,40605E-07 | 1,25852E-09 | 5,9702E-10 | 1,41651E-07 | 6,44634E-10 | 5,28132E-10 | 1,41909E-07 | -6,60019E-11 | 6,66981E-10 |
| 303 | G transversal | -5,49807E-08 | 8,71611E-10 | 5,14338E-11 | -4,71177E-08 | 7,67378E-10 | 4,99977E-11 | -3,91148E-08 | 6,61303E-10 | 5,24734E-11 |
| 304 | D Longitudinal | 2,11003E-07 | -3,10524E-16 | 3,03717E-14 | 1,82414E-07 | 9,76251E-14 | -2,30621E-13 | 1,52897E-07 | -1,10735E-12 | 2,53855E-12 |
| 304 | D Vertical | 7,04917E-17 | 6,5364E-08 | 3,72577E-09 | 6,86547E-17 | 5,68109E-08 | 3,72578E-09 | 3,51647E-17 | 4,82579E-08 | 3,72577E-09 |
| 304 | D transversal | -2,5265E-16 | 3,02628E-07 | 2,09815E-08 | -2,45115E-16 | 2,73428E-07 | 2,09815E-08 | -1,26761E-16 | 2,44228E-07 | 2,09815E-08 |
| 304 | G Longitudinal | 5,10641E-16 | 6,84075E-08 | 5,66638E-09 | 4,72995E-16 | 6,05682E-08 | 5,66641E-09 | -1,11454E-16 | 5,2729E-08 | 5,66616E-09 |
| 304 | G Vertical | 9,17854E-08 | -6,19071E-17 | 3,14169E-14 | 9,06352E-08 | 9,95217E-14 | -2,348E-13 | 8,85401E-08 | -1,12912E-12 | 2,58846E-12 |
| 304 | G transversal | -6,23598E-08 | 7,99747E-18 | -4,85132E-15 | -5,39468E-08 | -1,34666E-14 | 3,18771E-14 | -4,54234E-08 | 1,60574E-13 | -3,68106E-13 |
| 305 | D Longitudinal | 3,79733E-07 | 3,06513E-16 | -3,03732E-14 | 3,51903E-07 | -9,76308E-14 | 2,30628E-13 | 3,25002E-07 | 1,10733E-12 | -2,5385E-12 |
| 305 | D Vertical | 6,78726E-17 | -6,5364E-08 | -8,67613E-09 | 9,27885E-17 | -5,68109E-08 | -8,67612E-09 | 4,5627E-16 | -4,8258E-08 | -8,67588E-09 |
| 305 | D transversal | 2,42895E-16 | 3,02628E-07 | 2,13585E-08 | 3,33052E-16 | 2,73428E-07 | 2,13586E-08 | 1,6332E-15 | 2,44228E-07 | 2,13594E-08 |
| 305 | G Longitudinal | -4,86647E-16 | 6,84075E-08 | 5,70061E-09 | -6,91051E-16 | 6,05682E-08 | 5,70057E-09 | -3,65281E-15 | 5,27294E-08 | 5,69866E-09 |
| 305 | G Vertical | 8,12598E-08 | -5,75719E-16 | 3,12123E-14 | 8,16363E-08 | 9,88445E-14 | -2,33879E-13 | 8,10641E-08 | -1,13174E-12 | 2,59444E-12 |
| 305 | G transversal | -7,19362E-08 | 2,23419E-18 | 4,85538E-15 | -6,36336E-08 | 1,34802E-14 | -3,18956E-14 | -5,54414E-08 | -1,60521E-13 | 3,67986E-13 |
| 306 | D Longitudinal | 1,68298E-07 | 5,88306E-09 | 3,95735E-10 | 1,45424E-07 | 5,04468E-09 | 3,95518E-10 | 1,21748E-07 | 4,2052E-09 | 3,9786E-10 |
| 306 | D Vertical | 5,91348E-08 | 5,91124E-08 | 3,32222E-09 | 5,14564E-08 | 5,14882E-08 | 3,32219E-09 | 4,36835E-08 | 4,38639E-08 | 3,32254E-09 |
| 306 | D transversal | 8,21132E-08 | 2,46233E-07 | 1,63123E-08 | 8,11138E-08 | 2,23497E-07 | 1,6312E-08 | 7,93071E-08 | 2,00761E-07 | 1,63146E-08 |
| 306 | G Longitudinal | 1,26303E-08 | 6,1618E-08 | 4,98905E-09 | 1,2623E-08 | 5,47581E-08 | 4,98758E-09 | 1,24467E-08 | 4,78957E-08 | 4,99174E-09 |
| 306 | G Vertical | 1,37643E-07 | 1,09046E-09 | 5,73746E-10 | 1,38666E-07 | 5,17848E-10 | 5,06835E-10 | 1,38923E-07 | -1,48748E-10 | 6,41724E-10 |
| 306 | G transversal | -4,85391E-08 | -1,00263E-10 | -1,06026E-11 | -4,16271E-08 | -7,14084E-11 | -1,1985E-11 | -3,45793E-08 | -4,4332E-11 | -9,58826E-12 |
| 307 | D Longitudinal | 3,20348E-07 | -5,88306E-09 | -8,20091E-10 | 2,9812E-07 | -5,04469E-09 | -8,19859E-10 | 2,76693E-07 | -4,20529E-09 | -8,21875E-10 |
| 307 | D Vertical | 5,92622E-08 | -5,91124E-08 | -7,73289E-09 | 5,16803E-08 | -5,14882E-08 | -7,73285E-09 | 4,4193E-08 | -4,38639E-08 | -7,73318E-09 |
| 307 | D transversal | 7,26301E-08 | 2,46233E-07 | 1,6654E-08 | 7,29792E-08 | 2,23497E-07 | 1,66538E-08 | 7,25206E-08 | 2,00761E-07 | 1,6658E-08 |
| 307 | G Longitudinal | 1,3608E-08 | 6,1618E-08 | 4,95865E-09 | 1,3478E-08 | 5,47568E-08 | 4,96058E-09 | 1,31558E-08 | 4,78742E-08 | 5,0417E-09 |
| 307 | G Vertical | 1,47544E-07 | 1,09005E-09 | 2,9306E-10 | 1,46397E-07 | 4,58046E-10 | 3,85515E-10 | 1,43406E-07 | -1,15467E-09 | 4,12935E-09 |
| 307 | G transversal | -7,45796E-08 | 1,00272E-10 | 3,04928E-11 | -6,77995E-08 | 7,26847E-11 | 2,84738E-11 | -6,11323E-08 | 6,5801E-11 | -5,09478E-11 |
| 308 | D Longitudinal | 1,68298E-07 | -5,88306E-09 | -3,95683E-10 | 1,45424E-07 | -5,04451E-09 | -3,95912E-10 | 1,21748E-07 | -4,20708E-09 | -3,93533E-10 |
| 308 | D Vertical | -5,91348E-08 | 5,91124E-08 | 3,32221E-09 | -5,14564E-08 | 5,14882E-08 | 3,32224E-09 | -4,36835E-08 | 4,38642E-08 | 3,32189E-09 |
| 308 | D transversal | -8,21132E-08 | 2,46233E-07 | 1,63122E-08 | -8,11138E-08 | 2,23497E-07 | 1,63124E-08 | -7,93071E-08 | 2,00763E-07 | 1,63103E-08 |
| 308 | G Longitudinal | -1,26303E-08 | 6,1618E-08 | 4,98903E-09 | -1,26231E-08 | 5,4758E-08 | 4,98766E-09 | -1,24468E-08 | 4,78961E-08 | 4,99084E-09 |
| 308 | G Vertical | 1,37645E-07 | -1,09032E-09 | -5,73531E-10 | 1,38668E-07 | -5,1779E-10 | -5,06789E-10 | 1,38924E-07 | 1,48758E-10 | -6,41739E-10 |

APOYO 2

| DESPLAZAMIENTOS (metros) | | C4 | | | C5 | | | C6 | | |
|---|---|---|---|---|---|---|---|---|---|---|
| Nudo | Desplazamiento | L | T | V | L | T | V | L | T | V |
| 308 | G transversal | -4,8539E-08 | 1,00266E-10 | 1,05959E-11 | -4,16271E-08 | 7,13757E-11 | 1,20661E-11 | -3,45793E-08 | 4,47242E-11 | 8,68925E-12 |
| 309 | D Longitudinal | 3,20348E-07 | 5,88306E-09 | 8,20039E-10 | 2,9812E-07 | 5,04452E-09 | 8,20254E-10 | 2,76693E-07 | 4,20717E-09 | 8,17548E-10 |
| 309 | D Vertical | -5,92622E-08 | -5,91124E-08 | -7,73288E-09 | -5,16803E-08 | -5,14882E-08 | -7,73291E-09 | -4,4193E-08 | -4,38642E-08 | -7,73253E-09 |
| 309 | D transversal | -7,26301E-08 | 2,46233E-07 | 1,66539E-08 | -7,29792E-08 | 2,23497E-07 | 1,66542E-08 | -7,25205E-08 | 2,00762E-07 | 1,66537E-08 |
| 309 | G Longitudinal | -1,3608E-08 | 6,1618E-08 | 4,95864E-09 | -1,34779E-08 | 5,47568E-08 | 4,96065E-09 | -1,31555E-08 | 4,78747E-08 | 5,04073E-09 |
| 309 | G Vertical | 1,47542E-07 | -1,09021E-09 | -2,92966E-10 | 1,46394E-07 | -4,58389E-10 | -3,84924E-10 | 1,43392E-07 | 1,15313E-09 | -4,12582E-09 |
| 309 | G transversal | -7,45795E-08 | -1,00268E-10 | -3,04835E-11 | -6,77994E-08 | -7,26436E-11 | -2,85664E-11 | -6,1132E-08 | -6,61602E-11 | 5,17714E-11 |
| 310 | D Longitudinal | 2,47385E-07 | -2,04056E-17 | 1,91834E-10 | 2,24424E-07 | -1,03763E-14 | 1,91862E-10 | 2,01464E-07 | -1,75587E-13 | 1,92492E-10 |
| 310 | D Vertical | -5,91004E-08 | 1,99781E-17 | -2,20678E-09 | -5,1477E-08 | 1,04134E-14 | -2,20681E-09 | -4,38538E-08 | 1,76275E-13 | -2,20744E-09 |
| 310 | D transversal | -7,75359E-08 | 2,44468E-07 | 1,62737E-08 | -7,72112E-08 | 2,22021E-07 | 1,62739E-08 | -7,60794E-08 | 1,99576E-07 | 1,62716E-08 |
| 310 | G Longitudinal | -4,34548E-09 | 5,98481E-08 | 5,31198E-09 | -4,29329E-09 | 5,25212E-08 | 5,31202E-09 | -4,13321E-09 | 4,51945E-08 | 5,31168E-09 |
| 310 | G Vertical | 7,56429E-08 | 5,26486E-09 | 5,39009E-10 | 7,59653E-08 | 4,52129E-09 | 5,39203E-10 | 7,70835E-08 | 3,78002E-09 | 5,32537E-10 |
| 310 | G transversal | -6,15745E-08 | 1,92222E-17 | -8,86337E-12 | -5,47294E-08 | 1,22625E-14 | -8,89614E-12 | -4,78846E-08 | 2,07847E-13 | -9,64205E-12 |
| 311 | D Longitudinal | 2,68083E-07 | -5,02293E-09 | -6,87241E-10 | 2,50708E-07 | -4,32266E-09 | -6,87063E-10 | 2,34021E-07 | -3,62133E-09 | -6,8947E-10 |
| 311 | D Vertical | 5,36375E-08 | -5,38326E-08 | -6,94015E-09 | 4,68264E-08 | -4,69922E-08 | -6,94012E-09 | 4,01088E-08 | -4,01516E-08 | -6,94044E-09 |
| 311 | D transversal | 6,48526E-08 | 2,01348E-07 | 1,30811E-08 | 6,52491E-08 | 1,83543E-07 | 1,30809E-08 | 6,49526E-08 | 1,65737E-07 | 1,30834E-08 |
| 311 | G Longitudinal | 1,34596E-08 | 5,58408E-08 | 4,37286E-09 | 1,33531E-08 | 4,97931E-08 | 4,37474E-09 | 1,30614E-08 | 4,37246E-08 | 4,45327E-09 |
| 311 | G Vertical | 1,45277E-07 | 1,44971E-09 | 3,14588E-10 | 1,44086E-07 | 7,84758E-10 | 4,04655E-10 | 1,411E-07 | -8,35585E-10 | 4,0518E-09 |
| 311 | G transversal | -6,85346E-08 | 1,37826E-09 | 2,05267E-10 | -6,25642E-08 | 1,17289E-09 | 2,03308E-10 | -5,67021E-08 | 9,87625E-10 | 1,26194E-10 |
| 312 | D Longitudinal | 1,31186E-07 | -5,02293E-09 | -3,28257E-10 | 1,13264E-07 | -4,32252E-09 | -3,28439E-10 | 9,46545E-08 | -3,62304E-09 | -3,2645E-10 |
| 312 | D Vertical | -5,40112E-08 | 5,38326E-08 | 2,9785E-09 | -4,71076E-08 | 4,69922E-08 | 2,97854E-09 | -4,01105E-08 | 4,01518E-08 | 2,97821E-09 |
| 312 | D transversal | -7,4495E-08 | 2,01348E-07 | 1,27364E-08 | -7,35482E-08 | 1,83543E-07 | 1,27366E-08 | -7,19087E-08 | 1,65739E-07 | 1,27343E-08 |
| 312 | G Longitudinal | -1,26349E-08 | 5,58408E-08 | 4,39539E-09 | -1,26119E-08 | 4,97943E-08 | 4,39405E-09 | -1,24262E-08 | 4,37459E-08 | 4,39663E-09 |
| 312 | G Vertical | 1,34452E-07 | -1,44997E-09 | -6,01067E-10 | 1,35523E-07 | -8,42959E-10 | -5,36049E-10 | 1,35847E-07 | -1,4434E-10 | -6,67558E-10 |
| 312 | G transversal | -4,28716E-08 | 1,37825E-09 | 9,35748E-11 | -3,67772E-08 | 1,17162E-09 | 9,50008E-11 | -3,05522E-08 | 9,67152E-10 | 9,17403E-11 |
| 313 | D Longitudinal | 2,68083E-07 | 5,02293E-09 | 6,87198E-10 | 2,50708E-07 | 4,32251E-09 | 6,87397E-10 | 2,34021E-07 | 3,62293E-09 | 6,85808E-10 |
| 313 | D Vertical | -5,36375E-08 | -5,38326E-08 | -6,94014E-09 | -4,68264E-08 | -4,69922E-08 | -6,94017E-09 | -4,01088E-08 | -4,01519E-08 | -6,93982E-09 |
| 313 | D transversal | -6,48526E-08 | 2,01348E-07 | 1,30811E-08 | -6,52491E-08 | 1,83543E-07 | 1,30813E-08 | -6,49526E-08 | 1,65739E-07 | 1,30798E-08 |
| 313 | G Longitudinal | -1,34596E-08 | 5,58408E-08 | 4,37284E-09 | -1,3353E-08 | 4,9793E-08 | 4,3748E-09 | -1,30611E-08 | 4,3725E-08 | 4,45235E-09 |
| 313 | G Vertical | 1,45275E-07 | -1,44986E-09 | -3,14497E-10 | 1,44083E-07 | -7,85092E-10 | -4,04079E-10 | 1,41086E-07 | 8,34085E-10 | -4,04837E-09 |
| 313 | G transversal | -6,85346E-08 | -1,37826E-09 | -2,05259E-10 | -6,25641E-08 | -1,17285E-09 | -2,03396E-10 | -5,67018E-08 | -9,87962E-10 | -1,2542E-10 |
| 314 | D Longitudinal | 2,65296E-07 | 2,54634E-16 | -2,138E-14 | 2,48324E-07 | -7,04752E-14 | 1,66433E-13 | 2,32037E-07 | 7,92986E-13 | -1,81789E-12 |
| 314 | D Vertical | -1,57865E-16 | -5,22906E-08 | -6,73118E-09 | -2,18183E-16 | -4,56649E-08 | -6,7312E-09 | -1,0874E-15 | -3,9039E-08 | -6,73177E-09 |
| 314 | D transversal | 3,40341E-16 | 2,03409E-07 | 1,32979E-08 | 4,68823E-16 | 1,85305E-07 | 1,32979E-08 | 2,32428E-15 | 1,672E-07 | 1,32991E-08 |
| 314 | G Longitudinal | 1,23207E-16 | 5,55568E-08 | 4,34283E-09 | 1,9044E-16 | 4,95543E-08 | 4,34285E-09 | 1,16482E-15 | 4,35517E-08 | 4,34347E-09 |
| 314 | G Vertical | 6,33658E-08 | -4,75423E-16 | 2,14447E-14 | 6,37407E-08 | 6,94522E-14 | -1,64339E-13 | 6,34332E-08 | -7,90276E-13 | 1,81166E-12 |
| 314 | G transversal | -5,78334E-08 | -7,39584E-18 | 4,24081E-15 | -5,14399E-08 | 1,22865E-14 | -2,90532E-14 | -4,51517E-08 | -1,44125E-13 | 3,30399E-13 |
| 315 | D Longitudinal | 1,61453E-07 | -1,95184E-17 | 1,59787E-10 | 1,47803E-07 | -9,20973E-15 | 1,59811E-10 | 1,34153E-07 | -1,55643E-13 | 1,6037E-10 |
| 315 | D Vertical | -4,81894E-08 | -1,45559E-17 | -1,75124E-09 | -4,21461E-08 | -7,62362E-15 | -1,75122E-09 | -3,61027E-08 | -1,28559E-13 | -1,75076E-09 |
| 315 | D transversal | -6,20496E-08 | 1,5842E-07 | 9,53901E-09 | -6,18231E-08 | 1,45262E-07 | 9,53917E-09 | -6,10163E-08 | 1,32106E-07 | 9,53754E-09 |
| 315 | G Longitudinal | -4,17473E-09 | 4,74859E-08 | 4,05283E-09 | -4,12859E-09 | 4,18958E-08 | 4,05286E-09 | -3,98165E-09 | 3,63058E-08 | 4,05265E-09 |
| 315 | G Vertical | 5,86307E-08 | 4,36057E-09 | 4,21629E-10 | 5,88495E-08 | 3,77894E-09 | 4,21754E-10 | 5,96238E-08 | 3,19922E-09 | 4,15993E-10 |
| 315 | G transversal | -4,94115E-08 | -8,19965E-18 | -1,91123E-11 | -4,42439E-08 | -5,59901E-15 | -1,90973E-11 | -3,90761E-08 | -9,47093E-14 | -1,87573E-11 |
| 316 | D Longitudinal | 2,18113E-07 | -3,96241E-09 | -5,27093E-10 | 2,05172E-07 | -3,42806E-09 | -5,26952E-10 | 1,92804E-07 | -2,89279E-09 | -5,29157E-10 |

APOYO 2

| DESPLAZAMIENTOS (metros) | | C4 | | | C5 | | | C6 | | |
|---|---|---|---|---|---|---|---|---|---|---|
| Nudo | Desplazamiento | L | T | V | L | T | V | L | T | V |
| 316 | D Vertical | 4,81343E-08 | -4,80459E-08 | -6,11866E-09 | 4,21457E-08 | -4,20132E-08 | -6,11863E-09 | 3,62474E-08 | -3,59804E-08 | -6,11892E-09 |
| 316 | D transversal | 5,66683E-08 | 1,59238E-07 | 9,8378E-09 | 5,71108E-08 | 1,45911E-07 | 9,83766E-09 | 5,69746E-08 | 1,32582E-07 | 9,83974E-09 |
| 316 | G Longitudinal | 1,33768E-08 | 4,91695E-08 | 3,71047E-09 | 1,32783E-08 | 4,40354E-08 | 3,7123E-09 | 1,30043E-08 | 3,88814E-08 | 3,78817E-09 |
| 316 | G Vertical | 1,43072E-07 | 1,73112E-09 | 3,25904E-10 | 1,41845E-07 | 1,04383E-09 | 4,13791E-10 | 1,38865E-07 | -5,75728E-10 | 3,97268E-09 |
| 316 | G transversal | -6,22382E-08 | 5,18024E-10 | 8,9301E-11 | -5,71141E-08 | 4,30932E-10 | 8,73829E-11 | -5,20914E-08 | 3,63559E-10 | 1,17677E-11 |
| 317 | D Longitudinal | 9,69469E-08 | -3,96241E-09 | -2,47796E-10 | 8,35568E-08 | -3,42795E-09 | -2,47942E-10 | 6,95929E-08 | -2,89425E-09 | -2,46319E-10 |
| 317 | D Vertical | -4,80299E-08 | 4,80459E-08 | 2,62874E-09 | -4,19543E-08 | 4,20132E-08 | 2,62877E-09 | -3,57884E-08 | 3,59806E-08 | 2,62846E-09 |
| 317 | D transversal | -6,6596E-08 | 1,59238E-07 | 9,48765E-09 | -6,5701E-08 | 1,4591E-07 | 9,4878E-09 | -6,42275E-08 | 1,32583E-07 | 9,48603E-09 |
| 317 | G Longitudinal | -1,24981E-08 | 4,91696E-08 | 3,73302E-09 | -1,24771E-08 | 4,40366E-08 | 3,7317E-09 | -1,23025E-08 | 3,89021E-08 | 3,73346E-09 |
| 317 | G Vertical | 1,31446E-07 | -1,73138E-09 | -6,23311E-10 | 1,32555E-07 | -1,10062E-09 | -5,59866E-10 | 1,32934E-07 | -3,80483E-10 | -6,88202E-10 |
| 317 | G transversal | -3,6723E-08 | 5,18018E-10 | 3,80155E-11 | -3,14838E-08 | 4,29688E-10 | 3,94114E-11 | -2,61213E-08 | 3,4347E-10 | 3,62405E-11 |
| 318 | D Longitudinal | 2,18113E-07 | 3,96241E-09 | 5,27058E-10 | 2,05172E-07 | 3,42794E-09 | 5,27228E-10 | 1,92804E-07 | 2,8941E-09 | 5,2615E-10 |
| 318 | D Vertical | -4,81343E-08 | -4,80459E-08 | -6,11865E-09 | -4,21457E-08 | -4,20132E-08 | -6,11868E-09 | -3,62474E-08 | -3,59807E-08 | -6,11834E-09 |
| 318 | D transversal | -5,66683E-08 | 1,59238E-07 | 9,83777E-09 | -5,71108E-08 | 1,4591E-07 | 9,83794E-09 | -5,69746E-08 | 1,32583E-07 | 9,83671E-09 |
| 318 | G Longitudinal | -1,33768E-08 | 4,91696E-08 | 3,71046E-09 | -1,32782E-08 | 4,40354E-08 | 3,71236E-09 | -1,3004E-08 | 3,88817E-08 | 3,78731E-09 |
| 318 | G Vertical | 1,4307E-07 | -1,73127E-09 | -3,25815E-10 | 1,41842E-07 | -1,04416E-09 | -4,13229E-10 | 1,38852E-07 | 5,7426E-10 | -3,96932E-09 |
| 318 | G transversal | -6,22381E-08 | -5,1802E-10 | -8,92933E-11 | -5,7114E-08 | -4,30895E-10 | -8,74657E-11 | -5,20911E-08 | -3,63871E-10 | -1,10529E-11 |
| 319 | D Longitudinal | 1,76496E-07 | 1,94956E-16 | -1,41672E-14 | 1,67151E-07 | -4,79379E-14 | 1,13176E-13 | 1,58283E-07 | 5,35002E-13 | -1,22647E-12 |
| 319 | D Vertical | 2,44816E-16 | -4,3106E-08 | -5,41913E-09 | 3,36532E-16 | -3,77661E-08 | -5,41911E-09 | 1,66275E-15 | -3,24264E-08 | -5,41824E-09 |
| 319 | D transversal | 3,5239E-16 | 1,28797E-07 | 7,62318E-09 | 4,86696E-16 | 1,18522E-07 | 7,62321E-09 | 2,42855E-15 | 1,08248E-07 | 7,62447E-09 |
| 319 | G Longitudinal | -2,82552E-16 | 4,30562E-08 | 3,12701E-09 | -4,13923E-16 | 3,87414E-08 | 3,12699E-09 | -2,32009E-15 | 3,44269E-08 | 3,12576E-09 |
| 319 | G Vertical | 4,71704E-08 | -3,65967E-16 | 1,3962E-14 | 4,75949E-08 | 4,62439E-14 | -1,09431E-13 | 4,75545E-08 | -5,23045E-13 | 1,19905E-12 |
| 319 | G transversal | -4,4932E-08 | -1,53515E-17 | 3,52289E-15 | -4,01458E-08 | 1,05033E-14 | -2,48309E-14 | -3,54527E-08 | -1,22064E-13 | 2,79826E-13 |
| 320 | D Longitudinal | 1,75095E-07 | -4,02649E-09 | -5,20021E-10 | 1,65747E-07 | -3,5021E-09 | -5,19941E-10 | 1,5687E-07 | -2,9766E-09 | -5,23123E-10 |
| 320 | D Vertical | 4,21898E-08 | -4,23749E-08 | -5,31946E-09 | 3,69741E-08 | -3,71327E-08 | -5,31943E-09 | 3,18436E-08 | -3,18903E-08 | -5,31968E-09 |
| 320 | D transversal | 4,89566E-08 | 1,24052E-07 | 7,22831E-09 | 4,94278E-08 | 1,14322E-07 | 7,22817E-09 | 4,94231E-08 | 1,04592E-07 | 7,2292E-09 |
| 320 | G Longitudinal | 1,31773E-08 | 4,25723E-08 | 3,07996E-09 | 1,30952E-08 | 3,8314E-08 | 3,08176E-09 | 1,2848E-08 | 3,4036E-08 | 3,15636E-09 |
| 320 | G Vertical | 1,41374E-07 | 2,04299E-09 | 3,39053E-10 | 1,40091E-07 | 1,32779E-09 | 4,25148E-10 | 1,37092E-07 | -3,00671E-10 | 3,91148E-09 |
| 320 | G transversal | -5,57459E-08 | -1,04642E-09 | -1,22386E-10 | -5,14823E-08 | -9,17863E-10 | -1,24269E-10 | -4,73112E-08 | -7,69916E-10 | -1,9862E-10 |
| 321 | D Longitudinal | 6,9071E-08 | -4,02649E-09 | -2,4039E-10 | 5,93604E-08 | -3,50203E-09 | -2,40483E-10 | 4,91784E-08 | -2,97816E-09 | -2,39218E-10 |
| 321 | D Vertical | -4,25295E-08 | 4,23749E-08 | 2,28178E-09 | -3,72334E-08 | 3,71327E-08 | 2,2818E-09 | -3,1852E-08 | 3,18906E-08 | 2,28151E-09 |
| 321 | D transversal | -5,89553E-08 | 1,24052E-07 | 6,87976E-09 | -5,81172E-08 | 1,14322E-07 | 6,8799E-09 | -5,6803E-08 | 1,04593E-07 | 6,87875E-09 |
| 321 | G Longitudinal | -1,25851E-08 | 4,25723E-08 | 3,09366E-09 | -1,25584E-08 | 3,83151E-08 | 3,09237E-09 | -1,2388E-08 | 3,40563E-08 | 3,09444E-09 |
| 321 | G Vertical | 1,28674E-07 | -2,04325E-09 | -6,51602E-10 | 1,29842E-07 | -1,38343E-09 | -5,89451E-10 | 1,30294E-07 | -6,36044E-10 | -7,15166E-10 |
| 321 | G transversal | -3,02506E-08 | -1,04642E-09 | -6,30005E-11 | -2,58823E-08 | -9,19084E-10 | -6,16312E-11 | -2,13998E-08 | -7,89685E-10 | -6,47167E-11 |
| 322 | D Longitudinal | 1,75095E-07 | 4,02649E-09 | 5,19993E-10 | 1,65747E-07 | 3,502E-09 | 5,20165E-10 | 1,5687E-07 | 2,97766E-09 | 5,20691E-10 |
| 322 | D Vertical | -4,21898E-08 | -4,23749E-08 | -5,31945E-09 | -3,69741E-08 | -3,71327E-08 | -5,31947E-09 | -3,18436E-08 | -3,18906E-08 | -5,31915E-09 |
| 322 | D transversal | -4,89566E-08 | 1,24052E-07 | 7,22829E-09 | -4,94278E-08 | 1,14322E-07 | 7,2284E-09 | -4,94231E-08 | 1,04593E-07 | 7,22674E-09 |
| 322 | G Longitudinal | -1,31773E-08 | 4,25723E-08 | 3,07995E-09 | -1,30951E-08 | 3,83139E-08 | 3,08181E-09 | -1,28477E-08 | 3,40363E-08 | 3,15557E-09 |
| 322 | G Vertical | 1,41372E-07 | -2,04314E-09 | -3,38966E-10 | 1,40089E-07 | -1,32811E-09 | -4,24597E-10 | 1,37079E-07 | 2,99235E-10 | -3,90819E-09 |
| 322 | G transversal | -5,57458E-08 | 1,04642E-09 | 1,22393E-10 | -5,14822E-08 | 9,17898E-10 | 1,24192E-10 | -4,73109E-08 | 7,69634E-10 | 1,99266E-10 |
| 323 | D Longitudinal | 1,41705E-07 | -4,62859E-09 | -5,91126E-10 | 1,34959E-07 | -4,03414E-09 | -5,9101E-10 | 1,286E-07 | -3,43934E-09 | -5,91516E-10 |
| 323 | D Vertical | 3,73412E-08 | -3,72376E-08 | -4,62958E-09 | 3,28085E-08 | -3,26735E-08 | -4,62956E-09 | 2,83553E-08 | -2,81093E-08 | -4,62979E-09 |
| 323 | D transversal | 4,25205E-08 | 9,72776E-08 | 5,32255E-09 | 4,29942E-08 | 9,01672E-08 | 5,3225E-09 | 4,30739E-08 | 8,30558E-08 | 5,32575E-09 |

APOYO 2

| DESPLAZAMIENTOS (metros) | | C4 | | | C5 | | | C6 | | |
|---|---|---|---|---|---|---|---|---|---|---|
| Nudo | Desplazamiento | L | T | V | L | T | V | L | T | V |
| 323 | G Longitudinal | 1,25395E-08 | 3,74994E-08 | 2,62159E-09 | 1,25333E-08 | 3,39013E-08 | 2,62337E-09 | 1,23707E-08 | 3,02837E-08 | 2,69716E-09 |
| 323 | G Vertical | 1,39619E-07 | 1,95832E-09 | 3,21804E-10 | 1,38353E-07 | 1,26382E-09 | 4,0658E-10 | 1,35397E-07 | -3,29981E-10 | 3,83955E-09 |
| 323 | G transversal | -5,02772E-08 | -7,26583E-10 | -8,93223E-11 | -4,67146E-08 | -6,3002E-10 | -9,11595E-11 | -4,32363E-08 | -5,14494E-10 | -1,63837E-10 |
| 324 | D Longitudinal | 4,86736E-08 | -4,62859E-09 | -2,70888E-10 | 4,16338E-08 | -4,03406E-09 | -2,71E-10 | 3,4207E-08 | -3,44004E-09 | -2,699E-10 |
| 324 | D Vertical | -3,72754E-08 | 3,72376E-08 | 1,98841E-09 | -3,26693E-08 | 3,26735E-08 | 1,98844E-09 | -2,79838E-08 | 2,81095E-08 | 1,98817E-09 |
| 324 | D transversal | -5,21889E-08 | 9,72776E-08 | 4,9875E-09 | -5,14166E-08 | 9,01672E-08 | 4,98757E-09 | -5,0251E-08 | 8,30572E-08 | 4,98672E-09 |
| 324 | G Longitudinal | -1,31699E-08 | 3,74995E-08 | 2,59478E-09 | -1,3076E-08 | 3,39024E-08 | 2,59351E-09 | -1,28468E-08 | 3,03037E-08 | 2,59607E-09 |
| 324 | G Vertical | 1,27014E-07 | -1,95857E-09 | -6,39559E-10 | 1,28166E-07 | -1,3186E-09 | -5,7836E-10 | 1,28612E-07 | -5,92388E-10 | -7,02191E-10 |
| 324 | G transversal | -2,48961E-08 | -7,26589E-10 | -4,97039E-11 | -2,12382E-08 | -6,31211E-10 | -4,83682E-11 | -1,74748E-08 | -5,33831E-10 | -5,13599E-11 |
| 325 | D Longitudinal | 1,41705E-07 | 4,62859E-09 | 5,91104E-10 | 1,34959E-07 | 4,03407E-09 | 5,91192E-10 | 1,286E-07 | 3,4402E-09 | 5,89546E-10 |
| 325 | D Vertical | -3,73412E-08 | -3,72376E-08 | -4,62958E-09 | -3,28085E-08 | -3,26735E-08 | -4,6296E-09 | -2,83553E-08 | -2,81095E-08 | -4,6293E-09 |
| 325 | D transversal | -4,25205E-08 | 9,72776E-08 | 5,32253E-09 | -4,29941E-08 | 9,01671E-08 | 5,32268E-09 | -4,30739E-08 | 8,30567E-08 | 5,32375E-09 |
| 325 | G Longitudinal | -1,25395E-08 | 3,74995E-08 | 2,62158E-09 | -1,25333E-08 | 3,39013E-08 | 2,62341E-09 | -1,23704E-08 | 3,0284E-08 | 2,69644E-09 |
| 325 | G Vertical | 1,39617E-07 | -1,95847E-09 | -3,21718E-10 | 1,38351E-07 | -1,26413E-09 | -4,06039E-10 | 1,35384E-07 | 3,28565E-10 | -3,83631E-09 |
| 325 | G transversal | -5,02772E-08 | 7,26586E-10 | 8,93283E-11 | -4,67145E-08 | 6,30052E-10 | 9,10884E-11 | -4,3236E-08 | 5,14238E-10 | 1,64422E-10 |
| 326 | D Longitudinal | 9,40292E-08 | -1,80603E-17 | 1,45184E-10 | 8,71773E-08 | -1,00316E-14 | 1,45211E-10 | 8,03256E-08 | -1,69654E-13 | 1,4582E-10 |
| 326 | D Vertical | -3,57731E-08 | 8,08325E-18 | -1,26892E-09 | -3,13969E-08 | 4,17975E-15 | -1,26893E-09 | -2,70208E-08 | 7,04266E-14 | -1,26918E-09 |
| 326 | D transversal | -4,65156E-08 | 9,13984E-08 | 4,67699E-09 | -4,63728E-08 | 8,49473E-08 | 4,67709E-09 | -4,58522E-08 | 7,84967E-08 | 4,67604E-09 |
| 326 | G Longitudinal | -3,80322E-09 | 3,50713E-08 | 2,86731E-09 | -3,7657E-09 | 3,11164E-08 | 2,86734E-09 | -3,64256E-09 | 2,71616E-08 | 2,86712E-09 |
| 326 | G Vertical | 4,26419E-08 | 3,96839E-09 | 3,64259E-10 | 4,27766E-08 | 3,46592E-09 | 3,6433E-10 | 4,32636E-08 | 2,96488E-09 | 3,59857E-10 |
| 326 | G transversal | -3,67952E-08 | 1,29402E-17 | 1,62556E-11 | -3,32913E-08 | 6,02259E-15 | 1,62395E-11 | -2,97875E-08 | 1,01748E-13 | 1,58742E-11 |
| 327 | D Longitudinal | 2,73052E-08 | -4,50247E-09 | -2,60104E-10 | 2,30928E-08 | -3,92953E-09 | -2,60166E-10 | 1,85927E-08 | -3,35695E-09 | -2,59403E-10 |
| 327 | D Vertical | -3,06507E-08 | 3,04464E-08 | 1,59584E-09 | -2,69307E-08 | 2,67767E-08 | 1,59586E-09 | -2,31415E-08 | 2,3107E-08 | 1,59564E-09 |
| 327 | D transversal | -4,27021E-08 | 6,71726E-08 | 2,98221E-09 | -4,20738E-08 | 6,28641E-08 | 2,98228E-09 | -4,11527E-08 | 5,85561E-08 | 2,9814E-09 |
| 327 | G Longitudinal | -1,29651E-08 | 3,11977E-08 | 2,01805E-09 | -1,28908E-08 | 2,84024E-08 | 2,0168E-09 | -1,26934E-08 | 2,56054E-08 | 2,01927E-09 |
| 327 | G Vertical | 1,2448E-07 | -2,55509E-09 | -6,87233E-10 | 1,25703E-07 | -1,84934E-09 | -6,27048E-10 | 1,26233E-07 | -1,05877E-09 | -7,48873E-10 |
| 327 | G transversal | -1,8547E-08 | 4,40495E-11 | -1,74847E-12 | -1,57136E-08 | 3,53505E-11 | -4,50595E-13 | -1,27869E-08 | 2,85862E-11 | -3,33095E-12 |
| 328 | D Longitudinal | 1,03137E-07 | 4,50247E-09 | 5,70603E-10 | 9,9138E-08 | 3,92952E-09 | 5,70696E-10 | 9,5427E-08 | 3,35675E-09 | 5,70648E-10 |
| 328 | D Vertical | -3,02587E-08 | -3,04464E-08 | -3,72525E-09 | -2,66015E-08 | -2,67767E-08 | -3,72527E-09 | -2,30135E-08 | -2,3107E-08 | -3,72503E-09 |
| 328 | D transversal | -3,44746E-08 | 6,71726E-08 | 3,26502E-09 | -3,48846E-08 | 6,28641E-08 | 3,2651E-09 | -3,50017E-08 | 5,8556E-08 | 3,26446E-09 |
| 328 | G Longitudinal | -1,26566E-08 | 3,11977E-08 | 2,03586E-09 | -1,26427E-08 | 2,84013E-08 | 2,03766E-09 | -1,24849E-08 | 2,55861E-08 | 2,10935E-09 |
| 328 | G Vertical | 1,38381E-07 | -2,55499E-09 | -3,68867E-10 | 1,37046E-07 | -1,79578E-09 | -4,51791E-10 | 1,34039E-07 | -1,5307E-10 | -3,82531E-09 |
| 328 | G transversal | -4,36975E-08 | -4,40516E-11 | -1,36487E-11 | -4,09472E-08 | -3,64793E-11 | -1,19308E-11 | -3,82697E-08 | -4,76723E-11 | 5,94733E-11 |
| 329 | D Longitudinal | 2,47385E-07 | 7,24587E-17 | -1,91834E-10 | 2,24424E-07 | 1,04445E-14 | -1,91862E-10 | 2,01464E-07 | 1,75852E-13 | -1,92492E-10 |
| 329 | D Vertical | 5,91004E-08 | 7,33487E-17 | -2,20678E-09 | 5,1477E-08 | 1,04836E-14 | -2,20681E-09 | 4,38538E-08 | 1,76547E-13 | -2,20744E-09 |
| 329 | D transversal | 7,75359E-08 | 2,44468E-07 | 1,62738E-08 | 7,72112E-08 | 2,22022E-07 | 1,62735E-08 | 7,60794E-08 | 1,99574E-07 | 1,62759E-08 |
| 329 | G Longitudinal | 4,34548E-09 | 5,98481E-08 | 5,31199E-09 | 4,29329E-09 | 5,25212E-08 | 5,31196E-09 | 4,13321E-09 | 4,51942E-08 | 5,31238E-09 |
| 329 | G Vertical | 7,56429E-08 | -5,26486E-09 | -5,3906E-10 | 7,59653E-08 | -4,52146E-09 | -5,38809E-10 | 7,70835E-08 | -3,77814E-09 | -5,36853E-10 |
| 329 | G transversal | -6,15745E-08 | -9,05936E-17 | 8,86334E-12 | -5,47294E-08 | -1,23564E-14 | 8,89626E-12 | -4,78846E-08 | -2,08211E-13 | 9,64288E-12 |
| 330 | D Longitudinal | 1,31186E-07 | 5,02293E-09 | 3,283E-10 | 1,13264E-07 | 4,32266E-09 | 3,28104E-10 | 9,46545E-08 | 3,62144E-09 | 3,30112E-10 |
| 330 | D Vertical | 5,40112E-08 | 5,38326E-08 | 2,97851E-09 | 4,71076E-08 | 4,69922E-08 | 2,97848E-09 | 4,01105E-08 | 4,01516E-08 | 2,97882E-09 |
| 330 | D transversal | 7,4495E-08 | 2,01348E-07 | 1,27365E-08 | 7,35482E-08 | 1,83543E-07 | 1,27363E-08 | 7,19087E-08 | 1,65737E-07 | 1,2738E-08 |
| 330 | G Longitudinal | 1,26349E-08 | 5,58408E-08 | 4,3954E-09 | 1,26119E-08 | 4,97943E-08 | 4,39397E-09 | 1,24262E-08 | 4,37455E-08 | 4,39747E-09 |
| 330 | G Vertical | 1,3445E-07 | 1,45011E-09 | 6,01277E-10 | 1,35521E-07 | 8,43015E-10 | 5,36094E-10 | 1,35846E-07 | 1,44352E-10 | 6,67537E-10 |

APOYO 2

| DESPLAZAMIENTOS (metros) | | C4 | | | C5 | | | C6 | | |
|---|---|---|---|---|---|---|---|---|---|---|
| Nudo | Desplazamiento | L | T | V | L | T | V | L | T | V |
| 330 | G transversal | -4,28717E-08 | -1,37825E-09 | -9,35808E-11 | -3,67772E-08 | -1,17165E-09 | -9,49241E-11 | -3,05523E-08 | -9,66782E-10 | -9,25868E-11 |
| 331 | D Longitudinal | 1,28194E-07 | -2,55269E-16 | 2,13798E-14 | 1,10679E-07 | 7,0474E-14 | -1,66432E-13 | 9,24798E-08 | -7,9299E-13 | 1,81789E-12 |
| 331 | D Vertical | -1,644E-16 | 5,22906E-08 | 2,87615E-09 | -1,58107E-16 | 4,56649E-08 | 2,87614E-09 | -5,68211E-17 | 3,90391E-08 | 2,87617E-09 |
| 331 | D transversal | -3,54355E-16 | 2,03409E-07 | 1,29536E-08 | -3,41904E-16 | 1,85305E-07 | 1,29535E-08 | -1,42727E-16 | 1,672E-07 | 1,29536E-08 |
| 331 | G Longitudinal | -1,3231E-16 | 5,55568E-08 | 4,36077E-09 | -1,0786E-16 | 4,95543E-08 | 4,36076E-09 | 2,57559E-16 | 4,35518E-08 | 4,36096E-09 |
| 331 | G Vertical | 7,28136E-08 | -4,02697E-17 | 2,16179E-14 | 7,1899E-08 | 7,00252E-14 | -1,65118E-13 | 7,0305E-08 | -7,88056E-13 | 1,80659E-12 |
| 331 | G transversal | -4,94582E-08 | 1,92597E-17 | -4,2361E-15 | -4,29657E-08 | -1,22708E-14 | 2,90318E-14 | -3,63677E-08 | 1,44186E-13 | -3,30537E-13 |
| 332 | D Longitudinal | 1,61453E-07 | 6,29122E-17 | -1,59787E-10 | 1,47803E-07 | 9,26664E-15 | -1,59811E-10 | 1,34153E-07 | 1,55864E-13 | -1,60371E-10 |
| 332 | D Vertical | 4,81894E-08 | -5,37114E-17 | -1,75124E-09 | 4,21461E-08 | -7,67517E-15 | -1,75122E-09 | 3,61027E-08 | -1,28759E-13 | -1,75076E-09 |
| 332 | D transversal | 6,20496E-08 | 1,5842E-07 | 9,53905E-09 | 6,18231E-08 | 1,45262E-07 | 9,53889E-09 | 6,10163E-08 | 1,32104E-07 | 9,54057E-09 |
| 332 | G Longitudinal | 4,17472E-09 | 4,74859E-08 | 4,05284E-09 | 4,12859E-09 | 4,18958E-08 | 4,05281E-09 | 3,98166E-09 | 3,63055E-08 | 4,05327E-09 |
| 332 | G Vertical | 5,86307E-08 | -4,36057E-09 | -4,21663E-10 | 5,88495E-08 | -3,77905E-09 | -4,21484E-10 | 5,96238E-08 | -3,19794E-09 | -4,18925E-10 |
| 332 | G transversal | -4,94115E-08 | 4,19551E-17 | 1,91123E-11 | -4,42439E-08 | 5,64354E-15 | 1,90973E-11 | -3,90761E-08 | 9,48817E-14 | 1,87569E-11 |
| 333 | D Longitudinal | 9,69469E-08 | 3,96241E-09 | 2,47831E-10 | 8,35568E-08 | 3,42807E-09 | 2,47665E-10 | 6,95929E-08 | 2,89294E-09 | 2,49326E-10 |
| 333 | D Vertical | 4,80299E-08 | 4,80459E-08 | 2,62875E-09 | 4,19543E-08 | 4,20132E-08 | 2,62872E-09 | 3,57884E-08 | 3,59804E-08 | 2,62904E-09 |
| 333 | D transversal | 6,6596E-08 | 1,59238E-07 | 9,48769E-09 | 6,5701E-08 | 1,45911E-07 | 9,48752E-09 | 6,42275E-08 | 1,32582E-07 | 9,48906E-09 |
| 333 | G Longitudinal | 1,2498E-08 | 4,91696E-08 | 3,73303E-09 | 1,2477E-08 | 4,40366E-08 | 3,73163E-09 | 1,23024E-08 | 3,89018E-08 | 3,73424E-09 |
| 333 | G Vertical | 1,31444E-07 | 1,73151E-09 | 6,23515E-10 | 1,32553E-07 | 1,10068E-09 | 5,5991E-10 | 1,32933E-07 | 3,80492E-10 | 6,88189E-10 |
| 333 | G transversal | -3,6723E-08 | -5,18015E-10 | -3,80208E-11 | -3,14839E-08 | -4,29717E-10 | -3,93396E-11 | -2,61213E-08 | -3,43127E-10 | -3,70275E-11 |
| 334 | D Longitudinal | 6,9001E-08 | -1,96061E-16 | 1,41668E-14 | 5,92904E-08 | 4,79363E-14 | -1,13174E-13 | 4,91038E-08 | -5,35008E-13 | 1,22648E-12 |
| 334 | D Vertical | 2,54661E-16 | 4,3106E-08 | 2,32375E-09 | 2,46497E-16 | 3,77661E-08 | 2,32377E-09 | 1,10839E-16 | 3,24262E-08 | 2,32374E-09 |
| 334 | D transversal | -3,6713E-16 | 1,28797E-07 | 7,27484E-09 | -3,52957E-16 | 1,18523E-07 | 7,27481E-09 | -1,26678E-16 | 1,08248E-07 | 7,27487E-09 |
| 334 | G Longitudinal | 2,98968E-16 | 4,30562E-08 | 3,1295E-09 | 2,64739E-16 | 3,87414E-08 | 3,12952E-09 | -2,55018E-16 | 3,44266E-08 | 3,12927E-09 |
| 334 | G Vertical | 5,64318E-08 | -2,23488E-17 | 1,40988E-14 | 5,56504E-08 | 4,66966E-14 | -1,10046E-13 | 5,44065E-08 | -5,21291E-13 | 1,19505E-12 |
| 334 | G transversal | -3,80007E-08 | 2,02206E-17 | -3,52096E-15 | -3,31307E-08 | -1,04968E-14 | 2,48221E-14 | -2,81678E-08 | 1,22089E-13 | -2,79883E-13 |
| 335 | D Longitudinal | 6,9071E-08 | 4,02649E-09 | 2,40418E-10 | 5,93604E-08 | 3,50213E-09 | 2,40259E-10 | 4,91784E-08 | 2,9771E-09 | 2,41648E-10 |
| 335 | D Vertical | 4,25295E-08 | 4,23749E-08 | 2,28178E-09 | 3,72334E-08 | 3,71327E-08 | 2,28176E-09 | 3,1852E-08 | 3,18903E-08 | 2,28205E-09 |
| 335 | D transversal | 5,89553E-08 | 1,24052E-07 | 6,87979E-09 | 5,81172E-08 | 1,14322E-07 | 6,87967E-09 | 5,6803E-08 | 1,04592E-07 | 6,88121E-09 |
| 335 | G Longitudinal | 1,2585E-08 | 4,25723E-08 | 3,09367E-09 | 1,25583E-08 | 3,83151E-08 | 3,0923E-09 | 1,2388E-08 | 3,4056E-08 | 3,09515E-09 |
| 335 | G Vertical | 1,28672E-07 | 2,04338E-09 | 6,51802E-10 | 1,2984E-07 | 1,38348E-09 | 5,89494E-10 | 1,30293E-07 | 6,36055E-10 | 7,1515E-10 |
| 335 | G transversal | -3,02506E-08 | 1,04642E-09 | 6,29961E-11 | -2,58823E-08 | 9,19057E-10 | 6,16971E-11 | -2,13998E-08 | 7,89998E-10 | 6,39985E-11 |
| 336 | D Longitudinal | 4,86736E-08 | 4,62859E-09 | 2,7091E-10 | 4,16338E-08 | 4,03413E-09 | 2,70818E-10 | 3,4207E-08 | 3,43919E-09 | 2,7187E-10 |
| 336 | D Vertical | 3,72754E-08 | 3,72376E-08 | 1,98842E-09 | 3,26693E-08 | 3,26735E-08 | 1,98839E-09 | 2,79838E-08 | 2,81092E-08 | 1,98866E-09 |
| 336 | D transversal | 5,21889E-08 | 9,72776E-08 | 4,98752E-09 | 5,14166E-08 | 9,01673E-08 | 4,98739E-09 | 5,0251E-08 | 8,30563E-08 | 4,98873E-09 |
| 336 | G Longitudinal | 1,31699E-08 | 3,74995E-08 | 2,59479E-09 | 1,3076E-08 | 3,39025E-08 | 2,59345E-09 | 1,28468E-08 | 3,03034E-08 | 2,59673E-09 |
| 336 | G Vertical | 1,27012E-07 | 1,95871E-09 | 6,39756E-10 | 1,28164E-07 | 1,31865E-09 | 5,78403E-10 | 1,28611E-07 | 5,92396E-10 | 7,02179E-10 |
| 336 | G transversal | -2,48962E-08 | 7,26592E-10 | 4,97003E-11 | -2,12382E-08 | 6,31187E-10 | 4,84287E-11 | -1,74748E-08 | 5,34117E-10 | 5,07049E-11 |
| 337 | D Longitudinal | 9,40292E-08 | 7,17582E-17 | -1,45184E-10 | 8,71773E-08 | 1,01022E-14 | -1,45211E-10 | 8,03256E-08 | 1,69928E-13 | -1,45821E-10 |
| 337 | D Vertical | 3,57731E-08 | 2,93398E-17 | -1,26892E-09 | 3,13969E-08 | 4,20763E-15 | -1,26893E-09 | 2,70208E-08 | 7,0535E-14 | -1,26918E-09 |
| 337 | D transversal | 4,65156E-08 | 9,13984E-08 | 4,67702E-09 | 4,63728E-08 | 8,49474E-08 | 4,67692E-09 | 4,58522E-08 | 7,84959E-08 | 4,67795E-09 |
| 337 | G Longitudinal | 3,80322E-09 | 3,50713E-08 | 2,86732E-09 | 3,7657E-09 | 3,11164E-08 | 2,86729E-09 | 3,64256E-09 | 2,71613E-08 | 2,86762E-09 |
| 337 | G Vertical | 4,26419E-08 | -3,96839E-09 | -3,6428E-10 | 4,27766E-08 | -3,46599E-09 | -3,64163E-10 | 4,32636E-08 | -2,96409E-09 | -3,61662E-10 |
| 337 | G transversal | -3,67952E-08 | -4,09609E-17 | -1,62556E-11 | -3,32913E-08 | -6,05945E-15 | -1,62395E-11 | -2,97874E-08 | -1,01891E-13 | -1,58739E-11 |
| 338 | D Longitudinal | 1,03137E-07 | -4,50247E-09 | -5,70619E-10 | 9,9138E-08 | -3,92958E-09 | -5,70563E-10 | 9,5427E-08 | -3,35613E-09 | -5,72082E-10 |

APOYO 2

| DESPLAZAMIENTOS (metros) | | C4 | | | C5 | | | C6 | | |
|---|---|---|---|---|---|---|---|---|---|---|
| Nudo | Desplazamiento | L | T | V | L | T | V | L | T | V |
| 338 | D Vertical | 3,02587E-08 | -3,04464E-08 | -3,72526E-09 | 2,66015E-08 | -2,67767E-08 | -3,72524E-09 | 2,30135E-08 | -2,31069E-08 | -3,72545E-09 |
| 338 | D transversal | 3,44746E-08 | 6,71726E-08 | 3,26504E-09 | 3,48846E-08 | 6,28642E-08 | 3,26496E-09 | 3,50017E-08 | 5,85554E-08 | 3,26592E-09 |
| 338 | G Longitudinal | 1,26566E-08 | 3,11977E-08 | 2,03587E-09 | 1,26427E-08 | 2,84013E-08 | 2,03761E-09 | 1,24852E-08 | 2,55858E-08 | 2,11E-09 |
| 338 | G Vertical | 1,38383E-07 | 2,55485E-09 | 3,68951E-10 | 1,37048E-07 | 1,79547E-09 | 4,52324E-10 | 1,34052E-07 | 1,51679E-10 | 3,82849E-09 |
| 338 | G transversal | -4,36975E-08 | 4,40546E-11 | 1,36537E-11 | -4,09472E-08 | 3,6508E-11 | 1,18672E-11 | -3,827E-08 | 4,74516E-11 | -5,89672E-11 |
| 339 | D Longitudinal | 2,73052E-08 | 4,50247E-09 | 2,6012E-10 | 2,30928E-08 | 3,92959E-09 | 2,60032E-10 | 1,85927E-08 | 3,35632E-09 | 2,60837E-10 |
| 339 | D Vertical | 3,06507E-08 | 3,04464E-08 | 1,59584E-09 | 2,69307E-08 | 2,67767E-08 | 1,59582E-09 | 2,31415E-08 | 2,31069E-08 | 1,59605E-09 |
| 339 | D transversal | 4,27021E-08 | 6,71726E-08 | 2,98223E-09 | 4,20738E-08 | 6,28642E-08 | 2,98215E-09 | 4,11527E-08 | 5,85554E-08 | 2,98287E-09 |
| 339 | G Longitudinal | 1,2965E-08 | 3,11977E-08 | 2,01806E-09 | 1,28907E-08 | 2,84024E-08 | 2,01675E-09 | 1,26934E-08 | 2,56051E-08 | 2,01984E-09 |
| 339 | G Vertical | 1,24478E-07 | 2,55523E-09 | 6,87427E-10 | 1,25701E-07 | 1,8494E-09 | 6,2709E-10 | 1,26232E-07 | 1,05878E-09 | 7,48859E-10 |
| 339 | G transversal | -1,8547E-08 | -4,40467E-11 | 1,74578E-12 | -1,57136E-08 | -3,53716E-11 | 5,03866E-13 | -1,27869E-08 | -2,83362E-11 | 2,75809E-12 |
| 340 | D Longitudinal | 2,6111E-08 | -1,33776E-16 | 8,13612E-15 | 2,20297E-08 | 2,84843E-14 | -6,72252E-14 | 1,76581E-08 | -3,1463E-13 | 7,21276E-13 |
| 340 | D Vertical | -1,7197E-16 | 3,10416E-08 | 1,63156E-09 | -1,65727E-16 | 2,72901E-08 | 1,63155E-09 | -6,48439E-17 | 2,35385E-08 | 1,63157E-09 |
| 340 | D transversal | -3,30584E-16 | 7,20959E-08 | 3,35376E-09 | -3,1564E-16 | 6,72481E-08 | 3,35374E-09 | -7,88498E-17 | 6,24003E-08 | 3,35381E-09 |
| 340 | G Longitudinal | -3,37935E-16 | 3,15346E-08 | 2,04517E-09 | -3,06722E-16 | 2,87018E-08 | 2,04515E-09 | 1,69338E-16 | 2,5869E-08 | 2,04537E-09 |
| 340 | G Vertical | 4,04875E-08 | 5,88761E-17 | 8,31921E-15 | 3,98678E-08 | 2,79099E-14 | -6,56448E-14 | 3,8965E-08 | -3,08556E-13 | 7,07362E-13 |
| 340 | G transversal | -2,59669E-08 | 2,55573E-17 | -2,74363E-15 | -2,26757E-08 | -8,4957E-15 | 2,00852E-14 | -1,93064E-08 | 9,76408E-14 | -2,23836E-13 |
| 341 | D Longitudinal | 1,03696E-07 | 1,316E-16 | -8,13697E-15 | 9,98298E-08 | -2,84873E-14 | 6,72292E-14 | 9,62536E-08 | 3,14619E-13 | -7,2125E-13 |
| 341 | D Vertical | -1,65155E-16 | -3,10416E-08 | -3,80814E-09 | -2,27742E-16 | -2,72901E-08 | -3,80816E-09 | -1,13232E-15 | -2,35384E-08 | -3,80874E-09 |
| 341 | D transversal | 3,1689E-16 | 7,20959E-08 | 3,67551E-09 | 4,39961E-16 | 6,72481E-08 | 3,67554E-09 | 2,22049E-15 | 6,24E-08 | 3,6767E-09 |
| 341 | G Longitudinal | 3,20829E-16 | 3,15346E-08 | 2,06238E-09 | 4,62044E-16 | 2,87018E-08 | 2,06241E-09 | 2,50878E-15 | 2,58687E-08 | 2,06373E-09 |
| 341 | G Vertical | 3,21799E-08 | -3,26767E-16 | 8,16569E-15 | 3,25885E-08 | 2,74019E-14 | -6,49546E-14 | 3,27113E-08 | -3,10523E-13 | 7,11849E-13 |
| 341 | G transversal | -3,35412E-08 | -1,49001E-17 | 2,74786E-15 | -3,03169E-08 | 8,50979E-15 | -2,01043E-14 | -2,71704E-08 | -9,75863E-14 | 2,23712E-13 |
| 342 | D Longitudinal | 1,33017E-08 | 4,68795E-09 | 2,6078E-10 | 1,09571E-08 | 4,10751E-09 | 2,6072E-10 | 8,40208E-09 | 3,52679E-09 | 2,61291E-10 |
| 342 | D Vertical | 2,48009E-08 | 2,47532E-08 | 1,28761E-09 | 2,18128E-08 | 2,1797E-08 | 1,28759E-09 | 1,87653E-08 | 1,88408E-08 | 1,28779E-09 |
| 342 | D transversal | 3,52494E-08 | 4,58061E-08 | 1,65205E-09 | 3,46556E-08 | 4,33298E-08 | 1,65199E-09 | 3,3846E-08 | 4,08533E-08 | 1,65246E-09 |
| 342 | G Longitudinal | 1,1835E-08 | 2,52505E-08 | 1,51942E-09 | 1,18984E-08 | 2,31938E-08 | 1,51813E-09 | 1,18519E-08 | 2,11352E-08 | 1,52087E-09 |
| 342 | G Vertical | 1,23019E-07 | 2,86032E-09 | 7,12585E-10 | 1,2428E-07 | 2,12208E-09 | 6,5282E-10 | 1,24855E-07 | 1,29985E-09 | 7,73453E-10 |
| 342 | G transversal | -1,30337E-08 | 1,18876E-09 | 5,73716E-11 | -1,0894E-08 | 1,0665E-09 | 5,61379E-11 | -8,67281E-09 | 9,42601E-10 | 5,84093E-11 |
| 343 | D Longitudinal | 7,44084E-08 | -4,68795E-09 | -5,80909E-10 | 7,22168E-08 | -4,1075E-09 | -5,80864E-10 | 7,02355E-08 | -3,5267E-09 | -5,8176E-10 |
| 343 | D Vertical | 2,481E-08 | -2,47532E-08 | -2,99887E-09 | 2,18749E-08 | -2,1797E-08 | -2,99885E-09 | 1,89993E-08 | -1,88408E-08 | -2,99904E-09 |
| 343 | D transversal | 2,68126E-08 | 4,58061E-08 | 1,93859E-09 | 2,72487E-08 | 4,33298E-08 | 1,93854E-09 | 2,7469E-08 | 4,08533E-08 | 1,93911E-09 |
| 343 | G Longitudinal | 1,37276E-08 | 2,52505E-08 | 1,46351E-09 | 1,3588E-08 | 2,31927E-08 | 1,46524E-09 | 1,3318E-08 | 2,11161E-08 | 1,53653E-09 |
| 343 | G Vertical | 1,37634E-07 | 2,85995E-09 | 3,90487E-10 | 1,36263E-07 | 2,06866E-09 | 4,73068E-10 | 1,33244E-07 | 4,01357E-10 | 3,81719E-09 |
| 343 | G transversal | -3,8103E-08 | -1,18875E-09 | -1,20567E-10 | -3,60353E-08 | -1,06537E-09 | -1,22334E-10 | -3,40291E-08 | -9,23665E-10 | -1,92542E-10 |
| 344 | D Longitudinal | 1,33017E-08 | -4,68795E-09 | -2,60768E-10 | 1,09571E-08 | -4,10747E-09 | -2,60816E-10 | 8,40208E-09 | -3,52724E-09 | -2,60263E-10 |
| 344 | D Vertical | -2,48009E-08 | 2,47532E-08 | 1,2876E-09 | -2,18128E-08 | 2,1797E-08 | 1,28762E-09 | -1,87653E-08 | 1,88409E-08 | 1,28743E-09 |
| 344 | D transversal | -3,52494E-08 | 4,58061E-08 | 1,65203E-09 | -3,46556E-08 | 4,33298E-08 | 1,65209E-09 | -3,3846E-08 | 4,08538E-08 | 1,6514E-09 |
| 344 | G Longitudinal | -1,1835E-08 | 2,52505E-08 | 1,51941E-09 | -1,18985E-08 | 2,31938E-08 | 1,51817E-09 | -1,18519E-08 | 2,11354E-08 | 1,52038E-09 |
| 344 | G Vertical | 1,23021E-07 | -2,8602E-09 | -7,12392E-10 | 1,24282E-07 | -2,12203E-09 | -6,52779E-10 | 1,24856E-07 | -1,29984E-09 | -7,73464E-10 |
| 344 | G transversal | -1,30337E-08 | -1,18875E-09 | -5,73734E-11 | -1,0894E-08 | -1,06652E-09 | -5,60912E-11 | -8,67279E-09 | -9,42384E-10 | -5,89081E-11 |
| 345 | D Longitudinal | 7,44084E-08 | 4,68795E-09 | 5,80898E-10 | 7,22168E-08 | 4,10746E-09 | 5,8096E-10 | 7,02355E-08 | 3,52715E-09 | 5,80732E-10 |
| 345 | D Vertical | -2,481E-08 | -2,47532E-08 | -2,99886E-09 | -2,18749E-08 | -2,1797E-08 | -2,99888E-09 | -1,89993E-08 | -1,88409E-08 | -2,99868E-09 |
| 345 | D transversal | -2,68126E-08 | 4,58061E-08 | 1,93858E-09 | -2,72487E-08 | 4,33298E-08 | 1,93863E-09 | -2,7469E-08 | 4,08537E-08 | 1,93805E-09 |

APOYO 2

| DESPLAZAMIENTOS (metros) | | C4 | | | C5 | | | C6 | | |
|---|---|---|---|---|---|---|---|---|---|---|
| Nudo | Desplazamiento | L | T | V | L | T | V | L | T | V |
| 345 | G Longitudinal | -1,37275E-08 | 2,52505E-08 | 1,4635E-09 | -1,35879E-08 | 2,31927E-08 | 1,46527E-09 | -1,33177E-08 | 2,11164E-08 | 1,53596E-09 |
| 345 | G Vertical | 1,37632E-07 | -2,86009E-09 | -3,90403E-10 | 1,3626E-07 | -2,06897E-09 | -4,7254E-10 | 1,33232E-07 | -4,02735E-10 | -3,81404E-09 |
| 345 | G transversal | -3,81029E-08 | 1,18875E-09 | 1,20571E-10 | -3,60353E-08 | 1,0654E-09 | 1,22277E-10 | -3,40288E-08 | 9,23477E-10 | 1,92975E-10 |
| 346 | D Longitudinal | 4,61315E-08 | -6,37036E-18 | 1,70587E-10 | 4,35955E-08 | -3,0748E-15 | 1,70595E-10 | 4,10595E-08 | -5,20105E-14 | 1,70782E-10 |
| 346 | D Vertical | -2,52332E-08 | -2,57362E-18 | -8,70299E-10 | -2,22259E-08 | -1,39884E-15 | -8,70295E-10 | -1,92185E-08 | -2,35575E-14 | -8,7021E-10 |
| 346 | D transversal | -3,1261E-08 | 4,41707E-08 | 1,63414E-09 | -3,11836E-08 | 4,19167E-08 | 1,6342E-09 | -3,08933E-08 | 3,96629E-08 | 1,63364E-09 |
| 346 | G Longitudinal | -3,47942E-09 | 2,33846E-08 | 1,8043E-09 | -3,45186E-09 | 2,08959E-08 | 1,80432E-09 | -3,35891E-09 | 1,84072E-08 | 1,8042E-09 |
| 346 | G Vertical | 2,79168E-08 | 4,61645E-09 | 4,04375E-10 | 2,79883E-08 | 4,05867E-09 | 4,04403E-10 | 2,82534E-08 | 3,50209E-09 | 4,00441E-10 |
| 346 | G transversal | -2,53962E-08 | -2,32443E-19 | 3,0695E-11 | -2,33197E-08 | 1,73771E-15 | 3,06904E-11 | -2,12432E-08 | 2,94815E-14 | 3,05845E-11 |
| 347 | D Longitudinal | 4,98458E-08 | -5,75419E-09 | -6,86937E-10 | 4,89526E-08 | -5,07296E-09 | -6,86904E-10 | 4,82019E-08 | -4,39152E-09 | -6,87401E-10 |
| 347 | D Vertical | 1,87517E-08 | -1,89214E-08 | -2,25869E-09 | 1,65271E-08 | -1,66953E-08 | -2,25867E-09 | 1,43502E-08 | -1,44691E-08 | -2,25882E-09 |
| 347 | D transversal | 1,86337E-08 | 2,89202E-08 | 1,02759E-09 | 1,91552E-08 | 2,77274E-08 | 1,02755E-09 | 1,95278E-08 | 2,65345E-08 | 1,02795E-09 |
| 347 | G Longitudinal | 1,40278E-08 | 1,93241E-08 | 9,3461E-10 | 1,3856E-08 | 1,79817E-08 | 9,36329E-10 | 1,35683E-08 | 1,66208E-08 | 1,00697E-09 |
| 347 | G Vertical | 1,37193E-07 | 3,16603E-09 | 4,1187E-10 | 1,35778E-07 | 2,34226E-09 | 4,93869E-10 | 1,32728E-07 | 6,48631E-10 | 3,81444E-09 |
| 347 | G transversal | -3,24167E-08 | -1,67195E-09 | -1,71409E-10 | -3,10323E-08 | -1,49892E-09 | -1,7317E-10 | -2,96955E-08 | -1,30754E-09 | -2,43397E-10 |
| 348 | D Longitudinal | 3,50227E-09 | -5,75419E-09 | -3,00867E-10 | 2,5079E-09 | -5,07293E-09 | -3,009E-10 | 1,37103E-09 | -4,39185E-09 | -3,00529E-10 |
| 348 | D Vertical | -1,91338E-08 | 1,89214E-08 | 9,69179E-10 | -1,68672E-08 | 1,66953E-08 | 9,69194E-10 | -1,45529E-08 | 1,44692E-08 | 9,69047E-10 |
| 348 | D transversal | -2,83304E-08 | 2,89202E-08 | 7,01929E-10 | -2,77024E-08 | 2,77274E-08 | 7,01966E-10 | -2,69257E-08 | 2,65348E-08 | 7,01549E-10 |
| 348 | G Longitudinal | -1,15043E-08 | 1,93241E-08 | 1,0109E-09 | -1,16127E-08 | 1,79828E-08 | 1,00966E-09 | -1,16253E-08 | 1,66399E-08 | 1,01188E-09 |
| 348 | G Vertical | 1,21771E-07 | -3,16627E-09 | -7,3843E-10 | 1,23076E-07 | -2,39524E-09 | -6,79237E-10 | 1,23699E-07 | -1,54078E-09 | -7,99084E-10 |
| 348 | G transversal | -7,31774E-09 | -1,67195E-09 | -7,8535E-11 | -5,87344E-09 | -1,50006E-09 | -7,72574E-11 | -4,36114E-09 | -1,32629E-09 | -8,00289E-11 |
| 349 | D Longitudinal | 4,98458E-08 | 5,75419E-09 | 6,86929E-10 | 4,89526E-08 | 5,07293E-09 | 6,86968E-10 | 4,82019E-08 | 4,39181E-09 | 6,86721E-10 |
| 349 | D Vertical | -1,87517E-08 | -1,89214E-08 | -2,25868E-09 | -1,65271E-08 | -1,66953E-08 | -2,2587E-09 | -1,43502E-08 | -1,44692E-08 | -2,25854E-09 |
| 349 | D transversal | -1,86337E-08 | 2,89202E-08 | 1,02758E-09 | -1,91552E-08 | 2,77274E-08 | 1,02762E-09 | -1,95278E-08 | 2,65348E-08 | 1,02723E-09 |
| 349 | G Longitudinal | -1,40277E-08 | 1,93241E-08 | 9,34603E-10 | -1,38559E-08 | 1,79817E-08 | 9,36356E-10 | -1,3568E-08 | 1,6621E-08 | 1,0065E-09 |
| 349 | G Vertical | 1,37191E-07 | -3,16617E-09 | -4,11786E-10 | 1,35775E-07 | -2,34256E-09 | -4,93345E-10 | 1,32715E-07 | -6,5E-10 | -3,81131E-09 |
| 349 | G transversal | -3,24167E-08 | 1,67195E-09 | 1,71412E-10 | -3,10322E-08 | 1,49894E-09 | 1,73121E-10 | -2,96952E-08 | 1,30739E-09 | 2,43748E-10 |
| 350 | D Longitudinal | 4,69608E-08 | 7,19808E-17 | -3,46759E-15 | 4,63707E-08 | -1,27789E-14 | 3,01442E-14 | 4,59158E-08 | 1,3904E-13 | -3,18743E-13 |
| 350 | D Vertical | 8,81019E-17 | -1,94104E-08 | -2,305E-09 | 1,20457E-16 | -1,71424E-08 | -2,30499E-09 | 5,88912E-16 | -1,48745E-08 | -2,30468E-09 |
| 350 | D transversal | 5,92364E-17 | 3,04444E-08 | 1,16863E-09 | 7,56646E-17 | 2,9039E-08 | 1,16863E-09 | 3,1203E-16 | 2,76335E-08 | 1,16879E-09 |
| 350 | G Longitudinal | -3,78341E-18 | 1,90725E-08 | 9,2177E-10 | -1,44935E-17 | 1,77669E-08 | 9,21769E-10 | -1,71381E-16 | 1,64613E-08 | 9,21673E-10 |
| 350 | G Vertical | 1,67082E-08 | -2,33078E-16 | 3,75807E-15 | 1,71484E-08 | 1,27729E-14 | -3,03644E-14 | 1,74486E-08 | -1,45578E-13 | 3,33722E-13 |
| 350 | G transversal | -2,10627E-08 | -1,39743E-17 | 1,77737E-15 | -1,93107E-08 | 5,70108E-15 | -1,34634E-14 | -1,76127E-08 | -6,46395E-14 | 1,48183E-13 |
| 351 | D Longitudinal | 1,61241E-08 | -6,61339E-18 | 1,60292E-10 | 1,56915E-08 | -3,42717E-15 | 1,60302E-10 | 1,52588E-08 | -5,79335E-14 | 1,6051E-10 |
| 351 | D Vertical | -1,18769E-08 | -2,30564E-18 | -4,00391E-10 | -1,0485E-08 | -1,25439E-15 | -4,00388E-10 | -9,09313E-09 | -2,12298E-14 | -4,00312E-10 |
| 351 | D transversal | -1,57759E-08 | 1,33198E-08 | 6,24878E-11 | -1,57471E-08 | 1,32336E-08 | 6,2508E-11 | -1,56347E-08 | 1,31476E-08 | 6,22511E-11 |
| 351 | G Longitudinal | -3,47316E-09 | 1,21766E-08 | 8,1132E-10 | -3,4567E-09 | 1,10575E-08 | 8,11332E-10 | -3,39888E-09 | 9,93848E-09 | 8,11305E-10 |
| 351 | G Vertical | 1,38566E-08 | 4,17126E-09 | 3,47406E-10 | 1,38846E-08 | 3,69208E-09 | 3,47403E-10 | 1,39901E-08 | 3,21398E-09 | 3,43604E-10 |
| 351 | G transversal | -1,34058E-08 | -5,12765E-18 | -3,93602E-11 | -1,2761E-08 | -4,78238E-15 | -3,93474E-11 | -1,2116E-08 | -8,09441E-14 | -3,90568E-11 |
| 352 | D Longitudinal | 2,7774E-08 | -6,01004E-09 | -6,99921E-10 | 2,77016E-08 | -5,31938E-09 | -6,99899E-10 | 2,77094E-08 | -4,62865E-09 | -7,00015E-10 |
| 352 | D Vertical | 1,23273E-08 | -1,22196E-08 | -1,44517E-09 | 1,09045E-08 | -1,07933E-08 | -1,44516E-09 | 9,51429E-09 | -9,36704E-09 | -1,44526E-09 |
| 352 | D transversal | 9,84998E-09 | 1,5149E-08 | 4,38459E-10 | 1,04267E-08 | 1,47844E-08 | 4,38449E-10 | 1,09166E-08 | 1,44196E-08 | 4,39124E-10 |
| 352 | G Longitudinal | 1,26899E-08 | 1,35101E-08 | 4,81449E-10 | 1,26729E-08 | 1,28534E-08 | 4,83177E-10 | 1,25549E-08 | 1,21781E-08 | 5,53989E-10 |
| 352 | G Vertical | 1,36965E-07 | 3,50797E-09 | 4,36127E-10 | 1,35504E-07 | 2,64779E-09 | 5,17696E-10 | 1,32417E-07 | 9,22336E-10 | 3,82082E-09 |

APOYO 2

| DESPLAZAMIENTOS (metros) | | C4 | | | C5 | | | C6 | | |
|---|---|---|---|---|---|---|---|---|---|---|
| Nudo | Desplazamiento | L | T | V | L | T | V | L | T | V |
| 352 | G transversal | -2,56328E-08 | 1,21132E-09 | 1,52704E-10 | -2,50436E-08 | 1,06753E-09 | 1,50933E-10 | -2,44841E-08 | 9,42262E-10 | 8,00525E-11 |
| 353 | D Longitudinal | -2,11782E-09 | -6,01004E-09 | -3,01545E-10 | -2,24523E-09 | -5,31937E-09 | -3,01566E-10 | -2,45275E-09 | -4,62879E-09 | -3,01359E-10 |
| 353 | D Vertical | -1,23167E-08 | 1,22196E-08 | 6,22888E-10 | -1,08655E-08 | 1,07933E-08 | 6,22898E-10 | -9,38173E-09 | 9,36712E-09 | 6,22798E-10 |
| 353 | D transversal | -2,03213E-08 | 1,5149E-08 | 9,02176E-11 | -1,96839E-08 | 1,47844E-08 | 9,02314E-11 | -1,89599E-08 | 1,44199E-08 | 9,00379E-11 |
| 353 | G Longitudinal | -1,28078E-08 | 1,35101E-08 | 4,69833E-10 | -1,27744E-08 | 1,28545E-08 | 4,68591E-10 | -1,26601E-08 | 1,21972E-08 | 4,70958E-10 |
| 353 | G Vertical | 1,20693E-07 | -3,50821E-09 | -7,67185E-10 | 1,22045E-07 | -2,7005E-09 | -7,08303E-10 | 1,22719E-07 | -1,8098E-09 | -8,27522E-10 |
| 353 | G transversal | -4,68432E-10 | 1,21132E-09 | 5,67542E-11 | 1,65027E-10 | 1,06638E-09 | 5,80372E-11 | 8,48628E-10 | 9,2331E-10 | 5,52997E-11 |
| 354 | D Longitudinal | 2,7774E-08 | 6,01004E-09 | 6,99917E-10 | 2,77016E-08 | 5,31937E-09 | 6,99934E-10 | 2,77094E-08 | 4,62881E-09 | 6,99645E-10 |
| 354 | D Vertical | -1,23273E-08 | -1,22196E-08 | -1,44517E-09 | -1,09045E-08 | -1,07933E-08 | -1,44518E-09 | -9,51429E-09 | -9,36712E-09 | -1,44507E-09 |
| 354 | D transversal | -9,84998E-09 | 1,5149E-08 | 4,38455E-10 | -1,04267E-08 | 1,47844E-08 | 4,38487E-10 | -1,09166E-08 | 1,44198E-08 | 4,38716E-10 |
| 354 | G Longitudinal | -1,26898E-08 | 1,35101E-08 | 4,81444E-10 | -1,26729E-08 | 1,28534E-08 | 4,83196E-10 | -1,25546E-08 | 1,21783E-08 | 5,536E-10 |
| 354 | G Vertical | 1,36964E-07 | -3,50811E-09 | -4,36044E-10 | 1,35502E-07 | -2,64809E-09 | -5,17174E-10 | 1,32404E-07 | -9,23698E-10 | -3,81771E-09 |
| 354 | G transversal | -2,56328E-08 | -1,21132E-09 | -1,52702E-10 | -2,50436E-08 | -1,06751E-09 | -1,50974E-10 | -2,44838E-08 | -9,4237E-10 | -7,98065E-11 |
| 355 | D Longitudinal | 1,26314E-08 | -3,66657E-09 | -4,23347E-10 | 1,27574E-08 | -3,24941E-09 | -4,23355E-10 | 1,29206E-08 | -2,83202E-09 | -4,24125E-10 |
| 355 | D Vertical | 6,06469E-09 | -6,25212E-09 | -7,24209E-10 | 5,34374E-09 | -5,53859E-09 | -7,24204E-10 | 4,64011E-09 | -4,82504E-09 | -7,24244E-10 |
| 355 | D transversal | 3,75011E-09 | 6,5003E-09 | 1,63939E-10 | 4,17774E-09 | 6,44968E-09 | 1,63924E-10 | 4,56482E-09 | 6,39905E-09 | 1,63864E-10 |
| 355 | G Longitudinal | 9,48674E-09 | 9,52909E-09 | 2,53684E-10 | 9,83033E-09 | 9,33015E-09 | 2,55446E-10 | 1,00829E-08 | 9,1123E-09 | 3,27502E-10 |
| 355 | G Vertical | 1,37114E-07 | 3,82547E-09 | 4,58071E-10 | 1,35602E-07 | 2,93083E-09 | 5,39442E-10 | 1,32466E-07 | 1,17301E-09 | 3,83458E-09 |
| 355 | G transversal | -2,05966E-08 | 4,03302E-09 | 4,68046E-10 | -2,05911E-08 | 3,58106E-09 | 4,66264E-10 | -2,06013E-08 | 3,14782E-09 | 3,94733E-10 |
| 356 | D Longitudinal | 1,00589E-08 | 1,9816E-17 | -6,00523E-16 | 1,04993E-08 | -2,53618E-15 | 5,9753E-15 | 1,0969E-08 | 2,65772E-14 | -6,09274E-14 |
| 356 | D Vertical | -1,65216E-17 | -1,5652E-09 | -1,937E-10 | -2,30297E-17 | -1,37396E-09 | -1,93701E-10 | -1,1723E-16 | -1,1827E-09 | -1,93762E-10 |
| 356 | D transversal | 5,57452E-17 | 7,09903E-09 | 1,55227E-10 | 7,74269E-17 | 6,9802E-09 | 1,55232E-10 | 3,91284E-16 | 6,86132E-09 | 1,55436E-10 |
| 356 | G Longitudinal | 1,89809E-16 | 9,81729E-09 | 2,7067E-10 | 2,62192E-16 | 9,59443E-09 | 2,70687E-10 | 1,30997E-15 | 9,37138E-09 | 2,71369E-10 |
| 356 | G Vertical | 4,54175E-09 | -1,62111E-16 | 1,06751E-15 | 4,79155E-09 | 3,33805E-15 | -8,0666E-15 | 4,99948E-09 | -4,09384E-14 | 9,38412E-14 |
| 356 | G transversal | -9,40449E-09 | -8,13394E-18 | 7,52707E-16 | -8,94455E-09 | 2,58835E-15 | -6,10609E-15 | -8,51042E-09 | -2,86884E-14 | 6,57671E-14 |
| 357 | D Longitudinal | -2,46593E-09 | -3,66657E-09 | -1,81532E-10 | -2,36455E-09 | -3,24941E-09 | -1,81529E-10 | -2,30007E-09 | -2,83228E-09 | -1,81461E-10 |
| 357 | D Vertical | -6,42019E-09 | 6,25212E-09 | 3,10415E-10 | -5,68436E-09 | 5,53859E-09 | 3,1042E-10 | -4,93119E-09 | 4,82508E-09 | 3,10367E-10 |
| 357 | D transversal | -1,14433E-08 | 6,5003E-09 | -9,05325E-11 | -1,09877E-08 | 6,44967E-09 | -9,05194E-11 | -1,04916E-08 | 6,39909E-09 | -9,06212E-11 |
| 357 | G Longitudinal | -1,59434E-08 | 9,52909E-09 | 3,38314E-11 | -1,55588E-08 | 9,33128E-09 | 3,25635E-11 | -1,51038E-08 | 9,13173E-09 | 3,50296E-11 |
| 357 | G Vertical | 1,19911E-07 | -3,82571E-09 | -7,95311E-10 | 1,21315E-07 | -2,98342E-09 | -7,36572E-10 | 1,22042E-07 | -2,05833E-09 | -8,55507E-10 |
| 357 | G transversal | 4,65409E-09 | 4,03301E-09 | 1,88249E-10 | 4,69181E-09 | 3,57991E-09 | 1,89539E-10 | 4,76573E-09 | 3,12867E-09 | 1,86825E-10 |
| 358 | D Longitudinal | 1,26314E-08 | 3,66657E-09 | 4,23345E-10 | 1,27574E-08 | 3,2494E-09 | 4,23371E-10 | 1,29206E-08 | 2,8321E-09 | 4,23959E-10 |
| 358 | D Vertical | -6,06469E-09 | -6,25212E-09 | -7,24208E-10 | -5,34374E-09 | -5,53859E-09 | -7,24213E-10 | -4,64011E-09 | -4,82508E-09 | -7,24144E-10 |
| 358 | D transversal | -3,75011E-09 | 6,5003E-09 | 1,63937E-10 | -4,17774E-09 | 6,44967E-09 | 1,63942E-10 | -4,56482E-09 | 6,39913E-09 | 1,63676E-10 |
| 358 | G Longitudinal | -9,4867E-09 | 9,52909E-09 | 2,5368E-10 | -9,83027E-09 | 9,33014E-09 | 2,55459E-10 | -1,00827E-08 | 9,11244E-09 | 3,27174E-10 |
| 358 | G Vertical | 1,37113E-07 | -3,82561E-09 | -4,57988E-10 | 1,35599E-07 | -2,93114E-09 | -5,38922E-10 | 1,32453E-07 | -1,17437E-09 | -3,83148E-09 |
| 358 | G transversal | -2,05965E-08 | -4,03301E-09 | -4,68045E-10 | -2,05911E-08 | -3,58105E-09 | -4,66298E-10 | -2,06011E-08 | -3,14789E-09 | -3,94567E-10 |
| 359 | D Longitudinal | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 359 | D Vertical | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 359 | D transversal | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 359 | G Longitudinal | 7,36903E-09 | 7,74796E-09 | 1,76079E-10 | 7,94871E-09 | 7,75018E-09 | 1,77863E-10 | 8,44203E-09 | 7,73329E-09 | 2,50724E-10 |
| 359 | G Vertical | 1,37041E-07 | 3,87925E-09 | 4,61108E-10 | 1,35519E-07 | 2,97917E-09 | 5,42383E-10 | 1,32376E-07 | 1,21692E-09 | 3,83362E-09 |
| 359 | G transversal | -1,85786E-08 | 4,72E-09 | 5,43768E-10 | -1,88077E-08 | 4,19417E-09 | 5,41982E-10 | -1,90468E-08 | 3,68713E-09 | 4,70207E-10 |
| 360 | D Longitudinal | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |

APOYO 2

| DESPLAZAMIENTOS (metros) | | C4 | | | C5 | | | C6 | | |
|---|---|---|---|---|---|---|---|---|---|---|
| Nudo | Desplazamiento | L | T | V | L | T | V | L | T | V |
| 360 | D Vertical | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 360 | D transversal | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 360 | G Longitudinal | -1,80004E-08 | 7,74797E-09 | -1,80259E-10 | -1,7384E-08 | 7,75133E-09 | -1,81543E-10 | -1,67021E-08 | 7,75293E-09 | -1,79037E-10 |
| 360 | G Vertical | 1,19662E-07 | -3,87949E-09 | -8,00228E-10 | 1,21075E-07 | -3,03169E-09 | -7,41558E-10 | 1,21813E-07 | -2,10119E-09 | -8,60352E-10 |
| 360 | G transversal | 6,72666E-09 | 4,71999E-09 | 2,19638E-10 | 6,52505E-09 | 4,19302E-09 | 2,20931E-10 | 6,35406E-09 | 3,66791E-09 | 2,18222E-10 |
| 361 | D Longitudinal | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 361 | D Vertical | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 361 | D transversal | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 361 | G Longitudinal | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 361 | G Vertical | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 361 | G transversal | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 362 | D Longitudinal | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 362 | D Vertical | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 362 | D transversal | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 362 | G Longitudinal | -7,36899E-09 | 7,74797E-09 | 1,76075E-10 | -7,94865E-09 | 7,75018E-09 | 1,77873E-10 | -8,44175E-09 | 7,73342E-09 | 2,50424E-10 |
| 362 | G Vertical | 1,3704E-07 | -3,87939E-09 | -4,61025E-10 | 1,35517E-07 | -2,97947E-09 | -5,41863E-10 | 1,32363E-07 | -1,21828E-09 | -3,83051E-09 |
| 362 | G transversal | -1,85786E-08 | -4,71999E-09 | -5,43767E-10 | -1,88076E-08 | -4,19416E-09 | -5,42012E-10 | -1,90465E-08 | -3,68719E-09 | -4,70073E-10 |
| 363 | D Longitudinal | 4,61315E-08 | 2,11507E-17 | -1,70587E-10 | 4,35955E-08 | 3,0942E-15 | -1,70595E-10 | 4,10595E-08 | 5,20858E-14 | -1,70782E-10 |
| 363 | D Vertical | 2,52332E-08 | -9,94393E-18 | -8,70299E-10 | 2,22259E-08 | -1,40857E-15 | -8,70295E-10 | 1,92185E-08 | -2,35952E-14 | -8,7021E-10 |
| 363 | D transversal | 3,1261E-08 | 4,41707E-08 | 1,63415E-09 | 3,11836E-08 | 4,19167E-08 | 1,6341E-09 | 3,08933E-08 | 3,96624E-08 | 1,63468E-09 |
| 363 | G Longitudinal | 3,47942E-09 | 2,33846E-08 | 1,8043E-09 | 3,45186E-09 | 2,08959E-08 | 1,80429E-09 | 3,35891E-09 | 1,84071E-08 | 1,80457E-09 |
| 363 | G Vertical | 2,79168E-08 | -4,61645E-09 | -4,04386E-10 | 2,79883E-08 | -4,05871E-09 | -4,04313E-10 | 2,82534E-08 | -3,50167E-09 | -4,014E-10 |
| 363 | G transversal | -2,53962E-08 | -1,58296E-17 | -3,0695E-11 | -2,33197E-08 | -1,75882E-15 | -3,06904E-11 | -2,12432E-08 | -2,95633E-14 | -3,05844E-11 |
| 364 | D Longitudinal | 3,50227E-09 | 5,75419E-09 | 3,00874E-10 | 2,5079E-09 | 5,07296E-09 | 3,00836E-10 | 1,37103E-09 | 4,39155E-09 | 3,01209E-10 |
| 364 | D Vertical | 1,91338E-08 | 1,89214E-08 | 9,69183E-10 | 1,68672E-08 | 1,66953E-08 | 9,69169E-10 | 1,45529E-08 | 1,44691E-08 | 9,69328E-10 |
| 364 | D transversal | 2,83304E-08 | 2,89202E-08 | 7,01937E-10 | 2,77024E-08 | 2,77274E-08 | 7,01898E-10 | 2,69257E-08 | 2,65345E-08 | 7,02265E-10 |
| 364 | G Longitudinal | 1,15043E-08 | 1,93241E-08 | 1,01091E-09 | 1,16126E-08 | 1,79828E-08 | 1,00962E-09 | 1,16253E-08 | 1,66397E-08 | 1,01229E-09 |
| 364 | G Vertical | 1,21769E-07 | 3,1664E-09 | 7,3862E-10 | 1,23074E-07 | 2,39529E-09 | 6,79277E-10 | 1,23699E-07 | 1,54079E-09 | 7,99071E-10 |
| 364 | G transversal | -7,31778E-09 | 1,67195E-09 | 7,85344E-11 | -5,87348E-09 | 1,50004E-09 | 7,7297E-11 | -4,36116E-09 | 1,32647E-09 | 7,96115E-11 |
| 365 | D Longitudinal | 9,64284E-10 | -6,91031E-17 | 3,46874E-15 | 2,79378E-10 | 1,27826E-14 | -3,01494E-14 | -5,40704E-10 | -1,39025E-13 | 3,1871E-13 |
| 365 | D Vertical | 9,15367E-17 | 1,94104E-08 | 9,83596E-10 | 8,91879E-17 | 1,71424E-08 | 9,83601E-10 | 4,90144E-17 | 1,48744E-08 | 9,83596E-10 |
| 365 | D transversal | -6,05167E-17 | 3,04444E-08 | 8,69295E-10 | -6,40798E-17 | 2,9039E-08 | 8,69291E-10 | -1,13252E-16 | 2,76335E-08 | 8,69248E-10 |
| 365 | G Longitudinal | 5,74747E-18 | 1,90725E-08 | 9,71392E-10 | -3,37263E-18 | 1,77669E-08 | 9,71392E-10 | -1,37533E-16 | 1,64613E-08 | 9,71311E-10 |
| 365 | G Vertical | 2,50801E-08 | 8,43268E-17 | 3,88443E-15 | 2,45414E-08 | 1,3191E-14 | -3,09324E-14 | 2,3865E-08 | -1,43958E-13 | 3,30028E-13 |
| 365 | G transversal | -1,42112E-08 | 2,0697E-17 | -1,7747E-15 | -1,24149E-08 | -5,69219E-15 | 1,34513E-14 | -1,05647E-08 | 6,46738E-14 | -1,48261E-13 |
| 366 | D Longitudinal | 1,61241E-08 | 2,40676E-17 | -1,60292E-10 | 1,56915E-08 | 3,45014E-15 | -1,60302E-10 | 1,52588E-08 | 5,80225E-14 | -1,6051E-10 |
| 366 | D Vertical | 1,18769E-08 | -8,9254E-18 | -4,00391E-10 | 1,0485E-08 | -1,26313E-15 | -4,00388E-10 | 9,09314E-09 | -2,12636E-14 | -4,00312E-10 |
| 366 | D transversal | 1,57759E-08 | 1,33198E-08 | 6,2492E-11 | 1,57471E-08 | 1,32337E-08 | 6,24712E-11 | 1,56347E-08 | 1,31474E-08 | 6,26376E-11 |
| 366 | G Longitudinal | 3,47316E-09 | 1,21766E-08 | 8,11323E-10 | 3,4567E-09 | 1,10575E-08 | 8,11312E-10 | 3,39888E-09 | 9,93838E-09 | 8,11525E-10 |
| 366 | G Vertical | 1,38566E-08 | -4,17126E-09 | -3,4741E-10 | 1,38846E-08 | -3,69209E-09 | -3,47366E-10 | 1,39901E-08 | -3,21382E-09 | -3,43978E-10 |
| 366 | G transversal | -1,34058E-08 | 3,7733E-17 | 3,93602E-11 | -1,2761E-08 | 4,82534E-15 | 3,93474E-11 | -1,2116E-08 | 8,11105E-14 | 3,90564E-11 |
| 367 | D Longitudinal | -2,11782E-09 | 6,01004E-09 | 3,01549E-10 | -2,24523E-09 | 5,31938E-09 | 3,01531E-10 | -2,45275E-09 | 4,62863E-09 | 3,01729E-10 |
| 367 | D Vertical | 1,23167E-08 | 1,22196E-08 | 6,2289E-10 | 1,08655E-08 | 1,07933E-08 | 6,22881E-10 | 9,38173E-09 | 9,36703E-09 | 6,22987E-10 |
| 367 | D transversal | 2,03213E-08 | 1,5149E-08 | 9,02221E-11 | 1,96839E-08 | 1,47844E-08 | 9,01928E-11 | 1,89599E-08 | 1,44197E-08 | 9,04453E-11 |

APOYO 2

| DESPLAZAMIENTOS (metros) | | C4 | | | C5 | | | C6 | | |
|---|---|---|---|---|---|---|---|---|---|---|
| Nudo | Desplazamiento | L | T | V | L | T | V | L | T | V |
| 367 | G Longitudinal | 1,28078E-08 | 1,35101E-08 | 4,69841E-10 | 1,27744E-08 | 1,28545E-08 | 4,68562E-10 | 1,26601E-08 | 1,21971E-08 | 4,7128E-10 |
| 367 | G Vertical | 1,20692E-07 | 3,50834E-09 | 7,67375E-10 | 1,22043E-07 | 2,70055E-09 | 7,08343E-10 | 1,22718E-07 | 1,80981E-09 | 8,2751E-10 |
| 367 | G transversal | -4,68474E-10 | -1,21131E-09 | -5,67536E-11 | 1,64987E-10 | -1,06639E-09 | -5,80069E-11 | 8,4861E-10 | -9,23173E-10 | -5,56132E-11 |
| 368 | D Longitudinal | -5,31389E-09 | -1,86063E-17 | 6,01005E-16 | -4,89148E-09 | 2,53777E-15 | -5,97746E-15 | -4,49823E-09 | -2,6571E-14 | 6,09134E-14 |
| 368 | D Vertical | -1,72532E-17 | 1,5652E-09 | 8,35975E-11 | -1,63856E-17 | 1,37396E-09 | 8,35965E-11 | -2,71234E-18 | 1,18272E-09 | 8,36011E-11 |
| 368 | D transversal | -5,81603E-17 | 7,09903E-09 | 1,70739E-11 | -5,54963E-17 | 6,9802E-09 | 1,70704E-11 | -1,3227E-17 | 6,86137E-09 | 1,70838E-11 |
| 368 | G Longitudinal | -1,9775E-16 | 9,81729E-09 | 5,24777E-11 | -1,90078E-16 | 9,59444E-09 | 5,24657E-11 | -6,63562E-17 | 9,37156E-09 | 5,24989E-11 |
| 368 | G Vertical | 9,20432E-09 | 1,07632E-16 | 1,17489E-15 | 8,92731E-09 | 3,69335E-15 | -8,54939E-15 | 8,61033E-09 | -3,95621E-14 | 9,07023E-14 |
| 368 | G transversal | -3,38969E-09 | 1,36615E-17 | -7,50508E-16 | -2,91013E-09 | -2,58106E-15 | 6,09618E-15 | -2,40473E-09 | 2,87166E-14 | -6,58314E-14 |
| 369 | D Longitudinal | -2,46593E-09 | 3,66657E-09 | 1,81534E-10 | -2,36455E-09 | 3,24942E-09 | 1,81513E-10 | -2,30007E-09 | 2,83221E-09 | 1,81626E-10 |
| 369 | D Vertical | 6,42019E-09 | 6,25212E-09 | 3,10416E-10 | 5,68436E-09 | 5,53859E-09 | 3,10411E-10 | 4,93119E-09 | 4,82503E-09 | 3,10467E-10 |
| 369 | D transversal | 1,14433E-08 | 6,5003E-09 | -9,05305E-11 | 1,09877E-08 | 6,44968E-09 | -9,05373E-11 | 1,04916E-08 | 6,39901E-09 | -9,04335E-11 |
| 369 | G Longitudinal | 1,59433E-08 | 9,5291E-09 | 3,38383E-11 | 1,55587E-08 | 9,3313E-09 | 3,25397E-11 | 1,51038E-08 | 9,13162E-09 | 3,52892E-11 |
| 369 | G Vertical | 1,19909E-07 | 3,82584E-09 | 7,955E-10 | 1,21313E-07 | 2,98347E-09 | 7,36612E-10 | 1,22041E-07 | 2,05834E-09 | 8,55494E-10 |
| 369 | G transversal | 4,65405E-09 | -4,03301E-09 | -1,88247E-10 | 4,69177E-09 | -3,57992E-09 | -1,89516E-10 | 4,76571E-09 | -3,12856E-09 | -1,87058E-10 |
| 370 | D Longitudinal | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 370 | D Vertical | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 370 | D transversal | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 370 | G Longitudinal | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 370 | G Vertical | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 370 | G transversal | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 371 | D Longitudinal | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 371 | D Vertical | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 371 | D transversal | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 371 | G Longitudinal | 1,80004E-08 | 7,74797E-09 | -1,80252E-10 | 1,73839E-08 | 7,75134E-09 | -1,81564E-10 | 1,67021E-08 | 7,75283E-09 | -1,78806E-10 |
| 371 | G Vertical | 1,1966E-07 | 3,87962E-09 | 8,00417E-10 | 1,21073E-07 | 3,03174E-09 | 7,41598E-10 | 1,21813E-07 | 2,10119E-09 | 8,60339E-10 |
| 371 | G transversal | 6,72662E-09 | -4,71999E-09 | -2,19636E-10 | 6,52501E-09 | -4,19303E-09 | -2,2091E-10 | 6,35404E-09 | -3,66782E-09 | -2,18423E-10 |

