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|  | AltoQi Eberick 2018 Plena | |
| | Leilson Campos Rezende Rezende Engenharia | 11/5/2021 12:14:59 |

Relatório de Combinações

Térreo Lance 1

| CASO: Peso próprio (G1) | | | | | | | | | |
|-------------------------|------------------|------------------|-----------------------|------------------|-----------------------|------------------|--------------------|--------------------|----------------|
| Elemento | Carga (kgf/m) | Rd Nd (tf) | Mxi Mxf (kgf.m) | MxMáx (kgf.m) | Myi Myf (kgf.m) | MyMáx (kgf.m) | Vxi Vxf (tf) | Vyi Vyf (tf) | Mtd (kgf/m) |
| VA1 - 1 | 187.50 | 0.00 0.07 | -325.63 451.42 | 451.42 | -4.97 0.14 | 0.14 | 0.58 -0.22 | 0.00 0.00 | 0.13 |
| VA1 - 2 | 187.50 | 0.00 0.07 | 451.43 21.55 | 451.43 | 0.14 -7.47 | 0.00 | -0.31 0.51 | 0.01 -0.01 | -0.02 |
| VA1 - 3 | 187.50 | 0.00 0.07 | 21.76 -574.27 | 21.76 | -7.47 11.08 | 11.08 | -0.97 1.08 | -0.03 0.03 | -0.01 |
| VA1 - 4 | 187.50 | -0.01 0.00 | -491.25 64.92 | 174.53 | 10.40 -7.94 | 10.40 | 0.50 0.20 | 0.00 0.00 | 0.09 |
| VA1 - 5 | 187.50 | -0.02 0.00 | 65.29 -373.82 | 65.29 | -7.94 10.41 | 10.41 | -0.81 0.90 | -0.04 0.04 | -0.65 |
| VA1 - 6 | 187.50 | -0.02 0.00 | -270.60 -94.44 | 74.11 | 8.30 -4.12 | 8.30 | 0.36 0.25 | 0.00 0.00 | -0.01 |
| VA2 | 187.50 | 0.00 0.00 | 0.00 0.00 | 91.42 | 0.00 0.00 | 0.00 | 0.19 0.19 | 0.00 0.00 | -0.66 |
| VA3 - 1 | 187.50 | 0.00 0.00 | 0.00 -378.09 | 269.52 | 0.00 1.34 | 1.34 | 0.32 0.49 | 0.00 0.00 | 0.17 |
| VA3 - 2 | 187.50 | 0.00 0.00 | -379.71 1.35 | 1.35 | 4.55 0.00 | 4.55 | 0.39 -0.10 | 0.00 0.00 | 0.00 |
| VA4 - 1 | 225.00 | 0.00 0.02 | -407.89 -477.50 | 269.32 | 14.31 -6.40 | 14.31 | 0.55 0.58 | 0.00 0.00 | 0.23 |
| VA4 - 2 | 225.00 | 0.00 0.03 | -488.04 390.63 | 390.63 | -6.07 -2.92 | 0.00 | 0.67 -0.22 | 0.00 0.00 | -0.21 |
| VA4 - 3 | 225.00 | 0.00 0.03 | 390.62 315.52 | 390.62 | -2.92 0.69 | 0.00 | -0.20 0.28 | -0.01 0.01 | -0.21 |
| VA4 - 4 | 225.00 | 0.00 0.03 | 315.55 -55.12 | 315.55 | 0.69 12.46 | 12.46 | -0.42 0.59 | -0.02 0.02 | -0.21 |
| VA4 - 5 | 225.00 | 0.00 0.03 | -55.32 -761.09 | 0.00 | 12.46 -0.95 | 12.46 | -1.20 1.33 | 0.02 -0.02 | -1.04 |
| VA4 - 6 | 225.00 | 0.00 0.00 | -794.70 -47.17 | 0.00 | -4.20 -0.07 | 0.00 | 0.86 -0.63 | 0.00 0.00 | 0.40 |
| VA4 - 7 | 225.00 | 0.00 0.00 | -47.16 344.91 | 344.91 | -0.07 -0.25 | 0.00 | 0.49 -0.24 | 0.00 0.00 | 0.00 |
| VA4 - 8 | 225.00 | 0.00 0.00 | 344.71 191.06 | 366.28 | -0.25 8.70 | 0.00 | 0.10 0.28 | -0.01 0.01 | 0.00 |
| VA4 - 9 | 225.00 | 0.00 0.00 | 192.30 -606.02 | 192.30 | 8.70 -10.31 | 8.70 | -1.29 1.42 | 0.03 -0.03 | 0.00 |
| VA4 - 10 | 225.00 | -0.02 0.00 | -536.10 -28.76 | 0.00 | -4.04 1.33 | 1.33 | 0.63 -0.41 | -0.01 0.01 | 0.31 |
| VA4 - 11 | 225.00 | -0.02 0.00 | -27.41 112.08 | 112.08 | 1.33 2.76 | 2.76 | 0.32 -0.19 | 0.00 0.00 | 0.31 |
| VA4 - 12 | 225.00 | -0.02 0.00 | 112.22 -208.12 | 112.22 | 2.76 -5.96 | 2.76 | 0.01 0.38 | 0.01 -0.01 | 0.31 |
| VA4 - 13 | 225.00 | 0.00 0.00 | -194.30 -102.78 | 97.24 | -2.48 0.99 | 0.99 | 0.36 0.30 | 0.00 0.00 | -0.43 |
| VA5 - 1 | 187.50 | 0.00 0.01 | -100.34 128.08 | 162.05 | -3.39 2.07 | 2.07 | 0.31 0.11 | 0.00 0.00 | -0.20 |

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| VA5 - 2 | 187.50 | 0.00 0.01 | 128.05 -362.81 | 128.05 | 2.07 -0.60 | 2.07 | -0.26 0.50 | 0.00 0.00 | -0.20 |
| VA5 - 3 | 187.50 | 0.00 0.01 | -454.84 68.61 | 68.61 | 0.57 -0.35 | 0.57 | 0.61 -0.43 | 0.00 0.00 | 0.18 |
| VA5 - 4 | 187.50 | 0.00 0.01 | 68.61 262.94 | 262.94 | -0.35 3.28 | 0.00 | 0.28 -0.08 | 0.00 0.00 | 0.18 |
| VA5 - 5 | 187.50 | 0.00 0.01 | 263.14 -370.09 | 263.14 | 3.28 -1.48 | 3.28 | -0.07 0.49 | 0.00 0.00 | 0.18 |
| VA5 - 6 | 187.50 | 0.00 0.01 | -351.98 167.76 | 167.76 | 4.45 -3.65 | 4.45 | 0.48 -0.20 | 0.01 -0.01 | -0.10 |
| VA5 - 7 | 187.50 | 0.00 0.01 | 167.61 -39.34 | 167.61 | -1.25 2.38 | 2.38 | 0.02 0.28 | 0.00 0.00 | -2.06 |
| VA6 - 1 | 187.50 | 0.00 0.00 | 1.71 118.27 | 134.23 | -7.64 -2.12 | 0.00 | 0.22 0.08 | 0.00 0.00 | 0.32 |
| VA6 - 2 | 187.50 | 0.00 0.00 | 119.39 -684.09 | 119.39 | -2.12 6.21 | 6.21 | -0.38 0.67 | -0.01 0.01 | 0.32 |
| VA7 - 1 | 187.50 | -0.04 0.00 | -184.77 384.72 | 384.72 | -5.06 -0.98 | 0.00 | 0.51 -0.22 | 0.00 0.00 | -0.60 |
| VA7 - 2 | 187.50 | -0.04 0.00 | 383.60 0.00 | 383.60 | -0.98 0.00 | 0.00 | -0.09 0.39 | 0.00 0.00 | -0.60 |
| VA8 - 1 | 281.25 | 0.00 0.09 | -1251.30 -2103.09 | 944.48 | -5.95 4.38 | 4.38 | 1.11 1.31 | 0.00 0.00 | -0.51 |
| VA8 - 2 | 281.25 | 0.00 0.11 | -2849.37 -1906.02 | 1557.71 | 5.10 -4.66 | 5.10 | 1.57 1.40 | 0.00 0.00 | 0.41 |
| VA9 - 1 | 225.00 | 0.00 0.03 | -485.33 -718.64 | 350.30 | 12.38 -10.78 | 12.38 | 0.61 0.69 | 0.00 0.00 | 1.11 |
| VA9 - 2 | 225.00 | 0.00 0.05 | -751.86 -731.43 | 397.29 | -5.68 3.03 | 3.03 | 0.72 0.71 | 0.00 0.00 | -0.08 |
| VA10 - 1 | 225.00 | 0.00 0.03 | -583.69 -447.46 | 252.37 | 6.75 -10.87 | 6.75 | 0.61 0.56 | 0.00 0.00 | 0.04 |
| VA10 - 2 | 225.00 | 0.00 0.01 | -361.02 -206.59 | 168.13 | -15.24 12.07 | 12.07 | 0.49 0.41 | -0.01 0.01 | -1.22 |
| VA11 - 1 | 187.50 | 0.00 0.00 | -56.35 -97.83 | 11.59 | 4.26 -1.39 | 4.26 | 0.16 0.20 | 0.00 0.00 | 0.41 |
| VA11 - 2 | 187.50 | -0.03 0.00 | -238.53 139.24 | 215.50 | -1.38 0.25 | 0.25 | 0.41 0.17 | 0.00 0.00 | -0.29 |
| VA11 - 3 | 187.50 | -0.03 0.00 | 138.57 -318.61 | 138.57 | 0.25 1.13 | 1.13 | -0.36 0.55 | 0.00 0.00 | -0.29 |
| VA12 - 1 | 187.50 | -0.01 0.00 | 0.00 425.21 | 491.69 | 0.00 0.25 | 0.25 | 0.43 0.16 | 0.00 0.00 | 0.01 |
| VA12 - 2 | 187.50 | -0.01 0.00 | 425.87 0.00 | 425.87 | 0.25 0.00 | 0.25 | -0.34 0.53 | 0.00 0.00 | 0.01 |
| VA13 | 150.00 | 0.00 0.00 | 0.00 0.00 | 69.10 | 0.00 0.00 | 0.00 | 0.14 0.14 | 0.00 0.00 | 0.03 |
| VA14 - 1 | 187.50 | 0.00 0.04 | 0.00 544.40 | 544.40 | 0.00 -0.74 | 0.00 | 0.62 -0.42 | 0.00 0.00 | 0.21 |
| VA14 - 2 | 187.50 | 0.00 0.04 | 544.58 0.00 | 572.06 | -0.74 0.00 | 0.00 | 0.10 0.46 | 0.00 0.00 | 0.21 |
| VA15 | 150.00 | 0.00 0.00 | 0.00 0.00 | 69.10 | 0.00 0.00 | 0.00 | 0.14 0.14 | 0.00 0.00 | 0.01 |
| VA16 | 150.00 | 0.00 0.01 | 0.00 0.00 | 69.10 | 0.00 0.00 | 0.00 | 0.14 0.14 | 0.00 0.00 | -0.20 |
| VA17 - 1 | 187.50 | 0.00 0.04 | 0.00 956.71 | 956.71 | 0.00 1.59 | 1.59 | 1.01 -0.81 | 0.00 0.00 | -1.24 |
| VA17 - 2 | 187.50 | 0.00 0.04 | 956.54 0.00 | 956.54 | -1.62 0.00 | 0.00 | -0.07 0.60 | 0.00 0.00 | 0.37 |
| VA18 | 187.50 | 0.00 0.02 | -97.87 66.29 | 90.27 | -5.02 7.36 | 7.36 | 0.27 0.10 | -0.01 0.01 | 0.29 |
| VA19 | 187.50 | 0.00 0.00 | 0.00 0.00 | 24.80 | 0.00 0.00 | 0.00 | 0.10 0.10 | 0.00 0.00 | -1.35 |
| VA20 | 187.50 | -0.01 0.00 | -1.95 0.00 | 85.51 | -2.39 0.00 | 0.00 | 0.18 0.18 | 0.00 0.00 | 0.14 |
| VA21 - 1 | 187.50 | -0.01 | -393.39 | 520.09 | 3.86 | 3.86 | 0.59 | 0.00 | 1.24 |


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| | | 0.00 | 520.09 | | -2.76 | | 0.02 | 0.00 | |
| VA21 - 2 | 187.50 | -0.01 0.00 | 520.41 -402.20 | 520.41 | 4.88 -8.25 | 4.88 | -0.24 0.63 | 0.01 -0.01 | -0.47 |
| VA22 | 187.50 | 0.00 0.02 | -108.14 -184.51 | 165.97 | -4.36 6.19 | 6.19 | 0.32 0.36 | 0.00 0.00 | 0.04 |
| VA23 | 187.50 | 0.00 0.00 | 0.00 0.00 | 244.34 | 0.00 0.00 | 0.00 | 0.30 0.30 | 0.00 0.00 | 1.12 |
| VA24 - 1 | 225.00 | 0.00 0.03 | -495.59 -710.46 | 348.94 | -15.99 11.25 | 11.25 | 0.62 0.69 | 0.00 0.00 | -1.51 |
| VA24 - 2 | 225.00 | 0.00 0.04 | -727.83 -784.14 | 383.53 | 1.12 10.57 | 10.57 | 0.71 0.73 | 0.00 0.00 | -0.07 |
| VA25 - 1 | 225.00 | 0.00 0.05 | -820.87 437.73 | 437.73 | 32.77 -23.25 | 32.77 | 0.87 -0.44 | 0.03 -0.03 | 1.00 |
| VA25 - 2 | 225.00 | 0.00 0.05 | 438.33 -618.17 | 444.47 | -23.25 5.65 | 5.65 | 0.05 0.69 | -0.01 0.01 | 1.00 |
| VA25 - 3 | 225.00 | 0.00 0.02 | -442.13 -176.94 | 149.33 | 5.26 -6.71 | 5.26 | 0.52 0.38 | 0.00 0.00 | -0.07 |

| CASO: Adicional (G2) | | | | | | | | | |
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| Elemento | Carga (kgf/m) | Rd Nd (tf) | Mxi Mxf (kgf.m) | MxMáx (kgf.m) | Myi Myf (kgf.m) | MyMáx (kgf.m) | Vxi Vxf (tf) | Vyi Vyf (tf) | Mtd (kgf/m) |
| VA1 - 1 | 585.00 | 0.00 0.22 | -981.41 1390.71 | 1390.71 | -3.17 0.80 | 0.80 | 1.79 -0.65 | 0.00 0.00 | 1.21 |
| VA1 - 2 | 585.00 | 0.00 0.23 | 1390.79 21.35 | 1390.79 | 0.80 -3.24 | 0.00 | -1.00 1.61 | 0.00 0.00 | 0.74 |
| VA1 - 3 | 585.00 | 0.00 0.22 | 22.02 -1853.20 | 22.02 | -3.24 -0.52 | 0.00 | -3.06 3.40 | 0.00 0.00 | 0.73 |
| VA1 - 4 | 585.00 | 0.00 0.06 | -1497.02 191.93 | 546.77 | 4.30 -4.71 | 4.30 | 1.55 0.65 | 0.00 0.00 | 0.30 |
| VA1 - 5 | 585.00 | 0.00 0.06 | 193.04 -1183.33 | 193.04 | -4.71 5.05 | 5.05 | -2.53 2.83 | -0.02 0.02 | -1.91 |
| VA1 - 6 | 585.00 | 0.00 0.01 | -905.28 -210.69 | 258.68 | 4.23 -0.86 | 4.23 | 1.17 0.74 | 0.00 0.00 | -0.62 |
| VA2 | 585.00 | 0.00 0.00 | 0.00 0.00 | 285.23 | 0.00 0.00 | 0.00 | 0.58 0.58 | 0.00 0.00 | -2.01 |
| VA3 - 1 | 585.00 | 0.00 0.00 | 0.00 -1180.02 | 840.77 | 0.00 -0.07 | 0.00 | 0.99 1.54 | 0.00 0.00 | 0.59 |
| VA3 - 2 | 585.00 | 0.00 0.00 | -1184.93 3.97 | 3.97 | 1.19 0.00 | 1.19 | 1.22 -0.31 | 0.00 0.00 | 0.00 |
| VA4 - 1 | 585.00 | 0.00 0.13 | -970.92 -1333.73 | 702.55 | 22.47 -6.44 | 22.47 | 1.40 1.54 | 0.01 -0.01 | 0.68 |
| VA4 - 2 | 585.00 | 0.00 0.14 | -1390.72 1195.88 | 1195.88 | 0.04 -1.18 | 0.04 | 1.89 -0.74 | 0.00 0.00 | -0.46 |
| VA4 - 3 | 585.00 | 0.00 0.14 | 1195.80 978.66 | 1195.80 | -1.18 0.52 | 0.00 | -0.60 0.79 | -0.01 0.01 | -0.46 |
| VA4 - 4 | 585.00 | 0.00 0.14 | 978.64 -175.43 | 978.64 | 0.52 2.92 | 2.92 | -1.35 1.78 | 0.00 0.00 | -0.46 |
| VA4 - 5 | 585.00 | 0.00 0.14 | -176.07 -2333.97 | 0.00 | 2.92 -1.29 | 2.92 | -3.71 4.03 | 0.01 -0.01 | -3.12 |
| VA4 - 6 | 585.00 | 0.00 0.08 | -2337.43 -82.97 | 0.00 | -4.97 0.95 | 0.95 | 2.54 -1.95 | -0.01 0.01 | 0.52 |
| VA4 - 7 | 585.00 | 0.00 0.08 | -82.68 1066.74 | 1066.74 | 0.95 -0.92 | 0.95 | 1.38 -0.75 | 0.00 0.00 | -0.18 |
| VA4 - 8 | 585.00 | 0.00 0.08 | 1066.25 552.98 | 1093.89 | -0.92 3.61 | 0.00 | 0.19 0.80 | 0.00 0.00 | -0.18 |
| VA4 - 9 | 585.00 | 0.00 0.08 | 556.76 -1867.57 | 556.76 | 3.61 -6.56 | 3.61 | -3.95 4.29 | 0.02 -0.02 | -0.18 |
| VA4 - 10 | 585.00 | 0.00 0.01 | -1656.16 -158.09 | 0.00 | -3.04 0.62 | 0.62 | 1.83 -1.26 | 0.00 0.00 | 1.12 |
| VA4 - 11 | 585.00 | 0.00 0.01 | -154.12 281.89 | 281.89 | 0.62 2.28 | 2.28 | 0.95 -0.63 | 0.00 0.00 | 1.12 |

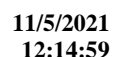
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| VA4 - 12 | 585.00 | 0.00 0.02 | 282.14 -480.80 | 283.64 | 2.28 -0.92 | 2.28 | 0.07 0.95 | 0.00 0.00 | 1.12 |
| VA4 - 13 | 585.00 | 0.00 0.05 | -518.29 -234.37 | 265.99 | 0.74 -8.20 | 0.74 | 0.96 0.77 | 0.00 0.00 | -1.21 |
| VA5 - 1 | 585.00 | 0.00 0.05 | -304.16 425.12 | 526.58 | 4.53 -1.11 | 4.53 | 0.99 0.35 | 0.00 0.00 | -0.27 |
| VA5 - 2 | 585.00 | 0.00 0.05 | 425.14 -1243.21 | 425.14 | -1.11 -1.52 | 0.00 | -0.91 1.67 | 0.00 0.00 | -0.27 |
| VA5 - 3 | 585.00 | 0.00 0.07 | -1556.18 244.96 | 244.96 | 2.47 -1.58 | 2.47 | 2.09 -1.50 | 0.00 0.00 | 0.34 |
| VA5 - 4 | 585.00 | 0.00 0.07 | 244.67 909.16 | 909.16 | -1.58 1.53 | 0.00 | 0.93 -0.30 | 0.00 0.00 | 0.34 |
| VA5 - 5 | 585.00 | 0.00 0.07 | 909.64 -1200.15 | 909.64 | 1.53 -1.97 | 1.53 | -0.26 1.59 | 0.00 0.00 | 0.34 |
| VA5 - 6 | 585.00 | 0.00 0.06 | -1121.26 512.03 | 512.03 | 4.63 -7.68 | 4.63 | 1.52 -0.63 | 0.01 -0.01 | -0.35 |
| VA5 - 7 | 585.00 | 0.00 0.06 | 511.78 -122.51 | 511.78 | -9.04 -14.17 | 0.00 | 0.06 0.86 | 0.00 0.00 | -7.38 |
| VA6 - 1 | 585.00 | 0.00 0.03 | 5.26 498.36 | 518.81 | 0.01 -9.00 | 0.00 | 0.78 0.16 | 0.01 -0.01 | 1.16 |
| VA6 - 2 | 585.00 | 0.00 0.03 | 501.98 -1880.95 | 501.98 | -9.00 17.59 | 17.59 | -1.11 2.00 | -0.02 0.02 | 1.16 |
| VA7 - 1 | 585.00 | -0.02 0.00 | -590.79 1193.16 | 1193.16 | -28.57 3.80 | 3.80 | 1.59 -0.68 | -0.02 0.02 | -2.45 |
| VA7 - 2 | 585.00 | -0.02 0.00 | 1189.54 0.00 | 1189.54 | 3.80 0.00 | 3.80 | -0.27 1.21 | 0.00 0.00 | -2.45 |
| VA8 - 1 | 585.00 | 0.00 0.40 | -2433.48 -4530.46 | 1984.33 | 1.28 -3.74 | 1.28 | 2.27 2.76 | 0.00 0.00 | -0.83 |
| VA8 - 2 | 585.00 | 0.00 0.62 | -5960.51 -3811.21 | 3306.98 | 6.06 1.44 | 6.06 | 3.29 2.89 | 0.00 0.00 | 0.67 |
| VA9 - 1 | 585.00 | 0.00 0.09 | -1239.67 -1884.53 | 914.50 | 21.61 -17.10 | 21.61 | 1.59 1.81 | 0.01 -0.01 | 1.84 |
| VA9 - 2 | 585.00 | 0.00 0.13 | -1957.75 -1902.20 | 1031.30 | -8.81 6.53 | 6.53 | 1.87 1.85 | 0.00 0.00 | -0.19 |
| VA10 - 1 | 585.00 | 0.00 0.08 | -1512.82 -1172.76 | 653.31 | 15.14 -20.80 | 15.14 | 1.59 1.46 | 0.01 -0.01 | 0.38 |
| VA10 - 2 | 585.00 | 0.00 0.04 | -949.00 -526.70 | 437.75 | -24.71 13.13 | 13.13 | 1.27 1.06 | -0.01 0.01 | -2.19 |
| VA11 - 1 | 585.00 | 0.00 0.02 | -148.54 -490.14 | 0.00 | -1.91 5.45 | 5.45 | 0.39 0.74 | 0.00 0.00 | 1.21 |
| VA11 - 2 | 585.00 | 0.00 0.07 | -860.17 562.94 | 735.69 | -2.33 1.35 | 1.35 | 1.37 0.45 | 0.00 0.00 | -0.82 |
| VA11 - 3 | 585.00 | 0.00 0.07 | 560.93 -785.76 | 560.93 | 1.35 5.05 | 5.05 | -1.03 1.63 | 0.00 0.00 | -0.82 |
| VA12 - 1 | 585.00 | -0.01 0.00 | 0.00 1326.70 | 1534.09 | 0.00 1.84 | 1.84 | 1.34 0.49 | 0.00 0.00 | 0.08 |
| VA12 - 2 | 585.00 | -0.01 0.00 | 1328.71 0.00 | 1328.71 | 1.84 0.00 | 1.84 | -1.07 1.65 | 0.00 0.00 | 0.08 |
| VA13 | 585.00 | 0.00 0.00 | 0.00 0.00 | 269.49 | 0.00 0.00 | 0.00 | 0.57 0.57 | 0.00 0.00 | -0.02 |
| VA14 - 1 | 585.00 | 0.00 0.01 | 0.00 1698.46 | 1698.46 | 0.00 -0.59 | 0.00 | 1.92 -1.31 | 0.00 0.00 | 0.67 |
| VA14 - 2 | 585.00 | 0.00 0.01 | 1699.04 0.00 | 1784.80 | -0.59 0.00 | 0.00 | 0.32 1.45 | 0.00 0.00 | 0.67 |
| VA15 | 585.00 | -0.01 0.00 | 0.00 0.00 | 269.49 | 0.00 0.00 | 0.00 | 0.57 0.57 | 0.00 0.00 | 0.29 |
| VA16 | 585.00 | 0.00 0.00 | 0.00 0.00 | 269.49 | 0.00 0.00 | 0.00 | 0.57 0.57 | 0.00 0.00 | -0.48 |
| VA17 - 1 | 585.00 | 0.00 0.02 | 0.00 2985.01 | 2985.01 | 0.00 0.92 | 0.92 | 3.15 -2.54 | 0.00 0.00 | -3.78 |
| VA17 - 2 | 585.00 | 0.00 0.02 | 2984.43 0.00 | 2984.43 | -0.34 0.00 | 0.00 | -0.22 1.88 | 0.00 0.00 | 1.12 |
| VA18 | 585.00 | 0.00 | -187.36 | 246.48 | -5.51 | 6.78 | 0.71 | -0.01 | 0.76 |

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| | | 0.03 | 99.58 | | 6.78 | | 0.42 | 0.01 | |
| VA19 | 585.00 | 0.00 0.00 | 0.00 0.00 | 77.37 | 0.00 0.00 | 0.00 | 0.31 0.31 | 0.00 0.00 | -3.97 |
| VA20 | 585.00 | 0.00 0.00 | -7.03 0.00 | 266.37 | 1.35 0.00 | 1.35 | 0.57 0.56 | 0.00 0.00 | 0.26 |
| VA21 - 1 | 585.00 | 0.00 0.16 | -1189.83 1794.26 | 1794.26 | 20.96 -27.70 | 20.96 | 1.87 0.01 | 0.02 -0.02 | 3.75 |
| VA21 - 2 | 585.00 | 0.00 0.16 | 1795.42 -1165.53 | 1795.42 | -27.71 -1.12 | 0.00 | -0.78 2.02 | -0.01 0.01 | -1.51 |
| VA22 | 585.00 | 0.00 0.06 | -379.84 -543.70 | 511.37 | -3.80 4.52 | 4.52 | 1.02 1.11 | 0.00 0.00 | 0.23 |
| VA23 | 585.00 | 0.00 0.02 | 0.00 0.00 | 762.34 | 0.00 0.00 | 0.00 | 0.94 0.94 | 0.00 0.00 | 3.62 |
| VA24 - 1 | 585.00 | 0.00 0.09 | -1266.84 -1860.73 | 911.94 | -35.08 20.41 | 20.41 | 1.60 1.80 | -0.01 0.01 | -2.78 |
| VA24 - 2 | 585.00 | 0.00 0.12 | -1880.29 -2075.72 | 985.52 | 4.40 10.32 | 10.32 | 1.83 1.89 | 0.00 0.00 | -0.21 |
| VA25 - 1 | 585.00 | 0.00 0.14 | -2258.47 1269.46 | 1269.46 | 37.60 -6.90 | 37.60 | 2.40 -1.28 | 0.02 -0.02 | 2.27 |
| VA25 - 2 | 585.00 | 0.00 0.14 | 1271.91 -1687.97 | 1274.57 | -6.90 -16.79 | 0.00 | 0.07 1.86 | 0.00 0.00 | 2.27 |
| VA25 - 3 | 585.00 | 0.00 0.05 | -1191.98 -439.71 | 382.15 | -18.14 8.28 | 8.28 | 1.36 0.98 | -0.01 0.01 | -1.01 |


| CASO: Solo (S) | | | | | | | | | |
|----------------|------------------|------------------|-----------------------|------------------|-----------------------|------------------|--------------------|--------------------|----------------|
| Elemento | Carga (kgf/m) | Rd Nd (tf) | Mxi Mxf (kgf.m) | MxMáx (kgf.m) | Myi Myf (kgf.m) | MyMáx (kgf.m) | Vxi Vxf (tf) | Vyi Vyf (tf) | Mtd (kgf/m) |
| VA1 - 1 | 0.00 | 0.00 0.00 | 0.00 0.00 | 0.00 | 0.00 0.00 | 0.00 | 0.00 0.00 | 0.00 0.00 | 0.00 |
| VA1 - 2 | 0.00 | 0.00 0.00 | 0.00 0.00 | 0.00 | 0.00 0.00 | 0.00 | 0.00 0.00 | 0.00 0.00 | 0.00 |
| VA1 - 3 | 0.00 | 0.00 0.00 | 0.00 0.00 | 0.00 | 0.00 0.00 | 0.00 | 0.00 0.00 | 0.00 0.00 | 0.00 |
| VA1 - 4 | 0.00 | 0.00 0.00 | 0.00 0.00 | 0.00 | 0.00 0.00 | 0.00 | 0.00 0.00 | 0.00 0.00 | 0.00 |
| VA1 - 5 | 0.00 | 0.00 0.00 | 0.00 0.00 | 0.00 | 0.00 0.00 | 0.00 | 0.00 0.00 | 0.00 0.00 | 0.00 |
| VA1 - 6 | 0.00 | 0.00 0.00 | 0.00 0.00 | 0.00 | 0.00 0.00 | 0.00 | 0.00 0.00 | 0.00 0.00 | 0.00 |
| VA2 | 0.00 | 0.00 0.00 | 0.00 0.00 | 0.00 | 0.00 0.00 | 0.00 | 0.00 0.00 | 0.00 0.00 | 0.00 |
| VA3 - 1 | 0.00 | 0.00 0.00 | 0.00 0.00 | 0.00 | 0.00 0.00 | 0.00 | 0.00 0.00 | 0.00 0.00 | 0.00 |
| VA3 - 2 | 0.00 | 0.00 0.00 | 0.00 0.00 | 0.00 | 0.00 0.00 | 0.00 | 0.00 0.00 | 0.00 0.00 | 0.00 |
| VA4 - 1 | 0.00 | 0.00 0.00 | 0.00 0.00 | 0.00 | 0.00 0.00 | 0.00 | 0.00 0.00 | 0.00 0.00 | 0.00 |
| VA4 - 2 | 0.00 | 0.00 0.00 | 0.00 0.00 | 0.00 | 0.00 0.00 | 0.00 | 0.00 0.00 | 0.00 0.00 | 0.00 |
| VA4 - 3 | 0.00 | 0.00 0.00 | 0.00 0.00 | 0.00 | 0.00 0.00 | 0.00 | 0.00 0.00 | 0.00 0.00 | 0.00 |
| VA4 - 4 | 0.00 | 0.00 0.00 | 0.00 0.00 | 0.00 | 0.00 0.00 | 0.00 | 0.00 0.00 | 0.00 0.00 | 0.00 |
| VA4 - 5 | 0.00 | 0.00 0.00 | 0.00 0.00 | 0.00 | 0.00 0.00 | 0.00 | 0.00 0.00 | 0.00 0.00 | 0.00 |
| VA4 - 6 | 0.00 | 0.00 0.00 | 0.00 0.00 | 0.00 | 0.00 0.00 | 0.00 | 0.00 0.00 | 0.00 0.00 | 0.00 |
| VA4 - 7 | 0.00 | 0.00 0.00 | 0.00 0.00 | 0.00 | 0.00 0.00 | 0.00 | 0.00 0.00 | 0.00 0.00 | 0.00 |
| VA4 - 8 | 0.00 | 0.00 0.00 | 0.00 0.00 | 0.00 | 0.00 0.00 | 0.00 | 0.00 0.00 | 0.00 0.00 | 0.00 |

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|----------|------|--------------|--------------|------|--------------|------|--------------|--------------|------|
| | | 0.00 | 0.00 | | 0.00 | | 0.00 | 0.00 | |
| VA17 - 1 | 0.00 | 0.00 0.00 | 0.00 0.00 | 0.00 | 0.00 0.00 | 0.00 | 0.00 0.00 | 0.00 0.00 | 0.00 |
| VA17 - 2 | 0.00 | 0.00 0.00 | 0.00 0.00 | 0.00 | 0.00 0.00 | 0.00 | 0.00 0.00 | 0.00 0.00 | 0.00 |
| VA18 | 0.00 | 0.00 0.00 | 0.00 0.00 | 0.00 | 0.00 0.00 | 0.00 | 0.00 0.00 | 0.00 0.00 | 0.00 |
| VA19 | 0.00 | 0.00 0.00 | 0.00 0.00 | 0.00 | 0.00 0.00 | 0.00 | 0.00 0.00 | 0.00 0.00 | 0.00 |
| VA20 | 0.00 | 0.00 0.00 | 0.00 0.00 | 0.00 | 0.00 0.00 | 0.00 | 0.00 0.00 | 0.00 0.00 | 0.00 |
| VA21 - 1 | 0.00 | 0.00 0.00 | 0.00 0.00 | 0.00 | 0.00 0.00 | 0.00 | 0.00 0.00 | 0.00 0.00 | 0.00 |
| VA21 - 2 | 0.00 | 0.00 0.00 | 0.00 0.00 | 0.00 | 0.00 0.00 | 0.00 | 0.00 0.00 | 0.00 0.00 | 0.00 |
| VA22 | 0.00 | 0.00 0.00 | 0.00 0.00 | 0.00 | 0.00 0.00 | 0.00 | 0.00 0.00 | 0.00 0.00 | 0.00 |
| VA23 | 0.00 | 0.00 0.00 | 0.00 0.00 | 0.00 | 0.00 0.00 | 0.00 | 0.00 0.00 | 0.00 0.00 | 0.00 |
| VA24 - 1 | 0.00 | 0.00 0.00 | 0.00 0.00 | 0.00 | 0.00 0.00 | 0.00 | 0.00 0.00 | 0.00 0.00 | 0.00 |
| VA24 - 2 | 0.00 | 0.00 0.00 | 0.00 0.00 | 0.00 | 0.00 0.00 | 0.00 | 0.00 0.00 | 0.00 0.00 | 0.00 |
| VA25 - 1 | 0.00 | 0.00 0.00 | 0.00 0.00 | 0.00 | 0.00 0.00 | 0.00 | 0.00 0.00 | 0.00 0.00 | 0.00 |
| VA25 - 2 | 0.00 | 0.00 0.00 | 0.00 0.00 | 0.00 | 0.00 0.00 | 0.00 | 0.00 0.00 | 0.00 0.00 | 0.00 |
| VA25 - 3 | 0.00 | 0.00 0.00 | 0.00 0.00 | 0.00 | 0.00 0.00 | 0.00 | 0.00 0.00 | 0.00 0.00 | 0.00 |

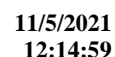
| CASO: Acidental (Q) | | | | | | | | | |
|---------------------|------------------|------------------|-----------------------|------------------|-----------------------|------------------|--------------------|--------------------|----------------|
| Elemento | Carga (kgf/m) | Rd Nd (tf) | Mxi Mxf (kgf.m) | MxMáx (kgf.m) | Myi Myf (kgf.m) | MyMáx (kgf.m) | Vxi Vxf (tf) | Vyi Vyf (tf) | Mtd (kgf/m) |
| VA1 - 1 | 0.00 | -0.01 0.00 | -124.24 56.27 | 56.27 | -47.19 2.55 | 2.55 | 0.09 -0.09 | -0.03 0.03 | -2.76 |
| VA1 - 2 | 0.00 | -0.01 0.00 | 56.16 153.55 | 153.55 | 2.55 -62.85 | 0.00 | 0.09 -0.09 | 0.06 -0.06 | -2.77 |
| VA1 - 3 | 0.00 | -0.03 0.00 | 153.60 207.45 | 207.45 | -62.85 117.52 | 0.00 | 0.09 -0.09 | -0.31 0.31 | -2.62 |
| VA1 - 4 | 0.00 | -0.35 0.00 | -123.21 43.38 | 43.38 | 94.61 -69.98 | 94.61 | 0.04 -0.04 | 0.04 -0.04 | 0.07 |
| VA1 - 5 | 0.00 | -0.38 0.00 | 43.49 66.36 | 66.36 | -69.98 93.40 | 93.40 | 0.04 -0.04 | -0.32 0.32 | -0.42 |
| VA1 - 6 | 0.00 | -0.29 0.00 | 193.49 -278.38 | 193.49 | 73.48 -39.60 | 73.48 | -0.14 0.14 | 0.03 -0.03 | 1.93 |
| VA2 | 0.00 | 0.00 0.00 | 0.00 0.00 | 0.00 | 0.00 0.00 | 0.00 | 0.00 0.00 | 0.00 0.00 | -0.36 |
| VA3 - 1 | 0.00 | 0.00 0.01 | 0.00 1.02 | 1.02 | 0.00 14.04 | 14.04 | 0.00 0.00 | 0.00 0.00 | -0.09 |
| VA3 - 2 | 0.00 | 0.00 0.00 | 0.88 0.88 | 0.88 | 45.42 0.00 | 45.42 | 0.00 0.00 | 0.03 -0.03 | 0.00 |
| VA4 - 1 | 0.00 | -0.03 0.00 | -114.61 68.63 | 68.63 | 20.93 -23.22 | 20.93 | 0.04 -0.04 | 0.01 -0.01 | -0.16 |
| VA4 - 2 | 0.00 | 0.00 0.03 | 38.39 36.23 | 38.39 | -55.85 -26.14 | 0.00 | 0.00 0.00 | -0.02 0.02 | -0.57 |
| VA4 - 3 | 0.00 | 0.00 0.03 | 36.34 36.02 | 36.34 | -26.14 6.05 | 0.00 | 0.00 0.00 | -0.10 0.10 | -0.57 |
| VA4 - 4 | 0.00 | 0.00 0.03 | 36.09 35.35 | 36.09 | 6.05 120.70 | 120.70 | 0.00 0.00 | -0.16 0.16 | -0.57 |
| VA4 - 5 | 0.00 | 0.00 0.02 | 35.31 34.64 | 35.31 | 120.70 -2.52 | 120.70 | 0.00 0.00 | 0.22 -0.22 | -0.04 |