APOYO 2

## 3.2 ESFUERZOS AXILES EN BARRAS

| Newton | VIENTO | PESO | CT1 | | | CT2 | | |
|---|---|---|---|---|---|---|---|---|
| Barra | | | L | T | V | L | T | V |
| 1 | 23,42186255 | 4,93701459 | -0,016992836 | 0,368880014 | -0,24289062 | 0,25224782 | 0,359914226 | 0,620092635 |
| 2 | 50,18584506 | -15,05715493 | 0,325474672 | 0,741669898 | -0,243083619 | 0,79377214 | 0,737708231 | 0,433341578 |
| 3 | 52,24115533 | -39,53158867 | 1,054478292 | 0,751305081 | -0,247565671 | -0,117835806 | 0,749765922 | 0,446685311 |
| 4 | 293,1359399 | -95,78700374 | 1,065737585 | 1,259805706 | -0,253023237 | 1,402581978 | 1,258584149 | 0,049478421 |
| 5 | 302,0632176 | -149,5390078 | 1,352842654 | 1,263302128 | -0,255589221 | 1,052786718 | 1,26255671 | 0,048776987 |
| 6 | 1,411406254 | -19,56662958 | 0,333612446 | -0,009912203 | -0,244400171 | 0,699835172 | -0,012697706 | -0,032069819 |
| 7 | -28,04693061 | -70,82247687 | 0,755177531 | -0,35439498 | -0,261696218 | 2,249050575 | -0,346604312 | -1,10020352 |
| 8 | -151,0934839 | -81,84587253 | 0,764095835 | -1,071807722 | -0,260279189 | 0,260966492 | -1,069999764 | -0,711686632 |
| 9 | -156,049309 | -124,8463217 | 1,265667069 | -1,074129844 | -0,259087934 | 1,908340269 | -1,072927656 | -0,716675935 |
| 10 | -417,8353091 | -170,4008516 | 1,265318902 | -1,355843866 | -0,257749236 | 1,056636965 | -1,35512048 | -0,482256344 |
| 11 | -2,346157646 | -10,38352794 | -0,372337805 | 0,017409213 | -0,252567814 | 0,448336333 | 0,014809887 | 0,027310654 |
| 12 | 29,04503564 | -7,346971739 | -0,716206406 | 0,34685039 | -0,262605208 | 0,768455633 | 0,355210822 | 0,640989524 |
| 13 | 151,8267477 | -49,59550259 | -0,733450068 | 1,065874875 | -0,260078956 | -1,246772467 | 1,067831845 | 0,196831423 |
| 14 | 156,4053097 | -92,18696018 | -1,25127957 | 1,071344506 | -0,259069747 | -0,608943042 | 1,072509591 | 0,20181018 |
| 15 | 417,9704838 | -154,3887488 | -1,260320586 | 1,354876221 | -0,257753118 | -1,468775062 | 1,355576859 | -0,032848082 |
| 16 | -25,0632433 | -37,78462345 | -0,049998936 | -0,355910786 | -0,242060992 | 0,227104632 | -0,364616032 | -0,667877074 |
| 17 | -51,52942947 | -63,81594646 | -0,378528694 | -0,73139894 | -0,242082802 | 0,030589364 | -0,738719036 | -0,928753386 |
| 18 | -52,93628141 | -89,01900854 | -1,082264307 | -0,745925866 | -0,247922069 | -2,239513973 | -0,747303522 | -0,937316539 |
| 19 | -293,4779761 | -117,5139007 | -1,079714849 | -1,257099786 | -0,253033826 | -0,741697442 | -1,258284204 | -0,560916573 |
| 20 | -302,1986756 | -171,2626134 | -1,357980259 | -1,262307517 | -0,255554571 | -1,659447526 | -1,263064386 | -0,561534228 |
| 21 | -35,55251234 | -23,55437803 | 0,037012689 | -0,544243953 | -0,023179916 | -0,276411 | -0,52802875 | -0,913391173 |
| 22 | 2,105587564 | 1,66521756 | 0,545021384 | -0,017741839 | -0,00546698 | -0,765475781 | -0,01801077 | -0,015634031 |
| 23 | -0,949085395 | 2,392759421 | -0,493669412 | 0,007800388 | -0,01796506 | -1,125883691 | 0,00793536 | 0,008489464 |
| 24 | 38,30699609 | 28,10794744 | 0,07151914 | 0,523232805 | -0,024569718 | -0,245079989 | 0,539969469 | 0,974557458 |
| 25 | 33,60808475 | -19,24082143 | -0,022054834 | 0,512695594 | -0,001022721 | -1,408430215 | 0,505154016 | -0,290120998 |
| 26 | 2,143663998 | -8,297278795 | -0,501037777 | -0,02146102 | -0,006913032 | -1,599230401 | -0,014860488 | -0,014657036 |
| 27 | -33,70484761 | 0,055720562 | 0,02032433 | -0,512360578 | -0,002616697 | -1,352988387 | -0,519307882 | 0,206457311 |
| 28 | -1,629851055 | -7,09126423 | 0,52001679 | 0,017786791 | -0,005518707 | -0,654463618 | 0,020123777 | 0,019578567 |
| 29 | -125,0164064 | -2,641045403 | -0,002086439 | -0,389190696 | -0,004670766 | 1,124137132 | -0,389207168 | 0,271511627 |
| 30 | -0,715882827 | -13,2827706 | 0,381801925 | -0,00512905 | -5,61891E-05 | 1,251534454 | -0,005579288 | -0,005338294 |
| 31 | 125,2675258 | -23,01562477 | 0,011514887 | 0,387365402 | -0,005010473 | 1,151689909 | 0,387465577 | -0,292878081 |
| 32 | 0,425133656 | -12,87551436 | -0,394350287 | 0,007558342 | -0,000291416 | 0,48823535 | 0,00696093 | 0,004532757 |
| 33 | 18,99588872 | 18,52442562 | -0,021370083 | 0,220134934 | -0,006763551 | 0,370621944 | 0,410995536 | 0,737263532 |
| 34 | 0,109334638 | -3,62851899 | -0,210411627 | 0,021244915 | -0,025597679 | 0,214779858 | -0,014264454 | -0,055193063 |
| 35 | -2,046059845 | -11,876831 | 0,202099906 | -0,019635813 | -0,020860495 | 0,369991875 | -0,158135505 | -0,295534301 |
| 36 | -15,27753212 | -0,71131259 | -0,008913778 | -0,21427215 | -0,030349973 | -0,312053037 | -0,015039092 | 0,033015388 |
| 37 | -6,385947373 | -18,67457801 | -0,013870291 | -0,362368004 | 0,024305361 | 0,029675968 | -0,362704164 | -0,761525131 |
| 38 | 1,828192548 | 9,007260822 | 0,351978569 | 0,031257998 | 0,014472938 | 0,957245753 | 0,024418712 | 0,266935066 |
| 39 | 8,482772484 | -6,452971395 | -0,024906495 | 0,36987497 | 0,005458616 | 1,103878353 | 0,376232831 | -0,24263839 |
| 40 | -2,47887804 | 1,45962029 | -0,376980498 | -0,026417765 | 0,009427612 | 0,502244738 | -0,028309277 | -0,019448189 |
| 41 | 2,624770336 | 1,433459425 | -0,015236463 | 0,014248254 | -0,023167611 | -0,266469078 | 0,072062944 | 0,131754611 |
| 42 | -1,41121424 | -0,146780911 | 0,009197757 | -0,013079195 | -0,024251379 | -0,296796423 | 0,039295286 | 0,077443902 |

APOYO 2

| Newton | VIENTO | PESO | CT1 | | | CT2 | | |
|---|---|---|---|---|---|---|---|---|
| Barra | | | L | T | V | L | T | V |
| 43 | 0,236651652 | 0,826412267 | -0,004777524 | 0,014464634 | -0,017262098 | 0,62739091 | 0,064210855 | 0,118513064 |
| 44 | 0,331423648 | 0,19467226 | -0,027779353 | -0,008161807 | -0,01889061 | 0,57921523 | 0,0479874 | 0,091839979 |
| 45 | 2,854152746 | 31,01108533 | -0,065425303 | 0,012665969 | 0,027811213 | 0,688242207 | 0,515449621 | 1,053875028 |
| 46 | 6,017358035 | 30,61130022 | 0,065425303 | -0,012665969 | -0,027811213 | -0,688242207 | 0,509861939 | 1,04801367 |
| 47 | 1,259455424 | -34,9592817 | 0,052099214 | -0,010086113 | -0,022146513 | 1,254984 | -0,00222478 | -1,189336566 |
| 48 | -1,259455431 | -34,64092643 | -0,052099214 | 0,010086113 | 0,022146513 | -1,254984 | 0,00222478 | -1,184669074 |
| 49 | 178,4787666 | -18,85639987 | -0,006436021 | 0,233027744 | 0,001310571 | -0,704087478 | 0,232725394 | -0,19131843 |
| 50 | -1,73629705 | -11,71695975 | -0,228751795 | -0,003342487 | -0,001804164 | -0,754548047 | -0,003051929 | 0,000258541 |
| 51 | -178,6629239 | -5,204269932 | -0,001279901 | -0,231533985 | 0,001368141 | -0,700844424 | -0,23186425 | 0,193569254 |
| 52 | 1,903678242 | -11,77783695 | 0,235941051 | 0,001950687 | -0,001847718 | -0,28734364 | 0,002318933 | -0,001296778 |
| 53 | -172,6321015 | -2,027924624 | 0,005905784 | -0,137749267 | -0,000290543 | 0,421663688 | -0,137402686 | 0,116350561 |
| 54 | 1,056499103 | -5,842269463 | 0,135111199 | 0,003956693 | 0,001633292 | 0,445452347 | 0,003656326 | 0,001471257 |
| 55 | 172,7353248 | -10,16091787 | -0,001342934 | 0,136865925 | -0,000241206 | 0,41248193 | 0,137194914 | -0,112504454 |
| 56 | -1,16051456 | -5,929438256 | -0,139521068 | -0,003102967 | 0,001645581 | 0,170154126 | -0,003369418 | -0,000757484 |
| 57 | -418,8774397 | -270,605227 | -1,452350968 | -1,35480042 | -0,255662398 | -1,683279856 | -1,355130694 | -0,478225751 |
| 58 | -736,3362244 | -269,989025 | 1,35406713 | -1,452918922 | -0,25514896 | 1,067325678 | -1,452583577 | -0,399889185 |
| 59 | 418,8904316 | -254,6496826 | 1,453663251 | 1,35454637 | -0,255653843 | 1,222371565 | 1,354211701 | -0,030255933 |
| 60 | 736,324747 | -259,7799922 | -1,355285372 | 1,453154767 | -0,255145365 | -1,64219558 | 1,453494055 | -0,113090187 |
| 61 | -384,0621292 | 4,199165677 | -0,004091317 | -0,122187598 | -0,001605582 | 0,352721159 | -0,121985596 | 0,095885924 |
| 62 | -2,001006699 | 0,12797115 | 0,119868629 | -0,005561286 | 1,8285E-05 | 0,387420922 | -0,005770478 | -0,001366629 |
| 63 | 384,1513759 | -2,705469892 | 0,007862226 | 0,121457572 | -0,001614052 | 0,365078978 | 0,121664173 | -0,097806074 |
| 64 | 1,910100851 | 0,17643738 | -0,123744704 | 0,006311672 | 1,12963E-05 | 0,14415604 | 0,00610211 | -7,67509E-05 |
| 65 | 200,6531569 | -16,66450863 | 0,000767049 | 0,08428714 | 0,001025552 | -0,251101153 | 0,084105712 | -0,068295296 |
| 66 | 0,627444745 | -14,35058849 | -0,082638009 | 0,001872331 | -0,000133362 | -0,2709506 | 0,00205085 | 0,000784621 |
| 67 | -200,7140515 | -11,79040065 | -0,003408025 | -0,083775862 | 0,001009437 | -0,254706332 | -0,083952275 | 0,068334515 |
| 68 | -0,562533135 | -14,36672481 | 0,085395056 | -0,00240608 | -0,000124654 | -0,1033767 | -0,002246307 | 0,00028746 |
| 69 | -907,2297608 | -459,1605346 | -1,427752055 | -1,438979518 | -0,195969882 | -1,362821588 | -1,439081246 | -0,314824868 |
| 70 | -890,5481528 | -465,0221295 | 1,432958657 | -1,433529149 | -0,193914402 | 1,396263335 | -1,433427758 | -0,321118041 |
| 71 | 907,3272127 | -450,5580374 | 1,432567009 | 1,438047371 | -0,195969754 | 1,497504895 | 1,437945687 | -0,073209127 |
| 72 | 890,4507001 | -456,1028404 | -1,437774689 | 1,434461505 | -0,193915169 | -1,474427814 | 1,434563889 | -0,070621933 |
| 73 | -442,8087852 | -78,23233534 | -0,29979257 | -0,322109288 | -0,041644473 | -0,250711853 | -0,322067648 | -0,045137517 |
| 74 | -468,8929124 | -131,6834855 | -0,300009401 | -0,32524191 | -0,041740319 | -0,250644283 | -0,325200352 | -0,045449662 |
| 75 | 472,7842856 | -77,89131937 | -0,301935051 | 0,331979942 | -0,042065524 | -0,376947162 | 0,331919226 | -0,04627019 |
| 76 | 498,5645283 | -131,3359247 | -0,302173335 | 0,334997767 | -0,042156972 | -0,377118479 | 0,334937405 | -0,046059632 |
| 77 | -186,2905201 | -81,82874912 | 0,327276008 | -0,299484635 | -0,04126524 | 0,370670505 | -0,299505023 | -0,068158828 |
| 78 | -186,3268006 | -133,9921297 | 0,330401826 | -0,29979367 | -0,041355887 | 0,373818712 | -0,299813969 | -0,068296523 |
| 79 | -190,2670898 | -80,04039333 | -0,33681537 | -0,303918213 | -0,042597304 | -0,39801207 | -0,303878999 | -0,067041353 |
| 80 | -190,3390764 | -132,1912275 | -0,339812751 | -0,304238915 | -0,042692351 | -0,400769537 | -0,304200046 | -0,067165577 |
| 81 | 442,7944546 | -78,00714897 | 0,299037451 | 0,322255475 | -0,041643277 | 0,348031831 | 0,322295337 | -0,038859023 |
| 82 | 468,8788362 | -131,4425618 | 0,299266529 | 0,325385726 | -0,041739119 | 0,348545272 | 0,325425496 | -0,038729231 |
| 83 | -472,7781427 | -77,57294101 | 0,302343036 | -0,332058926 | -0,042066094 | 0,227387008 | -0,332118178 | -0,037282886 |
| 84 | -498,5585481 | -131,0393135 | 0,302572951 | -0,335075131 | -0,042157537 | 0,227683747 | -0,33513404 | -0,03768373 |
| 85 | 186,2373012 | -79,97639224 | -0,32976161 | 0,299965833 | -0,041263464 | -0,286438711 | 0,299943846 | -0,016110612 |
| 86 | 186,2733286 | -132,1367571 | -0,332899622 | 0,300277229 | -0,041354105 | -0,289554449 | 0,300255339 | -0,016163536 |

APOYO 2

| Newton | VIENTO | PESO | CT1 | | | CT2 | | |
|---|---|---|---|---|---|---|---|---|
| Barra | | | L | T | V | L | T | V |
| 87 | 190,3284961 | -78,23216043 | 0,339649701 | 0,303369502 | -0,042599155 | 0,278530925 | 0,303410554 | -0,016276829 |
| 88 | 190,4006467 | -130,3806569 | 0,342655502 | 0,303688574 | -0,042694194 | 0,28177645 | 0,303729285 | -0,016335291 |
| 89 | 64,69140954 | 327,3285895 | 0,431352015 | 0,022596102 | 0,070809184 | 0,361352826 | 0,02254945 | 0,05331629 |
| 90 | 252,0530201 | 42,59024543 | -0,024017963 | 0,451211902 | 0,070500883 | -0,077170229 | 0,45125627 | 0,111895429 |
| 91 | -64,70858132 | 328,5624665 | -0,432078686 | -0,022455423 | 0,070808601 | -0,502073265 | -0,022499829 | 0,087977439 |
| 92 | -252,0361307 | 39,65494939 | 0,024735311 | -0,451350777 | 0,070499598 | -0,028393789 | -0,451307621 | 0,029438103 |
| 93 | 22,62858434 | 265,5185622 | 0,020215986 | 0,002209705 | 0,000445211 | -0,028335821 | 0,002223831 | -0,001931711 |
| 94 | -9,685390924 | 247,9914315 | 0,020105428 | 0,002305104 | 0,000457666 | -0,028437219 | 0,002319219 | -0,001910665 |
| 95 | 9,697710357 | 265,6614379 | -0,020217568 | -0,002285893 | -0,000455308 | 0,028333104 | -0,002300012 | 0,001915105 |
| 96 | -22,61393656 | 250,4176925 | -0,020105198 | -0,002189711 | -0,000442622 | 0,028438965 | -0,002203823 | 0,001935356 |
| 97 | 7,264061988 | 3,709219585 | -4,43525E-06 | 5,81172E-05 | 9,61605E-06 | -1,40986E-05 | 5,81255E-05 | 1,51064E-05 |
| 98 | 8,441383934 | -8,352286286 | 0,000289146 | -0,00028099 | -3,78625E-05 | 0,000271007 | -0,000280966 | -6,33142E-05 |
| 99 | 8,435348722 | -14,27096881 | -0,000288698 | -0,000283018 | -3,84607E-05 | -0,000266222 | -0,000283041 | -6,12539E-05 |
| 100 | 56,90764218 | -237,1419061 | -0,018605794 | -0,002047706 | -0,000413068 | 0,02615437 | -0,002060727 | 0,001777079 |
| 101 | 24,66029948 | -239,8640048 | -0,01850559 | -0,001880211 | -0,000396571 | 0,025837106 | -0,00189312 | 0,001784779 |
| 102 | 5,82289078 | 1,491821475 | -5,34883E-05 | 2,14236E-05 | 1,70465E-06 | 0,000177339 | 2,13577E-05 | 1,54658E-05 |
| 103 | 3,761665656 | -3,742953382 | 0,000138333 | 0,000273855 | 2,68163E-05 | -0,000434914 | 0,000274008 | 1,81593E-05 |
| 104 | 35,87162076 | -235,0827631 | 0,018505886 | 0,001841646 | 0,000392991 | -0,025837169 | 0,001854552 | -0,001791311 |
| 105 | 60,24627907 | -234,7209432 | 0,018492913 | 0,001846842 | 0,000393404 | -0,025794158 | 0,001859732 | -0,00178756 |
| 106 | -22,67484976 | 265,6288852 | -0,022436693 | -0,001779788 | 0,000444935 | -0,070979591 | -0,001765172 | 0,001167117 |
| 107 | 9,639135948 | 248,1011576 | -0,022325619 | -0,001875288 | 0,000457391 | -0,070859361 | -0,001860683 | 0,001171401 |
| 108 | -9,651444354 | 265,5515809 | 0,022438297 | 0,001855972 | -0,000455033 | 0,070980049 | 0,001841362 | -0,001170655 |
| 109 | 22,66019055 | 250,3072807 | 0,022325344 | 0,001759903 | -0,000442347 | 0,070860586 | 0,0017453 | -0,001165984 |
| 110 | -7,264058837 | 3,708830931 | 4,56912E-06 | -5,81432E-05 | 9,61581E-06 | -5,08943E-06 | -5,81351E-05 | 4,18754E-06 |
| 111 | -8,441412836 | -8,350513737 | -0,000290562 | 0,000281264 | -3,78628E-05 | -0,00030869 | 0,000281288 | -1,35327E-05 |
| 112 | -8,435319403 | -14,26930555 | 0,000290132 | 0,000282741 | -3,84606E-05 | 0,000312608 | 0,000282718 | -1,45385E-05 |
| 113 | -56,86498803 | -237,2435336 | 0,020653155 | 0,001651348 | -0,000412812 | 0,065405042 | 0,001637871 | -0,001077472 |
| 114 | -24,61802482 | -239,9655037 | 0,020534719 | 0,001487383 | -0,000396309 | 0,064868976 | 0,001474007 | -0,001066047 |
| 115 | -5,82268341 | 1,491113434 | 6,34568E-05 | -2,33535E-05 | 1,70223E-06 | 0,000294357 | -2,34134E-05 | -4,4758E-06 |
| 116 | -3,762187698 | -3,743021893 | -0,000163409 | -0,000269 | 2,6824E-05 | -0,000736885 | -0,000268861 | 1,63978E-05 |
| 117 | -35,91389494 | -234,9810553 | -0,020534993 | -0,001448823 | 0,00039273 | -0,064869591 | -0,00143545 | 0,001065396 |
| 118 | -60,28850295 | -234,6194071 | -0,020519602 | -0,001454487 | 0,000393143 | -0,064798199 | -0,001441128 | 0,001064311 |
| 119 | -1746,204494 | -847,1684439 | -1,99014014 | -1,99383921 | -0,236360261 | -1,939147213 | -1,993880872 | -0,369970127 |
| 120 | -1746,686033 | -842,5821648 | 1,990314755 | -1,992524943 | -0,234098504 | 1,938512669 | -1,992482926 | -0,371519566 |
| 121 | 1746,313968 | -837,5116645 | 1,995410558 | 1,992818886 | -0,236360002 | 2,046393084 | 1,992777048 | -0,09877447 |
| 122 | 1746,576624 | -832,9372948 | -1,995581984 | 1,993544648 | -0,234098261 | -2,047396112 | 1,993586769 | -0,100649978 |
| 123 | -757,6276424 | -31,21657633 | -0,111121092 | -0,328330796 | -0,0111442 | -0,023345809 | -0,32832582 | -0,011391938 |
| 124 | -776,8944535 | -61,92645509 | -0,110190034 | -0,329756206 | -0,01101307 | -0,022386703 | -0,329751284 | -0,011358083 |
| 125 | 757,0519372 | -32,16173025 | -0,109715753 | 0,32838048 | -0,01140655 | -0,196668489 | 0,328374034 | -0,010954281 |
| 126 | 776,322232 | -62,86140378 | -0,108788596 | 0,329814445 | -0,011273798 | -0,195787009 | 0,329808005 | -0,010727294 |
| 127 | -125,8961312 | -26,46060495 | 0,328853859 | -0,110361329 | -0,011442727 | 0,42553407 | -0,110366673 | -0,017699186 |
| 128 | -125,1165915 | -57,56561013 | 0,330274835 | -0,109401055 | -0,011310028 | 0,426912672 | -0,10940635 | -0,017503384 |
| 129 | -125,8960977 | -25,4671422 | -0,328723263 | -0,109538771 | -0,011101746 | -0,424970371 | -0,109532762 | -0,017829226 |
| 130 | -125,1162127 | -56,57543623 | -0,330156693 | -0,10857944 | -0,010970668 | -0,426372461 | -0,108573441 | -0,017632312 |

APOYO 2

| Newton | VIENTO | PESO | CT1 | | | CT2 | | |
|---|---|---|---|---|---|---|---|---|
| Barra | | | L | T | V | L | T | V |
| 131 | 757,6130558 | -31,21902764 | 0,110416577 | 0,328467186 | -0,011144741 | 0,198221715 | 0,328473128 | -0,011445706 |
| 132 | 776,8799416 | -61,92188586 | 0,109489135 | 0,329891896 | -0,011013614 | 0,197322415 | 0,329897791 | -0,011214641 |
| 133 | -757,0370072 | -32,17453735 | 0,110434959 | -0,328519714 | -0,011406638 | 0,023474294 | -0,328526074 | -0,011323331 |
| 134 | -776,3073843 | -62,88103166 | 0,109503863 | -0,329952917 | -0,011273889 | 0,022497633 | -0,329959264 | -0,011287853 |
| 135 | 125,9103583 | -25,99522196 | -0,328166795 | 0,110228317 | -0,01144349 | -0,231459866 | 0,110223282 | -0,004639699 |
| 136 | 125,1307432 | -57,10481541 | -0,329591423 | 0,10926875 | -0,011310794 | -0,232926764 | 0,109263762 | -0,004572797 |
| 137 | 125,8814301 | -25,00727291 | 0,328016652 | 0,109675567 | -0,011101489 | 0,231754902 | 0,109680852 | -0,004912615 |
| 138 | 125,1016267 | -56,12014666 | 0,329453987 | 0,10871548 | -0,010970415 | 0,233223683 | 0,108720751 | -0,004844369 |
| 139 | -2,094011979 | -113,887935 | 0,331330274 | -0,002633077 | 0,029647468 | 0,338552158 | -0,002619856 | 0,030990215 |
| 140 | 228,2588997 | 168,7251376 | 0,004208899 | 0,312812946 | 0,029690763 | 0,008703422 | 0,312801385 | 0,054332718 |
| 141 | 2,096991741 | -113,9792253 | -0,331204651 | 0,002608757 | 0,029648584 | -0,324018279 | 0,002619767 | 0,02840755 |
| 142 | -228,2615943 | 166,9663712 | -0,004320964 | -0,312791251 | 0,029692335 | 0,00012978 | -0,312801831 | 0,004958414 |
| 143 | 9,901775153 | 14,09253379 | 0,001586462 | -0,000394177 | 0,015077677 | 0,037897492 | -0,000366442 | 0,016049765 |
| 144 | -9,838407206 | 14,09310951 | 0,001360658 | -0,000176369 | 0,015077676 | 0,037671691 | -0,000148635 | 0,01606592 |
| 145 | 9,83992965 | 14,43770034 | -0,001585819 | 0,000177484 | 0,016325398 | -0,03171741 | 0,000150303 | 0,015338841 |
| 146 | -9,903146706 | 14,43833909 | -0,001354125 | 0,000391672 | 0,016325397 | -0,031485688 | 0,000364492 | 0,01535678 |
| 147 | -3012,551311 | -1092,644135 | -2,563610036 | -2,565237436 | -0,264227082 | -2,523612831 | -2,56526359 | -0,40663931 |
| 148 | -3012,484793 | -1090,502339 | 2,563902021 | -2,564376089 | -0,262749308 | 2,524550043 | -2,564349868 | -0,407815513 |
| 149 | 3012,622811 | -1082,41043 | 2,567049266 | 2,56457162 | -0,264226828 | 2,607039381 | 2,564545341 | -0,119233573 |
| 150 | 3012,413336 | -1080,26346 | -2,567339175 | 2,565041503 | -0,262749354 | -2,606687648 | 2,565068082 | -0,12026249 |
| 151 | -907,1597651 | 57,7920719 | 0,108442701 | -0,328652996 | 0,010629125 | 0,19616597 | -0,328647893 | 0,010400512 |
| 152 | -927,3359807 | 26,16257204 | 0,109037851 | -0,330496005 | 0,010620007 | 0,196794447 | -0,330490899 | 0,010289954 |
| 153 | 907,3771434 | 56,87769188 | 0,108959191 | 0,329067679 | 0,010313849 | 0,020588314 | 0,329060155 | 0,010430904 |
| 154 | 927,5538768 | 25,25707028 | 0,109551667 | 0,330903622 | 0,010305791 | 0,021157217 | 0,330896139 | 0,010525708 |
| 155 | 130,3520983 | 56,56426865 | 0,328983139 | 0,107712636 | 0,010326015 | 0,425794651 | 0,107707314 | 0,016672296 |
| 156 | 131,9311726 | 25,31703616 | 0,330826296 | 0,108268397 | 0,010317985 | 0,427612438 | 0,108263077 | 0,016662334 |
| 157 | 130,3322193 | 57,45414888 | -0,32953911 | 0,107666532 | 0,01061211 | -0,426708628 | 0,107673804 | 0,016410366 |
| 158 | 131,911246 | 26,20538049 | -0,33137292 | 0,108221674 | 0,01060302 | -0,428510907 | 0,108228911 | 0,016401246 |
| 159 | 907,1450668 | 57,78921377 | -0,109150185 | 0,328789961 | 0,010629028 | -0,02142672 | 0,328795253 | 0,0103195 |
| 160 | 927,321336 | 26,16701195 | -0,109742772 | 0,330632474 | 0,010619914 | -0,021986104 | 0,330637762 | 0,010413851 |
| 161 | -907,3627842 | 56,88761988 | -0,108265913 | -0,329201893 | 0,010313632 | -0,196626751 | -0,329209002 | 0,010715313 |
| 162 | -927,5395664 | 25,2596153 | -0,108860757 | -0,331037378 | 0,010305578 | -0,197245289 | -0,331044453 | 0,01060272 |
| 163 | -130,3373604 | 56,1314587 | -0,328273727 | -0,107849974 | 0,010325949 | -0,231461903 | -0,107855543 | 0,004516577 |
| 164 | -131,9164876 | 24,88429121 | -0,330119408 | -0,108405246 | 0,010317923 | -0,233333066 | -0,10841081 | 0,004508493 |
| 165 | -130,3466843 | 57,02282886 | 0,328840679 | -0,10753132 | 0,010611781 | 0,231682172 | -0,107524033 | 0,004293404 |
| 166 | -131,9256612 | 25,77412177 | 0,330676897 | -0,108086928 | 0,010602696 | 0,233549802 | -0,108079674 | 0,004286057 |
| 167 | -4120,225829 | -1116,929126 | -2,846338836 | -2,848085298 | -0,236106684 | -2,818603152 | -2,848095669 | -0,371189728 |
| 168 | -4120,353962 | -1117,154853 | 2,845960435 | -2,848072044 | -0,235410416 | 2,817687326 | -2,848061835 | -0,371652027 |
| 169 | 4120,259436 | -1107,266433 | 2,847951213 | 2,847773151 | -0,236107045 | 2,875697724 | 2,847762971 | -0,099822412 |
| 170 | 4120,320289 | -1107,495152 | -2,847575999 | 2,848384808 | -0,235410419 | -2,875850408 | 2,848394569 | -0,100373053 |
| 171 | -1049,940492 | -23,29374435 | -0,118550255 | -0,328367583 | -0,01059875 | -0,03082295 | -0,328359898 | -0,010809654 |
| 172 | -1070,912544 | -54,96688953 | -0,119882278 | -0,330408764 | -0,010711455 | -0,032136582 | -0,330401096 | -0,011019444 |
| 173 | 1049,796673 | -24,19825097 | -0,117805094 | 0,327879785 | -0,010895447 | -0,204994272 | 0,327875268 | -0,010605872 |
| 174 | 1070,766376 | -55,86463099 | -0,119138005 | 0,329923575 | -0,011007653 | -0,206348956 | 0,329919056 | -0,010621458 |

APOYO 2

| Newton | VIENTO | PESO | CT1 | | | CT2 | | |
|---|---|---|---|---|---|---|---|---|
| Barra | | | L | T | V | L | T | V |
| 175 | -147,8879786 | -29,82068019 | 0,328904876 | -0,116539618 | -0,010895275 | 0,425501712 | -0,116546947 | -0,016929158 |
| 176 | -149,6396746 | -61,89300489 | 0,330944069 | -0,117819643 | -0,011007486 | 0,427519758 | -0,117826958 | -0,017103562 |
| 177 | -147,9034053 | -28,88503336 | -0,328302548 | -0,116357603 | -0,010594019 | -0,424601139 | -0,116352706 | -0,017152257 |
| 178 | -149,6550094 | -60,95719618 | -0,330345335 | -0,117637637 | -0,01070673 | -0,426624909 | -0,117632741 | -0,017326329 |
| 179 | 1049,926171 | -23,29696084 | 0,117858796 | 0,328501446 | -0,010598511 | 0,205578917 | 0,328508692 | -0,01090271 |
| 180 | 1070,898247 | -54,96316472 | 0,119191941 | 0,33054241 | -0,010711217 | 0,20693051 | 0,330549643 | -0,01091754 |
| 181 | -1049,782045 | -24,19944394 | 0,118509381 | -0,328016131 | -0,010895177 | 0,031310418 | -0,328021147 | -0,010643792 |
| 182 | -1070,751773 | -55,87273885 | 0,119841099 | -0,33005969 | -0,011007384 | 0,032620411 | -0,330064705 | -0,010853553 |
| 183 | 147,9023591 | -29,37261895 | -0,328210463 | 0,116405184 | -0,010895021 | -0,231620295 | 0,116398071 | -0,004342645 |
| 184 | 149,6540314 | -61,44054254 | -0,330250795 | 0,117685429 | -0,011007235 | -0,233681729 | 0,117678328 | -0,004393472 |
| 185 | 147,8888168 | -28,43735658 | 0,32760021 | 0,116493572 | -0,010593695 | 0,23129208 | 0,116498612 | -0,004575716 |
| 186 | 149,6404456 | -60,50511616 | 0,329644174 | 0,117773378 | -0,010706408 | 0,233355114 | 0,117778417 | -0,004626147 |
| 187 | -4961,526491 | -1148,670755 | -2,886004039 | -2,893493317 | -0,188097268 | -2,88957009 | -2,893490207 | -0,308710554 |
| 188 | -4961,229822 | -1153,468443 | 2,886069267 | -2,893488338 | -0,188087768 | 2,889687221 | -2,893491431 | -0,308712272 |
| 189 | 4961,527182 | -1140,081132 | 2,886030833 | 2,89348813 | -0,188097222 | 2,882463387 | 2,893491219 | -0,067478838 |
| 190 | 4961,22914 | -1144,878391 | -2,886095593 | 2,893493434 | -0,188087766 | -2,882477493 | 2,893490398 | -0,067467975 |
| 191 | -1274,603503 | -258,2821005 | -0,698828321 | -0,32764951 | -0,047088036 | -0,635025001 | -0,327646955 | -0,047088942 |
| 192 | -1309,222595 | -311,801267 | -0,698709189 | -0,333842829 | -0,047121152 | -0,634913181 | -0,333840266 | -0,047380168 |
| 193 | 1275,530243 | -258,0751106 | -0,698426681 | 0,327723009 | -0,047276301 | -0,762298178 | 0,327719971 | -0,047284666 |
| 194 | 1310,166809 | -311,5861597 | -0,698307745 | 0,333916424 | -0,047309397 | -0,762171176 | 0,333913383 | -0,047059525 |
| 195 | -1203,86325 | -262,6460398 | 0,341417754 | -0,70062865 | -0,04735428 | 0,43232002 | -0,700635399 | -0,076155668 |
| 196 | -1203,799589 | -314,9115211 | 0,347595489 | -0,700687492 | -0,047387476 | 0,438505754 | -0,70069425 | -0,076194941 |
| 197 | -1204,400722 | -260,3434173 | -0,341524738 | -0,700583298 | -0,047031637 | -0,432440628 | -0,700576162 | -0,076415785 |
| 198 | -1204,337695 | -312,5986293 | -0,347701817 | -0,700642151 | -0,047064853 | -0,438625085 | -0,70063501 | -0,076455055 |
| 199 | 1274,594829 | -258,293162 | 0,69841196 | 0,327730115 | -0,047088067 | 0,762216087 | 0,327732726 | -0,047399341 |
| 200 | 1309,213922 | -311,7939459 | 0,698292896 | 0,333923421 | -0,047121182 | 0,762089696 | 0,333926041 | -0,047174313 |
| 201 | -1275,521611 | -258,0635688 | 0,698841268 | -0,32780327 | -0,047276341 | 0,634971322 | -0,327806233 | -0,046959783 |
| 202 | -1310,158179 | -311,5930076 | 0,698722286 | -0,333996677 | -0,047309436 | 0,634860393 | -0,333999644 | -0,047251102 |
| 203 | 1203,879106 | -260,5742826 | -0,340653054 | 0,700480609 | -0,047354314 | -0,249749921 | 0,700473833 | -0,017972593 |
| 204 | 1203,815443 | -312,8393324 | -0,346830852 | 0,700539463 | -0,04738751 | -0,255919732 | 0,700532679 | -0,017999742 |
| 205 | 1204,384894 | -258,2713546 | 0,340761088 | 0,700731136 | -0,047031682 | 0,249846586 | 0,70073825 | -0,018224477 |
| 206 | 1204,321869 | -310,5261361 | 0,346938218 | 0,700789979 | -0,047064898 | 0,256016322 | 0,700797097 | -0,018251649 |
| 207 | -1,010897279 | 463,8452794 | 0,581087761 | 5,35217E-05 | 0,043939123 | 0,580929263 | 5,24777E-05 | 0,043915013 |
| 208 | 1024,415426 | 186,1124162 | -0,000185576 | 0,621282426 | 0,043942356 | -0,000282004 | 0,621283222 | 0,070828812 |
| 209 | 1,010804182 | 463,8466023 | -0,581091636 | -5,27715E-05 | 0,043938956 | -0,581244559 | -5,35098E-05 | 0,043954433 |
| 210 | -1024,415367 | 184,1980438 | 0,000187763 | -0,621282849 | 0,043942155 | 9,68782E-05 | -0,621282181 | 0,017062914 |
| 211 | 16,87502367 | 265,4537786 | 0,045816528 | 1,71078E-05 | -5,23658E-05 | 0,024816308 | 1,42566E-05 | 3,91744E-05 |
| 212 | -15,14346826 | 247,9759559 | 0,045591225 | 0,000223471 | -3,91125E-05 | 0,024592433 | 0,00022062 | 6,09772E-05 |
| 213 | 15,21480469 | 265,6869543 | -0,045816548 | -0,000182579 | 4,17494E-05 | -0,024816331 | -0,000179727 | -5,6653E-05 |
| 214 | -16,80352997 | 250,4925911 | -0,045591234 | 2,3801E-05 | 5,49958E-05 | -0,024592439 | 2,66519E-05 | -3,48425E-05 |
| 215 | 7,33440471 | 3,723488484 | -3,40431E-08 | 6,33839E-05 | 4,78388E-06 | -5,15678E-08 | 6,3384E-05 | 7,61042E-06 |
| 216 | 7,634673205 | -8,488371631 | 0,000584019 | -0,000571669 | -3,71279E-05 | 0,000580328 | -0,000571671 | -6,09285E-05 |
| 217 | 7,634265557 | -14,40724694 | -0,00058401 | -0,000571712 | -3,711E-05 | -0,000580312 | -0,000571711 | -6,09483E-05 |
| 218 | 62,17253034 | -237,0921543 | -0,04216765 | -4,28033E-05 | 4,58072E-05 | -0,022807052 | -4,01744E-05 | -3,976E-05 |

APOYO 2

| Newton | VIENTO | PESO | CT1 | | | CT2 | | |
|---|---|---|---|---|---|---|---|---|
| Barra | | | L | T | V | L | T | V |
| 219 | 30,28477142 | -239,7661779 | -0,0418692 | 0,000248788 | 5,97362E-05 | -0,022697828 | 0,000251394 | -1,32706E-05 |
| 220 | 5,924137712 | 1,501000369 | -0,000163869 | 5,57244E-05 | 2,98968E-06 | -5,99663E-05 | 5,57369E-05 | 4,87269E-06 |
| 221 | 4,370838281 | -3,663185125 | 0,000410258 | 0,000483841 | 2,32386E-05 | 0,000150144 | 0,000483809 | 4,38813E-05 |
| 222 | 30,14764741 | -235,192759 | 0,041869139 | -0,000320999 | -6,32975E-05 | 0,022697814 | -0,000323605 | 6,77318E-06 |
| 223 | 54,5468617 | -234,828713 | 0,041829395 | -0,000307484 | -6,25724E-05 | 0,02268327 | -0,000310086 | 7,95498E-06 |
| 224 | -16,87010731 | 265,4537939 | -0,045578039 | -6,32779E-05 | -5,23815E-05 | -0,066577726 | -6,6101E-05 | 3,97988E-05 |
| 225 | 15,14838427 | 247,9753617 | -0,045352754 | -0,000269638 | -3,91283E-05 | -0,066351014 | -0,00027246 | 4,44875E-05 |
| 226 | -15,21972105 | 265,6874278 | 0,045578059 | 0,000228749 | 4,17652E-05 | 0,066577744 | 0,000231572 | -4,35518E-05 |
| 227 | 16,79861395 | 250,4924553 | 0,045352762 | 2,23658E-05 | 5,50115E-05 | 0,066351024 | 2,51885E-05 | -3,88555E-05 |
| 228 | -7,334404698 | 3,723287256 | 3,44555E-08 | -6,33839E-05 | 4,78385E-06 | 1,79534E-08 | -6,33838E-05 | 1,95866E-06 |
| 229 | -7,634672307 | -8,486675338 | -0,000583974 | 0,000571661 | -3,71279E-05 | -0,000587664 | 0,00057166 | -1,32896E-05 |
| 230 | -7,634266451 | -14,40555064 | 0,000583966 | 0,000571721 | -3,711E-05 | 0,000587664 | 0,000571722 | -1,33092E-05 |
| 231 | -62,17706338 | -237,0920854 | 0,041947756 | 8,53735E-05 | 4,58217E-05 | 0,061307862 | 8,79762E-05 | -3,80076E-05 |
| 232 | -30,28926554 | -239,766952 | 0,041651195 | -0,000206583 | 5,97508E-05 | 0,060822075 | -0,000204004 | -3,51887E-05 |
| 233 | -5,924159084 | 1,500837967 | 0,000162832 | -5,55236E-05 | 2,98968E-06 | 0,000266735 | -5,5511E-05 | 3,09841E-07 |
| 234 | -4,370784784 | -3,664584392 | -0,000407662 | -0,000484343 | 2,32386E-05 | -0,000667776 | -0,000484375 | 4,58943E-06 |
| 235 | -30,1431533 | -235,1917758 | -0,041651133 | 0,000278794 | -6,33121E-05 | -0,060821966 | 0,000276214 | 3,45626E-05 |
| 236 | -54,54237278 | -234,8277692 | -0,041611641 | 0,000265328 | -6,2587E-05 | -0,060757273 | 0,000262751 | 3,46377E-05 |
| 237 | -7495,741434 | -1786,571431 | -3,726939673 | -3,726322467 | -0,241934479 | -3,741833114 | -3,726314221 | -0,379985046 |
| 238 | -7495,491924 | -1781,808509 | 3,726944414 | -3,726441776 | -0,242218999 | 3,741829233 | -3,726450021 | -0,379763665 |
| 239 | 7495,728003 | -1776,758169 | 3,726287196 | 3,726448782 | -0,241934481 | 3,711393794 | 3,726457029 | -0,104388714 |
| 240 | 7495,505355 | -1771,995325 | -3,726291917 | 3,726315456 | -0,242218998 | -3,711407172 | 3,726307207 | -0,104169515 |
| 241 | -1569,852076 | -40,00349301 | -0,088828122 | -0,324428938 | -0,006082133 | 0,007894499 | -0,324429858 | -0,005919052 |
| 242 | -1590,885338 | -70,7619849 | -0,088171827 | -0,325927195 | -0,006022771 | 0,00854481 | -0,325928113 | -0,005915196 |
| 243 | 1570,219476 | -41,16764038 | -0,088894131 | 0,324437339 | -0,006051052 | -0,185611623 | 0,324438279 | -0,006212611 |
| 244 | 1591,245848 | -71,92027195 | -0,088237577 | 0,32593541 | -0,005991804 | -0,18494908 | 0,325936347 | -0,006097862 |
| 245 | -205,7162956 | -28,0746965 | 0,324441886 | -0,08930333 | -0,005992812 | 0,411378045 | -0,089302431 | -0,009024188 |
| 246 | -204,1768637 | -59,18688843 | 0,325940352 | -0,08859097 | -0,005933241 | 0,412882456 | -0,088590075 | -0,008940215 |
| 247 | -205,7178476 | -26,88041853 | -0,324446849 | -0,089312359 | -0,006023071 | -0,411374802 | -0,089313275 | -0,00900103 |
| 248 | -204,1785159 | -57,99452539 | -0,325945212 | -0,088599951 | -0,005963386 | -0,412879193 | -0,088600864 | -0,008917147 |
| 249 | 1569,853523 | -40,01316396 | 0,088898476 | 0,324415317 | -0,006082135 | 0,185621235 | 0,3244144 | -0,006190576 |
| 250 | 1590,88678 | -70,76771035 | 0,088241918 | 0,325913626 | -0,006022773 | 0,184958695 | 0,325912712 | -0,006075913 |
| 251 | -1570,220919 | -41,1580703 | 0,088823933 | -0,324423749 | -0,006051051 | -0,007893682 | -0,324422813 | -0,005943946 |
| 252 | -1591,247286 | -71,91464718 | 0,08816764 | -0,325921871 | -0,005991803 | -0,008543986 | -0,325920938 | -0,005939998 |
| 253 | 205,7148878 | -27,86070605 | -0,324510346 | 0,089316583 | -0,005992814 | -0,237574088 | 0,089317486 | -0,003014497 |
| 254 | 204,1754613 | -58,97462842 | -0,326008549 | 0,088604172 | -0,005933244 | -0,239066346 | 0,088605072 | -0,002979123 |
| 255 | 205,719251 | -26,66646382 | 0,32451512 | 0,089299142 | -0,006023066 | 0,237586959 | 0,089298221 | -0,002992258 |
| 256 | 204,179914 | -57,78230109 | 0,326013222 | 0,088586785 | -0,00596338 | 0,239079034 | 0,088585868 | -0,002956972 |
| 257 | 2,829612992 | -6,921863937 | 0,633408231 | 7,46087E-05 | 0,029387738 | 0,633415629 | 7,4769E-05 | 0,029391683 |
| 258 | 1052,257913 | 266,869004 | -4,15881E-05 | 0,595416391 | 0,029346715 | -1,18887E-06 | 0,595416255 | 0,053567209 |
| 259 | -2,829600627 | -6,922084057 | -0,633407725 | -7,47067E-05 | 0,029387753 | -0,633400841 | -7,45749E-05 | 0,029385287 |
| 260 | -1052,257929 | 265,1440788 | 4,09253E-05 | -0,595416263 | 0,029346746 | 8,04789E-05 | -0,595416379 | 0,005124668 |
| 261 | 9,578722662 | 68,43896829 | -0,000194952 | -0,000125468 | 0,015719109 | -0,010326096 | -0,000117851 | 0,015397123 |
| 262 | -9,595868438 | 68,43956377 | -0,000632365 | 0,000285632 | 0,015719109 | -0,01076351 | 0,000293248 | 0,015413846 |

APOYO 2

| Newton | VIENTO | PESO | CT1 | | | CT2 | | |
|---|---|---|---|---|---|---|---|---|
| Barra | | | L | T | V | L | T | V |
| 263 | 9,593913654 | 68,67048212 | 0,000194939 | -0,000285675 | 0,01536374 | 0,010351018 | -0,000293281 | 0,015668974 |
| 264 | -9,576769609 | 68,67107775 | 0,000632295 | 0,000125527 | 0,01536374 | 0,010788375 | 0,000117921 | 0,015685702 |
| 265 | -9952,102745 | -2085,046993 | -4,272841894 | -4,271615585 | -0,257220694 | -4,274806682 | -4,271609745 | -0,399015822 |
| 266 | -9952,223635 | -2083,288929 | 4,272838819 | -4,271708808 | -0,2574242 | 4,274804816 | -4,271714647 | -0,398856452 |
| 267 | 9952,093078 | -2074,96201 | 4,272372447 | 4,271706468 | -0,257220692 | 4,270407601 | 4,271712307 | -0,115788392 |
| 268 | 9952,233301 | -2073,203949 | -4,272369379 | 4,271617927 | -0,2574242 | -4,270403365 | 4,27161209 | -0,115629123 |
| 269 | -1747,593073 | 62,66312573 | 0,092332004 | -0,329586578 | 0,005701354 | 0,189966634 | -0,329587513 | 0,005741246 |
| 270 | -1769,608447 | 31,07169898 | 0,09277336 | -0,331303913 | 0,005702446 | 0,190407185 | -0,331304845 | 0,005685327 |
| 271 | 1747,391079 | 61,52530024 | 0,09225999 | 0,329583758 | 0,005732592 | -0,005373713 | 0,329584674 | 0,005692793 |
| 272 | 1769,410644 | 29,93863498 | 0,092701536 | 0,331301225 | 0,005733602 | -0,004931391 | 0,331302139 | 0,00575081 |
| 273 | 219,6739448 | 59,59357779 | 0,329609235 | 0,09094361 | 0,005662956 | 0,417217925 | 0,090944549 | 0,008584941 |
| 274 | 221,3490018 | 28,29727435 | 0,331327098 | 0,091324393 | 0,00566307 | 0,418936593 | 0,091325329 | 0,008589244 |
| 275 | 219,6768597 | 60,71528267 | -0,329605218 | 0,090928839 | 0,005631189 | -0,417216743 | 0,090927915 | 0,008608457 |
| 276 | 221,3519653 | 29,4182724 | -0,33132314 | 0,09130966 | 0,005631384 | -0,418935442 | 0,091308738 | 0,008612696 |
| 277 | 1747,594532 | 62,66224174 | -0,092261092 | 0,32957285 | 0,005701353 | 0,005373543 | 0,329571917 | 0,00571641 |
| 278 | 1769,609902 | 31,07486977 | -0,092702636 | 0,331290221 | 0,005702445 | 0,004931193 | 0,33128929 | 0,005774367 |
| 279 | -1747,392538 | 61,52617047 | -0,092330934 | -0,329570024 | 0,005732591 | -0,189964567 | -0,329569104 | 0,005717268 |
| 280 | -1769,412099 | 29,93545067 | -0,092772291 | -0,331287528 | 0,0057336 | -0,190405149 | -0,331286611 | 0,005661417 |
| 281 | -219,6754126 | 59,38352045 | -0,329680605 | -0,090929793 | 0,005662956 | -0,242071905 | -0,090928856 | 0,002685663 |
| 282 | -221,3504657 | 28,0869238 | -0,33139828 | -0,091310612 | 0,005663069 | -0,243788776 | -0,091309678 | 0,002681732 |
| 283 | -219,6753909 | 60,50523413 | 0,32967663 | -0,090942664 | 0,005631186 | 0,242065192 | -0,090943588 | 0,002709404 |
| 284 | -221,3505004 | 29,20793065 | 0,331394364 | -0,091323448 | 0,005631381 | 0,243782149 | -0,09132437 | 0,002705409 |
| 285 | -12030,55612 | -2139,915725 | -4,571477833 | -4,573380203 | -0,24189279 | -4,560500983 | -4,573376774 | -0,379560249 |
| 286 | -12030,53407 | -2141,122757 | 4,571478883 | -4,573437043 | -0,242014744 | 4,56050333 | -4,573440473 | -0,379462718 |
| 287 | 12030,55024 | -2130,119601 | 4,57119265 | 4,573435413 | -0,241892792 | 4,582169549 | 4,573438843 | -0,104445198 |
| 288 | 12030,53995 | -2131,326606 | -4,571193697 | 4,573381833 | -0,242014744 | -4,582169256 | 4,573378401 | -0,104346905 |
| 289 | -1900,188463 | -24,30931236 | -0,108344455 | -0,327936344 | -0,006117149 | -0,011955557 | -0,327937255 | -0,006102446 |
| 290 | -1923,043108 | -56,03740383 | -0,109517695 | -0,329775136 | -0,006179021 | -0,013124377 | -0,329776046 | -0,006219668 |
| 291 | 1900,211995 | -25,43279858 | -0,108414469 | 0,327933437 | -0,006086247 | -0,20480542 | 0,327934363 | -0,006101499 |
| 292 | 1923,063512 | -57,15743681 | -0,109587595 | 0,329772095 | -0,006148169 | -0,205982951 | 0,32977302 | -0,006108071 |
| 293 | -264,0638818 | -36,819846 | 0,327572971 | -0,105432406 | -0,006025192 | 0,41415787 | -0,105431492 | -0,00936058 |
| 294 | -266,7695242 | -68,88211294 | 0,329410947 | -0,106523943 | -0,006085632 | 0,415991426 | -0,10652303 | -0,009455114 |
| 295 | -264,0670706 | -35,65872061 | -0,327574441 | -0,105446345 | -0,006056396 | -0,414159234 | -0,10544727 | -0,009337393 |
| 296 | -266,7727219 | -67,72050226 | -0,329412385 | -0,106537858 | -0,006116787 | -0,415992772 | -0,106538782 | -0,009431966 |
| 297 | 1900,189906 | -24,30841715 | 0,108414655 | 0,327922753 | -0,006117148 | 0,204803524 | 0,32792184 | -0,006077308 |
| 298 | 1923,044549 | -56,03257008 | 0,109587781 | 0,329761567 | -0,00617902 | 0,205981071 | 0,329760656 | -0,006083919 |
| 299 | -1900,213439 | -25,43364898 | 0,108344262 | -0,327919845 | -0,006086246 | 0,011953263 | -0,327918922 | -0,006125399 |
| 300 | -1923,064954 | -57,16222572 | 0,109517503 | -0,329758526 | -0,006148167 | 0,013122099 | -0,329757604 | -0,006242581 |
| 301 | 264,0624391 | -36,5842578 | -0,327643123 | 0,105445987 | -0,006025191 | -0,241058247 | 0,105446903 | -0,002744287 |
| 302 | 266,7680838 | -68,64409361 | -0,329480985 | 0,106537501 | -0,006085631 | -0,24290053 | 0,106538415 | -0,002770545 |
| 303 | 264,0685133 | -35,42313105 | 0,327644595 | 0,105432763 | -0,006056394 | 0,241059752 | 0,105431838 | -0,002721053 |
| 304 | 266,7741622 | -67,48248158 | 0,329482424 | 0,106524299 | -0,006116785 | 0,242901986 | 0,106523375 | -0,00274735 |
| 305 | -13539,59397 | -2174,005733 | -4,635991238 | -4,624352298 | -0,209648022 | -4,634554364 | -4,624351173 | -0,337137651 |
| 306 | -13539,29476 | -2180,499683 | 4,636007973 | -4,624392517 | -0,209693161 | 4,634562432 | -4,624393641 | -0,337103193 |

APOYO 2

| Newton | VIENTO | PESO | CT1 | | | CT2 | | |
|---|---|---|---|---|---|---|---|---|
| Barra | | | L | T | V | L | T | V |
| 307 | 13539,5918 | -2164,929447 | 4,635886425 | 4,624372589 | -0,209648022 | 4,637323296 | 4,624373714 | -0,082238572 |
| 308 | 13539,29693 | -2171,423356 | -4,635903162 | 4,624372226 | -0,209693161 | -4,637348712 | 4,624371102 | -0,082202949 |
| 309 | -2128,987644 | -282,2247344 | -0,647494744 | -0,324477033 | -0,030049598 | -0,57673225 | -0,324477842 | -0,029839646 |
| 310 | -2169,235564 | -335,7884953 | -0,64758542 | -0,330026304 | -0,030074201 | -0,576821211 | -0,330027112 | -0,030017239 |
| 311 | 2129,901471 | -282,4040927 | -0,647561285 | 0,324478598 | -0,030023533 | -0,718326955 | 0,324479406 | -0,030233375 |
| 312 | 2170,166203 | -335,9647547 | -0,647651855 | 0,330028292 | -0,03004819 | -0,718419269 | 0,330029098 | -0,030105032 |
| 313 | -1999,277521 | -305,4978134 | 0,339496421 | -0,677562097 | -0,031431288 | 0,420876224 | -0,677561153 | -0,050026834 |
| 314 | -2001,127207 | -358,0806216 | 0,345059714 | -0,678198423 | -0,031472436 | 0,426437884 | -0,67819748 | -0,050085758 |
| 315 | -1999,776986 | -303,0175498 | -0,339522349 | -0,677618133 | -0,031463721 | -0,420885747 | -0,677619076 | -0,050005279 |
| 316 | -2001,627031 | -355,5925649 | -0,345085952 | -0,678254411 | -0,031504815 | -0,426447525 | -0,678255353 | -0,050064243 |
| 317 | 2128,989023 | -282,2378496 | 0,647561629 | 0,324464084 | -0,030049598 | 0,718324119 | 0,324463275 | -0,030207981 |
| 318 | 2169,23694 | -335,7907188 | 0,647652179 | 0,33001338 | -0,030074201 | 0,718416384 | 0,330012572 | -0,030079691 |
| 319 | -2129,902849 | -282,390986 | 0,647494401 | -0,324465649 | -0,030023533 | 0,576728743 | -0,324464841 | -0,029865273 |
| 320 | -2170,167578 | -335,9625403 | 0,647585097 | -0,330015367 | -0,03004819 | 0,576817695 | -0,33001456 | -0,030042834 |
| 321 | 1999,276065 | -304,1754969 | -0,339567277 | 0,677575814 | -0,031431288 | -0,258187483 | 0,677576756 | -0,012890795 |
| 322 | 2001,125753 | -356,7570359 | -0,345130444 | 0,678212116 | -0,031472436 | -0,263752284 | 0,678213057 | -0,012914072 |
| 323 | 1999,778443 | -301,6951565 | 0,339593206 | 0,677604416 | -0,031463721 | 0,258229829 | 0,677603474 | -0,012867096 |
| 324 | 2001,628485 | -354,2689024 | 0,345156683 | 0,678240718 | -0,031504815 | 0,263795132 | 0,678239777 | -0,012890416 |
| 325 | -0,990951174 | 477,2139695 | 0,534650989 | -4,83571E-05 | 0,027366487 | 0,534652972 | -4,8363E-05 | 0,027365331 |
| 326 | 1719,51017 | 225,3270621 | 8,35028E-06 | 0,597593876 | 0,028516831 | 3,19808E-06 | 0,597593881 | 0,045234436 |
| 327 | 0,990951298 | 477,21405 | -0,534650982 | 4,83558E-05 | 0,027366486 | -0,534648968 | 4,83519E-05 | 0,027367593 |
| 328 | -1719,51017 | 224,1365248 | -8,35712E-06 | -0,597593874 | 0,02851683 | -1,34978E-05 | -0,59759387 | 0,011799278 |
| 329 | 16,77867359 | 265,5250343 | 0,045936553 | -1,39246E-05 | -1,0178E-06 | 0,022566899 | -1,38305E-05 | -2,56221E-06 |
| 330 | -15,05833424 | 248,0509974 | 0,045733258 | 0,000169085 | 7,21472E-06 | 0,022365559 | 0,000169179 | 1,0701E-05 |
| 331 | 15,16439588 | 265,6124856 | -0,045936553 | -0,000133136 | -5,58199E-06 | -0,022566899 | -0,00013323 | -8,08101E-06 |
| 332 | -16,67246831 | 250,4220089 | -0,04573326 | 4,98819E-05 | 2,64896E-06 | -0,02236556 | 4,97878E-05 | 5,1841E-06 |
| 333 | 7,416358316 | 3,729542312 | 1,64363E-09 | 6,44276E-05 | 3,18651E-06 | 6,37897E-10 | 6,44276E-05 | 5,00838E-06 |
| 334 | 7,116721582 | -8,501696054 | 0,000526953 | -0,000511741 | -2,31874E-05 | 0,000521885 | -0,000511741 | -3,72839E-05 |
| 335 | 7,116349238 | -14,4208322 | -0,000526951 | -0,000511761 | -2,31833E-05 | -0,000521884 | -0,000511761 | -3,72889E-05 |
| 336 | 62,18245624 | -237,1675236 | -0,042285936 | -2,84352E-05 | -1,23747E-06 | -0,0207408 | -2,8522E-05 | -9,36035E-07 |
| 337 | 30,22336039 | -239,8900268 | -0,041982782 | 0,000127346 | 3,87845E-06 | -0,020645535 | 0,00012726 | 8,52573E-06 |
| 338 | 5,910440063 | 1,491077602 | -0,000166459 | 2,97027E-05 | 9,76154E-07 | -5,23107E-05 | 2,97023E-05 | 1,81017E-06 |
| 339 | 4,252443159 | -3,743881056 | 0,000416723 | 0,000258463 | 8,48832E-06 | 0,000130953 | 0,000258464 | 1,57008E-05 |
| 340 | 30,22833583 | -235,0564886 | 0,041982707 | -0,000165474 | -5,13797E-06 | 0,020645512 | -0,000165388 | -1,08513E-05 |
| 341 | 54,62422796 | -234,6948491 | 0,041942335 | -0,00015827 | -4,90121E-06 | 0,020632825 | -0,000158184 | -1,04123E-05 |
| 342 | -16,77872842 | 265,5250582 | -0,045939334 | 1,4463E-05 | -1,01796E-06 | -0,069308984 | 1,45574E-05 | -1,8944E-06 |
| 343 | 15,05827932 | 248,0506629 | -0,045736044 | -0,000168546 | 7,21456E-06 | -0,069103737 | -0,000168451 | 1,3042E-06 |
| 344 | -15,16434105 | 265,6127497 | 0,045939334 | 0,000132597 | -5,58183E-06 | 0,069308984 | 0,000132503 | -6,61912E-07 |
| 345 | 16,67252323 | 250,4219147 | 0,045736045 | -5,04212E-05 | 2,64911E-06 | 0,06910374 | -5,05156E-05 | 2,53812E-06 |
| 346 | -7,416358316 | 3,729412568 | -1,64476E-09 | -6,44276E-05 | 3,18651E-06 | -2,64851E-09 | -6,44276E-05 | 1,36465E-06 |
| 347 | -7,116721352 | -8,500691876 | -0,000526942 | 0,000511738 | -2,31874E-05 | -0,00053201 | 0,000511738 | -9,08247E-06 |
| 348 | -7,116349469 | -14,41982798 | 0,00052694 | 0,000511763 | -2,31833E-05 | 0,000532007 | 0,000511763 | -9,08618E-06 |
| 349 | -62,18240563 | -237,1674656 | 0,042288503 | 2,79383E-05 | -1,23732E-06 | 0,063833635 | 2,78512E-05 | 6,95167E-07 |
| 350 | -30,22331005 | -239,8902787 | 0,041985335 | -0,00012784 | 3,8786E-06 | 0,063322577 | -0,000127926 | 1,45218E-06 |

APOYO 2

| Newton | VIENTO | PESO | CT1 | | | CT2 | | |
|---|---|---|---|---|---|---|---|---|
| Barra | | | L | T | V | L | T | V |
| 351 | -5,910439919 | 1,491018464 | 0,000166466 | -2,97041E-05 | 9,76152E-07 | 0,000280615 | -2,97045E-05 | 1,49308E-07 |
| 352 | -4,252443519 | -3,744395333 | -0,000416742 | -0,000258459 | 8,48833E-06 | -0,000702511 | -0,000258459 | 1,2579E-06 |
| 353 | -30,22838618 | -235,0561608 | -0,04198526 | 0,000165969 | -5,13812E-06 | -0,06332245 | 0,000166055 | -1,64565E-06 |
| 354 | -54,62427826 | -234,6945357 | -0,041944886 | 0,000158764 | -4,90137E-06 | -0,063254391 | 0,000158851 | -1,60944E-06 |
| 355 | -2,703859983 | -14,25738841 | -0,494818127 | -4,43877E-05 | 0,016540365 | -0,494822615 | -4,43854E-05 | 0,016539242 |
| 356 | -906,4116307 | 165,4274076 | 5,97587E-05 | -0,317910641 | 0,010442282 | 9,6762E-05 | -0,317910645 | 0,00155858 |
| 357 | 906,4116309 | 166,0600576 | -5,97507E-05 | 0,31791064 | 0,010442281 | -2,27617E-05 | 0,317910635 | 0,019325952 |
| 358 | 2,703859912 | -14,25730717 | 0,494818122 | 4,43886E-05 | 0,016540365 | 0,494813654 | 4,43922E-05 | 0,016541515 |
| 359 | -17953,39709 | -2935,642666 | -5,283900382 | -5,456727016 | -0,247794909 | -5,254398546 | -5,45672704 | -0,385255524 |
| 360 | 17952,98781 | -2921,88478 | -5,283895733 | 5,456720064 | -0,247801563 | -5,313402341 | 5,456720089 | -0,11034114 |
| 361 | -17952,98752 | -2931,673645 | 5,283909367 | -5,456722704 | -0,247801563 | 5,254402759 | -5,456722679 | -0,385252346 |
| 362 | 17953,3968 | -2925,853788 | 5,283886747 | 5,456729655 | -0,247794909 | 5,313388584 | 5,456729631 | -0,11034393 |
| 363 | 251,6670641 | 73,05167893 | -0,136143211 | 0,08073097 | 0,003066075 | -0,212932096 | 0,08073096 | 0,005188018 |
| 364 | 260,4011999 | 23,66846009 | -0,137471277 | 0,08328173 | 0,003220851 | -0,214222757 | 0,083281719 | 0,005397569 |
| 365 | 251,6716056 | 72,82191579 | 0,136123426 | 0,080732815 | 0,003067104 | 0,212924083 | 0,080732828 | 0,005188217 |
| 366 | 260,4058467 | 23,43982476 | 0,137452609 | 0,083283574 | 0,003221878 | 0,214215159 | 0,083283588 | 0,005397769 |
| 367 | -2171,311978 | -55,275063 | -0,096530639 | -0,182284869 | -0,005157036 | 0,002304072 | -0,182284875 | -0,000655019 |
| 368 | -2216,361319 | -106,8702327 | -0,094764302 | -0,186231703 | -0,005064625 | 0,004044711 | -0,186231709 | -0,000662933 |
| 369 | 2171,888654 | -55,82937086 | -0,096532241 | 0,182295391 | -0,005156765 | -0,195367887 | 0,182295394 | -0,009658411 |
| 370 | 2216,927484 | -107,4145441 | -0,094765896 | 0,186242058 | -0,005064359 | -0,193575826 | 0,186242061 | -0,009465683 |
| 371 | -251,6670343 | 72,90060307 | 0,136144644 | -0,080731247 | 0,003066075 | 0,059355733 | -0,08073126 | 0,000945196 |
| 372 | -260,4011702 | 23,51348335 | 0,137472706 | -0,083282006 | 0,003220851 | 0,0607212 | -0,083282018 | 0,001045195 |
| 373 | -251,6716354 | 72,67082457 | -0,136124861 | -0,080732537 | 0,003067103 | -0,059324189 | -0,080732523 | 0,000944946 |
| 374 | -260,4058765 | 23,28483266 | -0,13745404 | -0,083283297 | 0,003221877 | -0,060691475 | -0,083283283 | 0,001044945 |
| 375 | 2171,312003 | -55,59564129 | 0,096531841 | 0,182284636 | -0,005157036 | 0,195366566 | 0,182284631 | -0,009658161 |
| 376 | 2216,361344 | -107,1836666 | 0,094765495 | 0,186231472 | -0,005064625 | 0,193574523 | 0,186231467 | -0,009465432 |
| 377 | -2171,888679 | -55,50881931 | 0,096531041 | -0,182295158 | -0,005156766 | -0,002304602 | -0,182295154 | -0,000656029 |
| 378 | -2216,927509 | -107,1011367 | 0,094764705 | -0,186241827 | -0,00506436 | -0,004045222 | -0,186241824 | -0,000663937 |
| 379 | -9,636830045 | 40,68015011 | -0,000133057 | 0,000102428 | 0,007123006 | 0,005204836 | 0,000101436 | 0,007155411 |
| 380 | 9,638384943 | 40,6799317 | 0,00020867 | -0,000117067 | 0,007123006 | 0,005546562 | -0,000118059 | 0,007149277 |
| 381 | -9,63651784 | 39,48812076 | 0,000133016 | 0,000117097 | 0,00715647 | -0,005187667 | 0,000118089 | 0,007130199 |
| 382 | 9,634962973 | 39,4879023 | -0,000208627 | -0,000102459 | 0,00715647 | -0,005529311 | -0,000101467 | 0,007124064 |
| 383 | -17664,72553 | -3049,514476 | -5,47981051 | -5,363335875 | -0,244036661 | -5,553532815 | -5,363335904 | -0,379055655 |
| 384 | -20900,58958 | -3312,332667 | -5,590590377 | -5,626384798 | -0,249939783 | -5,528878489 | -5,62638483 | -0,37912911 |
| 385 | -21154,57169 | -3549,202462 | -5,848805808 | -5,70918095 | -0,253452002 | -5,916919184 | -5,709180979 | -0,384823155 |
| 386 | -24513,07081 | -3659,209944 | -5,784662541 | -5,956842614 | -0,250118241 | -5,728484203 | -5,956842642 | -0,37630234 |
| 387 | -24405,30814 | -3816,09408 | -6,025826388 | -5,917573957 | -0,248374939 | -6,0907966 | -5,917573986 | -0,373491983 |
| 388 | -27943,81736 | -4016,055412 | -6,066830483 | -6,150711367 | -0,250305344 | -6,013518155 | -6,150711394 | -0,370426791 |
| 389 | -27960,68792 | -4188,864182 | -6,293654166 | -6,161907332 | -0,250856553 | -6,355108353 | -6,161907358 | -0,371345738 |
| 390 | -31766,48835 | -4330,530575 | -6,250059176 | -6,385560236 | -0,249072266 | -6,195958731 | -6,385560262 | -0,364612925 |
| 391 | 17664,31357 | -3036,153994 | -5,479791381 | 5,363328262 | -0,244042643 | -5,406064339 | 5,363328293 | -0,109023934 |
| 392 | 20900,79863 | -3299,661791 | -5,590572663 | 5,626388002 | -0,249945385 | -5,652280888 | 5,626388034 | -0,120756005 |
| 393 | 21154,78017 | -3536,59717 | -5,848797367 | 5,709184239 | -0,253457223 | -5,780685781 | 5,70918427 | -0,122085995 |
| 394 | 24512,98974 | -3647,188309 | -5,784654753 | 5,9568415 | -0,250123098 | -5,840834292 | 5,956841529 | -0,123939004 |

APOYO 2

| Newton | VIENTO | PESO | CT1 | | | CT2 | | |
|---|---|---|---|---|---|---|---|---|
| Barra | | | L | T | V | L | T | V |
| 395 | 24405,22716 | -3804,355957 | -6,025816693 | 5,917572823 | -0,248379402 | -5,960845905 | 5,91757285 | -0,123262371 |
| 396 | 27943,84326 | -4004,88087 | -6,066821558 | 6,150711671 | -0,250309464 | -6,120133571 | 6,150711698 | -0,130188022 |
| 397 | 27960,71385 | -4177,860323 | -6,293646611 | 6,161907643 | -0,250860314 | -6,232192567 | 6,16190767 | -0,130371131 |
| 398 | 31766,48229 | -4320,079466 | -6,250052341 | 6,385560195 | -0,249075689 | -6,304152831 | 6,38556022 | -0,133535025 |
| 399 | -17664,3133 | -3045,769 | 5,479803947 | -5,363330695 | -0,244042643 | 5,553530982 | -5,363330666 | -0,379052487 |
| 400 | -20900,79839 | -3308,861694 | 5,59058404 | -5,626390205 | -0,249945385 | 5,528875809 | -5,626390174 | -0,379126776 |
| 401 | -21154,77995 | -3545,952472 | 5,848807964 | -5,709186291 | -0,253457223 | 5,916919549 | -5,70918626 | -0,384821003 |
| 402 | -24512,98953 | -3656,174229 | 5,784664636 | -5,956843414 | -0,250123098 | 5,728485102 | -5,956843385 | -0,376300253 |
| 403 | -24405,22697 | -3813,265906 | 6,025825809 | -5,917574588 | -0,248379403 | 6,090796598 | -5,917574561 | -0,373490043 |
| 404 | -27943,84308 | -4013,435079 | 6,066829918 | -6,15071329 | -0,250309464 | 6,013517903 | -6,150713263 | -0,370425051 |
| 405 | -27960,71369 | -4186,440738 | 6,293654253 | -6,161909123 | -0,250860314 | 6,355108296 | -6,161909096 | -0,371344148 |
| 406 | -31766,48215 | -4328,307492 | 6,250059264 | -6,385561535 | -0,249075689 | 6,195958775 | -6,38556151 | -0,364611516 |
| 407 | 17664,72526 | -3039,899449 | 5,479797945 | 5,363338308 | -0,244036661 | 5,406075631 | 5,363338278 | -0,10902653 |
| 408 | 20900,58934 | -3303,132767 | 5,590579002 | 5,626387 | -0,249939783 | 5,65229089 | 5,626386968 | -0,120758451 |
| 409 | 21154,57147 | -3539,847164 | 5,848795208 | 5,709183002 | -0,253452002 | 5,780681829 | 5,709182972 | -0,122088288 |
| 410 | 24513,0706 | -3650,224023 | 5,784652658 | 5,956844527 | -0,250118241 | 5,840830997 | 5,956844499 | -0,12394108 |
| 411 | 24405,30795 | -3807,18413 | 6,025817273 | 5,917575722 | -0,248374939 | 5,960847063 | 5,917575694 | -0,123264294 |
| 412 | 27943,81718 | -4007,501203 | 6,066822123 | 6,150712986 | -0,250305344 | 6,120134451 | 6,150712959 | -0,130189752 |
| 413 | 27960,68776 | -4180,283766 | 6,293646524 | 6,161908812 | -0,250856552 | 6,232192335 | 6,161908786 | -0,130372712 |
| 414 | 31766,4882 | -4322,302549 | 6,250052253 | 6,385561577 | -0,249072266 | 6,304152699 | 6,385561552 | -0,133536444 |
| 415 | -240,1433434 | -23,17182247 | -0,185961298 | -0,077423394 | -0,00322597 | -0,280728378 | -0,077423391 | -0,005246507 |
| 416 | -236,4603356 | -76,78927114 | -0,18968259 | -0,076197721 | -0,003176114 | -0,284431467 | -0,076197718 | -0,005168649 |
| 417 | -240,1427613 | -23,33282461 | 0,185970284 | -0,077423443 | -0,003225726 | 0,280731639 | -0,077423444 | -0,005246662 |
| 418 | -236,4596872 | -76,94778472 | 0,189691476 | -0,076197769 | -0,003175874 | 0,284434693 | -0,07619777 | -0,005168802 |
| 419 | -2330,163039 | 61,88155605 | 0,058483142 | -0,182399054 | 0,003106907 | 0,149757695 | -0,182399053 | 0,006902407 |
| 420 | -2362,93981 | 24,33629286 | 0,057871724 | -0,184115205 | 0,003073821 | 0,14915296 | -0,184115203 | 0,006830541 |
| 421 | 2329,86767 | 61,45817435 | 0,058482787 | 0,182394431 | 0,003107177 | -0,032791192 | 0,182394428 | -0,00068842 |
| 422 | 2362,646848 | 23,91666855 | 0,057871372 | 0,184110615 | 0,003074089 | -0,033409295 | 0,184110613 | -0,000682729 |
| 423 | 119,8851579 | 47,68007466 | -0,177643319 | 0,040739041 | 0,001788048 | -0,267549466 | 0,040739041 | 0,002877501 |
| 424 | 116,2568806 | -9,422384249 | -0,181243442 | 0,039742821 | 0,001740638 | -0,271195562 | 0,039742821 | 0,002801994 |
| 425 | 119,8852344 | 47,52396373 | 0,177640303 | 0,040739188 | 0,001788352 | 0,26754843 | 0,040739187 | 0,002877396 |
| 426 | 116,2569188 | -9,576669342 | 0,18124046 | 0,039742967 | 0,00174094 | 0,271194536 | 0,039742966 | 0,00280189 |
| 427 | -2458,600841 | -12,54490776 | -0,033201609 | -0,170946288 | -0,001656655 | 0,053754319 | -0,170946287 | 0,002028862 |
| 428 | -2489,215616 | -51,1884029 | -0,033175599 | -0,17240702 | -0,001655045 | 0,053722171 | -0,172407019 | 0,001994771 |
| 429 | 2458,717462 | -12,96294525 | -0,033202203 | 0,170947919 | -0,001656402 | -0,1201584 | 0,170947919 | -0,005341902 |
| 430 | 2489,331514 | -51,6030193 | -0,03317619 | 0,172408642 | -0,001654794 | -0,120074226 | 0,172408642 | -0,005304594 |
| 431 | -42,20276765 | 9,526571678 | -0,164609009 | -0,016884662 | -0,000772837 | -0,248924842 | -0,016884661 | -0,001245767 |
| 432 | -42,18682449 | -29,90280077 | -0,166031869 | -0,016739421 | -0,000767871 | -0,250284165 | -0,01673942 | -0,001238663 |
| 433 | -42,20294865 | 9,381735567 | 0,164609813 | -0,016884565 | -0,000772571 | 0,248925091 | -0,016884565 | -0,001245874 |
| 434 | -42,18699847 | -30,04682923 | 0,166032671 | -0,016739324 | -0,000767606 | 0,250284414 | -0,016739324 | -0,00123877 |
| 435 | -2624,184253 | 34,97056291 | 0,025885493 | -0,164314295 | 0,001121977 | 0,109830428 | -0,164314295 | 0,004689109 |
| 436 | -2656,290764 | -5,19528801 | 0,026051836 | -0,16570072 | 0,001126737 | 0,109924786 | -0,165700719 | 0,004661044 |
| 437 | 2624,147297 | 34,57107079 | 0,025884971 | 0,164313862 | 0,001122222 | -0,058059858 | 0,164313861 | -0,002444905 |
| 438 | 2656,25395 | -5,591694719 | 0,026051318 | 0,165700287 | 0,00112698 | -0,057821527 | 0,165700286 | -0,002407322 |

APOYO 2

| Newton | VIENTO | PESO | CT1 | | | CT2 | | |
|---|---|---|---|---|---|---|---|---|
| Barra | | | L | T | V | L | T | V |
| 439 | -21,46230871 | 11,41180818 | -0,16189184 | -0,000927696 | 1,2613E-05 | -0,243532322 | -0,000927696 | 6,46892E-05 |
| 440 | -22,75571536 | -29,81398505 | -0,163382216 | -0,00109519 | 4,73803E-06 | -0,245029787 | -0,001095189 | 5,23934E-05 |
| 441 | -21,46219285 | 11,27115762 | 0,161891716 | -0,000927603 | 1,2867E-05 | 0,243532296 | -0,000927603 | 6,45772E-05 |
| 442 | -22,7556017 | -29,95409969 | 0,163382091 | -0,001095096 | 4,99118E-06 | 0,245029761 | -0,001095097 | 5,22818E-05 |
| 443 | -2788,966554 | -11,60942782 | -0,036446295 | -0,154120834 | -0,00142942 | 0,044964589 | -0,154120833 | 0,002116888 |
| 444 | -2826,464125 | -53,82246108 | -0,03674624 | -0,155636055 | -0,001441905 | 0,044675637 | -0,155636055 | 0,0020779 |
| 445 | 2788,975029 | -12,00390126 | -0,036446806 | 0,154120899 | -0,001429177 | -0,117857725 | 0,154120898 | -0,00497549 |
| 446 | 2826,472586 | -54,21457048 | -0,03674675 | 0,155636121 | -0,001441663 | -0,118168662 | 0,15563612 | -0,004961472 |
| 447 | 240,1433547 | -23,02791676 | 0,18596183 | 0,077423291 | -0,00322597 | 0,091194749 | 0,077423294 | -0,001205053 |
| 448 | 236,4603467 | -76,64735979 | 0,189683113 | 0,076197619 | -0,003176114 | 0,094934235 | 0,076197622 | -0,001183205 |
| 449 | 240,1427499 | -23,18891716 | -0,185970818 | 0,077423546 | -0,003225726 | -0,091209469 | 0,077423545 | -0,001205157 |
| 450 | 236,459676 | -76,80587164 | -0,189692002 | 0,076197871 | -0,003175874 | -0,09494879 | 0,07619787 | -0,001183307 |
| 451 | 2330,163049 | 61,61127182 | -0,058482683 | 0,182398965 | 0,003106907 | 0,032791872 | 0,182398967 | -0,000688279 |
| 452 | 2362,93982 | 24,06877016 | -0,057871268 | 0,184115116 | 0,003073821 | 0,03340997 | 0,184115118 | -0,000682589 |
| 453 | -2329,86768 | 61,7284654 | -0,058483245 | -0,182394342 | 0,003107177 | -0,149757219 | -0,182394344 | 0,006902454 |
| 454 | -2362,646857 | 24,18419805 | -0,057871827 | -0,184110527 | 0,003074089 | -0,149152489 | -0,184110529 | 0,006830589 |
| 455 | -119,8851456 | 47,60250402 | 0,177643904 | -0,040739154 | 0,001788048 | 0,087737758 | -0,040739154 | 0,000699004 |
| 456 | -116,2568684 | -9,497954062 | 0,181244021 | -0,039742933 | 0,001740639 | 0,091291903 | -0,039742933 | 0,000679689 |
| 457 | -119,8852467 | 47,44639275 | -0,177640887 | -0,040739075 | 0,001788352 | -0,087732757 | -0,040739076 | 0,000698889 |
| 458 | -116,256931 | -9,652239493 | -0,181241038 | -0,039742855 | 0,00174094 | -0,091286958 | -0,039742856 | 0,000679574 |
| 459 | 2458,600853 | -12,80735613 | 0,033202184 | 0,170946177 | -0,001656654 | 0,120158109 | 0,170946178 | -0,005341756 |
| 460 | 2489,215628 | -51,44830893 | 0,03317617 | 0,17240691 | -0,001655045 | 0,120073937 | 0,17240691 | -0,005304448 |
| 461 | -2458,717474 | -12,70049787 | 0,033201627 | -0,170947807 | -0,001656402 | -0,053754573 | -0,170947807 | 0,00202869 |
| 462 | -2489,331526 | -51,34311426 | 0,033175617 | -0,172408531 | -0,001654794 | -0,053722422 | -0,172408531 | 0,0019946 |
| 463 | 42,20277879 | 9,560264735 | 0,164609535 | 0,01688456 | -0,000772837 | 0,080293701 | 0,016884561 | -0,00029953 |
| 464 | 42,18683557 | -29,86926008 | 0,166032393 | 0,01673932 | -0,000767871 | 0,081780096 | 0,016739321 | -0,000296706 |
| 465 | 42,2029375 | 9,415428624 | -0,16461034 | 0,016884667 | -0,000772571 | -0,080295063 | 0,016884666 | -0,000299637 |
| 466 | 42,18698738 | -30,01328855 | -0,166033195 | 0,016739425 | -0,000767607 | -0,081781453 | 0,016739425 | -0,000296812 |
| 467 | 2624,184264 | 34,71654366 | -0,025884973 | 0,164314195 | 0,001121977 | 0,058059964 | 0,164314195 | -0,002444788 |
| 468 | 2656,290775 | -5,446969751 | -0,026051319 | 0,16570062 | 0,001126737 | 0,057821632 | 0,16570062 | -0,002407205 |
| 469 | -2624,147308 | 34,82508957 | -0,02588549 | -0,164313761 | 0,001122222 | -0,109830318 | -0,164313762 | 0,004688977 |
| 470 | -2656,253961 | -5,340013441 | -0,026051834 | -0,165700187 | 0,00112698 | -0,109924677 | -0,165700188 | 0,004660913 |
| 471 | 21,46231958 | 11,40811251 | 0,161892354 | 0,000927597 | 1,2613E-05 | 0,080251872 | 0,000927597 | -3,90999E-05 |
| 472 | 22,75572618 | -29,81736594 | 0,163382727 | 0,00109509 | 4,73804E-06 | 0,081735157 | 0,001095091 | -4,25552E-05 |
| 473 | 21,462182 | 11,26746206 | -0,161892229 | 0,000927702 | 1,2867E-05 | -0,080251648 | 0,000927701 | -3,92086E-05 |
| 474 | 22,75559088 | -29,95748047 | -0,163382603 | 0,001095195 | 4,9912E-06 | -0,081734933 | 0,001095195 | -4,26637E-05 |
| 475 | 2788,966565 | -11,86196422 | 0,036446807 | 0,154120734 | -0,00142942 | 0,11785769 | 0,154120735 | -0,004975362 |
| 476 | 2826,464135 | -54,07311007 | 0,036746751 | 0,155635956 | -0,001441905 | 0,118168627 | 0,155635957 | -0,004961345 |
| 477 | -2788,97504 | -11,75136446 | 0,036446293 | -0,1541208 | -0,001429177 | -0,044964627 | -0,1541208 | 0,002116772 |
| 478 | -2826,472597 | -53,96392109 | 0,036746239 | -0,155636022 | -0,001441663 | -0,044675674 | -0,155636022 | 0,002077784 |
| 479 | 31807,97245 | -4509,941333 | 6,457120942 | 6,389555406 | -0,249178563 | 6,402373125 | 6,389555382 | -0,133643344 |
| 480 | -31807,96639 | -4516,134409 | 6,457127201 | -6,389555356 | -0,24918164 | 6,511875033 | -6,389555332 | -0,364716863 |
| 481 | 31807,96652 | -4507,906444 | -6,457120964 | 6,389554149 | -0,24918164 | -6,402373133 | 6,389554173 | -0,133642068 |
| 482 | -31807,97258 | -4518,169298 | -6,457127179 | -6,389554199 | -0,249178563 | -6,511874996 | -6,389554223 | -0,364718132 |

APOYO 2

| Newton | VIENTO | PESO | CT1 | | | CT2 | | |
|---|---|---|---|---|---|---|---|---|
| Barra | | | L | T | V | L | T | V |
| 483 | -36,06600036 | 20,45210923 | -0,137953529 | -0,004937712 | 0,000168607 | -0,060894368 | -0,004937712 | 0,000117473 |
| 484 | -34,69202037 | -22,57406089 | -0,139191911 | -0,004793771 | 0,00016219 | -0,062126085 | -0,004793772 | 0,000114517 |
| 485 | 36,06614375 | 20,59015357 | -0,137953074 | 0,004937692 | 0,000168357 | -0,215012217 | 0,004937693 | 0,000219487 |
| 486 | 34,69216309 | -22,43662866 | -0,139191456 | 0,004793752 | 0,000161941 | -0,216257265 | 0,004793752 | 0,00020961 |
| 487 | -36,0661334 | 20,58652473 | 0,137953563 | -0,004937787 | 0,000168357 | 0,06089442 | -0,004937786 | 0,000117574 |
| 488 | -34,69215276 | -22,44001108 | 0,139191944 | -0,004793846 | 0,000161941 | 0,062126136 | -0,004793846 | 0,000114618 |
| 489 | 36,06599001 | 20,45573837 | 0,13795304 | 0,004937807 | 0,000168607 | 0,2150122 | 0,004937806 | 0,000219395 |
| 490 | 34,69201004 | -22,57067817 | 0,139191423 | 0,004793866 | 0,00016219 | 0,216257248 | 0,004793865 | 0,000209518 |
| 491 | -35612,21876 | -4744,087154 | -6,505489388 | -6,588868071 | -0,251059713 | -6,45483698 | -6,588868095 | -0,362007609 |
| 492 | -35543,1798 | -4935,059804 | -6,699318623 | -6,57876089 | -0,250710273 | -6,750034877 | -6,578760913 | -0,361539297 |
| 493 | -39376,98325 | -5119,203861 | -6,662990265 | -6,764108764 | -0,249309657 | -6,618500193 | -6,764108786 | -0,356082126 |
| 494 | -39525,14932 | -5349,277844 | -6,849920244 | -6,785639376 | -0,25006767 | -6,898711847 | -6,785639397 | -0,357128492 |
| 495 | -43517,56437 | -5564,842401 | -6,862845245 | -6,963469359 | -0,250591153 | -6,821806503 | -6,96346938 | -0,353875919 |
| 496 | -43244,37747 | -5737,151078 | -7,037990022 | -6,921588745 | -0,249110596 | -7,087140582 | -6,921588765 | -0,3518094 |
| 497 | 35612,21874 | -4734,334539 | -6,505483836 | 6,588868049 | -0,251062478 | -6,556136261 | 6,588868073 | -0,140114585 |
| 498 | 35543,1798 | -4925,490429 | -6,699313664 | 6,578760867 | -0,250712722 | -6,648597395 | 6,57876089 | -0,139883701 |
| 499 | 39376,98429 | -5110,086709 | -6,662985896 | 6,764108777 | -0,249311824 | -6,707475948 | 6,764108799 | -0,142539356 |
| 500 | 39525,15029 | -5340,299007 | -6,849916476 | 6,785639399 | -0,250069555 | -6,801124886 | 6,785639421 | -0,143008731 |
| 501 | 43517,56377 | -5556,285254 | -6,862842028 | 6,963469362 | -0,250592771 | -6,903880781 | 6,963469383 | -0,147308003 |
| 502 | 43244,37693 | -5728,788796 | -7,037987365 | 6,921588739 | -0,249111937 | -6,988836798 | 6,921588759 | -0,146413133 |
| 503 | -35612,21862 | -4742,235526 | 6,505489412 | -6,588869129 | -0,251062478 | 6,454836987 | -6,588869105 | -0,362006491 |
| 504 | -35543,1797 | -4933,382967 | 6,699318604 | -6,578761824 | -0,250712722 | 6,750034873 | -6,578761801 | -0,361538315 |
| 505 | -39376,9842 | -5117,690376 | 6,662990245 | -6,764109619 | -0,249311824 | 6,618500193 | -6,764109597 | -0,356081283 |
| 506 | -39525,15021 | -5347,923223 | 6,849920246 | -6,785640129 | -0,250069555 | 6,898711836 | -6,785640108 | -0,357127781 |
| 507 | -43517,5637 | -5563,640573 | 6,862845245 | -6,963469985 | -0,250592771 | 6,821806493 | -6,963469964 | -0,353875335 |
| 508 | -43244,37687 | -5736,1024 | 7,037990024 | -6,921589253 | -0,249111937 | 7,087140591 | -6,921589233 | -0,351808932 |
| 509 | 35612,21864 | -4736,186166 | 6,505483812 | 6,588869151 | -0,251059713 | 6,55613622 | 6,588869127 | -0,140115697 |
| 510 | 35543,1797 | -4927,167266 | 6,699313682 | 6,578761847 | -0,250710273 | 6,648597428 | 6,578761824 | -0,139884677 |
| 511 | 39376,98316 | -5111,600195 | 6,662985916 | 6,764109606 | -0,249309657 | 6,707475987 | 6,764109584 | -0,142540197 |
| 512 | 39525,14924 | -5341,653628 | 6,849916473 | 6,785640106 | -0,25006767 | 6,80112487 | 6,785640084 | -0,143009446 |
| 513 | 43517,5643 | -5557,487081 | 6,862842028 | 6,963469981 | -0,250591153 | 6,90388077 | 6,96346996 | -0,147308591 |
| 514 | 43244,37741 | -5729,837474 | 7,037987363 | 6,921589259 | -0,249110596 | 6,988836803 | 6,921589239 | -0,146413601 |
| 515 | -2781,98336 | 40,61774688 | 0,034693065 | -0,137256321 | 0,001334668 | 0,108331345 | -0,137256321 | 0,004576388 |
| 516 | -2813,702549 | -3,714438132 | 0,034435145 | -0,138287476 | 0,00132401 | 0,108105635 | -0,138287475 | 0,004550819 |
| 517 | 2781,983451 | 40,25865739 | 0,034692599 | 0,137256351 | 0,001334885 | -0,038945673 | 0,13725635 | -0,001906832 |
| 518 | 2813,70262 | -4,072263049 | 0,03443468 | 0,138287505 | 0,001324227 | -0,039235802 | 0,138287504 | -0,001902578 |
| 519 | -71,13188437 | 5,930466488 | -0,148610174 | -0,010283196 | -0,000359578 | -0,221813284 | -0,010283195 | -0,000489069 |
| 520 | -73,06267265 | -38,97373691 | -0,149676575 | -0,010497487 | -0,000368215 | -0,222914404 | -0,010497486 | -0,000501807 |
| 521 | -71,13177587 | 5,805419453 | 0,148610203 | -0,010283128 | -0,00035936 | 0,221813283 | -0,010283128 | -0,000489179 |
| 522 | -73,06256415 | -39,09860497 | 0,149676604 | -0,010497418 | -0,000367997 | 0,222914403 | -0,010497419 | -0,000501917 |
| 523 | -3028,223188 | 2,040051303 | -0,020586932 | -0,144187962 | -0,000797458 | 0,05072381 | -0,144187962 | 0,002149959 |
| 524 | -3059,290167 | -43,69628026 | -0,020581927 | -0,145072989 | -0,000797822 | 0,05069869 | -0,145072988 | 0,002133433 |
| 525 | 3028,221653 | 1,709480772 | -0,020587364 | 0,144187937 | -0,000797244 | -0,091898105 | 0,144187937 | -0,003744662 |
| 526 | 3059,288643 | -44,02544865 | -0,020582358 | 0,145072964 | -0,000797609 | -0,091862973 | 0,145072964 | -0,003728864 |

APOYO 2

| Newton | VIENTO | PESO | CT1 | | | CT2 | | |
|---|---|---|---|---|---|---|---|---|
| Barra | | | L | T | V | L | T | V |
| 527 | 153,6505549 | 37,36316037 | -0,134488589 | 0,022920532 | 0,000808684 | -0,203168273 | 0,022920532 | 0,001123889 |
| 528 | 153,6575079 | -9,38785546 | -0,135398514 | 0,023034861 | 0,000812134 | -0,204093916 | 0,023034861 | 0,001128358 |
| 529 | 153,6505161 | 37,24632325 | 0,134488585 | 0,022920619 | 0,000808896 | 0,203168288 | 0,022920619 | 0,0011238 |
| 530 | 153,6574691 | -9,504554449 | 0,13539851 | 0,023034948 | 0,000812345 | 0,20409393 | 0,023034947 | 0,001128268 |
| 531 | -3099,240387 | 15,10162807 | -0,001477939 | -0,128596796 | -2,1621E-05 | 0,065647652 | -0,128596795 | 0,002871018 |
| 532 | -3127,701701 | -32,88899038 | -0,001634457 | -0,129339419 | -2,77555E-05 | 0,065439148 | -0,129339419 | 0,002850184 |
| 533 | 3099,241256 | 14,78055666 | -0,001478358 | 0,128596801 | -2,14238E-05 | -0,068603952 | 0,128596801 | -0,002914064 |
| 534 | 3127,702566 | -33,20879037 | -0,001634876 | 0,129339424 | -2,75587E-05 | -0,068708483 | 0,129339424 | -0,0029055 |
| 535 | -264,3380645 | -17,76714672 | -0,130356991 | -0,04059717 | -0,001437641 | -0,198514198 | -0,040597169 | -0,002011507 |
| 536 | -266,4226406 | -66,13446067 | -0,131174007 | -0,04078256 | -0,001444563 | -0,199280518 | -0,04078256 | -0,002021449 |
| 537 | -264,3381197 | -17,88286353 | 0,130356984 | -0,040597078 | -0,00143743 | 0,198514183 | -0,040597079 | -0,002011594 |
| 538 | -266,4226958 | -66,24996471 | 0,131174 | -0,040782469 | -0,001444353 | 0,199280503 | -0,04078247 | -0,002021535 |
| 539 | 2781,98337 | 40,38690028 | -0,034692604 | 0,137256232 | 0,001334668 | 0,038945676 | 0,137256233 | -0,001906725 |
| 540 | 2813,702559 | -3,944222858 | -0,034434685 | 0,138287386 | 0,00132401 | 0,039235806 | 0,138287387 | -0,001902472 |
| 541 | -2781,98346 | 40,48950372 | -0,03469306 | -0,137256262 | 0,001334885 | -0,108331332 | -0,137256262 | 0,004576274 |
| 542 | -2813,702629 | -3,842478602 | -0,034435141 | -0,138287416 | 0,001324227 | -0,108105623 | -0,138287416 | 0,004550705 |
| 543 | 71,13189399 | 5,939699731 | 0,148610629 | 0,010283108 | -0,000359578 | 0,075407519 | 0,010283108 | -0,000229762 |
| 544 | 73,06268226 | -38,96421163 | 0,14967703 | 0,010497399 | -0,000368215 | 0,076439201 | 0,010497399 | -0,000234299 |
| 545 | 71,13176625 | 5,814652991 | -0,148610658 | 0,010283216 | -0,00035936 | -0,075407579 | 0,010283215 | -0,000229863 |
| 546 | 73,06255454 | -39,0890794 | -0,149677058 | 0,010497506 | -0,000367997 | -0,07643926 | 0,010497506 | -0,0002344 |
| 547 | 3028,223198 | 1,830162882 | 0,020587371 | 0,144187877 | -0,000797458 | 0,091898114 | 0,144187877 | -0,003744563 |
| 548 | 3059,290176 | -43,90501772 | 0,020582365 | 0,145072904 | -0,000797822 | 0,091862982 | 0,145072904 | -0,003728765 |
| 549 | -3028,221662 | 1,919369215 | 0,020586925 | -0,144187852 | -0,000797244 | -0,050723816 | -0,144187853 | 0,002149861 |
| 550 | -3059,288652 | -43,81671117 | 0,02058192 | -0,145072879 | -0,000797609 | -0,050698695 | -0,14507288 | 0,002133335 |
| 551 | -153,6505459 | 37,34072384 | 0,134489015 | -0,022920614 | 0,000808684 | 0,065809331 | -0,022920614 | 0,00049378 |
| 552 | -153,6574989 | -9,410364538 | 0,13539894 | -0,023034943 | 0,000812134 | 0,066703539 | -0,023034943 | 0,000496211 |
| 553 | -153,6505251 | 37,22388664 | -0,134489011 | -0,022920537 | 0,000808896 | -0,065809308 | -0,022920537 | 0,000493689 |
| 554 | -153,6574781 | -9,527063601 | -0,135398936 | -0,023034866 | 0,000812345 | -0,066703516 | -0,023034866 | 0,00049612 |
| 555 | 3099,240395 | 14,89564003 | 0,001478354 | 0,128596716 | -2,1621E-05 | 0,068603945 | 0,128596716 | -0,002913965 |
| 556 | 3127,70171 | -33,09393163 | 0,001634872 | 0,129339339 | -2,77555E-05 | 0,068708476 | 0,129339339 | -0,002905401 |
| 557 | -3099,241265 | 14,98654479 | 0,001477943 | -0,128596721 | -2,14238E-05 | -0,065647652 | -0,128596721 | 0,002870922 |
| 558 | -3127,702575 | -33,00384903 | 0,001634461 | -0,129339344 | -2,75587E-05 | -0,065439147 | -0,129339344 | 0,002850088 |
| 559 | 264,3380734 | -17,72626828 | 0,130357412 | 0,040597088 | -0,001437641 | 0,062200205 | 0,040597089 | -0,000863474 |
| 560 | 266,4226495 | -66,09336727 | 0,131174428 | 0,040782479 | -0,001444563 | 0,063067917 | 0,040782479 | -0,000867379 |
| 561 | 264,3381108 | -17,84198523 | -0,130357406 | 0,04059716 | -0,00143743 | -0,062200207 | 0,04059716 | -0,000863565 |
| 562 | 266,4226869 | -66,20887146 | -0,131174421 | 0,040782551 | -0,001444353 | -0,063067918 | 0,04078255 | -0,000867469 |
| 563 | 47248,39467 | -5965,105759 | 7,046493241 | 7,081385429 | -0,249381388 | 7,080019433 | 7,081385409 | -0,150227347 |
| 564 | -47248,39488 | -5971,2599 | 7,046495393 | -7,081385423 | -0,249382485 | 7,012969205 | -7,081385404 | -0,348536524 |
| 565 | 47248,39492 | -5964,19862 | -7,046493246 | 7,081385008 | -0,249382485 | -7,080019433 | 7,081385028 | -0,150227001 |
| 566 | -47248,39472 | -5972,167039 | -7,046495388 | -7,081385013 | -0,249381388 | -7,012969196 | -7,081385033 | -0,348536874 |
| 567 | -3225,075499 | 30,00688865 | -0,012303778 | -0,123944794 | 0,000418015 | -0,076276028 | -0,123944795 | 0,003156578 |
| 568 | -3254,305751 | -19,91768056 | -0,012298822 | -0,124635753 | 0,000417393 | -0,076255225 | -0,124635754 | 0,003145132 |
| 569 | 3225,075807 | 29,92135976 | -0,012303381 | 0,12394479 | 0,000417825 | 0,051668872 | 0,12394479 | -0,00232074 |
| 570 | 3254,306057 | -20,00255425 | -0,012298425 | 0,124635749 | 0,000417203 | 0,05165798 | 0,124635749 | -0,002310538 |

APOYO 2

| Newton | VIENTO | PESO | CT1 | | | CT2 | | |
|---|---|---|---|---|---|---|---|---|
| Barra | | | L | T | V | L | T | V |
| 571 | -3225,075798 | 30,11639596 | 0,012303778 | -0,123944867 | 0,000417825 | 0,07627603 | -0,123944866 | 0,003156671 |
| 572 | -3254,306049 | -19,80828887 | 0,012298822 | -0,124635826 | 0,000417203 | 0,076255227 | -0,124635825 | 0,003145225 |
| 573 | 3225,075491 | 29,81185257 | 0,012303381 | 0,123944871 | 0,000418015 | -0,051668869 | 0,123944871 | -0,002320829 |
| 574 | 3254,305742 | -20,11194582 | 0,012298425 | 0,12463583 | 0,000417393 | -0,051657978 | 0,12463583 | -0,002310627 |
| 575 | -47565,07338 | -6234,631697 | -7,208971838 | -7,130065091 | -0,251107731 | -7,258082374 | -7,13006511 | -0,350955131 |
| 576 | -52012,34205 | -6450,765553 | -7,191938942 | -7,29352712 | -0,250526717 | -7,157558914 | -7,293527138 | -0,346826571 |
| 577 | -51790,82716 | -6691,123918 | -7,343400818 | -7,257725295 | -0,249255567 | -7,386122485 | -7,257725313 | -0,345042902 |
| 578 | -56709,36364 | -6969,898844 | -7,358463381 | -7,422783615 | -0,249774432 | -7,316862741 | -7,422783633 | -0,341980305 |
| 579 | 47565,07358 | -6226,755007 | -7,208970204 | 7,130065088 | -0,251108576 | -7,15985967 | 7,130065107 | -0,151261177 |
| 580 | 52012,342 | -6443,283902 | -7,191937824 | 7,293527123 | -0,250527313 | -7,226317852 | 7,293527142 | -0,154227459 |
| 581 | 51790,8271 | -6683,8103 | -7,343400176 | 7,257725301 | -0,24925593 | -7,300678509 | 7,257725319 | -0,153468593 |
| 582 | 56709,36365 | -6962,983838 | -7,358463261 | 7,422783613 | -0,249774545 | -7,400063903 | 7,42278363 | -0,157568672 |
| 583 | -47565,07354 | -6233,865575 | 7,208971837 | -7,130065404 | -0,251108576 | 7,258082371 | -7,130065385 | -0,350954895 |
| 584 | -52012,34198 | -6450,141845 | 7,191938941 | -7,293527339 | -0,250527313 | 7,157558913 | -7,293527321 | -0,346826455 |
| 585 | -51790,82708 | -6690,631757 | 7,343400815 | -7,257725424 | -0,24925593 | 7,386122482 | -7,257725406 | -0,345042894 |
| 586 | -56709,36364 | -6969,550255 | 7,358463379 | -7,422783635 | -0,249774545 | 7,316862737 | -7,422783618 | -0,341980414 |
| 587 | 47565,07335 | -6227,521129 | 7,208970205 | 7,130065407 | -0,251107731 | 7,159859669 | 7,130065388 | -0,151261411 |
| 588 | 52012,34202 | -6443,907609 | 7,191937825 | 7,293527336 | -0,250526717 | 7,226317853 | 7,293527317 | -0,154227576 |
| 589 | 51790,82714 | -6684,302461 | 7,343400179 | 7,257725418 | -0,249255567 | 7,300678512 | 7,2577254 | -0,153468605 |
| 590 | 56709,36364 | -6963,332427 | 7,358463263 | 7,422783638 | -0,249774432 | 7,400063902 | 7,422783621 | -0,157568562 |
| 591 | 226,450308 | 48,36717115 | -0,123521796 | 0,035507357 | 0,001260687 | -0,18473902 | 0,035507358 | 0,001768838 |
| 592 | 223,6263194 | -3,588292322 | -0,124133292 | 0,035212853 | 0,001249849 | -0,185363898 | 0,035212854 | 0,001753439 |
| 593 | 226,450375 | 48,26182469 | 0,123521797 | 0,035507416 | 0,001260869 | 0,184739022 | 0,035507415 | 0,001768744 |
| 594 | 223,6263864 | -3,693606904 | 0,124133293 | 0,035212912 | 0,001250032 | 0,185363901 | 0,035212912 | 0,001753346 |
| 595 | -3601,946733 | 5,307558054 | -0,014071357 | -0,127519988 | -0,000482831 | 0,050808375 | -0,127519988 | 0,00226512 |
| 596 | -3638,461269 | -45,45484067 | -0,014050467 | -0,128237212 | -0,000482445 | 0,050830728 | -0,128237211 | 0,002256168 |
| 597 | 3601,946804 | 5,001464897 | -0,014071757 | 0,127519983 | -0,000482638 | -0,078951491 | 0,127519982 | -0,00323059 |
| 598 | 3638,461339 | -45,76021734 | -0,014050867 | 0,128237206 | -0,000482252 | -0,078932064 | 0,128237206 | -0,003220866 |
| 599 | -135,1526906 | 1,103218841 | -0,117901952 | -0,022169587 | -0,000787544 | -0,179830394 | -0,022169587 | -0,001104984 |
| 600 | -134,7965693 | -50,83706746 | -0,118456176 | -0,021992229 | -0,000781701 | -0,180334331 | -0,021992228 | -0,001097093 |
| 601 | -135,1527516 | 0,998372189 | 0,117901957 | -0,022169502 | -0,000787354 | 0,1798304 | -0,022169503 | -0,001105062 |
| 602 | -134,7966302 | -50,94179112 | 0,118456181 | -0,021992144 | -0,00078151 | 0,180334337 | -0,021992144 | -0,001097171 |
| 603 | -3754,41801 | 25,1604585 | 0,008434364 | -0,119533492 | 0,000291676 | 0,070171718 | -0,119533492 | 0,002932489 |
| 604 | -3788,331674 | -27,84922772 | 0,008374327 | -0,120116909 | 0,000289325 | 0,070076302 | -0,120116909 | 0,002920541 |
| 605 | 3754,417986 | 24,86714639 | 0,00843398 | 0,1195335 | 0,000291859 | -0,053303373 | 0,119533499 | -0,002348953 |
| 606 | 3788,33165 | -28,14177247 | 0,008373944 | 0,120116917 | 0,000289508 | -0,05332803 | 0,120116916 | -0,002341706 |
| 607 | -226,4502999 | 48,33099304 | 0,123522179 | -0,035507431 | 0,001260687 | 0,062304954 | -0,035507431 | 0,000752809 |
| 608 | -223,6263113 | -3,624145653 | 0,124133675 | -0,035212928 | 0,001249849 | 0,062903068 | -0,035212927 | 0,000746532 |
| 609 | -226,4503831 | 48,22564681 | -0,123522179 | -0,035507342 | 0,001260869 | -0,062304954 | -0,035507342 | 0,000752722 |
| 610 | -223,6263945 | -3,729460009 | -0,124133675 | -0,035212838 | 0,001250032 | -0,062903068 | -0,035212839 | 0,000746445 |
| 611 | 3601,946741 | 5,111873578 | 0,014071758 | 0,127519911 | -0,000482831 | 0,07895149 | 0,127519911 | -0,003230498 |
| 612 | 3638,461277 | -45,64986012 | 0,014050868 | 0,128237134 | -0,000482445 | 0,078932063 | 0,128237135 | -0,003220773 |
| 613 | -3601,946812 | 5,19714946 | 0,014071357 | -0,127519905 | -0,000482638 | -0,050808377 | -0,127519906 | 0,002265029 |
| 614 | -3638,461348 | -45,5651978 | 0,014050467 | -0,128237129 | -0,000482252 | -0,05083073 | -0,128237129 | 0,002256077 |