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|----------|------|---------------|--------------------|--------|-----------------|-------|---------------|---------------|-------|
| VA4 - 6 | 0.00 | -0.11 0.00 | -204.39 -109.49 | 0.00 | -24.81 -2.73 | 0.00 | 0.09 -0.09 | -0.02 0.02 | 1.63 |
| VA4 - 7 | 0.00 | -0.11 0.00 | -109.64 -8.11 | 0.00 | -2.73 0.44 | 0.44 | 0.09 -0.09 | 0.00 0.00 | 0.72 |
| VA4 - 8 | 0.00 | -0.11 0.00 | -8.35 150.81 | 150.81 | 0.44 78.60 | 78.60 | 0.09 -0.09 | -0.05 0.05 | 0.72 |
| VA4 - 9 | 0.00 | -0.09 0.00 | 150.84 206.49 | 206.49 | 78.60 -90.70 | 0.00 | 0.09 -0.09 | 0.29 -0.29 | 0.72 |
| VA4 - 10 | 0.00 | -0.13 0.00 | 233.98 101.74 | 233.98 | -22.65 6.46 | 0.00 | -0.14 0.14 | -0.03 0.03 | -0.23 |
| VA4 - 11 | 0.00 | -0.13 0.00 | 102.63 27.65 | 102.63 | 6.46 6.93 | 0.00 | -0.14 0.14 | 0.00 0.00 | -0.23 |
| VA4 - 12 | 0.00 | -0.14 0.00 | 28.06 -208.53 | 28.06 | 6.93 -39.79 | 6.93 | -0.14 0.14 | 0.03 -0.03 | -0.23 |
| VA4 - 13 | 0.00 | -0.01 0.00 | 10.28 -32.20 | 10.28 | -7.84 -8.94 | 0.00 | -0.01 0.01 | 0.00 0.00 | -0.14 |
| VA5 - 1 | 0.00 | -0.05 0.00 | -5.38 1.01 | 1.01 | -51.88 26.79 | 26.79 | 0.00 0.00 | -0.03 0.03 | -1.01 |
| VA5 - 2 | 0.00 | -0.05 0.00 | 0.94 4.58 | 4.58 | 26.79 3.27 | 26.79 | 0.00 0.00 | 0.02 -0.02 | -1.01 |
| VA5 - 3 | 0.00 | -0.06 0.00 | 21.12 13.40 | 21.12 | -2.83 2.57 | 0.00 | -0.01 0.01 | -0.01 0.01 | 0.61 |
| VA5 - 4 | 0.00 | -0.06 0.00 | 13.53 5.28 | 13.53 | 2.57 29.78 | 29.78 | -0.01 0.01 | -0.03 0.03 | 0.61 |
| VA5 - 5 | 0.00 | -0.06 0.00 | 5.51 -11.95 | 5.51 | 29.78 -11.42 | 29.78 | -0.01 0.01 | 0.02 -0.02 | 0.61 |
| VA5 - 6 | 0.00 | 0.00 0.00 | 14.16 -0.76 | 14.16 | 41.73 -27.84 | 41.73 | -0.01 0.01 | 0.05 -0.05 | 0.10 |
| VA5 - 7 | 0.00 | 0.00 0.02 | -1.18 -17.28 | 0.00 | 3.37 -25.22 | 3.37 | -0.01 0.01 | 0.02 -0.02 | -0.59 |
| VA6 - 1 | 0.00 | 0.00 0.01 | 0.01 -0.29 | 0.01 | 5.14 0.40 | 5.14 | 0.00 0.00 | 0.00 0.00 | 0.05 |
| VA6 - 2 | 0.00 | 0.00 0.01 | -0.28 -0.56 | 0.00 | 0.40 0.50 | 0.50 | 0.00 0.00 | 0.00 0.00 | 0.05 |
| VA7 - 1 | 0.00 | 0.00 0.00 | -3.14 -1.58 | 0.00 | -0.77 2.02 | 2.02 | 0.00 0.00 | 0.00 0.00 | -0.05 |
| VA7 - 2 | 0.00 | 0.00 0.00 | -1.59 0.00 | 0.00 | 2.02 0.00 | 2.02 | 0.00 0.00 | 0.00 0.00 | -0.05 |
| VA8 - 1 | 0.00 | 0.00 0.00 | 1.30 -0.76 | 1.30 | -0.19 0.72 | 0.72 | 0.00 0.00 | 0.00 0.00 | -0.03 |
| VA8 - 2 | 0.00 | 0.00 0.00 | 1.42 -1.13 | 1.42 | 0.02 0.23 | 0.23 | 0.00 0.00 | 0.00 0.00 | 0.07 |
| VA9 - 1 | 0.00 | 0.00 0.00 | -14.71 12.85 | 12.85 | 0.69 -0.41 | 0.69 | 0.00 0.00 | 0.00 0.00 | 0.00 |
| VA9 - 2 | 0.00 | 0.00 0.00 | -10.37 10.68 | 10.68 | 0.28 -0.50 | 0.28 | 0.00 0.00 | 0.00 0.00 | 0.00 |
| VA10 - 1 | 0.00 | 0.00 0.00 | -11.59 9.83 | 9.83 | 0.04 0.72 | 0.72 | 0.00 0.00 | 0.00 0.00 | 0.00 |
| VA10 - 2 | 0.00 | 0.00 0.00 | -16.93 20.40 | 20.40 | -0.08 1.38 | 1.38 | 0.01 -0.01 | 0.00 0.00 | 0.05 |
| VA11 - 1 | 0.00 | -0.10 0.00 | 37.29 410.56 | 410.56 | 48.25 -35.23 | 48.25 | 0.19 -0.19 | 0.04 -0.04 | -0.07 |
| VA11 - 2 | 0.00 | -0.54 0.00 | 247.27 -402.87 | 247.27 | 3.10 -4.53 | 3.10 | -0.21 0.21 | 0.00 0.00 | -0.01 |
| VA11 - 3 | 0.00 | -0.54 0.00 | -403.23 -615.31 | 0.00 | -4.53 -10.78 | 0.00 | -0.21 0.21 | 0.01 -0.01 | -0.01 |
| VA12 - 1 | 0.00 | -0.09 0.00 | 0.00 -0.27 | 0.00 | 0.00 -2.76 | 0.00 | 0.00 0.00 | 0.00 0.00 | -0.11 |
| VA12 - 2 | 0.00 | -0.09 0.00 | 0.09 0.00 | 0.09 | -2.76 0.00 | 0.00 | 0.00 0.00 | 0.00 0.00 | -0.11 |
| VA13 | 0.00 | 0.00 0.05 | 0.00 0.00 | 0.00 | 0.00 0.00 | 0.00 | 0.00 0.00 | 0.00 0.00 | 0.07 |
| VA14 - 1 | 0.00 | 0.00 | 0.00 | 0.21 | 0.00 | 0.00 | 0.00 | 0.01 | 0.05 |

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|----------|------|---------------|-------------------|--------|-----------------|-------|---------------|---------------|-------|
| | | 0.38 | 0.21 | | -6.65 | | 0.00 | -0.01 | |
| VA14 - 2 | 0.00 | 0.00 0.37 | 0.12 0.00 | 0.12 | -6.65 0.00 | 0.00 | 0.00 0.00 | 0.00 0.00 | 0.05 |
| VA15 | 0.00 | -0.02 0.00 | 0.00 0.00 | 0.00 | 0.00 0.00 | 0.00 | 0.00 0.00 | 0.00 0.00 | -0.13 |
| VA16 | 0.00 | 0.00 0.04 | 0.00 0.00 | 0.00 | 0.00 0.00 | 0.00 | 0.00 0.00 | 0.00 0.00 | -0.24 |
| VA17 - 1 | 0.00 | 0.00 0.33 | 0.00 -0.21 | 0.00 | 0.00 15.01 | 15.01 | 0.00 0.00 | -0.01 0.01 | -0.03 |
| VA17 - 2 | 0.00 | 0.00 0.37 | -0.11 0.00 | 0.00 | -16.37 0.00 | 0.00 | 0.00 0.00 | -0.01 0.01 | 0.11 |
| VA18 | 0.00 | 0.00 0.15 | -280.55 236.87 | 236.87 | -49.04 69.75 | 69.75 | 0.27 -0.27 | -0.06 0.06 | 0.10 |
| VA19 | 0.00 | 0.00 0.03 | 0.00 0.00 | 0.00 | 0.00 0.00 | 0.00 | 0.00 0.00 | 0.00 0.00 | -0.88 |
| VA20 | 0.00 | -0.03 0.00 | -0.69 0.00 | 0.00 | -31.21 0.00 | 0.00 | 0.00 0.00 | -0.02 0.02 | 0.42 |
| VA21 - 1 | 0.00 | 0.00 0.01 | 24.18 -5.37 | 24.18 | 1.05 -2.74 | 1.05 | -0.01 0.01 | 0.00 0.00 | 0.00 |
| VA21 - 2 | 0.00 | 0.00 0.01 | -5.32 -24.37 | 0.00 | -7.87 18.28 | 18.28 | -0.01 0.01 | -0.01 0.01 | -0.01 |
| VA22 | 0.00 | 0.00 0.04 | 139.87 -113.80 | 139.87 | -34.10 50.02 | 50.02 | -0.07 0.07 | -0.02 0.02 | -0.31 |
| VA23 | 0.00 | 0.00 0.00 | 0.00 0.00 | 0.00 | 0.00 0.00 | 0.00 | 0.00 0.00 | 0.00 0.00 | 0.01 |
| VA24 - 1 | 0.00 | 0.00 0.00 | 60.89 -53.87 | 60.89 | -1.70 1.33 | 1.33 | -0.02 0.02 | 0.00 0.00 | 0.00 |
| VA24 - 2 | 0.00 | 0.00 0.00 | 43.40 -43.83 | 43.40 | -1.04 1.17 | 1.17 | -0.01 0.01 | 0.00 0.00 | 0.00 |
| VA25 - 1 | 0.00 | 0.00 0.00 | 50.23 14.30 | 50.23 | -1.30 -1.21 | 0.00 | -0.02 0.02 | 0.00 0.00 | 0.00 |
| VA25 - 2 | 0.00 | 0.00 0.00 | 14.35 -44.49 | 14.35 | -1.21 3.49 | 3.49 | -0.02 0.02 | 0.00 0.00 | 0.00 |
| VA25 - 3 | 0.00 | 0.00 0.00 | 74.77 -89.11 | 74.77 | 7.62 -16.83 | 7.62 | -0.04 0.04 | 0.01 -0.01 | 0.07 |


| CASO: Água (A) | | | | | | | | | |
|----------------|------------------|------------------|-----------------------|------------------|-----------------------|------------------|--------------------|--------------------|----------------|
| Elemento | Carga (kgf/m) | Rd Nd (tf) | Mxi Mxf (kgf.m) | MxMáx (kgf.m) | Myi Myf (kgf.m) | MyMáx (kgf.m) | Vxi Vxf (tf) | Vyi Vyf (tf) | Mtd (kgf/m) |
| VA1 - 1 | 0.00 | 0.00 0.00 | 0.00 0.00 | 0.00 | 0.00 0.00 | 0.00 | 0.00 0.00 | 0.00 0.00 | 0.00 |
| VA1 - 2 | 0.00 | 0.00 0.00 | 0.00 0.00 | 0.00 | 0.00 0.00 | 0.00 | 0.00 0.00 | 0.00 0.00 | 0.00 |
| VA1 - 3 | 0.00 | 0.00 0.00 | 0.00 0.00 | 0.00 | 0.00 0.00 | 0.00 | 0.00 0.00 | 0.00 0.00 | 0.00 |
| VA1 - 4 | 0.00 | 0.00 0.00 | 0.00 0.00 | 0.00 | 0.00 0.00 | 0.00 | 0.00 0.00 | 0.00 0.00 | 0.00 |
| VA1 - 5 | 0.00 | 0.00 0.00 | 0.00 0.00 | 0.00 | 0.00 0.00 | 0.00 | 0.00 0.00 | 0.00 0.00 | 0.00 |
| VA1 - 6 | 0.00 | 0.00 0.00 | 0.00 0.00 | 0.00 | 0.00 0.00 | 0.00 | 0.00 0.00 | 0.00 0.00 | 0.00 |
| VA2 | 0.00 | 0.00 0.00 | 0.00 0.00 | 0.00 | 0.00 0.00 | 0.00 | 0.00 0.00 | 0.00 0.00 | 0.00 |
| VA3 - 1 | 0.00 | 0.00 0.00 | 0.00 0.00 | 0.00 | 0.00 0.00 | 0.00 | 0.00 0.00 | 0.00 0.00 | 0.00 |
| VA3 - 2 | 0.00 | 0.00 0.00 | 0.00 0.00 | 0.00 | 0.00 0.00 | 0.00 | 0.00 0.00 | 0.00 0.00 | 0.00 |
| VA4 - 1 | 0.00 | 0.00 0.00 | 0.00 0.00 | 0.00 | 0.00 0.00 | 0.00 | 0.00 0.00 | 0.00 0.00 | 0.00 |
| VA4 - 2 | 0.00 | 0.00 0.00 | 0.00 0.00 | 0.00 | 0.00 0.00 | 0.00 | 0.00 0.00 | 0.00 0.00 | 0.00 |

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|----------|------|--------------|--------------|------|--------------|------|--------------|--------------|------|
| | | 0.00 | 0.00 | | 0.00 | | 0.00 | 0.00 | |
| VA12 - 2 | 0.00 | 0.00 0.00 | 0.00 0.00 | 0.00 | 0.00 0.00 | 0.00 | 0.00 0.00 | 0.00 0.00 | 0.00 |
| VA13 | 0.00 | 0.00 0.00 | 0.00 0.00 | 0.00 | 0.00 0.00 | 0.00 | 0.00 0.00 | 0.00 0.00 | 0.00 |
| VA14 - 1 | 0.00 | 0.00 0.00 | 0.00 0.00 | 0.00 | 0.00 0.00 | 0.00 | 0.00 0.00 | 0.00 0.00 | 0.00 |
| VA14 - 2 | 0.00 | 0.00 0.00 | 0.00 0.00 | 0.00 | 0.00 0.00 | 0.00 | 0.00 0.00 | 0.00 0.00 | 0.00 |
| VA15 | 0.00 | 0.00 0.00 | 0.00 0.00 | 0.00 | 0.00 0.00 | 0.00 | 0.00 0.00 | 0.00 0.00 | 0.00 |
| VA16 | 0.00 | 0.00 0.00 | 0.00 0.00 | 0.00 | 0.00 0.00 | 0.00 | 0.00 0.00 | 0.00 0.00 | 0.00 |
| VA17 - 1 | 0.00 | 0.00 0.00 | 0.00 0.00 | 0.00 | 0.00 0.00 | 0.00 | 0.00 0.00 | 0.00 0.00 | 0.00 |
| VA17 - 2 | 0.00 | 0.00 0.00 | 0.00 0.00 | 0.00 | 0.00 0.00 | 0.00 | 0.00 0.00 | 0.00 0.00 | 0.00 |
| VA18 | 0.00 | 0.00 0.00 | 0.00 0.00 | 0.00 | 0.00 0.00 | 0.00 | 0.00 0.00 | 0.00 0.00 | 0.00 |
| VA19 | 0.00 | 0.00 0.00 | 0.00 0.00 | 0.00 | 0.00 0.00 | 0.00 | 0.00 0.00 | 0.00 0.00 | 0.00 |
| VA20 | 0.00 | 0.00 0.00 | 0.00 0.00 | 0.00 | 0.00 0.00 | 0.00 | 0.00 0.00 | 0.00 0.00 | 0.00 |
| VA21 - 1 | 0.00 | 0.00 0.00 | 0.00 0.00 | 0.00 | 0.00 0.00 | 0.00 | 0.00 0.00 | 0.00 0.00 | 0.00 |
| VA21 - 2 | 0.00 | 0.00 0.00 | 0.00 0.00 | 0.00 | 0.00 0.00 | 0.00 | 0.00 0.00 | 0.00 0.00 | 0.00 |
| VA22 | 0.00 | 0.00 0.00 | 0.00 0.00 | 0.00 | 0.00 0.00 | 0.00 | 0.00 0.00 | 0.00 0.00 | 0.00 |
| VA23 | 0.00 | 0.00 0.00 | 0.00 0.00 | 0.00 | 0.00 0.00 | 0.00 | 0.00 0.00 | 0.00 0.00 | 0.00 |
| VA24 - 1 | 0.00 | 0.00 0.00 | 0.00 0.00 | 0.00 | 0.00 0.00 | 0.00 | 0.00 0.00 | 0.00 0.00 | 0.00 |
| VA24 - 2 | 0.00 | 0.00 0.00 | 0.00 0.00 | 0.00 | 0.00 0.00 | 0.00 | 0.00 0.00 | 0.00 0.00 | 0.00 |
| VA25 - 1 | 0.00 | 0.00 0.00 | 0.00 0.00 | 0.00 | 0.00 0.00 | 0.00 | 0.00 0.00 | 0.00 0.00 | 0.00 |
| VA25 - 2 | 0.00 | 0.00 0.00 | 0.00 0.00 | 0.00 | 0.00 0.00 | 0.00 | 0.00 0.00 | 0.00 0.00 | 0.00 |
| VA25 - 3 | 0.00 | 0.00 0.00 | 0.00 0.00 | 0.00 | 0.00 0.00 | 0.00 | 0.00 0.00 | 0.00 0.00 | 0.00 |

| CASO: Subpressão (AS) | | | | | | | | | |
|-----------------------|------------------|------------------|-----------------------|------------------|-----------------------|------------------|--------------------|--------------------|----------------|
| Elemento | Carga (kgf/m) | Rd Nd (tf) | Mxi Mxf (kgf.m) | MxMáx (kgf.m) | Myi Myf (kgf.m) | MyMáx (kgf.m) | Vxi Vxf (tf) | Vyi Vyf (tf) | Mtd (kgf/m) |
| VA1 - 1 | 0.00 | 0.00 0.00 | 0.00 0.00 | 0.00 | 0.00 0.00 | 0.00 | 0.00 0.00 | 0.00 0.00 | 0.00 |
| VA1 - 2 | 0.00 | 0.00 0.00 | 0.00 0.00 | 0.00 | 0.00 0.00 | 0.00 | 0.00 0.00 | 0.00 0.00 | 0.00 |
| VA1 - 3 | 0.00 | 0.00 0.00 | 0.00 0.00 | 0.00 | 0.00 0.00 | 0.00 | 0.00 0.00 | 0.00 0.00 | 0.00 |
| VA1 - 4 | 0.00 | 0.00 0.00 | 0.00 0.00 | 0.00 | 0.00 0.00 | 0.00 | 0.00 0.00 | 0.00 0.00 | 0.00 |
| VA1 - 5 | 0.00 | 0.00 0.00 | 0.00 0.00 | 0.00 | 0.00 0.00 | 0.00 | 0.00 0.00 | 0.00 0.00 | 0.00 |
| VA1 - 6 | 0.00 | 0.00 0.00 | 0.00 0.00 | 0.00 | 0.00 0.00 | 0.00 | 0.00 0.00 | 0.00 0.00 | 0.00 |
| VA2 | 0.00 | 0.00 0.00 | 0.00 0.00 | 0.00 | 0.00 0.00 | 0.00 | 0.00 0.00 | 0.00 0.00 | 0.00 |
| VA3 - 1 | 0.00 | 0.00 0.00 | 0.00 0.00 | 0.00 | 0.00 0.00 | 0.00 | 0.00 0.00 | 0.00 0.00 | 0.00 |


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|----------|------|--------------|--------------|------|--------------|------|--------------|--------------|------|
| | | 0.00 | 0.00 | | 0.00 | | 0.00 | 0.00 | |
| VA11 - 2 | 0.00 | 0.00 0.00 | 0.00 0.00 | 0.00 | 0.00 0.00 | 0.00 | 0.00 0.00 | 0.00 0.00 | 0.00 |
| VA11 - 3 | 0.00 | 0.00 0.00 | 0.00 0.00 | 0.00 | 0.00 0.00 | 0.00 | 0.00 0.00 | 0.00 0.00 | 0.00 |
| VA12 - 1 | 0.00 | 0.00 0.00 | 0.00 0.00 | 0.00 | 0.00 0.00 | 0.00 | 0.00 0.00 | 0.00 0.00 | 0.00 |
| VA12 - 2 | 0.00 | 0.00 0.00 | 0.00 0.00 | 0.00 | 0.00 0.00 | 0.00 | 0.00 0.00 | 0.00 0.00 | 0.00 |
| VA13 | 0.00 | 0.00 0.00 | 0.00 0.00 | 0.00 | 0.00 0.00 | 0.00 | 0.00 0.00 | 0.00 0.00 | 0.00 |
| VA14 - 1 | 0.00 | 0.00 0.00 | 0.00 0.00 | 0.00 | 0.00 0.00 | 0.00 | 0.00 0.00 | 0.00 0.00 | 0.00 |
| VA14 - 2 | 0.00 | 0.00 0.00 | 0.00 0.00 | 0.00 | 0.00 0.00 | 0.00 | 0.00 0.00 | 0.00 0.00 | 0.00 |
| VA15 | 0.00 | 0.00 0.00 | 0.00 0.00 | 0.00 | 0.00 0.00 | 0.00 | 0.00 0.00 | 0.00 0.00 | 0.00 |
| VA16 | 0.00 | 0.00 0.00 | 0.00 0.00 | 0.00 | 0.00 0.00 | 0.00 | 0.00 0.00 | 0.00 0.00 | 0.00 |
| VA17 - 1 | 0.00 | 0.00 0.00 | 0.00 0.00 | 0.00 | 0.00 0.00 | 0.00 | 0.00 0.00 | 0.00 0.00 | 0.00 |
| VA17 - 2 | 0.00 | 0.00 0.00 | 0.00 0.00 | 0.00 | 0.00 0.00 | 0.00 | 0.00 0.00 | 0.00 0.00 | 0.00 |
| VA18 | 0.00 | 0.00 0.00 | 0.00 0.00 | 0.00 | 0.00 0.00 | 0.00 | 0.00 0.00 | 0.00 0.00 | 0.00 |
| VA19 | 0.00 | 0.00 0.00 | 0.00 0.00 | 0.00 | 0.00 0.00 | 0.00 | 0.00 0.00 | 0.00 0.00 | 0.00 |
| VA20 | 0.00 | 0.00 0.00 | 0.00 0.00 | 0.00 | 0.00 0.00 | 0.00 | 0.00 0.00 | 0.00 0.00 | 0.00 |
| VA21 - 1 | 0.00 | 0.00 0.00 | 0.00 0.00 | 0.00 | 0.00 0.00 | 0.00 | 0.00 0.00 | 0.00 0.00 | 0.00 |
| VA21 - 2 | 0.00 | 0.00 0.00 | 0.00 0.00 | 0.00 | 0.00 0.00 | 0.00 | 0.00 0.00 | 0.00 0.00 | 0.00 |
| VA22 | 0.00 | 0.00 0.00 | 0.00 0.00 | 0.00 | 0.00 0.00 | 0.00 | 0.00 0.00 | 0.00 0.00 | 0.00 |
| VA23 | 0.00 | 0.00 0.00 | 0.00 0.00 | 0.00 | 0.00 0.00 | 0.00 | 0.00 0.00 | 0.00 0.00 | 0.00 |
| VA24 - 1 | 0.00 | 0.00 0.00 | 0.00 0.00 | 0.00 | 0.00 0.00 | 0.00 | 0.00 0.00 | 0.00 0.00 | 0.00 |
| VA24 - 2 | 0.00 | 0.00 0.00 | 0.00 0.00 | 0.00 | 0.00 0.00 | 0.00 | 0.00 0.00 | 0.00 0.00 | 0.00 |
| VA25 - 1 | 0.00 | 0.00 0.00 | 0.00 0.00 | 0.00 | 0.00 0.00 | 0.00 | 0.00 0.00 | 0.00 0.00 | 0.00 |
| VA25 - 2 | 0.00 | 0.00 0.00 | 0.00 0.00 | 0.00 | 0.00 0.00 | 0.00 | 0.00 0.00 | 0.00 0.00 | 0.00 |
| VA25 - 3 | 0.00 | 0.00 0.00 | 0.00 0.00 | 0.00 | 0.00 0.00 | 0.00 | 0.00 0.00 | 0.00 0.00 | 0.00 |

| CASO: Vento X+ (V1) | | | | | | | | | |
|---------------------|------------------|------------------|-----------------------|------------------|-----------------------|------------------|--------------------|--------------------|----------------|
| Elemento | Carga (kgf/m) | Rd Nd (tf) | Mxi Mxf (kgf.m) | MxMáx (kgf.m) | Myi Myf (kgf.m) | MyMáx (kgf.m) | Vxi Vxf (tf) | Vyi Vyf (tf) | Mtd (kgf/m) |
| VA1 - 1 | 0.00 | 0.00 0.03 | 638.97 1.22 | 638.97 | -2.86 -0.24 | 0.00 | -0.33 0.33 | 0.00 0.00 | 0.08 |
| VA1 - 2 | 0.00 | 0.00 0.03 | 1.38 -342.98 | 1.38 | -0.24 1.56 | 1.56 | -0.33 0.33 | 0.00 0.00 | 0.07 |
| VA1 - 3 | 0.00 | 0.00 0.03 | -342.66 -533.17 | 0.00 | 1.56 -0.84 | 1.56 | -0.33 0.33 | 0.00 0.00 | -0.28 |
| VA1 - 4 | 0.00 | 0.00 0.00 | 362.81 -269.47 | 362.81 | -0.86 1.68 | 1.68 | -0.17 0.17 | 0.00 0.00 | -0.36 |
| VA1 - 5 | 0.00 | 0.00 0.01 | -269.53 -356.25 | 0.00 | 1.68 -2.01 | 1.68 | -0.17 0.17 | 0.01 -0.01 | 2.66 |


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|----------|------|---------------|---------------------|---------|-----------------|-------|---------------|---------------|-------|
| VA1 - 6 | 0.00 | -0.03 0.00 | 555.53 -665.93 | 555.53 | -1.17 1.73 | 1.73 | -0.37 0.37 | 0.00 0.00 | 0.08 |
| VA2 | 0.00 | 0.00 0.00 | 0.00 0.00 | 0.00 | 0.00 0.00 | 0.00 | 0.00 0.00 | 0.00 0.00 | 0.27 |
| VA3 - 1 | 0.00 | 0.00 0.00 | 0.00 1.33 | 1.33 | 0.00 0.89 | 0.89 | 0.00 0.00 | 0.00 0.00 | -0.09 |
| VA3 - 2 | 0.00 | 0.00 0.00 | 0.61 0.61 | 0.61 | -1.94 0.00 | 0.00 | 0.00 0.00 | 0.00 0.00 | 0.00 |
| VA4 - 1 | 0.00 | 0.00 0.17 | 890.46 -341.18 | 890.46 | -21.10 11.86 | 11.86 | -0.24 0.24 | -0.01 0.01 | -0.01 |
| VA4 - 2 | 0.00 | 0.00 0.12 | 247.68 -319.19 | 247.68 | -0.81 -0.78 | 0.00 | -0.29 0.29 | 0.00 0.00 | 1.36 |
| VA4 - 3 | 0.00 | 0.00 0.12 | -319.35 -409.48 | 0.00 | -0.78 -0.88 | 0.00 | -0.29 0.29 | 0.00 0.00 | 1.36 |
| VA4 - 4 | 0.00 | 0.00 0.12 | -409.71 -621.92 | 0.00 | -0.88 -0.02 | 0.00 | -0.29 0.29 | 0.00 0.00 | 1.36 |
| VA4 - 5 | 0.00 | 0.00 0.12 | -622.18 -782.89 | 0.00 | -0.02 2.78 | 2.78 | -0.29 0.29 | -0.01 0.01 | -8.02 |
| VA4 - 6 | 0.00 | 0.00 0.11 | 718.02 473.55 | 718.02 | -0.39 -0.19 | 0.00 | -0.24 0.24 | 0.00 0.00 | -2.98 |
| VA4 - 7 | 0.00 | 0.00 0.11 | 473.46 211.91 | 473.46 | -0.19 1.42 | 0.00 | -0.24 0.24 | 0.00 0.00 | 0.98 |
| VA4 - 8 | 0.00 | 0.00 0.11 | 211.86 -198.16 | 211.86 | 1.42 0.05 | 1.42 | -0.24 0.24 | 0.00 0.00 | 0.98 |
| VA4 - 9 | 0.00 | 0.00 0.11 | -197.36 -340.28 | 0.00 | 0.05 3.64 | 3.64 | -0.24 0.24 | -0.01 0.01 | 0.98 |
| VA4 - 10 | 0.00 | 0.00 0.08 | 200.11 12.64 | 200.11 | -9.24 0.97 | 0.00 | -0.19 0.19 | -0.01 0.01 | 0.03 |
| VA4 - 11 | 0.00 | 0.00 0.08 | 13.25 -93.05 | 13.25 | 0.97 7.45 | 7.45 | -0.19 0.19 | -0.01 0.01 | 0.03 |
| VA4 - 12 | 0.00 | 0.00 0.09 | -93.15 -430.34 | 0.00 | 7.45 -6.25 | 7.45 | -0.19 0.19 | 0.01 -0.01 | 0.03 |
| VA4 - 13 | 0.00 | -0.04 0.00 | 1017.67 -1372.68 | 1017.67 | -10.87 24.35 | 24.35 | -0.81 0.81 | -0.01 0.01 | 0.05 |
| VA5 - 1 | 0.00 | 0.00 0.00 | 492.38 -197.44 | 492.38 | -9.75 1.01 | 1.01 | -0.30 0.30 | 0.00 0.00 | -0.09 |
| VA5 - 2 | 0.00 | 0.00 0.00 | -197.21 -589.71 | 0.00 | 1.01 5.19 | 5.19 | -0.30 0.30 | 0.00 0.00 | -0.09 |
| VA5 - 3 | 0.00 | -0.01 0.00 | 421.77 261.90 | 421.77 | -2.40 -0.28 | 0.00 | -0.16 0.16 | 0.00 0.00 | 0.07 |
| VA5 - 4 | 0.00 | -0.01 0.00 | 262.00 90.94 | 262.00 | -0.28 -0.40 | 0.00 | -0.16 0.16 | 0.00 0.00 | 0.07 |
| VA5 - 5 | 0.00 | -0.01 0.00 | 90.99 -270.77 | 90.99 | -0.40 4.59 | 4.59 | -0.16 0.16 | 0.00 0.00 | 0.07 |
| VA5 - 6 | 0.00 | -0.04 0.00 | 308.25 -68.14 | 308.25 | -11.63 4.81 | 4.81 | -0.25 0.25 | -0.01 0.01 | 0.00 |
| VA5 - 7 | 0.00 | -0.04 0.00 | -68.04 -458.94 | 0.00 | -7.22 40.97 | 40.97 | -0.25 0.25 | -0.03 0.03 | 1.00 |
| VA6 - 1 | 0.00 | -0.03 0.00 | 4.15 -533.49 | 4.15 | -34.69 -6.95 | 0.00 | -0.34 0.34 | -0.02 0.02 | -0.22 |
| VA6 - 2 | 0.00 | -0.03 0.00 | -533.57 -1048.35 | 0.00 | -6.95 23.74 | 23.74 | -0.34 0.34 | -0.02 0.02 | -0.22 |
| VA7 - 1 | 0.00 | -0.09 0.00 | 730.96 369.71 | 730.96 | -15.31 -5.60 | 0.00 | -0.23 0.23 | -0.01 0.01 | 0.34 |
| VA7 - 2 | 0.00 | -0.09 0.00 | 369.80 0.00 | 369.80 | -5.60 0.00 | 0.00 | -0.23 0.23 | 0.00 0.00 | 0.34 |
| VA8 - 1 | 0.00 | 0.00 0.03 | 854.26 -708.60 | 854.26 | 25.85 -5.33 | 25.85 | -0.18 0.18 | 0.00 0.00 | -0.03 |
| VA8 - 2 | 0.00 | -0.05 0.00 | 605.25 -748.87 | 605.25 | 6.28 -23.13 | 6.28 | -0.13 0.13 | 0.00 0.00 | 0.11 |
| VA9 - 1 | 0.00 | 0.00 0.01 | 13.69 -15.89 | 13.69 | -25.50 26.16 | 26.16 | -0.01 0.01 | -0.01 0.01 | -3.58 |
| VA9 - 2 | 0.00 | 0.00 | -24.20 | 6.80 | 21.02 | 21.02 | 0.00 | 0.00 | -0.09 |

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|----------|------|---------------|-------------------|--------|-----------------|-------|---------------|---------------|-------|
| | | 0.02 | 6.80 | | 4.68 | | 0.00 | 0.00 | |
| VA10 - 1 | 0.00 | 0.00 0.01 | -20.01 12.57 | 12.57 | 6.32 2.72 | 6.32 | 0.01 -0.01 | 0.00 0.00 | 1.87 |
| VA10 - 2 | 0.00 | 0.00 0.01 | -26.09 34.77 | 34.77 | 10.43 -25.15 | 10.43 | 0.02 -0.02 | 0.01 -0.01 | 2.40 |
| VA11 - 1 | 0.00 | 0.00 0.00 | -22.68 24.60 | 24.60 | 2.30 -8.71 | 2.30 | 0.02 -0.02 | 0.01 -0.01 | 1.03 |
| VA11 - 2 | 0.00 | 0.00 0.01 | -1.66 11.97 | 11.97 | 2.08 -0.67 | 2.08 | 0.00 0.00 | 0.00 0.00 | -0.78 |
| VA11 - 3 | 0.00 | 0.00 0.01 | 12.24 16.68 | 16.68 | -0.67 -1.19 | 0.00 | 0.00 0.00 | 0.00 0.00 | -0.78 |
| VA12 - 1 | 0.00 | 0.00 0.00 | 0.00 0.20 | 0.20 | 0.00 0.28 | 0.28 | 0.00 0.00 | 0.00 0.00 | 0.16 |
| VA12 - 2 | 0.00 | 0.00 0.00 | -0.06 0.00 | 0.00 | 0.28 0.00 | 0.28 | 0.00 0.00 | 0.00 0.00 | 0.16 |
| VA13 | 0.00 | 0.00 0.00 | 0.00 0.00 | 0.00 | 0.00 0.00 | 0.00 | 0.00 0.00 | 0.00 0.00 | -0.23 |
| VA14 - 1 | 0.00 | -0.01 0.00 | 0.00 0.26 | 0.26 | 0.00 0.29 | 0.29 | 0.00 0.00 | 0.00 0.00 | 0.32 |
| VA14 - 2 | 0.00 | -0.01 0.00 | 0.18 0.00 | 0.18 | 0.29 0.00 | 0.29 | 0.00 0.00 | 0.00 0.00 | 0.32 |
| VA15 | 0.00 | 0.00 0.00 | 0.00 0.00 | 0.00 | 0.00 0.00 | 0.00 | 0.00 0.00 | 0.00 0.00 | -0.10 |
| VA16 | 0.00 | 0.00 0.00 | 0.00 0.00 | 0.00 | 0.00 0.00 | 0.00 | 0.00 0.00 | 0.00 0.00 | -0.04 |
| VA17 - 1 | 0.00 | -0.01 0.00 | 0.00 -0.26 | 0.00 | 0.00 -1.05 | 0.00 | 0.00 0.00 | 0.00 0.00 | -0.80 |
| VA17 - 2 | 0.00 | -0.01 0.00 | -0.17 0.00 | 0.00 | 1.77 0.00 | 1.77 | 0.00 0.00 | 0.00 0.00 | -0.08 |
| VA18 | 0.00 | 0.00 0.00 | -11.66 14.13 | 14.13 | 9.67 -11.97 | 9.67 | 0.01 -0.01 | 0.01 -0.01 | 0.30 |
| VA19 | 0.00 | 0.00 0.00 | 0.00 0.00 | 0.00 | 0.00 0.00 | 0.00 | 0.00 0.00 | 0.00 0.00 | -0.61 |
| VA20 | 0.00 | -0.02 0.00 | 1.00 0.00 | 1.00 | 12.03 0.00 | 12.03 | 0.00 0.00 | 0.01 -0.01 | -0.11 |
| VA21 - 1 | 0.00 | -0.04 0.00 | 114.69 -298.67 | 114.69 | 7.10 -0.30 | 7.10 | -0.13 0.13 | 0.00 0.00 | 2.26 |
| VA21 - 2 | 0.00 | -0.06 0.00 | -298.89 137.76 | 137.76 | 34.39 -35.53 | 34.39 | 0.21 -0.21 | 0.03 -0.03 | -1.89 |
| VA22 | 0.00 | -0.02 0.00 | 0.64 -9.00 | 0.64 | 1.22 -0.69 | 1.22 | 0.00 0.00 | 0.00 0.00 | -0.37 |
| VA23 | 0.00 | 0.00 0.00 | 0.00 0.00 | 0.00 | 0.00 0.00 | 0.00 | 0.00 0.00 | 0.00 0.00 | -0.08 |
| VA24 - 1 | 0.00 | -0.01 0.00 | 36.59 -26.96 | 36.59 | -21.95 20.23 | 20.23 | -0.01 0.01 | -0.01 0.01 | -3.51 |
| VA24 - 2 | 0.00 | -0.03 0.00 | 70.74 -68.28 | 70.74 | 10.14 35.94 | 35.94 | -0.02 0.02 | 0.00 0.00 | -0.02 |
| VA25 - 1 | 0.00 | 0.00 0.01 | -78.64 170.21 | 170.21 | 64.73 -62.65 | 64.73 | 0.13 -0.13 | 0.07 -0.07 | 2.80 |
| VA25 - 2 | 0.00 | 0.00 0.01 | 169.87 -160.55 | 169.87 | -62.65 13.21 | 13.21 | -0.10 0.10 | -0.02 0.02 | 2.80 |
| VA25 - 3 | 0.00 | -0.01 0.00 | 26.59 -68.96 | 26.59 | 24.34 -17.39 | 24.34 | -0.02 0.02 | 0.01 -0.01 | 1.40 |

| CASO: Vento X- (V2) | | | | | | | | | |
|---------------------|------------------|------------------|-----------------------|------------------|-----------------------|------------------|--------------------|--------------------|----------------|
| Elemento | Carga (kgf/m) | Rd Nd (tf) | Mxi Mxf (kgf.m) | MxMáx (kgf.m) | Myi Myf (kgf.m) | MyMáx (kgf.m) | Vxi Vxf (tf) | Vyi Vyf (tf) | Mtd (kgf/m) |
| VA1 - 1 | 0.00 | -0.03 0.00 | -638.97 -1.22 | 0.00 | 2.86 0.24 | 2.86 | 0.33 -0.33 | 0.00 0.00 | -0.08 |
| VA1 - 2 | 0.00 | -0.03 0.00 | -1.38 342.98 | 342.98 | 0.24 -1.56 | 0.24 | 0.33 -0.33 | 0.00 0.00 | -0.07 |