APOYO 2

| Newton | VIENTO | PESO | CT1 | | | CT2 | | |
|---|---|---|---|---|---|---|---|---|
| Barra | | | L | T | V | L | T | V |
| 615 | 135,1526987 | 1,125834876 | 0,117902334 | 0,022169513 | -0,000787544 | 0,055973892 | 0,022169514 | -0,000469834 |
| 616 | 134,7965774 | -50,81459724 | 0,118456558 | 0,021992155 | -0,000781701 | 0,056578403 | 0,021992155 | -0,000466038 |
| 617 | 135,1527435 | 1,020988065 | -0,117902339 | 0,022169576 | -0,000787354 | -0,055973895 | 0,022169576 | -0,000469916 |
| 618 | 134,7966221 | -50,91932107 | -0,118456562 | 0,021992218 | -0,00078151 | -0,056578406 | 0,021992217 | -0,00046612 |
| 619 | 3754,418018 | 24,97240334 | -0,008433982 | 0,119533418 | 0,000291676 | 0,053303372 | 0,119533419 | -0,002348866 |
| 620 | 3788,331682 | -28,0365994 | -0,008373946 | 0,120116835 | 0,000289325 | 0,053328029 | 0,120116836 | -0,002341619 |
| 621 | -3754,417994 | 25,05520145 | -0,008434361 | -0,119533426 | 0,000291859 | -0,070171714 | -0,119533426 | 0,002932399 |
| 622 | -3788,331658 | -27,9544009 | -0,008374325 | -0,120116843 | 0,000289508 | -0,070076298 | -0,120116844 | 0,002920451 |
| 623 | 56867,47461 | -7259,353049 | 7,518589611 | 7,447080685 | -0,250623205 | 7,47909737 | 7,447080669 | -0,158083058 |
| 624 | -56867,47463 | -7265,732775 | 7,518589232 | -7,447080678 | -0,25062307 | 7,558081473 | -7,447080662 | -0,343163216 |
| 625 | 56867,47463 | -7259,142565 | -7,518589617 | 7,447080753 | -0,25062307 | -7,479097375 | 7,44708077 | -0,158083278 |
| 626 | -56867,4746 | -7265,943258 | -7,518589226 | -7,44708076 | -0,250623205 | -7,558081467 | -7,447080777 | -0,343162998 |
| 627 | -100,6486551 | 31,9344589 | -0,124339896 | -0,01470874 | 0,000500183 | -0,063293767 | -0,01470874 | 0,000311104 |
| 628 | -99,5030371 | -21,81861371 | -0,124948009 | -0,014676631 | 0,000498733 | -0,063924817 | -0,014676631 | 0,000310413 |
| 629 | 100,6486336 | 32,05256707 | -0,124339522 | 0,014708744 | 0,000499998 | -0,185385652 | 0,014708745 | 0,000689078 |
| 630 | 99,50301562 | -21,70061199 | -0,124947635 | 0,014676635 | 0,000498548 | -0,185970829 | 0,014676636 | 0,000686869 |
| 631 | -100,6486255 | 32,03911146 | 0,124339903 | -0,014708818 | 0,000499998 | 0,063293772 | -0,014708818 | 0,000311189 |
| 632 | -99,50300756 | -21,71401358 | 0,124948016 | -0,014676709 | 0,000498548 | 0,063924821 | -0,014676708 | 0,000310498 |
| 633 | 100,648647 | 31,94791445 | 0,124339515 | 0,014708814 | 0,000500183 | 0,185385643 | 0,014708813 | 0,000688991 |
| 634 | 99,50302904 | -21,80521219 | 0,124947628 | 0,014676705 | 0,000498733 | 0,18597082 | 0,014676704 | 0,000686782 |
| 635 | -61911,69551 | -7547,566833 | -7,512479728 | -7,604219319 | -0,250410718 | -7,473436729 | -7,604219335 | -0,339653296 |
| 636 | -61750,75043 | -7804,184312 | -7,670692278 | -7,582519622 | -0,2496948 | -7,710229383 | -7,582519638 | -0,338678769 |
| 637 | -66937,59652 | -8088,078085 | -7,667692487 | -7,729408193 | -0,249597034 | -7,632950497 | -7,729408208 | -0,3354433 |
| 638 | -67125,73332 | -8399,783671 | -7,803427475 | -7,751424905 | -0,250300599 | -7,837916594 | -7,75142492 | -0,336387471 |
| 639 | -72326,26353 | -8669,03359 | -7,807719055 | -7,884327593 | -0,250449047 | -7,773379433 | -7,884327607 | -0,333588904 |
| 640 | 61911,69551 | -7541,134748 | -7,512480605 | 7,60421932 | -0,250410348 | -7,551523602 | 7,604219336 | -0,16116777 |
| 641 | 61750,75042 | -7797,904958 | -7,670693637 | 7,582519626 | -0,249694191 | -7,631156532 | 7,582519642 | -0,160710221 |
| 642 | 66937,59651 | -8082,148625 | -7,667694305 | 7,729408194 | -0,249596203 | -7,702436296 | 7,72940821 | -0,163749937 |
| 643 | 67125,73331 | -8393,955189 | -7,803429726 | 7,751424906 | -0,250299559 | -7,768940606 | 7,751424921 | -0,164212687 |
| 644 | 72326,26354 | -8663,532208 | -7,807721733 | 7,884327591 | -0,250447802 | -7,842061356 | 7,884327605 | -0,167307945 |
| 645 | -61911,69553 | -7547,49016 | 7,512479732 | -7,604219151 | -0,250410348 | 7,473436735 | -7,604219135 | -0,339653625 |
| 646 | -61750,75045 | -7804,241965 | 7,670692275 | -7,582519362 | -0,249694191 | 7,71022938 | -7,582519347 | -0,338679209 |
| 647 | -66937,59655 | -8088,262194 | 7,667692484 | -7,729407842 | -0,249596203 | 7,632950493 | -7,729407826 | -0,335443844 |
| 648 | -67125,73336 | -8400,085903 | 7,803427474 | -7,75142447 | -0,250299559 | 7,837916594 | -7,751424455 | -0,33638811 |
| 649 | -72326,2636 | -8669,453062 | 7,807719056 | -7,884327073 | -0,250447802 | 7,773379433 | -7,884327058 | -0,333589639 |
| 650 | 61911,69552 | -7541,211422 | 7,512480601 | 7,60421915 | -0,250410718 | 7,5515236 | 7,604219134 | -0,161167441 |
| 651 | 61750,75046 | -7797,847305 | 7,67069364 | 7,582519358 | -0,2496948 | 7,631156535 | 7,582519342 | -0,160709783 |
| 652 | 66937,59656 | -8081,964517 | 7,667694308 | 7,72940784 | -0,249597034 | 7,702436298 | 7,729407825 | -0,163749394 |
| 653 | 67125,73337 | -8393,652958 | 7,803429726 | 7,751424469 | -0,250300599 | 7,768940607 | 7,751424454 | -0,164212048 |
| 654 | 72326,26359 | -8663,112737 | 7,807721732 | 7,884327074 | -0,250449047 | 7,842061355 | 7,88432706 | -0,167307209 |
| 655 | -3946,872512 | 18,96369423 | -0,000665006 | -0,120805092 | -2,53798E-05 | 0,057913663 | -0,120805092 | 0,002390417 |
| 656 | -3984,150598 | -36,30257717 | -0,000726139 | -0,121454704 | -2,76448E-05 | 0,057879691 | -0,121454703 | 0,002382307 |
| 657 | 3946,872518 | 18,69188747 | -0,000665365 | 0,120805088 | -2,5201E-05 | -0,059244034 | 0,120805088 | -0,002440999 |
| 658 | 3984,150605 | -36,57401323 | -0,000726498 | 0,121454699 | -2,7466E-05 | -0,059332329 | 0,121454699 | -0,002437419 |

APOYO 2

| Newton | VIENTO | PESO | CT1 | | | CT2 | | |
|---|---|---|---|---|---|---|---|---|
| Barra | | | L | T | V | L | T | V |
| 659 | -148,3679584 | -1,315284854 | -0,113991196 | -0,018194479 | -0,000585055 | -0,171712696 | -0,018194479 | -0,000787244 |
| 660 | -150,607064 | -57,53234352 | -0,114618157 | -0,018336207 | -0,000589908 | -0,172357869 | -0,018336207 | -0,000793935 |
| 661 | -148,3679638 | -1,413662955 | 0,113991199 | -0,018194411 | -0,000584881 | 0,171712701 | -0,018194411 | -0,000787323 |
| 662 | -150,6070695 | -57,63076205 | 0,114618161 | -0,018336138 | -0,000589733 | 0,172357874 | -0,018336139 | -0,000794014 |
| 663 | -4048,540196 | 14,78824115 | -0,005514532 | -0,105658523 | -0,000184186 | 0,05087473 | -0,105658522 | 0,002267173 |
| 664 | -4081,657781 | -42,49939011 | -0,005519099 | -0,10613236 | -0,000184569 | 0,050823918 | -0,10613236 | 0,002258546 |
| 665 | 4048,540205 | 14,51771802 | -0,005514884 | 0,105658522 | -0,000184021 | -0,061904146 | 0,105658522 | -0,002635379 |
| 666 | 4081,65779 | -42,76926479 | -0,005519451 | 0,10613236 | -0,000184405 | -0,061862469 | 0,106132359 | -0,002627521 |
| 667 | 147,3240797 | 40,78897213 | -0,101711508 | 0,01690925 | 0,00053577 | -0,154407971 | 0,01690925 | 0,000716614 |
| 668 | 146,0346801 | -19,13719351 | -0,102174325 | 0,01688603 | 0,00053483 | -0,154867714 | 0,01688603 | 0,000715207 |
| 669 | 147,324065 | 40,69893528 | 0,101711508 | 0,016909315 | 0,00053593 | 0,154407971 | 0,016909314 | 0,000716542 |
| 670 | 146,0346654 | -19,22724629 | 0,102174325 | 0,016886095 | 0,00053499 | 0,154867714 | 0,016886094 | 0,000715135 |
| 671 | -4184,909378 | 21,41758592 | 0,001165361 | -0,105015617 | 4,69116E-05 | 0,054022229 | -0,105015617 | 0,002276262 |
| 672 | -4220,723048 | -39,02231571 | 0,001001782 | -0,1055509 | 4,14834E-05 | 0,053884294 | -0,105550899 | 0,002266817 |
| 673 | 4184,909356 | 21,16869996 | 0,001165037 | 0,105015622 | 4,70731E-05 | -0,05169183 | 0,105015621 | -0,002182277 |
| 674 | 4220,723026 | -39,27098912 | 0,001001457 | 0,105550904 | 4,16451E-05 | -0,051881055 | 0,105550903 | -0,002183688 |
| 675 | 3946,872519 | 18,79166309 | 0,00066537 | 0,120805021 | -2,53798E-05 | 0,059244039 | 0,120805022 | -0,002440918 |
| 676 | 3984,150606 | -36,47419205 | 0,000726504 | 0,121454633 | -2,76448E-05 | 0,059332334 | 0,121454633 | -0,002437338 |
| 677 | -3946,872525 | 18,86391867 | 0,000665 | -0,120805017 | -2,5201E-05 | -0,057913669 | -0,120805018 | 0,002390338 |
| 678 | -3984,150612 | -36,40239828 | 0,000726133 | -0,121454629 | -2,7466E-05 | -0,057879697 | -0,121454629 | 0,002382228 |
| 679 | 148,3679659 | -1,300877023 | 0,113991554 | 0,01819441 | -0,000585055 | 0,056270053 | 0,01819441 | -0,000382613 |
| 680 | 150,6070716 | -57,51780475 | 0,114618516 | 0,018336138 | -0,000589908 | 0,056878804 | 0,018336138 | -0,000385627 |
| 681 | 148,3679563 | -1,399255118 | -0,113991558 | 0,01819448 | -0,000584881 | -0,056270055 | 0,018194479 | -0,000382693 |
| 682 | 150,6070619 | -57,61622327 | -0,11461852 | 0,018336208 | -0,000589733 | -0,056878806 | 0,018336207 | -0,000385706 |
| 683 | 4048,540203 | 14,61367708 | 0,005514878 | 0,105658456 | -0,000184186 | 0,06190414 | 0,105658456 | -0,002635298 |
| 684 | 4081,657788 | -42,67336719 | 0,005519445 | 0,106132293 | -0,000184569 | 0,061862463 | 0,106132293 | -0,002627439 |
| 685 | -4048,540212 | 14,6922821 | 0,005514538 | -0,105658455 | -0,000184021 | -0,050874724 | -0,105658456 | 0,002267091 |
| 686 | -4081,657797 | -42,59528771 | 0,005519105 | -0,106132293 | -0,000184405 | -0,050823913 | -0,106132293 | 0,002258465 |
| 687 | -147,3240727 | 40,77610161 | 0,101711835 | -0,016909313 | 0,00053577 | 0,049015373 | -0,016909313 | 0,000355158 |
| 688 | -146,0346732 | -19,15003075 | 0,102174653 | -0,016886093 | 0,00053483 | 0,049481265 | -0,016886093 | 0,000354685 |
| 689 | -147,3240719 | 40,68606474 | -0,101711836 | -0,016909251 | 0,00053593 | -0,049015373 | -0,016909252 | 0,000355085 |
| 690 | -146,0346723 | -19,24008356 | -0,102174653 | -0,016886031 | 0,00053499 | -0,049481265 | -0,016886032 | 0,000354612 |
| 691 | 4184,909385 | 21,2588316 | -0,001165032 | 0,105015554 | 4,69116E-05 | 0,051691835 | 0,105015554 | -0,002182206 |
| 692 | 4220,723055 | -39,18078392 | -0,001001452 | 0,105550836 | 4,14834E-05 | 0,05188106 | 0,105550836 | -0,002183616 |
| 693 | -4184,909363 | 21,32745422 | -0,001165366 | -0,105015558 | 4,70731E-05 | -0,054022233 | -0,105015558 | 0,002276189 |
| 694 | -4220,723033 | -39,11252097 | -0,001001786 | -0,10555084 | 4,16451E-05 | -0,053884298 | -0,10555084 | 0,002266744 |
| 695 | 72174,06694 | -8921,923791 | 7,93325264 | 7,866441112 | -0,24988183 | 7,902815498 | 7,866441099 | -0,166931813 |
| 696 | -72174,06696 | -8928,361018 | 7,933249563 | -7,866441109 | -0,249880387 | 7,963686705 | -7,866441095 | -0,332830404 |
| 697 | 72174,06689 | -8922,453835 | -7,933252642 | 7,866441705 | -0,249880387 | -7,9028155 | 7,866441719 | -0,166932639 |
| 698 | -72174,06688 | -8927,830974 | -7,933249561 | -7,866441709 | -0,24988183 | -7,963686703 | -7,866441723 | -0,332829579 |
| 699 | 105,5457908 | 9,341583014 | -0,101975025 | 0,012250802 | -0,000389196 | -0,049310034 | 0,012250802 | -0,000256867 |
| 700 | 106,7490015 | -51,31026023 | -0,102413143 | 0,0122567 | -0,000389566 | -0,049762793 | 0,0122567 | -0,000256988 |
| 701 | -105,5457852 | 9,421952019 | -0,1019747 | -0,012250803 | -0,000389356 | -0,154639691 | -0,012250803 | -0,000521685 |
| 702 | -106,7489959 | -51,22990034 | -0,102412818 | -0,012256702 | -0,000389726 | -0,155063169 | -0,012256701 | -0,000522304 |

APOYO 2

| Newton | VIENTO | PESO | CT1 | | | CT2 | | |
|---|---|---|---|---|---|---|---|---|
| Barra | | | L | T | V | L | T | V |
| 703 | 105,5457922 | 9,431384069 | 0,101975027 | 0,01225074 | -0,000389356 | 0,049310036 | 0,01225074 | -0,000256795 |
| 704 | 106,7490029 | -51,22045052 | 0,102413145 | 0,012256638 | -0,000389726 | 0,049762795 | 0,012256639 | -0,000256915 |
| 705 | -105,5457977 | 9,332150981 | 0,101974698 | -0,012250739 | -0,000389196 | 0,154639688 | -0,012250739 | -0,000521757 |
| 706 | -106,7490084 | -51,31971004 | 0,102412816 | -0,012256637 | -0,000389566 | 0,155063166 | -0,012256637 | -0,000522377 |
| 707 | -77347,17394 | -9238,615017 | -7,93444573 | -7,989873597 | -0,249910777 | -7,901960692 | -7,989873611 | -0,330184705 |
| 708 | -77417,97944 | -9558,425229 | -8,05953441 | -7,998501409 | -0,2501911 | -8,090399916 | -7,998501422 | -0,330565002 |
| 709 | -82708,91939 | -9874,674035 | -8,0574319 | -8,11556292 | -0,250123821 | -8,028656159 | -8,115562933 | -0,327961725 |
| 710 | -82780,27802 | -10205,23252 | -8,168553682 | -8,120817226 | -0,250273247 | -8,195798179 | -8,120817238 | -0,328147566 |
| 711 | -88174,24329 | -10500,54389 | -8,164414014 | -8,232711286 | -0,250157615 | -8,135358113 | -8,232711298 | -0,32565155 |
| 712 | 77347,17394 | -9233,535675 | -7,934449201 | 7,989873599 | -0,249909145 | -7,966934238 | 7,989873613 | -0,169635217 |
| 713 | 77417,97943 | -9553,44722 | -8,059538274 | 7,998501412 | -0,250189276 | -8,028672767 | 7,998501425 | -0,169815373 |
| 714 | 82708,9194 | -9869,978548 | -8,057436135 | 8,115562918 | -0,250121818 | -8,086211877 | 8,115562931 | -0,172283914 |
| 715 | 82780,27803 | -10200,63041 | -8,168558268 | 8,120817224 | -0,250271074 | -8,141313772 | 8,120817236 | -0,172396756 |
| 716 | 88174,24328 | -10496,2077 | -8,16441895 | 8,232711289 | -0,250155271 | -8,19347485 | 8,232711301 | -0,174661336 |
| 717 | -77347,17401 | -9239,252452 | 7,934445731 | -7,989872927 | -0,249909145 | 7,901960694 | -7,989872914 | -0,330185618 |
| 718 | -77417,97951 | -9559,171127 | 8,059534409 | -7,998500664 | -0,250189276 | 8,090399915 | -7,998500651 | -0,330566004 |
| 719 | -82708,91949 | -9875,521864 | 8,057431899 | -8,115562098 | -0,250121818 | 8,028656157 | -8,115562086 | -0,32796281 |
| 720 | -82780,27813 | -10206,17633 | 8,168553683 | -8,120816336 | -0,250271074 | 8,195798179 | -8,120816324 | -0,328148729 |
| 721 | -88174,24339 | -10501,58411 | 8,164414013 | -8,232710333 | -0,250155271 | 8,135358113 | -8,232710321 | -0,325652793 |
| 722 | 77347,17402 | -9232,89824 | 7,9344492 | 7,989872926 | -0,249910777 | 7,966934237 | 7,989872912 | -0,169634304 |
| 723 | 77417,97952 | -9552,701322 | 8,059538275 | 7,998500661 | -0,2501911 | 8,028672769 | 7,998500648 | -0,169814372 |
| 724 | 82708,91948 | -9869,130719 | 8,057436136 | 8,1155621 | -0,250123821 | 8,086211877 | 8,115562088 | -0,172282828 |
| 725 | 82780,27812 | -10199,6866 | 8,168558268 | 8,120816338 | -0,250273247 | 8,141313771 | 8,120816326 | -0,172395591 |
| 726 | 88174,2434 | -10495,16748 | 8,16441895 | 8,232710331 | -0,250157615 | 8,193474851 | 8,232710319 | -0,174660094 |
| 727 | -4278,63172 | 27,10673307 | 0,00316763 | -0,096909834 | 9,57126E-05 | 0,053585517 | -0,096909833 | 0,002262306 |
| 728 | -4309,371916 | -35,75442732 | 0,003144645 | -0,097248331 | 9,48704E-05 | 0,053540664 | -0,097248331 | 0,002256698 |
| 729 | 4278,631741 | 26,86633873 | 0,003167314 | 0,096909829 | 9,5862E-05 | -0,047250573 | 0,096909829 | -0,002070732 |
| 730 | 4309,371937 | -35,99447778 | 0,003144329 | 0,097248327 | 9,50197E-05 | -0,047251691 | 0,097248327 | -0,002066809 |
| 731 | -0,720138397 | 20,37333656 | -0,099770839 | 0,001214853 | 4,84815E-05 | -0,149450411 | 0,001214853 | 7,30802E-05 |
| 732 | -3,496150745 | -43,55591538 | -0,100140177 | 0,001054763 | 4,33526E-05 | -0,14981681 | 0,001054763 | 6,62284E-05 |
| 733 | -0,720129413 | 20,28790351 | 0,09977084 | 0,00121491 | 4,86318E-05 | 0,149450414 | 0,001214909 | 7,30088E-05 |
| 734 | -3,496141766 | -43,64138051 | 0,100140178 | 0,00105482 | 4,3503E-05 | 0,149816812 | 0,001054819 | 6,6157E-05 |
| 735 | -4497,480442 | 23,28484062 | -0,000253569 | -0,097560421 | -1,44723E-05 | 0,048550729 | -0,097560421 | 0,00204078 |
| 736 | -4529,182434 | -41,71737524 | -0,000274357 | -0,097885232 | -1,52866E-05 | 0,048512317 | -0,097885232 | 0,002035767 |
| 737 | 4497,480422 | 23,055038 | -0,000253871 | 0,097560426 | -1,43235E-05 | -0,049058168 | 0,097560425 | -0,002069575 |
| 738 | 4529,182414 | -41,94688829 | -0,000274659 | 0,097885236 | -1,51378E-05 | -0,049061333 | 0,097885236 | -0,00206619 |
| 739 | 123,8827343 | 41,17343891 | -0,089937122 | 0,010957764 | 0,000326957 | -0,136199072 | 0,010957764 | 0,000421145 |
| 740 | 122,7694429 | -26,99261025 | -0,090243445 | 0,010979493 | 0,000327488 | -0,136505158 | 0,010979493 | 0,000421739 |
| 741 | 123,8827083 | 41,09458246 | 0,089937122 | 0,010957823 | 0,000327099 | 0,136199073 | 0,010957823 | 0,000421083 |
| 742 | 122,769417 | -27,0715034 | 0,090243445 | 0,010979553 | 0,000327629 | 0,136505158 | 0,010979553 | 0,000421677 |
| 743 | -4605,993241 | 14,27143542 | -0,007580865 | -0,091339664 | -0,000219635 | 0,038869462 | -0,091339664 | 0,001756855 |
| 744 | -4638,890377 | -53,8431289 | -0,007667707 | -0,091676715 | -0,000222368 | 0,038790192 | -0,091676714 | 0,001751492 |
| 745 | 4605,993259 | 14,05102192 | -0,007581156 | 0,091339661 | -0,000219495 | -0,054031483 | 0,09133966 | -0,002195985 |
| 746 | 4638,890395 | -54,06341099 | -0,007667999 | 0,091676711 | -0,000222228 | -0,054125899 | 0,091676711 | -0,002196089 |

APOYO 2

| Newton | VIENTO | PESO | CT1 | | | CT2 | | |
|---|---|---|---|---|---|---|---|---|
| Barra | | | L | T | V | L | T | V |
| 747 | 4278,631726 | 26,95244758 | -0,003167318 | 0,096909773 | 9,57126E-05 | 0,047250569 | 0,096909774 | -0,002070659 |
| 748 | 4309,371923 | -35,90837342 | -0,003144333 | 0,097248271 | 9,48704E-05 | 0,047251687 | 0,097248271 | -0,002066736 |
| 749 | -4278,631748 | 27,02062428 | -0,003167627 | -0,096909769 | 9,5862E-05 | -0,053585514 | -0,096909769 | 0,002262234 |
| 750 | -4309,371944 | -35,84053161 | -0,003144641 | -0,097248267 | 9,50197E-05 | -0,053540662 | -0,097248267 | 0,002256627 |
| 751 | 0,720144974 | 20,37159264 | 0,09977115 | -0,001214913 | 4,84815E-05 | 0,050091577 | -0,001214913 | 2,41037E-05 |
| 752 | 3,496157326 | -43,55753661 | 0,100140488 | -0,001054823 | 4,33526E-05 | 0,050463855 | -0,001054823 | 2,06978E-05 |
| 753 | 0,720122835 | 20,28615964 | -0,099771151 | -0,00121485 | 4,86318E-05 | -0,050091578 | -0,00121485 | 2,40337E-05 |
| 754 | 3,496135185 | -43,64300169 | -0,100140489 | -0,001054759 | 4,3503E-05 | -0,050463856 | -0,00105476 | 2,06277E-05 |
| 755 | 4497,480448 | 23,13848406 | 0,000253873 | 0,097560363 | -1,44723E-05 | 0,049058172 | 0,097560363 | -0,002069508 |
| 756 | 4529,182441 | -41,86343278 | 0,000274662 | 0,097885173 | -1,52866E-05 | 0,049061337 | 0,097885174 | -0,002066124 |
| 757 | -4497,480428 | 23,20139449 | 0,000253566 | -0,097560367 | -1,43236E-05 | -0,048550731 | -0,097560367 | 0,002040712 |
| 758 | -4529,182421 | -41,80083082 | 0,000274355 | -0,097885177 | -1,51378E-05 | -0,048512319 | -0,097885178 | 0,002035698 |
| 759 | -123,8827282 | 41,16673864 | 0,089937409 | -0,010957819 | 0,000326957 | 0,043675458 | -0,010957819 | 0,000232974 |
| 760 | -122,7694369 | -26,99931504 | 0,090243733 | -0,010979549 | 0,000327488 | 0,04398202 | -0,010979549 | 0,000233441 |
| 761 | -123,8827144 | 41,08788212 | -0,089937409 | -0,010957768 | 0,000327099 | -0,043675458 | -0,010957768 | 0,00023291 |
| 762 | -122,7694231 | -27,07820825 | -0,090243733 | -0,010979497 | 0,000327629 | -0,04398202 | -0,010979498 | 0,000233378 |
| 763 | 4605,993248 | 14,13068756 | 0,007581154 | 0,091339608 | -0,000219635 | 0,054031481 | 0,091339609 | -0,002195918 |
| 764 | 4638,890383 | -53,98368952 | 0,007667997 | 0,091676658 | -0,000222368 | 0,054125896 | 0,091676659 | -0,002196022 |
| 765 | -4605,993265 | 14,19176984 | 0,007580866 | -0,091339605 | -0,000219495 | -0,038869461 | -0,091339605 | 0,00175679 |
| 766 | -4638,890401 | -53,92285032 | 0,007667709 | -0,091676655 | -0,000222228 | -0,038790191 | -0,091676655 | 0,001751427 |
| 767 | 87967,56759 | -10787,30134 | 8,271285859 | 8,214215597 | -0,24960531 | 8,246724101 | 8,214215585 | -0,17426763 |
| 768 | -87967,56758 | -10793,79863 | 8,271280587 | -8,214215598 | -0,249602803 | 8,295842346 | -8,214215587 | -0,324940483 |
| 769 | 87967,56747 | -10788,43361 | -8,27128586 | 8,214216619 | -0,249602803 | -8,246724101 | 8,21421663 | -0,174268948 |
| 770 | -87967,56748 | -10792,66636 | -8,271280587 | -8,214216617 | -0,24960531 | -8,295842344 | -8,214216629 | -0,324939165 |
| 771 | 238,5915481 | -2,839667723 | -0,094330698 | 0,020993818 | -0,000627051 | -0,047981634 | 0,020993818 | -0,000444715 |
| 772 | 240,2721947 | -71,05514481 | -0,094638648 | 0,021022329 | -0,000627981 | -0,04829649 | 0,021022329 | -0,000445313 |
| 773 | -238,5915632 | -2,772566614 | -0,094330408 | -0,020993815 | -0,000627191 | -0,140679473 | -0,020993815 | -0,000809526 |
| 774 | -240,2722098 | -70,98803383 | -0,094638358 | -0,021022326 | -0,000628122 | -0,140980516 | -0,021022326 | -0,00081079 |
| 775 | 238,5915694 | -2,759574325 | 0,0943307 | 0,020993759 | -0,000627191 | 0,047981635 | 0,020993759 | -0,00044465 |
| 776 | 240,2722159 | -70,9750178 | 0,09463865 | 0,02102227 | -0,000628122 | 0,048296492 | 0,02102227 | -0,000445247 |
| 777 | -238,5915543 | -2,852660058 | 0,094330406 | -0,020993762 | -0,000627051 | 0,14067947 | -0,020993762 | -0,000809593 |
| 778 | -240,2722009 | -71,06816089 | 0,094638356 | -0,021022273 | -0,000627981 | 0,140980513 | -0,021022273 | -0,000810857 |
| 779 | -93319,37967 | -11149,53631 | -8,284683787 | -8,317495556 | -0,24999901 | -8,257221499 | -8,317495568 | -0,323130154 |
| 780 | -93719,21637 | -11526,39804 | -8,390720417 | -8,351018153 | -0,250991705 | -8,416459966 | -8,351018164 | -0,324405909 |
| 781 | -99243,79668 | -11855,83342 | -8,374172863 | -8,452638389 | -0,250499677 | -8,350074896 | -8,4526384 | -0,321827434 |
| 782 | -98581,5444 | -12125,62422 | -8,474325546 | -8,398195416 | -0,24890118 | -8,498722133 | -8,398195426 | -0,31978175 |
| 783 | -104262,0451 | -12442,14741 | -8,471008315 | -8,49954247 | -0,248817128 | -8,447511867 | -8,499542479 | -0,317719974 |
| 784 | 93319,37968 | -11145,54966 | -8,284689386 | 8,317495554 | -0,249996345 | -8,312151674 | 8,317495565 | -0,176865202 |
| 785 | 93719,21637 | -11522,48275 | -8,390726347 | 8,351018152 | -0,250988879 | -8,364986798 | 8,351018163 | -0,177574675 |
| 786 | 99243,79667 | -11852,15261 | -8,374179104 | 8,452638391 | -0,250496699 | -8,398277071 | 8,452638402 | -0,179168942 |
| 787 | 98581,5444 | -12122,05944 | -8,474332096 | 8,398195417 | -0,248898051 | -8,449935508 | 8,398195427 | -0,178017481 |
| 788 | 104262,0451 | -12438,80694 | -8,471015171 | 8,499542472 | -0,248813852 | -8,494511618 | 8,499542482 | -0,179911005 |
| 789 | -93319,3798 | -11150,75782 | 8,284683789 | -8,31749447 | -0,249996345 | 8,257221501 | -8,317494459 | -0,323131545 |
| 790 | -93719,21649 | -11527,71108 | 8,390720416 | -8,351017004 | -0,250988879 | 8,416459965 | -8,351016993 | -0,324407375 |

APOYO 2

| Newton | VIENTO | PESO | CT1 | | | CT2 | | |
|---|---|---|---|---|---|---|---|---|
| Barra | | | L | T | V | L | T | V |
| 791 | -99243,7968 | -11857,23236 | 8,374172861 | -8,452637183 | -0,250496699 | 8,350074894 | -8,452637172 | -0,321828971 |
| 792 | -98581,54453 | -12127,10735 | 8,474325545 | -8,398194149 | -0,248898051 | 8,498722133 | -8,398194139 | -0,319783356 |
| 793 | -104262,0452 | -12443,71401 | 8,471008315 | -8,499541145 | -0,248813852 | 8,447511868 | -8,499541135 | -0,317721649 |
| 794 | 93319,37979 | -11144,32815 | 8,284689384 | 8,317494473 | -0,24999901 | 8,312151672 | 8,317494462 | -0,17686381 |
| 795 | 93719,21649 | -11521,16972 | 8,390726348 | 8,351017005 | -0,250991705 | 8,364986799 | 8,351016994 | -0,177573208 |
| 796 | 99243,79681 | -11850,75367 | 8,374179106 | 8,452637181 | -0,250499677 | 8,398277073 | 8,45263717 | -0,179167405 |
| 797 | 98581,54454 | -12120,57631 | 8,474332097 | 8,398194148 | -0,24890118 | 8,449935509 | 8,398194138 | -0,178015876 |
| 798 | 104262,0452 | -12437,24033 | 8,471015171 | 8,499541142 | -0,248817128 | 8,494511618 | 8,499541133 | -0,17990933 |
| 799 | -5065,809708 | -17,40681967 | -0,020691526 | -0,089355565 | -0,000592554 | 0,020906872 | -0,089355565 | 0,001116116 |
| 800 | 5065,809728 | -17,6014231 | -0,020691795 | 0,089355561 | -0,000592426 | -0,062290194 | 0,089355561 | -0,002301096 |
| 801 | 5065,809713 | -17,52849538 | 0,020691792 | 0,089355514 | -0,000592554 | 0,062290191 | 0,089355514 | -0,002301034 |
| 802 | -5065,809733 | -17,47974733 | 0,020691529 | -0,08935551 | -0,000592426 | -0,02090687 | -0,08935551 | 0,001116055 |
| 803 | -4718,145492 | 46,14795227 | 0,016177958 | -0,08873251 | 0,000478082 | 0,060581683 | -0,08873251 | 0,002350989 |
| 804 | -4749,198579 | -25,08730003 | 0,016197259 | -0,089008771 | 0,000478514 | 0,060604274 | -0,089008771 | 0,002349187 |
| 805 | 4718,145474 | 45,93843123 | 0,016177682 | 0,088732514 | 0,000478217 | -0,028226042 | 0,088732513 | -0,00139469 |
| 806 | 4749,198561 | -25,29670859 | 0,016196982 | 0,089008775 | 0,000478649 | -0,028210033 | 0,089008775 | -0,001392024 |
| 807 | 445,7909868 | 76,00763719 | -0,085513612 | 0,036767394 | 0,001082548 | -0,129670037 | 0,036767394 | 0,001387573 |
| 808 | 445,1491824 | 4,734202358 | -0,085786517 | 0,036819254 | 0,001083891 | -0,12994038 | 0,036819254 | 0,001389181 |
| 809 | 445,7909783 | 75,93211762 | 0,085513614 | 0,036767448 | 0,001082681 | 0,12967004 | 0,036767448 | 0,001387512 |
| 810 | 445,1491739 | 4,658642112 | 0,085786519 | 0,036819308 | 0,001084025 | 0,129940382 | 0,036819308 | 0,00138912 |
| 811 | -4994,031533 | 18,39279 | -0,012883666 | -0,090204098 | -0,000386339 | 0,030560808 | -0,090204098 | 0,001420374 |
| 812 | -5027,092446 | -54,47019791 | -0,012964783 | -0,090479339 | -0,00038883 | 0,030484386 | -0,090479339 | 0,001415835 |
| 813 | 4994,03154 | 18,18887233 | -0,01288394 | 0,090204097 | -0,000386205 | -0,056328415 | 0,090204096 | -0,002192917 |
| 814 | 5027,092453 | -54,67402315 | -0,012965057 | 0,090479338 | -0,000388695 | -0,056414226 | 0,090479337 | -0,00219336 |
| 815 | -751,4257003 | -60,17376458 | -0,09249559 | -0,061141741 | -0,001792124 | -0,134347061 | -0,061141741 | -0,002290922 |
| 816 | -757,8570023 | -136,3071398 | -0,092745972 | -0,061540882 | -0,001803901 | -0,13460284 | -0,061540882 | -0,002306019 |
| 817 | -751,4257095 | -60,24764602 | 0,092495589 | -0,061141688 | -0,001791992 | 0,134347061 | -0,061141688 | -0,002290983 |
| 818 | -757,8570116 | -136,3810737 | 0,092745972 | -0,061540829 | -0,001803769 | 0,134602839 | -0,061540829 | -0,00230608 |
| 819 | 4718,145497 | 46,01458069 | -0,016177681 | 0,088732456 | 0,000478082 | 0,028226044 | 0,088732457 | -0,001394628 |
| 820 | 4749,198585 | -25,22051252 | -0,016196981 | 0,089008718 | 0,000478514 | 0,028210034 | 0,089008718 | -0,001391962 |
| 821 | -4718,14548 | 46,07180276 | -0,016177959 | -0,08873246 | 0,000478217 | -0,060581683 | -0,08873246 | 0,002350926 |
| 822 | -4749,198567 | -25,16349615 | -0,01619726 | -0,089008721 | 0,000478649 | -0,060604274 | -0,089008722 | 0,002349124 |
| 823 | -445,790981 | 75,98592183 | 0,085513887 | -0,036767447 | 0,001082548 | 0,041357462 | -0,036767447 | 0,000777717 |
| 824 | -445,1491766 | 4,712468162 | 0,085786792 | -0,036819307 | 0,001083891 | 0,04163293 | -0,036819307 | 0,000778796 |
| 825 | -445,7909841 | 75,91040225 | -0,085513889 | -0,036767395 | 0,001082681 | -0,041357464 | -0,036767395 | 0,000777656 |
| 826 | -445,1491797 | 4,636907908 | -0,085786794 | -0,036819255 | 0,001084025 | -0,041632931 | -0,036819255 | 0,000778735 |
| 827 | 4994,031539 | 18,26413241 | 0,012883941 | 0,090204045 | -0,000386339 | 0,056328416 | 0,090204045 | -0,002192855 |
| 828 | 5027,092452 | -54,59870967 | 0,012965058 | 0,090479286 | -0,00038883 | 0,056414226 | 0,090479286 | -0,002193299 |
| 829 | -4994,031546 | 18,31752994 | 0,012883665 | -0,090204043 | -0,000386205 | -0,03056081 | -0,090204044 | 0,001420313 |
| 830 | -5027,092459 | -54,54551137 | 0,012964782 | -0,090479284 | -0,000388695 | -0,030484387 | -0,090479285 | 0,001415774 |
| 831 | 751,425706 | -60,13823594 | 0,09249586 | 0,061141689 | -0,001792124 | 0,050644389 | 0,061141689 | -0,001293133 |
| 832 | 757,8570081 | -136,2713747 | 0,092746243 | 0,06154083 | -0,001803901 | 0,050889376 | 0,06154083 | -0,001301591 |
| 833 | 751,4257038 | -60,2121174 | -0,09249586 | 0,06114174 | -0,001791992 | -0,050644388 | 0,06114174 | -0,001293194 |
| 834 | 757,8570058 | -136,3453086 | -0,092746242 | 0,061540881 | -0,001803769 | -0,050889375 | 0,061540881 | -0,001301652 |

APOYO 2

| Newton | C1 | | | C2 | | | C3 | | |
|---|---|---|---|---|---|---|---|---|---|
| Barra | L | T | V | L | T | V | L | T | V |
| 1 | -0,058886076 | -0,000209916 | -0,003315074 | 0,008210587 | 1,80717E-06 | -7,25879E-06 | -0,00041117 | -1,45761E-08 | -1,51482E-08 |
| 2 | 0,022766434 | -0,000176684 | -0,002632446 | -0,005079662 | -2,52563E-06 | -2,40371E-05 | 0,000314606 | -2,00536E-08 | -1,00319E-07 |
| 3 | 0,110500728 | 6,68422E-06 | -0,000860518 | -0,019320355 | -5,87407E-06 | -1,60054E-05 | 0,001091087 | 9,66893E-08 | 2,91088E-07 |
| 4 | 0,172645145 | 0,000110563 | 0,000366417 | -0,02939634 | -8,32172E-06 | -1,03087E-05 | 0,001640928 | 1,19205E-07 | 3,38892E-07 |
| 5 | 0,207866323 | 0,000117516 | 0,000608463 | -0,035076388 | -1,00521E-05 | -1,68291E-05 | 0,00194909 | 1,0465E-07 | 2,62301E-07 |
| 6 | -0,05543617 | -7,62099E-05 | -0,001046404 | 0,008841146 | 2,68536E-06 | 5,53803E-06 | -0,000478183 | -4,27167E-09 | 3,97272E-08 |
| 7 | -0,035607511 | 7,08634E-05 | 0,001618294 | 0,006993238 | 2,21256E-06 | 6,71085E-06 | -0,000414086 | -1,44303E-08 | -4,6272E-08 |
| 8 | -0,10825465 | 6,997E-05 | 0,001312321 | 0,018981606 | 6,20105E-06 | 2,29721E-05 | -0,001072956 | -9,28124E-08 | -2,63015E-07 |
| 9 | -0,172228469 | -3,25156E-05 | 0,000197177 | 0,029344001 | 9,15531E-06 | 3,14818E-05 | -0,001637619 | -1,31944E-07 | -3,29579E-07 |
| 10 | -0,207820847 | -0,000178254 | -0,000716637 | 0,03508795 | 1,00262E-05 | 2,46371E-05 | -0,001949996 | -7,26211E-08 | -1,40686E-07 |
| 11 | -0,01973393 | 1,77061E-05 | 0,00033956 | 0,003517733 | 1,14901E-06 | 7,62518E-06 | -0,000200614 | -2,50486E-09 | 1,86041E-08 |
| 12 | -0,031632967 | 0,000111621 | 0,001960521 | 0,00640265 | 2,3298E-06 | 8,18758E-06 | -0,000383069 | -3,3727E-08 | -1,06812E-07 |
| 13 | -0,10902457 | -7,83153E-06 | 0,000808277 | 0,019101732 | 5,87033E-06 | 2,09284E-05 | -0,001079808 | -8,85709E-08 | -2,54285E-07 |
| 14 | -0,172244089 | -6,10981E-05 | 7,29525E-06 | 0,029349142 | 8,92882E-06 | 3,04409E-05 | -0,001638318 | -6,27011E-08 | -1,07818E-07 |
| 15 | -0,208149075 | -7,34193E-06 | 0,00035523 | 0,03508595 | 1,06987E-05 | 2,86101E-05 | -0,001949866 | -1,31544E-07 | -3,23834E-07 |
| 16 | -0,062496889 | -0,000265151 | -0,003736514 | 0,00874115 | 1,59338E-06 | -9,16298E-06 | -0,00043939 | -2,62787E-08 | -5,80797E-08 |
| 17 | 0,018468909 | -0,000151038 | -0,002589233 | -0,004425429 | -2,13538E-06 | -2,32568E-05 | 0,00028063 | 6,08566E-08 | 1,70148E-07 |
| 18 | 0,112098084 | -3,41117E-05 | -0,001073668 | -0,019544658 | -5,98575E-06 | -1,64973E-05 | 0,001103212 | 8,72247E-08 | 2,6041E-07 |
| 19 | 0,172605774 | 7,92149E-05 | 0,000185652 | -0,029404671 | -8,39051E-06 | -1,08089E-05 | 0,00164118 | 7,81625E-08 | 2,05714E-07 |
| 20 | 0,207790409 | 0,000126995 | 0,000654351 | -0,035076244 | -1,00407E-05 | -1,6779E-05 | 0,001947937 | 9,90224E-08 | 2,42911E-07 |
| 21 | 0,04915127 | 0,000147341 | 0,002920669 | -0,006574675 | -1,8078E-06 | 4,80635E-06 | 0,000320671 | -9,80481E-09 | -6,40351E-08 |
| 22 | 0,069150433 | 5,35054E-05 | 0,001020574 | -0,01107076 | -3,51699E-06 | -1,18877E-05 | 0,000599635 | -3,52265E-08 | -1,9609E-07 |
| 23 | 0,12378852 | 0,000279009 | 0,003631402 | -0,019210063 | -5,0733E-06 | -5,20714E-06 | 0,001024317 | 5,35853E-08 | 7,0114E-08 |
| 24 | 0,055144571 | 0,000313305 | 0,004070655 | -0,007473417 | -7,58521E-07 | 1,10508E-05 | 0,000368036 | 6,29386E-08 | 1,95738E-07 |
| 25 | -0,052712153 | -6,13005E-05 | -0,000500898 | 0,00866392 | 2,37713E-06 | 1,02628E-05 | -0,000476374 | -7,64974E-08 | -2,43116E-07 |
| 26 | 0,068194894 | 8,0164E-05 | 0,00107121 | -0,010986953 | -2,65049E-06 | 9,40178E-06 | 0,000596609 | 1,22513E-08 | 6,7729E-08 |
| 27 | -0,045708886 | 1,41618E-05 | 0,000115353 | 0,007635724 | 2,59563E-06 | 1,29563E-05 | -0,000422014 | -4,53924E-08 | -1,369E-07 |
| 28 | 0,062084494 | 0,000153494 | 0,001368723 | -0,010076562 | -2,03419E-06 | 1,11305E-05 | 0,000549189 | 1,19001E-07 | 4,25574E-07 |
| 29 | 0,044781461 | 9,26555E-05 | 0,000999483 | -0,007331253 | -2,0886E-06 | -5,50802E-06 | 0,000401031 | -1,40565E-08 | -8,15574E-08 |
| 30 | -0,048998268 | -6,70527E-05 | -0,000831408 | 0,007941732 | 2,19552E-06 | 1,71651E-06 | -0,000433429 | -2,19356E-08 | -4,48756E-08 |
| 31 | 0,046451527 | 1,77943E-05 | 0,000556042 | -0,007556964 | -2,44934E-06 | -7,19994E-06 | 0,00041256 | 5,4708E-08 | 1,37981E-07 |
| 32 | -0,048040314 | -7,25558E-05 | -0,000835395 | 0,007798653 | 2,22665E-06 | 1,99137E-06 | -0,000425507 | -2,13543E-08 | -4,04332E-08 |
| 33 | -0,05943514 | -0,000214394 | -0,002997857 | 0,008545221 | 1,40826E-06 | -1,70859E-05 | -0,000436436 | 3,44153E-09 | -9,95897E-11 |
| 34 | -0,017637967 | 3,01352E-05 | 0,000104692 | 0,002949236 | 1,65809E-06 | 1,15184E-05 | -0,0001632 | 2,86768E-08 | 1,54708E-07 |
| 35 | -0,038321774 | -6,79252E-05 | -0,000962865 | 0,006029444 | 1,95241E-06 | 7,85139E-06 | -0,000324132 | -1,70818E-08 | 6,57037E-09 |
| 36 | 0,043609397 | 4,34229E-05 | 0,000932119 | -0,006823394 | -2,59469E-06 | -9,71364E-06 | 0,000365121 | -3,2976E-08 | -1,83622E-07 |
| 37 | -0,043411878 | -0,000194971 | -0,00298655 | 0,005946999 | 1,76017E-06 | 3,48206E-06 | -0,000294164 | 4,38606E-08 | 2,30671E-07 |
| 38 | -0,067935278 | -0,0001326 | -0,001623541 | 0,010677136 | 2,39385E-06 | -7,506E-06 | -0,000572098 | -1,88978E-08 | -7,10476E-08 |
| 39 | 0,038782378 | 0,000114644 | 0,000797605 | -0,006326478 | -7,50357E-07 | 1,27161E-05 | 0,000346329 | 4,40127E-09 | 6,33579E-08 |
| 40 | -0,045814361 | -0,000105285 | -0,000955977 | 0,007380246 | 1,08356E-06 | -7,77399E-06 | -0,000400565 | -5,66589E-08 | -2,19811E-07 |
| 41 | 0,018215099 | -1,2234E-05 | -0,000330417 | -0,003279316 | -1,03701E-06 | -4,05296E-06 | 0,00018735 | 1,59075E-08 | 4,53764E-08 |
| 42 | 0,022950564 | -3,04849E-06 | -0,000165837 | -0,003985858 | -1,25025E-06 | -3,83992E-06 | 0,000224183 | 1,11831E-08 | 2,63071E-08 |
| 43 | -0,060032555 | -0,00010697 | -0,001357499 | 0,009513214 | 2,47921E-06 | -8,57906E-08 | -0,00051276 | -2,27833E-08 | -4,6046E-08 |

APOYO 2

| Newton | C1 | | | C2 | | | C3 | | |
|---|---|---|---|---|---|---|---|---|---|
| Barra | L | T | V | L | T | V | L | T | V |
| 44 | -0,052918591 | -8,65087E-05 | -0,001070157 | 0,008452468 | 2,23213E-06 | 5,48933E-07 | -0,00045742 | -2,22467E-08 | -4,80803E-08 |
| 45 | -0,12151114 | -0,000348836 | -0,004897601 | 0,018127935 | 4,172E-06 | -1,09846E-05 | -0,000945178 | -2,95736E-08 | -3,25705E-08 |
| 46 | 0,12151114 | 0,000348836 | 0,004897601 | -0,018127935 | -4,17199E-06 | 1,09846E-05 | 0,000945178 | 2,95722E-08 | 3,25706E-08 |
| 47 | 0,096761261 | 0,000277784 | 0,003900038 | -0,014435564 | -3,32223E-06 | 8,74724E-06 | 0,00075266 | 2,35502E-08 | 2,59363E-08 |
| 48 | -0,096761261 | -0,000277784 | -0,003900038 | 0,014435564 | 3,32223E-06 | -8,74724E-06 | -0,00075266 | -2,35493E-08 | -2,59365E-08 |
| 49 | -0,02926889 | -4,33191E-05 | -0,000520836 | 0,004725111 | 7,58871E-07 | -1,54746E-05 | -0,000256451 | -5,23696E-09 | -2,73174E-08 |
| 50 | 0,028782819 | 6,10891E-05 | 0,000531404 | -0,004655583 | -1,41714E-06 | -1,01151E-05 | 0,000252811 | 2,81241E-08 | 3,79381E-08 |
| 51 | -0,02945993 | -0,000127605 | -0,001054349 | 0,004743327 | 3,48905E-07 | -1,77018E-05 | -0,000258604 | 3,89094E-08 | 1,11173E-07 |
| 52 | 0,028941467 | -1,76176E-05 | 6,97927E-05 | -0,004675899 | -1,52782E-06 | -1,1212E-05 | 0,000254246 | -6,5529E-08 | -2,65675E-07 |
| 53 | 0,017809539 | -0,000159209 | -0,001396353 | -0,002771615 | -1,91839E-06 | -2,03593E-05 | 0,000150754 | 1,11651E-07 | 3,33821E-07 |
| 54 | -0,017297885 | 9,9731E-06 | -5,38902E-06 | 0,002764084 | 7,09539E-07 | -5,01024E-06 | -0,000147973 | 6,58704E-09 | -6,79742E-09 |
| 55 | 0,016975679 | 5,88743E-05 | -1,76582E-05 | -0,002756249 | -9,81139E-07 | -1,50429E-05 | 0,000148916 | -4,38186E-08 | -1,58846E-07 |
| 56 | -0,017120113 | -3,87885E-05 | -0,00031356 | 0,002747911 | 6,80784E-07 | -5,72101E-06 | -0,000148227 | -7,45121E-08 | -2,71482E-07 |
| 57 | 0,2330005 | 3,43555E-05 | -1,24657E-06 | -0,039144588 | -1,17296E-05 | -2,33158E-05 | 0,002174165 | 1,85004E-07 | 5,10471E-07 |
| 58 | -0,232914619 | 1,60394E-05 | 5,6562E-05 | 0,039187597 | 1,22948E-05 | 3,26274E-05 | -0,002172484 | -2,30265E-07 | -6,30591E-07 |
| 59 | 0,232813653 | 0,000245236 | 0,001316428 | -0,039170068 | -1,08558E-05 | -1,83301E-05 | 0,002174097 | 7,67259E-08 | 1,68002E-07 |
| 60 | -0,23262414 | -0,000274053 | -0,001792909 | 0,039165303 | 1,09544E-05 | 2,51509E-05 | -0,002172515 | -2,64927E-08 | 1,21686E-08 |
| 61 | 0,015022555 | 0,000367556 | 0,002943312 | -0,002625848 | 8,36803E-07 | 1,25384E-05 | 0,000144962 | -1,97728E-07 | -6,34393E-07 |
| 62 | -0,015261762 | -4,44514E-05 | -0,000545153 | 0,002572527 | 6,32068E-07 | 1,74292E-07 | -0,000146952 | -1,18277E-08 | -2,0143E-08 |
| 63 | 0,01571786 | -0,000232877 | -0,00084962 | -0,002626983 | -1,83639E-06 | -2,42249E-06 | 0,000145285 | 1,9727E-07 | 6,13949E-07 |
| 64 | -0,015795697 | -4,87248E-05 | -0,0005471 | 0,002631582 | 5,85203E-07 | 1,31595E-07 | -0,000147126 | 7,86519E-09 | 4,65605E-08 |
| 65 | -0,010704247 | 5,9015E-05 | 0,000514481 | 0,001727596 | 2,14126E-06 | 4,47137E-05 | -9,60618E-05 | -4,37627E-08 | -6,80984E-08 |
| 66 | 0,010761341 | -4,52953E-05 | -0,000102038 | -0,001753091 | -2,16638E-07 | 1,91684E-05 | 9,66041E-05 | -3,11465E-08 | -1,60056E-08 |
| 67 | -0,010570556 | 0,00016447 | 0,001173598 | 0,001765475 | 2,68029E-06 | 4,75012E-05 | -9,50508E-05 | -1,02543E-07 | -2,5374E-07 |
| 68 | 0,010732876 | 0,000132884 | 0,000957473 | -0,00175811 | -7,41569E-08 | 2,13951E-05 | 9,63685E-05 | 1,85104E-07 | 6,82973E-07 |
| 69 | 0,21147069 | 0,017673573 | 0,44670723 | -0,067534493 | 1,03121E-05 | 0,000856114 | 0,003847281 | -2,77685E-08 | -3,70709E-06 |
| 70 | -0,211572901 | 0,017519816 | 0,444556568 | 0,067525263 | 5,07667E-05 | 0,000939483 | -0,003847001 | -5,47372E-07 | -4,96434E-06 |
| 71 | -0,145770597 | 0,009159992 | -0,844653825 | -0,065531992 | -1,44038E-05 | 0,000777492 | 0,003840065 | 2,79474E-07 | -2,00205E-06 |
| 72 | 0,146426011 | 0,009180432 | -0,846317103 | 0,06552814 | 2,33975E-05 | 0,000855451 | -0,003839794 | -2,45739E-07 | -3,28398E-06 |
| 73 | -0,435664669 | -0,041522615 | 0,727219212 | -0,025350646 | -0,000142236 | -0,002927427 | 0,001670864 | 7,88262E-07 | 7,62642E-06 |
| 74 | -0,435983188 | -0,042004482 | 0,726169794 | -0,025478628 | -0,000143645 | -0,002961064 | 0,001679103 | 7,94659E-07 | 7,72141E-06 |
| 75 | 0,141623216 | -0,038339363 | -0,793745821 | 0,028342484 | -0,000107509 | -0,002799881 | -0,00169377 | 3,07135E-07 | 6,65043E-06 |
| 76 | 0,141165472 | -0,038839409 | -0,797562889 | 0,028499316 | -0,00010889 | -0,002833519 | -0,001701985 | 3,13066E-07 | 6,74633E-06 |
| 77 | -0,01139409 | 0,011916305 | 0,113206377 | 0,004145613 | 7,21623E-05 | 0,001458661 | -0,000173517 | -1,68212E-07 | -8,80384E-07 |
| 78 | -0,011854447 | 0,012000767 | 0,113209351 | 0,004291508 | 7,29134E-05 | 0,001472697 | -0,000181829 | -1,70369E-07 | -8,81861E-07 |
| 79 | 0,012701377 | 0,011964772 | 0,113803746 | -0,004368011 | 7,00504E-05 | 0,001455167 | 0,000186107 | -1,85978E-07 | -9,23382E-07 |
| 80 | 0,013146522 | 0,012049563 | 0,113811324 | -0,004511204 | 7,07149E-05 | 0,001469024 | 0,000194264 | -1,87023E-07 | -9,22167E-07 |
| 81 | -0,143007732 | -0,038733744 | -0,795075749 | -0,028105648 | -0,000125676 | -0,002841895 | 0,001680702 | 5,99533E-07 | 7,35369E-06 |
| 82 | -0,142532668 | -0,039235787 | -0,79889452 | -0,028265134 | -0,000127163 | -0,002875759 | 0,001689064 | 6,06875E-07 | 7,45316E-06 |
| 83 | 0,434574109 | -0,041107547 | 0,728800959 | 0,025587131 | -0,00012763 | -0,002892449 | -0,001683867 | 4,78103E-07 | 6,85615E-06 |
| 84 | 0,434908327 | -0,041591697 | 0,727741674 | 0,025712446 | -0,000128978 | -0,002925967 | -0,001691958 | 4,83675E-07 | 6,94927E-06 |
| 85 | -0,272521911 | 0,026878684 | -0,198580483 | 0,004412905 | 0,000128239 | 0,001659776 | -0,000174568 | -4,92478E-07 | -2,69398E-06 |
| 86 | -0,272224538 | 0,027161255 | -0,197073175 | 0,004554535 | 0,000129668 | 0,001676222 | -0,000182865 | -4,97611E-07 | -2,71682E-06 |
| 87 | 0,272845694 | 0,027271787 | -0,197280556 | -0,004643763 | 0,000125608 | 0,001654975 | 0,000187211 | -5,00535E-07 | -2,7041E-06 |

APOYO 2

| Newton | C1 | | | C2 | | | C3 | | |
|---|---|---|---|---|---|---|---|---|---|
| Barra | L | T | V | L | T | V | L | T | V |
| 88 | 0,272517636 | 0,027554314 | -0,195769688 | -0,00478266 | 0,000126956 | 0,001671254 | 0,000195352 | -5,04544E-07 | -2,7242E-06 |
| 89 | -0,284475028 | 0,029374133 | 0,601000328 | 8,43501E-05 | 7,70932E-05 | 0,001830314 | -2,49367E-05 | -3,08248E-07 | -6,2392E-06 |
| 90 | 0,002836689 | -0,008837756 | -0,085088129 | -0,000486637 | -5,03119E-05 | -0,001080921 | 2,79248E-05 | 2,23526E-07 | 1,1982E-06 |
| 91 | 0,278529001 | 0,029915731 | 0,602640171 | 0,000914773 | 7,80582E-05 | 0,001834082 | -3,02884E-05 | -3,89555E-07 | -6,49139E-06 |
| 92 | 0,003433493 | -0,020452397 | -0,140731123 | -0,000499089 | -8,54273E-05 | -0,001208937 | 2,80499E-05 | 1,24413E-07 | 1,66524E-06 |
| 93 | 0,148595218 | 3,17336E-05 | -0,000264069 | -0,015807946 | -5,20795E-06 | -1,26077E-05 | 0,001022607 | 1,10817E-07 | 2,72353E-07 |
| 94 | 0,148599294 | 3,07174E-05 | -0,000296241 | -0,015811828 | -5,20923E-06 | -1,26326E-05 | 0,001022818 | 1,10841E-07 | 2,72676E-07 |
| 95 | -0,148595168 | -3,08769E-05 | 0,000290166 | 0,015807929 | 5,20666E-06 | 1,25808E-05 | -0,001022606 | -1,1079E-07 | -2,72645E-07 |
| 96 | -0,1485995 | -3,18998E-05 | 0,000257784 | 0,015811857 | 5,20765E-06 | 1,25603E-05 | -0,00102282 | -1,10788E-07 | -2,72374E-07 |
| 97 | 5,28477E-07 | -1,32971E-06 | -7,78418E-06 | -9,09045E-08 | -8,835E-09 | -1,85426E-07 | 5,21419E-09 | 3,64798E-11 | 1,4485E-10 |
| 98 | -1,08721E-05 | 3,40535E-06 | 8,79062E-05 | 1,01139E-05 | 8,42429E-09 | 1,72034E-07 | -5,50584E-07 | -8,32188E-11 | -9,21233E-10 |
| 99 | 1,09219E-05 | 3,4228E-06 | 8,84506E-05 | -1,01278E-05 | 2,55962E-09 | 1,6073E-07 | 5,51331E-07 | -2,63611E-11 | -7,85448E-10 |
| 100 | -0,137007293 | -2,65402E-05 | 0,00024865 | 0,014576454 | 4,82382E-06 | 1,2052E-05 | -0,000942929 | -1,02225E-07 | -2,51137E-07 |
| 101 | -0,135756416 | -1,24012E-05 | 0,000206456 | 0,014442283 | 4,90722E-06 | 1,4415E-05 | -0,000934254 | -1,01525E-07 | -2,48284E-07 |
| 102 | -0,000686938 | 2,5166E-06 | -6,83503E-06 | 7,3701E-05 | 4,87493E-08 | 5,32799E-07 | -4,76484E-06 | -5,58078E-10 | -1,15339E-09 |
| 103 | 0,001719447 | 2,33897E-05 | -6,95407E-05 | -0,000184423 | 1,51007E-07 | 3,95206E-06 | 1,19238E-05 | 8,94701E-10 | 4,08207E-09 |
| 104 | 0,135756185 | 8,90609E-06 | -0,000196635 | -0,014442261 | -4,93762E-06 | -1,49861E-05 | 0,000934253 | 1,01547E-07 | 2,48197E-07 |
| 105 | 0,135589578 | 9,51646E-06 | -0,000198293 | -0,014424386 | -4,9258E-06 | -1,48569E-05 | 0,000933097 | 1,01411E-07 | 2,47918E-07 |
| 106 | -0,726925318 | -0,000444784 | 1,294767008 | -0,014750643 | -4,40326E-06 | -1,06326E-05 | 0,001018435 | 1,00206E-07 | 2,40549E-07 |
| 107 | -0,726877836 | -0,000444543 | 1,294677152 | -0,014754457 | -4,40075E-06 | -1,06448E-05 | 0,001018646 | 1,0021E-07 | 2,40716E-07 |
| 108 | 0,726925506 | 0,000443914 | 1,297288717 | 0,014750626 | 4,39729E-06 | 1,05868E-05 | -0,001018434 | -1,00395E-07 | -2,41486E-07 |
| 109 | 0,726877651 | 0,000444085 | 1,297198528 | 0,014754486 | 4,402E-06 | 1,05788E-05 | -0,001018647 | -1,00414E-07 | -2,41378E-07 |
| 110 | 6,46749E-07 | -3,65049E-06 | 0,000200339 | -9,31797E-08 | -1,58619E-08 | -2,10796E-07 | 5,23744E-09 | 2,35153E-11 | 2,62687E-10 |
| 111 | -0,00012345 | 1,4916E-06 | 0,000116718 | 9,93832E-06 | 2,67995E-09 | 1,54041E-07 | -5,50024E-07 | -2,62972E-11 | -5,85661E-10 |
| 112 | 0,000123666 | 1,67414E-06 | 0,000117579 | -9,95145E-06 | -2,99556E-09 | 1,42981E-07 | 5,50773E-07 | 3,60743E-11 | -4,31742E-10 |
| 113 | -1,389981136 | -0,515089367 | -1,194770839 | 0,013601539 | 4,10231E-06 | 1,03036E-05 | -0,000939082 | -9,25417E-08 | -2,22467E-07 |
| 114 | -1,37700017 | -0,516598788 | -1,198136388 | 0,013475974 | 4,32135E-06 | 1,31396E-05 | -0,000930441 | -9,26094E-08 | -2,24213E-07 |
| 115 | -0,007127985 | 0,000727805 | 0,00171585 | 6,8974E-05 | 6,99104E-08 | 6,11634E-07 | -4,74619E-06 | -6,45969E-10 | -1,85787E-09 |
| 116 | 0,017843812 | -0,002113731 | -0,004677177 | -0,000172593 | 3,74242E-07 | 4,73247E-06 | 1,18771E-05 | -3,55655E-10 | -3,48245E-09 |
| 117 | 1,376996973 | -0,514124532 | -1,193173849 | -0,013475954 | -4,38226E-06 | -1,3816E-05 | 0,000930439 | 9,30293E-08 | 2,25965E-07 |
| 118 | 1,375268183 | -0,513948013 | -1,192757694 | -0,013459225 | -4,3653E-06 | -1,36676E-05 | 0,000929288 | 9,28727E-08 | 2,25515E-07 |
| 119 | -0,263198813 | -0,194551298 | 0,988698922 | -0,01784042 | -0,000353773 | -0,011051073 | -0,003061916 | 9,32188E-07 | 3,89701E-05 |
| 120 | 0,263209127 | -0,194471989 | 0,98736964 | 0,017840816 | -0,000364524 | -0,011082102 | 0,003062109 | 3,7066E-06 | 4,53543E-05 |
| 121 | 0,101834149 | 0,202872273 | -1,435968513 | -0,032733063 | -0,000102912 | -0,010188608 | -0,003016046 | -6,6865E-07 | 2,99916E-05 |
| 122 | -0,101665462 | 0,202925827 | -1,437365241 | 0,032719132 | -9,30071E-05 | -0,010174481 | 0,003016282 | 2,03345E-06 | 3,6196E-05 |
| 123 | -0,88530094 | -0,339501401 | -0,040941519 | 0,036089334 | 0,001036382 | 0,023849628 | -0,006183894 | -4,9332E-06 | -5,37456E-05 |
| 124 | -0,884713469 | -0,33941449 | -0,039328428 | 0,036003529 | 0,001041647 | 0,023984215 | -0,006185863 | -4,9553E-06 | -5,40662E-05 |
| 125 | 0,783339572 | 0,316332683 | -0,044463101 | -0,058895275 | 0,000909339 | 0,023342202 | 0,006255154 | -2,54131E-06 | -5,00761E-05 |
| 126 | 0,78404288 | 0,316704627 | -0,044589755 | -0,058944823 | 0,000914791 | 0,023477417 | 0,006257544 | -2,56262E-06 | -5,03987E-05 |
| 127 | -0,478055178 | -0,020937962 | 0,055763386 | -0,047461255 | -0,000425104 | -0,006610718 | 0,006219815 | 1,68283E-06 | -8,44539E-06 |
| 128 | -0,477865875 | -0,020886282 | 0,05518195 | -0,047448586 | -0,00042696 | -0,006636923 | 0,006222018 | 1,68392E-06 | -8,53679E-06 |
| 129 | 0,477959916 | -0,020924305 | 0,055638779 | 0,04747895 | -0,00038521 | -0,006520793 | -0,006220872 | -9,6075E-07 | -1,45981E-05 |
| 130 | 0,477771729 | -0,020872682 | 0,055058296 | 0,047466032 | -0,000387058 | -0,006546976 | -0,006223061 | -9,61648E-07 | -1,46941E-05 |
| 131 | -0,783200235 | 0,316325191 | -0,044624794 | 0,058876912 | 0,000964891 | 0,023466434 | -0,00625438 | -5,2422E-06 | -5,63709E-05 |

APOYO 2

| Newton | C1 | | | C2 | | | C3 | | |
|---|---|---|---|---|---|---|---|---|---|
| Barra | L | T | V | L | T | V | L | T | V |
| 132 | -0,783905124 | 0,316697594 | -0,044749367 | 0,058926641 | 0,000970436 | 0,023601861 | -0,006256782 | -5,26583E-06 | -5,66988E-05 |
| 133 | 0,885364702 | -0,339535204 | -0,040889644 | -0,036107559 | 0,001012434 | 0,023794476 | 0,006184651 | -2,34344E-06 | -4,77261E-05 |
| 134 | 0,884775535 | -0,339447739 | -0,039276427 | -0,036021563 | 0,001017792 | 0,023929263 | 0,006186608 | -2,36393E-06 | -4,8043E-05 |
| 135 | -1,134571774 | 0,031099451 | -0,049134409 | -0,04743684 | -0,000877362 | -0,008216085 | 0,006220068 | 3,9019E-06 | 3,49876E-06 |
| 136 | -1,134640618 | 0,030883012 | -0,048763664 | -0,047413432 | -0,000881875 | -0,00825169 | 0,006222238 | 3,91655E-06 | 3,48274E-06 |
| 137 | 1,134186317 | 0,03111523 | -0,049250289 | 0,047476494 | -0,000837446 | -0,008126105 | -0,006221201 | 1,25694E-06 | -2,65872E-06 |
| 138 | 1,134263404 | 0,030898753 | -0,048878542 | 0,047452966 | -0,000841967 | -0,008161721 | -0,006223357 | 1,26965E-06 | -2,67919E-06 |
| 139 | -0,455076231 | -0,186423258 | -0,468519132 | 0,006424754 | -0,000536187 | -0,012954872 | -1,97046E-05 | 2,4014E-06 | 3,57132E-05 |
| 140 | -0,000506503 | 0,028359681 | -0,082769123 | 0,000107154 | 0,000260823 | 0,005049082 | -6,29056E-06 | -4,80043E-07 | 1,14061E-06 |
| 141 | 0,456386764 | -0,186822374 | -0,469421904 | -0,006595168 | -0,000545077 | -0,012974419 | 2,93928E-05 | 2,44871E-06 | 3,58344E-05 |
| 142 | -0,003310275 | 0,103740628 | 0,522580602 | 0,000101483 | 0,000524657 | 0,005983033 | -6,3193E-06 | -1,8847E-06 | -7,76983E-06 |
| 143 | -0,457500321 | -0,031851862 | -0,065335732 | -0,061233369 | -6,34777E-05 | -0,002024531 | 0,007263364 | 1,78503E-06 | 1,19795E-05 |
| 144 | -0,457184658 | -0,031878026 | -0,065545049 | -0,061237862 | -6,35719E-05 | -0,00202486 | 0,007263381 | 1,78553E-06 | 1,19826E-05 |
| 145 | 0,456836188 | -0,031930324 | -0,06626274 | 0,061243481 | -1,46969E-05 | -0,001917011 | -0,007264137 | -1,12787E-06 | 5,19517E-06 |
| 146 | 0,456522462 | -0,031956213 | -0,066471433 | 0,061247978 | -1,47849E-05 | -0,001917327 | -0,007264154 | -1,12741E-06 | 5,19821E-06 |
| 147 | -0,794564168 | -0,667035417 | 1,008762112 | 0,090638961 | 0,00051164 | 0,013382433 | -0,0192793 | -6,40111E-06 | -3,02958E-05 |
| 148 | 0,794586838 | -0,667007553 | 1,007791572 | -0,090641195 | 0,000419017 | 0,013165732 | 0,019279144 | 3,20718E-06 | -8,01777E-06 |
| 149 | 0,559315521 | 0,660324717 | -1,551747751 | 0,107843455 | 0,00026664 | 0,012646295 | -0,019297044 | -5,04512E-06 | -2,52556E-05 |
| 150 | -0,559470844 | 0,660371841 | -1,552657751 | -0,107825526 | 0,000149097 | 0,012375143 | 0,019296845 | 4,59536E-06 | -2,88799E-06 |
| 151 | -0,790802221 | -0,320480551 | 0,034618098 | 0,060901076 | -0,001421472 | -0,028648993 | -0,006233634 | 4,68923E-08 | -3,86208E-06 |
| 152 | -0,790613332 | -0,321085959 | 0,035184939 | 0,061164642 | -0,001437234 | -0,029035578 | -0,006247928 | 9,20137E-08 | -3,24762E-06 |
| 153 | 0,888428117 | 0,33949621 | 0,037040634 | -0,03467383 | -0,001123094 | -0,02712001 | 0,006205838 | 3,71033E-06 | 1,2089E-05 |
| 154 | 0,888785592 | 0,339842693 | 0,035770665 | -0,034552583 | -0,001139116 | -0,027507317 | 0,006219208 | 3,76333E-06 | 1,27231E-05 |
| 155 | -0,481417338 | 0,023983294 | -0,052033291 | -0,048140291 | 0,000453845 | 0,007184096 | 0,006238458 | 1,60088E-06 | 2,51303E-05 |
| 156 | -0,480847801 | 0,024587702 | -0,051948814 | -0,048205233 | 0,000458781 | 0,007248098 | 0,00625228 | 1,60767E-06 | 2,54409E-05 |
| 157 | 0,481460864 | 0,0239917 | -0,052240623 | 0,048126525 | 0,000493961 | 0,007274142 | -0,006237581 | -1,03706E-06 | 1,89908E-05 |
| 158 | 0,480890812 | 0,024596089 | -0,05215545 | 0,048191581 | 0,000498963 | 0,007338299 | -0,006251409 | -1,03717E-06 | 1,92854E-05 |
| 159 | -0,888522668 | 0,339519737 | 0,036873689 | 0,034691038 | -0,001101442 | -0,02707029 | -0,00620648 | 1,11217E-06 | 6,05135E-06 |
| 160 | -0,888879238 | 0,339865866 | 0,035603803 | 0,034569756 | -0,00111766 | -0,027458015 | -0,006219844 | 1,15903E-06 | 6,67138E-06 |
| 161 | 0,790727593 | -0,320473908 | 0,034879845 | -0,060884015 | -0,001481216 | -0,028781946 | 0,006232995 | 2,69205E-06 | 2,30732E-06 |
| 162 | 0,790539738 | -0,321079616 | 0,035445419 | -0,061147632 | -0,001497325 | -0,029169299 | 0,006247295 | 2,74484E-06 | 2,9397E-06 |
| 163 | -1,141095075 | -0,032704243 | 0,048622083 | -0,048130847 | 0,00104423 | 0,00929338 | 0,006237417 | 1,47658E-08 | 2,28354E-05 |
| 164 | -1,141498611 | -0,033212458 | 0,048794678 | -0,048208317 | 0,001056967 | 0,009384917 | 0,006251253 | -1,18989E-08 | 2,29933E-05 |
| 165 | 1,141425891 | -0,032696396 | 0,048412567 | 0,048086396 | 0,00108419 | 0,009383083 | -0,006236471 | -2,62291E-06 | 1,6697E-05 |
| 166 | 1,141824643 | -0,033204645 | 0,048585815 | 0,048163584 | 0,001097012 | 0,009474814 | -0,006250311 | -2,65649E-06 | 1,68389E-05 |
| 167 | -1,195527441 | -1,050008583 | 0,983883152 | 0,233722083 | -0,000577577 | -0,0164596 | -0,035687048 | -1,00899E-05 | -9,87265E-05 |
| 168 | 1,195496728 | -1,04998761 | 0,983485772 | -0,233718362 | -0,000802971 | -0,016972707 | 0,035687273 | 6,50345E-06 | -6,01769E-05 |
| 169 | 0,887372773 | 1,055551007 | -1,44099379 | 0,21380705 | -0,000479305 | -0,016651566 | -0,03578859 | -1,01772E-05 | -8,74268E-05 |
| 170 | -0,887238057 | 1,05555812 | -1,441445586 | -0,213837899 | -0,000672152 | -0,017093592 | 0,035788745 | 6,55245E-06 | -4,85876E-05 |
| 171 | -0,88543944 | -0,336525574 | -0,032411484 | 0,032959854 | 0,002708645 | 0,038581653 | -0,006466581 | 7,14631E-06 | 0,000204011 |
| 172 | -0,885916841 | -0,337234714 | -0,031533052 | 0,03278361 | 0,002740283 | 0,039280556 | -0,006492063 | 7,11145E-06 | 0,000204236 |
| 173 | 0,782924856 | 0,320288507 | -0,032127771 | -0,063241547 | 0,001371325 | 0,032289651 | 0,006314108 | 5,41119E-06 | 0,000170978 |
| 174 | 0,782668532 | 0,321089282 | -0,032988555 | -0,063738739 | 0,001402896 | 0,032988099 | 0,006339883 | 5,38826E-06 | 0,000171239 |
| 175 | -0,478219114 | -0,029962051 | 0,053245536 | -0,046631983 | -0,000644222 | -0,008344051 | 0,006331531 | -7,06257E-07 | -5,02628E-05 |

APOYO 2

| Newton | C1 | | | C2 | | | C3 | | |
|---|---|---|---|---|---|---|---|---|---|
| Barra | L | T | V | L | T | V | L | T | V |
| 176 | -0,477361673 | -0,030438658 | 0,05365179 | -0,046799587 | -0,000653056 | -0,008448608 | 0,006357121 | -7,13936E-07 | -5,08301E-05 |
| 177 | 0,478194374 | -0,029952368 | 0,053060389 | 0,046644283 | -0,000604248 | -0,008254198 | -0,006332424 | -3,4412E-06 | -5,66251E-05 |
| 178 | 0,477337199 | -0,030428991 | 0,053466928 | 0,046811883 | -0,00061292 | -0,008358387 | -0,006358017 | -3,46078E-06 | -5,72201E-05 |
| 179 | -0,782848973 | 0,320287383 | -0,032353734 | 0,063223483 | 0,001434478 | 0,032429965 | -0,006313559 | 2,73899E-06 | 0,000164747 |
| 180 | -0,782592975 | 0,321088345 | -0,033214073 | 0,063720572 | 0,001466693 | 0,033129837 | -0,006339334 | 2,70375E-06 | 0,000164979 |
| 181 | 0,885510375 | -0,336545968 | -0,032269581 | -0,032977503 | 0,002695147 | 0,038549782 | 0,006467131 | 1,00218E-05 | 0,000210674 |
| 182 | 0,88598733 | -0,337254899 | -0,031391311 | -0,032801338 | 0,00272713 | 0,039249424 | 0,006492611 | 9,99856E-06 | 0,000210925 |
| 183 | -1,135264401 | 0,037648567 | -0,052980912 | -0,04672359 | -0,001574431 | -0,011716895 | 0,006335912 | -3,65656E-06 | -9,20262E-05 |
| 184 | -1,135899792 | 0,038089681 | -0,053713424 | -0,046876515 | -0,001598213 | -0,011874046 | 0,006361575 | -3,63531E-06 | -9,26216E-05 |
| 185 | 1,134982141 | 0,037658464 | -0,053165622 | 0,046788301 | -0,001533956 | -0,011625947 | -0,006336696 | -6,39613E-06 | -9,83995E-05 |
| 186 | 1,135619333 | 0,038099572 | -0,05389781 | 0,046942043 | -0,0015576 | -0,011782781 | -0,006362362 | -6,38688E-06 | -9,90227E-05 |
| 187 | -1,287154898 | -1,297950581 | 0,88719441 | 0,23552988 | 0,018434436 | 0,445606449 | -0,062078024 | -1,05331E-05 | 0,000652429 |
| 188 | 1,287233264 | -1,297973271 | 0,887196992 | -0,235598714 | 0,018397521 | 0,445528566 | 0,062074408 | 1,88065E-05 | 0,000719636 |
| 189 | 1,308249357 | 1,297344086 | -1,264910912 | -0,11974457 | 0,008233806 | -0,840741639 | -0,060498435 | -6,9416E-06 | 0,000452353 |
| 190 | -1,308192705 | 1,29735416 | -1,264926882 | 0,120362267 | 0,008342818 | -0,840500261 | 0,0604952 | 2,06124E-05 | 0,000515389 |
| 191 | -0,908443273 | -0,32869613 | -0,045706364 | -0,458046955 | -0,042594538 | 0,719414015 | -0,016466346 | -4,82801E-05 | -0,001964692 |
| 192 | -0,90839059 | -0,331485639 | -0,043468491 | -0,458350819 | -0,043063919 | 0,718441393 | -0,016585812 | -4,86253E-05 | -0,001984676 |
| 193 | 0,282520435 | 0,330931837 | -0,042728931 | 0,16828994 | -0,037205567 | -0,795497651 | 0,01865358 | -2,59428E-05 | -0,001805741 |
| 194 | 0,282528088 | 0,333697439 | -0,045097558 | 0,167739566 | -0,037696549 | -0,799223116 | 0,018796476 | -2,62213E-05 | -0,001826018 |
| 195 | -0,418547175 | -0,316238026 | 0,21109813 | -0,011934503 | 0,010334625 | 0,118418618 | 0,002960969 | 2,85963E-05 | 0,000801489 |
| 196 | -0,415792993 | -0,316211517 | 0,211131297 | -0,012438892 | 0,010396302 | 0,118449825 | 0,003093883 | 2,89041E-05 | 0,000808179 |
| 197 | 0,418397749 | -0,31626481 | 0,210915503 | 0,011883134 | 0,010345521 | 0,118457758 | -0,002953852 | 2,79178E-05 | 0,000799605 |
| 198 | 0,415641592 | -0,316238251 | 0,210948665 | 0,012387171 | 0,010407276 | 0,118489132 | -0,003086679 | 2,81628E-05 | 0,000806152 |
| 199 | -0,282491705 | 0,330934081 | -0,042825235 | -0,168132731 | -0,037616298 | -0,796429734 | -0,01865518 | -3,57852E-05 | -0,001827338 |
| 200 | -0,282499008 | 0,333699297 | -0,045193602 | -0,167580687 | -0,038109142 | -0,800159273 | -0,018798082 | -3,61377E-05 | -0,001847784 |
| 201 | 0,908473324 | -0,328701737 | -0,045594739 | 0,458205419 | -0,042217376 | 0,720273285 | 0,016464713 | -4,09535E-05 | -0,00194881 |
| 202 | 0,908421038 | -0,331491658 | -0,043356634 | 0,458509484 | -0,042688465 | 0,719296939 | 0,016584172 | -4,12509E-05 | -0,001968683 |
| 203 | -1,083161744 | 0,314941618 | -0,308828081 | -0,274869603 | 0,028547247 | -0,200981243 | 0,003188998 | 3,09046E-05 | 0,001187207 |
| 204 | -1,085963097 | 0,314927056 | -0,308894297 | -0,274619614 | 0,02884238 | -0,199572329 | 0,00331853 | 3,11723E-05 | 0,001198216 |
| 205 | 1,083046635 | 0,314989515 | -0,309070996 | 0,27376783 | 0,028915555 | -0,200161033 | -0,003182429 | 2,99406E-05 | 0,00118443 |
| 206 | 1,085845636 | 0,314974933 | -0,309137178 | 0,273503883 | 0,029210455 | -0,198752636 | -0,003311877 | 3,01494E-05 | 0,001195304 |
| 207 | 0,268425014 | 0,004753898 | 0,056660413 | -0,271572669 | 0,027093609 | 0,572748188 | -0,000157549 | 3,8259E-07 | 0,000751233 |
| 208 | 6,1131E-05 | 0,263667683 | -0,200450095 | 1,55064E-05 | -0,007130386 | -0,082142831 | -2,26403E-06 | -1,38504E-05 | -0,00048701 |
| 209 | -0,268498108 | 0,004848488 | 0,056614007 | 0,271469331 | 0,027501342 | 0,573639139 | 0,000158441 | 4,82394E-07 | 0,000751184 |
| 210 | 0,000139082 | -0,268140097 | 0,275800944 | 0,000372192 | -0,019736884 | -0,126425553 | -2,35793E-06 | -3,44342E-06 | -0,000634164 |
| 211 | 0,219695216 | 1,09374E-05 | 2,14493E-05 | 0,135119339 | 4,95975E-05 | 0,000103775 | -0,010322717 | -2,90435E-06 | -6,35128E-06 |
| 212 | 0,219578579 | 0,000104208 | -4,13644E-05 | 0,135126483 | 4,84293E-05 | 7,1362E-05 | -0,010326647 | -2,90494E-06 | -6,38646E-06 |
| 213 | -0,219695213 | -8,57249E-05 | 2,89356E-05 | -0,135119341 | -4,85969E-05 | -7,76221E-05 | 0,010322717 | 2,9084E-06 | 6,37728E-06 |
| 214 | -0,219578588 | 7,55161E-06 | -3,38786E-05 | -0,135126481 | -4,976E-05 | -0,000110026 | 0,010326648 | 2,90959E-06 | 6,34623E-06 |
| 215 | 1,21206E-08 | 2,56282E-05 | -2,12923E-05 | 2,26868E-09 | -9,96173E-07 | -7,23568E-06 | -4,55429E-10 | -2,50935E-09 | -7,84274E-08 |
| 216 | 0,000302323 | -0,000256627 | 0,000175167 | -1,85184E-05 | 3,60591E-06 | 8,82133E-05 | 1,01868E-05 | 2,96671E-09 | 1,3669E-07 |
| 217 | -0,000302306 | -0,000256643 | 0,000175168 | 1,8505E-05 | 3,59264E-06 | 8,81907E-05 | -1,01876E-05 | -1,65211E-09 | 1,25987E-07 |
| 218 | -0,202513833 | -2,17782E-05 | -1,19378E-05 | -0,12458342 | -4,36512E-05 | -8,93713E-05 | 0,009519178 | 2,68683E-06 | 6,0687E-06 |
| 219 | -0,200628807 | 0,000113114 | -0,000102765 | -0,123445346 | -3,34712E-05 | -0,000122014 | 0,009431656 | 2,71474E-06 | 7,19769E-06 |

APOYO 2

| Newton | C1 | | | C2 | | | C3 | | |
|---|---|---|---|---|---|---|---|---|---|
| Barra | L | T | V | L | T | V | L | T | V |
| 220 | -0,001035049 | 2,57372E-05 | -1,75051E-05 | -0,000624846 | 1,6589E-06 | -6,86695E-06 | 4,80573E-05 | 2,36833E-08 | 2,58006E-07 |
| 221 | 0,002591198 | 0,000223813 | -0,000150768 | 0,001564444 | 1,67815E-05 | -5,44057E-05 | -0,00012031 | 5,33647E-08 | 1,88958E-06 |
| 222 | 0,200628336 | -0,000146509 | 0,000125291 | 0,123445041 | 3,09686E-05 | 0,00013013 | -0,009431634 | -2,73202E-06 | -7,49225E-06 |
| 223 | 0,2003773 | -0,000140267 | 0,000121045 | 0,123293494 | 3,1371E-05 | 0,000128465 | -0,009419978 | -2,72628E-06 | -7,42968E-06 |
| 224 | 0,202340488 | -1,55975E-05 | 4,2223E-05 | -0,742560673 | -0,000436352 | 1,295059527 | -0,009540428 | -2,48335E-06 | -5,0818E-06 |
| 225 | 0,202424537 | -0,000108609 | 0,000132239 | -0,742509781 | -0,000436076 | 1,294968512 | -0,0095443 | -2,4846E-06 | -5,09364E-06 |
| 226 | -0,202340481 | 9,01771E-05 | -0,000114422 | 0,742560704 | 0,000435693 | 1,296998456 | 0,009540428 | 2,46298E-06 | 5,01451E-06 |
| 227 | -0,202424547 | -2,8423E-06 | -2,43943E-05 | 0,742509727 | 0,000435907 | 1,296907303 | 0,0095443 | 2,46344E-06 | 5,00669E-06 |
| 228 | 2,64716E-08 | -2,6474E-05 | 2,84929E-05 | 7,50726E-08 | -3,53296E-06 | 0,000203097 | -4,6947E-10 | -5,20394E-10 | -1,0957E-07 |
| 229 | -0,000217875 | 0,000256447 | -0,000249854 | -0,000131959 | 1,33446E-06 | 0,00011812 | 1,00368E-05 | 3,54643E-09 | 9,42403E-08 |
| 230 | 0,00021789 | 0,000256467 | -0,000249883 | 0,000132091 | 1,49587E-06 | 0,000118479 | -1,00375E-05 | -8,98908E-10 | 8,38146E-08 |
| 231 | -0,186574644 | 2,60446E-05 | -5,17832E-05 | -1,375566136 | -0,515096653 | -1,195042763 | 0,008797935 | 2,29928E-06 | 5,03677E-06 |
| 232 | -0,184706628 | -0,0001085 | 6,9372E-05 | -1,362715881 | -0,516602993 | -1,198421016 | 0,008717104 | 2,32858E-06 | 7,03529E-06 |
| 233 | -0,001025711 | -2,56435E-05 | 2,29032E-05 | -0,007055999 | 0,000728359 | 0,001712009 | 4,43833E-05 | 2,06255E-08 | 4,1621E-07 |
| 234 | 0,002567814 | -0,000223225 | 0,000200938 | 0,017664215 | -0,00210863 | -0,004698801 | -0,000111112 | 5,43964E-08 | 3,32935E-06 |
| 235 | 0,184706161 | 0,000141801 | -9,92665E-05 | 1,362712686 | -0,514121318 | -1,19288696 | -0,008717084 | -2,32073E-06 | -7,47066E-06 |
| 236 | 0,184457389 | 0,000135581 | -9,37117E-05 | 1,361001355 | -0,513944665 | -1,192471737 | -0,00870632 | -2,31573E-06 | -7,36971E-06 |
| 237 | -1,837770967 | -1,903170888 | 0,98751294 | -0,271335285 | -0,201383585 | 1,003077472 | -0,010149502 | -8,98534E-05 | -0,008668656 |
| 238 | 1,837800362 | -1,903181877 | 0,987685387 | 0,27132021 | -0,20119156 | 1,003515087 | 0,010149669 | -0,000121065 | -0,008740543 |
| 239 | 1,967321306 | 1,903243293 | -1,471691576 | 0,102789878 | 0,211826188 | -1,459131107 | -0,022666455 | -9,63688E-05 | -0,006952212 |
| 240 | -1,967290599 | 1,903226663 | -1,471514353 | -0,102556207 | 0,211982423 | -1,45877488 | 0,022664865 | -0,000112676 | -0,006990081 |
| 241 | -0,905956724 | -0,326313767 | -0,007520752 | -0,8867949 | -0,340429176 | -0,040574689 | 0,03531681 | 0,000458322 | 0,017421848 |
| 242 | -0,905554809 | -0,327078623 | -0,006966104 | -0,886221925 | -0,340294775 | -0,039447199 | 0,035256579 | 0,000460304 | 0,017513141 |
| 243 | 0,804890729 | 0,326121687 | -0,005142353 | 0,798366458 | 0,313050909 | -0,046576469 | -0,054498188 | 0,000313246 | 0,016342082 |
| 244 | 0,805240571 | 0,32688719 | -0,005576355 | 0,799007291 | 0,313351504 | -0,046438765 | -0,054545225 | 0,000315219 | 0,016434049 |
| 245 | -0,456922647 | -0,049510322 | 0,020903566 | -0,466947804 | -0,008775864 | 0,031362615 | -0,044937652 | -0,000212529 | -0,003256104 |
| 246 | -0,456183326 | -0,049119842 | 0,020745457 | -0,466838639 | -0,008736259 | 0,031063021 | -0,04493359 | -0,000213487 | -0,003269342 |
| 247 | 0,456868025 | -0,049511853 | 0,020921943 | 0,46693867 | -0,008753861 | 0,031412393 | 0,044940998 | -0,000167635 | -0,003153247 |
| 248 | 0,456129585 | -0,049121369 | 0,020763764 | 0,466829661 | -0,008714333 | 0,031112623 | 0,044936899 | -0,00016858 | -0,003166457 |
| 249 | -0,804881261 | 0,326115751 | -0,005119706 | -0,798333243 | 0,313042345 | -0,046596198 | 0,054494576 | 0,000369323 | 0,016470466 |
| 250 | -0,805231217 | 0,326881361 | -0,005553855 | -0,798974411 | 0,313343313 | -0,046457699 | 0,054541602 | 0,00037137 | 0,0165626 |
| 251 | 0,905965801 | -0,32631661 | -0,00753599 | 0,886827239 | -0,340476148 | -0,040681204 | -0,035320274 | 0,000425161 | 0,017345769 |
| 252 | 0,905563771 | -0,327081371 | -0,006981348 | 0,886253829 | -0,340341233 | -0,0395526 | -0,035260055 | 0,000427197 | 0,017437184 |
| 253 | -1,109358708 | 0,049618431 | -0,032641097 | -1,121668268 | 0,01973877 | -0,012403529 | -0,044972483 | -0,000294355 | -0,006666954 |
| 254 | -1,110149219 | 0,049227187 | -0,032365691 | -1,121706367 | 0,019543689 | -0,012421018 | -0,044963381 | -0,000295664 | -0,00669896 |
| 255 | 1,109301849 | 0,049616979 | -0,032622743 | 1,121273751 | 0,019761023 | -0,012353245 | 0,044978437 | -0,00024927 | -0,006563662 |
| 256 | 1,110093246 | 0,049225742 | -0,032347408 | 1,121318211 | 0,019565879 | -0,012370878 | 0,044969314 | -0,000250573 | -0,006595652 |
| 257 | 0,28168515 | -0,000500393 | 0,027923988 | -0,459310518 | -0,183967566 | -0,459761828 | 0,004991559 | -0,000136682 | -0,008097261 |
| 258 | -0,00037288 | 0,275330523 | -0,18587289 | -6,18311E-05 | 0,019996498 | -0,068389152 | 1,70331E-05 | 0,000107614 | 0,002421903 |
| 259 | -0,281594318 | -0,000580823 | 0,027985797 | 0,459618687 | -0,184344649 | -0,46058462 | -0,004993765 | -0,00014232 | -0,008109863 |
| 260 | -0,000377609 | -0,274545155 | 0,246703463 | -0,002695523 | 0,109936103 | 0,492741849 | 1,59274E-05 | 0,000101277 | 0,004175443 |
| 261 | 0,024351219 | -0,000128145 | 0,015407629 | -0,453358319 | -0,031512907 | -0,065502535 | -0,055701275 | -3,50985E-05 | -0,001330305 |
| 262 | 0,024156741 | 6,16788E-05 | 0,015258297 | -0,453040138 | -0,03154409 | -0,065696557 | -0,055704722 | -3,50983E-05 | -0,001330915 |
| 263 | -0,02452577 | -0,00013999 | 0,015631784 | 0,452709344 | -0,031532433 | -0,06554606 | 0,055709412 | 1,65447E-05 | -0,001211883 |

APOYO 2

| Newton | C1 | | | C2 | | | C3 | | |
|---|---|---|---|---|---|---|---|---|---|
| Barra | L | T | V | L | T | V | L | T | V |
| 264 | -0,024331289 | 4,98901E-05 | 0,01548241 | 0,452392981 | -0,031563355 | -0,065739514 | 0,05571286 | 1,65488E-05 | -0,001212484 |
| 265 | -2,429785589 | -2,397994086 | 1,006254464 | -0,817012046 | -0,659363526 | 0,995302193 | 0,093658221 | 0,000445537 | 0,013495156 |
| 266 | 2,429766778 | -2,39800459 | 1,006382307 | 0,817024461 | -0,659256383 | 0,99554604 | -0,093659604 | 0,000315182 | 0,013195942 |
| 267 | 2,368150468 | 2,398010921 | -1,521006581 | 0,522465376 | 0,651966003 | -1,528533925 | 0,110891725 | 0,00035527 | 0,011670543 |
| 268 | -2,368169444 | 2,398001879 | -1,520881388 | -0,522625217 | 0,652095739 | -1,528235709 | -0,11088037 | 0,000201479 | 0,011317858 |
| 269 | -0,810263205 | -0,32973288 | 0,00563836 | -0,812383087 | -0,320554001 | 0,029795018 | 0,05926322 | -0,001194144 | -0,028134265 |
| 270 | -0,80992271 | -0,330696841 | 0,006147723 | -0,812423483 | -0,320927747 | 0,030018834 | 0,059467566 | -0,001202417 | -0,02842722 |
| 271 | 0,916887799 | 0,329749559 | 0,005843151 | 0,88902327 | 0,339769184 | 0,032045627 | -0,032847901 | -0,000782624 | -0,023800065 |
| 272 | 0,917253067 | 0,330713825 | 0,005336481 | 0,889101233 | 0,33992271 | 0,031254856 | -0,03272579 | -0,000790996 | -0,024093895 |
| 273 | -0,459567622 | 0,051894674 | -0,020720509 | -0,472632107 | 0,012698874 | -0,028498669 | -0,046033075 | 0,000255491 | 0,004246644 |
| 274 | -0,458590963 | 0,052221162 | -0,020756726 | -0,472303679 | 0,013002768 | -0,02845932 | -0,046070725 | 0,000258238 | 0,004281257 |
| 275 | 0,45960262 | 0,051893163 | -0,020701984 | 0,472637638 | 0,012720652 | -0,028449532 | 0,046029905 | 0,00030081 | 0,00435047 |
| 276 | 0,458625499 | 0,052219656 | -0,020738252 | 0,472309103 | 0,013024503 | -0,028410281 | 0,046067565 | 0,00030361 | 0,004385203 |
| 277 | -0,91689384 | 0,329749098 | 0,00585942 | -0,88904798 | 0,339809003 | 0,032138203 | 0,032853277 | -0,000754019 | -0,023734354 |
| 278 | -0,917259035 | 0,330713292 | 0,005352748 | -0,889125748 | 0,339962252 | 0,031346868 | 0,032731215 | -0,00076254 | -0,024028522 |
| 279 | 0,81025727 | -0,329730192 | 0,005618016 | 0,812358312 | -0,320558968 | 0,029786355 | -0,059258421 | -0,001259104 | -0,02828292 |
| 280 | 0,809916849 | -0,330694234 | 0,006127479 | 0,812398972 | -0,320932896 | 0,030009824 | -0,059462723 | -0,00126764 | -0,028576475 |
| 281 | -1,119230076 | -0,051921922 | 0,031920436 | -1,132754861 | -0,020721109 | 0,017553882 | -0,04581884 | 0,000688716 | 0,009762672 |
| 282 | -1,12018242 | -0,052248226 | 0,031957467 | -1,132966558 | -0,020943379 | 0,017742311 | -0,045863477 | 0,000694155 | 0,009857733 |
| 283 | 1,119265386 | -0,051923578 | 0,031939015 | 1,133026328 | -0,020699412 | 0,017603039 | 0,045796548 | 0,000733108 | 0,009864383 |
| 284 | 1,120217277 | -0,052249878 | 0,031975996 | 1,133234809 | -0,020921734 | 0,017791349 | 0,045841075 | 0,000738609 | 0,009959585 |
| 285 | -2,878498537 | -2,753424163 | 0,985411397 | -1,25934577 | -1,057577171 | 0,992581138 | 0,230048668 | -0,001023762 | -0,020451507 |
| 286 | 2,878505762 | -2,753431267 | 0,985489754 | 1,259331686 | -1,057509023 | 0,992742196 | -0,230045412 | -0,001302109 | -0,02108947 |
| 287 | 2,625558096 | 2,753409132 | -1,469451677 | 0,840951741 | 1,06233703 | -1,464914224 | 0,207513289 | -0,000722166 | -0,020987595 |
| 288 | -2,625550325 | 2,753404852 | -1,469372934 | -0,840850006 | 1,062392021 | -1,464790381 | -0,207559054 | -0,000960835 | -0,021535053 |
| 289 | -0,91607575 | -0,327754151 | -0,005944785 | -0,876205383 | -0,334123874 | -0,022625234 | 0,025822364 | 0,003713451 | 0,052392885 |
| 290 | -0,916808921 | -0,328861286 | -0,005513424 | -0,876434753 | -0,334514677 | -0,02210261 | 0,025599613 | 0,003739179 | 0,053013937 |
| 291 | 0,789003754 | 0,327779502 | -0,006182642 | 0,803204923 | 0,320946975 | -0,023407183 | -0,060627098 | 0,001812202 | 0,034327954 |
| 292 | 0,788372281 | 0,328886384 | -0,006738225 | 0,803143809 | 0,321408504 | -0,023872545 | -0,06102579 | 0,001837955 | 0,034948571 |
| 293 | -0,452784783 | -0,061661881 | 0,023482486 | -0,465637919 | -0,01880169 | 0,02918698 | -0,042753775 | -0,000464571 | -0,006454336 |
| 294 | -0,451627368 | -0,06230178 | 0,023726618 | -0,465131546 | -0,019031065 | 0,029405347 | -0,042846256 | -0,000469776 | -0,006518354 |
| 295 | 0,452770351 | -0,061663726 | 0,023500963 | 0,465641587 | -0,01878009 | 0,029236218 | 0,042757799 | -0,000419676 | -0,006351456 |
| 296 | 0,451613166 | -0,062303622 | 0,023745064 | 0,465135327 | -0,019009492 | 0,02945452 | 0,0428503 | -0,000424769 | -0,006415216 |
| 297 | -0,789000473 | 0,327780248 | -0,006164024 | -0,803187106 | 0,320958274 | -0,023387529 | 0,060617652 | 0,001883375 | 0,034490697 |
| 298 | -0,788369046 | 0,328887214 | -0,006719678 | -0,803126073 | 0,321419877 | -0,023852829 | 0,06101624 | 0,001909675 | 0,035112565 |
| 299 | 0,916078984 | -0,327750298 | -0,005962908 | 0,876223563 | -0,334155302 | -0,022702251 | -0,025829795 | 0,003704981 | 0,052373168 |
| 300 | 0,916812108 | -0,328857353 | -0,005531554 | 0,876452805 | -0,334545983 | -0,022179452 | -0,025607128 | 0,003731049 | 0,052994995 |
| 301 | -1,107542535 | 0,061667659 | -0,035575285 | -1,120052003 | 0,02455137 | -0,025480911 | -0,043674126 | -0,002080184 | -0,016480526 |
| 302 | -1,10859803 | 0,062307529 | -0,035940265 | -1,120389533 | 0,024753465 | -0,025895735 | -0,043757272 | -0,002097414 | -0,016675023 |
| 303 | 1,107527278 | 0,061666403 | -0,035557035 | 1,119877418 | 0,024573229 | -0,025431925 | 0,043751959 | -0,002031454 | -0,016368897 |
| 304 | 1,108582988 | 0,062306274 | -0,035922047 | 1,120216055 | 0,024775302 | -0,025846799 | 0,043835692 | -0,002048587 | -0,016563174 |
| 305 | -2,969922789 | -2,938104285 | 0,92756239 | -1,444695797 | -1,369815456 | 0,926781294 | 0,223411324 | 0,021059701 | 0,456703136 |
| 306 | 2,970003444 | -2,938118408 | 0,927595843 | 1,444771418 | -1,369810961 | 0,926809229 | -0,223464262 | 0,020960052 | 0,456475595 |
| 307 | 2,925244183 | 2,938109096 | -1,346924274 | 1,311446058 | 1,369281483 | -1,347397983 | -0,152638809 | 0,009702699 | -0,895687857 |

APOYO 2

| Newton | C1 | | | C2 | | | C3 | | |
|---|---|---|---|---|---|---|---|---|---|
| Barra | L | T | V | L | T | V | L | T | V |
| 308 | -2,925175961 | 2,938119591 | -1,34690073 | -1,311377241 | 1,369298803 | -1,347375686 | 0,153255851 | 0,009760825 | -0,89555555 |
| 309 | -1,036926913 | -0,326910193 | -0,031675939 | -0,797227446 | -0,328340972 | -0,029575558 | -0,492043248 | -0,044421147 | 0,727022712 |
| 310 | -1,03702755 | -0,330435918 | -0,030335793 | -0,797380773 | -0,32999216 | -0,028255164 | -0,492413136 | -0,044877634 | 0,725565988 |
| 311 | 0,212506295 | 0,326906169 | -0,02841149 | 0,414172301 | 0,330024825 | -0,026196124 | 0,168290091 | -0,036636103 | -0,764676365 |
| 312 | 0,212459356 | 0,330432228 | -0,029800822 | 0,414178964 | 0,33166072 | -0,02760484 | 0,167836013 | -0,037106149 | -0,767755872 |
| 313 | -0,399089778 | -0,431899988 | 0,134226559 | -0,414623515 | -0,203731941 | 0,133296095 | -0,018191221 | 0,006263386 | 0,080627646 |
| 314 | -0,395526582 | -0,432300483 | 0,134344493 | -0,412890598 | -0,203910354 | 0,133421141 | -0,018459515 | 0,006298697 | 0,080773449 |
| 315 | 0,39893623 | -0,431928586 | 0,134254436 | 0,414479491 | -0,203720937 | 0,133358225 | 0,018154793 | 0,006281693 | 0,080671573 |
| 316 | 0,395371196 | -0,432329065 | 0,13437233 | 0,412744892 | -0,203899355 | 0,133483237 | 0,018422774 | 0,006317123 | 0,080817649 |
| 317 | -0,21247584 | 0,326903762 | -0,028390117 | -0,414143475 | 0,330040563 | -0,02615527 | -0,168171062 | -0,037035553 | -0,765591938 |
| 318 | -0,212428678 | 0,330429556 | -0,029779377 | -0,414149884 | 0,331676314 | -0,027563937 | -0,16771575 | -0,037507299 | -0,76867532 |
| 319 | 1,036957397 | -0,326909916 | -0,031696757 | 0,797255738 | -0,328354997 | -0,029608872 | 0,492157979 | -0,044039483 | 0,727897714 |
| 320 | 1,037058273 | -0,33043591 | -0,03035647 | 0,797409326 | -0,330006304 | -0,028288369 | 0,492528297 | -0,04449772 | 0,726437001 |
| 321 | -1,068705477 | 0,431902049 | -0,197136806 | -1,075693134 | 0,20283168 | -0,198616971 | -0,283712641 | 0,027699662 | -0,134638808 |
| 322 | -1,072216692 | 0,432302532 | -0,197336981 | -1,077267905 | 0,203017103 | -0,198805243 | -0,283535244 | 0,027983505 | -0,133489766 |
| 323 | 1,068570932 | 0,431927441 | -0,197130265 | 1,075559798 | 0,202866927 | -0,19857692 | 0,282654412 | 0,028069726 | -0,133792606 |
| 324 | 1,072080534 | 0,432327912 | -0,197330469 | 1,077132556 | 0,203052329 | -0,198765219 | 0,282464718 | 0,028353499 | -0,132643722 |
| 325 | 0,342583191 | -4,27938E-05 | 0,027345447 | 0,17073742 | 0,003232939 | 0,035612972 | -0,258762893 | 0,025298185 | 0,541466133 |
| 326 | 5,30428E-05 | 0,376404697 | -0,12065865 | 4,51489E-05 | 0,169560241 | -0,123530302 | 1,18619E-05 | -0,004257056 | -0,053233326 |
| 327 | -0,342607064 | 1,82436E-05 | 0,027320751 | -0,170769465 | 0,003265636 | 0,03560122 | 0,258684563 | 0,025688126 | 0,542355493 |
| 328 | 4,72185E-05 | -0,376402677 | 0,177700364 | 9,19948E-05 | -0,172435485 | 0,172711503 | 0,000314234 | -0,016968466 | -0,167948198 |
| 329 | 0,229161013 | -9,32681E-06 | 1,24936E-06 | 0,212208449 | -8,05896E-06 | -5,62959E-06 | 0,121201474 | 4,66514E-05 | 0,000110849 |
| 330 | 0,229014593 | 0,000107101 | -3,54232E-05 | 0,212129061 | 4,64984E-05 | -4,21321E-05 | 0,121201275 | 4,589E-05 | 9,25073E-05 |
| 331 | -0,22916101 | -8,42363E-05 | 2,8231E-05 | -0,212208446 | -3,5795E-05 | 3,49606E-05 | -0,121201474 | -4,59816E-05 | -9,59146E-05 |
| 332 | -0,229014598 | 3,21972E-05 | -8,44232E-06 | -0,212129066 | 1,87647E-05 | -1,54402E-06 | -0,121201274 | -4,67398E-05 | -0,00011425 |
| 333 | 1,03101E-08 | 4,03224E-05 | -1,30707E-05 | 8,81124E-09 | 1,76929E-05 | -1,36146E-05 | 1,94419E-09 | -5,80493E-07 | -5,28435E-06 |
| 334 | 0,000379525 | -0,000325176 | 0,000102639 | 0,000205773 | -0,000151678 | 0,000102513 | 5,1413E-07 | 2,31011E-06 | 5,06084E-05 |
| 335 | -0,000379515 | -0,00032519 | 0,000102641 | -0,000205764 | -0,000151684 | 0,000102519 | -5,19779E-07 | 2,30178E-06 | 5,05904E-05 |
| 336 | -0,211230184 | -1,78124E-05 | 6,69575E-06 | -0,195623646 | -5,17259E-06 | 1,29971E-05 | -0,111747544 | -4,18027E-05 | -9,4545E-05 |
| 337 | -0,209270757 | 8,03756E-05 | -2,70364E-05 | -0,193793384 | 3,94631E-05 | -2,06652E-05 | -0,110723734 | -3,58981E-05 | -8,83437E-05 |
| 338 | -0,001075888 | 1,87197E-05 | -6,42846E-06 | -0,001004964 | 8,52819E-06 | -6,37417E-06 | -0,000562111 | 8,50324E-07 | 5,51051E-07 |
| 339 | 0,002693476 | 0,000162907 | -5,59653E-05 | 0,002515922 | 7,40637E-05 | -5,58336E-05 | 0,001407371 | 9,69062E-06 | 1,00461E-05 |
| 340 | 0,209270262 | -0,000104399 | 3,52897E-05 | 0,193792922 | -5,03736E-05 | 2,89008E-05 | 0,110723461 | 3,44622E-05 | 8,67594E-05 |
| 341 | 0,209009321 | -9,98583E-05 | 3,37306E-05 | 0,193549182 | -4,83052E-05 | 2,73549E-05 | 0,110587129 | 3,46685E-05 | 8,6893E-05 |
| 342 | 0,186477659 | 9,50575E-06 | -5,31143E-06 | 0,21419143 | 2,15698E-06 | -1,12246E-05 | -0,758921867 | -0,000440978 | 1,295031881 |
| 343 | 0,186588475 | -0,000106923 | 4,78224E-05 | 0,214230527 | -5,22427E-05 | 4,21635E-05 | -0,758867002 | -0,000440598 | 1,294915284 |
| 344 | -0,186477656 | 8,40575E-05 | -3,73688E-05 | -0,214191425 | 4,15592E-05 | -3,16744E-05 | 0,758921888 | 0,000440069 | 1,297045854 |
| 345 | -0,18658848 | -3,23764E-05 | 1,57687E-05 | -0,214230535 | -1,28429E-05 | 2,17164E-05 | 0,758866966 | 0,00044038 | 1,2969291 |
| 346 | 9,15969E-09 | -4,0322E-05 | 1,94453E-05 | 1,75194E-08 | -1,82348E-05 | 1,85094E-05 | 6,17877E-08 | -3,06776E-06 | 0,000201497 |
| 347 | -0,000287249 | 0,000325176 | -0,000149005 | -0,000101354 | 0,000151584 | -0,000149121 | -0,000142249 | 7,93073E-07 | 0,000185359 |
| 348 | 0,000287258 | 0,000325191 | -0,000149014 | 0,000101364 | 0,00015159 | -0,000149128 | 0,000142326 | 9,71584E-07 | 0,000185767 |
| 349 | -0,171958136 | 1,76472E-05 | -7,29966E-06 | -0,197484538 | 1,05735E-05 | -1,92019E-06 | -1,360480794 | -0,515092603 | -1,195020662 |
| 350 | -0,170217425 | -8,05407E-05 | 3,66552E-05 | -0,195521361 | -3,40089E-05 | 4,21093E-05 | -1,347759538 | -0,516600044 | -1,198475289 |
| 351 | -0,000955793 | -1,87206E-05 | 8,38336E-06 | -0,001077946 | -8,48479E-06 | 8,43079E-06 | -0,006985066 | 0,000728182 | 0,001697517 |

APOYO 2

| Newton | C1 | | | C2 | | | C3 | | |
|---|---|---|---|---|---|---|---|---|---|
| Barra | L | T | V | L | T | V | L | T | V |
| 352 | 0,002392824 | -0,000162908 | 7,29284E-05 | 0,00269863 | -7,39627E-05 | 7,30651E-05 | 0,01748693 | -0,002110446 | -0,004825491 |
| 353 | 0,170216985 | 0,000104564 | -4,74258E-05 | 0,195520866 | 4,49064E-05 | -5,28944E-05 | 1,347756339 | -0,514123838 | -1,192813013 |
| 354 | 0,169985171 | 0,000100024 | -4,53925E-05 | 0,195259425 | 4,28486E-05 | -5,08496E-05 | 1,346062212 | -0,513947228 | -1,192401305 |
| 355 | -0,310072401 | -2,58443E-05 | 0,016557873 | -0,13842387 | -0,000153264 | 0,016225288 | 0,440135051 | -0,178696396 | -0,456311377 |
| 356 | -0,000307345 | -0,200375168 | 0,089707933 | -0,000350574 | -0,090938418 | 0,089951945 | -0,002388375 | 0,107778007 | 0,337072367 |
| 357 | -0,000350899 | 0,200372602 | -0,068830138 | -0,000324481 | 0,09113876 | -0,068574483 | -5,68662E-05 | 0,011289765 | 0,010913616 |
| 358 | 0,310150123 | 3,06434E-05 | 0,016535537 | 0,138504723 | -0,000127871 | 0,016202255 | -0,439847778 | -0,17832838 | -0,455472016 |
| 359 | -3,744059622 | -3,638082551 | 0,978728673 | -2,089807122 | -1,946245134 | 0,978916275 | -0,488530791 | -0,244923058 | 1,004780944 |
| 360 | -3,217491798 | 3,638078041 | -1,474323819 | -1,516774609 | 1,946364168 | -1,474205453 | 0,292936759 | 0,262815512 | -1,450682359 |
| 361 | 3,744105459 | -3,638078073 | 0,97872985 | 2,089848396 | -1,946256392 | 0,978883423 | 0,488516012 | -0,244760032 | 1,005154347 |
| 362 | 3,217531191 | 3,638082288 | -1,474328474 | 1,516822022 | 1,946379678 | -1,47417533 | -0,292607163 | 0,262708832 | -1,450927251 |
| 363 | 0,500928476 | 0,052662124 | -0,015863302 | 0,457060264 | 0,026600298 | -0,01573411 | 0,411271108 | 0,005333216 | -0,002716259 |
| 364 | 0,499756656 | 0,054488146 | -0,01619726 | 0,456337991 | 0,027751805 | -0,016068734 | 0,410983021 | 0,005523311 | -0,003826021 |
| 365 | -0,501040628 | 0,05266261 | -0,015863907 | -0,457163448 | 0,026600665 | -0,01573387 | -0,411288381 | 0,005327448 | -0,002729516 |
| 366 | -0,499862155 | 0,054488633 | -0,016197865 | -0,456435011 | 0,027752168 | -0,016068503 | -0,410999176 | 0,005517587 | -0,003839175 |
| 367 | -0,947144826 | -0,241843218 | -0,045324077 | -0,917039585 | -0,297369368 | -0,045636981 | -0,924479211 | -0,368403821 | -0,086927752 |
| 368 | -0,945679463 | -0,244462721 | -0,044336501 | -0,916085962 | -0,298754462 | -0,044650352 | -0,923288253 | -0,368205845 | -0,085033905 |
| 369 | 0,816566203 | 0,241849693 | 0,035008235 | 0,844122645 | 0,29711986 | 0,034664276 | 0,828751431 | 0,331200465 | -0,026825127 |
| 370 | 0,817572815 | 0,244469077 | 0,034205489 | 0,844650975 | 0,298504226 | 0,033860548 | 0,829668965 | 0,331700973 | -0,026713001 |
| 371 | 0,869651673 | -0,052662016 | 0,021996977 | 0,91555971 | -0,02646892 | 0,022227283 | 0,955746019 | 0,013528071 | 0,061565651 |
| 372 | 0,870155844 | -0,054488002 | 0,022640575 | 0,915601508 | -0,02762029 | 0,022872586 | 0,955318111 | 0,012182222 | 0,059829028 |
| 373 | -0,869749887 | -0,052662477 | 0,021996744 | -0,91567552 | -0,026469098 | 0,022227609 | -0,956505562 | 0,013516323 | 0,061538757 |
| 374 | -0,870248231 | -0,054488464 | 0,022640344 | -0,915710754 | -0,027620471 | 0,022872903 | -0,956032307 | 0,012170507 | 0,059802208 |
| 375 | -0,816557847 | 0,241843324 | 0,035011049 | -0,844114017 | 0,297116136 | 0,034664846 | -0,828722531 | 0,331159518 | -0,026918514 |
| 376 | -0,817564613 | 0,244462815 | 0,034208259 | -0,844642507 | 0,298500558 | 0,033861093 | -0,829640621 | 0,331660635 | -0,026804999 |
| 377 | 0,94715317 | -0,241849572 | -0,045321821 | 0,917048556 | -0,29737187 | -0,045633633 | 0,924511631 | -0,368444994 | -0,087021661 |
| 378 | 0,945687653 | -0,244468967 | -0,044334286 | 0,916094771 | -0,298756926 | -0,044647074 | 0,923320084 | -0,368246216 | -0,085125985 |
| 379 | -0,039580771 | 6,86279E-05 | 0,007123028 | -0,026062419 | 3,24996E-05 | 0,007117766 | -0,482475782 | -0,031475674 | -0,074594753 |
| 380 | -0,039366616 | -6,97161E-05 | 0,007177757 | -0,025966814 | -3,03562E-05 | 0,007172491 | -0,482780413 | -0,031442233 | -0,074481853 |
| 381 | 0,039427147 | 7,03266E-05 | 0,007103275 | 0,025905199 | 8,98652E-06 | 0,007064564 | 0,481905578 | -0,031522208 | -0,074701365 |
| 382 | 0,039213022 | -6,80563E-05 | 0,00715802 | 0,025809577 | -5,38868E-05 | 0,007119305 | 0,482208599 | -0,031489021 | -0,074589044 |
| 383 | -3,079378653 | -3,576991148 | 0,960703586 | -1,48026058 | -1,915178031 | 0,960948118 | 0,06761763 | -0,240061949 | 0,997140159 |
| 384 | -4,362787885 | -3,917164674 | 0,902786694 | -2,728919933 | -2,327176662 | 0,902826273 | -1,186939465 | -0,742378447 | 0,889848754 |
| 385 | -3,534730689 | -3,971089817 | 0,918746348 | -1,966649828 | -2,354240383 | 0,918800572 | -0,485715297 | -0,744671589 | 0,900200466 |
| 386 | -4,59981308 | -4,287376804 | 0,875797888 | -3,049313139 | -2,73439427 | 0,875770808 | -1,558778675 | -1,17920348 | 0,8810518 |
| 387 | -3,827206312 | -4,262222434 | 0,868022214 | -2,338027437 | -2,722375853 | 0,867977581 | -0,904796723 | -1,179720195 | 0,874864666 |
| 388 | -4,912106421 | -4,561451829 | 0,821518455 | -3,410894977 | -3,083055985 | 0,821555175 | -1,970713664 | -1,605538613 | 0,819585296 |
| 389 | -4,17924271 | -4,56777891 | 0,82425124 | -2,736749054 | -3,084850977 | 0,8242961 | -1,351406105 | -1,602887797 | 0,822093004 |
| 390 | -5,177310675 | -4,856901143 | 0,781881944 | -3,743506105 | -3,434892578 | 0,78187989 | -2,360083804 | -2,012689475 | 0,782274511 |
| 391 | -4,395131571 | 3,576986258 | -1,448782011 | -2,751933397 | 1,915351229 | -1,448575679 | -1,000120826 | 0,273196641 | -1,393410345 |
| 392 | -3,261625053 | 3,917166785 | -1,402672691 | -1,586776699 | 2,327187665 | -1,402688185 | 0,147604591 | 0,734920557 | -1,408330594 |
| 393 | -4,750403587 | 3,971092323 | -1,425655501 | -3,144022324 | 2,354274162 | -1,425617157 | -1,482782566 | 0,728502447 | -1,449276137 |
| 394 | -3,597357428 | 4,287376009 | -1,376038972 | -2,011086289 | 2,734368708 | -1,376075926 | -0,351428507 | 1,182630056 | -1,373234226 |
| 395 | -4,986811972 | 4,262221449 | -1,364776719 | -3,464342787 | 2,722330128 | -1,364854237 | -1,87253139 | 1,185855735 | -1,356341451 |

APOYO 2

| Newton | C1 | | | C2 | | | C3 | | |
|---|---|---|---|---|---|---|---|---|---|
| Barra | L | T | V | L | T | V | L | T | V |
| 396 | -3,960833764 | 4,561452074 | -1,322133318 | -2,428765294 | 3,083072336 | -1,32212855 | -0,840275209 | 1,604253391 | -1,323060259 |
| 397 | -5,276115081 | 4,56777923 | -1,325968006 | -3,805117443 | 3,084877787 | -1,325941575 | -2,281576569 | 1,601004902 | -1,328219755 |
| 398 | -4,211986724 | 4,856901091 | -1,280029902 | -2,752036432 | 3,434884537 | -1,280048412 | -1,240471576 | 2,013083979 | -1,279616355 |
| 399 | 3,079334224 | -3,57698646 | 0,960704401 | 1,480218527 | -1,915188709 | 0,960916357 | -0,067647368 | -0,239905782 | 0,997497823 |
| 400 | 4,36275293 | -3,917166673 | 0,902789901 | 2,728887903 | -2,327189676 | 0,902798764 | 1,18694553 | -0,742270464 | 0,890096466 |
| 401 | 3,534747251 | -3,97109184 | 0,918749396 | 1,966665638 | -2,354252632 | 0,918774888 | 0,485730619 | -0,744571499 | 0,900430083 |
| 402 | 4,599824551 | -4,287375921 | 0,875799648 | 3,049323656 | -2,734404557 | 0,875745464 | 1,558774913 | -1,179092667 | 0,881305776 |
| 403 | 3,827201088 | -4,262221551 | 0,868023802 | 2,338022399 | -2,722385447 | 0,867953863 | 0,904790319 | -1,179616699 | 0,875101869 |
| 404 | 4,912103398 | -4,561451967 | 0,82152028 | 3,410892206 | -3,083065271 | 0,821533686 | 1,970715558 | -1,605448801 | 0,819791208 |
| 405 | 4,17924397 | -4,567779055 | 0,824252909 | 2,736750291 | -3,084859601 | 0,824276171 | 1,351408366 | -1,602804924 | 0,822283007 |
| 406 | 5,177311105 | -4,856901014 | 0,781883355 | 3,743506497 | -3,434900447 | 0,781861321 | 2,360082946 | -2,012611698 | 0,782452812 |
| 407 | 4,395091885 | 3,576990711 | -1,448786469 | 2,751889482 | 1,915366395 | -1,448546695 | 0,999837704 | 0,273099448 | -1,393633504 |
| 408 | 3,261594845 | 3,91716455 | -1,40267423 | 1,586742622 | 2,327198856 | -1,402658747 | -0,147853728 | 0,734784864 | -1,408641505 |
| 409 | 4,75041853 | 3,971090077 | -1,425656868 | 3,144038394 | 2,354284564 | -1,42558955 | 1,48288492 | 0,728374436 | -1,449569436 |
| 410 | 3,597367279 | 4,287376683 | -1,37604134 | 2,011097116 | 2,734379596 | -1,376051466 | 0,351512204 | 1,18252954 | -1,373464718 |
| 411 | 4,986807205 | 4,262222133 | -1,364778919 | 3,464337832 | 2,72234033 | -1,364831401 | 1,87250029 | 1,185762591 | -1,356555041 |
| 412 | 3,960831199 | 4,561451747 | -1,322134964 | 2,428762592 | 3,083081469 | -1,322106727 | 0,8402522 | 1,604160466 | -1,323273271 |
| 413 | 5,276116256 | 4,567778907 | -1,325969495 | 3,805118587 | 3,084886257 | -1,325921313 | 2,28158353 | 1,600918894 | -1,328416907 |
| 414 | 4,211987068 | 4,856901052 | -1,280031347 | 2,752036732 | 3,434892422 | -1,280029946 | 1,240475451 | 2,013006836 | -1,279793209 |
| 415 | 0,606078154 | -0,05068749 | 0,014805831 | 0,557247037 | -0,025814996 | 0,014812958 | 0,512247848 | -0,003191754 | 0,008760252 |
| 416 | 0,603404061 | -0,049832344 | 0,014605786 | 0,555683519 | -0,025304655 | 0,014612538 | 0,511745357 | -0,002998404 | 0,008634536 |
| 417 | -0,606023989 | -0,050687531 | 0,014805737 | -0,55719678 | -0,025814416 | 0,014814368 | -0,512237936 | -0,003197608 | 0,008746835 |
| 418 | -0,603350511 | -0,049832384 | 0,014605693 | -0,555633834 | -0,025304083 | 0,014613928 | -0,511735551 | -0,003004167 | 0,008621327 |
| 419 | -0,774825644 | -0,232614379 | -0,030759278 | -0,791509352 | -0,279341833 | -0,030804725 | -0,781965258 | -0,316770081 | -0,007331192 |
| 420 | -0,775275738 | -0,233817476 | -0,03044635 | -0,791758509 | -0,280067202 | -0,030490534 | -0,782231628 | -0,317100497 | -0,007222808 |
| 421 | 0,854086989 | 0,232611021 | 0,036973679 | 0,835576123 | 0,279310723 | 0,036936893 | 0,836632191 | 0,336607749 | 0,065036696 |
| 422 | 0,853756167 | 0,233814145 | 0,036594577 | 0,835457981 | 0,280037046 | 0,036559044 | 0,83655204 | 0,336774783 | 0,064453756 |
| 423 | 0,57428379 | 0,026327519 | -0,007931438 | 0,528404947 | 0,012915825 | -0,007947094 | 0,485479403 | 0,000216903 | -0,006038581 |
| 424 | 0,572095599 | 0,025703024 | -0,007728146 | 0,527137791 | 0,012637261 | -0,007743421 | 0,485090119 | 0,000275638 | -0,005857595 |
| 425 | -0,57430245 | 0,026327525 | -0,007931573 | -0,52842232 | 0,012916342 | -0,007945891 | -0,485482559 | 0,000211431 | -0,006051128 |
| 426 | -0,572114048 | 0,02570303 | -0,007728279 | -0,527154967 | 0,012637771 | -0,007742232 | -0,485093247 | 0,000270226 | -0,005870002 |
| 427 | -0,799143057 | -0,219705748 | -0,03454068 | -0,788890565 | -0,265036156 | -0,034466952 | -0,785406782 | -0,314300552 | -0,043987997 |
| 428 | -0,798597426 | -0,220694146 | -0,034220522 | -0,788350248 | -0,265585476 | -0,034147602 | -0,784827219 | -0,314385092 | -0,0436088 |
| 429 | 0,75267608 | 0,219707087 | 0,03122769 | 0,761113554 | 0,265091966 | 0,0313011 | 0,757006622 | 0,306245454 | 0,020729859 |
| 430 | 0,752183752 | 0,220695476 | 0,030910748 | 0,760626248 | 0,265640671 | 0,030983344 | 0,756606936 | 0,306380324 | 0,020472522 |
| 431 | 0,539997762 | -0,010624916 | 0,003449131 | 0,496446344 | -0,004798864 | 0,003457624 | 0,455778021 | 0,000888224 | 0,003086379 |
| 432 | 0,538460767 | -0,010507984 | 0,003435002 | 0,495325778 | -0,004708297 | 0,003443413 | 0,455056683 | 0,000952778 | 0,003073009 |
| 433 | -0,539992559 | -0,010624923 | 0,003449017 | -0,496441483 | -0,004798376 | 0,003458779 | -0,455777416 | 0,000883091 | 0,003074613 |
| 434 | -0,538455582 | -0,010507991 | 0,003434889 | -0,495320933 | -0,004707811 | 0,003444562 | -0,455056078 | 0,000947673 | 0,003061308 |
| 435 | -0,729793675 | -0,21150766 | -0,030706013 | -0,735151278 | -0,25542562 | -0,030751714 | -0,734428369 | -0,298034654 | -0,027763953 |
| 436 | -0,729004374 | -0,212459806 | -0,030408368 | -0,734384142 | -0,255973666 | -0,03045375 | -0,733714021 | -0,29818398 | -0,027477132 |
| 437 | 0,768293945 | 0,211507231 | 0,032950119 | 0,761226403 | 0,255391591 | 0,032906128 | 0,754652078 | 0,300644902 | 0,036117289 |
| 438 | 0,76779855 | 0,212459379 | 0,032661993 | 0,760717641 | 0,255939876 | 0,032618314 | 0,754132187 | 0,300783945 | 0,035818256 |
| 439 | 0,520817987 | -0,001614228 | -0,000450292 | 0,479071195 | -0,002254563 | -0,000454741 | 0,440066874 | -0,002906565 | -0,000485274 |

APOYO 2

| Newton | C1 | | | C2 | | | C3 | | |
|---|---|---|---|---|---|---|---|---|---|
| Barra | L | T | V | L | T | V | L | T | V |
| 440 | 0,519755027 | -0,001723239 | -0,000418726 | 0,478343821 | -0,002309156 | -0,000423134 | 0,439662644 | -0,002906426 | -0,000452782 |
| 441 | -0,520818892 | -0,001614231 | -0,000450404 | -0,47907205 | -0,002254093 | -0,000453634 | -0,440066784 | -0,002911493 | -0,000496572 |
| 442 | -0,519755933 | -0,001723242 | -0,000418837 | -0,478344677 | -0,002308688 | -0,000422032 | -0,439662556 | -0,002911336 | -0,000464038 |
| 443 | -0,754398696 | -0,201038768 | -0,033071591 | -0,745655621 | -0,244675823 | -0,033051392 | -0,735047666 | -0,288630615 | -0,033686175 |
| 444 | -0,754714156 | -0,202203335 | -0,032847588 | -0,745897177 | -0,245514239 | -0,032827497 | -0,735224235 | -0,289142245 | -0,03346163 |
| 445 | 0,698466236 | 0,201038869 | 0,03021305 | 0,705536338 | 0,244691573 | 0,030234362 | 0,709013003 | 0,28800547 | 0,029532602 |
| 446 | 0,698346917 | 0,202203436 | 0,029964076 | 0,705496523 | 0,245529906 | 0,029985277 | 0,709065937 | 0,288518213 | 0,029284176 |
| 447 | 1,085138954 | 0,050687846 | -0,02125656 | 1,135962229 | 0,025828889 | -0,021219727 | 1,190956377 | -0,006028015 | -0,040244674 |
| 448 | 1,087488265 | 0,049832694 | -0,020956822 | 1,137171595 | 0,025318042 | -0,020921102 | 1,190966034 | -0,006109849 | -0,03971964 |
| 449 | -1,085091477 | 0,050687875 | -0,021256681 | -1,135909162 | 0,025829514 | -0,021218309 | -1,190587405 | -0,006033439 | -0,040257111 |
| 450 | -1,087441327 | 0,049832722 | -0,020956942 | -1,137119115 | 0,025318658 | -0,020919704 | -1,190601272 | -0,006115192 | -0,039731892 |
| 451 | -0,854091963 | 0,232614043 | 0,036972578 | -0,835581236 | 0,279311473 | 0,03693422 | -0,836650098 | 0,336634508 | 0,065097812 |
| 452 | -0,853761102 | 0,233817143 | 0,036593484 | -0,835463053 | 0,28003779 | 0,036556392 | -0,836569814 | 0,336801353 | 0,064514437 |
| 453 | 0,774820674 | -0,232611371 | -0,030760553 | 0,791504149 | -0,279339983 | -0,030804785 | 0,781946355 | -0,31675739 | -0,007302331 |
| 454 | 0,775270808 | -0,233814491 | -0,030447615 | 0,791753347 | -0,280065364 | -0,03049059 | 0,782212882 | -0,317087927 | -0,007194221 |
| 455 | 1,030205708 | -0,026327703 | 0,011507534 | 1,077942052 | -0,012934884 | 0,011468105 | 1,128504928 | 0,002881704 | 0,017903925 |
| 456 | 1,033214408 | -0,025703205 | 0,011209427 | 1,080008202 | -0,012655888 | 0,011170843 | 1,129591762 | 0,002786061 | 0,017531744 |
| 457 | -1,030222054 | -0,026327717 | 0,011507408 | -1,077959839 | -0,012934379 | 0,01146931 | -1,128632873 | 0,002876105 | 0,01789109 |
| 458 | -1,033230569 | -0,025703219 | 0,011209301 | -1,080025795 | -0,01265539 | 0,011172033 | -1,129718244 | 0,002780529 | 0,017519061 |
| 459 | -0,752673794 | 0,219705963 | 0,031228251 | -0,761111216 | 0,265091019 | 0,031300535 | -0,756998325 | 0,306242981 | 0,020724277 |
| 460 | -0,752181481 | 0,22069436 | 0,030911306 | -0,760623924 | 0,265639729 | 0,030982782 | -0,75659869 | 0,306377865 | 0,020466971 |
| 461 | 0,799145338 | -0,219706877 | -0,034540362 | 0,788892926 | -0,265036081 | -0,034465115 | 0,785415465 | -0,314312969 | -0,044016375 |
| 462 | 0,798599693 | -0,220695268 | -0,034220205 | 0,788352594 | -0,265585402 | -0,034145777 | 0,784835843 | -0,314397435 | -0,043637008 |
| 463 | 0,964720498 | 0,010624998 | -0,00499425 | 1,010010043 | 0,004808977 | -0,004973756 | 1,058236471 | -0,001661482 | -0,006656834 |
| 464 | 0,96512364 | 0,010508066 | -0,004970194 | 1,009987218 | 0,00471832 | -0,00494987 | 1,057769298 | -0,001723569 | -0,006627722 |
| 465 | -0,964715949 | 0,010624997 | -0,004994366 | -1,010005285 | 0,004809468 | -0,004972603 | -1,058200308 | -0,001666574 | -0,006668507 |
| 466 | -0,965119107 | 0,010508065 | -0,00497031 | -1,009982475 | 0,004718808 | -0,004948724 | -1,057733265 | -0,001728633 | -0,006639331 |
| 467 | -0,768294832 | 0,211507567 | 0,032950099 | -0,761227306 | 0,255391212 | 0,032904742 | -0,754655337 | 0,300652233 | 0,036134069 |
| 468 | -0,767799432 | 0,212459713 | 0,032661973 | -0,760718539 | 0,255939499 | 0,032616935 | -0,754135432 | 0,300791242 | 0,035834959 |
| 469 | 0,72979279 | -0,211507331 | -0,030706249 | 0,735150373 | -0,255425025 | -0,030750805 | 0,734425018 | -0,298037535 | -0,027770584 |
| 470 | 0,729003493 | -0,212459478 | -0,030408604 | 0,734383241 | -0,255973074 | -0,030452846 | 0,733710686 | -0,298186843 | -0,027483722 |
| 471 | 0,936157138 | 0,001614205 | 0,00047583 | 0,979577495 | 0,00224963 | 0,000466395 | 1,025716207 | 0,00298303 | 0,000687534 |
| 472 | 0,937346648 | 0,001723216 | 0,000428513 | 0,980425116 | 0,002304264 | 0,00041915 | 1,02620988 | 0,002983583 | 0,00064158 |
| 473 | -0,936157922 | 0,001614201 | 0,000475719 | -0,979578216 | 0,002250101 | 0,000467504 | -1,025722802 | 0,002978092 | 0,000676214 |
| 474 | -0,937347433 | 0,001723212 | 0,000428402 | -0,980425839 | 0,002304733 | 0,000420256 | -1,026216476 | 0,002978664 | 0,000630303 |
| 475 | -0,69846594 | 0,201038808 | 0,030213183 | -0,70553604 | 0,244691088 | 0,030233318 | -0,709011913 | 0,288009926 | 0,029542821 |
| 476 | -0,698346622 | 0,202203375 | 0,029964208 | -0,705496226 | 0,245529422 | 0,029984236 | -0,709064851 | 0,288522652 | 0,029294358 |
| 477 | 0,754398992 | -0,201038837 | -0,033071675 | 0,74565592 | -0,24467536 | -0,033050204 | 0,735048797 | -0,288635969 | -0,033698443 |
| 478 | 0,754714451 | -0,202203403 | -0,032847672 | 0,745897475 | -0,245513777 | -0,032826313 | 0,735225361 | -0,289147582 | -0,03347386 |
| 479 | 5,453302457 | 4,860906121 | -1,28012985 | 4,053063849 | 3,438904769 | -1,280137501 | 2,604913627 | 2,017071973 | -1,279820516 |
| 480 | 4,476095293 | -4,860906105 | 0,781769563 | 3,099754681 | -3,438916978 | 0,781744731 | 1,770092287 | -2,016678102 | 0,782238449 |
| 481 | -5,453302565 | 4,860906154 | -1,280128554 | -4,053063905 | 3,438897516 | -1,280154479 | -2,604913799 | 2,017142482 | -1,279658872 |
| 482 | -4,47609539 | -4,860906231 | 0,781768302 | -3,099754792 | -3,438909741 | 0,781761811 | -1,770092946 | -2,016749259 | 0,782075327 |
| 483 | -0,872122601 | -0,004263519 | 0,000623139 | -0,916242676 | -0,003635048 | 0,000626791 | -0,963056627 | -0,002970155 | 0,000743554 |

APOYO 2

| Newton | C1 | | | C2 | | | C3 | | |
|---|---|---|---|---|---|---|---|---|---|
| Barra | L | T | V | L | T | V | L | T | V |
| 484 | -0,873138518 | -0,004165361 | 0,000585846 | -0,916994163 | -0,00357949 | 0,00058947 | -0,963535034 | -0,002957853 | 0,000704206 |
| 485 | 0,503091669 | 0,004263525 | -0,00028616 | 0,460583691 | 0,003636629 | -0,000285361 | 0,420749549 | 0,003049547 | -0,000182282 |
| 486 | 0,502194736 | 0,004165367 | -0,0002617 | 0,459946894 | 0,003581055 | -0,000260915 | 0,420364378 | 0,003036266 | -0,000158621 |
| 487 | 0,872122445 | -0,004263514 | 0,000623246 | 0,916242442 | -0,003635499 | 0,000625727 | 0,963055695 | -0,002965395 | 0,000754467 |
| 488 | 0,873138365 | -0,004165357 | 0,000585952 | 0,916993933 | -0,00357994 | 0,000588408 | 0,963534125 | -0,002953106 | 0,00071509 |
| 489 | -0,503091841 | 0,004263522 | -0,000286268 | -0,460583847 | 0,003637084 | -0,00028429 | -0,420749755 | 0,003044797 | -0,000193171 |
| 490 | -0,502194903 | 0,004165365 | -0,000261808 | -0,459947047 | 0,003581509 | -0,000259847 | -0,420364583 | 0,003031528 | -0,000169481 |
| 491 | -5,453772771 | -5,12096831 | 0,738917621 | -4,065940544 | -3,755474959 | 0,738929461 | -2,721926026 | -2,390052382 | 0,738806014 |
| 492 | -4,801453095 | -5,112430841 | 0,738208608 | -3,466881795 | -3,748397491 | 0,738221186 | -2,17270613 | -2,384391591 | 0,738209455 |
| 493 | -5,623005463 | -5,351447229 | 0,703414344 | -4,295241682 | -4,037340402 | 0,703420935 | -3,004750939 | -2,723284652 | 0,70329538 |
| 494 | -5,029302522 | -5,369159929 | 0,705231378 | -3,748716836 | -4,051502256 | 0,705236199 | -2,502327309 | -2,733911747 | 0,705066077 |
| 495 | -5,840482583 | -5,596947375 | 0,671015813 | -4,555918614 | -4,325761702 | 0,671020925 | -3,302495332 | -3,054584976 | 0,671011609 |
| 496 | -5,262089706 | -5,562816813 | 0,667269738 | -4,024270031 | -4,298840486 | 0,667275105 | -2,814593369 | -3,034864621 | 0,667287625 |
| 497 | -4,549999317 | 5,120968305 | -1,241039808 | -3,140428078 | 3,755477242 | -1,241045825 | -1,687129591 | 2,389991554 | -1,241024179 |
| 498 | -5,706728045 | 5,112430843 | -1,239631581 | -4,352500332 | 3,748401409 | -1,239633792 | -2,957971494 | 2,384434457 | -1,239434795 |
| 499 | -4,829221185 | 5,351447241 | -1,202035822 | -3,483730826 | 4,037340306 | -1,202042626 | -2,101108263 | 2,723266343 | -1,201968549 |
| 500 | -5,90024451 | 5,369159939 | -1,205368619 | -4,603817524 | 4,051501138 | -1,205376394 | -3,273326462 | 2,733815705 | -1,20548028 |
| 501 | -5,108305564 | 5,596947369 | -1,172199743 | -3,809707466 | 4,325761285 | -1,172205956 | -2,479876273 | 3,054598021 | -1,172171181 |
| 502 | -6,139451528 | 5,56281681 | -1,165492259 | -4,88942384 | 4,298840877 | -1,16549659 | -3,611167302 | 3,03491741 | -1,165363461 |
| 503 | 5,453772925 | -5,12096823 | 0,738918758 | 4,065940689 | -3,755481585 | 0,738913882 | 2,721926339 | -2,38998786 | 0,73895393 |
| 504 | 4,801452951 | -5,112430765 | 0,738209607 | 3,466881664 | -3,748403531 | 0,738206988 | 2,172706216 | -2,384333206 | 0,738343302 |
| 505 | 5,623005284 | -5,351447174 | 0,703415224 | 4,295241518 | -4,037345908 | 0,703408018 | 3,004750877 | -2,723232051 | 0,703415968 |
| 506 | 5,029302637 | -5,369159879 | 0,705232134 | 3,748716945 | -4,051507231 | 0,705224533 | 2,502327375 | -2,733864701 | 0,705173931 |
| 507 | 5,840482675 | -5,596947313 | 0,671016445 | 4,555918697 | -4,32576616 | 0,671010455 | 3,302495306 | -3,054543144 | 0,671107509 |
| 508 | 5,262089645 | -5,562816754 | 0,667270248 | 4,024269971 | -4,298844429 | 0,667265846 | 2,81459329 | -3,034828167 | 0,667371197 |
| 509 | 4,549999462 | 5,120968237 | -1,24104095 | 3,140428274 | 3,755483882 | -1,241030229 | 1,687130346 | 2,389927097 | -1,241171947 |
| 510 | 5,706727922 | 5,112430779 | -1,239632585 | 4,352500174 | 3,748407462 | -1,239619577 | 2,957970436 | 2,384376135 | -1,239568498 |
| 511 | 4,829221027 | 5,351447165 | -1,202036693 | 3,483730636 | 4,037345802 | -1,202029702 | 2,101107086 | 2,723213601 | -1,202089458 |
| 512 | 5,900244613 | 5,369159865 | -1,205369366 | 4,603817645 | 4,051506102 | -1,205364722 | 3,273327198 | 2,733768511 | -1,205588471 |
| 513 | 5,108305645 | 5,596947315 | -1,172200379 | 3,809707561 | 4,325765745 | -1,172195494 | 2,479876939 | 3,05455625 | -1,172266941 |
| 514 | 6,139451471 | 5,562816761 | -1,165492773 | 4,889423775 | 4,298844824 | -1,165487336 | 3,611166949 | 3,034881024 | -1,165446876 |
| 515 | -0,630320002 | -0,180144547 | -0,027589828 | -0,636952486 | -0,220043385 | -0,027597144 | -0,641054065 | -0,259934668 | -0,027645511 |
| 516 | -0,630795482 | -0,180978418 | -0,027467435 | -0,637364159 | -0,220693722 | -0,027474711 | -0,641405875 | -0,260400843 | -0,027521081 |
| 517 | 0,6838344 | 0,180144548 | 0,03025936 | 0,675691955 | 0,220038299 | 0,03025327 | 0,665147601 | 0,259942265 | 0,03022247 |
| 518 | 0,683933722 | 0,180978418 | 0,03011565 | 0,675857461 | 0,220688664 | 0,030109598 | 0,665385541 | 0,260409767 | 0,030080832 |
| 519 | 0,464432732 | -0,008567728 | 0,000797504 | 0,427817179 | -0,006972485 | 0,000796134 | 0,393606135 | -0,005396256 | 0,000745071 |
| 520 | 0,463872261 | -0,008727763 | 0,000825458 | 0,427438095 | -0,007082046 | 0,000824096 | 0,393403778 | -0,005455212 | 0,000773389 |
| 521 | -0,464432453 | -0,008567732 | 0,000797408 | -0,42781692 | -0,006972069 | 0,000797113 | -0,393606005 | -0,005400614 | 0,000735081 |
| 522 | -0,463871985 | -0,008727767 | 0,000825361 | -0,427437839 | -0,007081632 | 0,000825074 | -0,39340365 | -0,005459564 | 0,000763412 |
| 523 | -0,652111082 | -0,183182452 | -0,027095935 | -0,646944044 | -0,219456114 | -0,027095099 | -0,639344127 | -0,255672681 | -0,02693111 |
| 524 | -0,65183137 | -0,183853644 | -0,026952086 | -0,646660337 | -0,219928392 | -0,026951252 | -0,639063274 | -0,255946461 | -0,026788381 |
| 525 | 0,620505633 | 0,183182436 | 0,025501241 | 0,624241657 | 0,219457086 | 0,02550297 | 0,625753242 | 0,255776911 | 0,025631426 |
| 526 | 0,620247691 | 0,183853628 | 0,025356663 | 0,623990657 | 0,219929361 | 0,025358388 | 0,62551426 | 0,256049865 | 0,025485758 |
| 527 | 0,439547612 | 0,018752172 | -0,002002423 | 0,404150494 | 0,014874675 | -0,00200211 | 0,371036642 | 0,011007062 | -0,001976208 |

APOYO 2

| Newton | C1 | | | C2 | | | C3 | | |
|---|---|---|---|---|---|---|---|---|---|
| Barra | L | T | V | L | T | V | L | T | V |
| 528 | 0,438947367 | 0,018853023 | -0,002008063 | 0,403707044 | 0,014962988 | -0,002007751 | 0,370746298 | 0,011082795 | -0,00198196 |
| 529 | -0,439547776 | 0,018752169 | -0,002002516 | -0,404150649 | 0,014875067 | -0,002001186 | -0,371036706 | 0,011002961 | -0,00198561 |
| 530 | -0,438947531 | 0,01885302 | -0,002008155 | -0,403707198 | 0,01496338 | -0,002006828 | -0,370746362 | 0,011078699 | -0,001991351 |
| 531 | -0,600571884 | -0,166866647 | -0,025831414 | -0,600013654 | -0,202466802 | -0,025832051 | -0,597309942 | -0,238097843 | -0,025916648 |
| 532 | -0,600227368 | -0,167414791 | -0,025706388 | -0,599635904 | -0,202834034 | -0,025707024 | -0,5969039 | -0,238284009 | -0,025791227 |
| 533 | 0,597356575 | 0,166866655 | 0,025788363 | 0,596557632 | 0,202466731 | 0,025788803 | 0,593476708 | 0,238034759 | 0,025707155 |
| 534 | 0,596773309 | 0,167414798 | 0,025651067 | 0,59601023 | 0,202833961 | 0,025651505 | 0,59297082 | 0,238221236 | 0,025570258 |
| 535 | 0,438701074 | -0,033002469 | 0,003684494 | 0,403003947 | -0,02593807 | 0,003683414 | 0,369576432 | -0,018871835 | 0,003686369 |
| 536 | 0,437634821 | -0,033147924 | 0,003704505 | 0,402125392 | -0,026046376 | 0,003703422 | 0,368880409 | -0,018942993 | 0,003706374 |
| 537 | -0,438701006 | -0,033002472 | 0,003684402 | -0,403003883 | -0,025937681 | 0,00368433 | -0,369576414 | -0,0188759 | 0,003677051 |
| 538 | -0,437634753 | -0,033147927 | 0,003704413 | -0,402125328 | -0,026045988 | 0,003704337 | -0,368880392 | -0,01894705 | 0,003697073 |
| 539 | -0,683834463 | 0,180144542 | 0,030259461 | -0,675692019 | 0,22003786 | 0,030252249 | -0,665147854 | 0,259946663 | 0,030232552 |
| 540 | -0,683933786 | 0,180978413 | 0,030115751 | -0,675857525 | 0,220688226 | 0,030108579 | -0,665385794 | 0,260414159 | 0,030090901 |
| 541 | 0,630319938 | -0,18014456 | -0,027589921 | 0,636952425 | -0,220042966 | -0,027596145 | 0,641053839 | -0,259939165 | -0,027655821 |
| 542 | 0,630795419 | -0,18097843 | -0,027467528 | 0,637364097 | -0,220693304 | -0,027473715 | 0,641405649 | -0,260405332 | -0,027531371 |
| 543 | 0,841967388 | 0,008567728 | -0,001516357 | 0,880061527 | 0,006971233 | -0,001518327 | 0,92054557 | 0,005325434 | -0,001667576 |
| 544 | 0,843147488 | 0,008727763 | -0,001561585 | 0,881058149 | 0,007080802 | -0,001563544 | 0,921354056 | 0,005384969 | -0,001711491 |
| 545 | -0,841967139 | 0,008567727 | -0,001516454 | -0,88006123 | 0,006971652 | -0,001517341 | -0,920543764 | 0,00532109 | -0,001677535 |
| 546 | -0,843147242 | 0,008727761 | -0,001561682 | -0,881057854 | 0,00708122 | -0,00156256 | -0,921352265 | 0,005380631 | -0,001721436 |
| 547 | -0,620505645 | 0,183182455 | 0,025501329 | -0,624241669 | 0,219456691 | 0,025502015 | -0,625753249 | 0,25578123 | 0,025641327 |
| 548 | -0,620247703 | 0,183853648 | 0,025356751 | -0,623990669 | 0,219928967 | 0,025357435 | -0,625514265 | 0,256054176 | 0,025495638 |
| 549 | 0,65211107 | -0,183182438 | -0,027096036 | 0,646944027 | -0,219455703 | -0,027094155 | 0,639344049 | -0,255676785 | -0,02694052 |
| 550 | 0,651831359 | -0,183853631 | -0,026952187 | 0,646660321 | -0,219927981 | -0,026950309 | 0,639063196 | -0,255950557 | -0,026797772 |
| 551 | 0,786125666 | -0,018752166 | 0,003620111 | 0,822915209 | -0,014874344 | 0,003620695 | 0,861991484 | -0,010960604 | 0,003730643 |
| 552 | 0,787006435 | -0,018853017 | 0,00363265 | 0,823637576 | -0,014962658 | 0,003633233 | 0,862551766 | -0,011036552 | 0,003742684 |
| 553 | -0,786125814 | -0,018752169 | 0,003620019 | -0,822915381 | -0,014873952 | 0,003621617 | -0,861992575 | -0,010964709 | 0,003721233 |
| 554 | -0,787006582 | -0,01885302 | 0,003632558 | -0,823637747 | -0,014962267 | 0,003634154 | -0,862552851 | -0,011040652 | 0,003733285 |
| 555 | -0,597356551 | 0,16686665 | 0,025788454 | -0,596557607 | 0,202466344 | 0,025787902 | -0,593476645 | 0,238038701 | 0,025716192 |
| 556 | -0,596773286 | 0,167414793 | 0,025651158 | -0,596010206 | 0,202833575 | 0,025650606 | -0,592970757 | 0,23822517 | 0,025579278 |
| 557 | 0,600571907 | -0,166866658 | -0,025831499 | 0,600013681 | -0,202466421 | -0,02583114 | 0,597310048 | -0,238101888 | -0,025925921 |
| 558 | 0,600227391 | -0,167414801 | -0,025706472 | 0,599635931 | -0,202833652 | -0,025706115 | 0,596904006 | -0,238288046 | -0,025800481 |
| 559 | 0,777647749 | 0,03300247 | -0,006559485 | 0,814725297 | 0,025937177 | -0,006560743 | 0,854078105 | 0,018857847 | -0,006610594 |
| 560 | 0,777809289 | 0,033147925 | -0,006593341 | 0,814696637 | 0,026045481 | -0,006594603 | 0,853854074 | 0,018928966 | -0,006644594 |
| 561 | -0,777647688 | 0,033002466 | -0,006559576 | -0,814725225 | 0,025937564 | -0,00655983 | -0,854077646 | 0,018853774 | -0,006619931 |
| 562 | -0,777809227 | 0,033147922 | -0,006593433 | -0,814696566 | 0,026045868 | -0,006593691 | -0,853853615 | 0,018924901 | -0,006653913 |
| 563 | 5,40904639 | 5,769491406 | -1,134147704 | 4,158753852 | 4,549127058 | -1,134142925 | 2,883017325 | 3,328747249 | -1,134164967 |
| 564 | 6,007140157 | -5,769491406 | 0,635383837 | 4,76738427 | -4,549126721 | 0,635379945 | 3,55310672 | -3,328749883 | 0,63540203 |
| 565 | -5,409046422 | 5,769491458 | -1,1341473 | -4,15875389 | 4,549123585 | -1,134151069 | -2,883017603 | 3,328778757 | -1,134092734 |
| 566 | -6,007140194 | -5,769491455 | 0,635383433 | -4,767384303 | -4,549123249 | 0,635388085 | -3,553106696 | -3,328781377 | 0,635329829 |
| 567 | 0,560582321 | -0,160180001 | -0,024019794 | 0,561850346 | -0,193886947 | -0,024019303 | 0,560981054 | -0,227584329 | -0,023993233 |
| 568 | 0,560438521 | -0,16072775 | -0,023923832 | 0,561700391 | -0,194301477 | -0,02392334 | 0,560828084 | -0,227865679 | -0,023897363 |
| 569 | -0,581071284 | 0,160180003 | 0,024855637 | -0,578508226 | 0,193886959 | 0,02485518 | -0,573859824 | 0,227607966 | 0,024890639 |
| 570 | -0,580932251 | 0,160727752 | 0,024758431 | -0,578376694 | 0,194301489 | 0,024757976 | -0,573738734 | 0,227889234 | 0,024793334 |
| 571 | -0,560582337 | -0,16018 | -0,024019708 | -0,561850363 | -0,193887313 | -0,024020162 | -0,560981111 | -0,22758053 | -0,023984525 |

APOYO 2

| Newton | C1 | | | C2 | | | C3 | | |
|---|---|---|---|---|---|---|---|---|---|
| Barra | L | T | V | L | T | V | L | T | V |
| 572 | -0,560438537 | -0,160727749 | -0,023923747 | -0,561700408 | -0,194301842 | -0,023924199 | -0,560828141 | -0,227861884 | -0,023888664 |
| 573 | 0,581071268 | 0,160179999 | 0,024855553 | 0,578508208 | 0,193887325 | 0,024856045 | 0,573859768 | 0,227604141 | 0,024881871 |
| 574 | 0,580932235 | 0,160727748 | 0,024758348 | 0,578376677 | 0,194301855 | 0,02475884 | 0,573738678 | 0,227885413 | 0,024784575 |
| 575 | -5,478824747 | -5,809014514 | 0,639832907 | -4,281566196 | -4,580128588 | 0,639836506 | -3,107048856 | -3,35126634 | 0,639783135 |
| 576 | -6,209657862 | -6,019410819 | 0,608760722 | -5,014232607 | -4,83418493 | 0,60876381 | -3,838782614 | -3,648969918 | 0,608743107 |
| 577 | -5,71660468 | -5,990387713 | 0,605460315 | -4,560837784 | -4,811467923 | 0,605462697 | -3,422497097 | -3,632556448 | 0,605447104 |
| 578 | -6,481496672 | -6,202829044 | 0,572985605 | -5,32247904 | -5,067986868 | 0,572987095 | -4,17812733 | -3,933153742 | 0,57296558 |
| 579 | -6,355485082 | 5,809014515 | -1,142049218 | -5,149364735 | 4,580128542 | -1,14205294 | -3,920536046 | 3,351250046 | -1,14204294 |
| 580 | -5,59633938 | 6,019410819 | -1,10981475 | -4,393737172 | 4,834184958 | -1,109817759 | -3,17115105 | 3,648973214 | -1,109788481 |
| 581 | -6,479260962 | 5,990387713 | -1,103971813 | -5,317878567 | 4,811467824 | -1,10397446 | -4,13905978 | 3,632557843 | -1,103957016 |
| 582 | -5,739330764 | 6,202829042 | -1,072534588 | -4,576395721 | 5,067986575 | -1,072536861 | -3,398795505 | 3,933148424 | -1,072533949 |
| 583 | 5,478824763 | -5,809014468 | 0,6398332 | 4,281566213 | -4,580131588 | 0,639829477 | 3,107048894 | -3,35123978 | 0,639844026 |
| 584 | 6,209657863 | -6,019410776 | 0,608760905 | 5,014232606 | -4,834187455 | 0,608757899 | 3,838782591 | -3,648948308 | 0,608792648 |
| 585 | 5,716604681 | -5,990387673 | 0,605460395 | 4,560837784 | -4,811470008 | 0,605457823 | 3,422497076 | -3,632539438 | 0,605486101 |
| 586 | 6,481496685 | -6,202829007 | 0,572985575 | 5,322479054 | -5,067988472 | 0,572983353 | 4,17812736 | -3,933141727 | 0,572993126 |
| 587 | 6,355485098 | 5,809014467 | -1,142049511 | 5,149364752 | 4,580131542 | -1,142045908 | 3,920536127 | 3,351223469 | -1,142103868 |
| 588 | 5,59633938 | 6,019410776 | -1,109814934 | 4,393737171 | 4,834187482 | -1,10981185 | 3,171151074 | 3,648951604 | -1,109838022 |
| 589 | 6,479260962 | 5,990387673 | -1,103971893 | 5,317878569 | 4,811469907 | -1,103969588 | 4,139059805 | 3,63254083 | -1,103996019 |
| 590 | 5,739330776 | 6,202829006 | -1,072534558 | 4,576395737 | 5,06798818 | -1,072533118 | 3,398795566 | 3,933136412 | -1,072561488 |
| 591 | 0,388809923 | 0,02878599 | -0,003272219 | 0,357881852 | 0,022533374 | -0,003272599 | 0,328971946 | 0,01628276 | -0,003268219 |
| 592 | 0,388415058 | 0,028551827 | -0,003242362 | 0,357577234 | 0,022355344 | -0,003242735 | 0,328756313 | 0,016160859 | -0,003238356 |
| 593 | -0,388809934 | 0,028785986 | -0,003272299 | -0,357881862 | 0,022533724 | -0,003271774 | -0,328971949 | 0,016279094 | -0,003276624 |
| 594 | -0,388415069 | 0,028551823 | -0,003242442 | -0,357577245 | 0,022355694 | -0,00324191 | -0,328756316 | 0,016157193 | -0,003246759 |
| 595 | -0,590593592 | -0,163875576 | -0,025001607 | -0,587705632 | -0,197695001 | -0,025002216 | -0,582695434 | -0,231515319 | -0,025006478 |
| 596 | -0,590584786 | -0,164469247 | -0,024917894 | -0,587696232 | -0,198173738 | -0,024918504 | -0,582687213 | -0,231879127 | -0,024922788 |
| 597 | 0,567254965 | 0,163875576 | 0,024036134 | 0,568836269 | 0,197694901 | 0,024036472 | 0,568282525 | 0,231508429 | 0,024021369 |
| 598 | 0,567289854 | 0,164469246 | 0,023953193 | 0,568872342 | 0,198173637 | 0,02395353 | 0,568321551 | 0,231872228 | 0,02393841 |
| 599 | 0,399085019 | -0,017967789 | 0,002046332 | 0,366587102 | -0,014059256 | 0,002046166 | 0,336144133 | -0,010148423 | 0,002051647 |
| 600 | 0,398221442 | -0,017817523 | 0,002033904 | 0,365852437 | -0,013934191 | 0,002033736 | 0,335535276 | -0,010048561 | 0,002039215 |
| 601 | -0,39908503 | -0,017967791 | 0,002046248 | -0,366587114 | -0,014058903 | 0,002046997 | -0,33614414 | -0,010152105 | 0,002043207 |
| 602 | -0,398221454 | -0,017817525 | 0,002033821 | -0,365852448 | -0,013933839 | 0,002034565 | -0,335535283 | -0,010052238 | 0,002030784 |
| 603 | -0,543901574 | -0,15447164 | -0,023271153 | -0,544629207 | -0,186972369 | -0,023271375 | -0,543328576 | -0,219470608 | -0,023264961 |
| 604 | -0,543631712 | -0,154928075 | -0,023187864 | -0,544346623 | -0,18731068 | -0,023188084 | -0,543035557 | -0,21969078 | -0,02318161 |
| 605 | 0,557867859 | 0,154471642 | 0,023854692 | 0,555896183 | 0,186972561 | 0,023855428 | 0,551899525 | 0,21947366 | 0,02386004 |
| 606 | 0,55750632 | 0,154928077 | 0,023766702 | 0,555548339 | 0,187310874 | 0,02376744 | 0,551567709 | 0,219693867 | 0,023772116 |
| 607 | 0,703687346 | -0,028785987 | 0,005793858 | 0,73585944 | -0,022533671 | 0,005793469 | 0,770040722 | -0,016277018 | 0,005805147 |
| 608 | 0,704321051 | -0,028551824 | 0,005742326 | 0,736402536 | -0,022355635 | 0,005741947 | 0,770491943 | -0,016155003 | 0,005754025 |
| 609 | -0,703687355 | -0,028785988 | 0,005793776 | -0,73585945 | -0,022533318 | 0,005794299 | -0,770040795 | -0,016280672 | 0,005796771 |
| 610 | -0,704321061 | -0,028551825 | 0,005742244 | -0,736402547 | -0,022355282 | 0,005742777 | -0,770492018 | -0,016158655 | 0,005745651 |
| 611 | -0,567254956 | 0,163875579 | 0,024036219 | -0,568836258 | 0,197694533 | 0,024035605 | -0,568282487 | 0,231512276 | 0,024030187 |
| 612 | -0,567289844 | 0,164469249 | 0,023953279 | -0,568872331 | 0,198173269 | 0,023952663 | -0,568321514 | 0,231876073 | 0,023947224 |
| 613 | 0,590593602 | -0,163875579 | -0,025001693 | 0,587705643 | -0,197694632 | -0,025001345 | 0,582695468 | -0,231519164 | -0,025015295 |
| 614 | 0,590584796 | -0,164469249 | -0,02491798 | 0,587696243 | -0,198173369 | -0,024917634 | 0,582687246 | -0,231882971 | -0,0249316 |
| 615 | 0,706103887 | 0,017967793 | -0,003621141 | 0,739852589 | 0,014059164 | -0,003621192 | 0,775662521 | 0,010157245 | -0,00359976 |

APOYO 2

| Newton | C1 | | | C2 | | | C3 | | |
|---|---|---|---|---|---|---|---|---|---|
| Barra | L | T | V | L | T | V | L | T | V |
| 616 | 0,706070047 | 0,017817527 | -0,003597026 | 0,739688393 | 0,013934097 | -0,003597082 | 0,775364863 | 0,010057316 | -0,003575877 |
| 617 | -0,706103898 | 0,01796779 | -0,003621224 | -0,739852604 | 0,014059515 | -0,003620365 | -0,775662595 | 0,010153554 | -0,003608222 |
| 618 | -0,706070058 | 0,017817523 | -0,003597109 | -0,739688408 | 0,013934447 | -0,003596256 | -0,775364935 | 0,010053629 | -0,003584329 |
| 619 | -0,557867868 | 0,154471644 | 0,023854774 | -0,555896194 | 0,186972209 | 0,023854598 | -0,551899568 | 0,219477317 | 0,023868424 |
| 620 | -0,557506328 | 0,154928078 | 0,023766784 | -0,555548349 | 0,187310522 | 0,023766611 | -0,551567753 | 0,219697522 | 0,023780493 |
| 621 | 0,543901566 | -0,154471643 | -0,023271233 | 0,544629198 | -0,186972018 | -0,023270548 | 0,543328559 | -0,219474273 | -0,023273363 |
| 622 | 0,543631704 | -0,154928078 | -0,023187945 | 0,544346614 | -0,187310329 | -0,023187257 | 0,54303554 | -0,219694442 | -0,023190006 |
| 623 | 6,668751761 | 6,222705716 | -1,076364332 | 5,549143833 | 5,083752906 | -1,076362884 | 4,417557066 | 3,944798925 | -1,076359441 |
| 624 | 5,96371536 | -6,222705715 | 0,575118058 | 4,84638242 | -5,083752807 | 0,57511687 | 3,741031609 | -3,944796791 | 0,575120684 |
| 625 | -6,668751765 | 6,222705749 | -1,076364471 | -5,54914384 | 5,083751763 | -1,076365539 | -4,417557116 | 3,944806097 | -1,076342997 |
| 626 | -5,963715364 | -6,222705749 | 0,575118198 | -4,846382423 | -5,083751666 | 0,575119523 | -3,741031586 | -3,94480397 | 0,575104224 |
| 627 | -0,702851259 | -0,012208904 | 0,002186003 | -0,734903735 | -0,009883463 | 0,002185935 | -0,768970271 | -0,007566192 | 0,002158894 |
| 628 | -0,703137163 | -0,012186831 | 0,002177784 | -0,735079981 | -0,009870726 | 0,002177718 | -0,769035161 | -0,007562763 | 0,002150777 |
| 629 | 0,386592443 | 0,012208903 | -0,001185829 | 0,355780556 | 0,009883129 | -0,001186653 | 0,326985326 | 0,007559978 | -0,001181386 |
| 630 | 0,385897239 | 0,01218683 | -0,001180511 | 0,355194407 | 0,009870393 | -0,001181333 | 0,326506533 | 0,007556576 | -0,001176069 |
| 631 | 0,702851273 | -0,012208901 | 0,002186084 | 0,734903754 | -0,009883813 | 0,002185111 | 0,768970368 | -0,007562542 | 0,002167262 |
| 632 | 0,703137177 | -0,012186829 | 0,002177866 | 0,73508 | -0,009871075 | 0,002176895 | 0,769035257 | -0,007559115 | 0,00215914 |
| 633 | -0,386592429 | 0,0122089 | -0,001185911 | -0,355780542 | 0,009883478 | -0,001185831 | -0,326985322 | 0,007556324 | -0,001189762 |
| 634 | -0,385897224 | 0,012186827 | -0,001180592 | -0,355194393 | 0,009870742 | -0,001180511 | -0,326506528 | 0,007552924 | -0,001184441 |
| 635 | -6,659427185 | -6,423466669 | 0,545911095 | -5,542276408 | -5,325091681 | 0,545912146 | -4,434526698 | -4,226718269 | 0,545911056 |
| 636 | -6,160213245 | -6,40518621 | 0,544321159 | -5,082966029 | -5,309992319 | 0,54432123 | -4,012526376 | -4,214796808 | 0,544326451 |
| 637 | -6,820504326 | -6,593586803 | 0,516422572 | -5,742969405 | -5,537009039 | 0,516421998 | -4,669804998 | -4,48042718 | 0,516431542 |
| 638 | -6,37761447 | -6,612418054 | 0,517867462 | -5,335780395 | -5,552877258 | 0,517866524 | -4,296028772 | -4,493330019 | 0,517881256 |
| 639 | -6,995276619 | -6,784309977 | 0,491424065 | -5,952012769 | -5,761038525 | 0,491422487 | -4,908571239 | -4,737759549 | 0,491437381 |
| 640 | -5,962917973 | 6,423466671 | -1,046732154 | -4,845077846 | 5,325091992 | -1,046732376 | -3,717837462 | 4,226723355 | -1,046712872 |
| 641 | -6,866063051 | 6,405186211 | -1,043710151 | -5,78971974 | 5,309992273 | -1,043710344 | -4,706567727 | 4,214795324 | -1,043720231 |
| 642 | -6,200763963 | 6,593586803 | -1,015615812 | -5,125630435 | 5,537008921 | -1,015615554 | -4,046124681 | 4,480425353 | -1,015631838 |
| 643 | -6,993388594 | 6,612418054 | -1,018467619 | -5,955358308 | 5,552877271 | -1,018466648 | -4,915244239 | 4,493330598 | -1,018479654 |
| 644 | -6,382727868 | 6,784309976 | -0,992320916 | -5,344655702 | 5,761038445 | -0,99231955 | -4,306762433 | 4,737758131 | -0,992339445 |
| 645 | 6,659427172 | -6,42346664 | 0,545910852 | 5,542276395 | -5,325092376 | 0,545910546 | 4,434526679 | -4,226715762 | 0,545916805 |
| 646 | 6,160213247 | -6,405186185 | 0,544320811 | 5,08296603 | -5,309992565 | 0,544320686 | 4,012526364 | -4,214798993 | 0,544321443 |
| 647 | 6,820504331 | -6,593586781 | 0,516422126 | 5,74296941 | -5,537008863 | 0,51642245 | 4,669804996 | -4,480433771 | 0,516416434 |
| 648 | 6,377614469 | -6,612418035 | 0,517866923 | 5,335780394 | -5,552876686 | 0,517867907 | 4,296028767 | -4,493340739 | 0,51785668 |
| 649 | 6,995276622 | -6,78430996 | 0,491423436 | 5,952012773 | -5,761037561 | 0,491424793 | 4,908571252 | -4,737774354 | 0,491403442 |
| 650 | 5,962917961 | 6,423466641 | -1,046731911 | 4,84507783 | 5,325092687 | -1,046730775 | 3,717837389 | 4,226720846 | -1,046718625 |
| 651 | 6,866063053 | 6,405186184 | -1,043709802 | 5,789719744 | 5,309992518 | -1,043709801 | 4,706567755 | 4,214797504 | -1,043715234 |
| 652 | 6,200763967 | 6,59358678 | -1,015615366 | 5,125630442 | 5,537008744 | -1,015616006 | 4,046124718 | 4,480431943 | -1,015616732 |
| 653 | 6,993388593 | 6,612418035 | -1,018467081 | 5,955358308 | 5,552876699 | -1,018468031 | 4,915244239 | 4,493341318 | -1,01845508 |
| 654 | 6,38272787 | 6,78430996 | -0,992320286 | 5,344655705 | 5,761037482 | -0,992321855 | 4,30676244 | 4,737772937 | -0,992305504 |
| 655 | -0,52324977 | -0,152766205 | -0,021580442 | -0,522550031 | -0,182497715 | -0,021580996 | -0,519923236 | -0,212225395 | -0,021571149 |
| 656 | -0,523540444 | -0,153338483 | -0,021530552 | -0,522828512 | -0,182998056 | -0,021531109 | -0,52018929 | -0,212653817 | -0,021521334 |
| 657 | 0,522149309 | 0,152766204 | 0,021529859 | 0,521663256 | 0,182497583 | 0,021530059 | 0,51924976 | 0,212224011 | 0,021514442 |
| 658 | 0,522343335 | 0,153338482 | 0,021475438 | 0,521868917 | 0,182997921 | 0,021475636 | 0,519466767 | 0,212652388 | 0,021459935 |
| 659 | 0,368596064 | -0,015517652 | 0,001220347 | 0,338976868 | -0,013027699 | 0,00122015 | 0,311262048 | -0,010535846 | 0,00122456 |

APOYO 2

| Newton | C1 | | | C2 | | | C3 | | |
|---|---|---|---|---|---|---|---|---|---|
| Barra | L | T | V | L | T | V | L | T | V |
| 660 | 0,368210619 | -0,015635053 | 0,001231901 | 0,338665166 | -0,01312247 | 0,001231703 | 0,311024258 | -0,010607986 | 0,001236116 |
| 661 | -0,368596073 | -0,015517655 | 0,00122027 | -0,338976877 | -0,01302737 | 0,001220925 | -0,311262052 | -0,010539285 | 0,001216678 |
| 662 | -0,368210627 | -0,015635055 | 0,001231824 | -0,338665174 | -0,01312214 | 0,001232479 | -0,311024263 | -0,010611426 | 0,00122823 |
| 663 | -0,507758964 | -0,138090209 | -0,022056629 | -0,506337906 | -0,168259457 | -0,022057139 | -0,503072619 | -0,198429689 | -0,022063511 |
| 664 | -0,507346922 | -0,138454991 | -0,021983463 | -0,505922531 | -0,168522789 | -0,02198397 | -0,502655641 | -0,198591553 | -0,021990259 |
| 665 | 0,498568097 | 0,138090209 | 0,021688422 | 0,498857297 | 0,16825943 | 0,021688859 | 0,497300888 | 0,198428728 | 0,021692276 |
| 666 | 0,498154844 | 0,138454991 | 0,021614488 | 0,498448084 | 0,168522765 | 0,021614929 | 0,496897494 | 0,198590635 | 0,021618419 |
| 667 | 0,33843363 | 0,014518106 | -0,001076769 | 0,310994926 | 0,012293607 | -0,00107715 | 0,285302348 | 0,010071008 | -0,001073066 |
| 668 | 0,338012422 | 0,014501069 | -0,001073539 | 0,310638036 | 0,012282322 | -0,00107392 | 0,285009607 | 0,010065475 | -0,001069835 |
| 669 | -0,33843363 | 0,014518104 | -0,00107684 | -0,310994926 | 0,012293909 | -0,00107644 | -0,285302348 | 0,01006786 | -0,001080284 |
| 670 | -0,338012422 | 0,014501067 | -0,00107361 | -0,310638036 | 0,012282623 | -0,00107321 | -0,285009608 | 0,010062326 | -0,001077054 |
| 671 | -0,470793584 | -0,134510065 | -0,019844592 | -0,470550777 | -0,161946856 | -0,019844765 | -0,468560788 | -0,189378698 | -0,019829381 |
| 672 | -0,471160048 | -0,134992192 | -0,019814171 | -0,470892674 | -0,162379537 | -0,019814348 | -0,468877207 | -0,189761952 | -0,01979904 |
| 673 | 0,472493937 | 0,134510066 | 0,019938579 | 0,471665234 | 0,161946983 | 0,019939091 | 0,46909214 | 0,189381025 | 0,019931868 |
| 674 | 0,472585113 | 0,134992193 | 0,019897302 | 0,47178009 | 0,162379662 | 0,019897811 | 0,469229715 | 0,189764233 | 0,019890498 |
| 675 | -0,522149304 | 0,152766207 | 0,021529937 | -0,521663249 | 0,18249725 | 0,021529274 | -0,519249714 | 0,212227506 | 0,021522453 |
| 676 | -0,52234333 | 0,153338485 | 0,021475517 | -0,521868909 | 0,182997588 | 0,021474851 | -0,51946672 | 0,212655884 | 0,021467949 |
| 677 | 0,523249775 | -0,152766207 | -0,021580521 | 0,522550035 | -0,182497381 | -0,021580211 | 0,519923224 | -0,212228884 | -0,021579148 |
| 678 | 0,523540449 | -0,153338485 | -0,021530631 | 0,522828516 | -0,182997722 | -0,021530323 | 0,520189279 | -0,212657308 | -0,021529337 |
| 679 | 0,661515287 | 0,015517656 | -0,002390201 | 0,692302088 | 0,013027572 | -0,002390317 | 0,724992993 | 0,010542939 | -0,002373168 |
| 680 | 0,662225752 | 0,015635056 | -0,00241146 | 0,692939307 | 0,013122342 | -0,002411577 | 0,725557136 | 0,01061507 | -0,002394463 |
| 681 | -0,661515295 | 0,015517653 | -0,002390278 | -0,692302099 | 0,013027901 | -0,002389542 | -0,724993048 | 0,010539501 | -0,002381049 |
| 682 | -0,66222576 | 0,015635054 | -0,002411537 | -0,692939317 | 0,013122671 | -0,002410802 | -0,72555719 | 0,010611631 | -0,002402347 |
| 683 | -0,498568096 | 0,138090212 | 0,021688495 | -0,498857298 | 0,168259109 | 0,021688104 | -0,497300915 | 0,198432058 | 0,021699911 |
| 684 | -0,498154842 | 0,138454993 | 0,021614562 | -0,498448085 | 0,168522445 | 0,021614175 | -0,496897522 | 0,198593963 | 0,021626048 |
| 685 | 0,507758965 | -0,138090212 | -0,022056702 | 0,506337909 | -0,168259136 | -0,022056384 | 0,503072655 | -0,198433019 | -0,022071146 |
| 686 | 0,507346923 | -0,138454993 | -0,021983537 | 0,505922534 | -0,168522469 | -0,021983215 | 0,502655676 | -0,198594881 | -0,02199789 |
| 687 | 0,601999662 | -0,014518104 | 0,002148539 | 0,630507719 | -0,012293901 | 0,00214816 | 0,660762828 | -0,010067798 | 0,002152277 |
| 688 | 0,602366023 | -0,014501067 | 0,00214343 | 0,630809963 | -0,012282616 | 0,00214305 | 0,661000788 | -0,010062263 | 0,002147171 |
| 689 | -0,601999662 | -0,014518106 | 0,002148469 | -0,630507719 | -0,0122936 | 0,00214887 | -0,660762827 | -0,010070948 | 0,002145056 |
| 690 | -0,602366023 | -0,014501069 | 0,002143359 | -0,630809963 | -0,012282315 | 0,00214376 | -0,661000787 | -0,010065413 | 0,002139948 |
| 691 | -0,472493942 | 0,134510068 | 0,019938651 | -0,471665238 | 0,161946681 | 0,019938381 | -0,469092132 | 0,189384179 | 0,019939098 |
| 692 | -0,472585117 | 0,134992195 | 0,019897374 | -0,471780094 | 0,16237936 | 0,0198971 | -0,469229706 | 0,189767389 | 0,019897735 |
| 693 | 0,470793579 | -0,134510068 | -0,019844663 | 0,47055077 | -0,161946555 | -0,019844056 | 0,468560746 | -0,189381855 | -0,019836619 |
| 694 | 0,471160044 | -0,134992195 | -0,019814242 | 0,470892667 | -0,162379236 | -0,019813638 | 0,468877165 | -0,189765112 | -0,019806283 |
| 695 | 7,123119277 | 6,768963875 | -0,990040011 | 6,119982818 | 5,748053896 | -0,990041939 | 5,119169085 | 4,727155398 | -0,990015945 |
| 696 | 6,579646833 | -6,768963874 | 0,490277794 | 5,570005685 | -5,748053898 | 0,490279716 | 4,558044011 | -4,727155555 | 0,490253273 |
| 697 | -7,123119277 | 6,768963888 | -0,990040728 | -6,119982818 | 5,748055229 | -0,990038763 | -5,119169095 | 4,727136724 | -0,990058753 |
| 698 | -6,579646833 | -6,768963889 | 0,49027851 | -5,570005684 | -5,748055232 | 0,490276539 | -4,558043999 | -4,727136884 | 0,490296074 |
| 699 | -0,601850634 | 0,010498422 | -0,001571131 | -0,630234838 | 0,00886841 | -0,001570926 | -0,660359271 | 0,007234536 | -0,001582474 |
| 700 | -0,602086036 | 0,010501018 | -0,001573727 | -0,630403241 | 0,008867935 | -0,001573523 | -0,660460375 | 0,007230984 | -0,001585093 |
| 701 | 0,338021029 | -0,010498422 | 0,000792576 | 0,310702962 | -0,008868528 | 0,000792057 | 0,28512447 | -0,007236517 | 0,000796495 |
| 702 | 0,337524364 | -0,010501019 | 0,000794433 | 0,310273411 | -0,008868054 | 0,000793913 | 0,284761733 | -0,007232971 | 0,000798353 |
| 703 | 0,601850639 | 0,010498424 | -0,001571061 | 0,630234844 | 0,00886811 | -0,001571633 | 0,6603593 | 0,007237676 | -0,001575276 |

APOYO 2

| Newton | C1 | | | C2 | | | C3 | | |
|---|---|---|---|---|---|---|---|---|---|
| Barra | L | T | V | L | T | V | L | T | V |
| 704 | 0,60208604 | 0,010501021 | -0,001573657 | 0,630403247 | 0,008867635 | -0,00157423 | 0,660460404 | 0,007234124 | -0,001577894 |
| 705 | -0,338021024 | -0,010498424 | 0,000792506 | -0,310702958 | -0,008868228 | 0,000792765 | -0,285124469 | -0,007239656 | 0,000789299 |
| 706 | -0,33752436 | -0,010501021 | 0,000794363 | -0,310273407 | -0,008867753 | 0,000794621 | -0,284761732 | -0,00723611 | 0,000791156 |
| 707 | -7,142276899 | -6,927770616 | 0,466392228 | -6,131977499 | -5,939768917 | 0,466390017 | -5,117283284 | -4,951753637 | 0,466420721 |
| 708 | -6,737776609 | -6,935073792 | 0,467005377 | -5,760038816 | -5,945840141 | 0,467002557 | -4,775811312 | -4,95659045 | 0,467038336 |
| 709 | -7,268128387 | -7,085686737 | 0,444445045 | -6,290041078 | -6,127664015 | 0,44444156 | -5,303501123 | -5,169624677 | 0,444475705 |
| 710 | -6,910875608 | -7,09045757 | 0,44462178 | -5,961521665 | -6,131985281 | 0,444617935 | -5,001861474 | -5,173494435 | 0,444656255 |
| 711 | -7,409505339 | -7,233844255 | 0,423498303 | -6,459950558 | -6,304667548 | 0,423494242 | -5,498228721 | -5,37546892 | 0,423542205 |
| 712 | -6,56283552 | 6,927770617 | -0,966212146 | -5,560313896 | 5,939769076 | -0,966209511 | -4,562186055 | 4,951756342 | -0,966230536 |
| 713 | -7,288903902 | 6,935073792 | -0,967385752 | -6,32023024 | 5,945840175 | -0,967382841 | -5,358044583 | 4,956591044 | -0,967416514 |
| 714 | -6,754893631 | 7,085686736 | -0,944690687 | -5,787077775 | 6,127663887 | -0,944687544 | -4,827715841 | 5,169622516 | -0,944729436 |
| 715 | -7,39739119 | 7,09045757 | -0,945166103 | -6,459447434 | 6,131985201 | -0,94516247 | -5,531811336 | 5,173493095 | -0,9452056 |
| 716 | -6,891279999 | 7,233844256 | -0,923811188 | -5,954278748 | 6,304667615 | -0,92380695 | -5,02944331 | 5,375470034 | -0,923850914 |
| 717 | 7,142276893 | -6,927770605 | 0,466391428 | 6,131977492 | -5,939767225 | 0,466394039 | 5,11728327 | -4,951776058 | 0,466369323 |
| 718 | 6,737776607 | -6,935073783 | 0,467004493 | 5,760038814 | -5,945838087 | 0,467007433 | 4,7758113 | -4,956616659 | 0,466978254 |
| 719 | 7,268128392 | -7,085686731 | 0,444444081 | 6,290041083 | -6,127661619 | 0,444447239 | 5,303501136 | -5,169654437 | 0,444407481 |
| 720 | 6,910875611 | -7,090457566 | 0,444620742 | 5,961521668 | -6,131982564 | 0,444624369 | 5,001861486 | -5,173527548 | 0,444580345 |
| 721 | 7,409505337 | -7,233844254 | 0,423497189 | 6,459950555 | -6,30466451 | 0,423501434 | 5,498228711 | -5,375505401 | 0,423458574 |
| 722 | 6,562835514 | 6,927770605 | -0,966211346 | 5,560313889 | 5,939767383 | -0,966213533 | 4,562186028 | 4,951778761 | -0,966179141 |
| 723 | 7,288903901 | 6,935073783 | -0,967384868 | 6,320230239 | 5,94583812 | -0,967387718 | 5,358044587 | 4,95661725 | -0,967356438 |
| 724 | 6,754893636 | 7,085686731 | -0,944689723 | 5,787077781 | 6,127661492 | -0,944693222 | 4,827715861 | 5,169652279 | -0,944661208 |
| 725 | 7,397391193 | 7,090457566 | -0,945165065 | 6,459447437 | 6,131982485 | -0,945168904 | 5,531811345 | 5,17352621 | -0,945129686 |
| 726 | 6,891279996 | 7,233844254 | -0,923810074 | 5,954278745 | 6,304664576 | -0,923814143 | 5,029443304 | 5,375506513 | -0,923767288 |
| 727 | -0,44707114 | -0,125574033 | -0,019235876 | -0,446895465 | -0,152238669 | -0,019236474 | -0,44506532 | -0,178904133 | -0,019242603 |
| 728 | -0,44689416 | -0,125849479 | -0,019194195 | -0,446714004 | -0,15245546 | -0,01919479 | -0,444879823 | -0,179062255 | -0,01920086 |
| 729 | 0,452690187 | 0,125574032 | 0,019427448 | 0,451848359 | 0,152238527 | 0,019427667 | 0,449349505 | 0,178901703 | 0,019425121 |
| 730 | 0,45247691 | 0,125849478 | 0,019384082 | 0,451639604 | 0,15245532 | 0,019384303 | 0,449145749 | 0,179059857 | 0,019381812 |
| 731 | 0,315749149 | 0,000890891 | -0,000169917 | 0,290416546 | 0,000589392 | -0,000170192 | 0,266728945 | 0,000289594 | -0,000166434 |
| 732 | 0,315403954 | 0,000753595 | -0,000159673 | 0,290118396 | 0,000473302 | -0,000159947 | 0,266478092 | 0,000194708 | -0,00015619 |
| 733 | -0,315749152 | 0,000890888 | -0,000169983 | -0,290416549 | 0,000589677 | -0,000169521 | -0,266728947 | 0,000286614 | -0,000173266 |
| 734 | -0,315403957 | 0,000753593 | -0,000159739 | -0,290118399 | 0,000473587 | -0,000159275 | -0,266478094 | 0,000191727 | -0,000163024 |
| 735 | -0,43564461 | -0,124751528 | -0,018352569 | -0,435063821 | -0,150045671 | -0,018352732 | -0,432869265 | -0,175336045 | -0,018341289 |
| 736 | -0,435503269 | -0,125020783 | -0,018315916 | -0,434917894 | -0,150263248 | -0,018316081 | -0,432718931 | -0,175501953 | -0,018304675 |
| 737 | 0,435320407 | 0,124751529 | 0,018323776 | 0,434910269 | 0,1500458 | 0,018324284 | 0,432888793 | 0,17533822 | 0,018320644 |
| 738 | 0,435147222 | 0,125020784 | 0,018285494 | 0,43474155 | 0,150263376 | 0,018286001 | 0,432724698 | 0,175504107 | 0,018282326 |
| 739 | 0,296611732 | 0,009712966 | -0,000512477 | 0,272660139 | 0,008554855 | -0,000512811 | 0,250237655 | 0,007398408 | -0,000509247 |
| 740 | 0,296341558 | 0,009733856 | -0,000512512 | 0,272425783 | 0,008574965 | -0,000512847 | 0,250039526 | 0,007417739 | -0,000509279 |
| 741 | -0,296611732 | 0,009712964 | -0,000512539 | -0,27266014 | 0,00855512 | -0,000512188 | -0,250237656 | 0,007395649 | -0,000515573 |
| 742 | -0,296341559 | 0,009733854 | -0,000512574 | -0,272425783 | 0,008575229 | -0,000512225 | -0,250039526 | 0,007414978 | -0,000515608 |
| 743 | -0,421253637 | -0,117488754 | -0,01785499 | -0,420033056 | -0,141813717 | -0,017855508 | -0,417280359 | -0,166138582 | -0,017858039 |
| 744 | -0,421396258 | -0,117791016 | -0,017834261 | -0,420164374 | -0,142083619 | -0,017834779 | -0,417399601 | -0,166376115 | -0,017837284 |
| 745 | 0,407702228 | 0,117488753 | 0,017415858 | 0,407979719 | 0,141813599 | 0,01741606 | 0,406723032 | 0,166136592 | 0,017411444 |
| 746 | 0,407694741 | 0,117791015 | 0,017389663 | 0,407982864 | 0,142083501 | 0,017389866 | 0,406736048 | 0,166374139 | 0,017385272 |
| 747 | -0,452690181 | 0,125574035 | 0,019427514 | -0,451848354 | 0,15223824 | 0,01942699 | -0,449349506 | 0,178904699 | 0,019431989 |

APOYO 2

| Newton | C1 | | | C2 | | | C3 | | |
|---|---|---|---|---|---|---|---|---|---|
| Barra | L | T | V | L | T | V | L | T | V |
| 748 | -0,452476905 | 0,12584948 | 0,019384148 | -0,451639599 | 0,152455033 | 0,019383627 | -0,449145751 | 0,179062853 | 0,019388681 |
| 749 | 0,447071145 | -0,125574035 | -0,019235943 | 0,446895472 | -0,152238381 | -0,019235796 | 0,445065358 | -0,178907126 | -0,019249464 |
| 750 | 0,446894165 | -0,12584948 | -0,019194261 | 0,446714011 | -0,152455172 | -0,019194112 | 0,44487986 | -0,179065248 | -0,01920772 |
| 751 | 0,570844283 | -0,000890888 | 0,000267099 | 0,597188875 | -0,000589595 | 0,000266855 | 0,625176603 | -0,000285218 | 0,000275605 |
| 752 | 0,571137035 | -0,000753593 | 0,000246596 | 0,597434972 | -0,000473504 | 0,000246354 | 0,625376297 | -0,000190317 | 0,000255158 |
| 753 | -0,570844286 | -0,00089089 | 0,000267032 | -0,597188879 | -0,000589309 | 0,000267528 | -0,625176623 | -0,000288196 | 0,000268779 |
| 754 | -0,571137038 | -0,000753595 | 0,00024653 | -0,597434976 | -0,000473218 | 0,000247027 | -0,625376316 | -0,000193296 | 0,000248329 |
| 755 | -0,435320412 | 0,12475153 | 0,018323841 | -0,434910274 | 0,150045521 | 0,018323627 | -0,432888796 | 0,175341136 | 0,018327329 |
| 756 | -0,435147227 | 0,125020786 | 0,01828556 | -0,434741554 | 0,150263097 | 0,018285343 | -0,432724701 | 0,175507024 | 0,018289012 |
| 757 | 0,435644606 | -0,12475153 | -0,018352634 | 0,435063815 | -0,150045392 | -0,018352076 | 0,432869235 | -0,175338965 | -0,018347982 |
| 758 | 0,435503265 | -0,125020786 | -0,018315981 | 0,434917888 | -0,15026297 | -0,018315424 | 0,432718901 | -0,175504873 | -0,018311368 |
| 759 | 0,528989802 | -0,009712964 | 0,001166595 | 0,553878901 | -0,008555113 | 0,001166263 | 0,580299478 | -0,007395538 | 0,001170046 |
| 760 | 0,529255747 | -0,009733854 | 0,001167691 | 0,554109473 | -0,008575223 | 0,001167358 | 0,580495088 | -0,007414889 | 0,001171061 |
| 761 | -0,528989802 | -0,009712966 | 0,001166533 | -0,553878901 | -0,008554849 | 0,001166884 | -0,58029948 | -0,007398301 | 0,001163712 |
| 762 | -0,529255747 | -0,009733856 | 0,00116763 | -0,554109473 | -0,00857496 | 0,001167979 | -0,580495089 | -0,007417654 | 0,001164724 |
| 763 | -0,407702224 | 0,117488755 | 0,017415919 | -0,407979715 | 0,141813333 | 0,017415433 | -0,406723025 | 0,166139369 | 0,017417811 |
| 764 | -0,407694737 | 0,117791018 | 0,017389724 | -0,407982859 | 0,142083235 | 0,017389239 | -0,406736041 | 0,166376918 | 0,017391643 |
| 765 | 0,421253642 | -0,117488756 | -0,017855052 | 0,420033061 | -0,141813451 | -0,017854881 | 0,417280383 | -0,166141356 | -0,017864399 |
| 766 | 0,421396262 | -0,117791018 | -0,017834323 | 0,420164379 | -0,142083352 | -0,017834151 | 0,417399624 | -0,166378892 | -0,017843648 |
| 767 | 7,506691372 | 7,217465954 | -0,921830309 | 6,598243587 | 6,2902549 | -0,921834689 | 5,703738797 | 5,363068311 | -0,921780222 |
| 768 | 7,068043341 | -7,217465954 | 0,422622199 | 6,145949909 | -6,290254778 | 0,422626906 | 5,209912553 | -5,363066251 | 0,422579836 |
| 769 | -7,506691377 | 7,217465953 | -0,921831495 | -6,598243593 | 6,290258246 | -0,921826772 | -5,703738818 | 5,363028616 | -0,92187122 |
| 770 | -7,068043346 | -7,217465953 | 0,422623386 | -6,145949914 | -6,290258124 | 0,422618989 | -5,209912564 | -5,363026555 | 0,422670837 |
| 771 | -0,533702295 | 0,018579987 | -0,002255067 | -0,558170417 | 0,016334671 | -0,002254864 | -0,584176409 | 0,01408614 | -0,002264288 |
| 772 | -0,533906438 | 0,018604087 | -0,002258973 | -0,558335522 | 0,016354667 | -0,002258768 | -0,584302819 | 0,014102044 | -0,002268149 |
| 773 | 0,29345417 | -0,018579987 | 0,001000823 | 0,269934508 | -0,016334762 | 0,001000375 | 0,247954524 | -0,014087683 | 0,001004258 |
| 774 | 0,293126782 | -0,018604087 | 0,001002867 | 0,269646564 | -0,016354758 | 0,00100242 | 0,247706367 | -0,014103575 | 0,001006303 |
| 775 | 0,533702298 | 0,018579989 | -0,002255005 | 0,558170421 | 0,016334403 | -0,002255494 | 0,584176432 | 0,014088931 | -0,002257891 |
| 776 | 0,533906441 | 0,018604088 | -0,00225891 | 0,558335526 | 0,016354399 | -0,002259399 | 0,584302841 | 0,014104836 | -0,00226175 |
| 777 | -0,293454167 | -0,01857999 | 0,001000761 | -0,269934504 | -0,016334495 | 0,001001005 | -0,247954523 | -0,014090476 | 0,000997855 |
| 778 | -0,293126778 | -0,018604089 | 0,001002805 | -0,269646561 | -0,01635449 | 0,00100305 | -0,247706366 | -0,014106369 | 0,000999898 |
| 779 | -7,544193442 | -7,349886894 | 0,402575866 | -6,62020792 | -6,449788154 | 0,402570901 | -5,680560632 | -5,549665041 | 0,402621802 |
| 780 | -7,205375331 | -7,379662789 | 0,404110111 | -6,308634775 | -6,476078974 | 0,404104627 | -5,394469037 | -5,572468695 | 0,404159844 |
| 781 | -7,63538075 | -7,508886822 | 0,385985716 | -6,739852239 | -6,630981079 | 0,385979996 | -5,82524221 | -5,753045951 | 0,386043397 |
| 782 | -7,329698264 | -7,460358991 | 0,383595018 | -6,458681881 | -6,587955846 | 0,383589018 | -5,566963178 | -5,715521681 | 0,383655961 |
| 783 | -7,754009294 | -7,587871384 | 0,366032764 | -6,882755821 | -6,739808242 | 0,36602645 | -5,98919786 | -5,891712362 | 0,36609713 |
| 784 | -7,054416641 | 7,349886893 | -0,902571221 | -6,14513429 | 6,449788144 | -0,902566282 | -5,251515176 | 5,549664877 | -0,902617771 |
| 785 | -7,665051102 | 7,379662788 | -0,906090697 | -6,784098374 | 6,476078854 | -0,906085534 | -5,920571363 | 5,572466668 | -0,906148028 |
| 786 | -7,205652756 | 7,508886822 | -0,886982093 | -6,326931443 | 6,630981052 | -0,886976442 | -5,467290486 | 5,753045508 | -0,887041435 |
| 787 | -7,765415699 | 7,460358991 | -0,881394248 | -6,912205343 | 6,587955895 | -0,881388118 | -6,079696562 | 5,715522501 | -0,881452117 |
| 788 | -7,335024485 | 7,587871385 | -0,863663742 | -6,482566479 | 6,739808331 | -0,863657189 | -5,652411451 | 5,891713869 | -0,863722461 |
| 789 | 7,544193442 | -7,349886897 | 0,40257461 | 6,620207921 | -6,44978451 | 0,402579521 | 5,680560641 | -5,549707848 | 0,402523668 |
| 790 | 7,205375336 | -7,379662795 | 0,404108784 | 6,30863478 | -6,476075024 | 0,404113967 | 5,394469048 | -5,572514696 | 0,404054389 |
| 791 | 7,635380751 | -7,50888683 | 0,385984322 | 6,739852239 | -6,630976842 | 0,385990011 | 5,825242203 | -5,753094955 | 0,385931059 |