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|----------|------|---------------|---------------------|---------|-----------------|-------|---------------|---------------|-------|
| VA1 - 3 | 0.00 | -0.03 0.00 | 342.66 533.17 | 533.17 | -1.56 0.84 | 0.00 | 0.33 -0.33 | 0.00 0.00 | 0.28 |
| VA1 - 4 | 0.00 | 0.00 0.00 | -362.81 269.47 | 269.47 | 0.86 -1.68 | 0.86 | 0.17 -0.17 | 0.00 0.00 | 0.36 |
| VA1 - 5 | 0.00 | -0.01 0.00 | 269.53 356.25 | 356.25 | -1.68 2.01 | 0.00 | 0.17 -0.17 | -0.01 0.01 | -2.66 |
| VA1 - 6 | 0.00 | 0.00 0.03 | -555.53 665.93 | 665.93 | 1.17 -1.73 | 1.17 | 0.37 -0.37 | 0.00 0.00 | -0.08 |
| VA2 | 0.00 | 0.00 0.00 | 0.00 0.00 | 0.00 | 0.00 0.00 | 0.00 | 0.00 0.00 | 0.00 0.00 | -0.27 |
| VA3 - 1 | 0.00 | 0.00 0.00 | 0.00 -1.33 | 0.00 | 0.00 -0.89 | 0.00 | 0.00 0.00 | 0.00 0.00 | 0.09 |
| VA3 - 2 | 0.00 | 0.00 0.00 | -0.61 -0.61 | 0.00 | 1.94 0.00 | 1.94 | 0.00 0.00 | 0.00 0.00 | 0.00 |
| VA4 - 1 | 0.00 | -0.17 0.00 | -890.46 341.18 | 341.18 | 21.10 -11.86 | 21.10 | 0.24 -0.24 | 0.01 -0.01 | 0.01 |
| VA4 - 2 | 0.00 | -0.12 0.00 | -247.68 319.19 | 319.19 | 0.81 0.78 | 0.81 | 0.29 -0.29 | 0.00 0.00 | -1.36 |
| VA4 - 3 | 0.00 | -0.12 0.00 | 319.35 409.48 | 409.48 | 0.78 0.88 | 0.00 | 0.29 -0.29 | 0.00 0.00 | -1.36 |
| VA4 - 4 | 0.00 | -0.12 0.00 | 409.71 621.92 | 621.92 | 0.88 0.02 | 0.00 | 0.29 -0.29 | 0.00 0.00 | -1.36 |
| VA4 - 5 | 0.00 | -0.12 0.00 | 622.18 782.89 | 782.89 | 0.02 -2.78 | 0.00 | 0.29 -0.29 | 0.01 -0.01 | 8.02 |
| VA4 - 6 | 0.00 | -0.11 0.00 | -718.02 -473.55 | 0.00 | 0.39 0.19 | 0.39 | 0.24 -0.24 | 0.00 0.00 | 2.98 |
| VA4 - 7 | 0.00 | -0.11 0.00 | -473.46 -211.91 | 0.00 | 0.19 -1.42 | 0.19 | 0.24 -0.24 | 0.00 0.00 | -0.98 |
| VA4 - 8 | 0.00 | -0.11 0.00 | -211.86 198.16 | 198.16 | -1.42 -0.05 | 0.00 | 0.24 -0.24 | 0.00 0.00 | -0.98 |
| VA4 - 9 | 0.00 | -0.11 0.00 | 197.36 340.28 | 340.28 | -0.05 -3.64 | 0.00 | 0.24 -0.24 | 0.01 -0.01 | -0.98 |
| VA4 - 10 | 0.00 | -0.08 0.00 | -200.11 -12.64 | 0.00 | 9.24 -0.97 | 9.24 | 0.19 -0.19 | 0.01 -0.01 | -0.03 |
| VA4 - 11 | 0.00 | -0.08 0.00 | -13.25 93.05 | 93.05 | -0.97 -7.45 | 0.00 | 0.19 -0.19 | 0.01 -0.01 | -0.03 |
| VA4 - 12 | 0.00 | -0.09 0.00 | 93.15 430.34 | 430.34 | -7.45 6.25 | 0.00 | 0.19 -0.19 | -0.01 0.01 | -0.03 |
| VA4 - 13 | 0.00 | 0.00 0.04 | -1017.67 1372.68 | 1372.68 | 10.87 -24.35 | 10.87 | 0.81 -0.81 | 0.01 -0.01 | -0.05 |
| VA5 - 1 | 0.00 | 0.00 0.00 | -492.38 197.44 | 197.44 | 9.75 -1.01 | 9.75 | 0.30 -0.30 | 0.00 0.00 | 0.09 |
| VA5 - 2 | 0.00 | 0.00 0.00 | 197.21 589.71 | 589.71 | -1.01 -5.19 | 0.00 | 0.30 -0.30 | 0.00 0.00 | 0.09 |
| VA5 - 3 | 0.00 | 0.00 0.01 | -421.77 -261.90 | 0.00 | 2.40 0.28 | 2.40 | 0.16 -0.16 | 0.00 0.00 | -0.07 |
| VA5 - 4 | 0.00 | 0.00 0.01 | -262.00 -90.94 | 0.00 | 0.28 0.40 | 0.40 | 0.16 -0.16 | 0.00 0.00 | -0.07 |
| VA5 - 5 | 0.00 | 0.00 0.01 | -90.99 270.77 | 270.77 | 0.40 -4.59 | 0.40 | 0.16 -0.16 | 0.00 0.00 | -0.07 |
| VA5 - 6 | 0.00 | 0.00 0.04 | -308.25 68.14 | 68.14 | 11.63 -4.81 | 11.63 | 0.25 -0.25 | 0.01 -0.01 | 0.00 |
| VA5 - 7 | 0.00 | 0.00 0.04 | 68.04 458.94 | 458.94 | 7.22 -40.97 | 0.00 | 0.25 -0.25 | 0.03 -0.03 | -1.00 |
| VA6 - 1 | 0.00 | 0.00 0.03 | -4.15 533.49 | 533.49 | 34.69 6.95 | 34.69 | 0.34 -0.34 | 0.02 -0.02 | 0.22 |
| VA6 - 2 | 0.00 | 0.00 0.03 | 533.57 1048.35 | 1048.35 | 6.95 -23.74 | 0.00 | 0.34 -0.34 | 0.02 -0.02 | 0.22 |
| VA7 - 1 | 0.00 | 0.00 0.09 | -730.96 -369.71 | 0.00 | 15.31 5.60 | 15.31 | 0.23 -0.23 | 0.01 -0.01 | -0.34 |
| VA7 - 2 | 0.00 | 0.00 0.09 | -369.80 0.00 | 0.00 | 5.60 0.00 | 5.60 | 0.23 -0.23 | 0.00 0.00 | -0.34 |
| VA8 - 1 | 0.00 | -0.03 | -854.26 | 708.60 | -25.85 | 5.33 | 0.18 | 0.00 | 0.03 |


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| | | 0.00 | 708.60 | | 5.33 | | -0.18 | 0.00 | |
| VA8 - 2 | 0.00 | 0.00 0.05 | -605.25 748.87 | 748.87 | -6.28 23.13 | 23.13 | 0.13 -0.13 | 0.00 0.00 | -0.11 |
| VA9 - 1 | 0.00 | -0.01 0.00 | -13.69 15.89 | 15.89 | 25.50 -26.16 | 25.50 | 0.01 -0.01 | 0.01 -0.01 | 3.58 |
| VA9 - 2 | 0.00 | -0.02 0.00 | 24.20 -6.80 | 24.20 | -21.02 -4.68 | 0.00 | 0.00 0.00 | 0.00 0.00 | 0.09 |
| VA10 - 1 | 0.00 | -0.01 0.00 | 20.01 -12.57 | 20.01 | -6.32 -2.72 | 0.00 | -0.01 0.01 | 0.00 0.00 | -1.87 |
| VA10 - 2 | 0.00 | -0.01 0.00 | 26.09 -34.77 | 26.09 | -10.43 25.15 | 25.15 | -0.02 0.02 | -0.01 0.01 | -2.40 |
| VA11 - 1 | 0.00 | 0.00 0.00 | 22.68 -24.60 | 22.68 | -2.30 8.71 | 8.71 | -0.02 0.02 | -0.01 0.01 | -1.03 |
| VA11 - 2 | 0.00 | -0.01 0.00 | 1.66 -11.97 | 1.66 | -2.08 0.67 | 0.67 | 0.00 0.00 | 0.00 0.00 | 0.78 |
| VA11 - 3 | 0.00 | -0.01 0.00 | -12.24 -16.68 | 0.00 | 0.67 1.19 | 1.19 | 0.00 0.00 | 0.00 0.00 | 0.78 |
| VA12 - 1 | 0.00 | 0.00 0.00 | 0.00 -0.20 | 0.00 | 0.00 -0.28 | 0.00 | 0.00 0.00 | 0.00 0.00 | -0.16 |
| VA12 - 2 | 0.00 | 0.00 0.00 | 0.06 0.00 | 0.06 | -0.28 0.00 | 0.00 | 0.00 0.00 | 0.00 0.00 | -0.16 |
| VA13 | 0.00 | 0.00 0.00 | 0.00 0.00 | 0.00 | 0.00 0.00 | 0.00 | 0.00 0.00 | 0.00 0.00 | 0.23 |
| VA14 - 1 | 0.00 | 0.00 0.01 | 0.00 -0.26 | 0.00 | 0.00 -0.29 | 0.00 | 0.00 0.00 | 0.00 0.00 | -0.32 |
| VA14 - 2 | 0.00 | 0.00 0.01 | -0.18 0.00 | 0.00 | -0.29 0.00 | 0.00 | 0.00 0.00 | 0.00 0.00 | -0.32 |
| VA15 | 0.00 | 0.00 0.00 | 0.00 0.00 | 0.00 | 0.00 0.00 | 0.00 | 0.00 0.00 | 0.00 0.00 | 0.10 |
| VA16 | 0.00 | 0.00 0.00 | 0.00 0.00 | 0.00 | 0.00 0.00 | 0.00 | 0.00 0.00 | 0.00 0.00 | 0.04 |
| VA17 - 1 | 0.00 | 0.00 0.01 | 0.00 0.26 | 0.26 | 0.00 1.05 | 1.05 | 0.00 0.00 | 0.00 0.00 | 0.80 |
| VA17 - 2 | 0.00 | 0.00 0.01 | 0.17 0.00 | 0.17 | -1.77 0.00 | 0.00 | 0.00 0.00 | 0.00 0.00 | 0.08 |
| VA18 | 0.00 | 0.00 0.00 | 11.66 -14.13 | 11.66 | -9.67 11.97 | 11.97 | -0.01 0.01 | -0.01 0.01 | -0.30 |
| VA19 | 0.00 | 0.00 0.00 | 0.00 0.00 | 0.00 | 0.00 0.00 | 0.00 | 0.00 0.00 | 0.00 0.00 | 0.61 |
| VA20 | 0.00 | 0.00 0.02 | -1.00 0.00 | 0.00 | -12.03 0.00 | 0.00 | 0.00 0.00 | -0.01 0.01 | 0.11 |
| VA21 - 1 | 0.00 | 0.00 0.04 | -114.69 298.67 | 298.67 | -7.10 0.30 | 0.30 | 0.13 -0.13 | 0.00 0.00 | -2.26 |
| VA21 - 2 | 0.00 | 0.00 0.06 | 298.89 -137.76 | 298.89 | -34.39 35.53 | 35.53 | -0.21 0.21 | -0.03 0.03 | 1.89 |
| VA22 | 0.00 | 0.00 0.02 | -0.64 9.00 | 9.00 | -1.22 0.69 | 0.69 | 0.00 0.00 | 0.00 0.00 | 0.37 |
| VA23 | 0.00 | 0.00 0.00 | 0.00 0.00 | 0.00 | 0.00 0.00 | 0.00 | 0.00 0.00 | 0.00 0.00 | 0.08 |
| VA24 - 1 | 0.00 | 0.00 0.01 | -36.59 26.96 | 26.96 | 21.95 -20.23 | 21.95 | 0.01 -0.01 | 0.01 -0.01 | 3.51 |
| VA24 - 2 | 0.00 | 0.00 0.03 | -70.74 68.28 | 68.28 | -10.14 -35.94 | 0.00 | 0.02 -0.02 | 0.00 0.00 | 0.02 |
| VA25 - 1 | 0.00 | -0.01 0.00 | 78.64 -170.21 | 78.64 | -64.73 62.65 | 62.65 | -0.13 0.13 | -0.07 0.07 | -2.80 |
| VA25 - 2 | 0.00 | -0.01 0.00 | -169.87 160.55 | 160.55 | 62.65 -13.21 | 62.65 | 0.10 -0.10 | 0.02 -0.02 | -2.80 |
| VA25 - 3 | 0.00 | 0.00 0.01 | -26.59 68.96 | 68.96 | -24.34 17.39 | 17.39 | 0.02 -0.02 | -0.01 0.01 | -1.40 |


| CASO: Vento Y+ (V3) | | | | | | | | | |
|---------------------|-------|----|-----|-------|-----|-------|-----|-----|-----|
| Elemento | Carga | Rd | Mxi | MxMáx | Myi | MyMáx | Vxi | Vyi | Mtd |

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| | (kgf/m) | Nd (tf) | Mxf (kgf.m) | (kgf.m) | Myf (kgf.m) | (kgf.m) | Vxf (tf) | Vyf (tf) | (kgf/m) |
|----------|---------|---------------|------------------|---------|------------------|---------|---------------|---------------|---------|
| VA1 - 1 | 0.00 | -0.01 0.00 | 61.32 5.48 | 61.32 | 31.72 -3.22 | 31.72 | -0.03 0.03 | 0.02 -0.02 | 1.41 |
| VA1 - 2 | 0.00 | 0.00 0.00 | 5.40 -24.86 | 5.40 | -3.22 -57.18 | 0.00 | -0.03 0.03 | 0.05 -0.05 | 1.41 |
| VA1 - 3 | 0.00 | 0.00 0.00 | -24.97 -41.70 | 0.00 | -57.18 -16.78 | 0.00 | -0.03 0.03 | -0.07 0.07 | 1.39 |
| VA1 - 4 | 0.00 | -0.01 0.00 | 38.36 -25.02 | 38.36 | -14.30 18.42 | 18.42 | -0.02 0.02 | -0.01 0.01 | -0.71 |
| VA1 - 5 | 0.00 | 0.00 0.00 | -25.12 -33.82 | 0.00 | 18.42 -12.12 | 18.42 | -0.02 0.02 | 0.06 -0.06 | -0.43 |
| VA1 - 6 | 0.00 | -0.01 0.00 | 62.65 -88.97 | 62.65 | -5.46 3.52 | 3.52 | -0.05 0.05 | 0.00 0.00 | -1.25 |
| VA2 | 0.00 | 0.00 0.00 | 0.00 0.00 | 0.00 | 0.00 0.00 | 0.00 | 0.00 0.00 | 0.00 0.00 | -0.41 |
| VA3 - 1 | 0.00 | 0.00 0.00 | 0.00 -0.02 | 0.00 | 0.00 6.64 | 6.64 | 0.00 0.00 | 0.00 0.00 | -0.01 |
| VA3 - 2 | 0.00 | 0.00 0.00 | 0.09 0.09 | 0.09 | -11.11 0.00 | 0.00 | 0.00 0.00 | -0.01 0.01 | 0.00 |
| VA4 - 1 | 0.00 | -0.03 0.00 | -16.77 11.43 | 11.43 | -13.05 -3.79 | 0.00 | 0.01 -0.01 | 0.00 0.00 | -0.39 |
| VA4 - 2 | 0.00 | -0.05 0.00 | 8.57 -4.77 | 8.57 | 46.35 -15.67 | 46.35 | -0.01 0.01 | 0.03 -0.03 | 3.92 |
| VA4 - 3 | 0.00 | -0.05 0.00 | -4.69 -6.78 | 0.00 | -15.67 -15.03 | 0.00 | -0.01 0.01 | 0.00 0.00 | 3.92 |
| VA4 - 4 | 0.00 | -0.05 0.00 | -6.76 -11.68 | 0.00 | -15.03 -3.54 | 0.00 | -0.01 0.01 | -0.02 0.02 | 3.92 |
| VA4 - 5 | 0.00 | -0.05 0.00 | -11.63 -15.35 | 0.00 | -3.54 -62.75 | 0.00 | -0.01 0.01 | 0.11 -0.11 | 3.74 |
| VA4 - 6 | 0.00 | -0.05 0.00 | -19.51 -11.22 | 0.00 | -36.18 -31.40 | 0.00 | 0.01 -0.01 | 0.00 0.00 | -2.82 |
| VA4 - 7 | 0.00 | -0.05 0.00 | -11.23 -2.36 | 0.00 | -31.40 -3.95 | 0.00 | 0.01 -0.01 | -0.03 0.03 | -2.92 |
| VA4 - 8 | 0.00 | -0.05 0.00 | -2.40 11.50 | 11.50 | -3.95 10.46 | 10.46 | 0.01 -0.01 | -0.01 0.01 | -2.92 |
| VA4 - 9 | 0.00 | -0.05 0.00 | 11.49 16.34 | 16.34 | 10.46 52.39 | 52.39 | 0.01 -0.01 | -0.07 0.07 | -2.92 |
| VA4 - 10 | 0.00 | -0.02 0.00 | 33.33 14.29 | 33.33 | 15.74 5.52 | 15.74 | -0.02 0.02 | 0.01 -0.01 | 0.26 |
| VA4 - 11 | 0.00 | -0.02 0.00 | 14.38 3.58 | 14.38 | 5.52 3.65 | 5.52 | -0.02 0.02 | 0.00 0.00 | 0.26 |
| VA4 - 12 | 0.00 | -0.01 0.00 | 3.70 -32.28 | 3.70 | 3.65 -4.89 | 3.65 | -0.02 0.02 | 0.00 0.00 | 0.26 |
| VA4 - 13 | 0.00 | -0.02 0.00 | -15.98 -0.20 | 0.00 | -6.09 -14.64 | 0.00 | 0.01 -0.01 | 0.00 0.00 | 0.06 |
| VA5 - 1 | 0.00 | 0.00 0.03 | -10.16 10.48 | 10.48 | 31.83 -5.37 | 31.83 | 0.01 -0.01 | 0.02 -0.02 | 2.74 |
| VA5 - 2 | 0.00 | 0.00 0.03 | 10.45 22.20 | 22.20 | -5.37 -44.05 | 0.00 | 0.01 -0.01 | 0.03 -0.03 | 2.74 |
| VA5 - 3 | 0.00 | 0.00 0.03 | -6.01 -4.33 | 0.00 | -40.07 -15.82 | 0.00 | 0.00 0.00 | -0.02 0.02 | -2.39 |
| VA5 - 4 | 0.00 | 0.00 0.03 | -4.30 -2.49 | 0.00 | -15.82 -11.80 | 0.00 | 0.00 0.00 | 0.00 0.00 | -2.39 |
| VA5 - 5 | 0.00 | 0.00 0.03 | -2.46 1.36 | 1.36 | -11.80 35.34 | 35.34 | 0.00 0.00 | -0.02 0.02 | -2.39 |
| VA5 - 6 | 0.00 | 0.00 0.00 | -30.48 -3.09 | 0.00 | 0.25 5.09 | 5.09 | 0.02 -0.02 | 0.00 0.00 | -0.78 |
| VA5 - 7 | 0.00 | -0.01 0.00 | -3.20 26.95 | 26.95 | -2.68 4.72 | 4.72 | 0.02 -0.02 | 0.00 0.00 | 1.23 |
| VA6 - 1 | 0.00 | 0.00 0.00 | -0.26 33.98 | 33.98 | -14.28 -3.23 | 0.00 | 0.02 -0.02 | -0.01 0.01 | 0.71 |
| VA6 - 2 | 0.00 | 0.00 | 34.02 | 66.80 | -3.23 | 0.00 | 0.02 | -0.01 | 0.71 |


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| | | 0.00 | 66.80 | | 6.15 | | -0.02 | 0.01 | |
| VA7 - 1 | 0.00 | 0.00 0.00 | -59.39 -30.02 | 0.00 | -5.89 -3.60 | 0.00 | 0.02 -0.02 | 0.00 0.00 | -0.85 |
| VA7 - 2 | 0.00 | 0.00 0.00 | -30.06 0.00 | 0.00 | -3.60 0.00 | 0.00 | 0.02 -0.02 | 0.00 0.00 | -0.85 |
| VA8 - 1 | 0.00 | 0.00 0.01 | 21.25 -26.28 | 21.25 | 2.38 -10.30 | 2.38 | -0.01 0.01 | 0.00 0.00 | 1.78 |
| VA8 - 2 | 0.00 | 0.00 0.01 | -14.26 6.40 | 6.40 | -13.63 4.33 | 4.33 | 0.00 0.00 | 0.00 0.00 | -1.41 |
| VA9 - 1 | 0.00 | 0.00 0.04 | 551.83 -482.37 | 551.83 | -27.84 19.00 | 19.00 | -0.18 0.18 | -0.01 0.01 | 0.03 |
| VA9 - 2 | 0.00 | 0.00 0.03 | 383.22 -388.82 | 383.22 | -10.09 12.48 | 12.48 | -0.12 0.12 | 0.00 0.00 | 0.11 |
| VA10 - 1 | 0.00 | 0.00 0.02 | 445.03 -405.07 | 445.03 | -13.26 3.01 | 3.01 | -0.16 0.16 | 0.00 0.00 | -0.09 |
| VA10 - 2 | 0.00 | -0.02 0.00 | 577.85 -685.90 | 577.85 | -20.56 50.44 | 50.44 | -0.32 0.32 | -0.02 0.02 | -0.10 |
| VA11 - 1 | 0.00 | -0.03 0.00 | 655.81 -361.86 | 655.81 | -27.09 27.73 | 27.73 | -0.53 0.53 | -0.03 0.03 | 0.03 |
| VA11 - 2 | 0.00 | -0.07 0.00 | 463.82 -545.31 | 463.82 | -16.93 8.43 | 8.43 | -0.32 0.32 | -0.01 0.01 | -0.14 |
| VA11 - 3 | 0.00 | -0.07 0.00 | -545.72 -874.91 | 0.00 | 8.43 20.87 | 20.87 | -0.32 0.32 | -0.01 0.01 | -0.14 |
| VA12 - 1 | 0.00 | -0.03 0.00 | 0.00 -0.32 | 0.00 | 0.00 3.07 | 3.07 | 0.00 0.00 | 0.00 0.00 | -0.08 |
| VA12 - 2 | 0.00 | -0.03 0.00 | 0.10 0.00 | 0.10 | 3.07 0.00 | 3.07 | 0.00 0.00 | 0.00 0.00 | -0.08 |
| VA13 | 0.00 | 0.00 0.01 | 0.00 0.00 | 0.00 | 0.00 0.00 | 0.00 | 0.00 0.00 | 0.00 0.00 | 0.03 |
| VA14 - 1 | 0.00 | 0.00 0.12 | 0.00 0.00 | 0.00 | 0.00 3.65 | 3.65 | 0.00 0.00 | 0.00 0.00 | -0.10 |
| VA14 - 2 | 0.00 | 0.00 0.12 | -0.01 0.00 | 0.00 | 3.65 0.00 | 3.65 | 0.00 0.00 | 0.00 0.00 | -0.10 |
| VA15 | 0.00 | 0.00 0.02 | 0.00 0.00 | 0.00 | 0.00 0.00 | 0.00 | 0.00 0.00 | 0.00 0.00 | -0.03 |
| VA16 | 0.00 | -0.02 0.00 | 0.00 0.00 | 0.00 | 0.00 0.00 | 0.00 | 0.00 0.00 | 0.00 0.00 | -0.03 |
| VA17 - 1 | 0.00 | -0.06 0.00 | 0.00 0.00 | 0.00 | 0.00 -8.38 | 0.00 | 0.00 0.00 | 0.01 -0.01 | 0.01 |
| VA17 - 2 | 0.00 | -0.07 0.00 | 0.01 0.00 | 0.01 | 9.36 0.00 | 9.36 | 0.00 0.00 | 0.00 0.00 | -0.10 |
| VA18 | 0.00 | -0.03 0.00 | 583.00 -584.94 | 583.00 | 33.61 -39.24 | 33.61 | -0.60 0.60 | 0.04 -0.04 | -0.01 |
| VA19 | 0.00 | -0.01 0.00 | 0.00 0.00 | 0.00 | 0.00 0.00 | 0.00 | 0.00 0.00 | 0.00 0.00 | -0.09 |
| VA20 | 0.00 | 0.00 0.00 | 2.01 0.00 | 2.01 | 7.77 0.00 | 7.77 | 0.00 0.00 | 0.00 0.00 | 0.11 |
| VA21 - 1 | 0.00 | 0.00 0.00 | 392.68 -64.45 | 392.68 | 12.20 -9.36 | 12.20 | -0.14 0.14 | 0.01 -0.01 | -0.14 |
| VA21 - 2 | 0.00 | -0.01 0.00 | -63.74 -409.63 | 0.00 | 4.92 -5.17 | 4.92 | -0.16 0.16 | 0.00 0.00 | 0.12 |
| VA22 | 0.00 | -0.02 0.00 | 650.73 -770.82 | 650.73 | 6.97 -8.81 | 6.97 | -0.39 0.39 | 0.00 0.00 | -0.13 |
| VA23 | 0.00 | 0.00 0.00 | 0.00 0.00 | 0.00 | 0.00 0.00 | 0.00 | 0.00 0.00 | 0.00 0.00 | 0.04 |
| VA24 - 1 | 0.00 | 0.00 0.05 | 636.84 -557.33 | 636.84 | 23.44 -14.45 | 23.44 | -0.21 0.21 | 0.01 -0.01 | 0.04 |
| VA24 - 2 | 0.00 | 0.00 0.03 | 443.62 -447.36 | 443.62 | 6.95 -7.26 | 6.95 | -0.14 0.14 | 0.00 0.00 | 0.13 |
| VA25 - 1 | 0.00 | 0.00 0.02 | 525.43 138.23 | 525.43 | 6.67 2.75 | 0.00 | -0.20 0.20 | 0.00 0.00 | -0.10 |
| VA25 - 2 | 0.00 | 0.00 0.02 | 139.07 -468.51 | 139.07 | 2.75 -17.54 | 2.75 | -0.18 0.18 | 0.01 -0.01 | -0.10 |

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|----------|------|---------------|-------------------|--------|-----------------|-------|---------------|---------------|-------|
| VA25 - 3 | 0.00 | -0.02 0.00 | 680.33 -792.72 | 680.33 | 35.01 -44.17 | 35.01 | -0.37 0.37 | 0.02 -0.02 | -0.13 |
|----------|------|---------------|-------------------|--------|-----------------|-------|---------------|---------------|-------|

| CASO: Vento Y- (V4) | | | | | | | | | |
|---------------------|------------------|------------------|-----------------------|------------------|-----------------------|------------------|--------------------|--------------------|----------------|
| Elemento | Carga (kgf/m) | Rd Nd (tf) | Mxi Mxf (kgf.m) | MxMáx (kgf.m) | Myi Myf (kgf.m) | MyMáx (kgf.m) | Vxi Vxf (tf) | Vyi Vyf (tf) | Mtd (kgf/m) |
| VA1 - 1 | 0.00 | 0.00 0.01 | -61.32 -5.48 | 0.00 | -31.72 3.22 | 3.22 | 0.03 -0.03 | -0.02 0.02 | -1.41 |
| VA1 - 2 | 0.00 | 0.00 0.00 | -5.40 24.86 | 24.86 | 3.22 57.18 | 57.18 | 0.03 -0.03 | -0.05 0.05 | -1.41 |
| VA1 - 3 | 0.00 | 0.00 0.00 | 24.97 41.70 | 41.70 | 57.18 16.78 | 57.18 | 0.03 -0.03 | 0.07 -0.07 | -1.39 |
| VA1 - 4 | 0.00 | 0.00 0.01 | -38.36 25.02 | 25.02 | 14.30 -18.42 | 14.30 | 0.02 -0.02 | 0.01 -0.01 | 0.71 |
| VA1 - 5 | 0.00 | 0.00 0.00 | 25.12 33.82 | 33.82 | -18.42 12.12 | 0.00 | 0.02 -0.02 | -0.06 0.06 | 0.43 |
| VA1 - 6 | 0.00 | 0.00 0.01 | -62.65 88.97 | 88.97 | 5.46 -3.52 | 5.46 | 0.05 -0.05 | 0.00 0.00 | 1.25 |
| VA2 | 0.00 | 0.00 0.00 | 0.00 0.00 | 0.00 | 0.00 0.00 | 0.00 | 0.00 0.00 | 0.00 0.00 | 0.41 |
| VA3 - 1 | 0.00 | 0.00 0.00 | 0.00 0.02 | 0.02 | 0.00 -6.64 | 0.00 | 0.00 0.00 | 0.00 0.00 | 0.01 |
| VA3 - 2 | 0.00 | 0.00 0.00 | -0.09 -0.09 | 0.00 | 11.11 0.00 | 11.11 | 0.00 0.00 | 0.01 -0.01 | 0.00 |
| VA4 - 1 | 0.00 | 0.00 0.03 | 16.77 -11.43 | 16.77 | 13.05 3.79 | 13.05 | -0.01 0.01 | 0.00 0.00 | 0.39 |
| VA4 - 2 | 0.00 | 0.00 0.05 | -8.57 4.77 | 4.77 | -46.35 15.67 | 15.67 | 0.01 -0.01 | -0.03 0.03 | -3.92 |
| VA4 - 3 | 0.00 | 0.00 0.05 | 4.69 6.78 | 6.78 | 15.67 15.03 | 15.67 | 0.01 -0.01 | 0.00 0.00 | -3.92 |
| VA4 - 4 | 0.00 | 0.00 0.05 | 6.76 11.68 | 11.68 | 15.03 3.54 | 15.03 | 0.01 -0.01 | 0.02 -0.02 | -3.92 |
| VA4 - 5 | 0.00 | 0.00 0.05 | 11.63 15.35 | 15.35 | 3.54 62.75 | 62.75 | 0.01 -0.01 | -0.11 0.11 | -3.74 |
| VA4 - 6 | 0.00 | 0.00 0.05 | 19.51 11.22 | 19.51 | 36.18 31.40 | 36.18 | -0.01 0.01 | 0.00 0.00 | 2.82 |
| VA4 - 7 | 0.00 | 0.00 0.05 | 11.23 2.36 | 11.23 | 31.40 3.95 | 31.40 | -0.01 0.01 | 0.03 -0.03 | 2.92 |
| VA4 - 8 | 0.00 | 0.00 0.05 | 2.40 -11.50 | 2.40 | 3.95 -10.46 | 3.95 | -0.01 0.01 | 0.01 -0.01 | 2.92 |
| VA4 - 9 | 0.00 | 0.00 0.05 | -11.49 -16.34 | 0.00 | -10.46 -52.39 | 0.00 | -0.01 0.01 | 0.07 -0.07 | 2.92 |
| VA4 - 10 | 0.00 | 0.00 0.02 | -33.33 -14.29 | 0.00 | -15.74 -5.52 | 0.00 | 0.02 -0.02 | -0.01 0.01 | -0.26 |
| VA4 - 11 | 0.00 | 0.00 0.02 | -14.38 -3.58 | 0.00 | -5.52 -3.65 | 0.00 | 0.02 -0.02 | 0.00 0.00 | -0.26 |
| VA4 - 12 | 0.00 | 0.00 0.01 | -3.70 32.28 | 32.28 | -3.65 4.89 | 4.89 | 0.02 -0.02 | 0.00 0.00 | -0.26 |
| VA4 - 13 | 0.00 | 0.00 0.02 | 15.98 0.20 | 15.98 | 6.09 14.64 | 14.64 | -0.01 0.01 | 0.00 0.00 | -0.06 |
| VA5 - 1 | 0.00 | -0.03 0.00 | 10.16 -10.48 | 10.16 | -31.83 5.37 | 5.37 | -0.01 0.01 | -0.02 0.02 | -2.74 |
| VA5 - 2 | 0.00 | -0.03 0.00 | -10.45 -22.20 | 0.00 | 5.37 44.05 | 44.05 | -0.01 0.01 | -0.03 0.03 | -2.74 |
| VA5 - 3 | 0.00 | -0.03 0.00 | 6.01 4.33 | 6.01 | 40.07 15.82 | 40.07 | 0.00 0.00 | 0.02 -0.02 | 2.39 |
| VA5 - 4 | 0.00 | -0.03 0.00 | 4.30 2.49 | 4.30 | 15.82 11.80 | 15.82 | 0.00 0.00 | 0.00 0.00 | 2.39 |
| VA5 - 5 | 0.00 | -0.03 0.00 | 2.46 -1.36 | 2.46 | 11.80 -35.34 | 11.80 | 0.00 0.00 | 0.02 -0.02 | 2.39 |
| VA5 - 6 | 0.00 | 0.00 | 30.48 | 30.48 | -0.25 | 0.00 | -0.02 | 0.00 | 0.78 |

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|----------|------|---------------|-------------------|--------|-----------------|-------|---------------|---------------|-------|
| | | 0.00 | 3.09 | | -5.09 | | 0.02 | 0.00 | |
| VA5 - 7 | 0.00 | 0.00 0.01 | 3.20 -26.95 | 3.20 | 2.68 -4.72 | 2.68 | -0.02 0.02 | 0.00 0.00 | -1.23 |
| VA6 - 1 | 0.00 | 0.00 0.00 | 0.26 -33.98 | 0.26 | 14.28 3.23 | 14.28 | -0.02 0.02 | 0.01 -0.01 | -0.71 |
| VA6 - 2 | 0.00 | 0.00 0.00 | -34.02 -66.80 | 0.00 | 3.23 -6.15 | 3.23 | -0.02 0.02 | 0.01 -0.01 | -0.71 |
| VA7 - 1 | 0.00 | 0.00 0.00 | 59.39 30.02 | 59.39 | 5.89 3.60 | 0.00 | -0.02 0.02 | 0.00 0.00 | 0.85 |
| VA7 - 2 | 0.00 | 0.00 0.00 | 30.06 0.00 | 30.06 | 3.60 0.00 | 3.60 | -0.02 0.02 | 0.00 0.00 | 0.85 |
| VA8 - 1 | 0.00 | -0.01 0.00 | -21.25 26.28 | 26.28 | -2.38 10.30 | 10.30 | 0.01 -0.01 | 0.00 0.00 | -1.78 |
| VA8 - 2 | 0.00 | -0.01 0.00 | 14.26 -6.40 | 14.26 | 13.63 -4.33 | 13.63 | 0.00 0.00 | 0.00 0.00 | 1.41 |
| VA9 - 1 | 0.00 | -0.04 0.00 | -551.83 482.37 | 482.37 | 27.84 -19.00 | 27.84 | 0.18 -0.18 | 0.01 -0.01 | -0.03 |
| VA9 - 2 | 0.00 | -0.03 0.00 | -383.22 388.82 | 388.82 | 10.09 -12.48 | 10.09 | 0.12 -0.12 | 0.00 0.00 | -0.11 |
| VA10 - 1 | 0.00 | -0.02 0.00 | -445.03 405.07 | 405.07 | 13.26 -3.01 | 13.26 | 0.16 -0.16 | 0.00 0.00 | 0.09 |
| VA10 - 2 | 0.00 | 0.00 0.02 | -577.85 685.90 | 685.90 | 20.56 -50.44 | 20.56 | 0.32 -0.32 | 0.02 -0.02 | 0.10 |
| VA11 - 1 | 0.00 | 0.00 0.03 | -655.81 361.86 | 361.86 | 27.09 -27.73 | 27.09 | 0.53 -0.53 | 0.03 -0.03 | -0.03 |
| VA11 - 2 | 0.00 | 0.00 0.07 | -463.82 545.31 | 545.31 | 16.93 -8.43 | 16.93 | 0.32 -0.32 | 0.01 -0.01 | 0.14 |
| VA11 - 3 | 0.00 | 0.00 0.07 | 545.72 874.91 | 874.91 | -8.43 -20.87 | 0.00 | 0.32 -0.32 | 0.01 -0.01 | 0.14 |
| VA12 - 1 | 0.00 | 0.00 0.03 | 0.00 0.32 | 0.32 | 0.00 -3.07 | 0.00 | 0.00 0.00 | 0.00 0.00 | 0.08 |
| VA12 - 2 | 0.00 | 0.00 0.03 | -0.10 0.00 | 0.00 | -3.07 0.00 | 0.00 | 0.00 0.00 | 0.00 0.00 | 0.08 |
| VA13 | 0.00 | -0.01 0.00 | 0.00 0.00 | 0.00 | 0.00 0.00 | 0.00 | 0.00 0.00 | 0.00 0.00 | -0.03 |
| VA14 - 1 | 0.00 | -0.12 0.00 | 0.00 0.00 | 0.00 | 0.00 -3.65 | 0.00 | 0.00 0.00 | 0.00 0.00 | 0.10 |
| VA14 - 2 | 0.00 | -0.12 0.00 | 0.01 0.00 | 0.01 | -3.65 0.00 | 0.00 | 0.00 0.00 | 0.00 0.00 | 0.10 |
| VA15 | 0.00 | -0.02 0.00 | 0.00 0.00 | 0.00 | 0.00 0.00 | 0.00 | 0.00 0.00 | 0.00 0.00 | 0.03 |
| VA16 | 0.00 | 0.00 0.02 | 0.00 0.00 | 0.00 | 0.00 0.00 | 0.00 | 0.00 0.00 | 0.00 0.00 | 0.03 |
| VA17 - 1 | 0.00 | 0.00 0.06 | 0.00 0.00 | 0.00 | 0.00 8.38 | 8.38 | 0.00 0.00 | -0.01 0.01 | -0.01 |
| VA17 - 2 | 0.00 | 0.00 0.07 | -0.01 0.00 | 0.00 | -9.36 0.00 | 0.00 | 0.00 0.00 | 0.00 0.00 | 0.10 |
| VA18 | 0.00 | 0.00 0.03 | -583.00 584.94 | 584.94 | -33.61 39.24 | 39.24 | 0.60 -0.60 | -0.04 0.04 | 0.01 |
| VA19 | 0.00 | 0.00 0.01 | 0.00 0.00 | 0.00 | 0.00 0.00 | 0.00 | 0.00 0.00 | 0.00 0.00 | 0.09 |
| VA20 | 0.00 | 0.00 0.00 | -2.01 0.00 | 0.00 | -7.77 0.00 | 0.00 | 0.00 0.00 | 0.00 0.00 | -0.11 |
| VA21 - 1 | 0.00 | 0.00 0.00 | -392.68 64.45 | 64.45 | -12.20 9.36 | 9.36 | 0.14 -0.14 | -0.01 0.01 | 0.14 |
| VA21 - 2 | 0.00 | 0.00 0.01 | 63.74 409.63 | 409.63 | -4.92 5.17 | 0.00 | 0.16 -0.16 | 0.00 0.00 | -0.12 |
| VA22 | 0.00 | 0.00 0.02 | -650.73 770.82 | 770.82 | -6.97 8.81 | 8.81 | 0.39 -0.39 | 0.00 0.00 | 0.13 |
| VA23 | 0.00 | 0.00 0.00 | 0.00 0.00 | 0.00 | 0.00 0.00 | 0.00 | 0.00 0.00 | 0.00 0.00 | -0.04 |
| VA24 - 1 | 0.00 | -0.05 0.00 | -636.84 557.33 | 557.33 | -23.44 14.45 | 14.45 | 0.21 -0.21 | -0.01 0.01 | -0.04 |