APOYO 2

| Newton | C1 | | | C2 | | | C3 | | |
|---|---|---|---|---|---|---|---|---|---|
| Barra | L | T | V | L | T | V | L | T | V |
| 792 | 7,329698262 | -7,460359001 | 0,383593558 | 6,458681879 | -6,587951328 | 0,383599695 | 5,566963169 | -5,715573624 | 0,383536883 |
| 793 | 7,754009291 | -7,587871396 | 0,366031239 | 6,882755817 | -6,739803445 | 0,366037784 | 5,98919785 | -5,891767218 | 0,365971375 |
| 794 | 7,054416642 | 7,349886897 | -0,902569966 | 6,14513429 | 6,4497845 | -0,902574902 | 5,251515169 | 5,549707687 | -0,902519632 |
| 795 | 7,665051106 | 7,379662794 | -0,90608937 | 6,784098379 | 6,476074904 | -0,906094874 | 5,920571384 | 5,57251267 | -0,906042571 |
| 796 | 7,205652757 | 7,50888683 | -0,886980698 | 6,326931445 | 6,630976815 | -0,886986458 | 5,4672905 | 5,75309451 | -0,886929101 |
| 797 | 7,765415697 | 7,460359001 | -0,881392788 | 6,912205341 | 6,587951377 | -0,881398796 | 6,079696558 | 5,715574444 | -0,881333041 |
| 798 | 7,335024482 | 7,587871397 | -0,863662216 | 6,482566475 | 6,739803535 | -0,863668523 | 5,652411437 | 5,891768723 | -0,86359671 |
| 799 | -0,389714832 | -0,1119613 | -0,015838212 | -0,38727354 | -0,132990117 | -0,01583873 | -0,383439422 | -0,154019519 | -0,015843558 |
| 800 | 0,352652828 | 0,111961299 | 0,01465323 | 0,354231173 | 0,132989984 | 0,014653394 | 0,354414311 | 0,154017284 | 0,014650203 |
| 801 | -0,352652824 | 0,111961301 | 0,014653286 | -0,354231168 | 0,132989742 | 0,014652822 | -0,354414308 | 0,154019825 | 0,014656028 |
| 802 | 0,389714837 | -0,111961301 | -0,015838269 | 0,387273547 | -0,132989874 | -0,015838157 | 0,383439453 | -0,154022056 | -0,015849375 |
| 803 | -0,381831153 | -0,113511178 | -0,016233032 | -0,383047274 | -0,136561195 | -0,016233203 | -0,382793705 | -0,159608485 | -0,016225343 |
| 804 | -0,381841469 | -0,113757883 | -0,016212666 | -0,383057551 | -0,136780405 | -0,016212837 | -0,382803303 | -0,1598002 | -0,016204982 |
| 805 | 0,410600869 | 0,113511179 | 0,017189333 | 0,408481418 | 0,136561309 | 0,017189806 | 0,404894385 | 0,159610391 | 0,017188788 |
| 806 | 0,410649267 | 0,113757883 | 0,017169831 | 0,408529295 | 0,136780518 | 0,017170304 | 0,404941095 | 0,159802102 | 0,017169276 |
| 807 | 0,28341043 | 0,032732992 | -0,001638251 | 0,260519957 | 0,028979946 | -0,001638468 | 0,239088842 | 0,025228344 | -0,001635274 |
| 808 | 0,28314775 | 0,032781353 | -0,001639268 | 0,2602883 | 0,029025052 | -0,001639485 | 0,238888729 | 0,025270196 | -0,001636288 |
| 809 | -0,283410434 | 0,032732991 | -0,00163831 | -0,260519961 | 0,028980199 | -0,001637873 | -0,239088844 | 0,025225707 | -0,00164132 |
| 810 | -0,283147754 | 0,032781351 | -0,001639327 | -0,260288303 | 0,029025304 | -0,00163889 | -0,238888731 | 0,025267557 | -0,001642338 |
| 811 | -0,399079795 | -0,114106974 | -0,016506805 | -0,397274548 | -0,13634238 | -0,016507188 | -0,394020402 | -0,158576135 | -0,01650375 |
| 812 | -0,39919293 | -0,114355121 | -0,016491023 | -0,397378191 | -0,136565325 | -0,016491407 | -0,394113774 | -0,158773877 | -0,016487971 |
| 813 | 0,376233259 | 0,114106973 | 0,01573426 | 0,377145217 | 0,136342328 | 0,015734506 | 0,376607415 | 0,15857527 | 0,015727966 |
| 814 | 0,376203879 | 0,114355121 | 0,015713497 | 0,377124688 | 0,136565273 | 0,015713743 | 0,376594955 | 0,15877301 | 0,015707196 |
| 815 | 0,258389896 | -0,054540958 | 0,002659644 | 0,23784202 | -0,048400857 | 0,002659289 | 0,218710808 | -0,042259143 | 0,002662695 |
| 816 | 0,258210838 | -0,054896177 | 0,002677489 | 0,237684834 | -0,048715218 | 0,002677134 | 0,218576281 | -0,042532646 | 0,002680542 |
| 817 | -0,258389894 | -0,05454096 | 0,002659586 | -0,237842019 | -0,04840061 | 0,00265987 | -0,218710808 | -0,042261724 | 0,00265678 |
| 818 | -0,258210837 | -0,054896179 | 0,00267743 | -0,237684833 | -0,048714971 | 0,002677715 | -0,218576281 | -0,042535229 | 0,002674622 |
| 819 | -0,410600873 | 0,113511181 | 0,017189392 | -0,408481422 | 0,136561054 | 0,017189206 | -0,404894395 | 0,159613049 | 0,017194881 |
| 820 | -0,410649271 | 0,113757885 | 0,017169891 | -0,408529299 | 0,136780263 | 0,017169704 | -0,404941106 | 0,159804762 | 0,017175373 |
| 821 | 0,381831149 | -0,113511181 | -0,016233091 | 0,383047269 | -0,136560941 | -0,016232604 | 0,382793687 | -0,159611146 | -0,016231443 |
| 822 | 0,381841465 | -0,113757885 | -0,016212725 | 0,383057546 | -0,136780151 | -0,016212238 | 0,382803285 | -0,159802863 | -0,016211086 |
| 823 | 0,504615469 | -0,03273299 | 0,003803541 | 0,5284018 | -0,028980101 | 0,003803365 | 0,5536478 | -0,025224061 | 0,003812718 |
| 824 | 0,504832428 | -0,032781351 | 0,003807245 | 0,528588226 | -0,029025207 | 0,003807068 | 0,553804215 | -0,025265917 | 0,003816401 |
| 825 | -0,504615473 | -0,032732992 | 0,003803482 | -0,528401805 | -0,028979849 | 0,00380396 | -0,553647823 | -0,025226699 | 0,003806671 |
| 826 | -0,504832431 | -0,032781353 | 0,003807186 | -0,528588231 | -0,029024954 | 0,003807663 | -0,553804238 | -0,025268557 | 0,00381035 |
| 827 | -0,376233258 | 0,114106975 | 0,015734319 | -0,377145214 | 0,136342077 | 0,015733915 | -0,376607402 | 0,158577901 | 0,015733997 |
| 828 | -0,376203878 | 0,114355123 | 0,015713556 | -0,377124685 | 0,136565022 | 0,015713151 | -0,376594942 | 0,158775642 | 0,01571323 |
| 829 | 0,399079797 | -0,114106975 | -0,016506864 | 0,39727455 | -0,136342128 | -0,016506596 | 0,394020403 | -0,158578764 | -0,016509778 |
| 830 | 0,399192932 | -0,114355123 | -0,016491082 | 0,397378193 | -0,136565073 | -0,016490814 | 0,394113775 | -0,158776508 | -0,016494003 |
| 831 | 0,488501737 | 0,05454096 | -0,006243703 | 0,509926352 | 0,048400578 | -0,006244072 | 0,532768052 | 0,042261183 | -0,006242923 |
| 832 | 0,488777097 | 0,054896179 | -0,006285101 | 0,51018047 | 0,04871494 | -0,006285471 | 0,533001714 | 0,04253469 | -0,006284313 |
| 833 | -0,488501736 | 0,054540958 | -0,006243761 | -0,509926351 | 0,048400824 | -0,006243492 | -0,532768043 | 0,042258602 | -0,006248839 |
| 834 | -0,488777096 | 0,054896177 | -0,00628516 | -0,510180468 | 0,048715186 | -0,00628489 | -0,533001706 | 0,042532107 | -0,006290234 |

| Newton | C4 | | | C5 | | | C6 | | |
|---|---|---|---|---|---|---|---|---|---|
| Barra | L | T | V | L | T | V | L | T | V |
| 1 | 0,058867365 | 0,000258736 | -0,003615545 | -0,008199343 | -1,46901E-06 | -8,87369E-06 | 0,000411188 | 2,28185E-08 | -4,84936E-08 |
| 2 | -0,022845333 | 0,000141596 | -0,002432577 | 0,005078591 | 2,28545E-06 | -2,28914E-05 | -0,000314648 | -6,39293E-08 | 1,78035E-07 |
| 3 | -0,110543026 | 4,03387E-05 | -0,00114749 | 0,019312807 | 5,93225E-06 | -1,6655E-05 | -0,001091103 | -8,79799E-08 | 2,63784E-07 |
| 4 | -0,17256053 | -7,82227E-05 | 0,000178377 | 0,029397992 | 8,3889E-06 | -1,08214E-05 | -0,001640821 | -7,87038E-08 | 2,07555E-07 |
| 5 | -0,207942169 | -0,00012712 | 0,000658499 | 0,03509891 | 1,00459E-05 | -1,67683E-05 | -0,001949115 | -9,92576E-08 | 2,43621E-07 |
| 6 | 0,055415277 | 8,82965E-05 | -0,001121163 | -0,00884065 | -2,37433E-06 | 4,36499E-06 | 0,00047819 | 8,89406E-09 | 1,67127E-08 |
| 7 | 0,03560717 | -0,00010248 | 0,001814678 | -0,006995737 | -2,46611E-06 | 7,8503E-06 | 0,000413965 | 3,61534E-08 | -1,12755E-07 |
| 8 | 0,108152001 | 3,41029E-06 | 0,000855561 | -0,018971713 | -5,84025E-06 | 2,10259E-05 | 0,001073005 | 8,95889E-08 | -2,58172E-07 |
| 9 | 0,172165686 | 5,99844E-05 | 1,60736E-05 | -0,029337518 | -8,92607E-06 | 3,04566E-05 | 0,001637701 | 6,32511E-08 | -1,09708E-07 |
| 10 | 0,208166403 | 7,08443E-06 | 0,000356474 | -0,03508856 | -1,06993E-05 | 2,86115E-05 | 0,001949999 | 1,31742E-07 | -3,24499E-07 |
| 11 | 0,019749151 | -2,50393E-05 | 0,000384393 | -0,003516994 | -1,46015E-06 | 8,7525E-06 | 0,0002006 | -5,18651E-09 | 5,18769E-08 |
| 12 | 0,031639016 | -8,47878E-05 | 0,001794252 | -0,006401395 | -2,07615E-06 | 7,09414E-06 | 0,000383197 | 1,50923E-08 | -5,06521E-08 |
| 13 | 0,109131707 | -6,93104E-05 | 0,001288719 | -0,019112604 | -6,23105E-06 | 2,29108E-05 | 0,001079764 | 9,4223E-08 | -2,67247E-07 |
| 14 | 0,172308979 | 3,18633E-05 | 0,000199517 | -0,029356085 | -9,15802E-06 | 3,14831E-05 | 0,001638238 | 1,32534E-07 | -3,315E-07 |
| 15 | 0,20780425 | 0,000177898 | -0,000714018 | -0,035085499 | -1,00256E-05 | 2,46416E-05 | 0,001949865 | 7,28189E-08 | -1,41345E-07 |
| 16 | 0,062505788 | 0,000224553 | -0,003487812 | -0,008750256 | -1,93171E-06 | -7,62716E-06 | 0,00043936 | 1,27267E-08 | -6,98847E-09 |
| 17 | -0,018397779 | 0,000192638 | -0,002830101 | 0,004428192 | 2,37543E-06 | -2,44651E-05 | -0,000280598 | 1,89216E-08 | -9,41524E-08 |
| 18 | -0,112059854 | -9,50068E-06 | -0,000808168 | 0,019553093 | 5,9275E-06 | -1,58805E-05 | -0,001103201 | -9,81363E-08 | 2,95074E-07 |
| 19 | -0,172692436 | -0,00010984 | 0,000362891 | 0,029403465 | 8,32329E-06 | -1,03127E-05 | -0,001641289 | -1,19771E-07 | 3,40753E-07 |
| 20 | -0,207715315 | -0,000116761 | 0,000600344 | 0,035053886 | 1,00469E-05 | -1,68459E-05 | -0,001947913 | -1,04822E-07 | 2,62952E-07 |
| 21 | -0,04906462 | -0,000302333 | 0,00386658 | 0,006565835 | 5,5017E-07 | 1,0564E-05 | -0,000320793 | -5,72884E-08 | 1,80168E-07 |
| 22 | -0,069181025 | -0,000123592 | 0,001438951 | 0,011063201 | 3,19847E-06 | -1,01306E-05 | -0,000599562 | -3,94258E-08 | 5,25699E-08 |
| 23 | -0,123750407 | -0,000215225 | 0,003252709 | 0,019215983 | 5,39194E-06 | -6,90366E-06 | -0,001024381 | 2,51369E-08 | -1,92148E-07 |
| 24 | -0,055215327 | -0,000171635 | 0,003208615 | 0,007478794 | 2,01643E-06 | 5,42127E-06 | -0,000367894 | 1,27563E-08 | -7,72152E-08 |
| 25 | 0,052672794 | 6,16779E-06 | -0,000167466 | -0,008674624 | -2,83475E-06 | 1,23235E-05 | 0,000476186 | 4,68717E-08 | -1,38041E-07 |
| 26 | -0,06817487 | -0,000172349 | 0,001622866 | 0,010985057 | 2,24338E-06 | 1,16943E-05 | -0,000596574 | -1,19601E-07 | 4,24258E-07 |
| 27 | 0,045747992 | 4,11833E-05 | -0,000219416 | -0,007624965 | -2,13801E-06 | 1,08935E-05 | 0,000422203 | 7,48807E-08 | -2,41517E-07 |
| 28 | -0,062101739 | -6,36385E-05 | 0,000831733 | 0,010077852 | 2,44135E-06 | 8,86033E-06 | -0,000549221 | -1,01468E-08 | 6,40167E-08 |
| 29 | -0,044966664 | -1,4063E-05 | 0,000499553 | 0,007335397 | 2,39839E-06 | -7,32902E-06 | -0,000401014 | -5,40066E-08 | 1,3644E-07 |
| 30 | 0,049067093 | 7,63103E-05 | -0,000881881 | -0,007951769 | -2,26195E-06 | 1,89073E-06 | 0,0004335 | 2,10849E-08 | -3,89734E-08 |
| 31 | -0,046264943 | -9,75442E-05 | 0,001063258 | 0,007552518 | 2,13958E-06 | -5,36781E-06 | -0,000412575 | 1,4102E-08 | -8,25144E-08 |
| 32 | 0,047969651 | 6,48384E-05 | -0,000794619 | -0,007788215 | -2,16025E-06 | 1,80234E-06 | 0,000425434 | 2,12104E-08 | -4,30114E-08 |
| 33 | 0,059436748 | 0,000257685 | -0,003254629 | -0,008549364 | -9,43653E-07 | -1,90802E-05 | 0,000436468 | 5,46584E-08 | -1,99884E-07 |
| 34 | 0,01762455 | 8,33289E-06 | -0,000127545 | -0,002941693 | -1,24177E-06 | 9,72411E-06 | 0,000163137 | 1,2157E-08 | 1,1743E-08 |
| 35 | 0,038333974 | 3,04774E-05 | -0,000737051 | -0,006036722 | -2,36875E-06 | 9,6359E-06 | 0,000324194 | -2,44106E-08 | 1,51737E-07 |
| 36 | -0,04361544 | -8,29966E-05 | 0,001165489 | 0,006828503 | 2,13E-06 | -7,75508E-06 | -0,000365158 | -2,75231E-08 | 2,41854E-08 |
| 37 | 0,04355564 | 0,000126852 | -0,002553452 | -0,005956901 | -2,07697E-06 | 5,22317E-06 | 0,000294179 | 1,23466E-08 | 5,22944E-08 |
| 38 | 0,067855405 | 0,000170831 | -0,001858714 | -0,010668308 | -1,84046E-06 | -9,78852E-06 | 0,00057203 | 6,05627E-08 | -2,20837E-07 |
| 39 | -0,038931818 | -4,17647E-05 | 0,000334541 | 0,006337618 | 1,06706E-06 | 1,09293E-05 | -0,000346351 | -6,36796E-08 | 2,52007E-07 |
| 40 | 0,045890573 | 7,01229E-05 | -0,000740126 | -0,007388277 | -1,63701E-06 | -5,52099E-06 | 0,000400629 | 1,30127E-08 | -6,33995E-08 |
| 41 | -0,018216058 | 1,71693E-05 | -0,000360009 | 0,003279573 | 1,08766E-06 | -4,27305E-06 | -0,000187352 | -1,0371E-08 | 2,61754E-08 |
| 42 | -0,022950489 | -1,14557E-06 | -0,000140912 | 0,003985795 | 1,19959E-06 | -3,62696E-06 | -0,000224182 | -1,71976E-08 | 4,7108E-08 |
| 43 | 0,060031127 | 0,000109168 | -0,001371001 | -0,009513386 | -2,47647E-06 | -1,15759E-07 | 0,000512762 | 2,25373E-08 | -4,51681E-08 |

APOYO 2

| Newton | C4 | | | C5 | | | C6 | | |
|---|---|---|---|---|---|---|---|---|---|
| Barra | L | T | V | L | T | V | L | T | V |
| 44 | 0,052915251 | 8,8307E-05 | -0,001081814 | -0,008451257 | -2,23495E-06 | 5,40471E-07 | 0,000457411 | 1,99134E-08 | -4,03339E-08 |
| 45 | 0,121501558 | 0,000356866 | -0,00494816 | -0,018125847 | -4,17217E-06 | -1,10619E-05 | 0,000945166 | 2,43858E-08 | -1,52394E-08 |
| 46 | -0,121501558 | -0,000356866 | 0,00494816 | 0,018125847 | 4,17217E-06 | 1,10619E-05 | -0,000945166 | -2,43895E-08 | 1,52395E-08 |
| 47 | -0,096753631 | -0,000284178 | 0,003940299 | 0,014433901 | 3,32236E-06 | 8,80874E-06 | -0,000752651 | -1,94202E-08 | 1,21354E-08 |
| 48 | 0,096753631 | 0,000284178 | -0,003940299 | -0,014433901 | -3,32236E-06 | -8,80874E-06 | 0,000752651 | 1,94213E-08 | -1,21357E-08 |
| 49 | 0,029207841 | 0,000127348 | -0,00104714 | -0,00470568 | -3,40279E-07 | -1,76835E-05 | 0,000256647 | -3,92699E-08 | 1,12244E-07 |
| 50 | -0,028750652 | 1,77289E-05 | 6,48609E-05 | 0,004647396 | 1,52129E-06 | -1,1225E-05 | -0,000252765 | 6,58563E-08 | -2,66664E-07 |
| 51 | 0,029519849 | 4,4523E-05 | -0,000534008 | -0,004762512 | -7,67518E-07 | -1,5502E-05 | 0,000258407 | 4,98608E-09 | -2,63449E-08 |
| 52 | -0,028972581 | -6,20829E-05 | 0,000541892 | 0,004683857 | 1,42368E-06 | -1,00936E-05 | -0,00025429 | -2,78817E-08 | 3,70232E-08 |
| 53 | -0,017190899 | -5,97803E-05 | -7,16192E-06 | 0,002788333 | 9,88546E-07 | -1,50207E-05 | -0,000150592 | 4,39508E-08 | -1,59408E-07 |
| 54 | 0,017066097 | 3,89032E-05 | -0,000313089 | -0,002739831 | -6,78946E-07 | -5,71874E-06 | 0,000147809 | 7,43253E-08 | -2,70888E-07 |
| 55 | -0,01759365 | 0,000159555 | -0,001403324 | 0,002739385 | 1,91099E-06 | -2,03761E-05 | -0,000149077 | -1,11422E-07 | 3,33174E-07 |
| 56 | 0,017351254 | -9,54654E-06 | -9,26831E-06 | -0,002772024 | -7,11389E-07 | -5,01771E-06 | 0,00014839 | -6,74975E-09 | -6,22386E-09 |
| 57 | -0,232850933 | -0,000245425 | 0,00131845 | 0,039175623 | 1,08571E-05 | -1,83259E-05 | -0,002174388 | -7,66848E-08 | 1,67836E-07 |
| 58 | 0,232608347 | 0,000274082 | -0,001792744 | -0,039162941 | -1,09538E-05 | 2,51516E-05 | 0,002172393 | 2,64368E-08 | 1,23329E-08 |
| 59 | -0,232963027 | -3,43275E-05 | -2,25384E-06 | 0,039138991 | 1,17283E-05 | -2,33184E-05 | -0,002173874 | -1,84942E-07 | 5,1029E-07 |
| 60 | 0,232930233 | -1,5919E-05 | 5,54551E-05 | -0,03918992 | -1,22954E-05 | 3,26252E-05 | 0,002172606 | 2,30224E-07 | -6,30433E-07 |
| 61 | -0,015680581 | 0,000232753 | -0,000849662 | 0,002621402 | 1,83513E-06 | -2,42362E-06 | -0,000144997 | -1,97113E-07 | 6,13443E-07 |
| 62 | 0,015825947 | 4,90513E-05 | -0,000549835 | -0,002636075 | -5,86256E-07 | 1,26537E-07 | 0,000147363 | -8,01214E-09 | 4,70679E-08 |
| 63 | -0,015059281 | -0,000367895 | 0,002946269 | 0,002631308 | -8,35528E-07 | 1,2544E-05 | -0,00014525 | 1,9787E-07 | -6,34885E-07 |
| 64 | 0,015230945 | 4,46006E-05 | -0,000545414 | -0,00256791 | -6,31025E-07 | 1,74774E-07 | 0,000146714 | 1,16675E-08 | -1,96235E-08 |
| 65 | 0,010640767 | -0,000164103 | 0,001169725 | -0,001775936 | -2,68271E-06 | 4,74933E-05 | 9,55982E-05 | 1,02454E-07 | -2,53404E-07 |
| 66 | -0,010770718 | -0,000133163 | 0,00096008 | 0,001763741 | 7,54667E-08 | 2,14002E-05 | -9,66642E-05 | -1,85003E-07 | 6,82616E-07 |
| 67 | 0,010633649 | -5,90574E-05 | 0,000516313 | -0,00171705 | -2,13885E-06 | 4,47186E-05 | 9,55139E-05 | 4,36419E-08 | -6,77347E-08 |
| 68 | -0,010723095 | 4,52365E-05 | -0,000102514 | 0,001747372 | 2,15335E-07 | 1,91666E-05 | -9,63079E-05 | 3,1264E-08 | -1,63783E-08 |
| 69 | 0,145770394 | -0,009160289 | -0,844651942 | 0,065531998 | 1,44038E-05 | 0,000777495 | -0,003840069 | -2,79286E-07 | -2,00269E-06 |
| 70 | -0,146423011 | -0,009180127 | -0,8463191 | -0,065528564 | -2,33976E-05 | 0,000855447 | 0,00383982 | 2,45545E-07 | -3,28334E-06 |
| 71 | -0,211469783 | -0,017673867 | 0,446709067 | 0,067534333 | -1,03121E-05 | 0,000856117 | -0,003847276 | 2,79624E-08 | -3,70773E-06 |
| 72 | 0,211569195 | -0,01751953 | 0,444554843 | -0,067524686 | -5,07665E-05 | 0,00093948 | 0,003846975 | 5,47184E-07 | -4,9637E-06 |
| 73 | 0,143002451 | 0,038733775 | -0,795075829 | 0,028106439 | 0,000125676 | -0,002841895 | -0,001680742 | -5,99565E-07 | 7,35379E-06 |
| 74 | 0,142527374 | 0,039235818 | -0,798894595 | 0,028265928 | 0,000127164 | -0,002875759 | -0,001689105 | -6,06906E-07 | 7,45326E-06 |
| 75 | -0,434571591 | 0,041107529 | 0,728801016 | -0,025587508 | 0,00012763 | -0,002892449 | 0,001683887 | -4,78085E-07 | 6,85609E-06 |
| 76 | -0,434905829 | 0,04159168 | 0,727741729 | -0,025712821 | 0,000128978 | -0,002925967 | 0,001691978 | -4,83658E-07 | 6,94922E-06 |
| 77 | 0,27251397 | -0,026878554 | -0,198581129 | -0,004411708 | -0,000128239 | 0,001659775 | 0,000174507 | 4,92377E-07 | -2,69365E-06 |
| 78 | 0,272216572 | -0,027161124 | -0,197073825 | -0,004553334 | -0,000129667 | 0,001676221 | 0,000182804 | 4,9751E-07 | -2,71649E-06 |
| 79 | -0,272837402 | -0,027271938 | -0,197279788 | 0,004642512 | -0,000125609 | 0,001654976 | -0,000187147 | 5,00648E-07 | -2,70448E-06 |
| 80 | -0,272509376 | -0,027554466 | -0,195768916 | 0,004781414 | -0,000126956 | 0,001671255 | -0,000195289 | 5,04658E-07 | -2,72458E-06 |
| 81 | 0,435669839 | 0,041522676 | 0,727218709 | 0,025349879 | 0,000142236 | -0,002927428 | -0,001670824 | -7,8829E-07 | 7,62652E-06 |
| 82 | 0,435988373 | 0,042004543 | 0,726169294 | 0,025477858 | 0,000143645 | -0,002961065 | -0,001679063 | -7,94687E-07 | 7,72151E-06 |
| 83 | -0,141625675 | 0,038339331 | -0,793745563 | -0,02834212 | 0,000107509 | -0,00279988 | 0,001693751 | -3,0712E-07 | 6,65038E-06 |
| 84 | -0,141167912 | 0,038839377 | -0,797562635 | -0,028498954 | 0,00010889 | -0,002833519 | 0,001701966 | -3,13052E-07 | 6,74628E-06 |
| 85 | 0,011401667 | -0,01191613 | 0,113205102 | -0,004146731 | -7,21625E-05 | 0,001458659 | 0,000173577 | 1,68117E-07 | -8,80056E-07 |
| 86 | 0,011862048 | -0,012000591 | 0,113208071 | -0,00429263 | -7,29137E-05 | 0,001472694 | 0,00018189 | 1,70273E-07 | -8,81531E-07 |
| 87 | -0,012709254 | -0,011964969 | 0,113805169 | 0,004369171 | -7,00501E-05 | 0,00145517 | -0,000186169 | 1,86089E-07 | -9,23756E-07 |

APOYO 2

| Newton | C4 | | | C5 | | | C6 | | |
|---|---|---|---|---|---|---|---|---|---|
| Barra | L | T | V | L | T | V | L | T | V |
| 88 | -0,013154366 | -0,012049761 | 0,113812749 | 0,00451236 | -7,07146E-05 | 0,001469027 | -0,000194326 | 1,87134E-07 | -9,22542E-07 |
| 89 | -0,278526507 | -0,029915679 | 0,602639787 | -0,000915141 | -7,80583E-05 | 0,001834081 | 3,03082E-05 | 3,89527E-07 | -6,4913E-06 |
| 90 | -0,003427824 | 0,02045237 | -0,140731073 | 0,000498239 | 8,54271E-05 | -0,001208937 | -2,80062E-05 | -1,24382E-07 | 1,66514E-06 |
| 91 | 0,284472428 | -0,029374096 | 0,60100015 | -8,39586E-05 | -7,70931E-05 | 0,001830314 | 2,49168E-05 | 3,08218E-07 | -6,2391E-06 |
| 92 | -0,002842253 | 0,008837696 | -0,085087624 | 0,000487463 | 5,03121E-05 | -0,00108092 | -2,79684E-05 | -2,235E-07 | 1,19811E-06 |
| 93 | 0,726926359 | 0,000444924 | 1,294766102 | 0,014750499 | 4,40322E-06 | -1,0634E-05 | -0,001018425 | -1,00293E-07 | 2,40843E-07 |
| 94 | 0,726878876 | 0,000444683 | 1,294676245 | 0,014754313 | 4,4007E-06 | -1,06462E-05 | -0,001018636 | -1,00298E-07 | 2,4101E-07 |
| 95 | -0,726926544 | -0,000444054 | 1,297289623 | -0,014750483 | -4,39725E-06 | 1,05883E-05 | 0,001018424 | 1,00483E-07 | -2,4178E-07 |
| 96 | -0,726878689 | -0,000444225 | 1,297199434 | -0,014754343 | -4,40195E-06 | 1,05803E-05 | 0,001018638 | 1,00502E-07 | -2,41672E-07 |
| 97 | -6,45665E-07 | 3,65049E-06 | 0,000200339 | 9,30172E-08 | 1,58618E-08 | -2,10796E-07 | -5,22897E-09 | -2,35013E-11 | 2,62668E-10 |
| 98 | 0,000123451 | -1,49151E-06 | 0,000116718 | -9,93845E-06 | -2,67997E-09 | 1,5404E-07 | 5,50031E-07 | 2,62688E-11 | -5,85471E-10 |
| 99 | -0,000123667 | -1,67422E-06 | 0,000117579 | 9,95147E-06 | 2,99558E-09 | 1,42982E-07 | -5,50775E-07 | -3,60671E-11 | -4,31932E-10 |
| 100 | 1,389980168 | 0,515089238 | -1,194770003 | -0,013601405 | -4,10227E-06 | 1,03049E-05 | 0,000939073 | 9,26227E-08 | -2,22738E-07 |
| 101 | 1,376999177 | 0,516598661 | -1,198135557 | -0,013475836 | -4,32131E-06 | 1,31409E-05 | 0,000930432 | 9,26897E-08 | -2,24481E-07 |
| 102 | 0,007127996 | -0,000727806 | 0,001715853 | -6,89757E-05 | -6,99108E-08 | 6,11639E-07 | 4,74628E-06 | 6,46352E-10 | -1,85918E-09 |
| 103 | -0,017843847 | 0,002113732 | -0,004677186 | 0,000172599 | -3,74241E-07 | 4,73246E-06 | -1,18773E-05 | 3,54731E-10 | -3,47913E-09 |
| 104 | -1,376995981 | 0,51412466 | -1,193174679 | 0,013475816 | 4,38221E-06 | -1,38173E-05 | -0,000930431 | -9,31093E-08 | 2,26234E-07 |
| 105 | -1,375267188 | 0,513948141 | -1,192758523 | 0,013459087 | 4,36526E-06 | -1,36689E-05 | -0,00092928 | -9,29526E-08 | 2,25783E-07 |
| 106 | -0,148596584 | -3,16009E-05 | -0,000264878 | 0,015808161 | 5,20799E-06 | -1,26089E-05 | -0,001022617 | -1,10905E-07 | 2,72647E-07 |
| 107 | -0,14860066 | -3,05847E-05 | -0,00029705 | 0,015812043 | 5,20927E-06 | -1,26338E-05 | -0,001022828 | -1,10929E-07 | 2,7297E-07 |
| 108 | 0,148596531 | 3,07441E-05 | 0,000290976 | -0,015808144 | -5,2067E-06 | 1,2582E-05 | 0,001022616 | 1,10878E-07 | -2,72939E-07 |
| 109 | 0,148600863 | 3,17671E-05 | 0,000258594 | -0,015812072 | -5,20769E-06 | 1,25615E-05 | 0,001022829 | 1,10876E-07 | -2,72669E-07 |
| 110 | -5,29541E-07 | 1,32969E-06 | -7,78409E-06 | 9,10626E-08 | 8,83506E-09 | -1,85426E-07 | -5,22249E-09 | -3,64871E-11 | 1,44833E-10 |
| 111 | 1,0871E-05 | -3,40526E-06 | 8,79057E-05 | -1,01138E-05 | -8,42427E-09 | 1,72033E-07 | 5,50576E-07 | 8,31974E-11 | -9,21046E-10 |
| 112 | -1,09215E-05 | -3,42289E-06 | 8,84512E-05 | 1,01278E-05 | -2,55957E-09 | 1,60731E-07 | -5,51329E-07 | 2,63896E-11 | -7,85635E-10 |
| 113 | 0,137008561 | 2,64178E-05 | 0,000249396 | -0,014576654 | -4,82386E-06 | 1,20531E-05 | 0,000942938 | 1,02306E-07 | -2,51409E-07 |
| 114 | 0,135757706 | 1,228E-05 | 0,000207194 | -0,014442486 | -4,90726E-06 | 1,44161E-05 | 0,000934264 | 1,01606E-07 | -2,48553E-07 |
| 115 | 0,000686928 | -2,51724E-06 | -6,83075E-06 | -7,36996E-05 | -4,87489E-08 | 5,32805E-07 | 4,76476E-06 | 5,58412E-10 | -1,15471E-09 |
| 116 | -0,001719415 | -2,33881E-05 | -6,95517E-05 | 0,000184418 | -1,51008E-07 | 3,95205E-06 | -1,19235E-05 | -8,95582E-10 | 4,08539E-09 |
| 117 | -0,135757474 | -8,78487E-06 | -0,000197373 | 0,014442464 | 4,93766E-06 | -1,49872E-05 | -0,000934262 | -1,01627E-07 | 2,48466E-07 |
| 118 | -0,135590869 | -9,39539E-06 | -0,00019903 | 0,014424589 | 4,92583E-06 | -1,4858E-05 | -0,000933106 | -1,01492E-07 | 2,48186E-07 |
| 119 | -0,101834894 | -0,2028726 | -1,435966431 | 0,032733148 | 0,000102913 | -0,010188605 | 0,003016038 | 6,68854E-07 | 2,99909E-05 |
| 120 | 0,101664013 | -0,202925507 | -1,437367234 | -0,032718889 | 9,30071E-05 | -0,010174484 | -0,003016291 | -2,03366E-06 | 3,61967E-05 |
| 121 | 0,26320033 | 0,194550978 | 0,988700913 | 0,017840167 | 0,000353773 | -0,01105107 | 0,003061926 | -9,31975E-07 | 3,89694E-05 |
| 122 | -0,263208449 | 0,194472316 | 0,987367562 | -0,01784089 | 0,000364524 | -0,011082105 | -0,003062101 | -3,70681E-06 | 4,5355E-05 |
| 123 | 0,783202546 | -0,316325141 | -0,044625162 | -0,058877253 | -0,000964891 | 0,023466433 | 0,006254399 | 5,24217E-06 | -5,63708E-05 |
| 124 | 0,783907448 | -0,316697544 | -0,044749734 | -0,058926984 | -0,000970437 | 0,02360186 | 0,0062568 | 5,2658E-06 | -5,66987E-05 |
| 125 | -0,885364267 | 0,339535161 | -0,040889381 | 0,03610749 | -0,001012434 | 0,023794477 | -0,006184648 | 2,34347E-06 | -4,77262E-05 |
| 126 | -0,884775086 | 0,339447697 | -0,039276167 | 0,036021492 | -0,001017792 | 0,023929263 | -0,006186605 | 2,36396E-06 | -4,80431E-05 |
| 127 | 1,134575156 | -0,031099483 | -0,049134279 | 0,047436332 | 0,000877362 | -0,008216085 | -0,006220042 | -3,90187E-06 | 3,49866E-06 |
| 128 | 1,134644016 | -0,030883044 | -0,048763536 | 0,047412921 | 0,000881875 | -0,00825169 | -0,006222212 | -3,91652E-06 | 3,48265E-06 |
| 129 | -1,134187489 | -0,03111519 | -0,049250516 | -0,047476316 | 0,000837446 | -0,008126106 | 0,006221192 | -1,25697E-06 | -2,65863E-06 |
| 130 | -1,13426456 | -0,030898713 | -0,048878769 | -0,04745279 | 0,000841967 | -0,008161721 | 0,006223348 | -1,26968E-06 | -2,6791E-06 |
| 131 | 0,885298526 | 0,339501438 | -0,040941695 | -0,036088971 | -0,001036382 | 0,023849627 | 0,006183876 | 4,93317E-06 | -5,37455E-05 |

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| Newton | C4 | | | C5 | | | C6 | | |
|---|---|---|---|---|---|---|---|---|---|
| Barra | L | T | V | L | T | V | L | T | V |
| 132 | 0,884711042 | 0,339414526 | -0,039328603 | -0,036003164 | -0,001041647 | 0,023984215 | 0,006185844 | 4,95527E-06 | -5,40661E-05 |
| 133 | -0,783339902 | -0,316332728 | -0,044462807 | 0,05889532 | -0,000909339 | 0,023342202 | -0,006255157 | 2,54134E-06 | -5,00762E-05 |
| 134 | -0,784043224 | -0,316704672 | -0,044589462 | 0,058944871 | -0,000914791 | 0,023477418 | -0,006257547 | 2,56265E-06 | -5,03988E-05 |
| 135 | 0,478051896 | 0,02093791 | 0,055763786 | 0,047461741 | 0,000425105 | -0,006610717 | -0,006219841 | -1,6828E-06 | -8,44548E-06 |
| 136 | 0,477862577 | 0,020886231 | 0,05518235 | 0,047449074 | 0,00042696 | -0,006636923 | -0,006222044 | -1,68389E-06 | -8,53688E-06 |
| 137 | -0,477958847 | 0,020924352 | 0,05563846 | -0,047479106 | 0,00038521 | -0,006520793 | 0,006220881 | 9,60722E-07 | -1,4598E-05 |
| 138 | -0,477770676 | 0,020872728 | 0,05505798 | -0,047466185 | 0,000387058 | -0,006546977 | 0,006223069 | 9,61621E-07 | -1,4694E-05 |
| 139 | -0,456391631 | 0,186822353 | -0,469421658 | 0,006595893 | 0,000545077 | -0,012974419 | -2,94307E-05 | -2,4487E-06 | 3,58344E-05 |
| 140 | 0,0033034 | -0,103740641 | 0,522580837 | -0,000100457 | -0,000524657 | 0,005983034 | 6,26587E-06 | 1,88469E-06 | -7,76981E-06 |
| 141 | 0,455081116 | 0,186423265 | -0,468519281 | -0,006425483 | 0,000536187 | -0,012954872 | 1,97425E-05 | -2,40139E-06 | 3,57132E-05 |
| 142 | 0,000513361 | -0,028359654 | -0,082769444 | -0,000108176 | -0,000260823 | 0,005049081 | 6,34397E-06 | 4,80039E-07 | 1,14062E-06 |
| 143 | 0,457184875 | 0,031877845 | -0,06554391 | 0,061237815 | 6,35719E-05 | -0,002024858 | -0,007263381 | -1,78541E-06 | 1,19822E-05 |
| 144 | 0,457500536 | 0,031851681 | -0,065334593 | 0,061233322 | 6,34777E-05 | -0,002024529 | -0,007263364 | -1,78491E-06 | 1,19791E-05 |
| 145 | -0,456522673 | 0,031956393 | -0,066472569 | -0,061247932 | 1,47849E-05 | -0,001917329 | 0,007264154 | 1,12729E-06 | 5,1986E-06 |
| 146 | -0,456836408 | 0,031930505 | -0,066263876 | -0,061243433 | 1,46969E-05 | -0,001917013 | 0,007264137 | 1,12776E-06 | 5,19556E-06 |
| 147 | -0,559316379 | -0,660324932 | -1,551746377 | -0,107843344 | -0,00026664 | 0,012646297 | 0,019297035 | 5,04525E-06 | -2,52561E-05 |
| 148 | 0,559470794 | -0,66037163 | -1,552659087 | 0,107825551 | -0,000149097 | 0,012375141 | -0,019296844 | -4,59551E-06 | -2,88753E-06 |
| 149 | 0,794565529 | 0,667035209 | 1,008763396 | -0,090639181 | -0,00051164 | 0,013382435 | 0,019279309 | 6,40125E-06 | -3,02962E-05 |
| 150 | -0,794587291 | 0,667007763 | 1,007790252 | 0,09064128 | -0,000419017 | 0,01316573 | -0,019279146 | -3,20731E-06 | -8,01732E-06 |
| 151 | 0,888523039 | -0,339519693 | 0,036873398 | -0,03469109 | 0,001101442 | -0,027070291 | 0,006206483 | -1,1122E-06 | 6,05145E-06 |
| 152 | 0,888879593 | -0,339865822 | 0,035603514 | -0,034569805 | 0,00111766 | -0,027458016 | 0,006219847 | -1,15906E-06 | 6,67147E-06 |
| 153 | -0,790726594 | 0,320473868 | 0,034880074 | 0,060883862 | 0,001481216 | -0,028781946 | -0,006232988 | -2,69203E-06 | 2,30722E-06 |
| 154 | -0,790538754 | 0,321079577 | 0,035445648 | 0,061147481 | 0,001497325 | -0,029169299 | -0,006247288 | -2,74481E-06 | 2,93961E-06 |
| 155 | 1,141095415 | 0,0327042 | 0,048622345 | 0,048130793 | -0,00104423 | 0,00929338 | -0,006237415 | -1,47375E-08 | 2,28353E-05 |
| 156 | 1,141498933 | 0,033212415 | 0,04879494 | 0,048208266 | -0,001056967 | 0,009384917 | -0,006251251 | 1,19271E-08 | 2,29932E-05 |
| 157 | -1,141424506 | 0,032696443 | 0,048412239 | -0,0480866 | -0,00108419 | 0,009383083 | 0,006236482 | 2,62288E-06 | 1,66971E-05 |
| 158 | -1,141823276 | 0,033204692 | 0,048585489 | -0,048163784 | -0,001097012 | 0,009474814 | 0,006250322 | 2,65646E-06 | 1,6839E-05 |
| 159 | 0,790801746 | 0,320480593 | 0,034617842 | -0,060901001 | 0,001421472 | -0,028648993 | 0,006233631 | -4,69194E-08 | -3,86198E-06 |
| 160 | 0,790612873 | 0,321086001 | 0,035184683 | -0,06116457 | 0,001437234 | -0,029035578 | 0,006247925 | -9,20406E-08 | -3,24752E-06 |
| 161 | -0,888429015 | -0,339496255 | 0,03704094 | 0,034673961 | 0,001123094 | -0,027120009 | -0,006205845 | -3,7103E-06 | 1,20889E-05 |
| 162 | -0,888786475 | -0,339842738 | 0,03577097 | 0,034552712 | 0,001139116 | -0,027507317 | -0,006219215 | -3,76331E-06 | 1,2723E-05 |
| 163 | 0,481417102 | -0,023983338 | -0,052033005 | 0,048140323 | -0,000453845 | 0,007184097 | -0,00623846 | -1,60086E-06 | 2,51302E-05 |
| 164 | 0,480847582 | -0,024587747 | -0,05194853 | 0,048205262 | -0,000458781 | 0,007248098 | -0,006252282 | -1,60764E-06 | 2,54408E-05 |
| 165 | -0,481462351 | -0,023991661 | -0,052240835 | -0,0481263 | -0,000493961 | 0,007274142 | 0,00623757 | 1,03703E-06 | 1,89909E-05 |
| 166 | -0,48089228 | -0,02459605 | -0,052155661 | -0,048191358 | -0,000498963 | 0,007338298 | 0,006251398 | 1,03714E-06 | 1,92855E-05 |
| 167 | -0,887371077 | -1,055551101 | -1,440993231 | -0,213807311 | 0,000479305 | -0,016651565 | 0,035788602 | 1,01772E-05 | -8,7427E-05 |
| 168 | 0,887237951 | -1,055558021 | -1,441446211 | 0,213837923 | 0,000672152 | -0,017093593 | -0,035788745 | -6,55252E-06 | -4,85874E-05 |
| 169 | 1,195525981 | 1,050008479 | 0,983883839 | -0,233721874 | 0,000577577 | -0,016459599 | 0,035687036 | 1,009E-05 | -9,87267E-05 |
| 170 | -1,195496859 | 1,049987709 | 0,983485148 | 0,23371839 | 0,000802971 | -0,016972708 | -0,035687273 | -6,50351E-06 | -6,01767E-05 |
| 171 | 0,782847878 | -0,320287344 | -0,032353959 | -0,063223316 | -0,001434478 | 0,032429965 | 0,006313551 | -2,73902E-06 | 0,000164747 |
| 172 | 0,782591887 | -0,321088306 | -0,033214298 | -0,063720406 | -0,001466693 | 0,033129837 | 0,006339326 | -2,70378E-06 | 0,000164979 |
| 173 | -0,885511503 | 0,336545921 | -0,032269261 | 0,032977668 | -0,002695147 | 0,038549783 | -0,00646714 | -1,00218E-05 | 0,000210674 |
| 174 | -0,885988453 | 0,337254853 | -0,031390992 | 0,032801502 | -0,00272713 | 0,039249425 | -0,00649262 | -9,99853E-06 | 0,000210925 |
| 175 | 1,135263345 | -0,037648613 | -0,052980599 | 0,046723744 | 0,001574431 | -0,011716894 | -0,006335921 | 3,65659E-06 | -9,20263E-05 |

APOYO 2

| Newton | C4 | | | C5 | | | C6 | | |
|---|---|---|---|---|---|---|---|---|---|
| Barra | L | T | V | L | T | V | L | T | V |
| 176 | 1,135898743 | -0,038089726 | -0,053713112 | 0,046876668 | 0,001598213 | -0,011874045 | -0,006361583 | 3,63534E-06 | -9,26217E-05 |
| 177 | -1,134983609 | -0,037658425 | -0,053165836 | -0,046788079 | 0,001533956 | -0,011625947 | 0,006336685 | 6,3961E-06 | -9,83994E-05 |
| 178 | -1,135620793 | -0,038099533 | -0,053898024 | -0,046941822 | 0,0015576 | -0,011782781 | 0,006362351 | 6,38685E-06 | -9,90226E-05 |
| 179 | 0,885440434 | 0,336525619 | -0,032411794 | -0,032959999 | -0,002708646 | 0,038581653 | 0,00646659 | -7,14634E-06 | 0,000204011 |
| 180 | 0,885917828 | 0,337234759 | -0,031533361 | -0,032783754 | -0,002740283 | 0,039280555 | 0,006492071 | -7,11148E-06 | 0,000204236 |
| 181 | -0,782923625 | -0,320288547 | -0,032127546 | 0,06324136 | -0,001371325 | 0,032289651 | -0,006314099 | -5,41116E-06 | 0,000170978 |
| 182 | -0,782667306 | -0,321089321 | -0,032988331 | 0,063738553 | -0,001402896 | 0,032988099 | -0,006339873 | -5,38824E-06 | 0,000171239 |
| 183 | 0,478220272 | 0,029962011 | 0,05324576 | 0,046631807 | 0,000644222 | -0,008344051 | -0,006331522 | 7,06285E-07 | -5,02629E-05 |
| 184 | 0,477362824 | 0,030438619 | 0,053652013 | 0,046799412 | 0,000653056 | -0,008448607 | -0,006357113 | 7,13964E-07 | -5,08302E-05 |
| 185 | -0,478193009 | 0,029952416 | 0,05306006 | -0,046644483 | 0,000604248 | -0,008254198 | 0,006332435 | 3,44117E-06 | -5,6625E-05 |
| 186 | -0,477335842 | 0,030429038 | 0,0534666 | -0,046812082 | 0,00061292 | -0,008358387 | 0,006358028 | 3,46075E-06 | -5,722E-05 |
| 187 | -1,30824956 | -1,297344089 | -1,264910893 | 0,1197446 | -0,008233806 | -0,840741638 | 0,060498434 | 6,94159E-06 | 0,000452353 |
| 188 | 1,308192695 | -1,297354159 | -1,264926892 | -0,120362266 | -0,008342818 | -0,840500261 | -0,0604952 | -2,06124E-05 | 0,000515389 |
| 189 | 1,287155105 | 1,297950579 | 0,887194412 | -0,235529911 | -0,018434436 | 0,445606449 | 0,062078026 | 1,05331E-05 | 0,000652429 |
| 190 | -1,287233258 | 1,297973273 | 0,887196982 | 0,235598713 | -0,018397521 | 0,445528566 | -0,062074408 | -1,88065E-05 | 0,000719636 |
| 191 | 0,28249181 | -0,330934055 | -0,042825401 | 0,168132718 | 0,037616298 | -0,796429734 | 0,018655181 | 3,57852E-05 | -0,001827338 |
| 192 | 0,282499111 | -0,333699271 | -0,045193769 | 0,167580673 | 0,038109142 | -0,800159273 | 0,018798083 | 3,61377E-05 | -0,001847784 |
| 193 | -0,90847312 | 0,328701712 | -0,045594586 | -0,458205451 | 0,042217376 | 0,720273285 | -0,016464712 | 4,09536E-05 | -0,00194881 |
| 194 | -0,908420834 | 0,331491633 | -0,043356481 | -0,458509516 | 0,042688465 | 0,719296939 | -0,01658417 | 4,12509E-05 | -0,001968683 |
| 195 | 1,08316195 | -0,314941664 | -0,308827791 | 0,274869568 | -0,028547247 | -0,200981243 | -0,003188997 | -3,09046E-05 | 0,001187206 |
| 196 | 1,085963301 | -0,314927103 | -0,308894007 | 0,27461958 | -0,02884238 | -0,199572329 | -0,003318529 | -3,11723E-05 | 0,001198216 |
| 197 | -1,083046491 | -0,314989468 | -0,309071299 | -0,273767847 | -0,028915555 | -0,200161034 | 0,00318243 | -2,99406E-05 | 0,00118443 |
| 198 | -1,085845495 | -0,314974885 | -0,309137481 | -0,2735039 | -0,029210455 | -0,198752636 | 0,003311879 | -3,01494E-05 | 0,001195304 |
| 199 | 0,908443107 | 0,328696155 | -0,045706519 | 0,458046982 | 0,042594538 | 0,719414015 | 0,016466345 | 4,82801E-05 | -0,001964692 |
| 200 | 0,908390426 | 0,331485664 | -0,043468647 | 0,458350846 | 0,043063919 | 0,718441392 | 0,016585811 | 4,86252E-05 | -0,001984676 |
| 201 | -0,282520579 | -0,330931863 | -0,042728763 | -0,168289921 | 0,037205567 | -0,795497651 | -0,018653582 | 2,59428E-05 | -0,001805741 |
| 202 | -0,28252823 | -0,333697465 | -0,045097391 | -0,167739547 | 0,037696549 | -0,799223116 | -0,018796477 | 2,62213E-05 | -0,001826018 |
| 203 | 0,418547081 | 0,316237979 | 0,211098431 | 0,011934513 | -0,010334625 | 0,118418618 | -0,00296097 | -2,85963E-05 | 0,000801489 |
| 204 | 0,4157929 | 0,316211469 | 0,211131598 | 0,012438902 | -0,010396302 | 0,118449826 | -0,003093884 | -2,8904E-05 | 0,000808179 |
| 205 | -0,418398005 | 0,316264856 | 0,210915216 | -0,011883092 | -0,010345521 | 0,118457758 | 0,00295385 | -2,79179E-05 | 0,000799606 |
| 206 | -0,415641845 | 0,316238298 | 0,210948378 | -0,01238713 | -0,010407276 | 0,118489132 | 0,003086677 | -2,81628E-05 | 0,000806152 |
| 207 | 0,268498836 | -0,004848486 | 0,056613976 | -0,27146944 | -0,027501342 | 0,573639139 | -0,000158435 | -4,82395E-07 | 0,000751184 |
| 208 | -0,000138208 | 0,268140099 | 0,27580091 | -0,000372323 | 0,019736884 | -0,126425553 | 2,36472E-06 | 3,44342E-06 | -0,000634164 |
| 209 | -0,268425743 | -0,0047539 | 0,056660441 | 0,271572778 | -0,027093609 | 0,572748188 | 0,000157543 | -3,8259E-07 | 0,000751233 |
| 210 | -6,20047E-05 | -0,263667686 | -0,200450058 | -1,5376E-05 | 0,007130386 | -0,082142831 | 2,25723E-06 | 1,38504E-05 | -0,00048701 |
| 211 | -0,202340402 | 1,5583E-05 | 4,23124E-05 | 0,742560659 | 0,000436352 | 1,295059527 | 0,009540429 | 2,48336E-06 | -5,08184E-06 |
| 212 | -0,202424451 | 0,000108595 | 0,000132329 | 0,742509767 | 0,000436076 | 1,294968512 | 0,009544301 | 2,48461E-06 | -5,09368E-06 |
| 213 | 0,202340395 | -9,01626E-05 | -0,000114511 | -0,74256069 | -0,000435693 | 1,296998456 | -0,009540428 | -2,46298E-06 | 5,01454E-06 |
| 214 | 0,202424461 | 2,85674E-06 | -2,44836E-05 | -0,742509713 | -0,000435907 | 1,296907303 | -0,009544301 | -2,46345E-06 | 5,00672E-06 |
| 215 | -2,63104E-08 | 2,6474E-05 | 2,84929E-05 | -7,50968E-08 | 3,53296E-06 | 0,000203097 | 4,70664E-10 | 5,20402E-10 | -1,0957E-07 |
| 216 | 0,000217875 | -0,000256447 | -0,000249854 | 0,000131958 | -1,33446E-06 | 0,00011812 | -1,00368E-05 | -3,54642E-09 | 9,42403E-08 |
| 217 | -0,00021789 | -0,000256467 | -0,000249883 | -0,000132091 | -1,49587E-06 | 0,000118479 | 1,00375E-05 | 8,98929E-10 | 8,38146E-08 |
| 218 | 0,186574564 | -2,60313E-05 | -5,18655E-05 | 1,375566149 | 0,515096653 | -1,195042763 | -0,008797936 | -2,29929E-06 | 5,0368E-06 |
| 219 | 0,184706548 | 0,000108513 | 6,92904E-05 | 1,362715894 | 0,516602993 | -1,198421016 | -0,008717105 | -2,32859E-06 | 7,03532E-06 |

APOYO 2

| Newton | C4 | | | C5 | | | C6 | | |
|---|---|---|---|---|---|---|---|---|---|
| Barra | L | T | V | L | T | V | L | T | V |
| 220 | 0,001025711 | 2,56436E-05 | 2,29028E-05 | 0,007055999 | -0,000728359 | 0,001712009 | -4,43833E-05 | -2,06255E-08 | 4,1621E-07 |
| 221 | -0,002567814 | 0,000223225 | 0,000200939 | -0,017664215 | 0,00210863 | -0,004698801 | 0,000111112 | -5,43962E-08 | 3,32935E-06 |
| 222 | -0,184706081 | -0,000141814 | -9,91849E-05 | -1,362712699 | 0,514121318 | -1,19288696 | 0,008717085 | 2,32074E-06 | -7,47069E-06 |
| 223 | -0,18445731 | -0,000135595 | -9,36301E-05 | -1,361001368 | 0,513944665 | -1,192471737 | 0,00870632 | 2,31574E-06 | -7,36974E-06 |
| 224 | -0,219695267 | -1,09522E-05 | 2,15443E-05 | -0,135119333 | -4,95975E-05 | 0,000103775 | 0,010322717 | 2,90436E-06 | -6,35131E-06 |
| 225 | -0,219578631 | -0,000104223 | -4,12695E-05 | -0,135126477 | -4,84293E-05 | 7,13621E-05 | 0,010326647 | 2,90495E-06 | -6,38649E-06 |
| 226 | 0,219695264 | 8,57397E-05 | 2,88406E-05 | 0,135119335 | 4,85969E-05 | -7,76222E-05 | -0,010322717 | -2,9084E-06 | 6,37731E-06 |
| 227 | 0,219578639 | -7,53678E-06 | -3,39735E-05 | 0,135126474 | 4,976E-05 | -0,000110026 | -0,010326647 | -2,9096E-06 | 6,34626E-06 |
| 228 | -1,22817E-08 | -2,56282E-05 | -2,12923E-05 | -2,24463E-09 | 9,96173E-07 | -7,23568E-06 | 4,5415E-10 | 2,50934E-09 | -7,84274E-08 |
| 229 | -0,000302323 | 0,000256627 | 0,000175167 | 1,85184E-05 | -3,60591E-06 | 8,82133E-05 | -1,01868E-05 | -2,96668E-09 | 1,3669E-07 |
| 230 | 0,000302306 | 0,000256643 | 0,000175168 | -1,8505E-05 | -3,59264E-06 | 8,81907E-05 | 1,01876E-05 | 1,6521E-09 | 1,25987E-07 |
| 231 | 0,202513881 | 2,17919E-05 | -1,20253E-05 | 0,124583414 | 4,36512E-05 | -8,93715E-05 | -0,009519177 | -2,68684E-06 | 6,06873E-06 |
| 232 | 0,200628855 | -0,000113101 | -0,000102852 | 0,12344534 | 3,34712E-05 | -0,000122014 | -0,009431655 | -2,71475E-06 | 7,19771E-06 |
| 233 | 0,001035049 | -2,57371E-05 | -1,75055E-05 | 0,000624846 | -1,6589E-06 | -6,86695E-06 | -4,80573E-05 | -2,36833E-08 | 2,58006E-07 |
| 234 | -0,002591198 | -0,000223813 | -0,000150767 | -0,001564444 | -1,67815E-05 | -5,44057E-05 | 0,00012031 | -5,33645E-08 | 1,88958E-06 |
| 235 | -0,200628384 | 0,000146496 | 0,000125377 | -0,123445035 | -3,09686E-05 | 0,000130131 | 0,009431633 | 2,73203E-06 | -7,49228E-06 |
| 236 | -0,200377348 | 0,000140254 | 0,000121132 | -0,123293488 | -3,1371E-05 | 0,000128465 | 0,009419978 | 2,72629E-06 | -7,42971E-06 |
| 237 | -1,967321345 | -1,903243253 | -1,471691829 | -0,102789869 | -0,211826188 | -1,459131107 | 0,022666455 | 9,63688E-05 | -0,006952212 |
| 238 | 1,967290643 | -1,903226703 | -1,471514101 | 0,102556197 | -0,211982423 | -1,458774879 | -0,022664865 | 0,000112676 | -0,006990081 |
| 239 | 1,837770911 | 1,903170928 | 0,987512688 | 0,271335296 | 0,201383585 | 1,003077471 | 0,010149502 | 8,98534E-05 | -0,008668656 |
| 240 | -1,83780031 | 1,903181837 | 0,987685639 | -0,271320221 | 0,20119156 | 1,003515087 | -0,010149669 | 0,000121065 | -0,008740543 |
| 241 | 0,804881273 | -0,326115755 | -0,005119679 | 0,798333241 | -0,313042345 | -0,046596198 | -0,054494576 | -0,000369323 | 0,016470466 |
| 242 | 0,805231229 | -0,326881365 | -0,005553828 | 0,798974409 | -0,313343313 | -0,046457699 | -0,054541602 | -0,00037137 | 0,0165626 |
| 243 | -0,905965811 | 0,326316614 | -0,007536017 | -0,886827237 | 0,340476148 | -0,040681204 | 0,035320274 | -0,000425161 | 0,017345769 |
| 244 | -0,905563782 | 0,327081375 | -0,006981375 | -0,886253827 | 0,340341233 | -0,0395526 | 0,035260055 | -0,000427197 | 0,017437184 |
| 245 | 1,109358713 | -0,049618427 | -0,032641124 | 1,121668267 | -0,01973877 | -0,012403529 | 0,044972483 | 0,000294355 | -0,006666954 |
| 246 | 1,110149224 | -0,049227183 | -0,032365717 | 1,121706367 | -0,019543689 | -0,012421019 | 0,044963381 | 0,000295664 | -0,00669896 |
| 247 | -1,109301868 | -0,049616984 | -0,032622716 | -1,121273749 | -0,019761023 | -0,012353244 | -0,044978437 | 0,00024927 | -0,006563662 |
| 248 | -1,110093264 | -0,049225746 | -0,032347381 | -1,121318209 | -0,019565879 | -0,012370878 | -0,044969314 | 0,000250573 | -0,006595652 |
| 249 | 0,905956723 | 0,326313762 | -0,007520725 | 0,8867949 | 0,340429176 | -0,040574689 | -0,03531681 | -0,000458322 | 0,017421848 |
| 250 | 0,905554807 | 0,327078619 | -0,006966076 | 0,886221925 | 0,340294775 | -0,039447199 | -0,035256579 | -0,000460304 | 0,017513141 |
| 251 | -0,804890729 | -0,326121683 | -0,005142381 | -0,798366458 | -0,313050909 | -0,046576469 | 0,054498188 | -0,000313246 | 0,016342082 |
| 252 | -0,805240571 | -0,326887186 | -0,005576382 | -0,799007291 | -0,313351504 | -0,046438765 | 0,054545225 | -0,000315219 | 0,016434049 |
| 253 | 0,456922632 | 0,049510326 | 0,02090354 | 0,466947807 | 0,008775864 | 0,031362615 | 0,044937652 | 0,000212529 | -0,003256104 |
| 254 | 0,45618331 | 0,049119846 | 0,020745431 | 0,466838642 | 0,008736259 | 0,031063021 | 0,04493359 | 0,000213487 | -0,003269342 |
| 255 | -0,456867996 | 0,049511849 | 0,020921968 | -0,466938675 | 0,008753861 | 0,031412393 | -0,044940998 | 0,000167635 | -0,003153247 |
| 256 | -0,456129556 | 0,049121365 | 0,020763789 | -0,466829666 | 0,008714333 | 0,031112623 | -0,044936898 | 0,00016858 | -0,003166457 |
| 257 | 0,281594251 | 0,000580823 | 0,0279858 | -0,459618677 | 0,184344649 | -0,460584619 | 0,004993765 | 0,00014232 | -0,008109863 |
| 258 | 0,000377476 | 0,274545155 | 0,246703468 | 0,002695543 | -0,109936103 | 0,492741849 | -1,59285E-05 | -0,000101277 | 0,004175443 |
| 259 | -0,281685082 | 0,000500394 | 0,027923985 | 0,459310507 | 0,183967566 | -0,459761828 | -0,004991558 | 0,000136682 | -0,008097261 |
| 260 | 0,000373013 | -0,275330522 | -0,185872896 | 6,18112E-05 | -0,019996498 | -0,068389152 | -1,70321E-05 | -0,000107614 | 0,002421903 |
| 261 | -0,024156802 | -6,1628E-05 | 0,015257978 | 0,453040151 | 0,03154409 | -0,065696557 | 0,055704722 | 3,50983E-05 | -0,001330915 |
| 262 | -0,02435128 | 0,000128196 | 0,015407309 | 0,453358333 | 0,031512907 | -0,065502535 | 0,055701275 | 3,50985E-05 | -0,001330305 |
| 263 | 0,024331349 | -4,99408E-05 | 0,01548273 | -0,452392994 | 0,031563355 | -0,065739513 | -0,05571286 | -1,65488E-05 | -0,001212484 |

APOYO 2

| Newton | C4 | | | C5 | | | C6 | | |
|---|---|---|---|---|---|---|---|---|---|
| Barra | L | T | V | L | T | V | L | T | V |
| 264 | 0,02452583 | 0,000139939 | 0,015632104 | -0,452709357 | 0,031532433 | -0,065546059 | -0,055709412 | -1,65447E-05 | -0,001211883 |
| 265 | -2,368150511 | -2,398010893 | -1,521006762 | -0,522465368 | -0,651966003 | -1,528533926 | -0,110891725 | -0,000355271 | 0,011670543 |
| 266 | 2,368169479 | -2,398001908 | -1,520881206 | 0,52262521 | -0,652095739 | -1,528235708 | 0,11088037 | -0,000201479 | 0,011317858 |
| 267 | 2,429785563 | 2,397994114 | 1,006254283 | 0,817012052 | 0,659363526 | 0,995302193 | -0,09365822 | -0,000445537 | 0,013495156 |
| 268 | -2,429766743 | 2,398004561 | 1,006382488 | -0,817024468 | 0,659256383 | 0,995546041 | 0,093659604 | -0,000315182 | 0,013195942 |
| 269 | 0,916893849 | -0,329749103 | 0,005859447 | 0,889047979 | -0,339809003 | 0,032138203 | -0,032853277 | 0,000754019 | -0,023734354 |
| 270 | 0,917259043 | -0,330713297 | 0,005352776 | 0,889125746 | -0,339962252 | 0,031346868 | -0,032731215 | 0,00076254 | -0,024028522 |
| 271 | -0,810257269 | 0,329730197 | 0,005617988 | -0,812358312 | 0,320558968 | 0,029786354 | 0,059258422 | 0,001259104 | -0,02828292 |
| 272 | -0,809916847 | 0,330694238 | 0,006127452 | -0,812398972 | 0,320932896 | 0,030009824 | 0,059462723 | 0,00126764 | -0,028576475 |
| 273 | 1,119230075 | 0,051921926 | 0,031920408 | 1,132754862 | 0,020721109 | 0,017553882 | 0,04581884 | -0,000688716 | 0,009762672 |
| 274 | 1,120182418 | 0,052248231 | 0,03195744 | 1,132966559 | 0,020943379 | 0,017742311 | 0,045863477 | -0,000694155 | 0,009857733 |
| 275 | -1,119265369 | 0,051923574 | 0,031939042 | -1,133026331 | 0,020699412 | 0,017603039 | -0,045796548 | -0,000733108 | 0,009864383 |
| 276 | -1,12021726 | 0,052249874 | 0,031976023 | -1,133234812 | 0,020921734 | 0,017791349 | -0,045841074 | -0,000738609 | 0,009959585 |
| 277 | 0,810263207 | 0,329732876 | 0,005638387 | 0,812383087 | 0,320554001 | 0,029795018 | -0,05926322 | 0,001194144 | -0,028134265 |
| 278 | 0,809922712 | 0,330696837 | 0,00614775 | 0,812423482 | 0,320927747 | 0,030018834 | -0,059467566 | 0,001202417 | -0,02842722 |
| 279 | -0,916887811 | -0,329749555 | 0,005843124 | -0,889023268 | -0,339769184 | 0,032045627 | 0,032847901 | 0,000782624 | -0,023800065 |
| 280 | -0,917253078 | -0,330713821 | 0,005336454 | -0,889101231 | -0,33992271 | 0,031254856 | 0,03272579 | 0,000790996 | -0,024093895 |
| 281 | 0,459567613 | -0,051894669 | -0,020720537 | 0,472632108 | -0,012698874 | -0,028498669 | 0,046033075 | -0,000255491 | 0,004246644 |
| 282 | 0,458590954 | -0,052221157 | -0,020756754 | 0,47230368 | -0,013002768 | -0,02845932 | 0,046070725 | -0,000258238 | 0,004281257 |
| 283 | -0,459602627 | -0,051893168 | -0,020701955 | -0,472637638 | -0,012720652 | -0,028449532 | -0,046029905 | -0,00030081 | 0,00435047 |
| 284 | -0,458625506 | -0,05221966 | -0,020738224 | -0,472309103 | -0,013024503 | -0,028410281 | -0,046067566 | -0,00030361 | 0,004385203 |
| 285 | -2,625558109 | -2,753409115 | -1,469451788 | -0,840951738 | -1,06233703 | -1,464914224 | -0,207513289 | 0,000722166 | -0,020987595 |
| 286 | 2,625550346 | -2,75340487 | -1,469372824 | 0,840850002 | -1,062392021 | -1,464790381 | 0,207559054 | 0,000960835 | -0,021535053 |
| 287 | 2,878498508 | 2,753424181 | 0,985411287 | 1,259345776 | 1,057577171 | 0,992581137 | -0,230048668 | 0,001023762 | -0,020451507 |
| 288 | -2,878505742 | 2,753431249 | 0,985489864 | -1,25933169 | 1,057509023 | 0,992742197 | 0,230045412 | 0,001302109 | -0,02108947 |
| 289 | 0,789000473 | -0,327780252 | -0,006163997 | 0,803187105 | -0,320958274 | -0,023387529 | -0,060617652 | -0,001883375 | 0,034490697 |
| 290 | 0,788369047 | -0,328887219 | -0,006719651 | 0,803126073 | -0,321419877 | -0,023852829 | -0,06101624 | -0,001909675 | 0,035112565 |
| 291 | -0,916078994 | 0,327750302 | -0,005962935 | -0,876223561 | 0,334155302 | -0,022702251 | 0,025829795 | -0,003704981 | 0,052373168 |
| 292 | -0,916812118 | 0,328857358 | -0,005531581 | -0,876452803 | 0,334545983 | -0,022179452 | 0,025607128 | -0,003731049 | 0,052994995 |
| 293 | 1,107542525 | -0,061667655 | -0,035575312 | 1,120052005 | -0,02455137 | -0,025480911 | 0,043674126 | 0,002080184 | -0,016480526 |
| 294 | 1,10859802 | -0,062307525 | -0,035940291 | 1,120389535 | -0,024753465 | -0,025895735 | 0,043757272 | 0,002097414 | -0,016675023 |
| 295 | -1,107527281 | -0,061666407 | -0,035557008 | -1,119877418 | -0,024573229 | -0,025431925 | -0,043751959 | 0,002031454 | -0,016368897 |
| 296 | -1,108582991 | -0,062306279 | -0,035922019 | -1,120216055 | -0,024775302 | -0,025846799 | -0,043835692 | 0,002048587 | -0,016563174 |
| 297 | 0,91607576 | 0,327754146 | -0,005944758 | 0,876205381 | 0,334123874 | -0,022625233 | -0,025822364 | -0,003713451 | 0,052392885 |
| 298 | 0,916808931 | 0,328861281 | -0,005513397 | 0,876434751 | 0,334514677 | -0,02210261 | -0,025599613 | -0,003739179 | 0,053013937 |
| 299 | -0,789003753 | -0,327779497 | -0,006182669 | -0,803204922 | -0,320946975 | -0,023407183 | 0,060627098 | -0,001812202 | 0,034327954 |
| 300 | -0,78837228 | -0,32888638 | -0,006738253 | -0,803143808 | -0,321408504 | -0,023872545 | 0,06102579 | -0,001837955 | 0,034948571 |
| 301 | 0,452784782 | 0,061661885 | 0,023482458 | 0,465637919 | 0,01880169 | 0,02918698 | 0,042753775 | 0,000464571 | -0,006454336 |
| 302 | 0,451627368 | 0,062301785 | 0,02372659 | 0,465131546 | 0,019031065 | 0,029405347 | 0,042846256 | 0,000469776 | -0,006518354 |
| 303 | -0,452770338 | 0,061663721 | 0,02350099 | -0,465641589 | 0,01878009 | 0,029236218 | -0,042757799 | 0,000419676 | -0,006351456 |
| 304 | -0,451613153 | 0,062303618 | 0,02374509 | -0,46513533 | 0,019009492 | 0,02945452 | -0,0428503 | 0,000424769 | -0,006415216 |
| 305 | -2,92524419 | -2,93810909 | -1,346924314 | -1,311446056 | -1,369281483 | -1,347397983 | 0,152638809 | -0,009702699 | -0,895687857 |
| 306 | 2,925175968 | -2,938119597 | -1,34690069 | 1,311377239 | -1,369298803 | -1,347375686 | -0,153255851 | -0,009760825 | -0,89555555 |
| 307 | 2,969922781 | 2,938104292 | 0,92756235 | 1,444695799 | 1,369815456 | 0,926781294 | -0,223411324 | -0,021059701 | 0,456703136 |

APOYO 2

| Newton | C4 | | | C5 | | | C6 | | |
|---|---|---|---|---|---|---|---|---|---|
| Barra | L | T | V | L | T | V | L | T | V |
| 308 | -2,970003435 | 2,938118401 | 0,927595884 | -1,44477142 | 1,369810961 | 0,926809229 | 0,223464262 | -0,020960052 | 0,456475595 |
| 309 | 0,212475846 | -0,326903766 | -0,028390091 | 0,414143473 | -0,330040563 | -0,02615527 | 0,168171062 | 0,037035553 | -0,765591938 |
| 310 | 0,212428684 | -0,33042956 | -0,029779351 | 0,414149883 | -0,331676314 | -0,027563937 | 0,16771575 | 0,037507299 | -0,76867532 |
| 311 | -1,036957402 | 0,32690992 | -0,031696783 | -0,797255737 | 0,328354997 | -0,029608872 | -0,492157979 | 0,044039483 | 0,727897714 |
| 312 | -1,037058278 | 0,330435914 | -0,030356496 | -0,797409325 | 0,330006304 | -0,028288369 | -0,492528297 | 0,04449772 | 0,726437001 |
| 313 | 1,06870547 | -0,431902045 | -0,197136833 | 1,075693136 | -0,20283168 | -0,198616972 | 0,283712641 | -0,027699662 | -0,134638808 |
| 314 | 1,072216686 | -0,432302528 | -0,197337009 | 1,077267907 | -0,203017103 | -0,198805243 | 0,283535244 | -0,027983505 | -0,133489766 |
| 315 | -1,068570924 | -0,431927445 | -0,197130237 | -1,0755598 | -0,202866927 | -0,19857692 | -0,282654412 | -0,028069726 | -0,133792606 |
| 316 | -1,072080526 | -0,432327916 | -0,197330442 | -1,077132557 | -0,203052329 | -0,198765218 | -0,282464718 | -0,028353499 | -0,132643722 |
| 317 | 1,036926917 | 0,326910189 | -0,031675913 | 0,797227446 | 0,328340972 | -0,029575558 | 0,492043248 | 0,044421147 | 0,727022712 |
| 318 | 1,037027554 | 0,330435914 | -0,030335768 | 0,797380772 | 0,32999216 | -0,028255164 | 0,492413136 | 0,044877634 | 0,725565988 |
| 319 | -0,2125063 | -0,326906165 | -0,028411516 | -0,4141723 | -0,330024825 | -0,026196124 | -0,168290091 | 0,036636103 | -0,764676365 |
| 320 | -0,212459361 | -0,330432224 | -0,029800848 | -0,414178963 | -0,33166072 | -0,02760484 | -0,167836013 | 0,037106149 | -0,767755872 |
| 321 | 0,399089774 | 0,431899992 | 0,134226531 | 0,414623516 | 0,203731941 | 0,133296095 | 0,018191221 | -0,006263386 | 0,080627646 |
| 322 | 0,395526578 | 0,432300488 | 0,134344466 | 0,412890599 | 0,203910353 | 0,133421141 | 0,018459515 | -0,006298697 | 0,080773449 |
| 323 | -0,398936227 | 0,431928582 | 0,134254464 | -0,414479492 | 0,203720937 | 0,133358225 | -0,018154793 | -0,006281693 | 0,080671573 |
| 324 | -0,395371193 | 0,432329061 | 0,134372358 | -0,412744893 | 0,203899355 | 0,133483238 | -0,018422774 | -0,006317123 | 0,080817649 |
| 325 | 0,342607069 | -1,82436E-05 | 0,027320751 | 0,170769465 | -0,003265636 | 0,03560122 | -0,258684563 | -0,025688126 | 0,542355493 |
| 326 | -4,72141E-05 | 0,376402677 | 0,177700364 | -9,19954E-05 | 0,172435485 | 0,172711503 | -0,000314234 | 0,016968466 | -0,167948198 |
| 327 | -0,342583195 | 4,27938E-05 | 0,027345447 | -0,170737419 | -0,003232939 | 0,035612972 | 0,258762893 | -0,025298185 | 0,541466133 |
| 328 | -5,30472E-05 | -0,376404697 | -0,12065865 | -4,51483E-05 | -0,169560241 | -0,123530302 | -1,18619E-05 | 0,004257056 | -0,053233326 |
| 329 | -0,186477658 | -9,50558E-06 | -5,31253E-06 | -0,21419143 | -2,15698E-06 | -1,12246E-05 | 0,758921867 | 0,000440978 | 1,295031881 |
| 330 | -0,186588475 | 0,000106923 | 4,78213E-05 | -0,214230527 | 5,22427E-05 | 4,21635E-05 | 0,758867002 | 0,000440598 | 1,294915284 |
| 331 | 0,186477655 | -8,40576E-05 | -3,73677E-05 | 0,214191425 | -4,15592E-05 | -3,16744E-05 | -0,758921888 | -0,000440069 | 1,297045854 |
| 332 | 0,186588479 | 3,23762E-05 | 1,57698E-05 | 0,214230535 | 1,28429E-05 | 2,17164E-05 | -0,758866966 | -0,00044038 | 1,2969291 |
| 333 | -9,15901E-09 | 4,0322E-05 | 1,94453E-05 | -1,75195E-08 | 1,82348E-05 | 1,85094E-05 | -6,17877E-08 | 3,06776E-06 | 0,000201497 |
| 334 | 0,000287249 | -0,000325176 | -0,000149005 | 0,000101354 | -0,000151584 | -0,000149121 | 0,000142249 | -7,93073E-07 | 0,000185359 |
| 335 | -0,000287258 | -0,000325191 | -0,000149014 | -0,000101364 | -0,00015159 | -0,000149128 | -0,000142326 | -9,71584E-07 | 0,000185767 |
| 336 | 0,171958135 | -1,76474E-05 | -7,29864E-06 | 0,197484538 | -1,05735E-05 | -1,92019E-06 | 1,360480794 | 0,515092603 | -1,195020662 |
| 337 | 0,170217424 | 8,05405E-05 | 3,66562E-05 | 0,195521361 | 3,40089E-05 | 4,21093E-05 | 1,347759538 | 0,516600044 | -1,198475289 |
| 338 | 0,000955793 | 1,87206E-05 | 8,38336E-06 | 0,001077946 | 8,48479E-06 | 8,43079E-06 | 0,006985066 | -0,000728182 | 0,001697517 |
| 339 | -0,002392824 | 0,000162908 | 7,29284E-05 | -0,00269863 | 7,39627E-05 | 7,30651E-05 | -0,01748693 | 0,002110446 | -0,004825491 |
| 340 | -0,170216984 | -0,000104564 | -4,74268E-05 | -0,195520866 | -4,49064E-05 | -5,28944E-05 | -1,347756339 | 0,514123838 | -1,192813013 |
| 341 | -0,16998517 | -0,000100023 | -4,53935E-05 | -0,195259425 | -4,28486E-05 | -5,08496E-05 | -1,346062212 | 0,513947228 | -1,192401305 |
| 342 | -0,229161014 | 9,32698E-06 | 1,24832E-06 | -0,212208449 | 8,05896E-06 | -5,6296E-06 | -0,121201474 | -4,66514E-05 | 0,000110849 |
| 343 | -0,229014593 | -0,000107101 | -3,54243E-05 | -0,212129061 | -4,64984E-05 | -4,21321E-05 | -0,121201275 | -4,589E-05 | 9,25073E-05 |
| 344 | 0,229161011 | 8,42362E-05 | 2,82321E-05 | 0,212208446 | 3,5795E-05 | 3,49606E-05 | 0,121201474 | 4,59816E-05 | -9,59146E-05 |
| 345 | 0,229014599 | -3,21974E-05 | -8,44127E-06 | 0,212129066 | -1,87647E-05 | -1,54401E-06 | 0,121201274 | 4,67398E-05 | -0,00011425 |
| 346 | -1,03109E-08 | -4,03224E-05 | -1,30707E-05 | -8,81113E-09 | -1,76929E-05 | -1,36146E-05 | -1,94419E-09 | 5,80493E-07 | -5,28435E-06 |
| 347 | -0,000379525 | 0,000325176 | 0,000102639 | -0,000205773 | 0,000151678 | 0,000102513 | -5,1413E-07 | -2,31011E-06 | 5,06084E-05 |
| 348 | 0,000379515 | 0,00032519 | 0,000102641 | 0,000205764 | 0,000151684 | 0,000102519 | 5,19779E-07 | -2,30178E-06 | 5,05904E-05 |
| 349 | 0,211230185 | 1,78122E-05 | 6,69672E-06 | 0,195623646 | 5,17259E-06 | 1,29971E-05 | 0,111747544 | 4,18027E-05 | -9,4545E-05 |
| 350 | 0,209270758 | -8,03758E-05 | -2,70355E-05 | 0,193793384 | -3,94631E-05 | -2,06652E-05 | 0,110723734 | 3,58981E-05 | -8,83437E-05 |
| 351 | 0,001075888 | -1,87197E-05 | -6,42846E-06 | 0,001004964 | -8,52819E-06 | -6,37417E-06 | 0,000562111 | -8,50324E-07 | 5,51051E-07 |

APOYO 2

| Newton | C4 | | | C5 | | | C6 | | |
|---|---|---|---|---|---|---|---|---|---|
| Barra | L | T | V | L | T | V | L | T | V |
| 352 | -0,002693476 | -0,000162907 | -5,59653E-05 | -0,002515922 | -7,40637E-05 | -5,58336E-05 | -0,001407371 | -9,69062E-06 | 1,00461E-05 |
| 353 | -0,209270263 | 0,000104399 | 3,52887E-05 | -0,193792921 | 5,03736E-05 | 2,89008E-05 | -0,110723461 | -3,44622E-05 | 8,67594E-05 |
| 354 | -0,209009322 | 9,98585E-05 | 3,37296E-05 | -0,193549182 | 4,83052E-05 | 2,73549E-05 | -0,110587129 | -3,46685E-05 | 8,6893E-05 |
| 355 | -0,31015012 | -3,06434E-05 | 0,016535537 | -0,138504723 | 0,000127871 | 0,016202255 | 0,439847778 | 0,17832838 | -0,455472016 |
| 356 | 0,000350901 | -0,200372602 | -0,068830138 | 0,000324481 | -0,09113876 | -0,068574483 | 5,68662E-05 | -0,011289765 | 0,010913616 |
| 357 | 0,000307343 | 0,200375168 | 0,089707933 | 0,000350574 | 0,090938418 | 0,089951945 | 0,002388375 | -0,107778007 | 0,337072367 |
| 358 | 0,310072399 | 2,58443E-05 | 0,016557873 | 0,138423871 | 0,000153264 | 0,016225288 | -0,440135051 | 0,178696396 | -0,456311377 |
| 359 | -3,217531192 | -3,638082287 | -1,47432848 | -1,516822022 | -1,946379678 | -1,47417533 | 0,292607163 | -0,262708832 | -1,450927251 |
| 360 | -3,744105458 | 3,638078072 | 0,978729855 | -2,089848396 | 1,946256392 | 0,978883423 | -0,488516012 | 0,244760032 | 1,005154347 |
| 361 | 3,217491799 | -3,638078042 | -1,474323813 | 1,516774609 | -1,946364168 | -1,474205453 | -0,292936759 | -0,262815512 | -1,450682359 |
| 362 | 3,744059621 | 3,638082552 | 0,978728668 | 2,089807122 | 1,946245134 | 0,978916275 | 0,488530791 | 0,244923058 | 1,004780944 |
| 363 | -0,869651675 | 0,052662016 | 0,021996977 | -0,91555971 | 0,02646892 | 0,022227283 | -0,955746019 | -0,013528071 | 0,061565651 |
| 364 | -0,870155846 | 0,054488002 | 0,022640575 | -0,915601508 | 0,02762029 | 0,022872586 | -0,955318111 | -0,012182222 | 0,059829028 |
| 365 | 0,86974989 | 0,052662477 | 0,021996744 | 0,915675519 | 0,026469098 | 0,022227609 | 0,956505562 | -0,013516323 | 0,061538757 |
| 366 | 0,870248234 | 0,054488464 | 0,022640343 | 0,915710754 | 0,027620471 | 0,022872903 | 0,956032307 | -0,012170507 | 0,059802208 |
| 367 | 0,816557848 | -0,241843324 | 0,03501105 | 0,844114016 | -0,297116136 | 0,034664846 | 0,828722531 | -0,331159518 | -0,026918514 |
| 368 | 0,817564614 | -0,244462815 | 0,03420826 | 0,844642507 | -0,298500558 | 0,033861093 | 0,829640621 | -0,331660635 | -0,026804999 |
| 369 | -0,947153169 | 0,241849572 | -0,045321822 | -0,917048556 | 0,29737187 | -0,045633633 | -0,924511631 | 0,368444994 | -0,087021661 |
| 370 | -0,945687651 | 0,244468967 | -0,044334286 | -0,916094771 | 0,298756926 | -0,044647074 | -0,923320084 | 0,368246216 | -0,085125985 |
| 371 | -0,500928473 | -0,052662124 | -0,015863301 | -0,457060264 | -0,026600298 | -0,01573411 | -0,411271108 | -0,005333216 | -0,002716259 |
| 372 | -0,499756653 | -0,054488146 | -0,01619726 | -0,456337991 | -0,027751805 | -0,016068734 | -0,410983021 | -0,005523311 | -0,003826021 |
| 373 | 0,501040624 | -0,05266261 | -0,015863908 | 0,457163448 | -0,026600665 | -0,01573387 | 0,411288381 | -0,005327448 | -0,002729516 |
| 374 | 0,499862151 | -0,054488633 | -0,016197866 | 0,456435011 | -0,027752168 | -0,016068503 | 0,410999176 | -0,005517587 | -0,003839175 |
| 375 | 0,947144825 | 0,241843218 | -0,045324076 | 0,917039585 | 0,297369368 | -0,045636981 | 0,924479211 | 0,368403821 | -0,086927752 |
| 376 | 0,945679463 | 0,244462721 | -0,0443365 | 0,916085962 | 0,298754462 | -0,044650352 | 0,923288253 | 0,368205845 | -0,085033905 |
| 377 | -0,816566205 | -0,241849693 | 0,035008234 | -0,844122645 | -0,29711986 | 0,034664276 | -0,828751431 | -0,331200465 | -0,026825127 |
| 378 | -0,817572817 | -0,244469076 | 0,034205489 | -0,844650975 | -0,298504226 | 0,033860548 | -0,829668965 | -0,331700973 | -0,026713001 |
| 379 | 0,039366621 | 6,97115E-05 | 0,007177787 | 0,025966813 | 3,03562E-05 | 0,007172491 | 0,482780413 | 0,031442233 | -0,074481853 |
| 380 | 0,039580776 | -6,86325E-05 | 0,007123057 | 0,026062417 | -3,24996E-05 | 0,007117766 | 0,482475782 | 0,031475674 | -0,074594753 |
| 381 | -0,039213027 | 6,8061E-05 | 0,007157991 | -0,025809575 | 5,38868E-05 | 0,007119305 | -0,482208599 | 0,031489021 | -0,074589044 |
| 382 | -0,039427152 | -7,0322E-05 | 0,007103246 | -0,025905198 | -8,98652E-06 | 0,007064564 | -0,481905578 | 0,031522208 | -0,074701365 |
| 383 | -4,395091887 | -3,57699071 | -1,448786474 | -2,751889481 | -1,915366395 | -1,448546695 | -0,999837704 | -0,273099448 | -1,393633504 |
| 384 | -3,261594847 | -3,917164549 | -1,402674235 | -1,586742621 | -2,327198856 | -1,402658747 | 0,147853728 | -0,734784864 | -1,408641505 |
| 385 | -4,750418531 | -3,971090076 | -1,425656872 | -3,144038394 | -2,354284564 | -1,42558955 | -1,48288492 | -0,728374436 | -1,449569436 |
| 386 | -3,597367279 | -4,287376683 | -1,376041343 | -2,011097116 | -2,734379596 | -1,376051466 | -0,351512204 | -1,18252954 | -1,373464718 |
| 387 | -4,986807205 | -4,262222132 | -1,364778922 | -3,464337832 | -2,72234033 | -1,364831401 | -1,87250029 | -1,185762591 | -1,356555041 |
| 388 | -3,9608312 | -4,561451747 | -1,322134967 | -2,428762592 | -3,083081469 | -1,322106727 | -0,8402522 | -1,604160466 | -1,323273271 |
| 389 | -5,276116257 | -4,567778906 | -1,325969497 | -3,805118587 | -3,084886257 | -1,325921313 | -2,28158353 | -1,600918894 | -1,328416907 |
| 390 | -4,211987068 | -4,856901052 | -1,28003135 | -2,752036732 | -3,434892422 | -1,280029946 | -1,240475451 | -2,013006836 | -1,279793209 |
| 391 | -3,079334224 | 3,576986459 | 0,960704406 | -1,480218527 | 1,915188709 | 0,960916357 | 0,067647368 | 0,239905782 | 0,997497823 |
| 392 | -4,362752929 | 3,917166672 | 0,902789906 | -2,728887903 | 2,327189676 | 0,902798764 | -1,18694553 | 0,742270464 | 0,890096466 |
| 393 | -3,534747251 | 3,971091839 | 0,9187494 | -1,966665638 | 2,354252632 | 0,918774888 | -0,485730619 | 0,744571499 | 0,900430083 |
| 394 | -4,59982455 | 4,287375921 | 0,875799652 | -3,049323656 | 2,734404557 | 0,875745464 | -1,558774913 | 1,179092667 | 0,881305776 |
| 395 | -3,827201087 | 4,262221551 | 0,868023805 | -2,338022399 | 2,722385447 | 0,867953863 | -0,904790319 | 1,179616699 | 0,875101869 |

APOYO 2

| Newton | C4 | | | C5 | | | C6 | | |
|---|---|---|---|---|---|---|---|---|---|
| Barra | L | T | V | L | T | V | L | T | V |
| 396 | -4,912103397 | 4,561451967 | 0,821520283 | -3,410892206 | 3,08306527 | 0,821533686 | -1,970715558 | 1,605448801 | 0,819791208 |
| 397 | -4,17924397 | 4,567779055 | 0,824252912 | -2,736750291 | 3,084859601 | 0,824276171 | -1,351408366 | 1,602804924 | 0,822283007 |
| 398 | -5,177311104 | 4,856901013 | 0,781883358 | -3,743506497 | 3,434900447 | 0,781861321 | -2,360082946 | 2,012611698 | 0,782452812 |
| 399 | 4,395131573 | -3,576986258 | -1,448782006 | 2,751933396 | -1,915351229 | -1,448575679 | 1,000120826 | -0,273196641 | -1,393410345 |
| 400 | 3,261625054 | -3,917166786 | -1,402672687 | 1,586776699 | -2,327187665 | -1,402688185 | -0,147604591 | -0,734920557 | -1,408330594 |
| 401 | 4,750403589 | -3,971092323 | -1,425655497 | 3,144022323 | -2,354274162 | -1,425617157 | 1,482782566 | -0,728502447 | -1,449276137 |
| 402 | 3,597357428 | -4,28737601 | -1,376038968 | 2,011086289 | -2,734368708 | -1,376075926 | 0,351428507 | -1,182630056 | -1,373234226 |
| 403 | 4,986811972 | -4,262221449 | -1,364776716 | 3,464342787 | -2,722330128 | -1,364854237 | 1,87253139 | -1,185855735 | -1,356341451 |
| 404 | 3,960833764 | -4,561452075 | -1,322133315 | 2,428765294 | -3,083072336 | -1,32212855 | 0,840275209 | -1,604253391 | -1,323060259 |
| 405 | 5,276115082 | -4,567779231 | -1,325968003 | 3,805117443 | -3,084877787 | -1,325941575 | 2,281576569 | -1,601004902 | -1,328219755 |
| 406 | 4,211986724 | -4,856901091 | -1,280029899 | 2,752036432 | -3,434884537 | -1,280048412 | 1,240471576 | -2,013083979 | -1,279616355 |
| 407 | 3,079378653 | 3,576991149 | 0,960703581 | 1,48026058 | 1,915178031 | 0,960948118 | -0,06761763 | 0,240061949 | 0,997140159 |
| 408 | 4,362787885 | 3,917164675 | 0,902786689 | 2,728919933 | 2,327176662 | 0,902826273 | 1,186939465 | 0,742378447 | 0,889848754 |
| 409 | 3,534730688 | 3,971089818 | 0,918746343 | 1,966649828 | 2,354240383 | 0,918800572 | 0,485715297 | 0,744671589 | 0,900200466 |
| 410 | 4,599813079 | 4,287376805 | 0,875797885 | 3,049313139 | 2,73439427 | 0,875770808 | 1,558778675 | 1,17920348 | 0,8810518 |
| 411 | 3,827206311 | 4,262222434 | 0,86802221 | 2,338027437 | 2,722375853 | 0,867977581 | 0,904796723 | 1,179720195 | 0,874864666 |
| 412 | 4,91210642 | 4,56145183 | 0,821518452 | 3,410894977 | 3,083055985 | 0,821555175 | 1,970713664 | 1,605538613 | 0,819585296 |
| 413 | 4,17924271 | 4,567778911 | 0,824251237 | 2,736749054 | 3,084850977 | 0,8242961 | 1,351406105 | 1,602887797 | 0,822093004 |
| 414 | 5,177310675 | 4,856901144 | 0,781881941 | 3,743506106 | 3,434892578 | 0,78187989 | 2,360083804 | 2,012689475 | 0,782274511 |
| 415 | -1,085138954 | -0,050687846 | -0,021256559 | -1,135962229 | -0,025828889 | -0,021219727 | -1,190956377 | 0,006028015 | -0,040244674 |
| 416 | -1,087488265 | -0,049832694 | -0,020956822 | -1,137171595 | -0,025318042 | -0,020921102 | -1,190966034 | 0,006109849 | -0,03971964 |
| 417 | 1,085091477 | -0,050687875 | -0,021256681 | 1,135909162 | -0,025829514 | -0,021218309 | 1,190587405 | 0,006033439 | -0,040257111 |
| 418 | 1,087441327 | -0,049832722 | -0,020956942 | 1,137119115 | -0,025318658 | -0,020919704 | 1,190601272 | 0,006115192 | -0,039731892 |
| 419 | 0,854091963 | -0,232614043 | 0,036972578 | 0,835581236 | -0,279311473 | 0,03693422 | 0,836650098 | -0,336634508 | 0,065097812 |
| 420 | 0,853761102 | -0,233817143 | 0,036593485 | 0,835463053 | -0,28003779 | 0,036556392 | 0,836569814 | -0,336801353 | 0,064514437 |
| 421 | -0,774820674 | 0,232611371 | -0,030760553 | -0,791504149 | 0,279339983 | -0,030804785 | -0,781946355 | 0,31675739 | -0,007302331 |
| 422 | -0,775270807 | 0,233814491 | -0,030447615 | -0,791753347 | 0,280065364 | -0,03049059 | -0,782212882 | 0,317087927 | -0,007194221 |
| 423 | -1,030205708 | 0,026327703 | 0,011507535 | -1,077942052 | 0,012934884 | 0,011468105 | -1,128504928 | -0,002881704 | 0,017903925 |
| 424 | -1,033214408 | 0,025703205 | 0,011209427 | -1,080008202 | 0,012655888 | 0,011170843 | -1,129591762 | -0,002786061 | 0,017531744 |
| 425 | 1,030222054 | 0,026327717 | 0,011507407 | 1,077959839 | 0,012934379 | 0,01146931 | 1,128632873 | -0,002876105 | 0,01789109 |
| 426 | 1,033230569 | 0,025703219 | 0,011209301 | 1,080025795 | 0,01265539 | 0,011172033 | 1,129718244 | -0,002780529 | 0,017519061 |
| 427 | 0,752673794 | -0,219705964 | 0,031228251 | 0,761111216 | -0,265091019 | 0,031300535 | 0,756998325 | -0,306242981 | 0,020724277 |
| 428 | 0,75218148 | -0,22069436 | 0,030911306 | 0,760623925 | -0,265639729 | 0,030982782 | 0,75659869 | -0,306377865 | 0,020466971 |
| 429 | -0,799145339 | 0,219706877 | -0,034540362 | -0,788892926 | 0,265036081 | -0,034465115 | -0,785415465 | 0,314312969 | -0,044016375 |
| 430 | -0,798599694 | 0,220695268 | -0,034220206 | -0,788352594 | 0,265585402 | -0,034145777 | -0,784835843 | 0,314397435 | -0,043637008 |
| 431 | -0,964720498 | -0,010624998 | -0,00499425 | -1,010010043 | -0,004808977 | -0,004973756 | -1,058236471 | 0,001661482 | -0,006656834 |
| 432 | -0,965123639 | -0,010508066 | -0,004970194 | -1,009987218 | -0,00471832 | -0,00494987 | -1,057769298 | 0,001723569 | -0,006627722 |
| 433 | 0,96471595 | -0,010624997 | -0,004994367 | 1,010005285 | -0,004809468 | -0,004972603 | 1,058200308 | 0,001666574 | -0,006668507 |
| 434 | 0,965119107 | -0,010508065 | -0,00497031 | 1,009982475 | -0,004718808 | -0,004948724 | 1,057733265 | 0,001728633 | -0,006639331 |
| 435 | 0,768294832 | -0,211507567 | 0,032950099 | 0,761227305 | -0,255391212 | 0,032904742 | 0,754655337 | -0,300652233 | 0,036134069 |
| 436 | 0,767799433 | -0,212459713 | 0,032661973 | 0,760718539 | -0,255939499 | 0,032616935 | 0,754135432 | -0,300791242 | 0,035834959 |
| 437 | -0,72979279 | 0,211507331 | -0,03070625 | -0,735150373 | 0,255425025 | -0,030750805 | -0,734425018 | 0,298037535 | -0,027770584 |
| 438 | -0,729003493 | 0,212459479 | -0,030408604 | -0,734383241 | 0,255973074 | -0,030452846 | -0,733710686 | 0,298186843 | -0,027483722 |
| 439 | -0,936157138 | -0,001614205 | 0,00047583 | -0,979577495 | -0,00224963 | 0,000466395 | -1,025716207 | -0,00298303 | 0,000687534 |

APOYO 2

| Newton | C4 | | | C5 | | | C6 | | |
|---|---|---|---|---|---|---|---|---|---|
| Barra | L | T | V | L | T | V | L | T | V |
| 440 | -0,937346648 | -0,001723216 | 0,000428513 | -0,980425116 | -0,002304264 | 0,00041915 | -1,02620988 | -0,002983583 | 0,00064158 |
| 441 | 0,936157922 | -0,001614201 | 0,000475719 | 0,979578216 | -0,002250101 | 0,000467504 | 1,025722802 | -0,002978092 | 0,000676214 |
| 442 | 0,937347433 | -0,001723212 | 0,000428402 | 0,980425839 | -0,002304733 | 0,000420256 | 1,026216476 | -0,002978664 | 0,000630303 |
| 443 | 0,69846594 | -0,201038808 | 0,030213183 | 0,70553604 | -0,244691088 | 0,030233318 | 0,709011913 | -0,288009926 | 0,029542821 |
| 444 | 0,698346622 | -0,202203375 | 0,029964209 | 0,705496226 | -0,245529422 | 0,029984236 | 0,709064851 | -0,288522652 | 0,029294358 |
| 445 | -0,754398992 | 0,201038837 | -0,033071675 | -0,74565592 | 0,24467536 | -0,033050204 | -0,735048797 | 0,288635969 | -0,033698443 |
| 446 | -0,754714451 | 0,202203403 | -0,032847672 | -0,745897474 | 0,245513777 | -0,032826313 | -0,735225361 | 0,289147582 | -0,03347386 |
| 447 | -0,606078154 | 0,05068749 | 0,014805831 | -0,557247037 | 0,025814996 | 0,014812958 | -0,512247848 | 0,003191754 | 0,008760252 |
| 448 | -0,603404062 | 0,049832344 | 0,014605786 | -0,555683519 | 0,025304655 | 0,014612538 | -0,511745357 | 0,002998404 | 0,008634536 |
| 449 | 0,606023989 | 0,050687531 | 0,014805737 | 0,55719678 | 0,025814416 | 0,014814368 | 0,512237936 | 0,003197608 | 0,008746835 |
| 450 | 0,603350511 | 0,049832384 | 0,014605693 | 0,555633834 | 0,025304083 | 0,014613928 | 0,511735551 | 0,003004167 | 0,008621327 |
| 451 | 0,774825643 | 0,232614379 | -0,030759278 | 0,791509352 | 0,279341833 | -0,030804725 | 0,781965258 | 0,316770081 | -0,007331192 |
| 452 | 0,775275738 | 0,233817476 | -0,03044635 | 0,79175851 | 0,280067202 | -0,030490534 | 0,782231628 | 0,317100497 | -0,007222808 |
| 453 | -0,854086989 | -0,232611021 | 0,036973679 | -0,835576123 | -0,279310723 | 0,036936893 | -0,836632191 | -0,336607749 | 0,065036696 |
| 454 | -0,853756167 | -0,233814145 | 0,036594577 | -0,835457981 | -0,280037046 | 0,036559044 | -0,83655204 | -0,336774783 | 0,064453756 |
| 455 | -0,57428379 | -0,026327519 | -0,007931438 | -0,528404947 | -0,012915825 | -0,007947094 | -0,485479403 | -0,000216903 | -0,006038581 |
| 456 | -0,572095599 | -0,025703024 | -0,007728145 | -0,527137791 | -0,012637261 | -0,007743421 | -0,485090119 | -0,000275638 | -0,005857595 |
| 457 | 0,574302451 | -0,026327525 | -0,007931573 | 0,52842232 | -0,012916342 | -0,007945891 | 0,485482559 | -0,000211431 | -0,006051128 |
| 458 | 0,572114048 | -0,02570303 | -0,007728279 | 0,527154967 | -0,012637771 | -0,007742232 | 0,485093247 | -0,000270226 | -0,005870002 |
| 459 | 0,799143057 | 0,219705747 | -0,03454068 | 0,788890565 | 0,265036156 | -0,034466952 | 0,785406782 | 0,314300552 | -0,043987997 |
| 460 | 0,798597427 | 0,220694146 | -0,034220522 | 0,788350248 | 0,265585476 | -0,034147602 | 0,784827219 | 0,314385092 | -0,0436088 |
| 461 | -0,75267608 | -0,219707086 | 0,03122769 | -0,761113554 | -0,265091966 | 0,0313011 | -0,757006622 | -0,306245454 | 0,020729859 |
| 462 | -0,752183751 | -0,220695476 | 0,030910747 | -0,760626248 | -0,265640671 | 0,030983344 | -0,756606936 | -0,306380324 | 0,020472522 |
| 463 | -0,539997762 | 0,010624916 | 0,003449131 | -0,496446344 | 0,004798864 | 0,003457624 | -0,455778021 | -0,000888224 | 0,003086379 |
| 464 | -0,538460767 | 0,010507984 | 0,003435002 | -0,495325778 | 0,004708297 | 0,003443413 | -0,455056683 | -0,000952778 | 0,003073009 |
| 465 | 0,539992559 | 0,010624923 | 0,003449017 | 0,496441483 | 0,004798376 | 0,003458779 | 0,455777416 | -0,000883091 | 0,003074613 |
| 466 | 0,538455582 | 0,010507991 | 0,003434889 | 0,495320933 | 0,004707811 | 0,003444562 | 0,455056078 | -0,000947673 | 0,003061308 |
| 467 | 0,729793674 | 0,21150766 | -0,030706013 | 0,735151278 | 0,25542562 | -0,030751714 | 0,734428369 | 0,298034654 | -0,027763953 |
| 468 | 0,729004373 | 0,212459805 | -0,030408368 | 0,734384142 | 0,255973666 | -0,03045375 | 0,733714021 | 0,29818398 | -0,027477132 |
| 469 | -0,768293946 | -0,211507231 | 0,032950118 | -0,761226403 | -0,255391591 | 0,032906128 | -0,754652078 | -0,300644902 | 0,036117289 |
| 470 | -0,76779855 | -0,212459379 | 0,032661993 | -0,760717641 | -0,255939876 | 0,032618314 | -0,754132187 | -0,300783945 | 0,035818256 |
| 471 | -0,520817986 | 0,001614228 | -0,000450292 | -0,479071195 | 0,002254563 | -0,000454741 | -0,440066874 | 0,002906565 | -0,000485274 |
| 472 | -0,519755027 | 0,001723239 | -0,000418725 | -0,478343821 | 0,002309156 | -0,000423134 | -0,439662644 | 0,002906426 | -0,000452782 |
| 473 | 0,520818892 | 0,001614231 | -0,000450404 | 0,47907205 | 0,002254093 | -0,000453634 | 0,440066784 | 0,002911493 | -0,000496572 |
| 474 | 0,519755933 | 0,001723242 | -0,000418837 | 0,478344677 | 0,002308688 | -0,000422032 | 0,439662556 | 0,002911336 | -0,000464038 |
| 475 | 0,754398696 | 0,201038768 | -0,033071591 | 0,745655621 | 0,244675823 | -0,033051392 | 0,735047666 | 0,288630615 | -0,033686175 |
| 476 | 0,754714156 | 0,202203335 | -0,032847588 | 0,745897177 | 0,245514239 | -0,032827497 | 0,735224235 | 0,289142245 | -0,03346163 |
| 477 | -0,698466236 | -0,201038869 | 0,03021305 | -0,705536338 | -0,244691573 | 0,030234362 | -0,709013003 | -0,28800547 | 0,029532602 |
| 478 | -0,698346917 | -0,202203436 | 0,029964076 | -0,705496523 | -0,245529906 | 0,029985277 | -0,709065937 | -0,288518213 | 0,029284176 |
| 479 | 4,47609539 | 4,860906231 | 0,781768299 | 3,099754792 | 3,438909741 | 0,781761811 | 1,770092946 | 2,016749259 | 0,782075327 |
| 480 | 5,453302565 | -4,860906154 | -1,280128551 | 4,053063905 | -3,438897516 | -1,280154479 | 2,604913799 | -2,017142482 | -1,279658872 |
| 481 | -4,476095292 | 4,860906105 | 0,781769565 | -3,099754681 | 3,438916978 | 0,781744731 | -1,770092287 | 2,016678102 | 0,782238449 |
| 482 | -5,453302457 | -4,860906121 | -1,280129852 | -4,053063848 | -3,438904769 | -1,280137501 | -2,604913627 | -2,017071973 | -1,279820516 |
| 483 | 0,503091841 | -0,004263522 | -0,000286269 | 0,460583847 | -0,003637084 | -0,00028429 | 0,420749755 | -0,003044797 | -0,000193171 |

APOYO 2

| Newton | C4 | | | C5 | | | C6 | | |
|---|---|---|---|---|---|---|---|---|---|
| Barra | L | T | V | L | T | V | L | T | V |
| 484 | 0,502194903 | -0,004165365 | -0,000261808 | 0,459947047 | -0,003581509 | -0,000259847 | 0,420364583 | -0,003031528 | -0,000169481 |
| 485 | -0,872122445 | 0,004263514 | 0,000623247 | -0,916242442 | 0,003635499 | 0,000625727 | -0,963055695 | 0,002965395 | 0,000754467 |
| 486 | -0,873138365 | 0,004165357 | 0,000585953 | -0,916993933 | 0,00357994 | 0,000588408 | -0,963534125 | 0,002953106 | 0,00071509 |
| 487 | -0,503091669 | -0,004263525 | -0,00028616 | -0,460583691 | -0,003636629 | -0,000285361 | -0,420749549 | -0,003049547 | -0,000182282 |
| 488 | -0,502194736 | -0,004165367 | -0,0002617 | -0,459946894 | -0,003581055 | -0,000260915 | -0,420364378 | -0,003036266 | -0,000158621 |
| 489 | 0,872122601 | 0,004263519 | 0,000623139 | 0,916242676 | 0,003635048 | 0,000626791 | 0,963056627 | 0,002970155 | 0,000743554 |
| 490 | 0,873138518 | 0,004165361 | 0,000585845 | 0,916994163 | 0,00357949 | 0,00058947 | 0,963535034 | 0,002957853 | 0,000704206 |
| 491 | -4,549999463 | -5,120968236 | -1,241040952 | -3,140428274 | -3,755483882 | -1,241030229 | -1,687130346 | -2,389927097 | -1,241171947 |
| 492 | -5,706727922 | -5,112430779 | -1,239632587 | -4,352500174 | -3,748407462 | -1,239619577 | -2,957970436 | -2,384376135 | -1,239568498 |
| 493 | -4,829221027 | -5,351447164 | -1,202036695 | -3,483730636 | -4,037345802 | -1,202029702 | -2,101107086 | -2,723213601 | -1,202089458 |
| 494 | -5,900244613 | -5,369159865 | -1,205369368 | -4,603817645 | -4,051506102 | -1,205364722 | -3,273327198 | -2,733768511 | -1,205588471 |
| 495 | -5,108305645 | -5,596947315 | -1,17220038 | -3,809707561 | -4,325765745 | -1,172195494 | -2,479876939 | -3,05455625 | -1,172266941 |
| 496 | -6,139451471 | -5,562816761 | -1,165492774 | -4,889423775 | -4,298844824 | -1,165487336 | -3,611166949 | -3,034881024 | -1,165446876 |
| 497 | -5,453772925 | 5,120968229 | 0,73891876 | -4,065940689 | 3,755481585 | 0,738913882 | -2,721926339 | 2,38998786 | 0,73895393 |
| 498 | -4,801452951 | 5,112430765 | 0,738209609 | -3,466881664 | 3,748403531 | 0,738206988 | -2,172706216 | 2,384333206 | 0,738343302 |
| 499 | -5,623005284 | 5,351447174 | 0,703415226 | -4,295241518 | 4,037345908 | 0,703408018 | -3,004750877 | 2,723232051 | 0,703415968 |
| 500 | -5,029302637 | 5,369159878 | 0,705232135 | -3,748716945 | 4,051507231 | 0,705224533 | -2,502327375 | 2,733864701 | 0,705173931 |
| 501 | -5,840482675 | 5,596947313 | 0,671016446 | -4,555918697 | 4,32576616 | 0,671010455 | -3,302495306 | 3,054543144 | 0,671107509 |
| 502 | -5,262089645 | 5,562816754 | 0,667270249 | -4,024269971 | 4,298844429 | 0,667265846 | -2,81459329 | 3,034828167 | 0,667371197 |
| 503 | 4,549999318 | -5,120968306 | -1,241039806 | 3,140428078 | -3,755477242 | -1,241045825 | 1,687129591 | -2,389991554 | -1,241024179 |
| 504 | 5,706728046 | -5,112430843 | -1,239631579 | 4,352500332 | -3,748401409 | -1,239633792 | 2,957971494 | -2,384434457 | -1,239434795 |
| 505 | 4,829221186 | -5,351447242 | -1,20203582 | 3,483730826 | -4,037340306 | -1,202042626 | 2,101108263 | -2,723266343 | -1,201968549 |
| 506 | 5,90024451 | -5,369159939 | -1,205368618 | 4,603817524 | -4,051501138 | -1,205376394 | 3,273326462 | -2,733815705 | -1,20548028 |
| 507 | 5,108305564 | -5,596947369 | -1,172199742 | 3,809707465 | -4,325761285 | -1,172205956 | 2,479876273 | -3,054598021 | -1,172171181 |
| 508 | 6,139451528 | -5,56281681 | -1,165492258 | 4,88942384 | -4,298840877 | -1,16549659 | 3,611167302 | -3,03491741 | -1,165363461 |
| 509 | 5,45377277 | 5,120968311 | 0,738917619 | 4,065940544 | 3,755474959 | 0,738929461 | 2,721926026 | 2,390052382 | 0,738806014 |
| 510 | 4,801453094 | 5,112430842 | 0,738208606 | 3,466881795 | 3,748397491 | 0,738221186 | 2,17270613 | 2,384391591 | 0,738209455 |
| 511 | 5,623005462 | 5,351447229 | 0,703414342 | 4,295241682 | 4,037340402 | 0,703420935 | 3,004750939 | 2,723284652 | 0,70329538 |
| 512 | 5,029302522 | 5,369159929 | 0,705231376 | 3,748716836 | 4,051502256 | 0,705236199 | 2,502327309 | 2,733911747 | 0,705066077 |
| 513 | 5,840482583 | 5,596947375 | 0,671015812 | 4,555918614 | 4,325761702 | 0,671020926 | 3,302495332 | 3,054584976 | 0,671011609 |
| 514 | 5,262089706 | 5,562816814 | 0,667269737 | 4,024270031 | 4,298840486 | 0,667275105 | 2,814593369 | 3,034864621 | 0,667287625 |
| 515 | 0,683834463 | -0,180144542 | 0,030259461 | 0,675692019 | -0,22003786 | 0,030252249 | 0,665147854 | -0,259946663 | 0,030232552 |
| 516 | 0,683933786 | -0,180978413 | 0,030115751 | 0,675857525 | -0,220688226 | 0,030108579 | 0,665385794 | -0,260414159 | 0,030090901 |
| 517 | -0,630319938 | 0,18014456 | -0,027589922 | -0,636952425 | 0,220042966 | -0,027596145 | -0,641053839 | 0,259939165 | -0,027655821 |
| 518 | -0,630795419 | 0,18097843 | -0,027467528 | -0,637364097 | 0,220693304 | -0,027473715 | -0,641405649 | 0,260405332 | -0,027531371 |
| 519 | -0,841967388 | -0,008567728 | -0,001516357 | -0,880061527 | -0,006971233 | -0,001518327 | -0,92054557 | -0,005325434 | -0,001667576 |
| 520 | -0,843147488 | -0,008727763 | -0,001561585 | -0,881058149 | -0,007080802 | -0,001563544 | -0,921354056 | -0,005384969 | -0,001711491 |
| 521 | 0,841967139 | -0,008567727 | -0,001516454 | 0,88006123 | -0,006971652 | -0,001517341 | 0,920543764 | -0,00532109 | -0,001677535 |
| 522 | 0,843147242 | -0,008727761 | -0,001561683 | 0,881057854 | -0,00708122 | -0,00156256 | 0,921352265 | -0,005380631 | -0,001721436 |
| 523 | 0,620505645 | -0,183182455 | 0,025501329 | 0,624241669 | -0,219456691 | 0,025502015 | 0,625753249 | -0,25578123 | 0,025641327 |
| 524 | 0,620247703 | -0,183853648 | 0,025356751 | 0,623990669 | -0,219928967 | 0,025357435 | 0,625514265 | -0,256054176 | 0,025495638 |
| 525 | -0,65211107 | 0,183182438 | -0,027096036 | -0,646944027 | 0,219455703 | -0,027094155 | -0,639344049 | 0,255676785 | -0,02694052 |
| 526 | -0,651831359 | 0,183853631 | -0,026952187 | -0,646660321 | 0,219927981 | -0,026950309 | -0,639063196 | 0,255950557 | -0,026797772 |
| 527 | -0,786125666 | 0,018752166 | 0,003620111 | -0,822915209 | 0,014874344 | 0,003620695 | -0,861991484 | 0,010960604 | 0,003730643 |

APOYO 2

| Newton | C4 | | | C5 | | | C6 | | |
|---|---|---|---|---|---|---|---|---|---|
| Barra | L | T | V | L | T | V | L | T | V |
| 528 | -0,787006435 | 0,018853017 | 0,00363265 | -0,823637576 | 0,014962658 | 0,003633233 | -0,862551766 | 0,011036552 | 0,003742684 |
| 529 | 0,786125814 | 0,018752169 | 0,003620019 | 0,822915381 | 0,014873952 | 0,003621617 | 0,861992575 | 0,010964709 | 0,003721233 |
| 530 | 0,787006582 | 0,01885302 | 0,003632558 | 0,823637747 | 0,014962267 | 0,003634154 | 0,862552851 | 0,011040652 | 0,003733285 |
| 531 | 0,597356551 | -0,16686665 | 0,025788454 | 0,596557607 | -0,202466344 | 0,025787902 | 0,593476645 | -0,238038701 | 0,025716192 |
| 532 | 0,596773286 | -0,167414793 | 0,025651158 | 0,596010206 | -0,202833575 | 0,025650606 | 0,592970757 | -0,23822517 | 0,025579278 |
| 533 | -0,600571907 | 0,166866658 | -0,025831499 | -0,600013681 | 0,202466421 | -0,02583114 | -0,597310048 | 0,238101888 | -0,025925921 |
| 534 | -0,600227391 | 0,167414801 | -0,025706473 | -0,599635931 | 0,202833652 | -0,025706115 | -0,596904006 | 0,238288046 | -0,025800481 |
| 535 | -0,777647749 | -0,03300247 | -0,006559485 | -0,814725297 | -0,025937177 | -0,006560743 | -0,854078105 | -0,018857847 | -0,006610594 |
| 536 | -0,777809289 | -0,033147925 | -0,006593341 | -0,814696637 | -0,026045481 | -0,006594603 | -0,853854074 | -0,018928966 | -0,006644594 |
| 537 | 0,777647688 | -0,033002466 | -0,006559577 | 0,814725225 | -0,025937564 | -0,00655983 | 0,854077646 | -0,018853774 | -0,006619931 |
| 538 | 0,777809227 | -0,033147921 | -0,006593433 | 0,814696566 | -0,026045868 | -0,006593691 | 0,853853615 | -0,018924901 | -0,006653913 |
| 539 | 0,630320002 | 0,180144547 | -0,027589828 | 0,636952486 | 0,220043385 | -0,027597144 | 0,641054065 | 0,259934668 | -0,027645511 |
| 540 | 0,630795482 | 0,180978418 | -0,027467435 | 0,637364159 | 0,220693722 | -0,027474711 | 0,641405875 | 0,260400843 | -0,027521081 |
| 541 | -0,6838344 | -0,180144548 | 0,03025936 | -0,675691955 | -0,220038299 | 0,03025327 | -0,665147601 | -0,259942265 | 0,03022247 |
| 542 | -0,683933722 | -0,180978418 | 0,03011565 | -0,675857461 | -0,220688664 | 0,030109598 | -0,665385541 | -0,260409767 | 0,030080832 |
| 543 | -0,464432732 | 0,008567728 | 0,000797504 | -0,427817179 | 0,006972485 | 0,000796134 | -0,393606135 | 0,005396256 | 0,000745071 |
| 544 | -0,463872261 | 0,008727763 | 0,000825458 | -0,427438095 | 0,007082046 | 0,000824096 | -0,393403778 | 0,005455212 | 0,000773389 |
| 545 | 0,464432453 | 0,008567732 | 0,000797407 | 0,42781692 | 0,006972069 | 0,000797113 | 0,393606005 | 0,005400614 | 0,000735081 |
| 546 | 0,463871985 | 0,008727767 | 0,000825361 | 0,427437839 | 0,007081632 | 0,000825074 | 0,39340365 | 0,005459564 | 0,000763412 |
| 547 | 0,652111082 | 0,183182452 | -0,027095935 | 0,646944044 | 0,219456114 | -0,027095099 | 0,639344127 | 0,255672681 | -0,02693111 |
| 548 | 0,65183137 | 0,183853644 | -0,026952086 | 0,646660337 | 0,219928392 | -0,026951252 | 0,639063274 | 0,255946461 | -0,026788381 |
| 549 | -0,620505633 | -0,183182436 | 0,025501241 | -0,624241657 | -0,219457086 | 0,02550297 | -0,625753242 | -0,255776911 | 0,025631426 |
| 550 | -0,620247691 | -0,183853628 | 0,025356663 | -0,623990657 | -0,219929361 | 0,025358388 | -0,62551426 | -0,256049865 | 0,025485758 |
| 551 | -0,439547611 | -0,018752172 | -0,002002423 | -0,404150494 | -0,014874675 | -0,00200211 | -0,371036642 | -0,011007062 | -0,001976208 |
| 552 | -0,438947367 | -0,018853023 | -0,002008063 | -0,403707044 | -0,014962988 | -0,002007751 | -0,370746298 | -0,011082795 | -0,00198196 |
| 553 | 0,439547776 | -0,018752169 | -0,002002516 | 0,404150649 | -0,014875067 | -0,002001186 | 0,371036706 | -0,011002961 | -0,00198561 |
| 554 | 0,438947531 | -0,01885302 | -0,002008156 | 0,403707198 | -0,01496338 | -0,002006828 | 0,370746362 | -0,011078699 | -0,001991351 |
| 555 | 0,600571884 | 0,166866647 | -0,025831414 | 0,600013654 | 0,202466802 | -0,025832051 | 0,597309942 | 0,238097843 | -0,025916648 |
| 556 | 0,600227368 | 0,16741479 | -0,025706388 | 0,599635904 | 0,202834034 | -0,025707024 | 0,5969039 | 0,238284009 | -0,025791227 |
| 557 | -0,597356575 | -0,166866655 | 0,025788363 | -0,596557632 | -0,202466731 | 0,025788803 | -0,593476708 | -0,238034759 | 0,025707155 |
| 558 | -0,596773309 | -0,167414798 | 0,025651067 | -0,59601023 | -0,202833961 | 0,025651505 | -0,59297082 | -0,238221236 | 0,025570258 |
| 559 | -0,438701074 | 0,033002469 | 0,003684494 | -0,403003947 | 0,02593807 | 0,003683414 | -0,369576432 | 0,018871835 | 0,003686369 |
| 560 | -0,437634821 | 0,033147924 | 0,003704505 | -0,402125392 | 0,026046376 | 0,003703422 | -0,368880409 | 0,018942993 | 0,003706374 |
| 561 | 0,438701006 | 0,033002472 | 0,003684402 | 0,403003883 | 0,025937681 | 0,00368433 | 0,369576414 | 0,0188759 | 0,003677051 |
| 562 | 0,437634753 | 0,033147927 | 0,003704413 | 0,402125329 | 0,026045988 | 0,003704337 | 0,368880392 | 0,01894705 | 0,003697073 |
| 563 | 6,007140194 | 5,769491456 | 0,635383432 | 4,767384303 | 4,549123249 | 0,635388085 | 3,553106696 | 3,328781377 | 0,635329829 |
| 564 | 5,409046422 | -5,769491458 | -1,134147299 | 4,158753889 | -4,549123585 | -1,134151069 | 2,883017603 | -3,328778757 | -1,134092734 |
| 565 | -6,007140157 | 5,769491406 | 0,635383838 | -4,76738427 | 4,549126721 | 0,635379945 | -3,55310672 | 3,328749883 | 0,63540203 |
| 566 | -5,40904639 | -5,769491406 | -1,134147704 | -4,158753851 | -4,549127058 | -1,134142925 | -2,883017325 | -3,328747249 | -1,134164967 |
| 567 | -0,581071269 | -0,160179999 | 0,024855553 | -0,578508208 | -0,193887325 | 0,024856045 | -0,573859768 | -0,227604141 | 0,024881871 |
| 568 | -0,580932235 | -0,160727747 | 0,024758347 | -0,578376677 | -0,194301855 | 0,02475884 | -0,573738678 | -0,227885413 | 0,024784575 |
| 569 | 0,560582337 | 0,16018 | -0,024019708 | 0,561850363 | 0,193887313 | -0,024020162 | 0,560981111 | 0,22758053 | -0,023984525 |
| 570 | 0,560438537 | 0,160727749 | -0,023923747 | 0,561700408 | 0,194301842 | -0,023924199 | 0,560828141 | 0,227861884 | -0,023888664 |
| 571 | 0,581071284 | -0,160180003 | 0,024855637 | 0,578508226 | -0,193886959 | 0,02485518 | 0,573859824 | -0,227607966 | 0,024890639 |

APOYO 2

| Newton | C4 | | | C5 | | | C6 | | |
|---|---|---|---|---|---|---|---|---|---|
| Barra | L | T | V | L | T | V | L | T | V |
| 572 | 0,580932251 | -0,160727752 | 0,024758431 | 0,578376694 | -0,194301489 | 0,024757976 | 0,573738734 | -0,227889234 | 0,024793334 |
| 573 | -0,560582321 | 0,160180001 | -0,024019794 | -0,561850346 | 0,193886947 | -0,024019303 | -0,560981054 | 0,227584329 | -0,023993233 |
| 574 | -0,560438521 | 0,16072775 | -0,023923832 | -0,561700391 | 0,194301477 | -0,02392334 | -0,560828084 | 0,227865679 | -0,023897363 |
| 575 | -6,355485098 | -5,809014467 | -1,142049512 | -5,149364752 | -4,580131542 | -1,142045908 | -3,920536127 | -3,351223469 | -1,142103868 |
| 576 | -5,59633938 | -6,019410776 | -1,109814934 | -4,393737171 | -4,834187482 | -1,10981185 | -3,171151074 | -3,648951604 | -1,109838022 |
| 577 | -6,479260962 | -5,990387673 | -1,103971893 | -5,317878569 | -4,811469907 | -1,103969588 | -4,139059805 | -3,63254083 | -1,103996019 |
| 578 | -5,739330776 | -6,202829006 | -1,072534558 | -4,576395737 | -5,06798818 | -1,072533118 | -3,398795566 | -3,933136412 | -1,072561488 |
| 579 | -5,478824763 | 5,809014468 | 0,639833201 | -4,281566213 | 4,580131588 | 0,639829477 | -3,107048894 | 3,35123978 | 0,639844026 |
| 580 | -6,209657862 | 6,019410776 | 0,608760906 | -5,014232606 | 4,834187455 | 0,608757899 | -3,838782591 | 3,648948308 | 0,608792648 |
| 581 | -5,71660468 | 5,990387673 | 0,605460395 | -4,560837784 | 4,811470008 | 0,605457823 | -3,422497076 | 3,632539438 | 0,605486101 |
| 582 | -6,481496685 | 6,202829007 | 0,572985575 | -5,322479054 | 5,067988472 | 0,572983353 | -4,17812736 | 3,933141727 | 0,572993126 |
| 583 | 6,355485082 | -5,809014515 | -1,142049218 | 5,149364735 | -4,580128542 | -1,14205294 | 3,920536046 | -3,351250046 | -1,14204294 |
| 584 | 5,59633938 | -6,019410819 | -1,10981475 | 4,393737172 | -4,834184958 | -1,109817759 | 3,17115105 | -3,648973214 | -1,109788481 |
| 585 | 6,479260962 | -5,990387713 | -1,103971812 | 5,317878567 | -4,811467824 | -1,10397446 | 4,13905978 | -3,632557843 | -1,103957016 |
| 586 | 5,739330764 | -6,202829042 | -1,072534588 | 4,576395721 | -5,067986575 | -1,072536861 | 3,398795505 | -3,933148424 | -1,072533949 |
| 587 | 5,478824747 | 5,809014514 | 0,639832906 | 4,281566196 | 4,580128588 | 0,639836506 | 3,107048856 | 3,35126634 | 0,639783135 |
| 588 | 6,209657862 | 6,019410819 | 0,608760721 | 5,014232607 | 4,83418493 | 0,60876381 | 3,838782614 | 3,648969918 | 0,608743107 |
| 589 | 5,71660468 | 5,990387713 | 0,605460314 | 4,560837784 | 4,811467923 | 0,605462697 | 3,422497097 | 3,632556448 | 0,605447104 |
| 590 | 6,481496672 | 6,202829044 | 0,572985605 | 5,32247904 | 5,067986868 | 0,572987095 | 4,17812733 | 3,933153742 | 0,57296558 |
| 591 | -0,703687346 | 0,028785987 | 0,005793858 | -0,73585944 | 0,022533671 | 0,005793469 | -0,770040722 | 0,016277018 | 0,005805147 |
| 592 | -0,704321051 | 0,028551824 | 0,005742326 | -0,736402536 | 0,022355635 | 0,005741947 | -0,770491943 | 0,016155003 | 0,005754025 |
| 593 | 0,703687355 | 0,028785989 | 0,005793776 | 0,73585945 | 0,022533318 | 0,005794299 | 0,770040795 | 0,016280672 | 0,005796771 |
| 594 | 0,704321061 | 0,028551825 | 0,005742244 | 0,736402547 | 0,022355282 | 0,005742777 | 0,770492018 | 0,016158655 | 0,005745651 |
| 595 | 0,567254956 | -0,163875579 | 0,024036219 | 0,568836258 | -0,197694533 | 0,024035605 | 0,568282487 | -0,231512276 | 0,024030187 |
| 596 | 0,567289844 | -0,164469249 | 0,023953279 | 0,568872331 | -0,198173269 | 0,023952663 | 0,568321514 | -0,231876073 | 0,023947224 |
| 597 | -0,590593602 | 0,163875579 | -0,025001693 | -0,587705643 | 0,197694632 | -0,025001345 | -0,582695468 | 0,231519164 | -0,025015295 |
| 598 | -0,590584796 | 0,164469249 | -0,02491798 | -0,587696243 | 0,198173369 | -0,024917634 | -0,582687246 | 0,231882971 | -0,0249316 |
| 599 | -0,706103887 | -0,017967793 | -0,003621141 | -0,739852589 | -0,014059164 | -0,003621192 | -0,775662521 | -0,010157245 | -0,00359976 |
| 600 | -0,706070047 | -0,017817527 | -0,003597026 | -0,739688393 | -0,013934097 | -0,003597082 | -0,775364863 | -0,010057316 | -0,003575877 |
| 601 | 0,706103898 | -0,01796779 | -0,003621224 | 0,739852604 | -0,014059515 | -0,003620365 | 0,775662595 | -0,010153554 | -0,003608222 |
| 602 | 0,706070058 | -0,017817523 | -0,003597109 | 0,739688408 | -0,013934447 | -0,003596256 | 0,775364935 | -0,010053629 | -0,003584329 |
| 603 | 0,557867868 | -0,154471644 | 0,023854774 | 0,555896194 | -0,186972209 | 0,023854598 | 0,551899568 | -0,219477317 | 0,023868424 |
| 604 | 0,557506328 | -0,154928078 | 0,023766784 | 0,555548349 | -0,187310522 | 0,023766611 | 0,551567753 | -0,219697522 | 0,023780493 |
| 605 | -0,543901566 | 0,154471643 | -0,023271234 | -0,544629198 | 0,186972018 | -0,023270548 | -0,543328559 | 0,219474273 | -0,023273363 |
| 606 | -0,543631704 | 0,154928078 | -0,023187945 | -0,544346614 | 0,187310329 | -0,023187257 | -0,54303554 | 0,219694442 | -0,023190006 |
| 607 | -0,388809923 | -0,02878599 | -0,003272218 | -0,357881852 | -0,022533374 | -0,003272599 | -0,328971946 | -0,01628276 | -0,003268219 |
| 608 | -0,388415058 | -0,028551827 | -0,003242361 | -0,357577234 | -0,022355344 | -0,003242735 | -0,328756313 | -0,016160859 | -0,003238356 |
| 609 | 0,388809934 | -0,028785986 | -0,003272299 | 0,357881862 | -0,022533724 | -0,003271774 | 0,328971949 | -0,016279094 | -0,003276624 |
| 610 | 0,388415069 | -0,028551823 | -0,003242442 | 0,357577245 | -0,022355694 | -0,00324191 | 0,328756316 | -0,016157193 | -0,003246759 |
| 611 | 0,590593592 | 0,163875576 | -0,025001607 | 0,587705632 | 0,197695001 | -0,025002216 | 0,582695434 | 0,231515319 | -0,025006478 |
| 612 | 0,590584787 | 0,164469247 | -0,024917894 | 0,587696232 | 0,198173738 | -0,024918504 | 0,582687213 | 0,231879127 | -0,024922788 |
| 613 | -0,567254965 | -0,163875576 | 0,024036134 | -0,568836269 | -0,197694901 | 0,024036472 | -0,568282525 | -0,231508429 | 0,024021369 |
| 614 | -0,567289854 | -0,164469246 | 0,023953193 | -0,568872342 | -0,198173637 | 0,02395353 | -0,568321551 | -0,231872228 | 0,02393841 |
| 615 | -0,399085019 | 0,017967789 | 0,002046332 | -0,366587102 | 0,014059256 | 0,002046166 | -0,336144133 | 0,010148423 | 0,002051647 |

APOYO 2

| Newton | C4 | | | C5 | | | C6 | | |
|---|---|---|---|---|---|---|---|---|---|
| Barra | L | T | V | L | T | V | L | T | V |
| 616 | -0,398221442 | 0,017817523 | 0,002033905 | -0,365852437 | 0,013934191 | 0,002033736 | -0,335535276 | 0,010048561 | 0,002039215 |
| 617 | 0,39908503 | 0,017967791 | 0,002046248 | 0,366587114 | 0,014058903 | 0,002046997 | 0,33614414 | 0,010152105 | 0,002043207 |
| 618 | 0,398221454 | 0,017817525 | 0,002033821 | 0,365852448 | 0,013933839 | 0,002034565 | 0,335535283 | 0,010052238 | 0,002030784 |
| 619 | 0,543901574 | 0,15447164 | -0,023271153 | 0,544629207 | 0,186972369 | -0,023271375 | 0,543328576 | 0,219470608 | -0,023264961 |
| 620 | 0,543631712 | 0,154928075 | -0,023187864 | 0,544346623 | 0,18731068 | -0,023188084 | 0,543035557 | 0,21969078 | -0,02318161 |
| 621 | -0,557867859 | -0,154471642 | 0,023854692 | -0,555896183 | -0,186972561 | 0,023855428 | -0,551899525 | -0,21947366 | 0,02386004 |
| 622 | -0,55750632 | -0,154928077 | 0,023766702 | -0,555548339 | -0,187310874 | 0,02376744 | -0,551567709 | -0,219693867 | 0,023772116 |
| 623 | 5,963715364 | 6,222705749 | 0,575118198 | 4,846382423 | 5,083751666 | 0,575119523 | 3,741031586 | 3,94480397 | 0,575104224 |
| 624 | 6,668751765 | -6,222705749 | -1,076364471 | 5,54914384 | -5,083751763 | -1,076365539 | 4,417557116 | -3,944806097 | -1,076342997 |
| 625 | -5,96371536 | 6,222705716 | 0,575118058 | -4,84638242 | 5,083752807 | 0,57511687 | -3,741031609 | 3,944796791 | 0,575120684 |
| 626 | -6,668751761 | -6,222705717 | -1,076364332 | -5,549143833 | -5,083752906 | -1,076362884 | -4,417557066 | -3,944798925 | -1,076359441 |
| 627 | 0,386592429 | -0,0122089 | -0,001185911 | 0,355780542 | -0,009883478 | -0,001185831 | 0,326985322 | -0,007556324 | -0,001189762 |
| 628 | 0,385897224 | -0,012186827 | -0,001180593 | 0,355194393 | -0,009870742 | -0,001180511 | 0,326506528 | -0,007552924 | -0,001184441 |
| 629 | -0,702851273 | 0,012208901 | 0,002186085 | -0,734903754 | 0,009883813 | 0,002185111 | -0,768970368 | 0,007562542 | 0,002167262 |
| 630 | -0,703137177 | 0,012186829 | 0,002177866 | -0,73508 | 0,009871075 | 0,002176895 | -0,769035257 | 0,007559115 | 0,00215914 |
| 631 | -0,386592443 | -0,012208903 | -0,001185829 | -0,355780556 | -0,009883129 | -0,001186653 | -0,326985326 | -0,007559978 | -0,001181386 |
| 632 | -0,385897239 | -0,01218683 | -0,001180511 | -0,355194407 | -0,009870393 | -0,001181333 | -0,326506533 | -0,007556576 | -0,001176069 |
| 633 | 0,702851259 | 0,012208904 | 0,002186002 | 0,734903735 | 0,009883463 | 0,002185935 | 0,768970271 | 0,007566192 | 0,002158894 |
| 634 | 0,703137163 | 0,012186831 | 0,002177784 | 0,735079981 | 0,009870726 | 0,002177718 | 0,769035161 | 0,007562763 | 0,002150777 |
| 635 | -5,96291796 | -6,423466642 | -1,046731911 | -4,84507783 | -5,325092687 | -1,046730775 | -3,71783739 | -4,226720846 | -1,046718625 |
| 636 | -6,866063053 | -6,405186184 | -1,043709802 | -5,789719744 | -5,309992518 | -1,043709801 | -4,706567755 | -4,214797504 | -1,043715234 |
| 637 | -6,200763967 | -6,59358678 | -1,015615365 | -5,125630442 | -5,537008744 | -1,015616006 | -4,046124718 | -4,480431943 | -1,015616732 |
| 638 | -6,993388593 | -6,612418035 | -1,01846708 | -5,955358308 | -5,552876699 | -1,018468031 | -4,915244239 | -4,493341318 | -1,01845508 |
| 639 | -6,38272787 | -6,78430996 | -0,992320285 | -5,344655705 | -5,761037482 | -0,992321855 | -4,30676244 | -4,737772937 | -0,992305504 |
| 640 | -6,659427172 | 6,42346664 | 0,545910852 | -5,542276395 | 5,325092376 | 0,545910546 | -4,434526679 | 4,226715762 | 0,545916805 |
| 641 | -6,160213247 | 6,405186185 | 0,54432081 | -5,08296603 | 5,309992565 | 0,544320686 | -4,012526364 | 4,214798993 | 0,544321443 |
| 642 | -6,820504331 | 6,593586781 | 0,516422125 | -5,74296941 | 5,537008863 | 0,51642245 | -4,669804996 | 4,480433771 | 0,516416434 |
| 643 | -6,37761447 | 6,612418035 | 0,517866922 | -5,335780394 | 5,552876686 | 0,517867907 | -4,296028767 | 4,493340739 | 0,51785668 |
| 644 | -6,995276622 | 6,78430996 | 0,491423434 | -5,952012773 | 5,761037561 | 0,491424793 | -4,908571252 | 4,737774354 | 0,491403442 |
| 645 | 5,962917973 | -6,423466671 | -1,046732155 | 4,845077846 | -5,325091992 | -1,046732376 | 3,717837462 | -4,226723355 | -1,046712872 |
| 646 | 6,866063051 | -6,405186211 | -1,043710151 | 5,78971974 | -5,309992273 | -1,043710344 | 4,706567727 | -4,214795324 | -1,043720231 |
| 647 | 6,200763962 | -6,593586803 | -1,015615813 | 5,125630435 | -5,537008921 | -1,015615554 | 4,046124681 | -4,480425353 | -1,015631838 |
| 648 | 6,993388594 | -6,612418054 | -1,01846762 | 5,955358308 | -5,552877271 | -1,018466648 | 4,915244239 | -4,493330598 | -1,018479654 |
| 649 | 6,382727867 | -6,784309976 | -0,992320917 | 5,344655702 | -5,761038445 | -0,99231955 | 4,306762433 | -4,737758131 | -0,992339445 |
| 650 | 6,659427185 | 6,423466669 | 0,545911095 | 5,542276408 | 5,325091681 | 0,545912147 | 4,434526698 | 4,226718269 | 0,545911056 |
| 651 | 6,160213245 | 6,40518621 | 0,544321159 | 5,082966029 | 5,309992319 | 0,54432123 | 4,012526376 | 4,214796808 | 0,544326451 |
| 652 | 6,820504326 | 6,593586803 | 0,516422573 | 5,742969405 | 5,537009039 | 0,516421998 | 4,669804998 | 4,48042718 | 0,516431542 |
| 653 | 6,37761447 | 6,612418054 | 0,517867463 | 5,335780395 | 5,552877258 | 0,517866524 | 4,296028772 | 4,493330019 | 0,517881256 |
| 654 | 6,99527662 | 6,784309977 | 0,491424066 | 5,952012769 | 5,761038525 | 0,491422487 | 4,908571239 | 4,737759549 | 0,491437381 |
| 655 | 0,522149304 | -0,152766207 | 0,021529937 | 0,521663249 | -0,18249725 | 0,021529274 | 0,519249714 | -0,212227506 | 0,021522453 |
| 656 | 0,52234333 | -0,153338485 | 0,021475517 | 0,521868909 | -0,182997588 | 0,021474851 | 0,51946672 | -0,212655884 | 0,021467949 |
| 657 | -0,523249775 | 0,152766207 | -0,021580521 | -0,522550035 | 0,182497381 | -0,021580211 | -0,519923224 | 0,212228884 | -0,021579148 |
| 658 | -0,523540449 | 0,153338485 | -0,021530631 | -0,522828516 | 0,182997722 | -0,021530323 | -0,520189279 | 0,212657308 | -0,021529337 |
| 659 | -0,661515287 | -0,015517656 | -0,002390201 | -0,692302088 | -0,013027572 | -0,002390317 | -0,724992993 | -0,010542939 | -0,002373168 |

APOYO 2

| Newton | C4 | | | C5 | | | C6 | | |
|---|---|---|---|---|---|---|---|---|---|
| Barra | L | T | V | L | T | V | L | T | V |
| 660 | -0,662225752 | -0,015635056 | -0,00241146 | -0,692939307 | -0,013122342 | -0,002411577 | -0,725557136 | -0,01061507 | -0,002394463 |
| 661 | 0,661515295 | -0,015517653 | -0,002390278 | 0,692302099 | -0,013027901 | -0,002389542 | 0,724993048 | -0,010539501 | -0,002381049 |
| 662 | 0,66222576 | -0,015635054 | -0,002411538 | 0,692939317 | -0,013122671 | -0,002410802 | 0,72555719 | -0,010611631 | -0,002402347 |
| 663 | 0,498568096 | -0,138090212 | 0,021688495 | 0,498857298 | -0,168259109 | 0,021688104 | 0,497300915 | -0,198432058 | 0,021699911 |
| 664 | 0,498154842 | -0,138454993 | 0,021614562 | 0,498448085 | -0,168522445 | 0,021614175 | 0,496897522 | -0,198593963 | 0,021626048 |
| 665 | -0,507758965 | 0,138090212 | -0,022056702 | -0,506337909 | 0,168259136 | -0,022056384 | -0,503072655 | 0,198433019 | -0,022071146 |
| 666 | -0,507346923 | 0,138454993 | -0,021983537 | -0,505922534 | 0,168522469 | -0,021983215 | -0,502655676 | 0,198594881 | -0,02199789 |
| 667 | -0,601999662 | 0,014518104 | 0,00214854 | -0,630507719 | 0,012293901 | 0,00214816 | -0,660762828 | 0,010067798 | 0,002152277 |
| 668 | -0,602366023 | 0,014501067 | 0,00214343 | -0,630809963 | 0,012282616 | 0,00214305 | -0,661000788 | 0,010062263 | 0,002147171 |
| 669 | 0,601999662 | 0,014518106 | 0,002148469 | 0,630507719 | 0,0122936 | 0,00214887 | 0,660762827 | 0,010070948 | 0,002145056 |
| 670 | 0,602366023 | 0,014501069 | 0,002143359 | 0,630809963 | 0,012282315 | 0,00214376 | 0,661000787 | 0,010065413 | 0,002139948 |
| 671 | 0,472493942 | -0,134510068 | 0,019938651 | 0,471665238 | -0,161946681 | 0,019938381 | 0,469092132 | -0,189384179 | 0,019939098 |
| 672 | 0,472585117 | -0,134992195 | 0,019897374 | 0,471780094 | -0,16237936 | 0,0198971 | 0,469229706 | -0,189767389 | 0,019897735 |
| 673 | -0,470793579 | 0,134510068 | -0,019844663 | -0,47055077 | 0,161946555 | -0,019844056 | -0,468560746 | 0,189381855 | -0,019836619 |
| 674 | -0,471160044 | 0,134992195 | -0,019814242 | -0,470892667 | 0,162379236 | -0,019813638 | -0,468877165 | 0,189765112 | -0,019806283 |
| 675 | 0,52324977 | 0,152766205 | -0,021580442 | 0,522550031 | 0,182497715 | -0,021580996 | 0,519923236 | 0,212225395 | -0,021571149 |
| 676 | 0,523540444 | 0,153338483 | -0,021530552 | 0,522828512 | 0,182998056 | -0,021531109 | 0,52018929 | 0,212653817 | -0,021521334 |
| 677 | -0,522149309 | -0,152766204 | 0,021529859 | -0,521663256 | -0,182497583 | 0,021530059 | -0,51924976 | -0,212224011 | 0,021514442 |
| 678 | -0,522343335 | -0,153338482 | 0,021475438 | -0,521868917 | -0,182997921 | 0,021475636 | -0,519466767 | -0,212652388 | 0,021459935 |
| 679 | -0,368596064 | 0,015517652 | 0,001220347 | -0,338976868 | 0,013027699 | 0,00122015 | -0,311262048 | 0,010535846 | 0,00122456 |
| 680 | -0,368210619 | 0,015635053 | 0,001231901 | -0,338665166 | 0,01312247 | 0,001231703 | -0,311024258 | 0,010607986 | 0,001236116 |
| 681 | 0,368596073 | 0,015517655 | 0,00122027 | 0,338976877 | 0,01302737 | 0,001220925 | 0,311262052 | 0,010539285 | 0,001216678 |
| 682 | 0,368210627 | 0,015635055 | 0,001231824 | 0,338665174 | 0,01312214 | 0,001232479 | 0,311024263 | 0,010611426 | 0,00122823 |
| 683 | 0,507758964 | 0,138090209 | -0,022056629 | 0,506337906 | 0,168259457 | -0,022057139 | 0,503072619 | 0,198429689 | -0,022063511 |
| 684 | 0,507346922 | 0,138454991 | -0,021983463 | 0,505922531 | 0,168522789 | -0,02198397 | 0,502655641 | 0,198591553 | -0,021990259 |
| 685 | -0,498568097 | -0,138090209 | 0,021688421 | -0,498857297 | -0,16825943 | 0,021688859 | -0,497300888 | -0,198428728 | 0,021692276 |
| 686 | -0,498154844 | -0,138454991 | 0,021614488 | -0,498448084 | -0,168522765 | 0,021614929 | -0,496897494 | -0,198590635 | 0,021618419 |
| 687 | -0,33843363 | -0,014518106 | -0,001076769 | -0,310994926 | -0,012293607 | -0,00107715 | -0,285302348 | -0,010071008 | -0,001073066 |
| 688 | -0,338012422 | -0,014501069 | -0,001073539 | -0,310638036 | -0,012282322 | -0,00107392 | -0,285009607 | -0,010065475 | -0,001069835 |
| 689 | 0,33843363 | -0,014518104 | -0,00107684 | 0,310994926 | -0,012293909 | -0,00107644 | 0,285302348 | -0,01006786 | -0,001080284 |
| 690 | 0,338012422 | -0,014501067 | -0,00107361 | 0,310638036 | -0,012282623 | -0,00107321 | 0,285009608 | -0,010062326 | -0,001077054 |
| 691 | 0,470793584 | 0,134510065 | -0,019844592 | 0,470550777 | 0,161946856 | -0,019844765 | 0,468560788 | 0,189378698 | -0,019829381 |
| 692 | 0,471160048 | 0,134992192 | -0,019814171 | 0,470892674 | 0,162379537 | -0,019814348 | 0,468877207 | 0,189761952 | -0,01979904 |
| 693 | -0,472493937 | -0,134510066 | 0,019938579 | -0,471665234 | -0,161946983 | 0,019939091 | -0,46909214 | -0,189381025 | 0,019931868 |
| 694 | -0,472585113 | -0,134992193 | 0,019897302 | -0,47178009 | -0,162379662 | 0,019897811 | -0,469229715 | -0,189764233 | 0,019890498 |
| 695 | 6,579646833 | 6,768963889 | 0,490278511 | 5,570005684 | 5,748055232 | 0,490276539 | 4,558043999 | 4,727136884 | 0,490296074 |
| 696 | 7,123119277 | -6,768963888 | -0,990040729 | 6,119982818 | -5,748055229 | -0,990038763 | 5,119169095 | -4,727136724 | -0,990058753 |
| 697 | -6,579646833 | 6,768963875 | 0,490277793 | -5,570005685 | 5,748053898 | 0,490279716 | -4,558044011 | 4,727155555 | 0,490253273 |
| 698 | -7,123119277 | -6,768963875 | -0,99004001 | -6,119982818 | -5,748053896 | -0,990041939 | -5,119169085 | -4,727155398 | -0,990015945 |
| 699 | 0,338021024 | 0,010498424 | 0,000792506 | 0,310702958 | 0,008868228 | 0,000792765 | 0,285124469 | 0,007239656 | 0,000789299 |
| 700 | 0,33752436 | 0,010501021 | 0,000794363 | 0,310273407 | 0,008867753 | 0,000794621 | 0,284761732 | 0,00723611 | 0,000791156 |
| 701 | -0,601850639 | -0,010498424 | -0,001571061 | -0,630234844 | -0,00886811 | -0,001571633 | -0,6603593 | -0,007237676 | -0,001575276 |
| 702 | -0,60208604 | -0,010501021 | -0,001573657 | -0,630403247 | -0,008867635 | -0,00157423 | -0,660460404 | -0,007234124 | -0,001577894 |
| 703 | -0,338021029 | 0,010498422 | 0,000792576 | -0,310702962 | 0,008868528 | 0,000792057 | -0,28512447 | 0,007236517 | 0,000796495 |

APOYO 2

| Newton | C4 | | | C5 | | | C6 | | |
|---|---|---|---|---|---|---|---|---|---|
| Barra | L | T | V | L | T | V | L | T | V |
| 704 | -0,337524364 | 0,010501019 | 0,000794433 | -0,310273411 | 0,008868054 | 0,000793913 | -0,284761733 | 0,007232971 | 0,000798353 |
| 705 | 0,601850634 | -0,010498422 | -0,001571131 | 0,630234838 | -0,00886841 | -0,001570926 | 0,660359271 | -0,007234536 | -0,001582474 |
| 706 | 0,602086036 | -0,010501018 | -0,001573728 | 0,630403241 | -0,008867935 | -0,001573523 | 0,660460375 | -0,007230984 | -0,001585093 |
| 707 | -6,562835514 | -6,927770606 | -0,966211345 | -5,560313889 | -5,939767383 | -0,966213533 | -4,562186028 | -4,951778761 | -0,966179141 |
| 708 | -7,288903901 | -6,935073784 | -0,967384866 | -6,320230239 | -5,94583812 | -0,967387718 | -5,358044587 | -4,95661725 | -0,967356438 |
| 709 | -6,754893635 | -7,085686731 | -0,944689721 | -5,787077781 | -6,127661492 | -0,944693222 | -4,827715861 | -5,169652279 | -0,944661208 |
| 710 | -7,397391193 | -7,090457566 | -0,945165063 | -6,459447437 | -6,131982485 | -0,945168904 | -5,531811345 | -5,17352621 | -0,945129686 |
| 711 | -6,891279996 | -7,233844255 | -0,923810072 | -5,954278745 | -6,304664576 | -0,923814143 | -5,029443304 | -5,375506513 | -0,923767288 |
| 712 | -7,142276893 | 6,927770605 | 0,466391427 | -6,131977492 | 5,939767225 | 0,466394039 | -5,11728327 | 4,951776058 | 0,466369323 |
| 713 | -6,737776608 | 6,935073784 | 0,467004491 | -5,760038814 | 5,945838087 | 0,467007433 | -4,7758113 | 4,956616659 | 0,466978254 |
| 714 | -7,268128392 | 7,085686731 | 0,44444408 | -6,290041083 | 6,127661619 | 0,444447239 | -5,303501136 | 5,169654437 | 0,444407481 |
| 715 | -6,910875612 | 7,090457567 | 0,44462074 | -5,961521668 | 6,131982564 | 0,444624369 | -5,001861486 | 5,173527548 | 0,444580345 |
| 716 | -7,409505337 | 7,233844254 | 0,423497187 | -6,459950555 | 6,30466451 | 0,423501434 | -5,498228711 | 5,375505401 | 0,423458574 |
| 717 | 6,56283552 | -6,927770617 | -0,966212148 | 5,560313896 | -5,939769076 | -0,966209511 | 4,562186055 | -4,951756342 | -0,966230536 |
| 718 | 7,288903902 | -6,935073792 | -0,967385754 | 6,32023024 | -5,945840175 | -0,967382841 | 5,358044583 | -4,956591044 | -0,967416514 |
| 719 | 6,754893631 | -7,085686736 | -0,944690688 | 5,787077775 | -6,127663887 | -0,944687544 | 4,827715841 | -5,169622516 | -0,944729436 |
| 720 | 7,39739119 | -7,090457569 | -0,945166105 | 6,459447434 | -6,131985201 | -0,94516247 | 5,531811337 | -5,173493095 | -0,9452056 |
| 721 | 6,891279999 | -7,233844255 | -0,92381119 | 5,954278748 | -6,304667615 | -0,92380695 | 5,02944331 | -5,375470034 | -0,923850914 |
| 722 | 7,142276899 | 6,927770616 | 0,466392229 | 6,131977499 | 5,939768917 | 0,466390017 | 5,117283284 | 4,951753637 | 0,466420721 |
| 723 | 6,737776609 | 6,935073792 | 0,467005379 | 5,760038816 | 5,945840141 | 0,467002557 | 4,775811312 | 4,95659045 | 0,467038336 |
| 724 | 7,268128388 | 7,085686737 | 0,444445047 | 6,290041078 | 6,127664015 | 0,44444156 | 5,303501123 | 5,169624677 | 0,444475705 |
| 725 | 6,910875609 | 7,09045757 | 0,444621782 | 5,961521665 | 6,131985281 | 0,444617935 | 5,001861474 | 5,173494435 | 0,444656255 |
| 726 | 7,40950534 | 7,233844255 | 0,423498305 | 6,459950558 | 6,304667548 | 0,423494242 | 5,498228721 | 5,37546892 | 0,423542205 |
| 727 | 0,452690181 | -0,125574035 | 0,019427514 | 0,451848354 | -0,15223824 | 0,01942699 | 0,449349506 | -0,178904699 | 0,019431989 |
| 728 | 0,452476905 | -0,12584948 | 0,019384148 | 0,451639599 | -0,152455033 | 0,019383627 | 0,449145751 | -0,179062853 | 0,019388681 |
| 729 | -0,447071145 | 0,125574035 | -0,019235943 | -0,446895472 | 0,152238381 | -0,019235796 | -0,445065358 | 0,178907126 | -0,019249464 |
| 730 | -0,446894165 | 0,125849481 | -0,019194261 | -0,446714011 | 0,152455172 | -0,019194112 | -0,44487986 | 0,179065248 | -0,01920772 |
| 731 | -0,570844283 | 0,000890888 | 0,000267099 | -0,597188875 | 0,000589595 | 0,000266855 | -0,625176603 | 0,000285218 | 0,000275605 |
| 732 | -0,571137035 | 0,000753593 | 0,000246597 | -0,597434972 | 0,000473504 | 0,000246354 | -0,625376297 | 0,000190317 | 0,000255158 |
| 733 | 0,570844286 | 0,00089089 | 0,000267032 | 0,597188879 | 0,000589309 | 0,000267528 | 0,625176623 | 0,000288196 | 0,000268779 |
| 734 | 0,571137038 | 0,000753595 | 0,00024653 | 0,597434976 | 0,000473218 | 0,000247027 | 0,625376316 | 0,000193296 | 0,000248329 |
| 735 | 0,435320412 | -0,12475153 | 0,018323842 | 0,434910274 | -0,150045521 | 0,018323627 | 0,432888796 | -0,175341136 | 0,018327329 |
| 736 | 0,435147227 | -0,125020786 | 0,01828556 | 0,434741554 | -0,150263097 | 0,018285343 | 0,432724701 | -0,175507024 | 0,018289012 |
| 737 | -0,435644606 | 0,12475153 | -0,018352634 | -0,435063815 | 0,150045392 | -0,018352076 | -0,432869235 | 0,175338965 | -0,018347982 |
| 738 | -0,435503265 | 0,125020786 | -0,018315981 | -0,434917888 | 0,15026297 | -0,018315424 | -0,432718901 | 0,175504873 | -0,018311368 |
| 739 | -0,528989802 | 0,009712964 | 0,001166595 | -0,553878901 | 0,008555113 | 0,001166263 | -0,580299478 | 0,007395538 | 0,001170046 |
| 740 | -0,529255747 | 0,009733854 | 0,001167692 | -0,554109473 | 0,008575223 | 0,001167358 | -0,580495088 | 0,007414889 | 0,001171061 |
| 741 | 0,528989802 | 0,009712966 | 0,001166533 | 0,553878901 | 0,008554849 | 0,001166884 | 0,58029948 | 0,007398301 | 0,001163712 |
| 742 | 0,529255747 | 0,009733856 | 0,001167629 | 0,554109473 | 0,00857496 | 0,001167979 | 0,580495089 | 0,007417654 | 0,001164724 |
| 743 | 0,407702224 | -0,117488755 | 0,017415919 | 0,407979715 | -0,141813333 | 0,017415433 | 0,406723025 | -0,166139369 | 0,017417811 |
| 744 | 0,407694737 | -0,117791018 | 0,017389725 | 0,407982859 | -0,142083235 | 0,017389239 | 0,406736041 | -0,166376918 | 0,017391643 |
| 745 | -0,421253642 | 0,117488756 | -0,017855052 | -0,420033061 | 0,141813451 | -0,017854881 | -0,417280383 | 0,166141356 | -0,017864399 |
| 746 | -0,421396262 | 0,117791018 | -0,017834323 | -0,420164379 | 0,142083352 | -0,017834151 | -0,417399624 | 0,166378892 | -0,017843648 |
| 747 | 0,44707114 | 0,125574033 | -0,019235876 | 0,446895465 | 0,152238669 | -0,019236474 | 0,44506532 | 0,178904133 | -0,019242603 |

APOYO 2

| Newton | C4 | | | C5 | | | C6 | | |
|---|---|---|---|---|---|---|---|---|---|
| Barra | L | T | V | L | T | V | L | T | V |
| 748 | 0,44689416 | 0,125849479 | -0,019194195 | 0,446714004 | 0,15245546 | -0,01919479 | 0,444879823 | 0,179062255 | -0,01920086 |
| 749 | -0,452690187 | -0,125574032 | 0,019427448 | -0,451848359 | -0,152238527 | 0,019427667 | -0,449349505 | -0,178901703 | 0,019425121 |
| 750 | -0,45247691 | -0,125849478 | 0,019384082 | -0,451639604 | -0,15245532 | 0,019384303 | -0,449145749 | -0,179059857 | 0,019381812 |
| 751 | -0,315749149 | -0,000890891 | -0,000169917 | -0,290416546 | -0,000589392 | -0,000170192 | -0,266728945 | -0,000289594 | -0,000166434 |
| 752 | -0,315403954 | -0,000753595 | -0,000159672 | -0,290118396 | -0,000473302 | -0,000159947 | -0,266478092 | -0,000194708 | -0,00015619 |
| 753 | 0,315749152 | -0,000890888 | -0,000169984 | 0,290416549 | -0,000589677 | -0,000169521 | 0,266728947 | -0,000286614 | -0,000173266 |
| 754 | 0,315403957 | -0,000753593 | -0,000159739 | 0,290118399 | -0,000473587 | -0,000159275 | 0,266478094 | -0,000191727 | -0,000163024 |
| 755 | 0,43564461 | 0,124751528 | -0,018352569 | 0,435063821 | 0,150045671 | -0,018352732 | 0,432869265 | 0,175336045 | -0,018341289 |
| 756 | 0,43550327 | 0,125020783 | -0,018315916 | 0,434917894 | 0,150263248 | -0,018316081 | 0,432718931 | 0,175501953 | -0,018304675 |
| 757 | -0,435320407 | -0,124751529 | 0,018323776 | -0,434910269 | -0,1500458 | 0,018324284 | -0,432888793 | -0,17533822 | 0,018320644 |
| 758 | -0,435147222 | -0,125020784 | 0,018285494 | -0,43474155 | -0,150263376 | 0,018286001 | -0,432724698 | -0,175504107 | 0,018282326 |
| 759 | -0,296611732 | -0,009712966 | -0,000512477 | -0,272660139 | -0,008554855 | -0,000512811 | -0,250237655 | -0,007398408 | -0,000509247 |
| 760 | -0,296341558 | -0,009733856 | -0,000512512 | -0,272425783 | -0,008574965 | -0,000512847 | -0,250039526 | -0,007417739 | -0,000509279 |
| 761 | 0,296611732 | -0,009712964 | -0,000512539 | 0,27266014 | -0,00855512 | -0,000512188 | 0,250237656 | -0,007395649 | -0,000515573 |
| 762 | 0,296341559 | -0,009733854 | -0,000512574 | 0,272425783 | -0,008575229 | -0,000512225 | 0,250039526 | -0,007414978 | -0,000515608 |
| 763 | 0,421253638 | 0,117488754 | -0,01785499 | 0,420033056 | 0,141813717 | -0,017855508 | 0,417280359 | 0,166138582 | -0,017858039 |
| 764 | 0,421396258 | 0,117791016 | -0,017834261 | 0,420164374 | 0,142083619 | -0,017834779 | 0,417399601 | 0,166376115 | -0,017837284 |
| 765 | -0,407702228 | -0,117488753 | 0,017415857 | -0,407979719 | -0,141813599 | 0,01741606 | -0,406723032 | -0,166136592 | 0,017411444 |
| 766 | -0,407694741 | -0,117791015 | 0,017389663 | -0,407982864 | -0,142083501 | 0,017389866 | -0,406736048 | -0,166374139 | 0,017385272 |
| 767 | 7,068043346 | 7,217465952 | 0,422623388 | 6,145949913 | 6,290258124 | 0,422618989 | 5,209912564 | 5,363026555 | 0,422670837 |
| 768 | 7,506691376 | -7,217465953 | -0,921831498 | 6,598243593 | -6,290258246 | -0,921826772 | 5,703738818 | -5,363028616 | -0,92187122 |
| 769 | -7,068043341 | 7,217465954 | 0,422622197 | -6,145949909 | 6,290254778 | 0,422626906 | -5,209912553 | 5,363066251 | 0,422579836 |
| 770 | -7,506691372 | -7,217465955 | -0,921830307 | -6,598243587 | -6,2902549 | -0,921834689 | -5,703738797 | -5,363068311 | -0,921780222 |
| 771 | 0,293454167 | 0,01857999 | 0,00100076 | 0,269934504 | 0,016334495 | 0,001001005 | 0,247954523 | 0,014090476 | 0,000997855 |
| 772 | 0,293126778 | 0,018604089 | 0,001002805 | 0,269646561 | 0,01635449 | 0,00100305 | 0,247706366 | 0,014106369 | 0,000999898 |
| 773 | -0,533702298 | -0,018579989 | -0,002255004 | -0,558170421 | -0,016334403 | -0,002255494 | -0,584176432 | -0,014088931 | -0,002257891 |
| 774 | -0,533906441 | -0,018604088 | -0,00225891 | -0,558335526 | -0,016354399 | -0,002259399 | -0,584302841 | -0,014104836 | -0,00226175 |
| 775 | -0,29345417 | 0,018579987 | 0,001000823 | -0,269934508 | 0,016334762 | 0,001000375 | -0,247954524 | 0,014087683 | 0,001004258 |
| 776 | -0,293126782 | 0,018604087 | 0,001002867 | -0,269646564 | 0,016354758 | 0,00100242 | -0,247706367 | 0,014103575 | 0,001006303 |
| 777 | 0,533702295 | -0,018579987 | -0,002255067 | 0,558170417 | -0,016334671 | -0,002254864 | 0,584176409 | -0,01408614 | -0,002264288 |
| 778 | 0,533906438 | -0,018604087 | -0,002258973 | 0,558335522 | -0,016354667 | -0,002258768 | 0,584302819 | -0,014102044 | -0,002268149 |
| 779 | -7,054416641 | -7,349886897 | -0,902569963 | -6,14513429 | -6,4497845 | -0,902574902 | -5,251515169 | -5,549707687 | -0,902519632 |
| 780 | -7,665051106 | -7,379662795 | -0,906089368 | -6,784098379 | -6,476074904 | -0,906094874 | -5,920571384 | -5,57251267 | -0,906042571 |
| 781 | -7,205652756 | -7,50888683 | -0,886980696 | -6,326931445 | -6,630976815 | -0,886986458 | -5,4672905 | -5,75309451 | -0,886929101 |
| 782 | -7,765415697 | -7,460359002 | -0,881392785 | -6,912205341 | -6,587951377 | -0,881398796 | -6,079696558 | -5,715574444 | -0,881333041 |
| 783 | -7,335024481 | -7,587871397 | -0,863662213 | -6,482566475 | -6,739803534 | -0,863668523 | -5,652411437 | -5,891768723 | -0,86359671 |
| 784 | -7,544193443 | 7,349886897 | 0,402574608 | -6,620207921 | 6,44978451 | 0,402579521 | -5,680560641 | 5,549707848 | 0,402523668 |
| 785 | -7,205375336 | 7,379662795 | 0,404108782 | -6,30863478 | 6,476075024 | 0,404113967 | -5,394469048 | 5,572514696 | 0,404054389 |
| 786 | -7,635380751 | 7,508886831 | 0,385984319 | -6,739852239 | 6,630976842 | 0,385990011 | -5,825242203 | 5,753094955 | 0,385931059 |
| 787 | -7,329698263 | 7,460359001 | 0,383593555 | -6,458681879 | 6,587951328 | 0,383599695 | -5,566963169 | 5,715573624 | 0,383536883 |
| 788 | -7,754009291 | 7,587871397 | 0,366031236 | -6,882755817 | 6,739803445 | 0,366037784 | -5,98919785 | 5,891767218 | 0,365971375 |
| 789 | 7,054416641 | -7,349886893 | -0,902571223 | 6,14513429 | -6,449788144 | -0,902566282 | 5,251515176 | -5,549664877 | -0,902617771 |
| 790 | 7,665051101 | -7,379662788 | -0,9060907 | 6,784098374 | -6,476078854 | -0,906085534 | 5,920571363 | -5,572466668 | -0,906148028 |
| 791 | 7,205652755 | -7,508886822 | -0,886982095 | 6,326931443 | -6,630981052 | -0,886976442 | 5,467290486 | -5,753045508 | -0,887041435 |

APOYO 2

| Newton | C4 | | | C5 | | | C6 | | |
|---|---|---|---|---|---|---|---|---|---|
| Barra | L | T | V | L | T | V | L | T | V |
| 792 | 7,765415699 | -7,460358991 | -0,881394251 | 6,912205343 | -6,587955895 | -0,881388118 | 6,079696562 | -5,715522501 | -0,881452117 |
| 793 | 7,335024484 | -7,587871384 | -0,863663744 | 6,482566479 | -6,739808331 | -0,863657189 | 5,652411451 | -5,891713869 | -0,863722461 |
| 794 | 7,544193442 | 7,349886893 | 0,402575868 | 6,62020792 | 6,449788154 | 0,402570901 | 5,680560632 | 5,549665041 | 0,402621802 |
| 795 | 7,205375332 | 7,379662789 | 0,404110114 | 6,308634775 | 6,476078974 | 0,404104627 | 5,394469037 | 5,572468695 | 0,404159844 |
| 796 | 7,63538075 | 7,508886822 | 0,385985719 | 6,739852239 | 6,630981079 | 0,385979996 | 5,82524221 | 5,753045951 | 0,386043397 |
| 797 | 7,329698264 | 7,460358991 | 0,38359502 | 6,458681881 | 6,587955846 | 0,383589018 | 5,566963178 | 5,715521681 | 0,383655961 |
| 798 | 7,754009295 | 7,587871384 | 0,366032767 | 6,882755821 | 6,739808242 | 0,36602645 | 5,98919786 | 5,891712362 | 0,36609713 |
| 799 | 0,352652824 | -0,111961301 | 0,014653286 | 0,354231168 | -0,132989742 | 0,014652822 | 0,354414308 | -0,154019825 | 0,014656028 |
| 800 | -0,389714837 | 0,111961301 | -0,015838269 | -0,387273547 | 0,132989874 | -0,015838157 | -0,383439453 | 0,154022056 | -0,015849375 |
| 801 | 0,389714832 | 0,1119613 | -0,015838212 | 0,38727354 | 0,132990117 | -0,01583873 | 0,383439422 | 0,154019519 | -0,015843558 |
| 802 | -0,352652828 | -0,111961299 | 0,014653229 | -0,354231173 | -0,132989984 | 0,014653394 | -0,354414311 | -0,154017284 | 0,014650203 |
| 803 | 0,410600873 | -0,113511181 | 0,017189392 | 0,408481422 | -0,136561054 | 0,017189206 | 0,404894395 | -0,159613049 | 0,017194881 |
| 804 | 0,410649271 | -0,113757885 | 0,017169891 | 0,408529299 | -0,136780263 | 0,017169704 | 0,404941106 | -0,159804762 | 0,017175373 |
| 805 | -0,381831149 | 0,113511181 | -0,016233091 | -0,383047269 | 0,136560941 | -0,016232604 | -0,382793687 | 0,159611146 | -0,016231443 |
| 806 | -0,381841465 | 0,113757885 | -0,016212725 | -0,383057546 | 0,136780151 | -0,016212238 | -0,382803285 | 0,159802863 | -0,016211086 |
| 807 | -0,504615469 | 0,03273299 | 0,003803542 | -0,5284018 | 0,028980101 | 0,003803365 | -0,5536478 | 0,025224061 | 0,003812718 |
| 808 | -0,504832428 | 0,032781351 | 0,003807245 | -0,528588226 | 0,029025207 | 0,003807068 | -0,553804215 | 0,025265917 | 0,003816401 |
| 809 | 0,504615473 | 0,032732992 | 0,003803482 | 0,528401805 | 0,028979849 | 0,00380396 | 0,553647823 | 0,025226699 | 0,003806671 |
| 810 | 0,504832431 | 0,032781353 | 0,003807186 | 0,528588231 | 0,029024954 | 0,003807663 | 0,553804238 | 0,025268557 | 0,00381035 |
| 811 | 0,376233258 | -0,114106975 | 0,01573432 | 0,377145214 | -0,136342077 | 0,015733915 | 0,376607402 | -0,158577901 | 0,015733997 |
| 812 | 0,376203878 | -0,114355123 | 0,015713556 | 0,377124685 | -0,136565022 | 0,015713151 | 0,376594942 | -0,158775642 | 0,01571323 |
| 813 | -0,399079797 | 0,114106976 | -0,016506864 | -0,39727455 | 0,136342128 | -0,016506596 | -0,394020403 | 0,158578764 | -0,016509778 |
| 814 | -0,399192932 | 0,114355123 | -0,016491083 | -0,397378193 | 0,136565073 | -0,016490814 | -0,394113775 | 0,158776508 | -0,016494003 |
| 815 | -0,488501737 | -0,05454096 | -0,006243702 | -0,509926352 | -0,048400578 | -0,006244072 | -0,532768052 | -0,042261183 | -0,006242923 |
| 816 | -0,488777097 | -0,054896179 | -0,006285101 | -0,51018047 | -0,04871494 | -0,006285471 | -0,533001714 | -0,04253469 | -0,006284313 |
| 817 | 0,488501736 | -0,054540958 | -0,006243761 | 0,509926351 | -0,048400824 | -0,006243492 | 0,532768043 | -0,042258602 | -0,006248839 |
| 818 | 0,488777096 | -0,054896177 | -0,00628516 | 0,510180468 | -0,048715186 | -0,00628489 | 0,533001706 | -0,042532107 | -0,006290234 |
| 819 | 0,381831153 | 0,113511178 | -0,016233032 | 0,383047274 | 0,136561195 | -0,016233203 | 0,382793705 | 0,159608485 | -0,016225343 |
| 820 | 0,381841469 | 0,113757883 | -0,016212666 | 0,383057551 | 0,136780405 | -0,016212837 | 0,382803303 | 0,1598002 | -0,016204982 |
| 821 | -0,410600869 | -0,113511179 | 0,017189333 | -0,408481418 | -0,136561309 | 0,017189806 | -0,404894385 | -0,159610391 | 0,017188788 |
| 822 | -0,410649267 | -0,113757883 | 0,017169831 | -0,408529295 | -0,136780518 | 0,017170304 | -0,404941095 | -0,159802102 | 0,017169276 |
| 823 | -0,28341043 | -0,032732992 | -0,001638251 | -0,260519957 | -0,028979946 | -0,001638468 | -0,239088842 | -0,025228344 | -0,001635274 |
| 824 | -0,28314775 | -0,032781353 | -0,001639267 | -0,2602883 | -0,029025052 | -0,001639485 | -0,238888729 | -0,025270196 | -0,001636288 |
| 825 | 0,283410434 | -0,032732991 | -0,00163831 | 0,260519961 | -0,028980199 | -0,001637873 | 0,239088844 | -0,025225707 | -0,00164132 |
| 826 | 0,283147754 | -0,032781351 | -0,001639327 | 0,260288303 | -0,029025304 | -0,00163889 | 0,238888731 | -0,025267557 | -0,001642338 |
| 827 | 0,399079795 | 0,114106974 | -0,016506804 | 0,397274548 | 0,13634238 | -0,016507188 | 0,394020402 | 0,158576135 | -0,01650375 |
| 828 | 0,39919293 | 0,114355121 | -0,016491023 | 0,397378191 | 0,136565325 | -0,016491407 | 0,394113774 | 0,158773877 | -0,016487971 |
| 829 | -0,376233259 | -0,114106973 | 0,01573426 | -0,377145217 | -0,136342328 | 0,015734506 | -0,376607415 | -0,15857527 | 0,015727966 |
| 830 | -0,376203879 | -0,114355121 | 0,015713497 | -0,377124688 | -0,136565273 | 0,015713743 | -0,376594955 | -0,15877301 | 0,015707196 |
| 831 | -0,258389896 | 0,054540958 | 0,002659644 | -0,23784202 | 0,048400857 | 0,002659289 | -0,218710808 | 0,042259143 | 0,002662695 |
| 832 | -0,258210838 | 0,054896177 | 0,002677489 | -0,237684834 | 0,048715218 | 0,002677134 | -0,218576281 | 0,042532646 | 0,002680542 |
| 833 | 0,258389894 | 0,05454096 | 0,002659586 | 0,237842019 | 0,04840061 | 0,00265987 | 0,218710808 | 0,042261724 | 0,00265678 |
| 834 | 0,258210837 | 0,054896179 | 0,00267743 | 0,237684833 | 0,048714971 | 0,002677715 | 0,218576281 | 0,042535229 | 0,002674622 |

APOYO 2

## 3.3 REACCIONES

| REACCIONES EMPOTRAMIENTOS (Ri (N) Mi(N*m)) | | VIENTO | PESO | CT1 | | | CT2 | | |
|---|---|---|---|---|---|---|---|---|---|
| Nudo | Reacción | | | L | T | V | L | T | V |
| 359 | R longitudinal | 2996,721229 | 393,4147442 | -0,249746888 | 0,243868706 | 0,00713875 | -0,284243715 | 0,243868706 | 0,009117327 |
| 359 | R vertical | 104629,1897 | 12660,44027 | -8,517901999 | 8,529361025 | 0,249670287 | -8,517377592 | 8,529361016 | 0,318821751 |
| 359 | R transversal | -2219,85606 | -302,6258294 | 0,202985522 | -0,175597983 | -0,005945737 | 0,202970373 | -0,175597983 | -0,007368437 |
| 359 | M longitudinal | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 359 | M vertical | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 359 | M transversal | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 360 | R longitudinal | 2996,721222 | -393,2738497 | -0,249747254 | 0,243868777 | -0,00713875 | -0,215250427 | 0,243868777 | -0,005160435 |
| 360 | R vertical | -104629,1896 | 12655,51584 | 8,517909001 | -8,529362381 | 0,249670287 | 8,518433408 | -8,529362391 | 0,180523878 |
| 360 | R transversal | -2219,856057 | 302,5245159 | 0,202985667 | -0,175598011 | 0,005945737 | 0,203000817 | -0,175598011 | 0,004523143 |
| 360 | M longitudinal | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 360 | M vertical | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 360 | M transversal | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 361 | R longitudinal | 2,44759E-07 | -0,427931071 | -0,000505858 | -5,02334E-11 | -1,44849E-05 | -0,000505858 | -4,99204E-11 | -1,44849E-05 |
| 361 | R vertical | -1,10861E-05 | 61,04414284 | 0,022912404 | 2,27528E-09 | 0,000656079 | 0,022912404 | 2,2611E-09 | 0,00065608 |
| 361 | R transversal | -8459,47709 | 0,162036794 | 2,23723E-07 | -0,148804046 | -1,06472E-07 | 0,069274142 | -0,148804045 | 0,002845346 |
| 361 | M longitudinal | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 361 | M vertical | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 361 | M transversal | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 362 | R longitudinal | -2996,721222 | -393,3208991 | -0,249746888 | 0,243868777 | -0,007138927 | -0,284243715 | -0,243868777 | -0,009117242 |
| 362 | R vertical | 104629,1896 | 12658,83373 | 8,517901999 | -8,529362379 | 0,249673634 | 8,517377592 | 8,529362388 | 0,318820043 |
| 362 | R transversal | -2219,856042 | -302,5927076 | -0,202985525 | 0,175598014 | -0,005945808 | -0,202970375 | -0,175598014 | -0,007368403 |
| 362 | M longitudinal | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 362 | M vertical | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 362 | M transversal | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 370 | R longitudinal | 2,44762E-07 | 0,42793107 | -0,000505858 | -5,02776E-11 | 1,44849E-05 | -0,000505858 | -5,04494E-11 | 1,44849E-05 |
| 370 | R vertical | 1,10863E-05 | 61,04414281 | -0,022912404 | -2,27728E-09 | 0,000656079 | -0,022912403 | -2,28506E-09 | 0,000656079 |
| 370 | R transversal | -8459,4771 | 0,040590125 | -2,19419E-07 | -0,14880396 | 1,0647E-07 | -0,069274138 | -0,14880396 | 0,002845244 |
| 370 | M longitudinal | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 370 | M vertical | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 370 | M transversal | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 371 | R longitudinal | -2996,72123 | 393,1800045 | -0,249747254 | 0,243868706 | 0,007138927 | -0,215250427 | -0,243868706 | 0,005160349 |
| 371 | R vertical | -104629,1898 | 12653,90931 | -8,517909001 | -8,529361023 | 0,249673634 | -8,518433409 | -8,529361014 | 0,180522171 |
| 371 | R transversal | -2219,856045 | 302,4913941 | -0,202985669 | 0,175597986 | 0,005945808 | -0,203000819 | -0,175597986 | 0,004523108 |
| 371 | M longitudinal | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 371 | M vertical | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 371 | M transversal | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |

APOYO 2

| REACCIONES EMPOTRAMIENTOS (Ri (N) Mi(N*m)) | | C1 | | | C2 | | | C3 | | |
|---|---|---|---|---|---|---|---|---|---|---|
| Nudo | Reacción | L | T | V | L | T | V | L | T | V |
| 359 | R longitudinal | 0,058049396 | 0,217692375 | -0,010514951 | 0,058583573 | 0,193342109 | -0,010515358 | 0,060759053 | 0,168993772 | -0,010511322 |
| 359 | R vertical | -7,608718297 | 7,614468092 | -0,367348539 | -6,749132636 | 6,763401754 | -0,367355239 | -5,866473964 | 5,912367933 | -0,367287157 |
| 359 | R transversal | 0,181339024 | -0,156775282 | 0,006748602 | 0,16088075 | -0,139265767 | 0,006748625 | 0,139942854 | -0,121756771 | 0,006747417 |
| 359 | M longitudinal | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 359 | M vertical | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 359 | M transversal | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 360 | R longitudinal | -0,55759636 | 0,217692373 | -0,024792708 | -0,558179672 | 0,19334242 | -0,0247923 | -0,560404258 | 0,168990601 | -0,02479611 |
| 360 | R vertical | 7,59969802 | -7,614468079 | 0,866694015 | 6,759381543 | -6,763406757 | 0,866687314 | 5,942136755 | -5,912312919 | 0,866755394 |
| 360 | R transversal | 0,181075594 | -0,156775281 | 0,018640182 | 0,161016276 | -0,139265767 | 0,018640205 | 0,141438455 | -0,12175388 | 0,018648102 |
| 360 | M longitudinal | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 360 | M vertical | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 360 | M transversal | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 361 | R longitudinal | -0,000453036 | -1,13336E-11 | -1,44849E-05 | -0,000403901 | -1,62413E-09 | -1,44892E-05 | -0,000354795 | -2,73187E-08 | -1,45872E-05 |
| 361 | R vertical | 0,020519851 | 5,13344E-10 | 0,000656081 | 0,018294328 | 7,35637E-08 | 0,000656277 | 0,016070123 | 1,23738E-06 | 0,000660716 |
| 361 | R transversal | -0,618133372 | -0,186449435 | -0,025388738 | -0,617414838 | -0,221468668 | -0,025389305 | -0,614374845 | -0,256487234 | -0,025390669 |
| 361 | M longitudinal | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 361 | M vertical | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 361 | M transversal | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 362 | R longitudinal | 0,058049395 | -0,217692373 | 0,010515031 | 0,058583573 | -0,193342413 | 0,01051464 | 0,060759053 | -0,168990492 | 0,010518841 |
| 362 | R vertical | 7,608718299 | 7,614468078 | -0,367350095 | 6,749132639 | 6,763406683 | -0,367343591 | 5,866473973 | 5,912311682 | -0,36741611 |
| 362 | R transversal | -0,18133902 | -0,156775282 | 0,006748635 | -0,160880746 | -0,139265869 | 0,006748384 | -0,139942853 | -0,121755607 | 0,006750086 |
| 362 | M longitudinal | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 362 | M vertical | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 362 | M transversal | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 370 | R longitudinal | -0,000453036 | 3,10948E-12 | 1,44849E-05 | -0,000403901 | 1,6133E-09 | 1,44892E-05 | -0,000354795 | 2,72768E-08 | 1,45871E-05 |
| 370 | R vertical | -0,020519857 | 1,40841E-10 | 0,000656081 | -0,018294335 | 7,3073E-08 | 0,000656276 | -0,016070141 | 1,23548E-06 | 0,000660712 |
| 370 | R transversal | 0,618133372 | -0,186449438 | -0,025388832 | 0,617414839 | -0,221468263 | -0,025388352 | 0,614374868 | -0,256491462 | -0,025400363 |
| 370 | M longitudinal | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 370 | M vertical | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 370 | M transversal | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 371 | R longitudinal | -0,55759636 | -0,217692375 | 0,024792628 | -0,558179672 | -0,193342116 | 0,024793017 | -0,560404257 | -0,16899388 | 0,024788592 |
| 371 | R vertical | -7,599698017 | -7,614468092 | 0,866692458 | -6,75938154 | -6,763401827 | 0,866698962 | -5,942136746 | -5,912369168 | 0,866626446 |
| 371 | R transversal | -0,181075598 | -0,156775282 | 0,01864015 | -0,161016281 | -0,139265665 | 0,018640445 | -0,14143848 | -0,121755047 | 0,018645427 |
| 371 | M longitudinal | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 371 | M vertical | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 371 | M transversal | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |

| REACCIONES EMPOTRAMIENTOS (Ri (N) Mi(N*m)) | | C4 | | | C5 | | | C6 | | |
|---|---|---|---|---|---|---|---|---|---|---|
| Nudo | Reacción | L | T | V | L | T | V | L | T | V |
| 359 | R longitudinal | -0,55759636 | 0,217692373 | 0,024792708 | -0,558179672 | 0,19334242 | 0,0247923 | -0,560404258 | 0,168990601 | 0,02479611 |
| 359 | R vertical | -7,599698019 | 7,614468078 | 0,866694017 | -6,759381543 | 6,763406757 | 0,866687314 | -5,942136755 | 5,912312919 | 0,866755394 |
| 359 | R transversal | 0,181075594 | -0,156775281 | -0,018640182 | 0,161016276 | -0,139265767 | -0,018640205 | 0,141438455 | -0,12175388 | -0,018648102 |
| 359 | M longitudinal | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 359 | M vertical | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 359 | M transversal | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 360 | R longitudinal | 0,058049396 | 0,217692375 | 0,010514951 | 0,058583573 | 0,193342109 | 0,010515358 | 0,060759053 | 0,168993772 | 0,010511322 |
| 360 | R vertical | 7,608718297 | -7,614468092 | -0,367348536 | 6,749132636 | -6,763401754 | -0,367355239 | 5,866473964 | -5,912367933 | -0,367287157 |
| 360 | R transversal | 0,181339024 | -0,156775282 | -0,006748602 | 0,16088075 | -0,139265767 | -0,006748625 | 0,139942854 | -0,121756771 | -0,006747417 |
| 360 | M longitudinal | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 360 | M vertical | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 360 | M transversal | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 361 | R longitudinal | -0,000453036 | 3,10854E-12 | -1,44849E-05 | -0,000403901 | 1,6133E-09 | -1,44892E-05 | -0,000354795 | 2,72768E-08 | -1,45871E-05 |
| 361 | R vertical | 0,020519857 | -1,40798E-10 | 0,000656081 | 0,018294335 | -7,3073E-08 | 0,000656276 | 0,016070141 | -1,23548E-06 | 0,000660712 |
| 361 | R transversal | 0,618133372 | -0,186449438 | 0,025388832 | 0,617414839 | -0,221468263 | 0,025388352 | 0,614374868 | -0,256491462 | 0,025400363 |
| 361 | M longitudinal | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 361 | M vertical | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 361 | M transversal | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 362 | R longitudinal | -0,55759636 | -0,217692375 | -0,024792628 | -0,558179672 | -0,193342116 | -0,024793017 | -0,560404257 | -0,16899388 | -0,024788592 |
| 362 | R vertical | 7,599698017 | 7,614468092 | 0,866692455 | 6,75938154 | 6,763401827 | 0,866698962 | 5,942136746 | 5,912369168 | 0,866626446 |
| 362 | R transversal | -0,181075598 | -0,156775282 | -0,01864015 | -0,161016281 | -0,139265665 | -0,018640445 | -0,14143848 | -0,121755047 | -0,018645427 |
| 362 | M longitudinal | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 362 | M vertical | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 362 | M transversal | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 370 | R longitudinal | -0,000453036 | -1,13346E-11 | 1,44849E-05 | -0,000403901 | -1,62413E-09 | 1,44892E-05 | -0,000354795 | -2,73187E-08 | 1,45872E-05 |
| 370 | R vertical | -0,020519851 | -5,1339E-10 | 0,000656081 | -0,018294328 | -7,35637E-08 | 0,000656277 | -0,016070123 | -1,23738E-06 | 0,000660716 |
| 370 | R transversal | -0,618133372 | -0,186449435 | 0,025388737 | -0,617414838 | -0,221468668 | 0,025389305 | -0,614374845 | -0,256487234 | 0,025390669 |
| 370 | M longitudinal | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 370 | M vertical | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 370 | M transversal | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 371 | R longitudinal | 0,058049395 | -0,217692373 | -0,010515031 | 0,058583573 | -0,193342413 | -0,01051464 | 0,060759053 | -0,168990492 | -0,010518841 |
| 371 | R vertical | -7,6087183 | -7,614468078 | -0,367350098 | -6,749132639 | -6,763406683 | -0,367343591 | -5,866473973 | -5,912311682 | -0,36741611 |
| 371 | R transversal | -0,18133902 | -0,156775282 | -0,006748635 | -0,160880746 | -0,139265869 | -0,006748384 | -0,139942853 | -0,121755607 | -0,006750086 |
| 371 | M longitudinal | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 371 | M vertical | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 371 | M transversal | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |

# 4 EJEMPLO DE APLICACIÓN

## 4.1 Desplazamientos

| Nudo | Desplazamiento | metros |
|---|---|---|
| 1 | D Longitudinal | 0 |
| 1 | D Vertical | 0 |
| 1 | D transversal | 0 |
| 1 | G Longitudinal | 0,000109742 |
| 1 | G Vertical | -0,000206166 |
| 1 | G transversal | 1,76691E-05 |
| 2 | D Longitudinal | 0,001866733 |
| 2 | D Vertical | -0,000771681 |
| 2 | D transversal | 0,004201208 |
| 2 | G Longitudinal | 0,000738247 |
| 2 | G Vertical | -0,00012062 |
| 2 | G transversal | -0,000416928 |
| 3 | D Longitudinal | 0,005503267 |
| 3 | D Vertical | -0,001055132 |
| 3 | D transversal | 0,007848855 |
| 3 | G Longitudinal | 0,000589885 |
| 3 | G Vertical | 0,000267091 |
| 3 | G transversal | -0,000895888 |
| 4 | D Longitudinal | 0,004793336 |
| 4 | D Vertical | 0,000418202 |
| 4 | D transversal | 0,007321607 |
| 4 | G Longitudinal | -0,000112738 |
| 4 | G Vertical | -0,000100107 |
| 4 | G transversal | -0,000829511 |
| 5 | D Longitudinal | 0,00450622 |
| 5 | D Vertical | -0,001398178 |
| 5 | D transversal | 0,007275784 |
| 5 | G Longitudinal | 0,000405434 |
| 5 | G Vertical | -4,45148E-05 |
| 5 | G transversal | -0,000834955 |
| 6 | D Longitudinal | 0,003189204 |
| 6 | D Vertical | 0,000615636 |
| 6 | D transversal | 0,005923665 |
| 6 | G Longitudinal | -9,67387E-06 |
| 6 | G Vertical | -8,45117E-05 |
| 6 | G transversal | -0,000674167 |
| 7 | D Longitudinal | 0,002952671 |
| 7 | D Vertical | -0,001564607 |
| 7 | D transversal | 0,005875428 |
| 7 | G Longitudinal | 0,000514783 |
| 7 | G Vertical | -3,55079E-05 |

| Nudo | Desplazamiento | metros |
|---|---|---|
| 7 | G transversal | -0,000688818 |
| 8 | D Longitudinal | 0,001943215 |
| 8 | D Vertical | 0,000750084 |
| 8 | D transversal | 0,004348414 |
| 8 | G Longitudinal | 7,63294E-05 |
| 8 | G Vertical | -6,85024E-05 |
| 8 | G transversal | -0,000506034 |
| 9 | D Longitudinal | 0,001761926 |
| 9 | D Vertical | -0,002421365 |
| 9 | D transversal | 0,004065815 |
| 9 | G Longitudinal | 0,001535099 |
| 9 | G Vertical | -0,000118784 |
| 9 | G transversal | -0,00048861 |
| 10 | D Longitudinal | 0,009474686 |
| 10 | D Vertical | -0,000222138 |
| 10 | D transversal | 0,009580742 |
| 10 | G Longitudinal | 0,000864309 |
| 10 | G Vertical | -0,004910373 |
| 10 | G transversal | -0,002265989 |
| 11 | D Longitudinal | 0,010469001 |
| 11 | D Vertical | -4,9631E-05 |
| 11 | D transversal | 0,009580769 |
| 11 | G Longitudinal | 0,000862968 |
| 11 | G Vertical | -0,004983309 |
| 11 | G transversal | -0,002557923 |
| 12 | D Longitudinal | 0 |
| 12 | D Vertical | 0 |
| 12 | D transversal | 0 |
| 12 | G Longitudinal | 6,7226E-05 |
| 12 | G Vertical | 0,000450385 |
| 12 | G transversal | 3,08544E-05 |
| 13 | D Longitudinal | 0 |
| 13 | D Vertical | 0 |
| 13 | D transversal | 0 |
| 13 | G Longitudinal | 5,11537E-05 |
| 13 | G Vertical | -0,000600581 |
| 13 | G transversal | -4,54746E-05 |
| 14 | D Longitudinal | 0 |
| 14 | D Vertical | 0 |
| 14 | D transversal | 0 |
| 14 | G Longitudinal | 0,000109108 |

| Nudo | Desplazamiento | metros |
|---|---|---|
| 14 | G Vertical | 0,000230631 |
| 14 | G transversal | -1,02519E-05 |
| 15 | D Longitudinal | 0,001915234 |
| 15 | D Vertical | -9,14443E-05 |
| 15 | D transversal | 0,004256904 |
| 15 | G Longitudinal | 0,000758116 |
| 15 | G Vertical | 0,000522598 |
| 15 | G transversal | -0,000446411 |
| 16 | D Longitudinal | 0,001877041 |
| 16 | D Vertical | 0,000419516 |
| 16 | D transversal | 0,004217307 |
| 16 | G Longitudinal | 0,000703359 |
| 16 | G Vertical | -0,000672196 |
| 16 | G transversal | -0,000477696 |
| 17 | D Longitudinal | 0,001834955 |
| 17 | D Vertical | -0,000260864 |
| 17 | D transversal | 0,004148602 |
| 17 | G Longitudinal | 0,00077721 |
| 17 | G Vertical | 0,000151177 |
| 17 | G transversal | -0,000483429 |
| 18 | D Longitudinal | 0,005576466 |
| 18 | D Vertical | -0,000365994 |
| 18 | D transversal | 0,007778311 |
| 18 | G Longitudinal | 0,000472852 |
| 18 | G Vertical | 0,001033442 |
| 18 | G transversal | -0,000839494 |
| 19 | D Longitudinal | 0,005600838 |
| 19 | D Vertical | 0,000578981 |
| 19 | D transversal | 0,007731143 |
| 19 | G Longitudinal | 0,000485398 |
| 19 | G Vertical | 3,32337E-05 |
| 19 | G transversal | -0,000947546 |
| 20 | D Longitudinal | 0,005499135 |
| 20 | D Vertical | -0,000116108 |
| 20 | D transversal | 0,00774418 |
| 20 | G Longitudinal | 0,000561137 |
| 20 | G Vertical | 0,000339839 |
| 20 | G transversal | -0,000865298 |
| 21 | D Longitudinal | -9,54385E-08 |
| 21 | D Vertical | 1,17467E-05 |
| 21 | D transversal | 6,51985E-05 |

| Nudo | Desplazamiento | metros |
|---|---|---|
| 21 | G Longitudinal | 7,78466E-05 |
| 21 | G Vertical | 0,0004513 |
| 21 | G transversal | 2,84665E-05 |
| 22 | D Longitudinal | 4,5575E-06 |
| 22 | D Vertical | 2,29189E-05 |
| 22 | D transversal | 0,000145368 |
| 22 | G Longitudinal | 0,000117331 |
| 22 | G Vertical | 0,000455121 |
| 22 | G transversal | 1,32498E-05 |
| 23 | D Longitudinal | 2,49659E-05 |
| 23 | D Vertical | 3,00083E-05 |
| 23 | D transversal | 0,000255657 |
| 23 | G Longitudinal | 0,000163049 |
| 23 | G Vertical | 0,000450378 |
| 23 | G transversal | -1,80909E-05 |
| 24 | D Longitudinal | 6,52633E-05 |
| 24 | D Vertical | 3,74185E-05 |
| 24 | D transversal | 0,000389701 |
| 24 | G Longitudinal | 0,000201006 |
| 24 | G Vertical | 0,000453259 |
| 24 | G transversal | -4,86622E-05 |
| 25 | D Longitudinal | 0,000121222 |
| 25 | D Vertical | 4,12524E-05 |
| 25 | D transversal | 0,000547289 |
| 25 | G Longitudinal | 0,000233028 |
| 25 | G Vertical | 0,00045481 |
| 25 | G transversal | -6,62895E-05 |
| 26 | D Longitudinal | 0,000185587 |
| 26 | D Vertical | 4,44391E-05 |
| 26 | D transversal | 0,000723097 |
| 26 | G Longitudinal | 0,000265659 |
| 26 | G Vertical | 0,000452304 |
| 26 | G transversal | -7,72374E-05 |
| 27 | D Longitudinal | 0,000260918 |
| 27 | D Vertical | 4,4972E-05 |
| 27 | D transversal | 0,000932469 |
| 27 | G Longitudinal | 0,000329694 |
| 27 | G Vertical | 0,00046011 |
| 27 | G transversal | -0,000102618 |
| 28 | D Longitudinal | 0,000354373 |
| 28 | D Vertical | 4,48554E-05 |

| Nudo | Desplazamiento | metros |
|---|---|---|
| 28 | D transversal | 0,001174173 |
| 28 | G Longitudinal | 0,000379629 |
| 28 | G Vertical | 0,000467412 |
| 28 | G transversal | -0,000134935 |
| 29 | D Longitudinal | 0,000470667 |
| 29 | D Vertical | 3,87318E-05 |
| 29 | D transversal | 0,001449815 |
| 29 | G Longitudinal | 0,000430582 |
| 29 | G Vertical | 0,000467562 |
| 29 | G transversal | -0,000170532 |
| 30 | D Longitudinal | 0,000607755 |
| 30 | D Vertical | 3,24475E-05 |
| 30 | D transversal | 0,001756861 |
| 30 | G Longitudinal | 0,00049105 |
| 30 | G Vertical | 0,000473799 |
| 30 | G transversal | -0,000202738 |
| 31 | D Longitudinal | 0,000763976 |
| 31 | D Vertical | 1,92233E-05 |
| 31 | D transversal | 0,00210259 |
| 31 | G Longitudinal | 0,000536569 |
| 31 | G Vertical | 0,000478517 |
| 31 | G transversal | -0,000228318 |
| 32 | D Longitudinal | 0,000935978 |
| 32 | D Vertical | 6,70465E-06 |
| 32 | D transversal | 0,002461565 |
| 32 | G Longitudinal | 0,000543051 |
| 32 | G Vertical | 0,000480758 |
| 32 | G transversal | -0,000257765 |
| 33 | D Longitudinal | 0,001132955 |
| 33 | D Vertical | -1,25697E-05 |
| 33 | D transversal | 0,002829156 |
| 33 | G Longitudinal | 0,000575541 |
| 33 | G Vertical | 0,000482965 |
| 33 | G transversal | -0,000304158 |
| 34 | D Longitudinal | 0,001361785 |
| 34 | D Vertical | -3,23273E-05 |
| 34 | D transversal | 0,003242294 |
| 34 | G Longitudinal | 0,000699518 |
| 34 | G Vertical | 0,00050103 |
| 34 | G transversal | -0,000357395 |
| 35 | D Longitudinal | 0,001624335 |

| Nudo | Desplazamiento | metros |
|---|---|---|
| 35 | D Vertical | -6,2685E-05 |
| 35 | D transversal | 0,003741487 |
| 35 | G Longitudinal | 0,000800925 |
| 35 | G Vertical | 0,000517216 |
| 35 | G transversal | -0,000406531 |
| 36 | D Longitudinal | 0,001894094 |
| 36 | D Vertical | 0,000139951 |
| 36 | D transversal | 0,004422522 |
| 36 | G Longitudinal | 0,000730737 |
| 36 | G Vertical | -1,65953E-05 |
| 36 | G transversal | -0,000465737 |
| 37 | D Longitudinal | 0,001850885 |
| 37 | D Vertical | -0,000513679 |
| 37 | D transversal | 0,004156305 |
| 37 | G Longitudinal | 0,000757728 |
| 37 | G Vertical | -7,93752E-05 |
| 37 | G transversal | -0,000471479 |
| 38 | D Longitudinal | 0,002447931 |
| 38 | D Vertical | -0,000143797 |
| 38 | D transversal | 0,004967596 |
| 38 | G Longitudinal | 0,00080072 |
| 38 | G Vertical | 0,000618076 |
| 38 | G transversal | -0,000634791 |
| 39 | D Longitudinal | 0,003147973 |
| 39 | D Vertical | -0,000205708 |
| 39 | D transversal | 0,005831846 |
| 39 | G Longitudinal | 0,000763807 |
| 39 | G Vertical | 0,000718681 |
| 39 | G transversal | -0,00071271 |
| 40 | D Longitudinal | 0,00387199 |
| 40 | D Vertical | -0,000269576 |
| 40 | D transversal | 0,006485153 |
| 40 | G Longitudinal | 0,000696703 |
| 40 | G Vertical | 0,000819286 |
| 40 | G transversal | -0,000786606 |
| 41 | D Longitudinal | 0,004724939 |
| 41 | D Vertical | -0,0003219 |
| 41 | D transversal | 0,00724122 |
| 41 | G Longitudinal | 0,000677475 |
| 41 | G Vertical | 0,000926364 |
| 41 | G transversal | -0,000871846 |

| Nudo | Desplazamiento | metros |
|---|---|---|
| 42 | D Longitudinal | 0,006484508 |
| 42 | D Vertical | -0,000402286 |
| 42 | D transversal | 0,00833518 |
| 42 | G Longitudinal | 0,000409798 |
| 42 | G Vertical | -0,000582582 |
| 42 | G transversal | -0,000957229 |
| 43 | D Longitudinal | 0,006480334 |
| 43 | D Vertical | 0,000423608 |
| 43 | D transversal | 0,008236434 |
| 43 | G Longitudinal | 0,00048881 |
| 43 | G Vertical | -0,001194553 |
| 43 | G transversal | -0,001069016 |
| 44 | D Longitudinal | 0,006393394 |
| 44 | D Vertical | -0,000889796 |
| 44 | D transversal | 0,008342071 |
| 44 | G Longitudinal | 0,000394669 |
| 44 | G Vertical | -0,000947317 |
| 44 | G transversal | -0,001003353 |
| 45 | D Longitudinal | 0,006389521 |
| 45 | D Vertical | -8,88199E-05 |
| 45 | D transversal | 0,008241145 |
| 45 | G Longitudinal | 0,000586818 |
| 45 | G Vertical | -0,000910492 |
| 45 | G transversal | -0,00101904 |
| 46 | D Longitudinal | 0,007734776 |
| 46 | D Vertical | -0,000359203 |
| 46 | D transversal | 0,008874583 |
| 46 | G Longitudinal | 0,002142782 |
| 46 | G Vertical | -0,001855395 |
| 46 | G transversal | -0,002748301 |
| 47 | D Longitudinal | 0,007732184 |
| 47 | D Vertical | 0,000222793 |
| 47 | D transversal | 0,008721593 |
| 47 | G Longitudinal | -0,000755434 |
| 47 | G Vertical | -0,002101843 |
| 47 | G transversal | -0,00280071 |
| 48 | D Longitudinal | 0,007525057 |
| 48 | D Vertical | -0,000651323 |
| 48 | D transversal | 0,008878463 |
| 48 | G Longitudinal | 0,002112305 |
| 48 | G Vertical | -0,002039724 |

| Nudo | Desplazamiento | metros |
|---|---|---|
| 48 | G transversal | -0,000368402 |
| 49 | D Longitudinal | 0,007522921 |
| 49 | D Vertical | -9,73936E-05 |
| 49 | D transversal | 0,008724548 |
| 49 | G Longitudinal | -0,000688668 |
| 49 | G Vertical | -0,002085149 |
| 49 | G transversal | -0,000360903 |
| 50 | D Longitudinal | 0,008008989 |
| 50 | D Vertical | -0,000473399 |
| 50 | D transversal | 0,009523364 |
| 50 | G Longitudinal | 0,000972306 |
| 50 | G Vertical | -0,00368933 |
| 50 | G transversal | -0,001503239 |
| 51 | D Longitudinal | 0,004722629 |
| 51 | D Vertical | 0,000213692 |
| 51 | D transversal | 0,007294463 |
| 51 | G Longitudinal | 0,000181345 |
| 51 | G Vertical | -2,09788E-05 |
| 51 | G transversal | -0,000814832 |
| 52 | D Longitudinal | 0,004722596 |
| 52 | D Vertical | 0,000656912 |
| 52 | D transversal | 0,007244418 |
| 52 | G Longitudinal | 0,000208841 |
| 52 | G Vertical | -9,6525E-05 |
| 52 | G transversal | -0,000864446 |
| 53 | D Longitudinal | 0,005165973 |
| 53 | D Vertical | 0,000214435 |
| 53 | D transversal | 0,007434017 |
| 53 | G Longitudinal | 0,0003487 |
| 53 | G Vertical | 6,25477E-05 |
| 53 | G transversal | -0,000633622 |
| 54 | D Longitudinal | 0,005166087 |
| 54 | D Vertical | 0,000657728 |
| 54 | D transversal | 0,007411492 |
| 54 | G Longitudinal | 0,000284977 |
| 54 | G Vertical | 4,88093E-06 |
| 54 | G transversal | -0,000878245 |
| 55 | D Longitudinal | 0,004984503 |
| 55 | D Vertical | -0,000830136 |
| 55 | D transversal | 0,00747008 |
| 55 | G Longitudinal | 0,000479287 |

| Nudo | Desplazamiento | metros |
|---|---|---|
| 55 | G Vertical | -2,7576E-05 |
| 55 | G transversal | -0,000961765 |
| 56 | D Longitudinal | 0,004984614 |
| 56 | D Vertical | -0,001276792 |
| 56 | D transversal | 0,007523723 |
| 56 | G Longitudinal | 0,000559383 |
| 56 | G Vertical | -4,12931E-05 |
| 56 | G transversal | -0,000941959 |
| 57 | D Longitudinal | 0,004546824 |
| 57 | D Vertical | -0,000830284 |
| 57 | D transversal | 0,007223235 |
| 57 | G Longitudinal | 0,000508853 |
| 57 | G Vertical | -0,000103006 |
| 57 | G transversal | -0,000836786 |
| 58 | D Longitudinal | 0,004546825 |
| 58 | D Vertical | -0,001277055 |
| 58 | D transversal | 0,00725071 |
| 58 | G Longitudinal | 0,000536122 |
| 58 | G Vertical | -5,34526E-05 |
| 58 | G transversal | -0,000838394 |
| 59 | D Longitudinal | 0,003130192 |
| 59 | D Vertical | 0,000731843 |
| 59 | D transversal | 0,005851539 |
| 59 | G Longitudinal | 0,000308877 |
| 59 | G Vertical | -7,81919E-05 |
| 59 | G transversal | -0,000710049 |
| 60 | D Longitudinal | 0,003130233 |
| 60 | D Vertical | 0,000373382 |
| 60 | D transversal | 0,005891459 |
| 60 | G Longitudinal | 0,000287766 |
| 60 | G Vertical | -3,45305E-06 |
| 60 | G transversal | -0,000661751 |
| 61 | D Longitudinal | 0,003503891 |
| 61 | D Vertical | 0,000374133 |
| 61 | D transversal | 0,006082968 |
| 61 | G Longitudinal | 0,000439941 |
| 61 | G Vertical | 4,71982E-05 |
| 61 | G transversal | -0,000558029 |
| 62 | D Longitudinal | 0,003504003 |
| 62 | D Vertical | 0,000732649 |
| 62 | D transversal | 0,006070036 |