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|----------|------|---------------|--------------------|--------|-----------------|-------|---------------|---------------|-------|
| VA24 - 2 | 0.00 | -0.03 0.00 | -443.62 447.36 | 447.36 | -6.95 7.26 | 7.26 | 0.14 -0.14 | 0.00 0.00 | -0.13 |
| VA25 - 1 | 0.00 | -0.02 0.00 | -525.43 -138.23 | 0.00 | -6.67 -2.75 | 0.00 | 0.20 -0.20 | 0.00 0.00 | 0.10 |
| VA25 - 2 | 0.00 | -0.02 0.00 | -139.07 468.51 | 468.51 | -2.75 17.54 | 17.54 | 0.18 -0.18 | -0.01 0.01 | 0.10 |
| VA25 - 3 | 0.00 | 0.00 0.02 | -680.33 792.72 | 792.72 | -35.01 44.17 | 44.17 | 0.37 -0.37 | -0.02 0.02 | 0.13 |

| CASO: Desaprumo X+ (D1) | | | | | | | | | |
|-------------------------|------------------|------------------|-----------------------|------------------|-----------------------|------------------|--------------------|--------------------|----------------|
| Elemento | Carga (kgf/m) | Rd Nd (tf) | Mxi Mxf (kgf.m) | MxMáx (kgf.m) | Myi Myf (kgf.m) | MyMáx (kgf.m) | Vxi Vxf (tf) | Vyi Vyf (tf) | Mtd (kgf/m) |
| VA1 - 1 | 0.00 | 0.00 0.01 | 154.93 0.41 | 154.93 | -0.13 0.26 | 0.00 | -0.08 0.08 | 0.00 0.00 | 0.02 |
| VA1 - 2 | 0.00 | 0.00 0.01 | 0.45 -82.98 | 0.45 | 0.26 -0.48 | 0.26 | -0.08 0.08 | 0.00 0.00 | 0.02 |
| VA1 - 3 | 0.00 | 0.00 0.01 | -82.91 -129.07 | 0.00 | -0.48 -0.78 | 0.00 | -0.08 0.08 | 0.00 0.00 | -0.06 |
| VA1 - 4 | 0.00 | 0.00 0.01 | 87.92 -65.27 | 87.92 | 0.04 -0.09 | 0.04 | -0.04 0.04 | 0.00 0.00 | -0.12 |
| VA1 - 5 | 0.00 | 0.00 0.01 | -65.29 -86.30 | 0.00 | -0.09 -0.42 | 0.00 | -0.04 0.04 | 0.00 0.00 | 0.61 |
| VA1 - 6 | 0.00 | 0.00 0.00 | 134.21 -160.69 | 134.21 | 0.53 -0.31 | 0.53 | -0.09 0.09 | 0.00 0.00 | 0.00 |
| VA2 | 0.00 | 0.00 0.00 | 0.00 0.00 | 0.00 | 0.00 0.00 | 0.00 | 0.00 0.00 | 0.00 0.00 | 0.05 |
| VA3 - 1 | 0.00 | 0.00 0.00 | 0.00 0.29 | 0.29 | 0.00 0.08 | 0.08 | 0.00 0.00 | 0.00 0.00 | -0.02 |
| VA3 - 2 | 0.00 | 0.00 0.00 | 0.13 0.13 | 0.13 | -0.97 0.00 | 0.00 | 0.00 0.00 | 0.00 0.00 | 0.00 |
| VA4 - 1 | 0.00 | 0.00 0.03 | 196.58 -75.23 | 196.58 | -2.79 0.58 | 0.58 | -0.05 0.05 | 0.00 0.00 | 0.00 |
| VA4 - 2 | 0.00 | 0.00 0.02 | 55.02 -70.72 | 55.02 | 1.01 -0.14 | 1.01 | -0.06 0.06 | 0.00 0.00 | 0.35 |
| VA4 - 3 | 0.00 | 0.00 0.02 | -70.76 -90.75 | 0.00 | -0.14 -0.04 | 0.00 | -0.06 0.06 | 0.00 0.00 | 0.35 |
| VA4 - 4 | 0.00 | 0.00 0.02 | -90.79 -137.86 | 0.00 | -0.04 -0.51 | 0.00 | -0.06 0.06 | 0.00 0.00 | 0.35 |
| VA4 - 5 | 0.00 | 0.00 0.02 | -137.92 -173.56 | 0.00 | -0.51 -1.17 | 0.00 | -0.06 0.06 | 0.00 0.00 | -1.73 |
| VA4 - 6 | 0.00 | 0.00 0.03 | 158.95 104.80 | 158.95 | 0.28 -0.03 | 0.00 | -0.05 0.05 | 0.00 0.00 | -0.70 |
| VA4 - 7 | 0.00 | 0.00 0.03 | 104.77 46.84 | 104.77 | -0.03 -0.10 | 0.00 | -0.05 0.05 | 0.00 0.00 | 0.18 |
| VA4 - 8 | 0.00 | 0.00 0.03 | 46.84 -43.97 | 46.84 | -0.10 -0.31 | 0.00 | -0.05 0.05 | 0.00 0.00 | 0.18 |
| VA4 - 9 | 0.00 | 0.00 0.03 | -43.80 -75.46 | 0.00 | -0.31 -0.34 | 0.00 | -0.05 0.05 | 0.00 0.00 | 0.18 |
| VA4 - 10 | 0.00 | 0.00 0.03 | 44.04 2.74 | 44.04 | -0.16 0.57 | 0.00 | -0.04 0.04 | 0.00 0.00 | 0.00 |
| VA4 - 11 | 0.00 | 0.00 0.03 | 2.88 -20.54 | 2.88 | 0.57 1.32 | 1.32 | -0.04 0.04 | 0.00 0.00 | 0.00 |
| VA4 - 12 | 0.00 | 0.00 0.03 | -20.55 -94.80 | 0.00 | 1.32 -0.80 | 1.32 | -0.04 0.04 | 0.00 0.00 | 0.00 |
| VA4 - 13 | 0.00 | 0.00 0.00 | 225.04 -302.95 | 225.04 | -0.99 3.94 | 3.94 | -0.18 0.18 | 0.00 0.00 | 0.01 |
| VA5 - 1 | 0.00 | 0.00 0.00 | 88.08 -35.22 | 88.08 | 1.13 -0.41 | 1.13 | -0.05 0.05 | 0.00 0.00 | 0.01 |
| VA5 - 2 | 0.00 | 0.00 0.00 | -35.18 -105.34 | 0.00 | -0.41 -0.06 | 0.00 | -0.05 0.05 | 0.00 0.00 | 0.01 |
| VA5 - 3 | 0.00 | -0.01 | 75.34 | 75.34 | -0.33 | 0.00 | -0.03 | 0.00 | -0.02 |

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|----------|------|---------------|-------------------|--------|----------------|------|---------------|--------------|-------|
| | | 0.00 | 46.78 | | 0.04 | | 0.03 | 0.00 | |
| VA5 - 4 | 0.00 | -0.01 0.00 | 46.81 16.26 | 46.81 | 0.04 -0.11 | 0.00 | -0.03 0.03 | 0.00 0.00 | -0.02 |
| VA5 - 5 | 0.00 | -0.01 0.00 | 16.26 -48.36 | 16.26 | -0.11 -0.27 | 0.00 | -0.03 0.03 | 0.00 0.00 | -0.02 |
| VA5 - 6 | 0.00 | -0.01 0.00 | 55.13 -12.14 | 55.13 | -0.06 0.60 | 0.60 | -0.04 0.04 | 0.00 0.00 | -0.01 |
| VA5 - 7 | 0.00 | -0.01 0.00 | -12.13 -81.98 | 0.00 | 1.13 5.92 | 5.92 | -0.04 0.04 | 0.00 0.00 | 0.18 |
| VA6 - 1 | 0.00 | 0.00 0.00 | 0.72 -93.45 | 0.72 | -5.40 -1.15 | 0.00 | -0.06 0.06 | 0.00 0.00 | -0.04 |
| VA6 - 2 | 0.00 | 0.00 0.00 | -93.46 -183.63 | 0.00 | -1.15 2.51 | 2.51 | -0.06 0.06 | 0.00 0.00 | -0.04 |
| VA7 - 1 | 0.00 | -0.01 0.00 | 122.46 61.94 | 122.46 | -2.16 -1.30 | 0.00 | -0.04 0.04 | 0.00 0.00 | 0.06 |
| VA7 - 2 | 0.00 | -0.01 0.00 | 61.95 0.00 | 61.95 | -1.30 0.00 | 0.00 | -0.04 0.04 | 0.00 0.00 | 0.06 |
| VA8 - 1 | 0.00 | 0.00 0.00 | 146.08 -121.12 | 146.08 | 4.72 -1.33 | 4.72 | -0.03 0.03 | 0.00 0.00 | 0.01 |
| VA8 - 2 | 0.00 | -0.01 0.00 | 103.16 -128.12 | 103.16 | 1.16 -4.24 | 1.16 | -0.02 0.02 | 0.00 0.00 | -0.01 |
| VA9 - 1 | 0.00 | 0.00 0.00 | 7.67 -7.51 | 7.67 | -5.12 5.17 | 5.17 | 0.00 0.00 | 0.00 0.00 | -0.65 |
| VA9 - 2 | 0.00 | 0.00 0.00 | -1.02 -2.24 | 0.00 | 3.92 0.88 | 3.92 | 0.00 0.00 | 0.00 0.00 | 0.02 |
| VA10 - 1 | 0.00 | 0.00 0.00 | 0.73 -0.99 | 0.73 | 0.93 -0.67 | 0.93 | 0.00 0.00 | 0.00 0.00 | 0.32 |
| VA10 - 2 | 0.00 | 0.00 0.00 | 1.37 -1.26 | 1.37 | 0.96 -2.15 | 0.96 | 0.00 0.00 | 0.00 0.00 | 0.35 |
| VA11 - 1 | 0.00 | 0.00 0.00 | 9.37 -2.82 | 9.37 | -1.03 1.20 | 1.20 | -0.01 0.01 | 0.00 0.00 | 0.20 |
| VA11 - 2 | 0.00 | 0.00 0.00 | 9.83 -9.47 | 9.83 | 0.90 -0.28 | 0.90 | -0.01 0.01 | 0.00 0.00 | -0.19 |
| VA11 - 3 | 0.00 | 0.00 0.00 | -9.42 -15.72 | 0.00 | -0.28 -0.62 | 0.00 | -0.01 0.01 | 0.00 0.00 | -0.19 |
| VA12 - 1 | 0.00 | 0.00 0.00 | 0.00 0.04 | 0.04 | 0.00 0.04 | 0.04 | 0.00 0.00 | 0.00 0.00 | 0.04 |
| VA12 - 2 | 0.00 | 0.00 0.00 | -0.01 0.00 | 0.00 | 0.04 0.00 | 0.04 | 0.00 0.00 | 0.00 0.00 | 0.04 |
| VA13 | 0.00 | 0.00 0.00 | 0.00 0.00 | 0.00 | 0.00 0.00 | 0.00 | 0.00 0.00 | 0.00 0.00 | -0.04 |
| VA14 - 1 | 0.00 | 0.00 0.00 | 0.00 0.06 | 0.06 | 0.00 0.14 | 0.14 | 0.00 0.00 | 0.00 0.00 | 0.07 |
| VA14 - 2 | 0.00 | 0.00 0.00 | 0.04 0.00 | 0.04 | 0.14 0.00 | 0.14 | 0.00 0.00 | 0.00 0.00 | 0.07 |
| VA15 | 0.00 | 0.00 0.00 | 0.00 0.00 | 0.00 | 0.00 0.00 | 0.00 | 0.00 0.00 | 0.00 0.00 | -0.03 |
| VA16 | 0.00 | 0.00 0.00 | 0.00 0.00 | 0.00 | 0.00 0.00 | 0.00 | 0.00 0.00 | 0.00 0.00 | 0.00 |
| VA17 - 1 | 0.00 | 0.00 0.00 | 0.00 -0.06 | 0.00 | 0.00 -0.42 | 0.00 | 0.00 0.00 | 0.00 0.00 | -0.18 |
| VA17 - 2 | 0.00 | 0.00 0.00 | -0.04 0.00 | 0.00 | 0.63 0.00 | 0.63 | 0.00 0.00 | 0.00 0.00 | -0.02 |
| VA18 | 0.00 | 0.00 0.00 | -3.68 4.25 | 4.25 | 0.10 -0.12 | 0.10 | 0.00 0.00 | 0.00 0.00 | 0.06 |
| VA19 | 0.00 | 0.00 0.00 | 0.00 0.00 | 0.00 | 0.00 0.00 | 0.00 | 0.00 0.00 | 0.00 0.00 | -0.13 |
| VA20 | 0.00 | 0.00 0.00 | 0.19 0.00 | 0.19 | -0.53 0.00 | 0.00 | 0.00 0.00 | 0.00 0.00 | -0.01 |
| VA21 - 1 | 0.00 | -0.01 0.00 | 19.07 -52.26 | 19.07 | 1.07 0.00 | 1.07 | -0.02 0.02 | 0.00 0.00 | 0.38 |
| VA21 - 2 | 0.00 | -0.01 0.00 | -52.30 24.88 | 24.88 | 5.40 -4.71 | 5.40 | 0.04 -0.04 | 0.00 0.00 | -0.33 |


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|----------|------|---------------|-----------------|-------|----------------|------|---------------|---------------|-------|
| VA22 | 0.00 | 0.00 0.00 | -11.31 11.03 | 11.03 | 0.28 -0.52 | 0.28 | 0.01 -0.01 | 0.00 0.00 | -0.09 |
| VA23 | 0.00 | 0.00 0.00 | 0.00 0.00 | 0.00 | 0.00 0.00 | 0.00 | 0.00 0.00 | 0.00 0.00 | -0.02 |
| VA24 - 1 | 0.00 | 0.00 0.00 | -2.74 3.49 | 3.49 | -3.46 3.35 | 3.35 | 0.00 0.00 | 0.00 0.00 | -0.63 |
| VA24 - 2 | 0.00 | -0.01 0.00 | 6.09 -5.27 | 6.09 | 2.36 5.98 | 5.98 | 0.00 0.00 | 0.00 0.00 | 0.02 |
| VA25 - 1 | 0.00 | 0.00 0.00 | -20.57 26.15 | 26.15 | 9.87 -10.55 | 9.87 | 0.02 -0.02 | 0.01 -0.01 | 0.48 |
| VA25 - 2 | 0.00 | 0.00 0.00 | 26.08 -20.58 | 26.08 | -10.55 1.41 | 1.41 | -0.01 0.01 | 0.00 0.00 | 0.48 |
| VA25 - 3 | 0.00 | 0.00 0.00 | -5.74 0.62 | 0.62 | 3.21 -1.09 | 3.21 | 0.00 0.00 | 0.00 0.00 | 0.20 |

| CASO: Desaprumo X- (D2) | | | | | | | | | |
|-------------------------|------------------|------------------|-----------------------|------------------|-----------------------|------------------|--------------------|--------------------|----------------|
| Elemento | Carga (kgf/m) | Rd Nd (tf) | Mxi Mxf (kgf.m) | MxMáx (kgf.m) | Myi Myf (kgf.m) | MyMáx (kgf.m) | Vxi Vxf (tf) | Vyi Vyf (tf) | Mtd (kgf/m) |
| VA1 - 1 | 0.00 | -0.01 0.00 | -154.93 -0.41 | 0.00 | 0.13 -0.26 | 0.13 | 0.08 -0.08 | 0.00 0.00 | -0.02 |
| VA1 - 2 | 0.00 | -0.01 0.00 | -0.45 82.98 | 82.98 | -0.26 0.48 | 0.48 | 0.08 -0.08 | 0.00 0.00 | -0.02 |
| VA1 - 3 | 0.00 | -0.01 0.00 | 82.91 129.07 | 129.07 | 0.48 0.78 | 0.00 | 0.08 -0.08 | 0.00 0.00 | 0.06 |
| VA1 - 4 | 0.00 | -0.01 0.00 | -87.92 65.27 | 65.27 | -0.04 0.09 | 0.09 | 0.04 -0.04 | 0.00 0.00 | 0.12 |
| VA1 - 5 | 0.00 | -0.01 0.00 | 65.29 86.30 | 86.30 | 0.09 0.42 | 0.00 | 0.04 -0.04 | 0.00 0.00 | -0.61 |
| VA1 - 6 | 0.00 | 0.00 0.00 | -134.21 160.69 | 160.69 | -0.53 0.31 | 0.31 | 0.09 -0.09 | 0.00 0.00 | 0.00 |
| VA2 | 0.00 | 0.00 0.00 | 0.00 0.00 | 0.00 | 0.00 0.00 | 0.00 | 0.00 0.00 | 0.00 0.00 | -0.05 |
| VA3 - 1 | 0.00 | 0.00 0.00 | 0.00 -0.29 | 0.00 | 0.00 -0.08 | 0.00 | 0.00 0.00 | 0.00 0.00 | 0.02 |
| VA3 - 2 | 0.00 | 0.00 0.00 | -0.13 -0.13 | 0.00 | 0.97 0.00 | 0.97 | 0.00 0.00 | 0.00 0.00 | 0.00 |
| VA4 - 1 | 0.00 | -0.03 0.00 | -196.58 75.23 | 75.23 | 2.79 -0.58 | 2.79 | 0.05 -0.05 | 0.00 0.00 | 0.00 |
| VA4 - 2 | 0.00 | -0.02 0.00 | -55.02 70.72 | 70.72 | -1.01 0.14 | 0.14 | 0.06 -0.06 | 0.00 0.00 | -0.35 |
| VA4 - 3 | 0.00 | -0.02 0.00 | 70.76 90.75 | 90.75 | 0.14 0.04 | 0.00 | 0.06 -0.06 | 0.00 0.00 | -0.35 |
| VA4 - 4 | 0.00 | -0.02 0.00 | 90.79 137.86 | 137.86 | 0.04 0.51 | 0.00 | 0.06 -0.06 | 0.00 0.00 | -0.35 |
| VA4 - 5 | 0.00 | -0.02 0.00 | 137.92 173.56 | 173.56 | 0.51 1.17 | 0.00 | 0.06 -0.06 | 0.00 0.00 | 1.73 |
| VA4 - 6 | 0.00 | -0.03 0.00 | -158.95 -104.80 | 0.00 | -0.28 0.03 | 0.03 | 0.05 -0.05 | 0.00 0.00 | 0.70 |
| VA4 - 7 | 0.00 | -0.03 0.00 | -104.77 -46.84 | 0.00 | 0.03 0.10 | 0.10 | 0.05 -0.05 | 0.00 0.00 | -0.18 |
| VA4 - 8 | 0.00 | -0.03 0.00 | -46.84 43.97 | 43.97 | 0.10 0.31 | 0.31 | 0.05 -0.05 | 0.00 0.00 | -0.18 |
| VA4 - 9 | 0.00 | -0.03 0.00 | 43.80 75.46 | 75.46 | 0.31 0.34 | 0.00 | 0.05 -0.05 | 0.00 0.00 | -0.18 |
| VA4 - 10 | 0.00 | -0.03 0.00 | -44.04 -2.74 | 0.00 | 0.16 -0.57 | 0.16 | 0.04 -0.04 | 0.00 0.00 | 0.00 |
| VA4 - 11 | 0.00 | -0.03 0.00 | -2.88 20.54 | 20.54 | -0.57 -1.32 | 0.00 | 0.04 -0.04 | 0.00 0.00 | 0.00 |
| VA4 - 12 | 0.00 | -0.03 0.00 | 20.55 94.80 | 94.80 | -1.32 0.80 | 0.00 | 0.04 -0.04 | 0.00 0.00 | 0.00 |
| VA4 - 13 | 0.00 | 0.00 | -225.04 | 302.95 | 0.99 | 0.99 | 0.18 | 0.00 | -0.01 |