| Nudo | Desplazamiento | metros |
|---|---|---|
| 62 | G Longitudinal | 0,000406223 |
| 62 | G Vertical | -1,50925E-05 |
| 62 | G transversal | -0,000804849 |
| 63 | D Longitudinal | 0,002986494 |
| 63 | D Vertical | -0,001319028 |
| 63 | D transversal | 0,005848387 |
| 63 | G Longitudinal | 0,000641153 |
| 63 | G Vertical | -5,12629E-05 |
| 63 | G transversal | -0,000686772 |
| 64 | D Longitudinal | 0,002986495 |
| 64 | D Vertical | -0,000952699 |
| 64 | D transversal | 0,005824842 |
| 64 | G Longitudinal | 0,000617756 |
| 64 | G Vertical | -9,5527E-05 |
| 64 | G transversal | -0,000693847 |
| 65 | D Longitudinal | 0,003358499 |
| 65 | D Vertical | -0,001318761 |
| 65 | D transversal | 0,006176913 |
| 65 | G Longitudinal | 0,000648017 |
| 65 | G Vertical | -5,92493E-05 |
| 65 | G transversal | -0,000783199 |
| 66 | D Longitudinal | 0,003358389 |
| 66 | D Vertical | -0,000952557 |
| 66 | D transversal | 0,006124874 |
| 66 | G Longitudinal | 0,000591537 |
| 66 | G Vertical | -3,21062E-05 |
| 66 | G transversal | -0,000824118 |
| 67 | D Longitudinal | 0,001896073 |
| 67 | D Vertical | 0,000489675 |
| 67 | D transversal | 0,004314519 |
| 67 | G Longitudinal | 0,000372859 |
| 67 | G Vertical | 4,53087E-06 |
| 67 | G transversal | -0,000460481 |
| 68 | D Longitudinal | 0,001896051 |
| 68 | D Vertical | 0,000754464 |
| 68 | D transversal | 0,00427796 |
| 68 | G Longitudinal | 0,000385016 |
| 68 | G Vertical | -7,12221E-05 |
| 68 | G transversal | -0,000493578 |
| 69 | D Longitudinal | 0,00217655 |
| 69 | D Vertical | 0,000755301 |
| 69 | D transversal | 0,004543544 |
| 69 | G Longitudinal | 0,00050386 |
| 69 | G Vertical | -5,80795E-05 |
| 69 | G transversal | -0,000702318 |
| 70 | D Longitudinal | 0,002176438 |
| 70 | D Vertical | 0,000490403 |
| 70 | D transversal | 0,004542843 |
| 70 | G Longitudinal | 0,000491027 |
| 70 | G Vertical | 1,87631E-05 |
| 70 | G transversal | -0,000423866 |
| 71 | D Longitudinal | 0,001839879 |
| 71 | D Vertical | -0,001440562 |
| 71 | D transversal | 0,004142802 |
| 71 | G Longitudinal | 0,001216227 |
| 71 | G Vertical | -9,2838E-05 |
| 71 | G transversal | -0,00042454 |
| 72 | D Longitudinal | 0,002087711 |
| 72 | D Vertical | -0,001439771 |
| 72 | D transversal | 0,004707977 |
| 72 | G Longitudinal | 0,001123312 |
| 72 | G Vertical | -2,26718E-05 |
| 72 | G transversal | -0,000543634 |
| 73 | D Longitudinal | 0,002087621 |
| 73 | D Vertical | -0,001166907 |
| 73 | D transversal | 0,004641015 |
| 73 | G Longitudinal | 0,001107263 |
| 73 | G Vertical | -7,25415E-05 |
| 73 | G transversal | -0,000601922 |
| 74 | D Longitudinal | 0,001839717 |
| 74 | D Vertical | -0,001167664 |
| 74 | D transversal | 0,004092695 |
| 74 | G Longitudinal | 0,001219471 |
| 74 | G Vertical | -2,1025E-05 |
| 74 | G transversal | -0,000508487 |
| 75 | D Longitudinal | -4,40241E-06 |
| 75 | D Vertical | -1,98687E-05 |
| 75 | D transversal | 6,41469E-05 |
| 75 | G Longitudinal | 2,49535E-05 |
| 75 | G Vertical | 2,16589E-06 |
| 75 | G transversal | -8,6722E-06 |
| 76 | D Longitudinal | 3,0317E-06 |
| 76 | D Vertical | -9,60582E-06 |
| 76 | D transversal | 5,92732E-05 |
| 76 | G Longitudinal | -1,26428E-05 |
| 76 | G Vertical | 4,06209E-07 |
| 76 | G transversal | -1,42539E-05 |
| 77 | D Longitudinal | 9,02161E-06 |
| 77 | D Vertical | -7,39893E-05 |
| 77 | D transversal | 7,3431E-05 |
| 77 | G Longitudinal | 0,000149759 |
| 77 | G Vertical | -0,000205188 |
| 77 | G transversal | -8,46911E-06 |
| 78 | D Longitudinal | -6,51349E-06 |
| 78 | D Vertical | -3,33308E-05 |
| 78 | D transversal | 6,47573E-05 |
| 78 | G Longitudinal | 0,000128404 |
| 78 | G Vertical | 0,000229313 |
| 78 | G transversal | -9,67939E-06 |
| 79 | D Longitudinal | 1,02993E-05 |
| 79 | D Vertical | 5,21508E-05 |
| 79 | D transversal | 6,89862E-05 |
| 79 | G Longitudinal | 8,26125E-05 |
| 79 | G Vertical | -0,000601346 |
| 79 | G transversal | -6,60664E-05 |
| 80 | D Longitudinal | 4,0367E-05 |
| 80 | D Vertical | -0,00014378 |
| 80 | D transversal | 0,000179815 |
| 80 | G Longitudinal | 0,000187733 |
| 80 | G Vertical | -0,00020466 |
| 80 | G transversal | -3,75552E-05 |
| 81 | D Longitudinal | -1,03328E-05 |
| 81 | D Vertical | -6,49676E-05 |
| 81 | D transversal | 0,000150001 |
| 81 | G Longitudinal | 0,000168451 |
| 81 | G Vertical | 0,000225602 |
| 81 | G transversal | -2,36411E-05 |
| 82 | D Longitudinal | 3,8466E-05 |
| 82 | D Vertical | 0,000101249 |
| 82 | D transversal | 0,000165473 |
| 82 | G Longitudinal | 0,00011996 |
| 82 | G Vertical | -0,000602257 |
| 82 | G transversal | -9,02294E-05 |

| Nudo | Desplazamiento | metros |
|---|---|---|
| 83 | D Longitudinal | 7,88232E-05 |
| 83 | D Vertical | -0,00020916 |
| 83 | D transversal | 0,00029519 |
| 83 | G Longitudinal | 0,00019833 |
| 83 | G Vertical | -0,000202669 |
| 83 | G transversal | -3,62835E-05 |
| 84 | D Longitudinal | 2,87376E-06 |
| 84 | D Vertical | -9,27707E-05 |
| 84 | D transversal | 0,000259781 |
| 84 | G Longitudinal | 0,000206199 |
| 84 | G Vertical | 0,000228874 |
| 84 | G transversal | -6,22541E-05 |
| 85 | D Longitudinal | 7,35464E-05 |
| 85 | D Vertical | 0,000146073 |
| 85 | D transversal | 0,00027656 |
| 85 | G Longitudinal | 0,000138355 |
| 85 | G Vertical | -0,000602612 |
| 85 | G transversal | -9,55502E-05 |
| 86 | D Longitudinal | 0,000115135 |
| 86 | D Vertical | -0,000273884 |
| 86 | D transversal | 0,000426432 |
| 86 | G Longitudinal | 0,000237122 |
| 86 | G Vertical | -0,000194749 |
| 86 | G transversal | -3,82735E-05 |
| 87 | D Longitudinal | 4,18395E-05 |
| 87 | D Vertical | -0,000120875 |
| 87 | D transversal | 0,00039226 |
| 87 | G Longitudinal | 0,000243214 |
| 87 | G Vertical | 0,000222688 |
| 87 | G transversal | -9,83786E-05 |
| 88 | D Longitudinal | 0,000112607 |
| 88 | D Vertical | 0,000189966 |
| 88 | D transversal | 0,000404409 |
| 88 | G Longitudinal | 0,000178256 |
| 88 | G Vertical | -0,000606895 |
| 88 | G transversal | -0,000103606 |
| 89 | D Longitudinal | 0,000158113 |
| 89 | D Vertical | -0,00033279 |
| 89 | D transversal | 0,000584285 |
| 89 | G Longitudinal | 0,000273162 |
| 89 | G Vertical | -0,000188327 |

| Nudo | Desplazamiento | metros |
|---|---|---|
| 89 | G transversal | -5,88026E-05 |
| 90 | D Longitudinal | 9,7556E-05 |
| 90 | D Vertical | -0,000145266 |
| 90 | D transversal | 0,000547462 |
| 90 | G Longitudinal | 0,000273898 |
| 90 | G Vertical | 0,000218319 |
| 90 | G transversal | -0,000115009 |
| 91 | D Longitudinal | 0,000159581 |
| 91 | D Vertical | 0,000228485 |
| 91 | D transversal | 0,00055981 |
| 91 | G Longitudinal | 0,000215664 |
| 91 | G Vertical | -0,000610203 |
| 91 | G transversal | -0,000123003 |
| 92 | D Longitudinal | 0,000218257 |
| 92 | D Vertical | -0,000388541 |
| 92 | D transversal | 0,000761456 |
| 92 | G Longitudinal | 0,000309416 |
| 92 | G Vertical | -0,000181709 |
| 92 | G transversal | -9,17135E-05 |
| 93 | D Longitudinal | 0,000159529 |
| 93 | D Vertical | -0,000168283 |
| 93 | D transversal | 0,000720034 |
| 93 | G Longitudinal | 0,000306946 |
| 93 | G Vertical | 0,000217912 |
| 93 | G transversal | -0,00012114 |
| 94 | D Longitudinal | 0,000221272 |
| 94 | D Vertical | 0,000264268 |
| 94 | D transversal | 0,000735293 |
| 94 | G Longitudinal | 0,000250904 |
| 94 | G Vertical | -0,000613549 |
| 94 | G transversal | -0,000150925 |
| 95 | D Longitudinal | 0,000306261 |
| 95 | D Vertical | -0,000454286 |
| 95 | D transversal | 0,000980036 |
| 95 | G Longitudinal | 0,000384812 |
| 95 | G Vertical | -0,000168703 |
| 95 | G transversal | -0,000135776 |
| 96 | D Longitudinal | 0,000228873 |
| 96 | D Vertical | -0,000193163 |
| 96 | D transversal | 0,000928694 |
| 96 | G Longitudinal | 0,000375208 |

| Nudo | Desplazamiento | metros |
|---|---|---|
| 96 | G Vertical | 0,000206846 |
| 96 | G transversal | -0,000143167 |
| 97 | D Longitudinal | 0,000307617 |
| 97 | D Vertical | 0,000305991 |
| 97 | D transversal | 0,000948848 |
| 97 | G Longitudinal | 0,000320738 |
| 97 | G Vertical | -0,000622541 |
| 97 | G transversal | -0,000192591 |
| 98 | D Longitudinal | 0,000407356 |
| 98 | D Vertical | -0,000516642 |
| 98 | D transversal | 0,001232457 |
| 98 | G Longitudinal | 0,000424984 |
| 98 | G Vertical | -0,000155597 |
| 98 | G transversal | -0,000143188 |
| 99 | D Longitudinal | 0,000318846 |
| 99 | D Vertical | -0,000216707 |
| 99 | D transversal | 0,001171705 |
| 99 | G Longitudinal | 0,000424539 |
| 99 | G Vertical | 0,000195972 |
| 99 | G transversal | -0,000181389 |
| 100 | D Longitudinal | 0,000410315 |
| 100 | D Vertical | 0,000344489 |
| 100 | D transversal | 0,001193675 |
| 100 | G Longitudinal | 0,000361332 |
| 100 | G Vertical | -0,000631395 |
| 100 | G transversal | -0,000206977 |
| 101 | D Longitudinal | 0,000513939 |
| 101 | D Vertical | -0,000571048 |
| 101 | D transversal | 0,00150936 |
| 101 | G Longitudinal | 0,000465481 |
| 101 | G Vertical | -0,000146292 |
| 101 | G transversal | -0,00016436 |
| 102 | D Longitudinal | 0,000432841 |
| 102 | D Vertical | -0,000234463 |
| 102 | D transversal | 0,001445748 |
| 102 | G Longitudinal | 0,000471238 |
| 102 | G Vertical | 0,000192765 |
| 102 | G transversal | -0,000216067 |
| 103 | D Longitudinal | 0,000519959 |
| 103 | D Vertical | 0,000375372 |
| 103 | D transversal | 0,001466151 |

| Nudo | Desplazamiento | metros |
|---|---|---|
| 103 | G Longitudinal | 0,000406416 |
| 103 | G Vertical | -0,000637086 |
| 103 | G transversal | -0,000227222 |
| 104 | D Longitudinal | 0,000641864 |
| 104 | D Vertical | -0,000622558 |
| 104 | D transversal | 0,001813299 |
| 104 | G Longitudinal | 0,000508264 |
| 104 | G Vertical | -0,000138066 |
| 104 | G transversal | -0,00020697 |
| 105 | D Longitudinal | 0,000566178 |
| 105 | D Vertical | -0,000251508 |
| 105 | D transversal | 0,001747477 |
| 105 | G Longitudinal | 0,000516571 |
| 105 | G Vertical | 0,000185021 |
| 105 | G transversal | -0,000243266 |
| 106 | D Longitudinal | 0,00064945 |
| 106 | D Vertical | 0,000403297 |
| 106 | D transversal | 0,001769314 |
| 106 | G Longitudinal | 0,000464377 |
| 106 | G Vertical | -0,000643289 |
| 106 | G transversal | -0,000264665 |
| 107 | D Longitudinal | 0,00079547 |
| 107 | D Vertical | -0,000663952 |
| 107 | D transversal | 0,002144146 |
| 107 | G Longitudinal | 0,000554064 |
| 107 | G Vertical | -0,000129526 |
| 107 | G transversal | -0,00024814 |
| 108 | D Longitudinal | 0,000717156 |
| 108 | D Vertical | -0,000261854 |
| 108 | D transversal | 0,002078694 |
| 108 | G Longitudinal | 0,000561393 |
| 108 | G Vertical | 0,000177268 |
| 108 | G transversal | -0,000271111 |
| 109 | D Longitudinal | 0,000803314 |
| 109 | D Vertical | 0,000421584 |
| 109 | D transversal | 0,002108569 |
| 109 | G Longitudinal | 0,000510775 |
| 109 | G Vertical | -0,000648222 |
| 109 | G transversal | -0,000308587 |
| 110 | D Longitudinal | 0,000971612 |
| 110 | D Vertical | -0,000701164 |

| Nudo | Desplazamiento | metros |
|---|---|---|
| 110 | D transversal | 0,002511965 |
| 110 | G Longitudinal | 0,00063304 |
| 110 | G Vertical | -0,000117871 |
| 110 | G transversal | -0,000278239 |
| 111 | D Longitudinal | 0,000887845 |
| 111 | D Vertical | -0,000271182 |
| 111 | D transversal | 0,002438872 |
| 111 | G Longitudinal | 0,000616053 |
| 111 | G Vertical | 0,000168299 |
| 111 | G transversal | -0,000306375 |
| 112 | D Longitudinal | 0,000983915 |
| 112 | D Vertical | 0,000436627 |
| 112 | D transversal | 0,002468976 |
| 112 | G Longitudinal | 0,000541618 |
| 112 | G Vertical | -0,000652611 |
| 112 | G transversal | -0,000344675 |
| 113 | D Longitudinal | 0,001165003 |
| 113 | D Vertical | -0,000725819 |
| 113 | D transversal | 0,002932142 |
| 113 | G Longitudinal | 0,000698247 |
| 113 | G Vertical | -0,000114272 |
| 113 | G transversal | -0,000312941 |
| 114 | D Longitudinal | 0,001084117 |
| 114 | D Vertical | -0,000272637 |
| 114 | D transversal | 0,002835654 |
| 114 | G Longitudinal | 0,000667248 |
| 114 | G Vertical | 0,000167608 |
| 114 | G transversal | -0,000350289 |
| 115 | D Longitudinal | 0,00118209 |
| 115 | D Vertical | 0,000441167 |
| 115 | D transversal | 0,002853896 |
| 115 | G Longitudinal | 0,000587811 |
| 115 | G Vertical | -0,000657199 |
| 115 | G transversal | -0,000375966 |
| 116 | D Longitudinal | 0,001383466 |
| 116 | D Vertical | -0,000748663 |
| 116 | D transversal | 0,003365829 |
| 116 | G Longitudinal | 0,000675396 |
| 116 | G Vertical | -0,00011917 |
| 116 | G transversal | -0,000350931 |
| 117 | D Longitudinal | 0,001308329 |

| Nudo | Desplazamiento | metros |
|---|---|---|
| 117 | D Vertical | -0,000274199 |
| 117 | D transversal | 0,003255 |
| 117 | G Longitudinal | 0,000693154 |
| 117 | G Vertical | 0,000163027 |
| 117 | G transversal | -0,000392688 |
| 118 | D Longitudinal | 0,001401302 |
| 118 | D Vertical | 0,000442362 |
| 118 | D transversal | 0,003274572 |
| 118 | G Longitudinal | 0,000661644 |
| 118 | G Vertical | -0,000665062 |
| 118 | G transversal | -0,000404513 |
| 119 | D Longitudinal | 0,001618066 |
| 119 | D Vertical | -0,000761292 |
| 119 | D transversal | 0,003774682 |
| 119 | G Longitudinal | 0,000652193 |
| 119 | G Vertical | -0,000122438 |
| 119 | G transversal | -0,000365425 |
| 120 | D Longitudinal | 0,001558193 |
| 120 | D Vertical | -0,000267608 |
| 120 | D transversal | 0,003689536 |
| 120 | G Longitudinal | 0,000720386 |
| 120 | G Vertical | 0,000158664 |
| 120 | G transversal | -0,000430667 |
| 121 | D Longitudinal | 0,001631316 |
| 121 | D Vertical | 0,000431941 |
| 121 | D transversal | 0,00374064 |
| 121 | G Longitudinal | 0,000712702 |
| 121 | G Vertical | -0,000672609 |
| 121 | G transversal | -0,00041478 |
| 122 | D Longitudinal | 0,002410031 |
| 122 | D Vertical | -0,000881622 |
| 122 | D transversal | 0,005072509 |
| 122 | G Longitudinal | 0,000865548 |
| 122 | G Vertical | -4,35676E-05 |
| 122 | G transversal | -0,000619494 |
| 123 | D Longitudinal | 0,002411347 |
| 123 | D Vertical | -0,00025449 |
| 123 | D transversal | 0,004993164 |
| 123 | G Longitudinal | 0,000832487 |
| 123 | G Vertical | 0,000183882 |
| 123 | G transversal | -0,000633945 |

| Nudo | Desplazamiento | metros |
|---|---|---|
| 124 | D Longitudinal | 0,00247708 |
| 124 | D Vertical | 0,000483946 |
| 124 | D transversal | 0,004943401 |
| 124 | G Longitudinal | 0,000819998 |
| 124 | G Vertical | -0,000524534 |
| 124 | G transversal | -0,000630465 |
| 125 | D Longitudinal | 0,003066868 |
| 125 | D Vertical | -0,000951758 |
| 125 | D transversal | 0,005837672 |
| 125 | G Longitudinal | 0,000708953 |
| 125 | G Vertical | 3,29632E-05 |
| 125 | G transversal | -0,00070551 |
| 126 | D Longitudinal | 0,003073393 |
| 126 | D Vertical | -0,000221934 |
| 126 | D transversal | 0,005755223 |
| 126 | G Longitudinal | 0,000712728 |
| 126 | G Vertical | 0,000221882 |
| 126 | G transversal | -0,000696037 |
| 127 | D Longitudinal | 0,003111599 |
| 127 | D Vertical | 0,000525088 |
| 127 | D transversal | 0,005793596 |
| 127 | G Longitudinal | 0,000745487 |
| 127 | G Vertical | -0,000382997 |
| 127 | G transversal | -0,000704038 |
| 128 | D Longitudinal | 0,003816864 |
| 128 | D Vertical | -0,000999312 |
| 128 | D transversal | 0,006542715 |
| 128 | G Longitudinal | 0,000709252 |
| 128 | G Vertical | 0,000109494 |
| 128 | G transversal | -0,000778944 |
| 129 | D Longitudinal | 0,003813091 |
| 129 | D Vertical | -0,000183455 |
| 129 | D transversal | 0,006456804 |
| 129 | G Longitudinal | 0,000707513 |
| 129 | G Vertical | 0,000259881 |
| 129 | G transversal | -0,000787152 |
| 130 | D Longitudinal | 0,003890567 |
| 130 | D Vertical | 0,000548339 |
| 130 | D transversal | 0,006438672 |
| 130 | G Longitudinal | 0,00068384 |
| 130 | G Vertical | -0,00024146 |

| Nudo | Desplazamiento | metros |
|---|---|---|
| 130 | G transversal | -0,000793768 |
| 131 | D Longitudinal | 0,004622669 |
| 131 | D Vertical | -0,001031384 |
| 131 | D transversal | 0,007237935 |
| 131 | G Longitudinal | 0,000654819 |
| 131 | G Vertical | 0,000188292 |
| 131 | G transversal | -0,000846088 |
| 132 | D Longitudinal | 0,004638759 |
| 132 | D Vertical | -0,000146409 |
| 132 | D transversal | 0,007152269 |
| 132 | G Longitudinal | 0,000648368 |
| 132 | G Vertical | 0,00029986 |
| 132 | G transversal | -0,000851425 |
| 133 | D Longitudinal | 0,004687106 |
| 133 | D Vertical | 0,000566849 |
| 133 | D transversal | 0,007179565 |
| 133 | G Longitudinal | 0,000677037 |
| 133 | G Vertical | -0,000104113 |
| 133 | G transversal | -0,000847356 |
| 134 | D Longitudinal | 0,00873915 |
| 134 | D Vertical | -0,000343414 |
| 134 | D transversal | 0,009527328 |
| 134 | G Longitudinal | 0,000983289 |
| 134 | G Vertical | -0,00372093 |
| 134 | G transversal | -0,002322255 |
| 135 | D Longitudinal | 0,008739155 |
| 135 | D Vertical | 7,14195E-05 |
| 135 | D transversal | 0,008752811 |
| 135 | G Longitudinal | 0,000742225 |
| 135 | G Vertical | -0,003721216 |
| 135 | G transversal | -0,002324193 |
| 136 | D Longitudinal | 0,008008995 |
| 136 | D Vertical | -0,000142874 |
| 136 | D transversal | 0,008756744 |
| 136 | G Longitudinal | 0,000744234 |
| 136 | G Vertical | -0,003689152 |
| 136 | G transversal | -0,00150598 |
| 137 | D Longitudinal | 8,16443E-06 |
| 137 | D Vertical | -1,3989E-06 |
| 137 | D transversal | 6,1683E-05 |
| 137 | G Longitudinal | 2,48687E-05 |

| Nudo | Desplazamiento | metros |
|---|---|---|
| 137 | G Vertical | -4,78336E-06 |
| 137 | G transversal | -2,86512E-08 |
| 138 | D Longitudinal | 7,24756E-07 |
| 138 | D Vertical | -8,86897E-07 |
| 138 | D transversal | 7,14009E-05 |
| 138 | G Longitudinal | -2,11406E-05 |
| 138 | G Vertical | -2,23718E-06 |
| 138 | G transversal | -1,43388E-05 |

## 4.2 Esfuerzos axiles en barras

| Barra | Axil (daN) |
|---|---|
| 1 | 1892,247986 |
| 2 | -9238,577765 |
| 3 | -4439,970672 |
| 4 | 6684,294535 |
| 5 | 1909,049079 |
| 6 | -9203,020535 |
| 7 | -4388,8736 |
| 8 | 6700,619223 |
| 9 | 1569,373265 |
| 10 | -8848,043766 |
| 11 | -4022,284203 |
| 12 | 6405,401919 |
| 13 | 1622,074817 |
| 14 | -8859,57365 |
| 15 | -4016,179545 |
| 16 | 6442,373418 |
| 17 | 1272,255972 |
| 18 | -8457,097161 |
| 19 | -3634,873269 |
| 20 | 6109,304885 |
| 21 | 1297,389019 |
| 22 | -8429,305844 |
| 23 | -3585,24826 |
| 24 | 6117,278909 |
| 25 | 912,1190941 |
| 26 | -7990,009157 |
| 27 | -3173,751541 |
| 28 | 5749,113903 |
| 29 | 944,2284078 |
| 30 | -7982,186825 |
| 31 | -3139,807836 |
| 32 | 5760,742162 |
| 33 | 489,2204696 |
| 34 | -7500,540378 |
| 35 | -2677,699813 |
| 36 | 5340,402897 |
| 37 | 519,7434607 |
| 38 | -7494,485887 |
| 39 | -2644,094153 |
| 40 | 5341,671398 |
| 41 | 10,71564792 |

| Barra | Axil (daN) |
|---|---|
| 42 | -6907,716767 |
| 43 | -2107,489499 |
| 44 | 4849,356516 |
| 45 | 58,95553809 |
| 46 | -6908,350217 |
| 47 | -2073,975234 |
| 48 | 4861,070983 |
| 49 | -639,2627836 |
| 50 | -6294,837496 |
| 51 | -1453,387968 |
| 52 | 4254,553751 |
| 53 | -620,5410425 |
| 54 | -6290,645788 |
| 55 | -1399,802132 |
| 56 | 4230,945599 |
| 57 | -1253,267481 |
| 58 | -5299,998103 |
| 59 | -586,3823795 |
| 60 | 3530,131385 |
| 61 | -1185,136084 |
| 62 | -5299,546569 |
| 63 | -557,285767 |
| 64 | 3516,165632 |
| 65 | -5,19169531 |
| 66 | -3,593512205 |
| 67 | 39,44327648 |
| 68 | -39,71410582 |
| 69 | -777,746159 |
| 70 | -619,2814788 |
| 71 | 467,3105867 |
| 72 | 541,0469788 |
| 73 | -465,3018774 |
| 74 | -483,2058248 |
| 75 | 595,4511658 |
| 76 | 507,3731374 |
| 77 | -494,3834406 |
| 78 | -446,1530984 |
| 79 | 445,5622963 |
| 80 | 435,2214756 |
| 81 | -420,4614854 |
| 82 | -402,2983223 |

| Barra | Axil (daN) |
|---|---|
| 83 | 431,077464 |
| 84 | 398,6873447 |
| 85 | -399,7391021 |
| 86 | -371,6559653 |
| 87 | 387,2986472 |
| 88 | 371,364714 |
| 89 | -0,150794045 |
| 90 | 11,24655204 |
| 91 | 32,17462929 |
| 92 | -30,99126925 |
| 93 | -29,34232858 |
| 94 | 18,18252221 |
| 95 | 0,908769331 |
| 96 | -11,52091729 |
| 97 | -10,97584037 |
| 98 | 9,947443726 |
| 99 | 16,5595977 |
| 100 | -13,98247317 |
| 101 | -12,81801338 |
| 102 | 7,769737451 |
| 103 | 8,68823124 |
| 104 | -15,07003148 |
| 105 | 378,5667092 |
| 106 | 355,0906783 |
| 107 | -376,4948411 |
| 108 | -360,2392229 |
| 109 | 375,2721259 |
| 110 | 347,4269513 |
| 111 | -369,822029 |
| 112 | -362,2096159 |
| 113 | -5,979126359 |
| 114 | 6,142563903 |
| 115 | 8,847583958 |
| 116 | -18,83757286 |
| 117 | -25,62335342 |
| 118 | 27,19168908 |
| 119 | -6,538915397 |
| 120 | 11,16243798 |
| 121 | 20,32795313 |
| 122 | -36,07556098 |
| 123 | 32,64653283 |

| Barra | Axil (daN) |
|---|---|
| 124 | -57,16032186 |
| 125 | -8,568140261 |
| 126 | 75,6416924 |
| 127 | 25,04781508 |
| 128 | -59,50260873 |
| 129 | -25,47817183 |
| 130 | 67,59813288 |
| 131 | 58,97318397 |
| 132 | -59,21228502 |
| 133 | -10,4305564 |
| 134 | 8,664194001 |
| 135 | 9,280726519 |
| 136 | -11,09250611 |
| 137 | 342,8957837 |
| 138 | -465,3283001 |
| 139 | -391,1696429 |
| 140 | 386,0108344 |
| 141 | -36,10358738 |
| 142 | -23,07433138 |
| 143 | -13,94270484 |
| 144 | 2,094542012 |
| 145 | -385,6589002 |
| 146 | 313,9879895 |
| 147 | 352,5689527 |
| 148 | -314,1502576 |
| 149 | -1901,967686 |
| 150 | -3994,14332 |
| 151 | 231,5860361 |
| 152 | 2340,73542 |
| 153 | -2249,245342 |
| 154 | -2548,035258 |
| 155 | 1182,753133 |
| 156 | 1494,693246 |
| 157 | -2320,315225 |
| 158 | -1727,639163 |
| 159 | 1397,944592 |
| 160 | 844,6993513 |
| 161 | -1900,91634 |
| 162 | -1165,174999 |
| 163 | 1345,88753 |
| 164 | 672,4959196 |

| Barra | Axil (daN) |
|---|---|
| 165 | -1601,95155 |
| 166 | -862,7821342 |
| 167 | 1100,824455 |
| 168 | 440,7534636 |
| 169 | -371,0818272 |
| 170 | 211,1750001 |
| 171 | 212,2745607 |
| 172 | -457,7658581 |
| 173 | 227,2385701 |
| 174 | 281,6993741 |
| 175 | 699,0064064 |
| 176 | -8,769121763 |
| 177 | 331,5618827 |
| 178 | -194,2095015 |
| 179 | 38,81863248 |
| 180 | -43,47449985 |
| 181 | -255,6734416 |
| 182 | 242,352154 |
| 183 | 383,5193398 |
| 184 | 25,13885585 |
| 185 | 120,8105365 |
| 186 | -123,7724517 |
| 187 | -21,88617979 |
| 188 | -107,2019341 |
| 189 | -181,8653275 |
| 190 | 252,0737094 |
| 191 | 470,0118507 |
| 192 | -162,3853191 |
| 193 | 86,86275103 |
| 194 | 27,53239342 |
| 195 | -373,4829251 |
| 196 | -194,4870558 |
| 197 | 53,93944309 |
| 198 | 294,9494241 |
| 199 | -981,2778516 |
| 200 | -590,5170577 |
| 201 | 487,9798619 |
| 202 | 818,4270707 |
| 203 | -726,8403143 |
| 204 | 108,5772671 |
| 205 | 853,489438 |

| Barra | Axil (daN) |
|---|---|
| 206 | -278,9099272 |
| 207 | 680,1610273 |
| 208 | -319,3236779 |
| 209 | -460,2009409 |
| 210 | 220,4315142 |
| 211 | -53,12645423 |
| 212 | -239,6468652 |
| 213 | 84,2816673 |
| 214 | 190,5002894 |
| 215 | -137,0473099 |
| 216 | 184,4478496 |
| 217 | 95,7182714 |
| 218 | -286,4645714 |
| 219 | 302,1827578 |
| 220 | -233,4442484 |
| 221 | -204,0276753 |
| 222 | 216,9747434 |
| 223 | -414,799739 |
| 224 | 194,3365027 |
| 225 | 411,4518999 |
| 226 | -274,5840605 |
| 227 | -295,7139565 |
| 228 | -282,2415949 |
| 229 | 323,7259698 |
| 230 | 404,2412927 |
| 231 | -222,7473552 |
| 232 | -285,5583076 |
| 233 | 192,6395266 |
| 234 | 207,3120635 |
| 235 | -592,0870535 |
| 236 | -594,2377971 |
| 237 | -590,4289037 |
| 238 | -592,3865888 |
| 239 | 432,3453867 |
| 240 | 434,6444045 |
| 241 | 447,5426775 |
| 242 | 449,8781616 |
| 243 | -602,2615339 |
| 244 | -604,3759962 |
| 245 | -580,20586 |
| 246 | -582,0199332 |

| Barra | Axil (daN) |
|---|---|
| 247 | 437,3532223 |
| 248 | 439,6394351 |
| 249 | 442,5634025 |
| 250 | 444,7406784 |
| 251 | -573,8233812 |
| 252 | -576,0220822 |
| 253 | -608,9210479 |
| 254 | -611,0498562 |
| 255 | -559,1213448 |
| 256 | -554,0504202 |
| 257 | -617,5826905 |
| 258 | -614,5686739 |
| 259 | 694,0012113 |
| 260 | 708,1691975 |
| 261 | 687,7348294 |
| 262 | 702,6364524 |
| 263 | 15,14565856 |
| 264 | 24,23149228 |
| 265 | 0,779697556 |
| 266 | 11,73166017 |
| 267 | 706,1744436 |
| 268 | 720,5637951 |
| 269 | 675,5291996 |
| 270 | 690,2310348 |
| 271 | 8,949953592 |
| 272 | 17,9023379 |
| 273 | 6,921494392 |
| 274 | 18,02846996 |
| 275 | 709,4909955 |
| 276 | 724,5221555 |
| 277 | 672,3953569 |
| 278 | 686,3666672 |
| 279 | 727,0290108 |
| 280 | 745,9032339 |
| 281 | 654,4699382 |
| 282 | 674,1519453 |
| 283 | 10,89194091 |
| 284 | 0,431337274 |
| 285 | 11,95554215 |
| 286 | -1,513169192 |
| 287 | 3,854275532 |

| Barra | Axil (daN) |
|---|---|
| 288 | 0,012052992 |
| 289 | 2,170367484 |
| 290 | 1,481030378 |
| 291 | 11,02080058 |
| 292 | 0,539830829 |
| 293 | 11,81002068 |
| 294 | -1,497898288 |
| 295 | -0,026238341 |
| 296 | 3,912588339 |
| 297 | 1,468982887 |
| 298 | 2,080282742 |
| 299 | -1,500487707 |
| 300 | 10,67842347 |
| 301 | 0,287928531 |
| 302 | 12,2603468 |
| 303 | 1,194982447 |
| 304 | 11,59425475 |
| 305 | 2,150144333 |
| 306 | 11,09360029 |
| 307 | -3,124995791 |
| 308 | 2,553359943 |
| 309 | -3,392304204 |
| 310 | 2,91548911 |
| 311 | -2,818248859 |
| 312 | -2,478582762 |
| 313 | -20,05697632 |
| 314 | -20,45044529 |
| 315 | -3,801345681 |
| 316 | -5,955455897 |
| 317 | -20,17110477 |
| 318 | -20,38305132 |
| 319 | -3,620537836 |
| 320 | -6,233951214 |
| 321 | -20,37995236 |
| 322 | -19,862769 |
| 323 | -15,17556028 |
| 324 | -16,36568414 |
| 325 | -93,35346708 |
| 326 | -87,97349934 |
| 327 | -2,183098173 |
| 328 | -6,805479304 |

| Barra | Axil (daN) |
|---|---|
| 329 | -20,20976555 |
| 330 | -9,230100447 |
| 331 | -861,6242091 |
| 332 | -769,9142008 |
| 333 | -968,7948511 |
| 334 | -882,6887143 |
| 335 | -696,8639785 |
| 336 | -814,6345156 |
| 337 | 856,3711127 |
| 338 | 952,959987 |
| 339 | 797,6648994 |
| 340 | 966,1758875 |
| 341 | 1109,505807 |
| 342 | 970,4697234 |
| 343 | -185,5307023 |
| 344 | -704,7441908 |
| 345 | 692,5060409 |
| 346 | 193,4135867 |
| 347 | -1,128790891 |
| 348 | -831,1848538 |
| 349 | 829,8221892 |
| 350 | -161,8954695 |
| 351 | -0,197833198 |
| 352 | 160,6140634 |
| 353 | -0,20555646 |
| 354 | 68,98730093 |
| 355 | 38,78570251 |
| 356 | 47,1647394 |
| 357 | 41,79584343 |
| 358 | -79,60429102 |
| 359 | -43,85928728 |
| 360 | -37,01025075 |
| 361 | -39,30071064 |
| 362 | 77,6980664 |
| 363 | 42,77039469 |
| 364 | 59,18799006 |
| 365 | 51,90190315 |
| 366 | -234,9682386 |
| 367 | -132,1611324 |
| 368 | -186,2965248 |
| 369 | -160,5184632 |

Trabajo Fin de Máster

Sistemas de Energía Eléctrica

# HERRAMIENTA PARA EL CÁLCULO DE APOYOS EN LÍNEAS ELÉCTRICAS DE ALTA TENSIÓN

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# Herramienta para el cálculo de apoyos en líneas eléctricas de alta tensión


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El tribunal nombrado para juzgar el Proyecto arriba indicado, compuesto por los siguientes miembros:

Presidente:

Vocales:

Secretario:

Acuerdan otorgarle la calificación de:

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# RESUMEN EJECUTIVO

El objetivo de este trabajo ha sido desarrollar una herramienta en Matlab para el cálculo y diseño de estructuras tridimensionales, mediante cálculo matricial, particularizada para apoyos metálicos de líneas eléctricas aéreas de alta tensión. Su finalidad es poder obtener de forma sencilla e individualmente los esfuerzos y desplazamientos resultantes de estados de cargas básicos, cuya combinación de resultados, permitan obtener directamente los resultados mecánicos de estados de cargas más complejos, sin necesidad de realizar el cálculo estructural para cada hipótesis de carga que se necesite estudiar para proyectar el apoyo.

Esas hipótesis de cargas más complejas, necesarias estudiar para el diseño de apoyos, vienen recogidas en la Instrucción Técnica Complementaria ITC-LAT 07 para Líneas aéreas con conductores desnudos, recogido y aprobado por el Real Decreto 223/2008, de 15 de febrero, que establece las condiciones técnicas y garantías de seguridad a que han de someterse las líneas eléctricas de alta tensión.

La herramienta resuelve de forma individual, mediante el método matricial de la rigidez y para cualquier apoyo que se dimensione, las siguientes hipótesis de carga básicas:

- Fuerza del viento sobre el apoyo
- Carga permanente producida por el peso propio
- Carga unitaria en cada cruceta y para cada sentido de aplicación (longitudinal, transversal y vertical)

El método matricial de la rigidez es la implementación más común del método de los elementos finitos. Se trata de un método de cálculo aplicable a estructuras hiperestáticas de barras que se comportan de forma elástica y lineal. Este método se basa en estimar los componentes de las relaciones de rigidez para resolver las fuerzas y los desplazamientos que sufre una estructura debido a una solicitación. Las propiedades de rigidez del material son compilados en una única ecuación matricial que gobierna el comportamiento interno de la estructura idealizada. Resolviendo esta ecuación, podemos determinar los datos que se desconocen de la estructura.

Para plantear la ecuación matricial, es necesario ensamblar la matriz de rigidez global de la estructura, que relaciona los desplazamientos que se producen con las fuerzas exteriores que los provocan. Estas matrices se caracterizan por ser de gran tamaño siendo muchos de sus elementos nulos. Matlab permite trabajar de forma rápida y eficiente con estas matrices dispersas, que sumado a la gran capacidad que presenta este software para cálculos matriciales, ha posibilitado desarrollar una herramienta capaz de resolver una estructura en menos de 2 segundos de computación, además de poder realizar una representación gráfica tridimensional de la estructura.

# 1 INTRODUCCIÓN

Para el diseño de apoyos metálicos de líneas eléctricas, es necesario realizar los pertinentes estudios mecánicos de la estructura para determinar el comportamiento y fiabilidad que presentará frente a distintas hipótesis de carga.

Tanto el ingeniero de la empresa fabricante, como el proyectista de torres singulares, y siempre de acuerdo a la normativa dedicada a tal fin, deben plantear todos los estados de solicitaciones para la estructura, y realizar el cálculo mecánico para cada de una de ellas. Identificando todas las hipótesis de cargas simples en las cuales se podría descomponer cualquiera de las necesarias estudiar, es posible desarrollar una herramienta que tan solo resuelva una vez estos estados de carga simples, y cuya combinación de resultados nos permita obtener de forma directa, los resultados de cualquier hipótesis planteada.

Este trabajo surge a raíz de la beca de la cátedra Endesa que me permitió realizar un periodo de prácticas dentro del departamento de componentes de red, donde desarrollé esta herramienta en Microsoft VBA (Visual Basic for Applications). La idea de desarrollar de nuevo esta herramienta en Matlab reside en la gran ventaja que nos da este software al permitirnos operar con matrices dispersas con el consiguiente ahorro computacional que nos aporta con respecto a VBA.

El programa permite calcular los desplazamientos en los nudos de la estructura, los esfuerzos en las barras y las reacciones en los nudos de la base de la estructura, para la hipótesis de solicitación introducida. Por último, presenta un módulo gráfico capaz de representar la estructura objetivo, así como la deformada correspondiente a la hipótesis de carga introducida.

En relación al contenido de esta memoria, en el apartado 2 se describe en primer lugar, de forma resumida, todo lo referente a apoyos metálicos en líneas aéreas que recoge la Instrucción Técnica Complementaria ITC – LAT 07 para Líneas aéreas con conductores desnudos, y a continuación se detalla el método matricial de la rigidez.

En el apartado 3 se describe y se explica la utilización de los módulos implementados en Matlab para el cálculo mecánico de estructuras y la representación gráfica de los mismos. Se adjunta en el CD del proyecto un documento anexo que contiene los códigos de los módulos desarrollados.

En el apartado 4 se exponen dos apoyos metálicos reales de celosía resueltos con la herramienta. Así mismo, en el apartado 5 se presenta un ejemplo de aplicación del primer apoyo presentado sometido a una hipótesis de carga compleja. Todos los datos de los apoyos presentados y los resultados numéricos se incluyen en documentos anexos en el CD del proyecto.

Por último, se presentan las conclusiones del trabajo, las posibilidades de futuros desarrollos y la bibliografía utilizada.

# 2 FUNDAMENTOS TEÓRICOS

En este apartado se describe en primer lugar, de forma resumida, todo lo referente a apoyos metálicos en líneas aéreas que recoge la Instrucción Técnica Complementaria ITC – LAT 07 para Líneas aéreas con conductores desnudos. Esta instrucción recoge las prescripciones técnicas que deberán cumplir las líneas eléctricas aéreas de alta tensión con conductores desnudos, entendiéndose como tales las de corriente alterna trifásica a 50 Hz de frecuencia, cuya tensión nominal eficaz entre fases sea superior a 1kV.

A continuación se describirá el cálculo matricial de estructuras para poder entender cómo funciona la herramienta y por último se describirán las matrices dispersas

## 2.1 ITC – LAT 07: Apoyos metálicos en líneas aéreas

El sistema de instalación de las líneas eléctricas aéreas se realiza mediante red tensada sobre apoyo. La durabilidad de un apoyo o de una parte de éste en su entorno debe ser tal que, con un mantenimiento apropiado, permanezca apto para su uso dentro de la vida útil prevista.

Los conductores de la línea se fijarán mediante aisladores y los cables de tierra de modo directo a las estructuras de apoyo.

Los apoyos metálicos serán de características adecuadas a la función a desempeñar. Las características técnicas de sus componentes (perfiles, chapas, tornillería, galvanizado, etc.) responderán a lo indicado en las normas UNE aplicables o, en su defecto, en otras normas o especificaciones técnicas reconocidas.

### 2.1.1 Clasificación de los apoyos según su función

Atendiendo al tipo de cadena de aislamiento y a su función en la línea, los apoyos se clasifican en:

a) Apoyo de suspensión: Apoyo con cadenas de aislamiento de suspensión.

b) Apoyo de amarre: Apoyo con cadenas de aislamiento de amarre.

c) Apoyo de anclaje: Apoyo con cadenas de aislamiento de amarre destinado a proporcionar un punto firme en la línea. Limitará, en ese punto, la propagación de esfuerzos longitudinales de carácter excepcional. Todos los apoyos de la línea cuya función sea de anclaje tendrán identificación propia en el plano de detalle del proyecto de la línea.

d) Apoyo de principio o fin de línea: Son los apoyos primero y último de la línea, con cadenas de aislamiento de amarre, destinados a soportar, en sentido longitudinal, las solicitaciones del haz completo de conductores en un solo sentido.

e) Apoyos especiales: Son aquellos que tienen una función diferente a las definidas en la clasificación anterior.

Los apoyos de los tipos enumerados pueden aplicarse a diferentes fines de los indicados, siempre que cumplan las condiciones de resistencia y estabilidad necesarias al empleo a que se destinen.

Atendiendo a su posición relativa respecto al trazado de la línea, los apoyos se clasifican en:

a) Apoyo de alineación: Apoyo de suspensión, amarre o anclaje usado en un tramo rectilíneo de la línea.

b) Apoyo de ángulo: Apoyo de suspensión, amarre o anclaje colocado en un ángulo del trazado de una línea.

### 2.1.2 Cálculos mecánicos

La filosofía de diseño que refleja este apartado para las líneas de alta tensión en general, está basada en el método empírico indicado en las normas UNE-EN 50341-1 y UNE-EN 50423-1. De acuerdo con ello, se utilizarán para las aplicaciones de las posibles solicitudes de cargas, fórmulas empíricas avaladas por la práctica que responderán a la duración, fiabilidad y garantía establecida en esta instrucción, equiparables con lo recomendado en la norma aludida.

En este reglamento se parte de unos valores mínimos generalizados para el cálculo de las solicitaciones sobre los apoyos y los componentes de la línea. Se exponen fórmulas empíricas en función de variables y posibilidades de aplicación de distintas hipótesis, que puedan contemplar la diferencia geográfica de las distintas áreas en que puede dividirse el Estado, en cuanto a concepción orográfica y climatológica se refiere. De esta forma, se establece una metodología de cálculo basada en la experiencia que las empresas distribuidoras y de transporte tienen en el diseño de líneas eléctricas aéreas.

Cargas y sobrecargas a considerar

- Cargas permanentes: Se considerarán las cargas verticales debidas al peso propio de los distintos elementos: conductores, aisladores, herrajes, cables de tierra -si los hubiere-, apoyos y cimentaciones.

- Fuerza del viento sobre los apoyos: Se considerará un viento mínimo de referencia de 120 km/h (33,3 m/s) de velocidad, excepto en las líneas de categoría especial, donde se considerará un viento mínimo de 140 km/h (38,89 m/s) de velocidad. Se supondrá el viento horizontal, actuando perpendicularmente a las superficies sobre las que incide.

  La fuerza del viento sobre los apoyos es la presión de viento multiplicada por el área del apoyo expuesta al viento. Se considerará como área de apoyo

expuesta al viento la superficie real de la cara de barlovento del apoyo proyectada en el plano normal a la dirección del viento.

Por lo tanto, la fuerza del viento sobre el apoyo será:

$$F_c = q \times A_T \text{ daN,}$$

Siendo:

$A_T$ área del apoyo expuesta al viento proyectada en el plano normal a la dirección del viento, en $m^2$.

q presión del viento = $170 \text{x} \left( \frac{V_V}{120} \right)^2$ daN/$m^2$

Criterios de agotamiento de apoyos

Los criterios de agotamiento, a considerar en el cálculo mecánico de los apoyos, serán según los casos:

a) Rotura (descohesión).

b) Fluencia (deformaciones permanentes).

c) Inestabilidad (pandeo o inestabilidad general).

d) Resiliencia (resistencia a bajas temperaturas)

Características resistentes de los diferentes materiales

La característica básica de los materiales será la carga de rotura o el límite de fluencia, considerándose en los aceros igual al límite elástico convencional. Los perfiles utilizados serán de acero cuyo límite elástico sea igual o superior a 275 N/$mm^2$.

Hipótesis de cálculo

Las diferentes hipótesis que se tendrán en cuenta en el cálculo de los apoyos serán, de forma general:

a) Viento (120 o 140 km/h según la categoría de la línea)

b) Peso propio (+ Hielo)

c) Desequilibrio de tracciones

d) Rotura de conductores

Según la zona donde se encuentre situada la línea y el tipo de apoyo del que se trate, se estudiaran todas o solo algunas de las hipótesis anteriores.

## 2.2 Cálculo matricial de estructuras

En este apartado se describirá el método de la rigidez para el cálculo de estructuras implementado en la herramienta.

Para el análisis, la estructura se supone que está compuesta por una serie de de barras prismáticas que admiten la idealización de la Resistencia de Materiales. Estas barras se unen en una serie de puntos a los que llamamos nudos.

Las ecuaciones de resistencia de materiales al ser aplicadas a cada una de las barras, permiten expresar el comportamiento de cada punto o sección de esta en función del comportamiento de los extremos de la misma, lo que nos permite, a través de los nudos, relacionar un elemento con otro y finalmente simular toda la estructura.

De esta forma, se pasa de una solución continua (desplazamientos y esfuerzos en todos los puntos de la estructura) a una solución discreta (desplazamientos y esfuerzos en los nudos extremos de cada elemento).

La idea de discretización anterior puede formalizarse diciendo que se ha pasado del número infinito de grados de libertad (GDL) de los puntos de la estructura a un número finito; entendiendo por GDL de un punto el número de coordenadas que es preciso fijar para su movimiento quede determinado. En las ecuaciones se tendrán en cuenta los GDL de los nudos únicamente, expresándose a partir de ellos lo que ocurre en otro punto cualquiera de la estructura.

El método matricial de la rigidez es un método de cálculo aplicable a estructuras hiperestáticas de barras que se comportan de forma elástica y lineal. Este método se basa en estimar los componentes de las relaciones de rigidez para resolver las fuerzas o los desplazamientos. El método de rigidez directa es la implementación más común del método de los elementos finitos. Las propiedades de rigidez del material son compilados en una única ecuación matricial que gobierna el comportamiento interno de la estructura idealizada. Los datos que se desconocen de la estructura son las fuerzas y los desplazamientos que pueden ser determinados resolviendo esta ecuación.

### 2.2.1 Cálculo de la matriz de transformación para cada barra

Se utiliza para relacionar los vectores y matrices de rigidez de los sistemas (ejes) locales (de la barra) y globales (de la estructura). La matriz de transformación está representada en función de los cosenos directores:

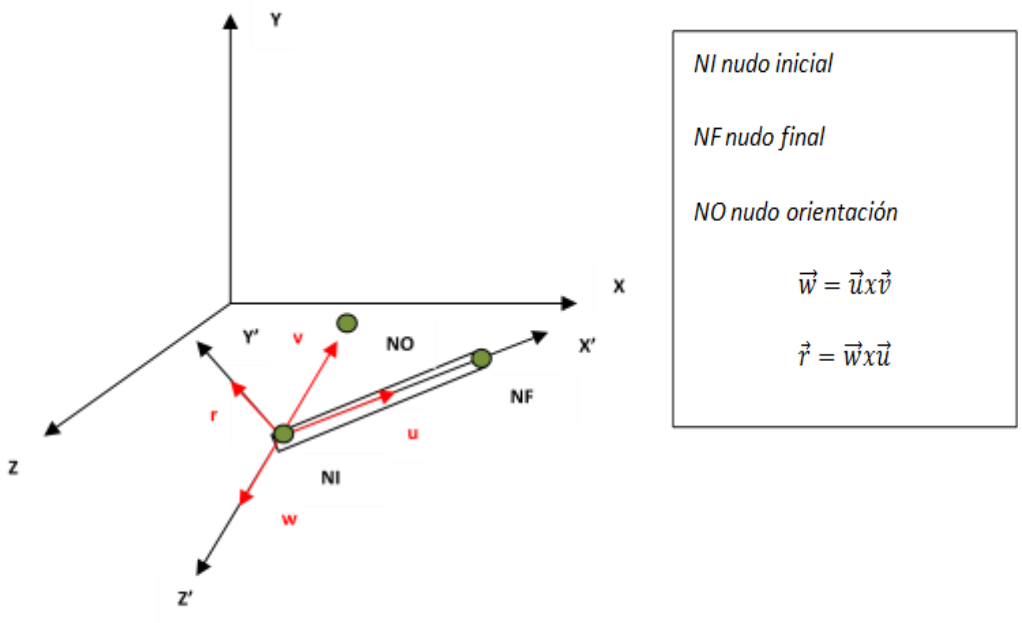
$$\mathbf{T}^a = \left[\begin{array}{c|c|c|c} \mathbf{R} & \mathbf{0}_{3\times3} & \mathbf{0}_{3\times3} & \mathbf{0}_{3\times3} \\ \hline \mathbf{0}_{3\times3} & \mathbf{R} & \mathbf{0}_{3\times3} & \mathbf{0}_{3\times3} \\ \hline \mathbf{0}_{3\times3} & \mathbf{0}_{3\times3} & \mathbf{R} & \mathbf{0}_{3\times3} \\ \hline \mathbf{0}_{3\times3} & \mathbf{0}_{3\times3} & \mathbf{0}_{3\times3} & \mathbf{R} \end{array}\right]_{12\times12}$$

Siendo:

$$\mathbf{R} = \begin{bmatrix} \cos\theta_{\hat{x}x} & \cos\theta_{\hat{y}x} & \cos\theta_{\hat{z}x} \\ \cos\theta_{\hat{x}y} & \cos\theta_{\hat{y}y} & \cos\theta_{\hat{z}y} \\ \cos\theta_{\hat{x}z} & \cos\theta_{\hat{y}z} & \cos\theta_{\hat{z}z} \end{bmatrix}_{3\times3}$$

Donde el ángulo $\theta_{ij}$ es el que forma el eje local i con el eje global j.

Cálculo de cosenos directores:



$$L = \sqrt{Lx^2 + Ly^2 + Lz^2}$$

$$\cos\theta_{x'x} = \frac{Lx}{L} \qquad \cos\theta_{y'x} = \frac{r_x}{|\vec{r}|} \qquad \cos\theta_{z'x} = \frac{w_x}{|\vec{w}|}$$

$$\cos\theta_{x'y} = \frac{Ly}{L} \qquad \cos\theta_{y'y} = \frac{r_y}{|\vec{r}|} \qquad \cos\theta_{z'y} = \frac{w_y}{|\vec{w}|}$$

$$\cos\theta_{x'z} = \frac{Lz}{L} \qquad \cos\theta_{y'z} = \frac{r_z}{|\vec{r}|} \qquad \cos\theta_{z'z} = \frac{r_z}{|\vec{w}|}$$

### 2.2.2 Cálculo de la matriz de rigidez en coordenadas locales para cada barra

Cada barra tendrá 12 grados de libertad, 6 en cada uno de sus dos nudos extremos i y j, tres desplazamientos y tres giros. Su orientación en el espacio podrá ser arbitraria dentro de un sistema de coordenadas global de la estructura, en el que definimos un sistema local de coordenadas de la barra tal que “x” esté alineado con la dirección de la barra i -> j e “y” será uno de los ejes principales de su sección.

En una barra espacial tenemos dos momentos de inercia (en función del tipo de perfil), nombrados según el eje del giro con respecto al cual se definen. Tenemos también dos momentos flectores $M_Y$ y $M_Z$ y un momento torsor $M_X$.

La ecuación matricial completa de la barra “a” en ejes principales es la siguiente:

$$\hat{\vec{f}}^a = \hat{K}^a \hat{\vec{u}}^a$$

$$\begin{pmatrix} \hat{\vec{f}}_i^a \\ \hat{\vec{f}}_j^a \end{pmatrix} = \left[\begin{array}{c|c} \hat{K}_{ii}^a & \hat{K}_{ij}^a \\ \hline \hat{K}_{ji}^a & \hat{K}_{jj}^a \end{array}\right] \begin{pmatrix} \hat{\vec{u}}_i^a \\ \hat{\vec{u}}_j^a \end{pmatrix}$$

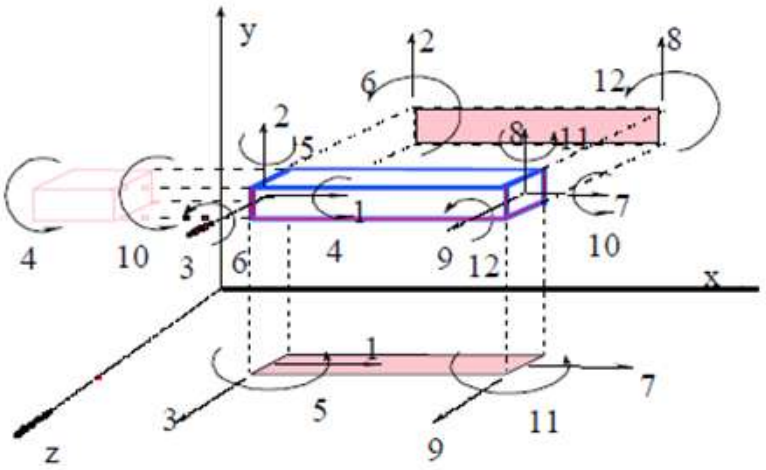
Donde:

f es vector de solicitaciones de la barra en coordenadas locales.

u es el vector de desplazamientos de la barra en coordenadas locales.

K es la matriz de rigidez de la barra en coordenadas locales. Está compuesta por 4 submatrices. Cada submatriz $K_{\alpha\beta}$ establece la relación entre los desplazamientos en el nudo β y las solicitaciones provocadas por éstos en el nudo α.

Las leyes de comportamiento de sólidos deformables dan lugar a los términos que componen la matriz de rigidez de la barra. Para una barra rígida (también llamada reticulada, biempotrada, etc.) tenemos que su matriz de rigidez es:




Axial →

Viga a flexión plano XY →

Viga a flexión plano XZ →

Barra a torsión pura →

$$
\begin{bmatrix}
\frac{EA}{L} & & & & & & & & & & & \\
0 & \frac{12EIz}{L^3} & & & & & & & & & & \\
0 & 0 & \frac{12EIy}{L^3} & & & & & & & & & \\
0 & 0 & 0 & \frac{GIp}{L} & & & & & & & & \\
0 & 0 & -\frac{6EIy}{L^2} & 0 & \frac{4EIy}{L} & & & & & & & \\
0 & \frac{6EIz}{L^2} & 0 & 0 & 0 & \frac{4EIz}{L} & & & & & & \\
-\frac{EA}{L} & 0 & 0 & 0 & 0 & 0 & \frac{EA}{L} & & & & & \\
0 & -\frac{12EIz}{L^3} & 0 & 0 & 0 & -\frac{6EIz}{L^2} & 0 & \frac{12EIz}{L^3} & & & & \\
0 & 0 & -\frac{12EIy}{L^3} & 0 & \frac{6EIy}{L^2} & 0 & 0 & 0 & \frac{12EIy}{L^3} & & & \\
0 & 0 & 0 & -\frac{GIp}{L} & 0 & 0 & 0 & 0 & 0 & \frac{GIp}{L} & & \\
0 & 0 & -\frac{6EIy}{L^2} & 0 & \frac{2EIy}{L} & 0 & 0 & 0 & \frac{6EIy}{L^2} & 0 & \frac{4EIy}{L} & \\
0 & \frac{6EIz}{L^2} & 0 & 0 & 0 & \frac{2EIz}{L} & 0 & -\frac{6EIz}{L^2} & 0 & 0 & 0 & \frac{4EIz}{L}
\end{bmatrix}
$$

SIMETRÍA

Siendo:

L: Longitud de la barra.

E: Módulo de elasticidad longitudinal (módulo de Young).

A: Área de la sección de la barra.

G: Módulo de elasticidad transversal (cizalladura).

$$G = \frac{E}{2(1+v)}$$

Donde v es el coeficiente de Poisson.

$I_P$ (también llamada J): Momento de torsión.

$I_Y$ $I_Z$: Momentos de inercia.

Para proyectar otros tipos de barra (articuladas en los dos extremos, empotrada – articulada, o articulada – empotrada) el programa obtendrá la matriz de rigidez correspondiente, mediante el método de condensación de grados de libertad partiendo del anterior modelo para una barra biarticulada.

### 2.2.3 Cálculo de la matriz de rigidez en coordenadas globales para cada barra

Para poder relacionar todas las barras entre sí y ensamblar la matriz de rigidez de la estructura, es necesario que todas las barras estén definidas en el sistema global. Para ello se hace uso de la matriz de transformación (apartado 2.1). Por tanto, para cada barra, se obtiene la matriz de rigidez referida a los ejes globales de la siguiente forma:

$$\mathbf{K}^a = \mathbf{T}^a \hat{\mathbf{K}}^a \mathbf{T}^{a\top}$$

### 2.2.4 Cálculo de la matriz de rigidez de la estructura

Las matrices de rigidez de los elementos (barras), referidas el sistema de ejes globales de la estructura, se ensamblan para formar la matriz de rigidez global K, de forma que se pueda plantear el sistema de ecuaciones correspondiente a la estructura completa, para posteriormente poder despejar el valor de las variables desconocidas, ya sean desplazamientos y giros de nudos libres o reacciones en los apoyos:

$$\vec{\mathbf{F}} = \mathbf{K}\vec{\mathbf{U}}$$

Donde F y U son los vectores de solicitaciones y desplazamientos de la estructura global, respectivamente. Como ya se ha mencionado, K es la matriz de rigidez global de la estructura.

Si enumeramos cada uno de los N nudos de la estructura como i=1,2,…N se puede mostrar que dicha matriz K se forma a partir de las submatrices que componen las matrices de rigidez de las barras:

$$\mathbf{K} = \begin{array}{c} \\ 1 \\ \vdots \\ i \\ \vdots \\ j \\ \vdots \\ N \end{array} \begin{array}{c} \begin{array}{cccccccc} 1 & \cdots & i & \cdots & j & \cdots & N \end{array} \\ \begin{bmatrix} \ddots & & & & & & \\ & \ddots & & & & & \\ & & \sum_\alpha \mathbf{K}_{ii}^{\alpha} & & \mathbf{K}_{ij}^{\beta} & & \\ & & & \ddots & & & \\ & & \mathbf{K}_{ji}^{\beta} & & \sum_\alpha \mathbf{K}_{jj}^{\alpha} & & \\ & & & & & \ddots & \\ & & & & & & \ddots \end{bmatrix} \end{array}$$

El tamaño de esta matriz será de 6 (GDL /nudo) x Número de Nudos. La i-ésima submatriz de la diagonal se compone sumando todas las matrices $K_{ii}^{\alpha}$ para todas las barras α que inciden en el nudo i.

Por cada barra ß entre los nudos i y j, existe un par de entradas simétricas con las $K_{ij}^{ß}$ y $K_{ji}^{ß}$ en las entradas (i, j) y (j, i), respectivamente. Siempre se cumplirá que $K_{ij}^{ß} = K_{ij}^{ß\,T}$. El resto de entradas son ceros.

### 2.2.5 Resolución del sistema (cálculo de desplazamientos y reacciones)

El sistema a resolver es:

$$\vec{\mathbf{F}} = \mathbf{K}\vec{\mathbf{U}}$$

Donde F y U son los vectores de solicitaciones y desplazamientos de la estructura global, respectivamente y K es la matriz de rigidez global de la estructura.

El sistema de ecuaciones estará compuesto por tantas ecuaciones como grados de libertad tenga la estructura:

Nº ecuaciones total = nº nudos x GDL por nudo

No obstante, sobre este "enorme" sistema de ecuaciones resultan conocidas las condiciones de contorno en desplazamientos (apoyos) y las cargas aplicadas resultando las incógnitas del problema:

Los desplazamientos en los nudos sin restricciones.

Las reacciones en los apoyos (para aquellos grados de libertad restringidos).

Así, el sistema inicial puede agruparse la siguiente manera:

$$\begin{matrix}\mathbf{INCOGNITAS} \rightarrow \\ \mathbf{DATOS} \rightarrow\end{matrix}\begin{pmatrix}(\mathbf{F_i}) \\ (\mathbf{F_j})\end{pmatrix} = \begin{pmatrix}[\mathbf{K_{ii}}][\mathbf{K_{ij}}] \\ [\mathbf{K_{ji}}][\mathbf{K_{jj}}]\end{pmatrix}\begin{pmatrix}(\mathbf{u_i}) \\ (\mathbf{u_j})\end{pmatrix}\begin{matrix}\leftarrow \mathbf{DATOS} \\ \leftarrow \mathbf{INCOGNITAS}\end{matrix}$$

El vector F estará compuesto por las reacciones en los apoyos (correspondiente a los GDL restringidos, incógnitas) y por las cargas que se le apliquen a la estructura.

El vector U contendrá elementos ceros (desplazamientos o giros de los GDL restringidos) y el resto, serán los desplazamientos a calcular.

Rescribiendo el sistema, obtenemos en un único vector todas las incógnitas del sistema. Se obtiene un sistema de la forma A·x = B el cuál Matlab es capaz de resolver de la forma más eficiente, una vez que ambas matrices (A, B) las hemos convertido en dispersas, sin necesidad de implementar ningún método resolutivo por nuestra cuenta.

Como resultado, se obtiene un vector con los desplazamientos de los nudos de la estructura y las reacciones en los apoyos.

### 2.2.6 Cálculo de los esfuerzos de cada barra en coordenadas locales

Supongamos que nos centramos en una barra en particular situada entre los nudos i y j. Los esfuerzos vendrán determinados por cómo ha sido obligada a deformarse en dichos extremos, valores que nombramos como $u_i$ y $u_j$ y que conocemos por ser una parte del vector U (obtenido en el punto anterior).

El cálculo matricial de estructuras está basado en la siguiente aproximación lineal:

$$\hat{\vec{\mathbf{f}}}^a = \hat{\mathbf{K}}^a \hat{\vec{\mathbf{u}}}^a$$

$$\begin{pmatrix} \hat{\vec{\mathbf{f}}}_i^a \\ \hat{\vec{\mathbf{f}}}_j^a \end{pmatrix} = \left[\begin{array}{c|c} \hat{\mathbf{K}}_{ii}^a & \hat{\mathbf{K}}_{ij}^a \\ \hline \hat{\mathbf{K}}_{ji}^a & \hat{\mathbf{K}}_{jj}^a \end{array}\right] \begin{pmatrix} \hat{\vec{\mathbf{u}}}_i^a \\ \hat{\vec{\mathbf{u}}}_j^a \end{pmatrix}$$

Donde se ha usado como superíndice el número de la barra que va desde el nudo i al j. Nuestra intención es calcular las incógnitas de los esfuerzos f.

Para ello, necesitamos calcular el vector desplazamiento de la barra en coordenadas locales, haciendo uso de la matriz de transformación:

$$\vec{\mathbf{u}}^a = \mathbf{T}^a \hat{\vec{\mathbf{u}}}^a$$

$$\downarrow$$

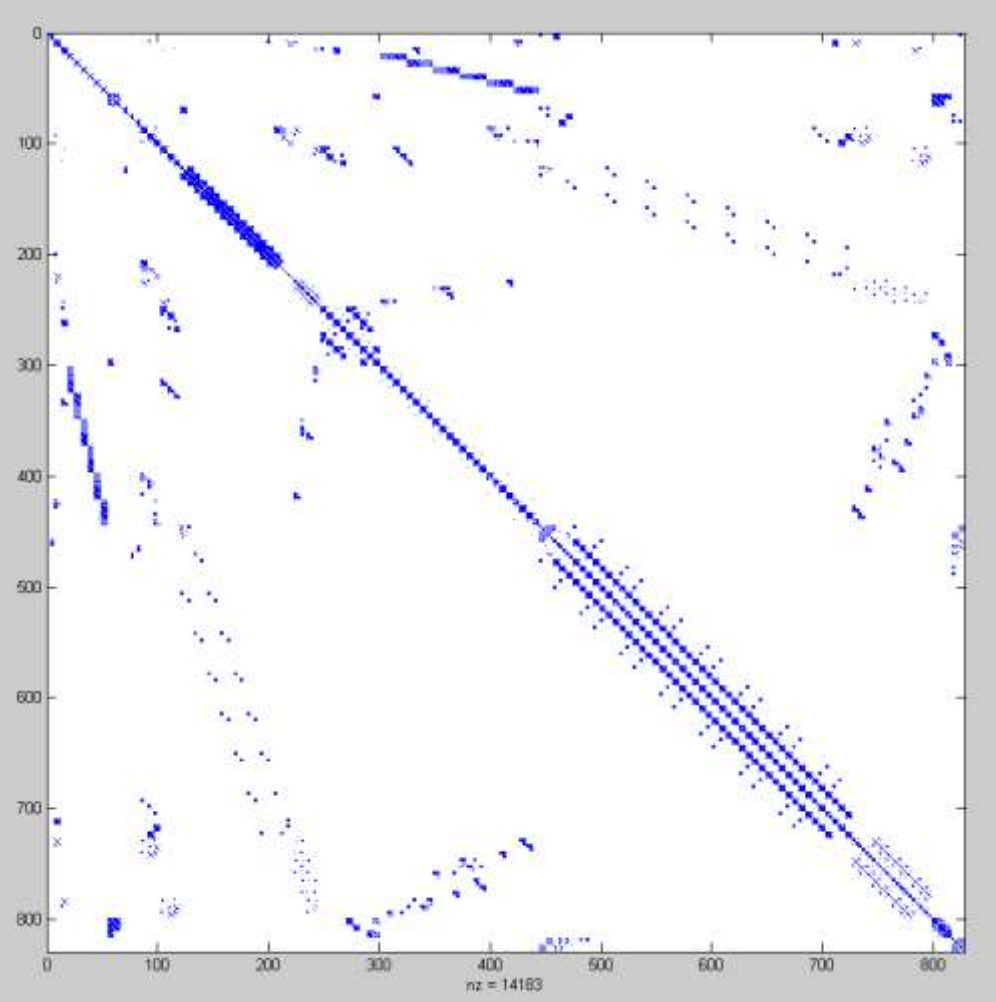
$$\begin{aligned} \hat{\vec{\mathbf{u}}}^a &= (\mathbf{T}^a)^{-1} \vec{\mathbf{u}}^a \\ &= (\mathbf{T}^a)^{\top} \vec{\mathbf{u}}^a \end{aligned}$$

## 2.3 Matrices dispersas

La matriz de rigidez que va a definir nuestra estructura se caracteriza por ser una matriz de gran dimensión con un gran número de elementos nulos. Este tipo de matrices se les conoce como matrices dispersas. El objetivo del tratamiento de estas matrices es poder trabajar sólo con los elementos no nulos sin necesidad de almacenar toda la matriz.

Matlab implementa una función que nos permite almacenar este tipo de matrices guardando en vectores los elementos no nulos y sus posiciones relativas en la matriz global. Esta técnica de almacenamiento nos permite un mínimo consumo de memoria, un mínimo uso de procesador, mejora en el tiempo para acceder a los datos y reducir los tiempos de cálculo.

En la siguiente gráfica se representan los elementos no nulos de la matriz de rigidez de un apoyo.



# 3 USO Y DESCRIPCIÓN DE LA HERRAMIENTA

La herramienta para el cálculo de apoyos de líneas eléctricas desarrolladas, presenta las siguientes características principales a tener en cuenta:

- Permite el cálculo de apoyos con hasta 12 crucetas (C1 a C12) y 2 crucetas para cable de tierra (CT1 y CT2), pudiendo estar cada cruceta definida por hasta 6 nudos distintos.

- El programa está preparado para calcular:

    - Estados de carga en cada cruceta: carga unitaria en dirección transversal, longitudinal y vertical. Con los resultados unitarios, el proyectista podrá estudiar las distintas hipótesis para analizar la rotura de conductores y el desequilibrio de tracciones.

    - El comportamiento del apoyo solicitado por una velocidad del viento cualquiera, en dirección transversal.

    - El comportamiento del apoyo debido a su peso propio.

- Permite seleccionar el tipo de barra: Biarticulada, Biempotrada, Articulada-Empotrada o Empotrada-Articulada.

- Calcula los desplazamientos de los nudos del apoyo, los esfuerzos en las barras y las reacciones en los apoyos de la estructura.

- Permite hacer una representación gráfica del apoyo y de la deformada en 3D, con la posibilidad de aplicar un factor (calculado por el programa) de aumento a los desplazamientos para observar la deformada.

## 3.1 Introducción de los datos de la estructura

Se ha creado una plantilla en formato .xlsx que contiene ocho hojas, tres de las cuales sirven para la introducción de los datos de la estructura a calcular y las cinco restantes para el volcado de los resultados calculados por el programa.

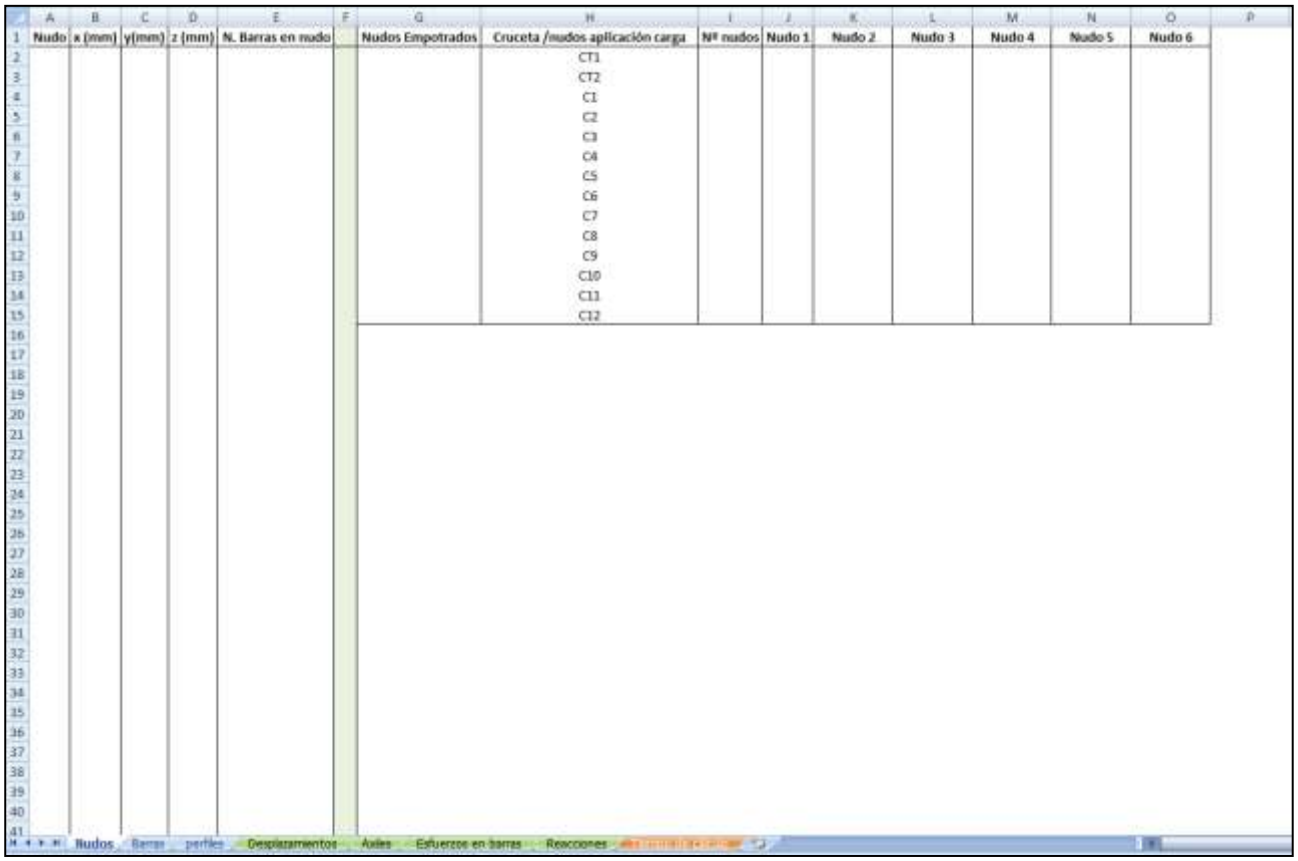
En la hoja “nudos” se introducirán los siguientes datos:

- Coordenadas en milímetros tanto de los nudos pertenecientes a la estructura como de los nudos que son exclusivamente de orientación.

- Con el fin de que el programa pueda diferencia entre un nudo perteneciente a la estructura y un nudo de orientación, debe introducirse por nudo el número de barras que confluyen en ellos, indicando 0 en aquellos nudos que sean exclusivamente de orientación.

- Nudos que definen la base de la estructura (nudos empotrados en la cimentación del apoyo).

- Nudos de aplicación de las cargas unitarias en las crucetas.



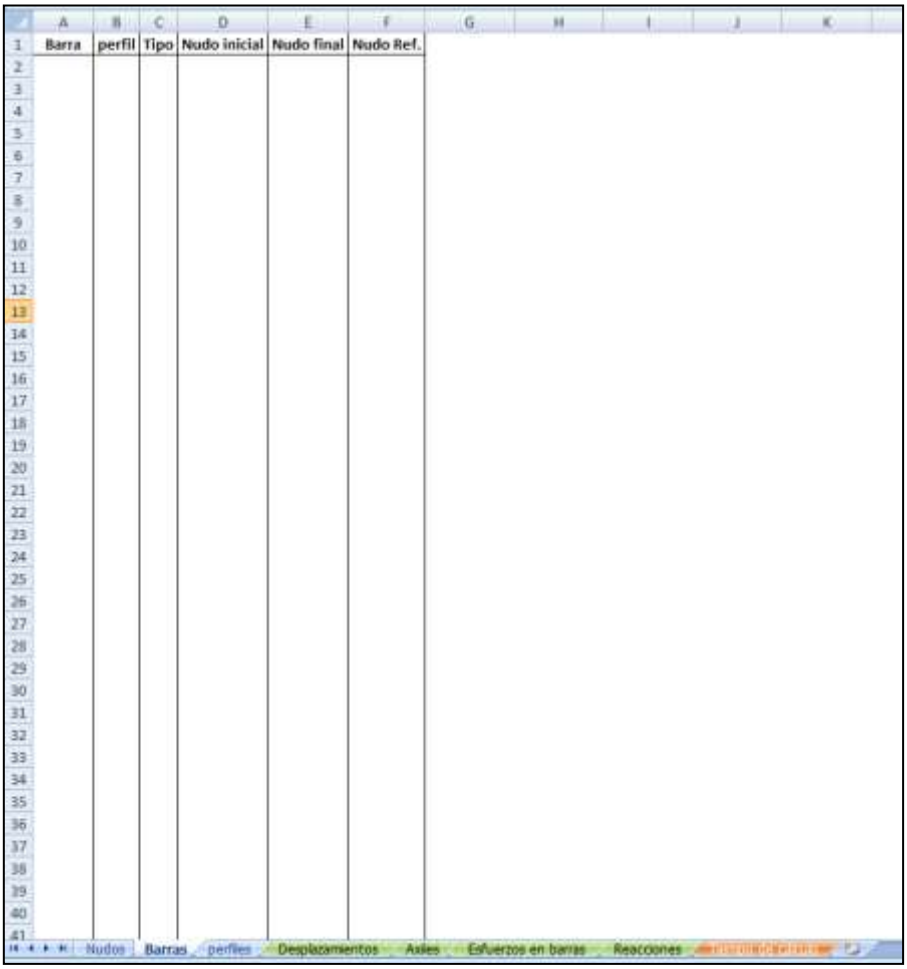
| Nudo | x (mm) | y(mm) | z (mm) | N. Barras en nudo | Nudos Empotrados | Cruceta /nudos aplicación carga | Nº nudos | Nudo 1 | Nudo 2 | Nudo 3 | Nudo 4 | Nudo 5 | Nudo 6 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | | CT1 | | | | | | | |
| | | | | | | CT2 | | | | | | | |
| | | | | | | C1 | | | | | | | |
| | | | | | | C2 | | | | | | | |
| | | | | | | C3 | | | | | | | |
| | | | | | | C4 | | | | | | | |
| | | | | | | C5 | | | | | | | |
| | | | | | | C6 | | | | | | | |
| | | | | | | C7 | | | | | | | |
| | | | | | | C8 | | | | | | | |
| | | | | | | C9 | | | | | | | |
| | | | | | | C10 | | | | | | | |
| | | | | | | C11 | | | | | | | |
| | | | | | | C12 | | | | | | | |

En la hoja “barras” se definirán cada una de ellas, siendo necesario indicar:

-El número de perfil que define la barra

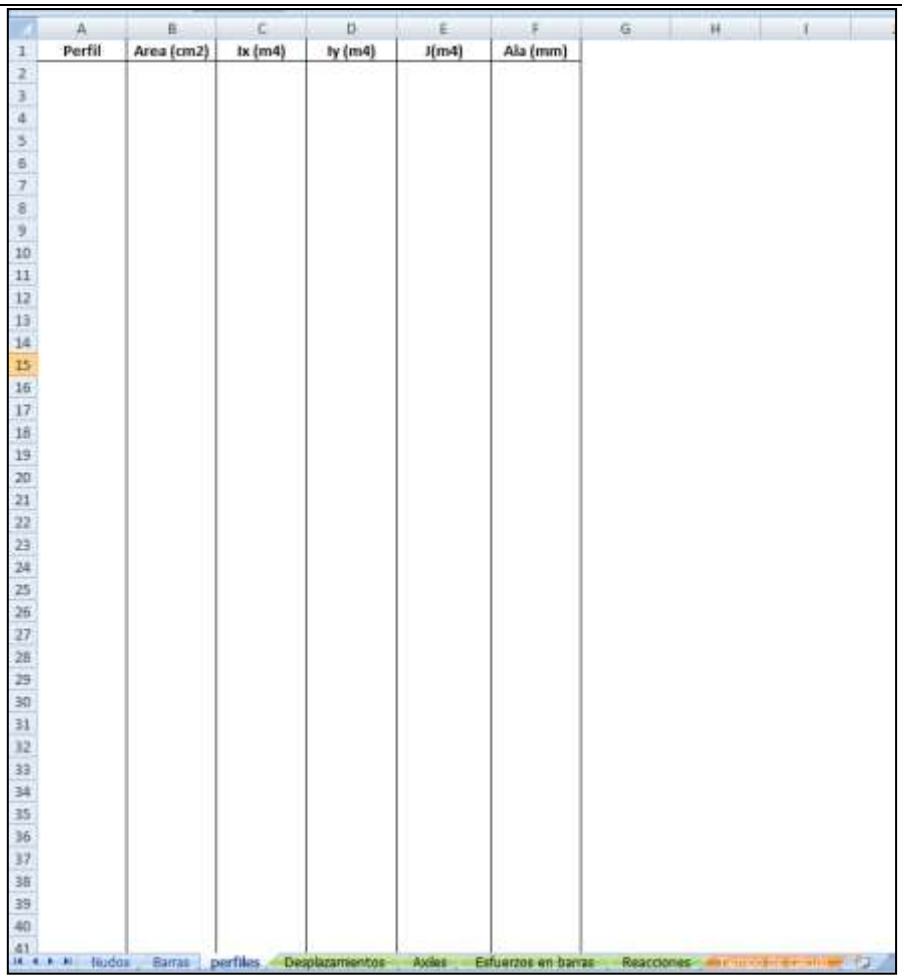
-El tipo de barra: 1- Biarticualda; 2- Biempotrada; 3- Articulada-Empotrada; 4- Empotrada-Articulada.

-Nudo inicial, nudo final y nudo de orientación.



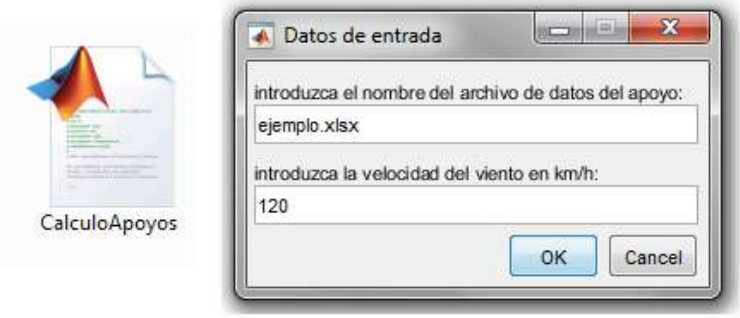

En la hoja “perfiles” se indica para cada uno de ellos:

- Área, expresada en $cm^2$
- Momentos de inercia, expresados en $m^4$
- Momento de torsión, expresado en $m^4$
- Longitud del ala, expresada en mm.




## 3.2 Ejecución del programa

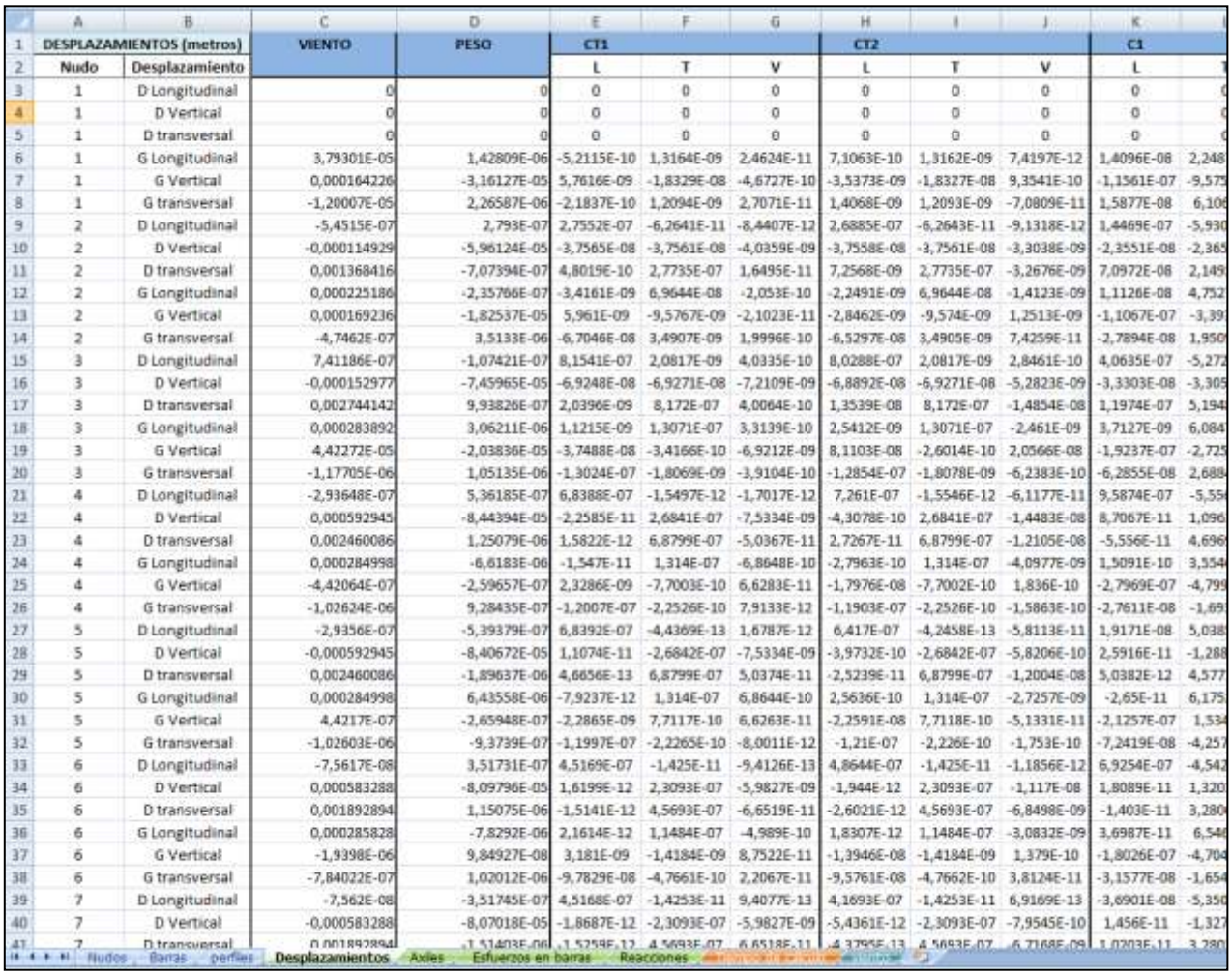
Una vez definido en la plantilla Excel la estructura que pretendemos calcular, ejecutamos en Matlab el módulo para el cálculo del apoyo. Debemos indicarle el nombre del archivo donde se encuentran los datos, y la velocidad del viento a la que queremos solicitar la estructura.



## 3.3 Visualización de resultados

Una vez ejecutado el módulo para el cálculo de la estructura, los resultados numéricos se volcarán en el mismo archivo donde se encuentran introducidos los datos del apoyo.

Obtendremos los desplazamientos y giros, expresados en metros, que sufren cada uno de los nudos pertenecientes a la estructura, para cada una de las cargas a las que hemos expuesto el apoyo.

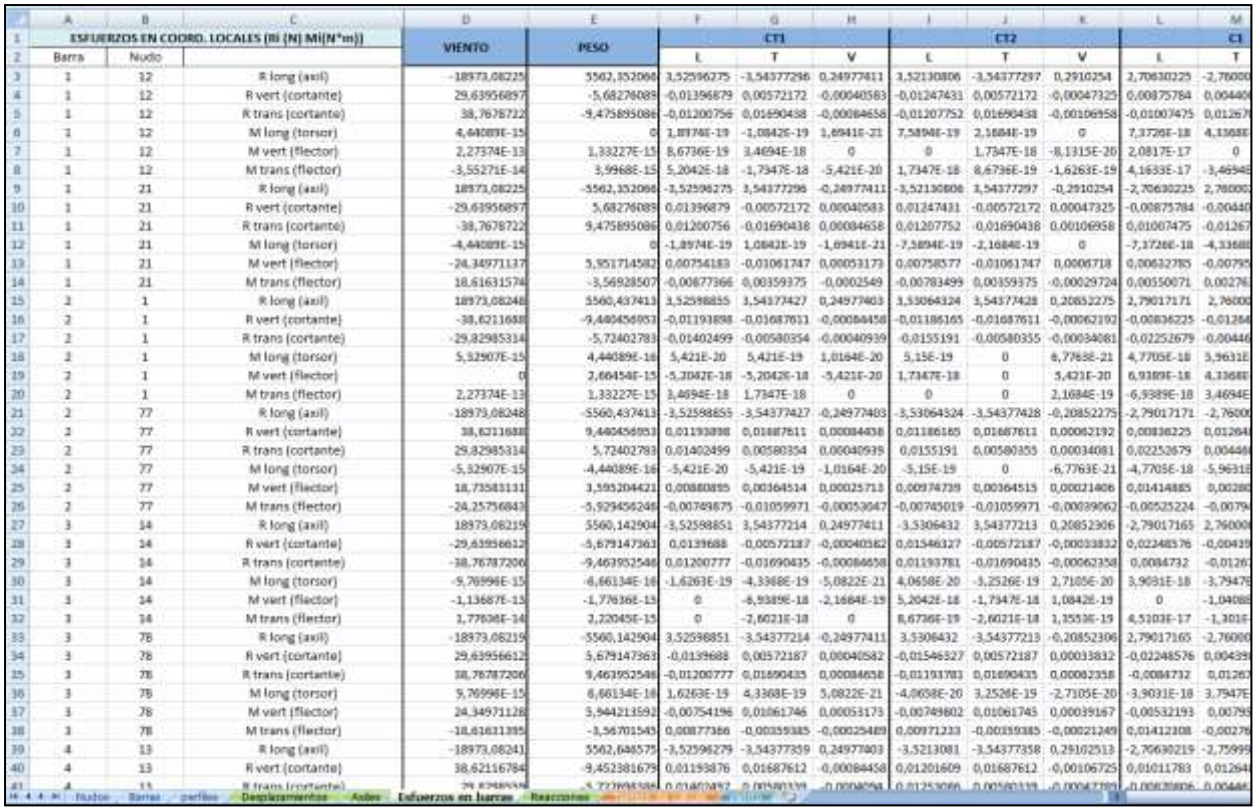


| | A | B | C | D | E | F | G | H | I | J | K | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | DESPLAZAMIENTOS (metros) | | VIENTO | PESO | CT1 | | | CT2 | | | C1 | |
| 2 | Nudo | Desplazamiento | | | L | T | V | L | T | V | L | T |
| 3 | 1 | D Longitudinal | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 4 | 1 | D Vertical | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 5 | 1 | D transversal | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 6 | 1 | G Longitudinal | 3,79301E-05 | 1,42809E-06 | -5,2115E-10 | 1,3164E-09 | 2,4624E-11 | 7,1063E-10 | 1,3162E-09 | 7,4197E-12 | 1,4096E-08 | 2,248 |
| 7 | 1 | G Vertical | 0,000164226 | -3,16127E-05 | 5,7616E-09 | -1,8329E-08 | -4,6727E-10 | -3,5373E-09 | -1,8327E-08 | 9,3541E-10 | -1,1561E-07 | -9,575 |
| 8 | 1 | G transversal | -1,20007E-05 | 2,26587E-06 | -2,1837E-10 | 1,2094E-09 | 2,7071E-11 | 1,4068E-09 | 1,2093E-09 | -7,0809E-11 | 1,5877E-08 | 6,106 |
| 9 | 2 | D Longitudinal | -5,4515E-07 | 2,793E-07 | 2,7552E-07 | -6,2641E-11 | -8,4407E-12 | 2,6885E-07 | -6,2643E-11 | -9,1318E-12 | 1,4469E-07 | -5,930 |
| 10 | 2 | D Vertical | -0,000114929 | -5,96124E-05 | -3,7565E-08 | -3,7561E-08 | -4,0359E-09 | -3,7558E-08 | -3,7561E-08 | -3,3038E-09 | -2,3551E-08 | -2,365 |
| 11 | 2 | D transversal | 0,001368416 | -7,07394E-07 | 4,8019E-10 | 2,7735E-07 | 1,6495E-11 | 7,2568E-09 | 2,7735E-07 | -3,2676E-09 | 7,0972E-08 | 2,149 |
| 12 | 2 | G Longitudinal | 0,000225186 | -2,35766E-07 | -3,4161E-09 | 6,9644E-08 | -2,053E-10 | -2,2491E-09 | 6,9644E-08 | -1,4123E-09 | 1,1126E-08 | 4,752 |
| 13 | 2 | G Vertical | 0,000169236 | -1,82537E-05 | 5,961E-09 | -9,5767E-09 | -2,1023E-11 | -2,8462E-09 | -9,574E-09 | 1,2513E-09 | -1,1067E-07 | -3,39 |
| 14 | 2 | G transversal | -4,7462E-07 | 3,5133E-06 | -6,7046E-08 | 3,4907E-09 | 1,9996E-10 | -6,5297E-08 | 3,4905E-09 | 7,4259E-11 | -2,7894E-08 | 1,950 |
| 15 | 3 | D Longitudinal | 7,41186E-07 | -1,07421E-07 | 8,1541E-07 | 2,0817E-09 | 4,0335E-10 | 8,0288E-07 | 2,0817E-09 | 2,8461E-10 | 4,0635E-07 | -5,272 |
| 16 | 3 | D Vertical | -0,000152977 | -7,45965E-05 | -6,9248E-08 | -6,9271E-08 | -7,2109E-09 | -6,8892E-08 | -6,9271E-08 | -5,2823E-09 | -3,3303E-08 | -3,305 |
| 17 | 3 | D transversal | 0,002744142 | 9,93826E-07 | 2,0396E-09 | 8,172E-07 | 4,0064E-10 | 1,3539E-08 | 8,172E-07 | -1,4854E-08 | 1,1974E-07 | 5,194 |
| 18 | 3 | G Longitudinal | 0,000283892 | 3,06211E-06 | 1,1215E-09 | 1,3071E-07 | 3,3139E-10 | 2,5412E-09 | 1,3071E-07 | -2,461E-09 | 3,7127E-09 | 6,084 |
| 19 | 3 | G Vertical | 4,42272E-05 | -2,03836E-05 | -3,7488E-08 | -3,4166E-10 | -6,9212E-09 | 8,1103E-08 | -2,6014E-10 | 2,0566E-08 | -1,9237E-07 | -2,725 |
| 20 | 3 | G transversal | -1,17705E-06 | 1,05135E-06 | -1,3024E-07 | -1,8069E-09 | -3,9104E-10 | -1,2854E-07 | -1,8078E-09 | -6,2383E-10 | -6,2855E-08 | 2,688 |
| 21 | 4 | D Longitudinal | -2,93648E-07 | 5,36185E-07 | 6,8388E-07 | -1,5497E-12 | -1,7017E-12 | 7,261E-07 | -1,5546E-12 | -6,1177E-11 | 9,5874E-07 | -5,554 |
| 22 | 4 | D Vertical | 0,000592945 | -8,44394E-05 | -2,2585E-11 | 2,6841E-07 | -7,5334E-09 | -4,3078E-10 | 2,6841E-07 | -1,4483E-08 | 8,7067E-11 | 1,096 |
| 23 | 4 | D transversal | 0,002460086 | 1,25079E-06 | 1,5822E-12 | 6,8799E-07 | -5,0367E-11 | 2,7267E-11 | 6,8799E-07 | -1,2105E-08 | -5,556E-11 | 4,696 |
| 24 | 4 | G Longitudinal | 0,000284998 | -6,6183E-06 | -1,547E-11 | 1,314E-07 | -6,8648E-10 | -2,7963E-10 | 1,314E-07 | -4,0977E-09 | 1,5091E-10 | 3,554 |
| 25 | 4 | G Vertical | -4,42064E-07 | -2,59657E-07 | 2,3286E-09 | -7,7003E-10 | 6,6283E-11 | -1,7976E-08 | -7,7002E-10 | 1,836E-10 | -2,7969E-07 | -4,799 |
| 26 | 4 | G transversal | -1,02624E-06 | 9,28435E-07 | -1,2007E-07 | -2,2526E-10 | 7,9133E-12 | -1,1903E-07 | -2,2526E-10 | -1,5863E-10 | -2,7611E-08 | -1,69 |
| 27 | 5 | D Longitudinal | -2,9356E-07 | -5,39379E-07 | 6,8392E-07 | -4,4369E-13 | 1,6787E-12 | 6,417E-07 | -4,2458E-13 | -5,8113E-11 | 1,9171E-08 | 5,038 |
| 28 | 5 | D Vertical | -0,000592945 | -8,40672E-05 | 1,1074E-11 | -2,6842E-07 | -7,5334E-09 | -3,9732E-10 | -2,6842E-07 | -5,8206E-10 | 2,5916E-11 | -1,288 |
| 29 | 5 | D transversal | 0,002460086 | -1,89637E-06 | 4,6656E-13 | 6,8799E-07 | 5,0374E-11 | -2,5239E-11 | 6,8799E-07 | -1,2004E-08 | 5,0382E-12 | 4,577 |
| 30 | 5 | G Longitudinal | 0,000284998 | 6,43558E-06 | -7,9237E-12 | 1,314E-07 | 6,8644E-10 | 2,5636E-10 | 1,314E-07 | -2,7257E-09 | -2,65E-11 | 6,175 |
| 31 | 5 | G Vertical | 4,4217E-07 | -2,65948E-07 | -2,2865E-09 | 7,7117E-10 | 6,6263E-11 | -2,2591E-08 | 7,7118E-10 | -5,1331E-11 | -2,1257E-07 | 1,534 |
| 32 | 5 | G transversal | -1,02603E-06 | -9,3739E-07 | -1,1997E-07 | -2,2265E-10 | -8,0011E-12 | -1,21E-07 | -2,226E-10 | -1,753E-10 | -7,2419E-08 | -4,257 |
| 33 | 6 | D Longitudinal | -7,5617E-08 | 3,51731E-07 | 4,5169E-07 | -1,425E-11 | -9,4126E-13 | 4,8644E-07 | -1,425E-11 | -1,1856E-12 | 6,9254E-07 | -4,542 |
| 34 | 6 | D Vertical | 0,000583288 | -8,09796E-05 | 1,6199E-12 | 2,3093E-07 | -5,9827E-09 | -1,944E-12 | 2,3093E-07 | -1,117E-08 | 1,8089E-11 | 1,320 |
| 35 | 6 | D transversal | 0,001892894 | 1,15075E-06 | -1,5141E-12 | 4,5693E-07 | -6,6519E-11 | -2,6021E-12 | 4,5693E-07 | -6,8498E-09 | -1,403E-11 | 3,280 |
| 36 | 6 | G Longitudinal | 0,000285828 | -7,8292E-06 | 2,1614E-12 | 1,1484E-07 | -4,989E-10 | 1,8307E-12 | 1,1484E-07 | -3,0832E-09 | 3,6987E-11 | 6,546 |
| 37 | 6 | G Vertical | -1,9398E-06 | 9,84927E-08 | 3,181E-09 | -1,4184E-09 | 8,7522E-11 | -1,3946E-08 | -1,4184E-09 | 1,379E-10 | -1,8026E-07 | -4,704 |
| 38 | 6 | G transversal | -7,84022E-07 | 1,02012E-06 | -9,7829E-08 | -4,7661E-10 | 2,2067E-11 | -9,5761E-08 | -4,7662E-10 | 3,8124E-11 | -3,1577E-08 | -1,654 |
| 39 | 7 | D Longitudinal | -7,562E-08 | -3,51745E-07 | 4,5168E-07 | -1,4253E-11 | 9,4077E-13 | 4,1693E-07 | -1,4253E-11 | 6,9169E-13 | -3,6901E-08 | -5,350 |
| 40 | 7 | D Vertical | -0,000583288 | -8,07018E-05 | -1,8687E-12 | -2,3093E-07 | -5,9827E-09 | -5,4361E-12 | -2,3093E-07 | -7,9545E-10 | 1,456E-11 | -1,327 |
| 41 | 7 | D transversal | 0,001892894 | -1,51403E-06 | -1,5259E-12 | 4,5693E-07 | -6,6518E-11 | -4,3795E-13 | 4,5693E-07 | -6,7168E-09 | 1,0203E-11 | 3,280 |

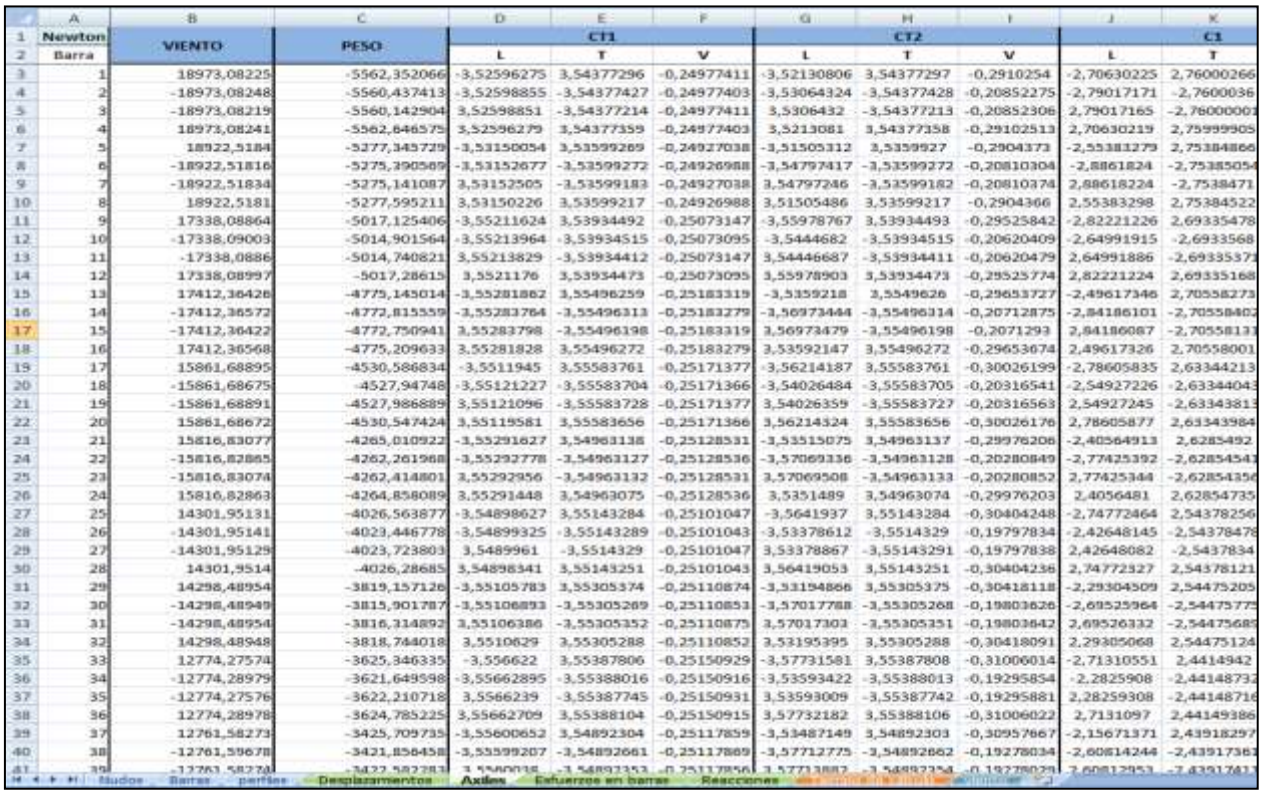
Nudos | Barras | perfiles | Desplazamientos | Axiles | Esfuerzos en barras | Reacciones

Obtendremos todos los esfuerzos a los que se encuentran sometido cada una de las barras, expresándose los esfuerzos axiles y cortantes en Newton, y los momentos en newton por metro.

Al ser los axiles, los esfuerzos determinantes en el diseño de estas estructuras, estos también se encontrarán volcados de manera independiente.

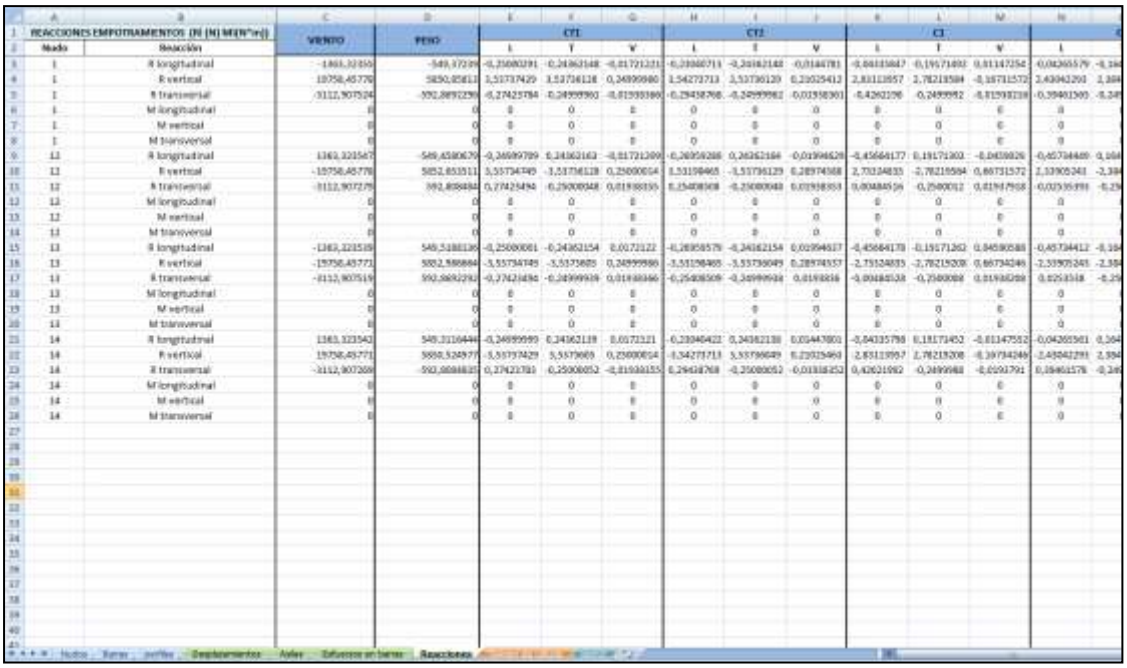


| | A | B | C | D | E | F | G | H | I | J | K | L | M |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | ESFUERZOS EN COORD. LOCALES (Ri (N) Mi(N*m)) | | | VIENTO | PESO | CT1 | | | CT2 | | | C1 | |
| 2 | Barra | Nudo | | | | L | T | V | L | T | V | L | T |
| 3 | 1 | 12 | R long (axil) | -18973,08225 | 5562,352066 | 3,52596275 | -3,54377296 | 0,24977411 | 3,52130806 | -3,54377297 | 0,2910254 | 2,70630225 | -2,76000 |
| 4 | 1 | 12 | R vert (cortante) | 29,63956897 | -5,68276089 | -0,01396879 | 0,00572172 | -0,00040583 | -0,01247431 | 0,00572172 | -0,00047325 | 0,00875784 | 0,00440 |
| 5 | 1 | 12 | R trans (cortante) | 38,7678722 | -9,475895086 | -0,01200756 | 0,01690438 | -0,00084658 | -0,01207752 | 0,01690438 | -0,00106958 | -0,01007475 | 0,01267 |
| 6 | 1 | 12 | M long (torsor) | 4,44089E-15 | 0 | 1,8974E-19 | -1,0842E-19 | 1,6941E-21 | 7,5894E-19 | 2,1684E-19 | 0 | 7,3726E-18 | 4,3368E |
| 7 | 1 | 12 | M vert (flector) | 2,27374E-13 | 1,33227E-15 | 8,6736E-19 | 3,4694E-18 | 0 | 0 | 1,7347E-18 | -8,1315E-20 | 2,0817E-17 | 0 |
| 8 | 1 | 12 | M trans (flector) | -3,55271E-14 | 3,9968E-15 | 5,2042E-18 | -1,7347E-18 | -5,421E-20 | 1,7347E-18 | 8,6736E-19 | -1,6263E-19 | 4,1633E-17 | -3,4694E |
| 9 | 1 | 21 | R long (axil) | 18973,08225 | -5562,352066 | -3,52596275 | 3,54377296 | -0,24977411 | -3,52130806 | 3,54377297 | -0,2910254 | -2,70630225 | 2,76000 |
| 10 | 1 | 21 | R vert (cortante) | -29,63956897 | 5,68276089 | 0,01396879 | -0,00572172 | 0,00040583 | 0,01247431 | -0,00572172 | 0,00047325 | -0,00875784 | -0,00440 |
| 11 | 1 | 21 | R trans (cortante) | -38,7678722 | 9,475895086 | 0,01200756 | -0,01690438 | 0,00084658 | 0,01207752 | -0,01690438 | 0,00106958 | 0,01007475 | -0,01267 |
| 12 | 1 | 21 | M long (torsor) | -4,44089E-15 | 0 | -1,8974E-19 | 1,0842E-19 | -1,6941E-21 | -7,5894E-19 | -2,1684E-19 | 0 | -7,3726E-18 | -4,3368 |
| 13 | 1 | 21 | M vert (flector) | -24,34971137 | 5,951714582 | 0,00754183 | -0,01061747 | 0,00053173 | 0,00758577 | -0,01061747 | 0,0006718 | 0,00632785 | -0,00795 |
| 14 | 1 | 21 | M trans (flector) | 18,61631574 | -3,56928507 | -0,00877366 | 0,00359375 | -0,0002549 | -0,00783499 | 0,00359375 | -0,00029724 | 0,00550071 | 0,00276 |
| 15 | 2 | 1 | R long (axil) | 18973,08248 | 5560,437413 | 3,52598855 | 3,54377427 | 0,24977403 | 3,53064324 | 3,54377428 | 0,20852275 | 2,79017171 | 2,76000 |
| 16 | 2 | 1 | R vert (cortante) | -38,6211688 | -9,440456953 | -0,01193898 | -0,01687611 | -0,00084458 | -0,01186165 | -0,01687611 | -0,00062192 | -0,00836225 | -0,01264 |
| 17 | 2 | 1 | R trans (cortante) | -29,82985314 | -5,72402783 | -0,01402499 | -0,00580354 | -0,00040939 | -0,0155191 | -0,00580355 | -0,00034081 | -0,02252679 | -0,00446 |
| 18 | 2 | 1 | M long (torsor) | 5,32907E-15 | 4,44089E-16 | 5,421E-20 | 5,421E-19 | 1,0164E-20 | 5,15E-19 | 0 | 6,7763E-21 | 4,7705E-18 | 5,9631E |
| 19 | 2 | 1 | M vert (flector) | 0 | 2,66454E-15 | -5,2042E-18 | -5,2042E-18 | -5,421E-20 | 1,7347E-18 | 0 | 3,421E-20 | 6,9389E-18 | 4,3368 |
| 20 | 2 | 1 | M trans (flector) | 2,27374E-13 | 1,33227E-15 | 3,4694E-18 | 1,7347E-18 | 0 | 0 | 0 | 2,1684E-19 | -6,9389E-18 | 3,4694E |
| 21 | 2 | 77 | R long (axil) | -18973,08248 | -5560,437413 | -3,52598855 | -3,54377427 | -0,24977403 | -3,53064324 | -3,54377428 | -0,20852275 | -2,79017171 | -2,76000 |
| 22 | 2 | 77 | R vert (cortante) | 38,6211688 | 9,440456953 | 0,01193898 | 0,01687611 | 0,00084458 | 0,01186165 | 0,01687611 | 0,00062192 | 0,00836225 | 0,01264 |
| 23 | 2 | 77 | R trans (cortante) | 29,82985314 | 5,72402783 | 0,01402499 | 0,00580354 | 0,00040939 | 0,0155191 | 0,00580355 | 0,00034081 | 0,02252679 | 0,00446 |
| 24 | 2 | 77 | M long (torsor) | -5,32907E-15 | -4,44089E-16 | -5,421E-20 | -5,421E-19 | -1,0164E-20 | -5,15E-19 | 0 | -6,7763E-21 | -4,7705E-18 | -5,9631E |
| 25 | 2 | 77 | M vert (flector) | 18,73583131 | 1,595204421 | 0,00880895 | 0,00364514 | 0,00025713 | 0,00974739 | 0,00364515 | 0,00021406 | 0,01414885 | 0,00280 |
| 26 | 2 | 77 | M trans (flector) | -24,25756843 | -5,929456248 | -0,00749875 | -0,01059971 | -0,00053047 | -0,00745019 | -0,01059971 | -0,00039062 | -0,00525224 | -0,00794 |
| 27 | 3 | 14 | R long (axil) | 18973,08219 | 5560,142904 | -3,52588851 | 3,54377214 | 0,24977411 | -3,5306432 | 3,54377213 | 0,20852306 | -2,79017165 | 2,76000 |
| 28 | 3 | 14 | R vert (cortante) | -29,63956612 | -5,679147363 | 0,0139688 | -0,00572187 | -0,00040582 | 0,01546327 | -0,00572187 | -0,00033832 | 0,02248576 | -0,00419 |
| 29 | 3 | 14 | R trans (cortante) | -38,76787206 | -9,461952548 | 0,01200777 | -0,01690435 | -0,00084658 | 0,01193781 | -0,01690435 | -0,00062358 | 0,0084732 | -0,01267 |
| 30 | 3 | 14 | M long (torsor) | -9,76996E-15 | -6,66134E-16 | -1,6263E-19 | -4,3368E-19 | -5,0822E-21 | 4,0658E-20 | -3,2526E-19 | 2,7105E-20 | 3,9031E-18 | -3,7947E |
| 31 | 3 | 14 | M vert (flector) | -1,13687E-13 | -1,77636E-15 | 0 | -6,9389E-18 | -2,1684E-19 | 5,2042E-18 | -1,7347E-18 | 1,0842E-19 | 0 | -1,0408E |
| 32 | 3 | 14 | M trans (flector) | 1,77636E-14 | 2,22045E-15 | 0 | -2,6021E-18 | 0 | 8,6736E-19 | -2,6021E-18 | 1,3553E-19 | 4,5103E-17 | -1,3018 |
| 33 | 3 | 78 | R long (axil) | -18973,08219 | -5560,142904 | 3,52598851 | -3,54377214 | -0,24977411 | 3,5306432 | -3,54377213 | -0,20852306 | 2,79017165 | -2,76000 |
| 34 | 3 | 78 | R vert (cortante) | 29,63956612 | 5,679147363 | -0,0139688 | 0,00572187 | 0,00040582 | -0,01546327 | 0,00572187 | 0,00033832 | -0,02248576 | 0,00439 |
| 35 | 3 | 78 | R trans (cortante) | 38,76787206 | 9,461952548 | -0,01200777 | 0,01690435 | 0,00084658 | -0,01193781 | 0,01690435 | 0,00062358 | -0,0084732 | 0,01267 |
| 36 | 3 | 78 | M long (torsor) | 9,76996E-15 | 6,66134E-16 | 1,6263E-19 | 4,3368E-19 | 5,0822E-21 | -4,0658E-20 | 3,2526E-19 | -2,7105E-20 | -3,9031E-18 | 3,7947E |
| 37 | 3 | 78 | M vert (flector) | 24,34971128 | 5,944213592 | -0,00754196 | 0,01061746 | 0,00053173 | -0,00749802 | 0,01061745 | 0,00039167 | -0,00532193 | 0,00795 |
| 38 | 3 | 78 | M trans (flector) | -18,61631395 | -3,56701545 | 0,00877366 | -0,00359385 | -0,00025489 | 0,00971233 | -0,00359385 | -0,00021249 | 0,01412308 | -0,00276 |
| 39 | 4 | 13 | R long (axil) | -18973,08241 | 5562,646575 | -3,52596279 | -3,54377359 | 0,24977403 | -3,5213081 | -3,54377358 | 0,29102513 | -2,70630219 | -2,75999 |
| 40 | 4 | 13 | R vert (cortante) | 38,62116784 | -9,452381679 | 0,01193876 | 0,01687612 | -0,00084458 | 0,01201609 | 0,01687612 | -0,00106725 | 0,01011783 | 0,01264 |
| 41 | 4 | 13 | R trans (cortante) | 29,82985314 | -5,723893894 | 0,01402497 | 0,00580339 | -0,0004094 | 0,01253066 | 0,00580339 | -0,00047781 | 0,00878806 | 0,00446 |



| | A | B | C | D | E | F | G | H | I | J | K |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | Newton | VIENTO | PESO | CT1 | | | CT2 | | | C1 | |
| 2 | Barra | | | L | T | V | L | T | V | L | T |
| 3 | 1 | 18973,08225 | -5562,352066 | -3,52596275 | 3,54377296 | -0,24977411 | -3,52130806 | 3,54377297 | -0,2910254 | -2,70630225 | 2,76000266 |
| 4 | 2 | -18973,08248 | -5560,437413 | -3,52598855 | -3,54377427 | -0,24977403 | -3,53064324 | -3,54377428 | -0,20852275 | -2,79017171 | -2,7600036 |
| 5 | 3 | -18973,08219 | -5560,142904 | 3,52598851 | -3,54377214 | -0,24977411 | 3,5306432 | -3,54377213 | -0,20852306 | 2,79017165 | -2,76000001 |
| 6 | 4 | 18973,08241 | -5562,646575 | 3,52596279 | 3,54377359 | -0,24977403 | 3,5213081 | 3,54377358 | -0,29102513 | 2,70630219 | 2,75999905 |
| 7 | 5 | 18922,5184 | -5277,345729 | -3,53150054 | 3,53599289 | -0,24927038 | -3,51505312 | 3,5359927 | -0,2904373 | -2,55381279 | 2,75384866 |
| 8 | 6 | -18922,51816 | -5275,390569 | -3,53152677 | -3,53599272 | -0,24926988 | -3,54797417 | -3,53599272 | -0,20810304 | -2,8861824 | -2,75385054 |
| 9 | 7 | -18922,51834 | -5275,141087 | 3,53152505 | -3,53599183 | -0,24927038 | 3,54797246 | -3,53599182 | -0,20810374 | 2,88618224 | -2,7538471 |
| 10 | 8 | 18922,5181 | -5277,595211 | 3,53150226 | 3,53599217 | -0,24926988 | 3,51505486 | 3,53599217 | -0,2904366 | 2,55383298 | 2,75384522 |
| 11 | 9 | 17338,08864 | -5017,125406 | -3,55211624 | 3,53934492 | -0,25073147 | -3,55978767 | 3,53934493 | -0,29525842 | -2,82221226 | 2,69335478 |
| 12 | 10 | -17338,09003 | -5014,901564 | -3,55213964 | -3,53934515 | -0,25073095 | -3,5446682 | -3,53934515 | -0,20620409 | -2,64991915 | -2,6933568 |
| 13 | 11 | -17338,0886 | -5014,740821 | 3,55213829 | -3,53934412 | -0,25073147 | 3,54446687 | -3,53934411 | -0,20620479 | 2,64991886 | -2,69335371 |
| 14 | 12 | 17338,08997 | -5017,28615 | 3,5521176 | 3,53934473 | -0,25073095 | 3,55978903 | 3,53934473 | -0,29525774 | 2,82221224 | 2,69335168 |
| 15 | 13 | 17412,36428 | -4775,145014 | -3,55281862 | 3,55496259 | -0,25183319 | -3,5359218 | 3,5549626 | -0,29653727 | -2,49617346 | 2,70558273 |
| 16 | 14 | -17412,36572 | -4772,815559 | -3,55283764 | -3,55496313 | -0,25183279 | -3,56973444 | -3,55496314 | -0,20712875 | -2,84186101 | -2,70558402 |
| 17 | 15 | -17412,36422 | -4772,750941 | 3,55283798 | -3,55496198 | -0,25183319 | 3,56973479 | -3,55496198 | -0,2071293 | 2,84186087 | -2,70558131 |
| 18 | 16 | 17412,36568 | -4775,209633 | 3,55281828 | 3,55496272 | -0,25183279 | 3,53592147 | 3,55496272 | -0,29653674 | 2,49617326 | 2,70558001 |
| 19 | 17 | 15861,68895 | -4530,586834 | -3,5511945 | 3,55583761 | -0,25171377 | -3,56214187 | 3,55583761 | -0,30026199 | -2,78605835 | 2,63344213 |
| 20 | 18 | -15861,68675 | -4527,94748 | -3,55121227 | -3,55583704 | -0,25171366 | -3,54026484 | -3,55583705 | -0,20316541 | -2,54927226 | -2,63344043 |
| 21 | 19 | -15861,68891 | -4527,986889 | 3,55121096 | -3,55583728 | -0,25171377 | 3,54026359 | -3,55583727 | -0,20316563 | 2,54927245 | -2,63343813 |
| 22 | 20 | 15861,68672 | -4530,547424 | 3,55119581 | 3,55583656 | -0,25171366 | 3,56214324 | 3,55583656 | -0,30026176 | 2,78605877 | 2,63343984 |
| 23 | 21 | 15816,83077 | -4265,010922 | -3,55291627 | 3,54963138 | -0,25128531 | -3,53515075 | 3,54963137 | -0,29976206 | -2,40564913 | 2,6285492 |
| 24 | 22 | -15816,82865 | -4262,261968 | -3,55292778 | -3,54963127 | -0,25128536 | -3,57069336 | -3,54963128 | -0,20280849 | -2,77425392 | -2,62854543 |
| 25 | 23 | -15816,83074 | -4262,414801 | 3,55292956 | -3,54963132 | -0,25128531 | 3,57069508 | -3,54963133 | -0,20280852 | 2,77425344 | -2,62854356 |
| 26 | 24 | 15816,82863 | -4264,858089 | 3,55291448 | 3,54963075 | -0,25128536 | 3,5351489 | 3,54963074 | -0,29976203 | 2,4056481 | 2,62854735 |
| 27 | 25 | 14301,95131 | -4026,563877 | -3,54898627 | 3,55143284 | -0,25101047 | -3,5641937 | 3,55143284 | -0,30404248 | -2,74772464 | 2,54378256 |
| 28 | 26 | -14301,95141 | -4023,446778 | -3,54899325 | -3,55143289 | -0,25101043 | -3,53378612 | -3,5514329 | -0,19797834 | -2,42648145 | -2,54378478 |
| 29 | 27 | -14301,95129 | -4023,723803 | 3,5489961 | -3,5514329 | -0,25101047 | 3,53378867 | -3,55143291 | -0,19797838 | 2,42648082 | -2,5437834 |
| 30 | 28 | 14301,9514 | -4026,28685 | 3,54898341 | 3,55143251 | -0,25101043 | 3,56419053 | 3,55143251 | -0,30404236 | 2,74772327 | 2,54378121 |
| 31 | 29 | 14298,48954 | -3819,157126 | -3,55105783 | 3,55305374 | -0,25110874 | -3,53194866 | 3,55305375 | -0,30418118 | -2,29304509 | 2,54475205 |
| 32 | 30 | -14298,48949 | -3815,901787 | -3,55106893 | -3,55305269 | -0,25110853 | -3,57017788 | -3,55305268 | -0,19803626 | -2,69525964 | -2,54475775 |
| 33 | 31 | -14298,48954 | -3816,314892 | 3,55106386 | -3,55305352 | -0,25110875 | 3,57017303 | -3,55305351 | -0,19803642 | 2,69526332 | -2,54475685 |
| 34 | 32 | 14298,48948 | -3818,744018 | 3,5510629 | 3,55305288 | -0,25110852 | 3,53195395 | 3,55305288 | -0,30418091 | 2,29305068 | 2,54475124 |
| 35 | 33 | 12774,27574 | -3625,346335 | -3,556622 | 3,55387806 | -0,25150929 | -3,57731581 | 3,55387808 | -0,31006014 | -2,71310551 | 2,4414942 |
| 36 | 34 | -12774,28979 | -3621,649598 | -3,55662895 | -3,55388016 | -0,25150916 | -3,53593422 | -3,55388013 | -0,19295854 | -2,2825908 | -2,44148732 |
| 37 | 35 | -12774,27576 | -3622,210718 | 3,5566239 | -3,55387745 | -0,25150931 | 3,53593009 | -3,55387742 | -0,19295881 | 2,28259308 | -2,44148716 |
| 38 | 36 | 12774,28978 | -3624,785225 | 3,55662709 | 3,55388104 | -0,25150915 | 3,57732182 | 3,55388106 | -0,31006022 | 2,7131097 | 2,44149386 |
| 39 | 37 | 12761,58273 | -3425,709735 | -3,55600652 | 3,54892304 | -0,25117859 | -3,53487149 | 3,54892303 | -0,30957667 | -2,15671371 | 2,43918297 |
| 40 | 38 | -12761,59678 | -3421,858458 | -3,55599207 | -3,54892661 | -0,25117869 | -3,57712775 | -3,54892662 | -0,19278034 | -2,60814244 | -2,43917361 |
| 41 | 39 | -12761,58274 | -3422,582283 | 3,5560018 | -3,54892353 | -0,25117856 | 3,57713882 | -3,54892354 | -0,19278029 | 2,60812953 | -2,43917411 |

Obtendremos las reacciones en los apoyos de la estructura (nudos empotrados en la cimentación).Las reacciones vendrán expresadas en Newton, mientras que los momentos vendrán expresados en Newton por metro.

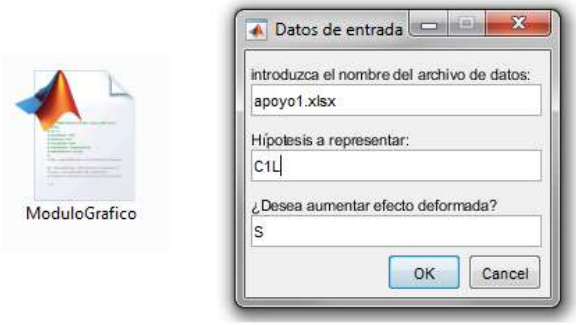


Por último, obtendremos los tiempos de cálculo de cada uno de los bloques del módulo.

| | A | B | C | D | E | F |
|---|---|---|---|---|---|---|
| 1 | **Lectura de datos** | **Matrices barras** | **Matriz de la estructura** | **Resolución del sistema** | **Escritura resultados** | |
| 2 | 39,91217795 | 0,372830604 | 0,051701238 | 4,854909788 | 19,26848201 | |
| 3 | | | | | | |
| 4 | | | | | | |
| 5 | | | | | | |
| 6 | | | | | | |
| 7 | | | | | | |

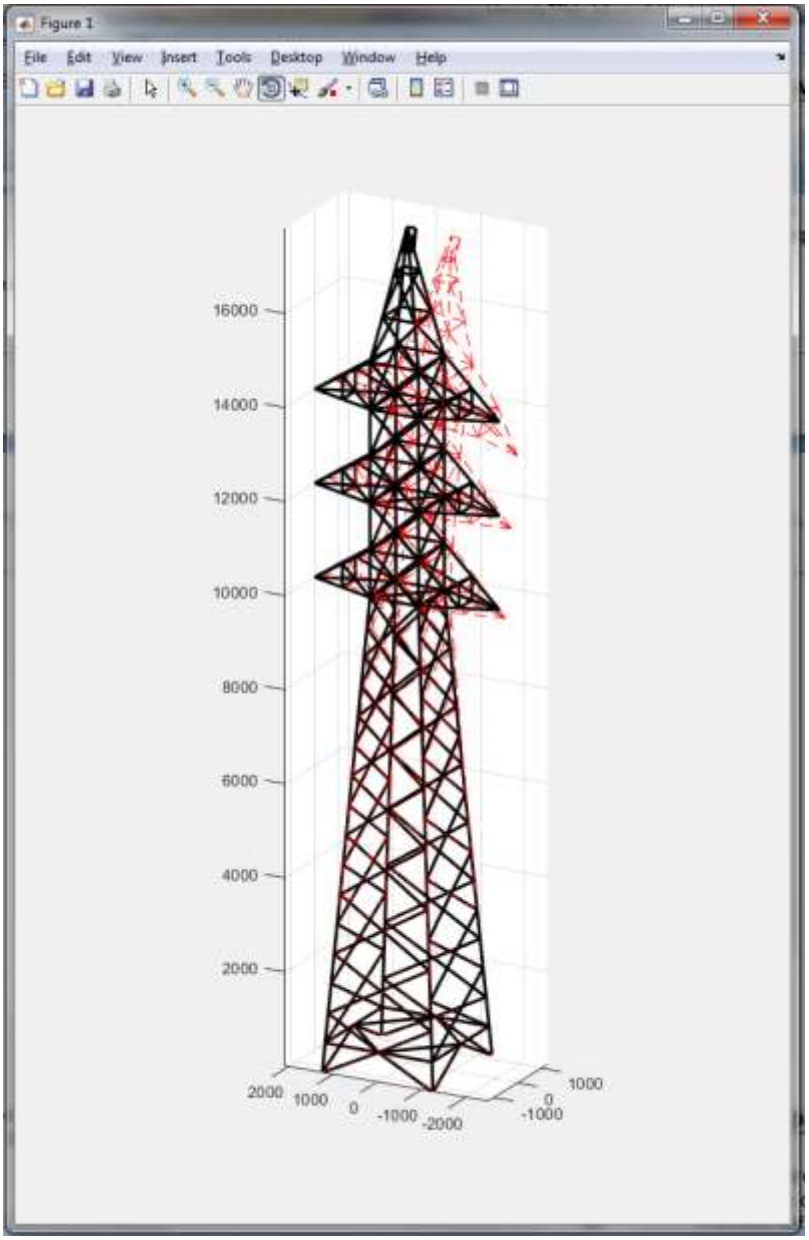
## 3.4 Representación gráfica

El módulo gráfico permite representar tanto el apoyo estudiado como cualquiera de las deformadas de las hipótesis de carga calculadas.

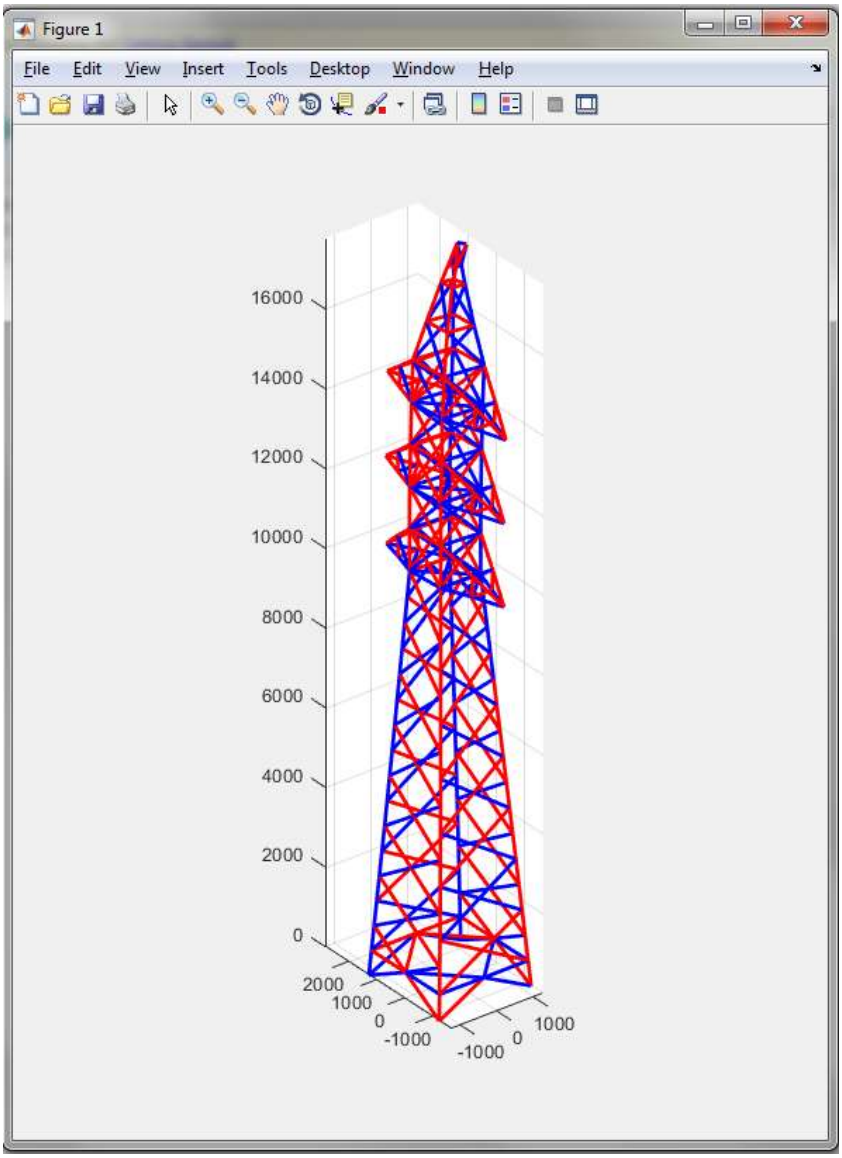


Debemos indicar, el nombre del archivo donde se encuentran los datos geométricos del apoyo, y los desplazamientos obtenidos con el módulo de cálculo. También le indicaremos que hipótesis de carga queremos representar (viento, peso, CT1L, CT1V, CT1T,…). Por último, para poder apreciar visualmente la deformación que produce una solicitación de carga, podemos indicarle que calcule un factor adecuado para aumente la representación gráfica de la deformación sufrida.

Matlab nos permitirá rotar la representación grafica para el estudio de la estructura desde cualquier vista.



El módulo grafico 2, nos permitirá visualizar sobre la deformada, por un lado, las barras que se encuentran sometidas a mayores esfuerzos, y por otro lado, nos permitirá diferenciar visualmente que barras se encuentran sometidas a tracción y a compresión.



# 4 APOYOS

En este apartado se resuelven mediante el método descrito dos apoyos reales utilizados en líneas eléctricas. Se tratan de apoyos metálicos (acero) de celosía formados por perfiles angulares de acero.

El acero es ampliamente utilizado en estas estructuras para grandes alturas debido a las muchas ventajas que presenta. Entre ellas, resuelve con éxito los planteamientos estructurales para soportar el peso con pilares de dimensiones reducidas, resistir el empuje ante el vuelco y evitar movimientos debido a la acción del viento. Sus características mecánicas, ya introducidas en el programa, son:

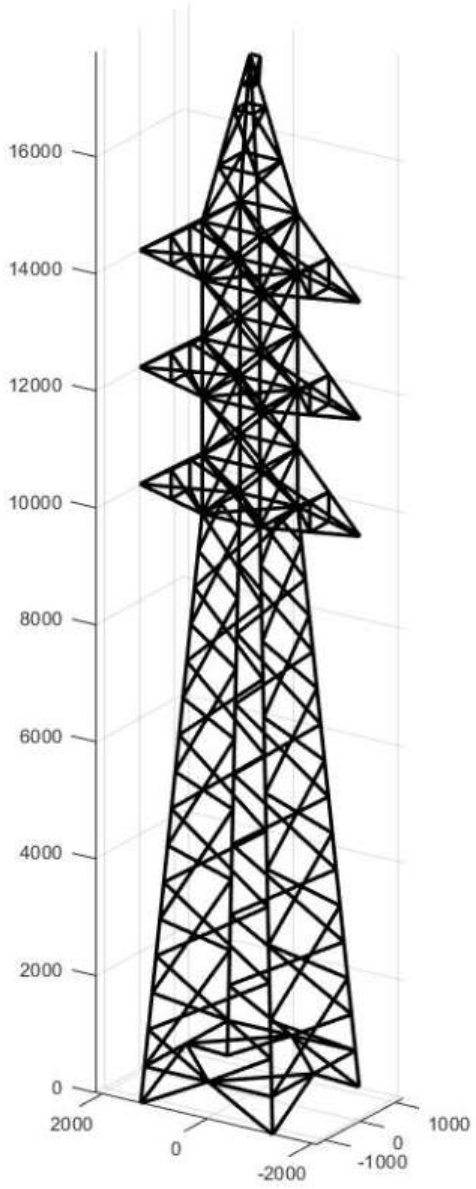
Módulo de elasticidad: E 210 GPa

Coeficiente de Poisson: v= 0,3

En los dos apoyos que se exponen a continuación, se han utilizado barras con perfiles angulares de lados iguales (Perfiles L). Este tipo de perfil es ampliamente utilizado ya que su comportamiento a los esfuerzos axiles, tanto de tracción como de compresión, es razonablemente bueno con relación a su peso, presentando además la ventaja de su fácil montaje y acople en la estructura, al tener siempre un ala disponible a la que enfrentar otra barra o una chapa, con el fin de unirlas solidariamente con tornillos.

## 4.1 Apoyo 1

Se trata de un apoyo metálico de celosía de 17,8 metros, 138 nudos y 369 barras. Presenta 8 crucetas, 2 de las cuales corresponden a los cables de tierra. Para cada cruceta se define el nudo de aplicación de la carga. La base del apoyo quedará definida por 4 nudos empotrados. Los datos correspondientes a este apoyo, se recogen en el documento anexo 1 incluido en el CD del proyecto. En este apoyo se han utilizado barras de siete perfiles distintos angulares de lados iguales (Perfiles L).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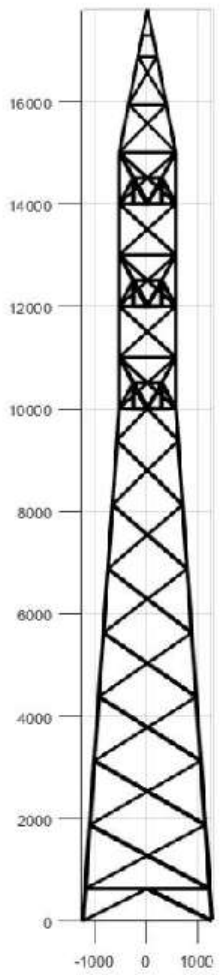
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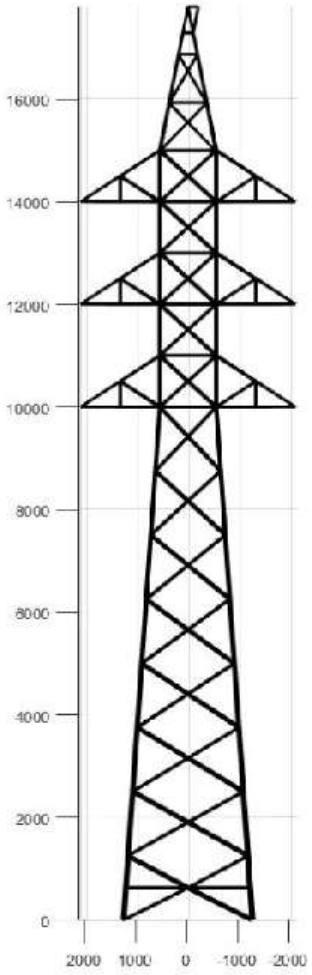
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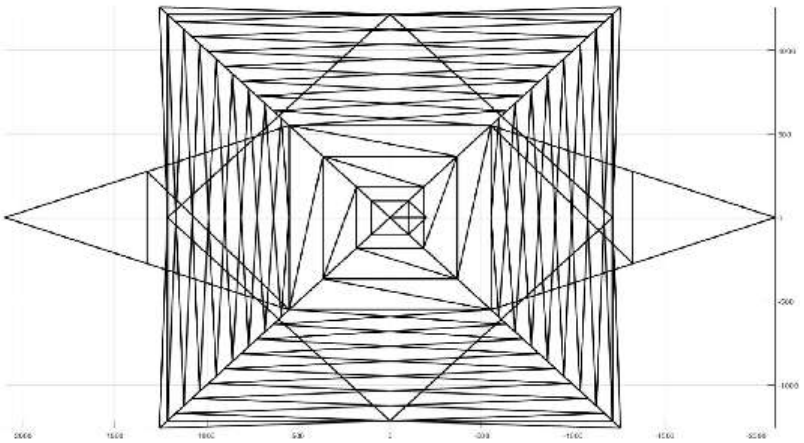
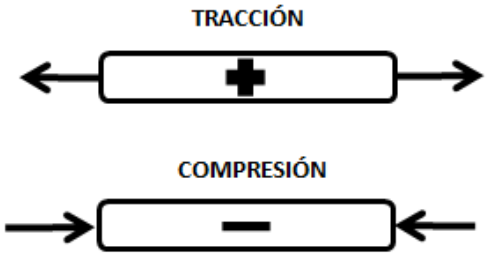


### 4.1.1 Resultados

Todos los resultados numéricos obtenidos se incluyen en el documento anexo 3 incluido en el CD del proyecto, donde encontraremos:

- Los desplazamientos y los giros sufridos por cada uno de los nudos, para cada una de los estados de cargas resueltas. Se parte de la hipótesis de que cualquier tipo de nudo perteneciente a la estructura tiene permitido el giro en los tres ejes. Los nudos empotrados tendrán impedidos los desplazamientos, mientras que los nudos articulados podrán sufrir desplazamientos en los tres sentidos.

- Los esfuerzo resultantes de aplicar los distintos estados de carga. Para cada barra, encontramos el esfuerzo axil, los esfuerzos cortantes, el momento torsor y los momentos cortantes. Debido a la gran cantidad de resultados, tan solo se presentan en este anexo, de forma separada, el esfuerzo axil de cada barra. Los apoyos son siempre diseñados buscando el comportamiento cuasi-isostático de la estructura, con el fin de no someter a las barras a flexiones ni a momentos importantes. Por ello, en el diseño de apoyos, la importancia radica en los esfuerzo axiles de compresión y tracción que se producen, los cuales se transmiten desde el punto donde se producen hasta las cimentaciones.



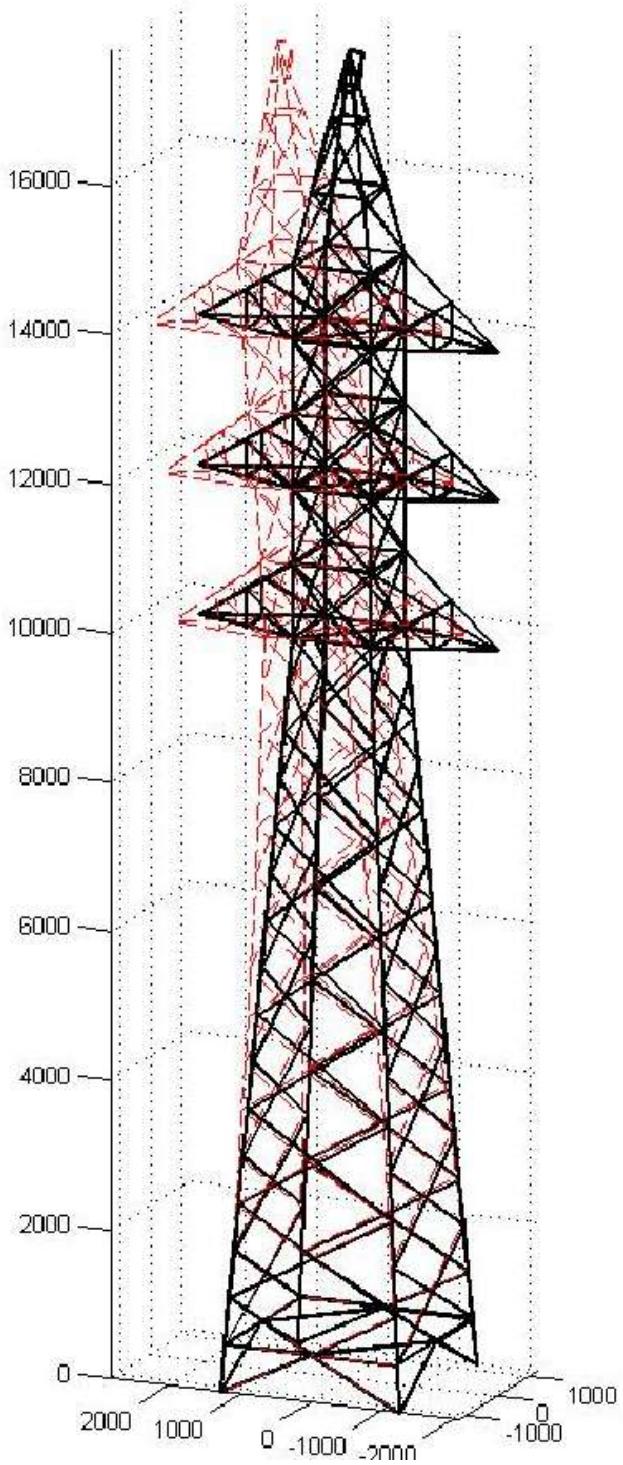

Esfuerzo axil a tracción: La barra se encuentra sometida a un alargamiento.

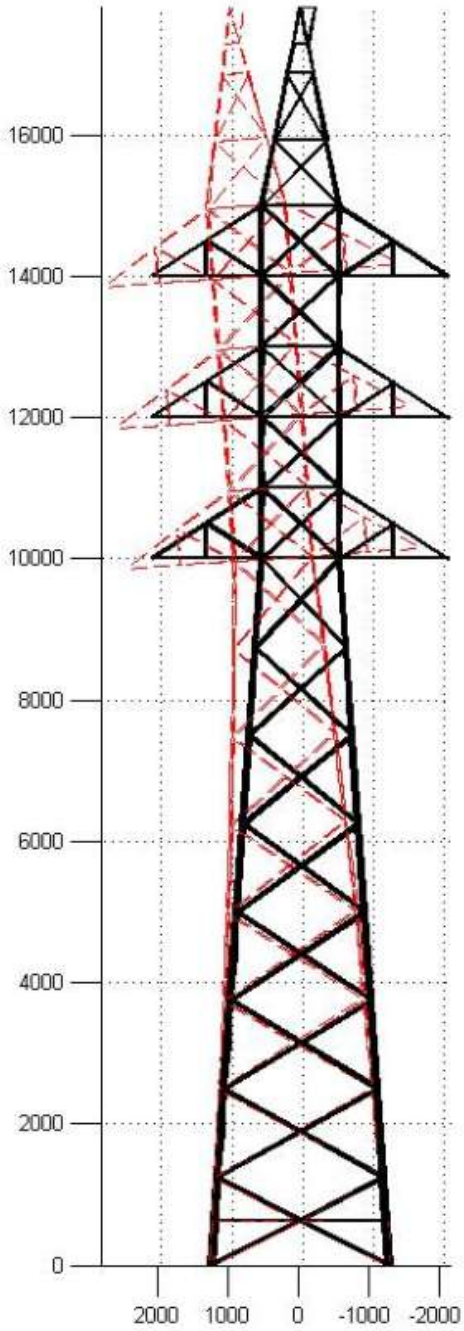
Esfuerzo axil a compresión: La barra se encuentra sometida a una contracción.

- Las reacciones que se producen en los nudos de la base del apoyo, los cuales se encuentran empotrados en la cimentación. Al tener impedidos los desplazamientos, aparecen reacciones que se oponen a las fuerzas aplicadas en la estructura (el sumatorio de las reacciones es de igual magnitud y sentido opuesto a las cargas aplicadas).

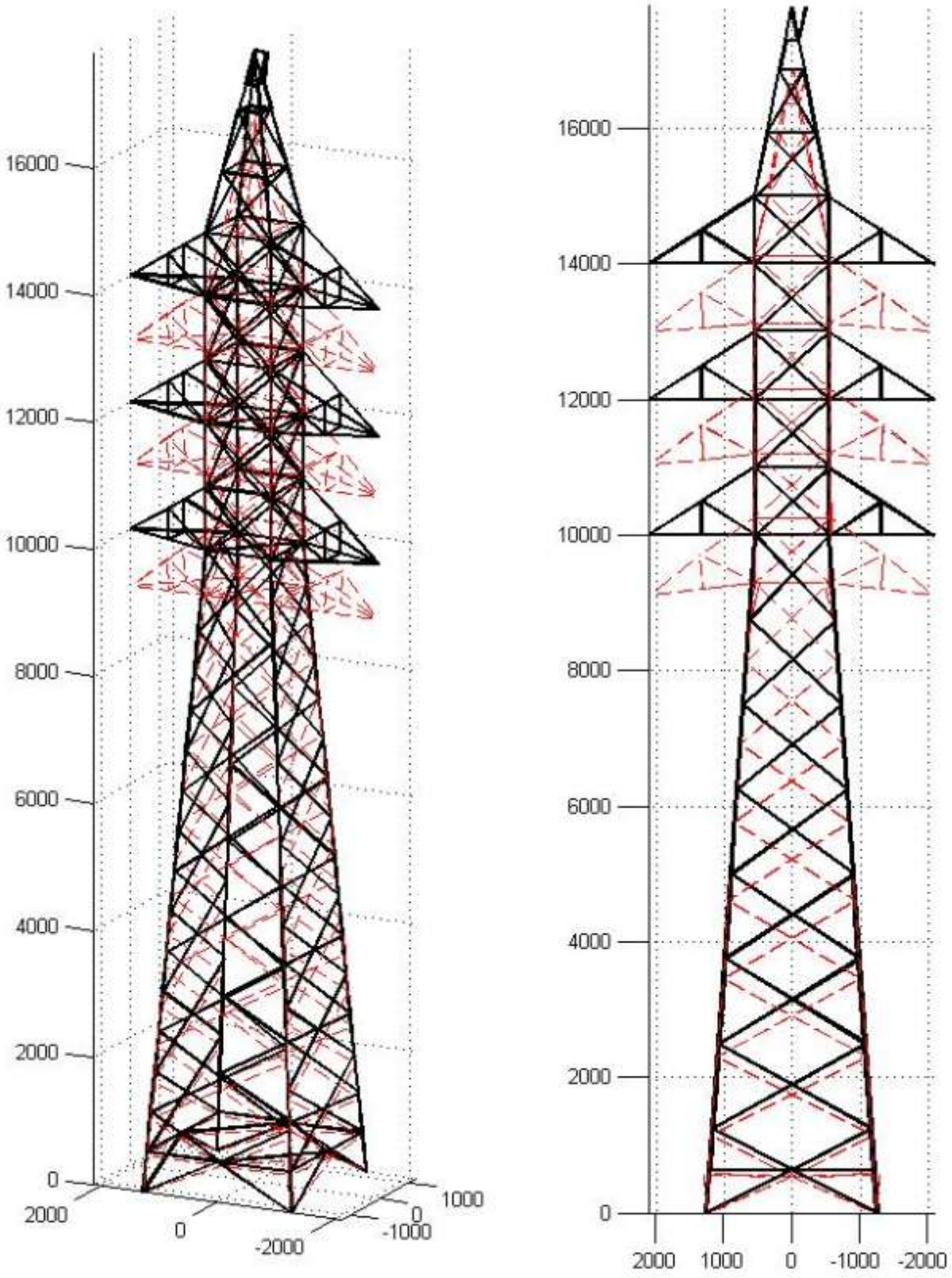
A continuación se incluyen representaciones gráficas de las deformaciones provocadas en el apoyo por algunas de las hipótesis de carga básicas.

Deformación ocasionada por viento de 120 km/h

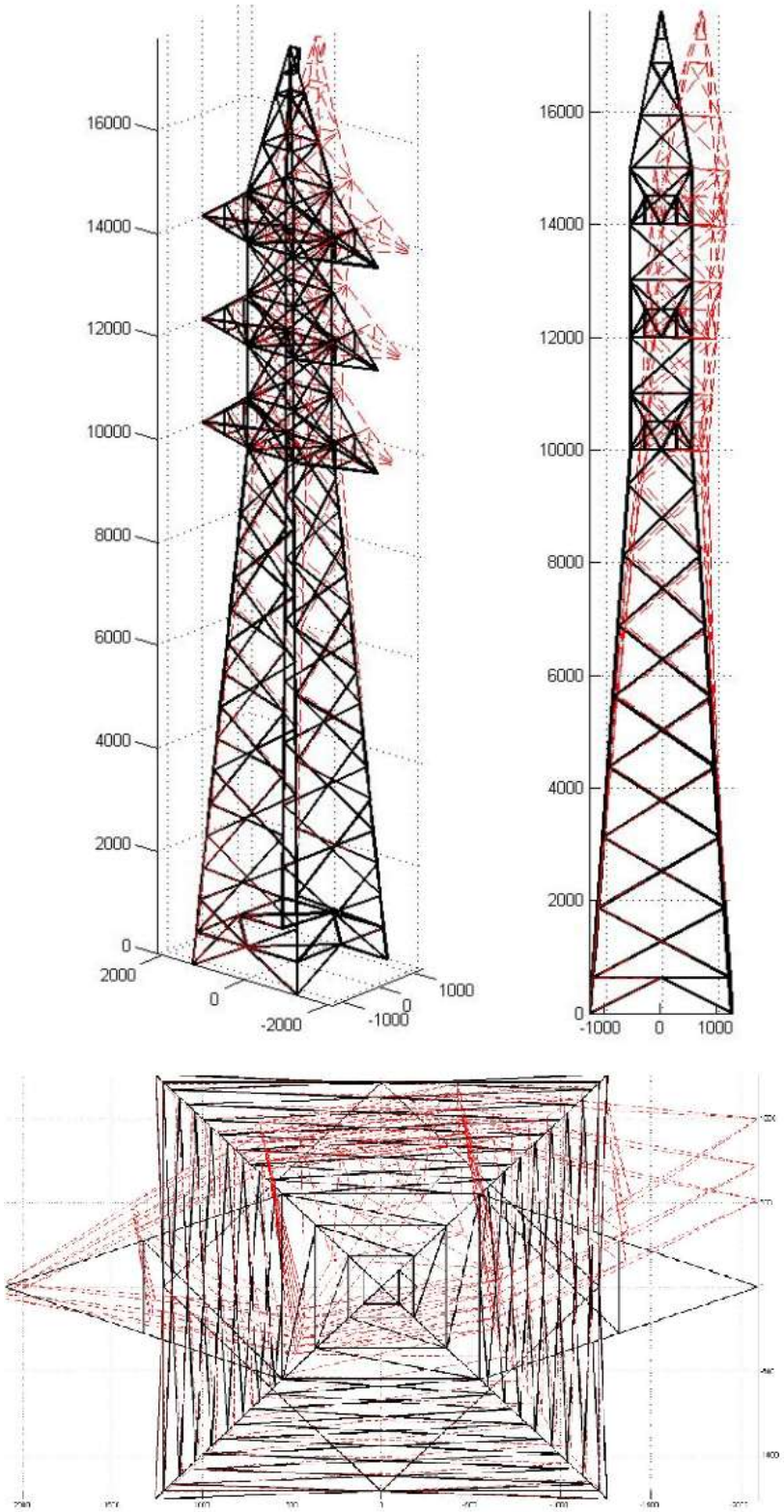


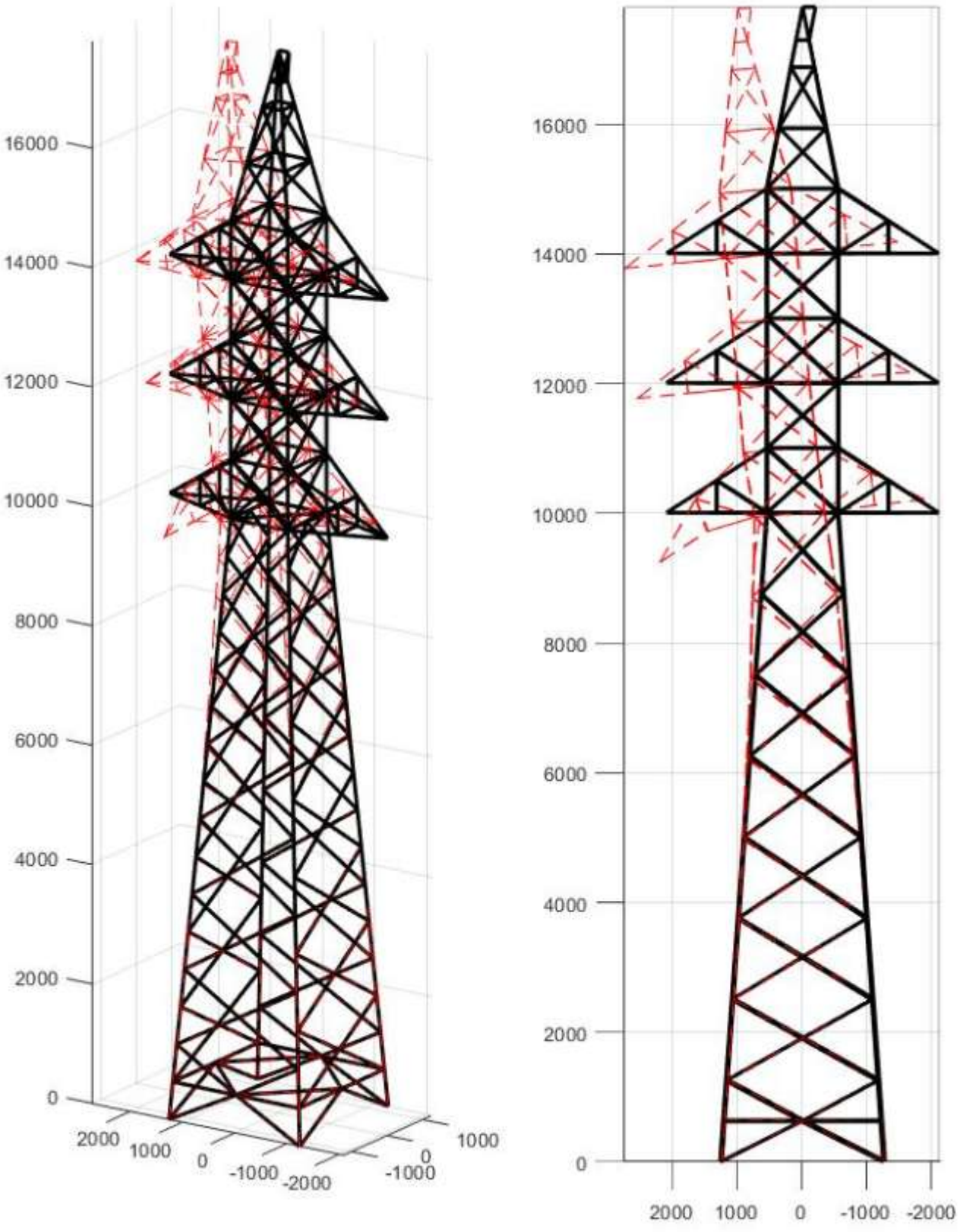
Deformación ocasionada por el peso propio de la estructura



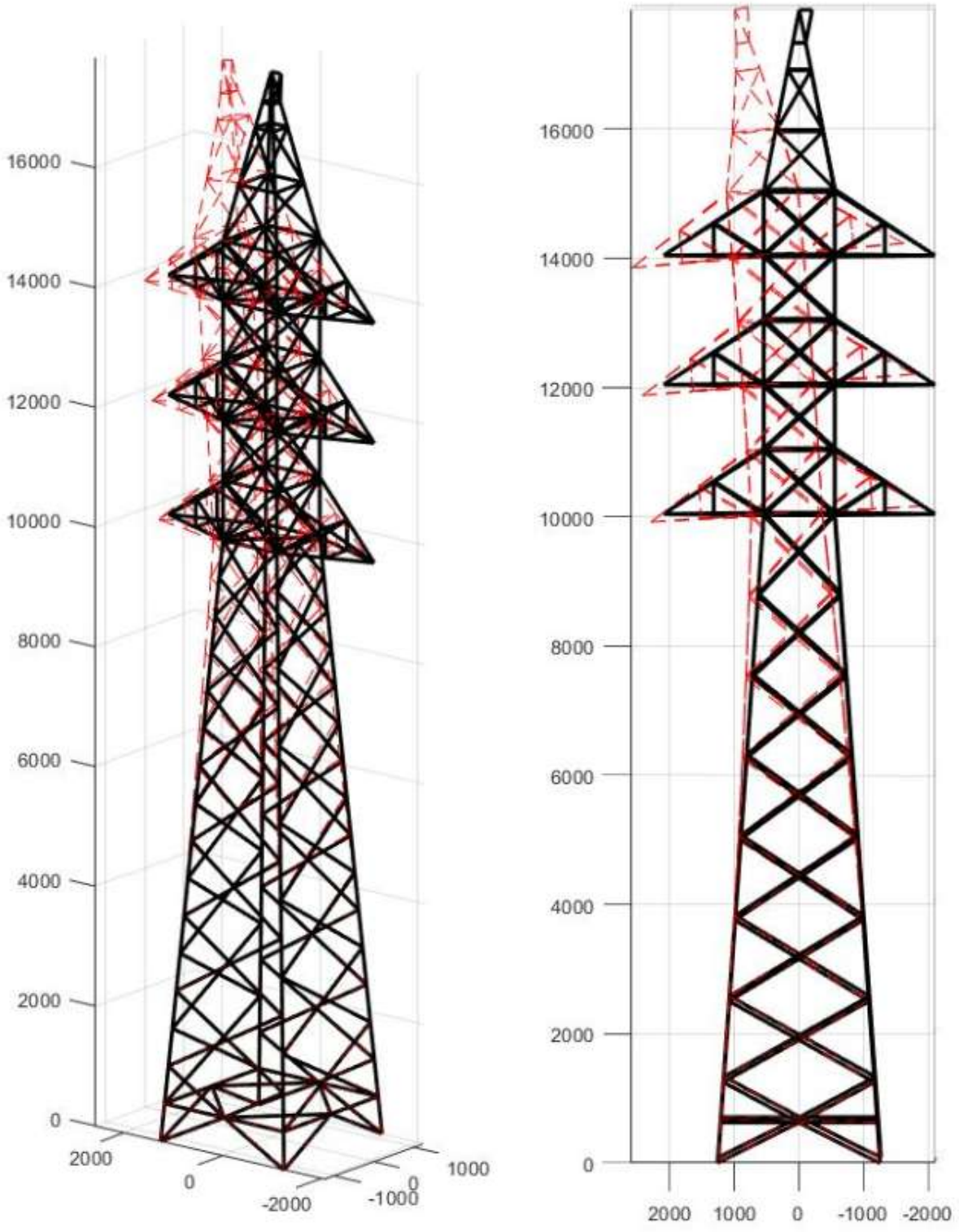
Deformación ocasionada por una carga longitudinal aplicada en la cruceta C1



Deformación ocasionada por una carga vertical aplicada en la cruceta C6

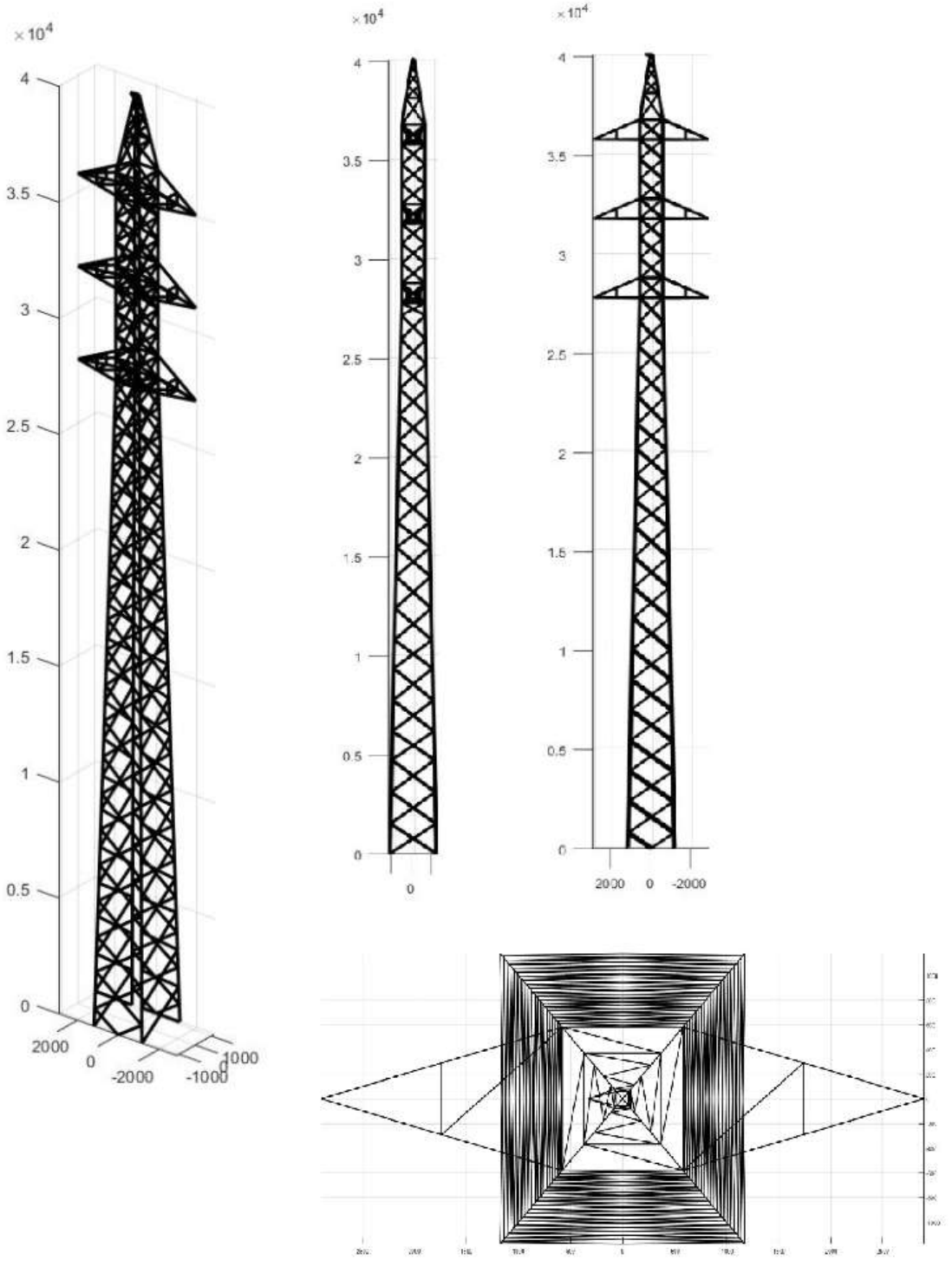


Deformación ocasionada por una carga transversal aplicada en la cruceta CT2



## 4.2 Apoyo 2

Se trata de un apoyo metálico de celosía de 40,108 metros, 371 nudos y 834 barras. Presenta 8 crucetas, 2 de las cuales corresponden a los cables de tierra. Para cada cruceta se define el nudo o los nudos de aplicación de la carga. La base del apoyo quedará definida por 4 nudos empotrados. Los datos correspondientes a este apoyo, se recogen en el documento anexo 1 incluido en el CD del proyecto. En este apoyo se han utilizado barras de 12 perfiles distintos angulares de lados iguales (Perfiles L).

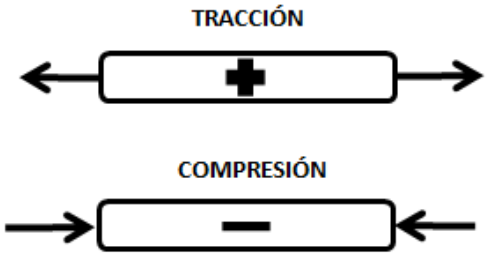


### 4.2.1 Resultados

Todos los resultados numéricos obtenidos se incluyen en el documento anexo 3 incluido en el CD del proyecto, donde encontraremos:

- Los desplazamientos y los giros sufridos por cada uno de los nudos, para cada una de los estados de cargas resueltas. Se parte de la hipótesis de que cualquier tipo de nudo perteneciente a la estructura tiene permitido el giro en los tres ejes. Los nudos empotrados tendrán impedidos los desplazamientos, mientras que los nudos articulados podrán sufrir desplazamientos en los tres sentidos.

- Los esfuerzo resultantes de aplicar los distintos estados de carga. Para cada barra, encontramos el esfuerzo axil, los esfuerzos cortantes, el momento torsor y los momentos cortantes. Debido a la gran cantidad de resultados, tan solo se presentan en este anexo, de forma separada, el esfuerzo axil de cada barra. Los apoyos son siempre diseñados buscando el comportamiento cuasi-isostático de la estructura, con el fin de no someter a las barras a flexiones ni a momentos importantes. Por ello, en el diseño de apoyos, la importancia radica en los esfuerzo axiles de compresión y tracción que se producen, los cuales se transmiten desde el punto donde se producen hasta las cimentaciones.



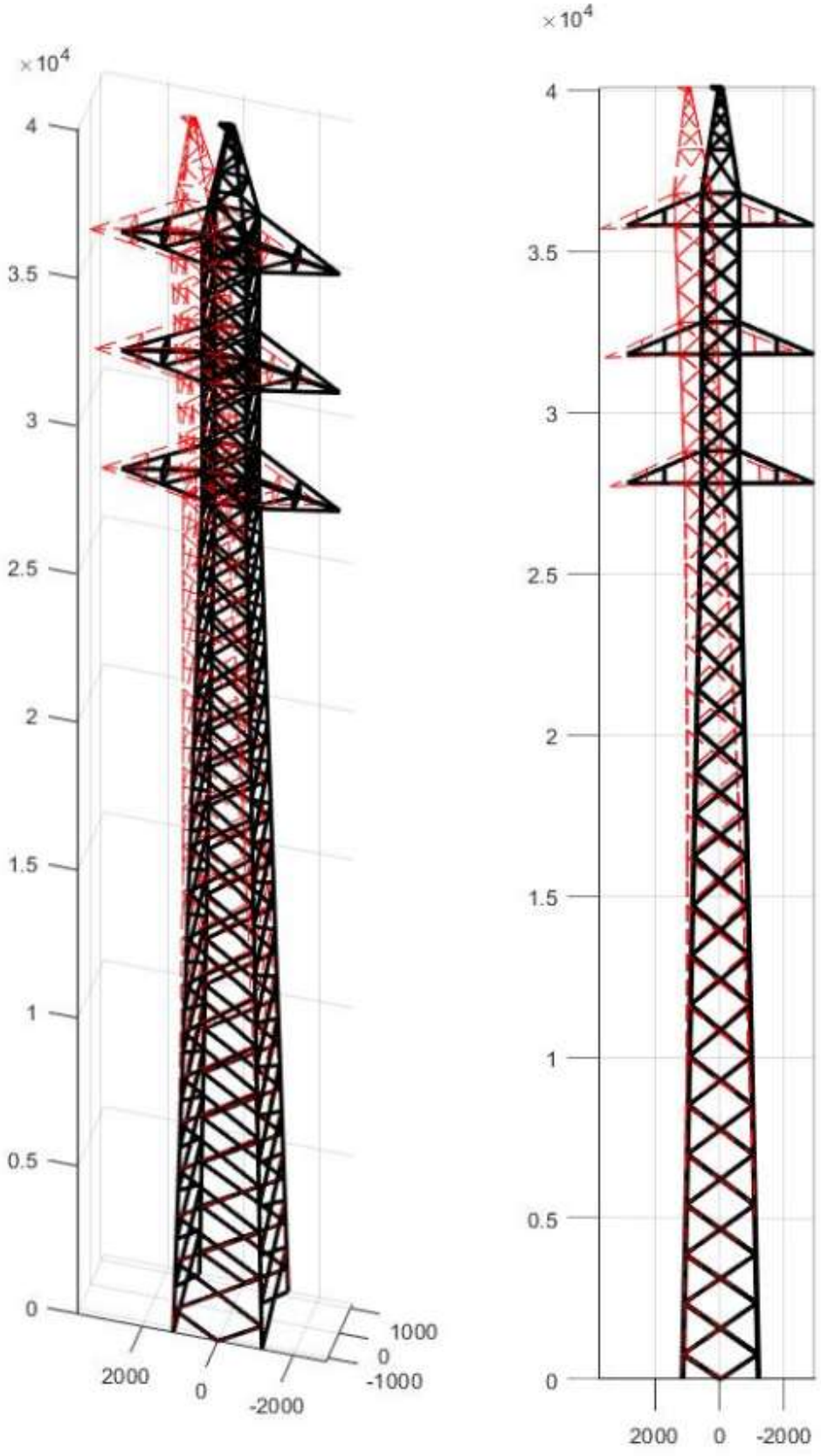

Esfuerzo axil a tracción: La barra se encuentra sometida a un alargamiento.

Esfuerzo axil a compresión: La barra se encuentra sometida a una contracción.

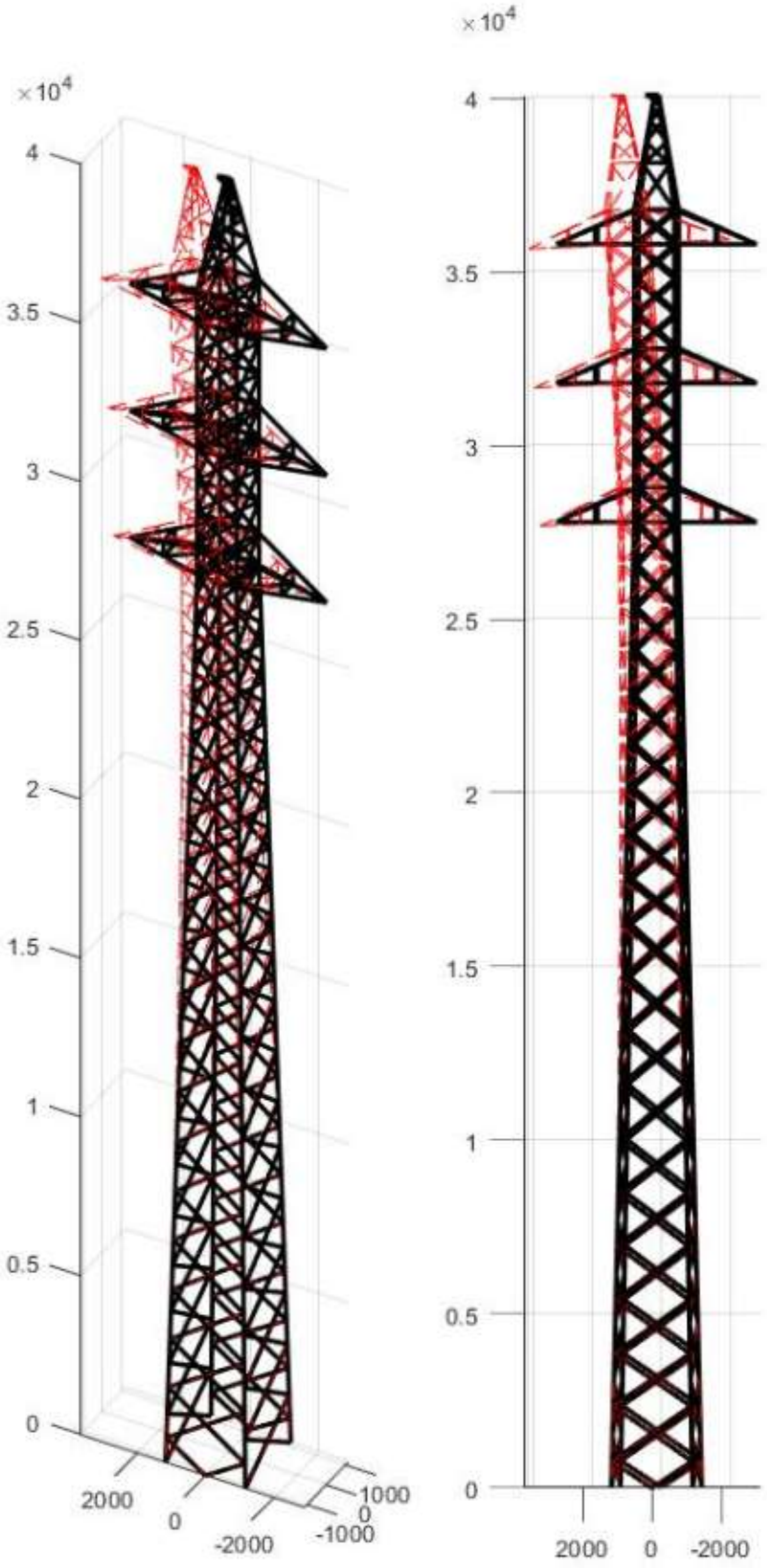
- Las reacciones que se producen en los nudos de la base del apoyo, los cuales se encuentran empotrados en la cimentación. Al tener impedidos los desplazamientos, aparecen reacciones que se oponen a las fuerzas aplicadas en la estructura (el sumatorio de las reacciones es de igual magnitud y sentido opuesto a las cargas aplicadas).

A continuación se incluyen representaciones gráficas de las deformaciones provocadas en el apoyo por algunas de las hipótesis de carga básicas.

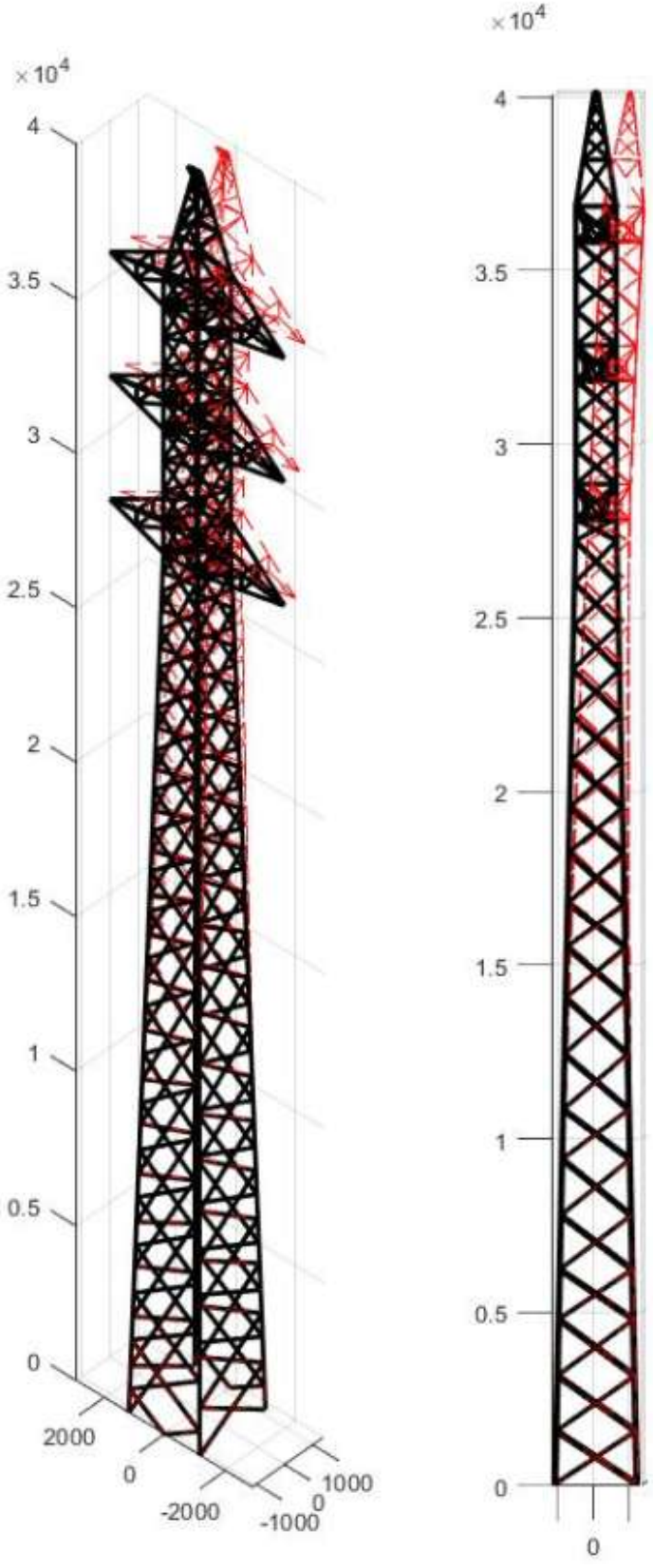
Deformación ocasionada por viento de 120 km/h



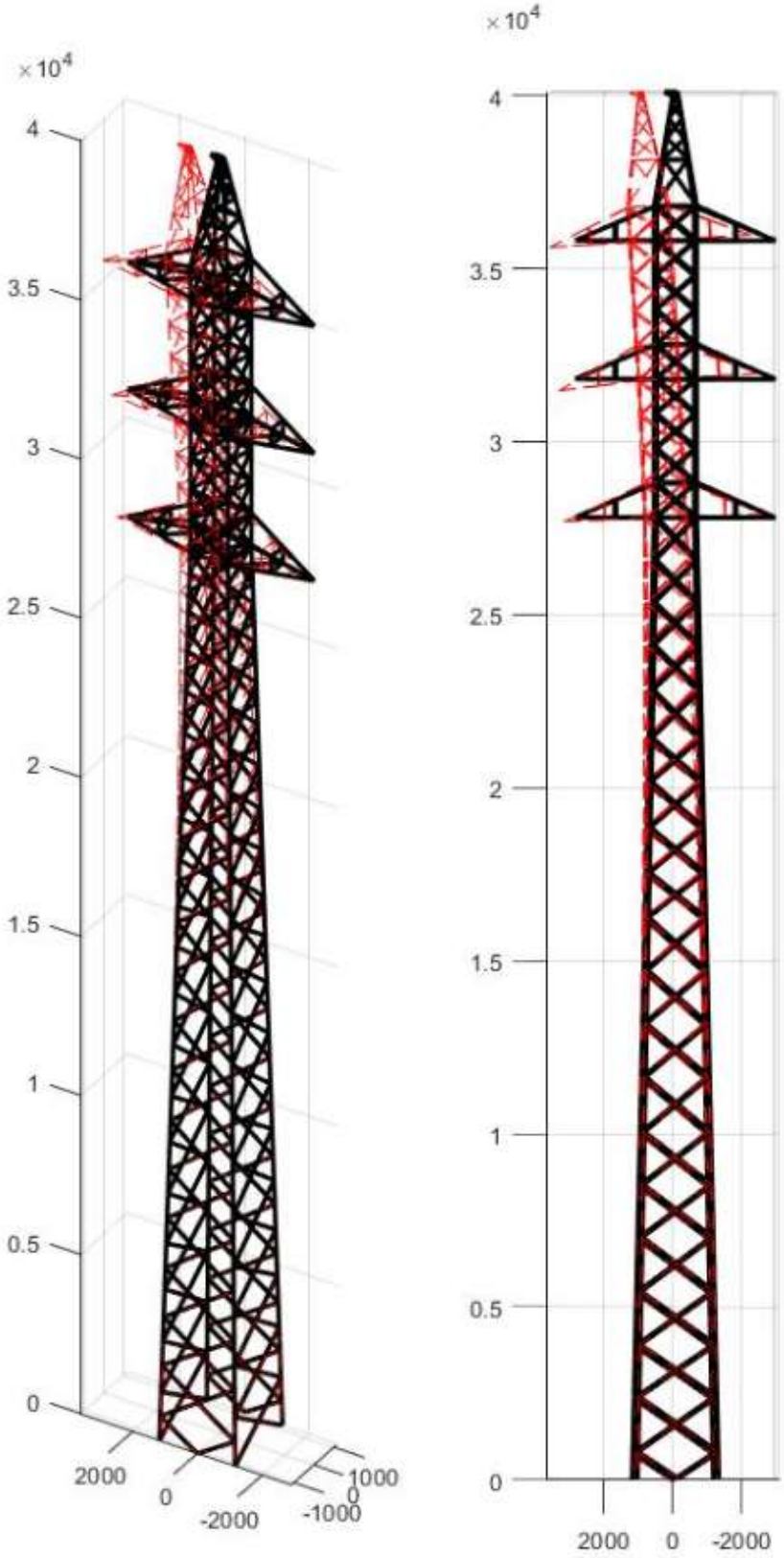
Deformación ocasionada por una carga transversal aplicada en la cruceta C4



Deformación ocasionada por una carga longitudinal aplicada en la cruceta CT1



Deformación ocasionada por una carga vertical aplicada en la cruceta C5



# 5 COMPARATIVA DE TIEMPOS COMPUTACIONALES

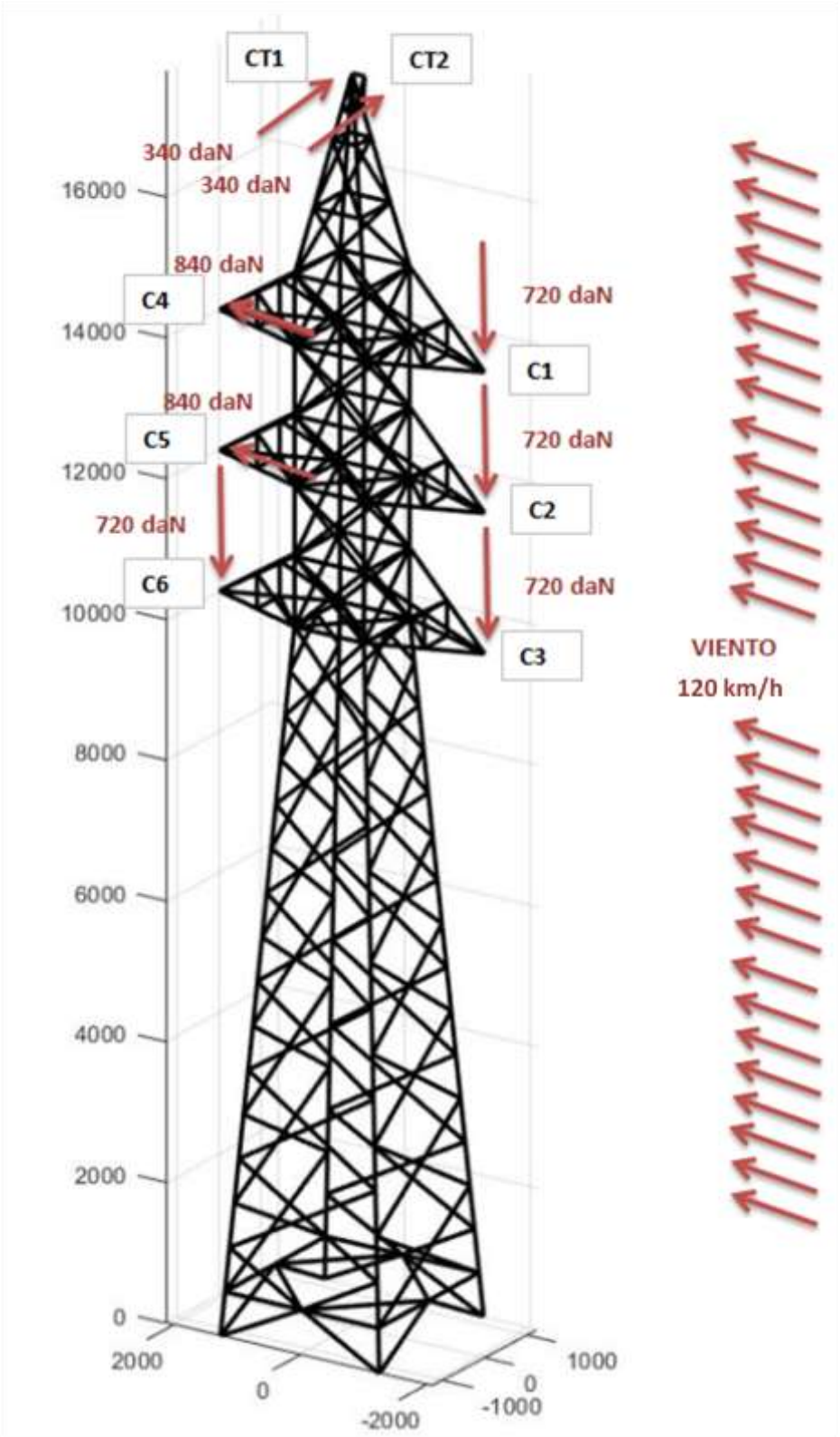
A continuación se muestra una tabla comparativa de los tiempos en segundos de la herramienta desarrollada en Matlab y en VBA para Excel

| | | Lectura de datos | Matrices barras | Matriz de la estructura | Resolución del sistema | Escritura resultados |
|---|---|---|---|---|---|---|
| Apoyo 1 | Matlab | 53,4 | 0,84 | 0,024 | 0,86 | 8,25 |
| | VBA Excel | 124,5 | 2,65 | 2,28125 | 128,8 | 327,4 |
| Apoyo 2 | Matlab | 51,04 | 0,18 | 0,035 | 0,86 | 12,21 |
| | VBA Excel | 145,6 | 3,41 | 2,89 | 147,85 | 345,6 |

La gran capacidad de Matlab para cálculos matriciales y el tratamiento de datos a través de matrices permite poder resolver una estructura en menos de 2 minutos, mientras que con VBA es necesario un periodo de entre 8-10 minutos.

# 6 EJEMPLO DE APLICACIÓN

Supongamos que el apoyo 1 se encuentra sometido a la siguiente hipótesis de carga



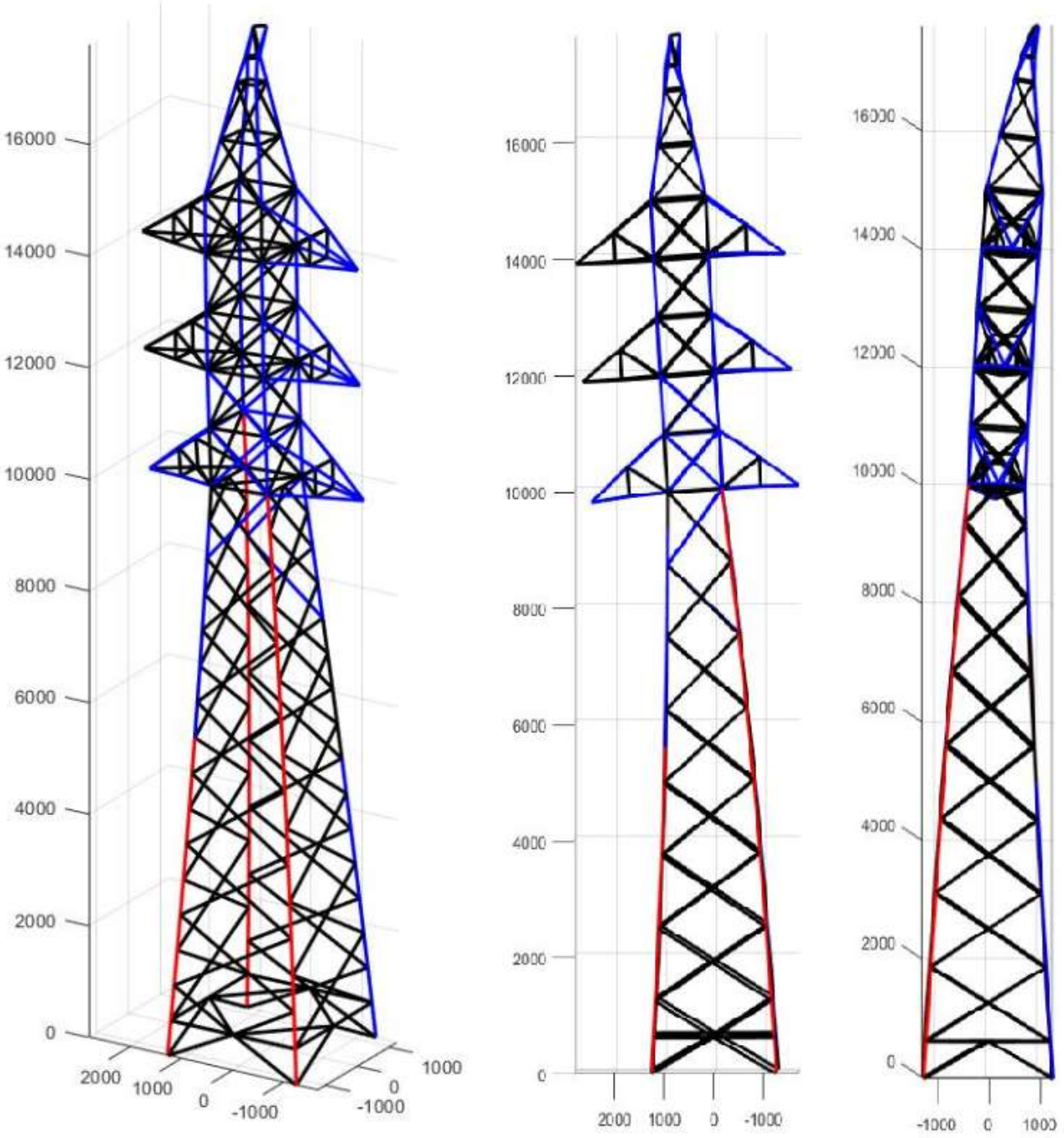
Podríamos descomponer dicha hipótesis como el sumatorio de las siguientes:

- Fuerza del viento a 120 km/h sobre el apoyo
- Carga permanente producida por el peso propio
- Carga unitaria vertical sobre la cruceta C1 x 720 daN
- Carga unitaria vertical sobre la cruceta C2 x 720 daN
- Carga unitaria vertical sobre la cruceta C3 x 720 daN
- Carga unitaria transversal sobre la cruceta C4 x 840 daN
- Carga unitaria transversal sobre la cruceta C5 x 840 daN
- Carga unitaria vertical sobre la cruceta C6 x 720 daN
- Carga unitaria longitudinal sobre la cruceta CT1 x 340 daN
- Carga unitaria longitudinal sobre la cruceta CT2 x 340 daN

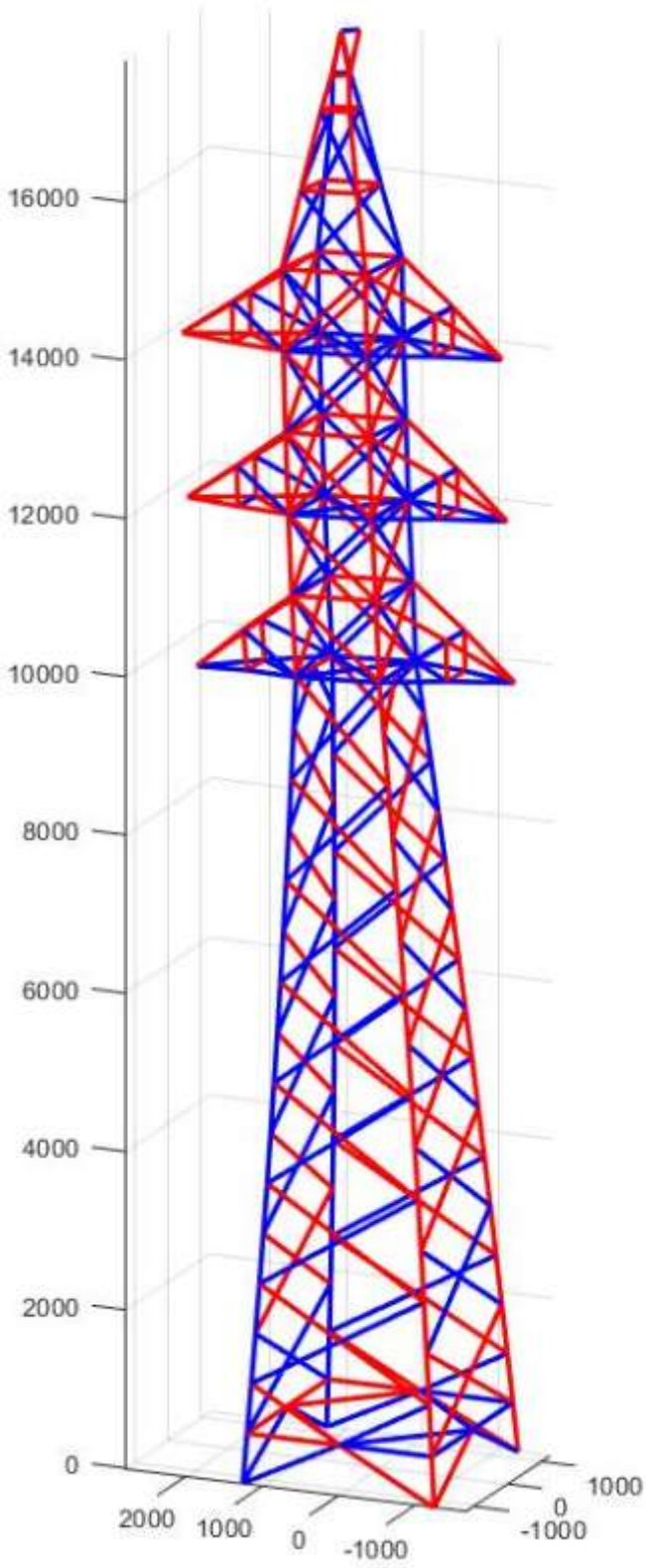
Por lo tanto, a partir de los resultados obtenidos con la herramienta para los estados de carga básicos, podemos obtener los desplazamientos y los esfuerzos que se producen para la hipótesis de carga planteada. Los resultados numéricos se incluyen en el documento anexo 3 incluido en el CD del proyecto.

En la siguiente representación podemos observar la deformación y los esfuerzos que se producen en las barras.

En rojo se representan las barras que sufren un esfuerzo comprendido entre 2500 y 9200 daN en valor absoluto, en azul aquellas cuyo esfuerzo se encuentra entre 500 y 2500 daN en valor absoluto y en negro aquellas barras con esfuerzo comprendidos entre 0 y 500 daN en valor absoluto.



En la siguiente representación, pueden observarse las barras que se encuentran sometidas a tracción (color rojo) y las barras que se encuentran sometidas a compresión (color azul).



# 7 CONCLUSIONES

Los apoyos están destinados a mantener los conductores a una altura suficiente sobre el nivel del terreno, teniendo en cuenta la flecha máxima, así como las distancias reglamentarias a las instalaciones cruzadas o bajo las que han de pasar a están en sus proximidades. Una vez determinadas en un proyecto las distancias eléctricas y la altura del apoyo, debe establecerse la geometría básica del apoyo y este debe soportar las cargas a las que está sometido y que deben ser resistidas en las condiciones de seguridad requeridas. Para ello, es necesario, determinar para todas las hipótesis de carga planteadas por el reglamento, los esfuerzos y desplazamientos, realizando un cálculo estructural complejo para cada una de ellas de forma individual.

Si descomponemos estas hipótesis de cargas como el sumatorio de varias hipótesis básicas, llegaríamos al listado de cargas resueltas por esta herramienta: viento, peso, carga unitaria vertical/transversal/longitudinal para cada cruceta.

El programa permite obtener de forma rápida todos los esfuerzos y desplazamientos de forma individual de todas estas cargas que se estudian de forma combinada para el diseño de los apoyos. Combinando estos resultados, puede resolverse cualquier hipótesis, ya sea de las planteadas por el reglamento o establecida por el proyectista, sin necesidad de volver a realizar los cálculos estructurales necesarios para ello.

Matlab, nos permite implementar un completo análisis mediante métodos matriciales de rigidez para este tipo de estructuras, debido a la gran fuerza que presenta en cálculo matricial sin olvidar la posibilidad que nos brinda de trabajar de forma eficiente con matrices dispersas. También cuenta con un potente leguaje de programación, una gran cantidad de documentación y abundancia de libros de aplicación para todos los niveles. Todo ello, son ventajas respecto a otros software utilizados para el cálculo de este tipo de estructuras como Ansys, PLS-Tower donde no tenemos tantas facilidades para adaptar el cálculo a las necesidades que se nos presentan.

# 8 FUTUROS DESARROLLOS

Determinados los esfuerzos de tracción y compresión de cada elemento, es responsabilidad tanto del ingeniero de la empresa fabricante, como del proyectista de torres singulares, estudiar estos resultados en las hipótesis de cargas necesarias y determinar si la opción de diseño del apoyo planteado es óptima. Un futuro desarrollo, para aliviar el trabajo del proyectista, sería implementar un nuevo módulo para combinar los resultados obtenidos para resolver una hipótesis de carga compleja definida, que determine puntos críticos del diseño, con una base de datos de perfiles y un proceso de optimización iterativo de recalculo para que el programa sea capaz de proponer un rediseño siguiendo un criterio de mínimo peso posible, pero manteniendo la resistencia del perfil y la seguridad de toda la estructura.

Las posibilidades de este programa son enormes, y una vez familiarizado con el entorno y los comandos de programación, es sencillo modificarlo, ampliarlo o adaptarlo para las necesidades que se puedan plantear.

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- Instrucción Técnica Complementaria ITC-LAT 07 para Líneas aéreas con conductores desnudos.

- Real Decreto 223/2008, de 15 de febrero, por el que se aprueban el Reglamento sobre condiciones técnicas y garantías de seguridad en líneas eléctricas de alta tensión y sus instrucciones técnicas complementarias ITC-LAT 01 a 09.

- Interfaz gráfica de usuario Matlab. Diego Orlando Barragán Guerrero.