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|----------|------|--------------|-------------------|--------|----------------|------|---------------|--------------|-------|
| | | 0.00 | 302.95 | | -3.94 | | -0.18 | 0.00 | |
| VA5 - 1 | 0.00 | 0.00 0.00 | -88.08 35.22 | 35.22 | -1.13 0.41 | 0.41 | 0.05 -0.05 | 0.00 0.00 | -0.01 |
| VA5 - 2 | 0.00 | 0.00 0.00 | 35.18 105.34 | 105.34 | 0.41 0.06 | 0.00 | 0.05 -0.05 | 0.00 0.00 | -0.01 |
| VA5 - 3 | 0.00 | 0.00 0.01 | -75.34 -46.78 | 0.00 | 0.33 -0.04 | 0.33 | 0.03 -0.03 | 0.00 0.00 | 0.02 |
| VA5 - 4 | 0.00 | 0.00 0.01 | -46.81 -16.26 | 0.00 | -0.04 0.11 | 0.11 | 0.03 -0.03 | 0.00 0.00 | 0.02 |
| VA5 - 5 | 0.00 | 0.00 0.01 | -16.26 48.36 | 48.36 | 0.11 0.27 | 0.27 | 0.03 -0.03 | 0.00 0.00 | 0.02 |
| VA5 - 6 | 0.00 | 0.00 0.01 | -55.13 12.14 | 12.14 | 0.06 -0.60 | 0.06 | 0.04 -0.04 | 0.00 0.00 | 0.01 |
| VA5 - 7 | 0.00 | 0.00 0.01 | 12.13 81.98 | 81.98 | -1.13 -5.92 | 0.00 | 0.04 -0.04 | 0.00 0.00 | -0.18 |
| VA6 - 1 | 0.00 | 0.00 0.00 | -0.72 93.45 | 93.45 | 5.40 1.15 | 5.40 | 0.06 -0.06 | 0.00 0.00 | 0.04 |
| VA6 - 2 | 0.00 | 0.00 0.00 | 93.46 183.63 | 183.63 | 1.15 -2.51 | 0.00 | 0.06 -0.06 | 0.00 0.00 | 0.04 |
| VA7 - 1 | 0.00 | 0.00 0.01 | -122.46 -61.94 | 0.00 | 2.16 1.30 | 2.16 | 0.04 -0.04 | 0.00 0.00 | -0.06 |
| VA7 - 2 | 0.00 | 0.00 0.01 | -61.95 0.00 | 0.00 | 1.30 0.00 | 1.30 | 0.04 -0.04 | 0.00 0.00 | -0.06 |
| VA8 - 1 | 0.00 | 0.00 0.00 | -146.08 121.12 | 121.12 | -4.72 1.33 | 1.33 | 0.03 -0.03 | 0.00 0.00 | -0.01 |
| VA8 - 2 | 0.00 | 0.00 0.01 | -103.16 128.12 | 128.12 | -1.16 4.24 | 4.24 | 0.02 -0.02 | 0.00 0.00 | 0.01 |
| VA9 - 1 | 0.00 | 0.00 0.00 | -7.67 7.51 | 7.51 | 5.12 -5.17 | 5.12 | 0.00 0.00 | 0.00 0.00 | 0.65 |
| VA9 - 2 | 0.00 | 0.00 0.00 | 1.02 2.24 | 2.24 | -3.92 -0.88 | 0.00 | 0.00 0.00 | 0.00 0.00 | -0.02 |
| VA10 - 1 | 0.00 | 0.00 0.00 | -0.73 0.99 | 0.99 | -0.93 0.67 | 0.67 | 0.00 0.00 | 0.00 0.00 | -0.32 |
| VA10 - 2 | 0.00 | 0.00 0.00 | -1.37 1.26 | 1.26 | -0.96 2.15 | 2.15 | 0.00 0.00 | 0.00 0.00 | -0.35 |
| VA11 - 1 | 0.00 | 0.00 0.00 | -9.37 2.82 | 2.82 | 1.03 -1.20 | 1.03 | 0.01 -0.01 | 0.00 0.00 | -0.20 |
| VA11 - 2 | 0.00 | 0.00 0.00 | -9.83 9.47 | 9.47 | -0.90 0.28 | 0.28 | 0.01 -0.01 | 0.00 0.00 | 0.19 |
| VA11 - 3 | 0.00 | 0.00 0.00 | 9.42 15.72 | 15.72 | 0.28 0.62 | 0.00 | 0.01 -0.01 | 0.00 0.00 | 0.19 |
| VA12 - 1 | 0.00 | 0.00 0.00 | 0.00 -0.04 | 0.00 | 0.00 -0.04 | 0.00 | 0.00 0.00 | 0.00 0.00 | -0.04 |
| VA12 - 2 | 0.00 | 0.00 0.00 | 0.01 0.00 | 0.01 | -0.04 0.00 | 0.00 | 0.00 0.00 | 0.00 0.00 | -0.04 |
| VA13 | 0.00 | 0.00 0.00 | 0.00 0.00 | 0.00 | 0.00 0.00 | 0.00 | 0.00 0.00 | 0.00 0.00 | 0.04 |
| VA14 - 1 | 0.00 | 0.00 0.00 | 0.00 -0.06 | 0.00 | 0.00 -0.14 | 0.00 | 0.00 0.00 | 0.00 0.00 | -0.07 |
| VA14 - 2 | 0.00 | 0.00 0.00 | -0.04 0.00 | 0.00 | -0.14 0.00 | 0.00 | 0.00 0.00 | 0.00 0.00 | -0.07 |
| VA15 | 0.00 | 0.00 0.00 | 0.00 0.00 | 0.00 | 0.00 0.00 | 0.00 | 0.00 0.00 | 0.00 0.00 | 0.03 |
| VA16 | 0.00 | 0.00 0.00 | 0.00 0.00 | 0.00 | 0.00 0.00 | 0.00 | 0.00 0.00 | 0.00 0.00 | 0.00 |
| VA17 - 1 | 0.00 | 0.00 0.00 | 0.00 0.06 | 0.06 | 0.00 0.42 | 0.42 | 0.00 0.00 | 0.00 0.00 | 0.18 |
| VA17 - 2 | 0.00 | 0.00 0.00 | 0.04 0.00 | 0.04 | -0.63 0.00 | 0.00 | 0.00 0.00 | 0.00 0.00 | 0.02 |
| VA18 | 0.00 | 0.00 0.00 | 3.68 -4.25 | 3.68 | -0.10 0.12 | 0.12 | 0.00 0.00 | 0.00 0.00 | -0.06 |
| VA19 | 0.00 | 0.00 0.00 | 0.00 0.00 | 0.00 | 0.00 0.00 | 0.00 | 0.00 0.00 | 0.00 0.00 | 0.13 |


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|----------|------|--------------|-----------------|-------|----------------|-------|---------------|---------------|-------|
| VA20 | 0.00 | 0.00 0.00 | -0.19 0.00 | 0.00 | 0.53 0.00 | 0.53 | 0.00 0.00 | 0.00 0.00 | 0.01 |
| VA21 - 1 | 0.00 | 0.00 0.01 | -19.07 52.26 | 52.26 | -1.07 0.00 | 0.00 | 0.02 -0.02 | 0.00 0.00 | -0.38 |
| VA21 - 2 | 0.00 | 0.00 0.01 | 52.30 -24.88 | 52.30 | -5.40 4.71 | 4.71 | -0.04 0.04 | 0.00 0.00 | 0.33 |
| VA22 | 0.00 | 0.00 0.00 | 11.31 -11.03 | 11.31 | -0.28 0.52 | 0.52 | -0.01 0.01 | 0.00 0.00 | 0.09 |
| VA23 | 0.00 | 0.00 0.00 | 0.00 0.00 | 0.00 | 0.00 0.00 | 0.00 | 0.00 0.00 | 0.00 0.00 | 0.02 |
| VA24 - 1 | 0.00 | 0.00 0.00 | 2.74 -3.49 | 2.74 | 3.46 -3.35 | 3.46 | 0.00 0.00 | 0.00 0.00 | 0.63 |
| VA24 - 2 | 0.00 | 0.00 0.01 | -6.09 5.27 | 5.27 | -2.36 -5.98 | 0.00 | 0.00 0.00 | 0.00 0.00 | -0.02 |
| VA25 - 1 | 0.00 | 0.00 0.00 | 20.57 -26.15 | 20.57 | -9.87 10.55 | 10.55 | -0.02 0.02 | -0.01 0.01 | -0.48 |
| VA25 - 2 | 0.00 | 0.00 0.00 | -26.08 20.58 | 20.58 | 10.55 -1.41 | 10.55 | 0.01 -0.01 | 0.00 0.00 | -0.48 |
| VA25 - 3 | 0.00 | 0.00 0.00 | 5.74 -0.62 | 5.74 | -3.21 1.09 | 1.09 | 0.00 0.00 | 0.00 0.00 | -0.20 |

| CASO: Desaprumo Y+ (D3) | | | | | | | | | |
|-------------------------|------------------|------------------|-----------------------|------------------|-----------------------|------------------|--------------------|--------------------|----------------|
| Elemento | Carga (kgf/m) | Rd Nd (tf) | Mxi Mxf (kgf.m) | MxMáx (kgf.m) | Myi Myf (kgf.m) | MyMáx (kgf.m) | Vxi Vxf (tf) | Vyi Vyf (tf) | Mtd (kgf/m) |
| VA1 - 1 | 0.00 | 0.00 0.00 | 20.02 1.66 | 20.02 | 10.17 -1.21 | 10.17 | -0.01 0.01 | 0.01 -0.01 | 0.45 |
| VA1 - 2 | 0.00 | 0.00 0.00 | 1.64 -8.30 | 1.64 | -1.21 -16.52 | 0.00 | -0.01 0.01 | 0.01 -0.01 | 0.45 |
| VA1 - 3 | 0.00 | 0.00 0.00 | -8.34 -13.84 | 0.00 | -16.52 -5.77 | 0.00 | -0.01 0.01 | -0.02 0.02 | 0.44 |
| VA1 - 4 | 0.00 | 0.00 0.00 | 12.55 -8.12 | 12.55 | -4.52 4.81 | 4.81 | -0.01 0.01 | 0.00 0.00 | -0.22 |
| VA1 - 5 | 0.00 | 0.00 0.00 | -8.15 -10.99 | 0.00 | 4.81 -3.49 | 4.81 | -0.01 0.01 | 0.02 -0.02 | -0.13 |
| VA1 - 6 | 0.00 | 0.00 0.00 | 20.25 -28.41 | 20.25 | -1.85 1.79 | 1.79 | -0.01 0.01 | 0.00 0.00 | -0.41 |
| VA2 | 0.00 | 0.00 0.00 | 0.00 0.00 | 0.00 | 0.00 0.00 | 0.00 | 0.00 0.00 | 0.00 0.00 | -0.13 |
| VA3 - 1 | 0.00 | 0.00 0.00 | 0.00 -0.01 | 0.00 | 0.00 1.71 | 1.71 | 0.00 0.00 | 0.00 0.00 | 0.00 |
| VA3 - 2 | 0.00 | 0.00 0.00 | 0.03 0.03 | 0.03 | -4.19 0.00 | 0.00 | 0.00 0.00 | 0.00 0.00 | 0.00 |
| VA4 - 1 | 0.00 | -0.01 0.00 | -4.74 3.48 | 3.48 | -3.65 -1.94 | 0.00 | 0.00 0.00 | 0.00 0.00 | -0.08 |
| VA4 - 2 | 0.00 | -0.02 0.00 | 2.67 -1.51 | 2.67 | 14.12 -4.52 | 14.12 | 0.00 0.00 | 0.01 -0.01 | 1.20 |
| VA4 - 3 | 0.00 | -0.02 0.00 | -1.49 -2.14 | 0.00 | -4.52 -4.74 | 0.00 | 0.00 0.00 | 0.00 0.00 | 1.20 |
| VA4 - 4 | 0.00 | -0.02 0.00 | -2.14 -3.68 | 0.00 | -4.74 -2.07 | 0.00 | 0.00 0.00 | 0.00 0.00 | 1.20 |
| VA4 - 5 | 0.00 | -0.02 0.00 | -3.66 -4.83 | 0.00 | -2.07 -18.58 | 0.00 | 0.00 0.00 | 0.03 -0.03 | 1.15 |
| VA4 - 6 | 0.00 | -0.02 0.00 | -5.88 -3.40 | 0.00 | -10.19 -9.75 | 0.00 | 0.00 0.00 | 0.00 0.00 | -0.87 |
| VA4 - 7 | 0.00 | -0.02 0.00 | -3.40 -0.74 | 0.00 | -9.75 -1.23 | 0.00 | 0.00 0.00 | -0.01 0.01 | -0.90 |
| VA4 - 8 | 0.00 | -0.02 0.00 | -0.75 3.41 | 3.41 | -1.23 3.11 | 3.11 | 0.00 0.00 | 0.00 0.00 | -0.90 |
| VA4 - 9 | 0.00 | -0.02 0.00 | 3.41 4.86 | 4.86 | 3.11 14.26 | 14.26 | 0.00 0.00 | -0.02 0.02 | -0.90 |
| VA4 - 10 | 0.00 | -0.01 | 10.14 | 10.14 | 2.15 | 0.00 | -0.01 | 0.00 | 0.07 |


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|----------|------|---------------|--------------------|--------|-----------------|-------|---------------|---------------|-------|
| | | 0.00 | 4.37 | | 0.98 | | 0.01 | 0.00 | |
| VA4 - 11 | 0.00 | -0.01 0.00 | 4.40 1.13 | 4.40 | 0.98 1.80 | 1.80 | -0.01 0.01 | 0.00 0.00 | 0.07 |
| VA4 - 12 | 0.00 | 0.00 0.00 | 1.16 -9.68 | 1.16 | 1.80 -0.48 | 1.80 | -0.01 0.01 | 0.00 0.00 | 0.07 |
| VA4 - 13 | 0.00 | -0.01 0.00 | -4.43 -0.19 | 0.00 | -1.58 -6.52 | 0.00 | 0.00 0.00 | 0.00 0.00 | -0.03 |
| VA5 - 1 | 0.00 | 0.00 0.01 | -2.25 2.86 | 2.86 | 10.08 -1.67 | 10.08 | 0.00 0.00 | 0.01 -0.01 | 0.84 |
| VA5 - 2 | 0.00 | 0.00 0.01 | 2.85 5.76 | 5.76 | -1.67 -13.96 | 0.00 | 0.00 0.00 | 0.01 -0.01 | 0.84 |
| VA5 - 3 | 0.00 | 0.00 0.01 | -1.05 -0.82 | 0.00 | -12.61 -4.44 | 0.00 | 0.00 0.00 | -0.01 0.01 | -0.73 |
| VA5 - 4 | 0.00 | 0.00 0.01 | -0.81 -0.56 | 0.00 | -4.44 -3.61 | 0.00 | 0.00 0.00 | 0.00 0.00 | -0.73 |
| VA5 - 5 | 0.00 | 0.00 0.01 | -0.54 -0.01 | 0.00 | -3.61 10.32 | 10.32 | 0.00 0.00 | -0.01 0.01 | -0.73 |
| VA5 - 6 | 0.00 | 0.00 0.00 | -8.59 -1.00 | 0.00 | -1.91 1.16 | 1.16 | 0.00 0.00 | 0.00 0.00 | -0.24 |
| VA5 - 7 | 0.00 | 0.00 0.00 | -1.04 7.31 | 7.31 | -4.43 3.19 | 3.19 | 0.01 -0.01 | 0.00 0.00 | 0.30 |
| VA6 - 1 | 0.00 | 0.00 0.00 | -0.09 13.86 | 13.86 | -4.90 -1.11 | 0.00 | 0.01 -0.01 | 0.00 0.00 | 0.18 |
| VA6 - 2 | 0.00 | 0.00 0.00 | 13.87 27.23 | 27.23 | -1.11 3.44 | 0.00 | 0.01 -0.01 | 0.00 0.00 | 0.18 |
| VA7 - 1 | 0.00 | 0.00 0.00 | -17.12 -8.65 | 0.00 | -2.48 -0.78 | 0.00 | 0.01 -0.01 | 0.00 0.00 | -0.22 |
| VA7 - 2 | 0.00 | 0.00 0.00 | -8.67 0.00 | 0.00 | -0.78 0.00 | 0.00 | 0.01 -0.01 | 0.00 0.00 | -0.22 |
| VA8 - 1 | 0.00 | 0.00 0.00 | 6.57 -8.46 | 6.57 | 0.67 -3.33 | 0.67 | 0.00 0.00 | 0.00 0.00 | 0.58 |
| VA8 - 2 | 0.00 | 0.00 0.00 | -4.24 1.37 | 1.37 | -4.54 1.36 | 1.36 | 0.00 0.00 | 0.00 0.00 | -0.45 |
| VA9 - 1 | 0.00 | 0.00 0.01 | 122.19 -106.35 | 122.19 | -9.55 6.67 | 6.67 | -0.04 0.04 | 0.00 0.00 | 0.01 |
| VA9 - 2 | 0.00 | 0.00 0.01 | 84.05 -85.49 | 84.05 | -3.75 4.57 | 4.57 | -0.03 0.03 | 0.00 0.00 | 0.04 |
| VA10 - 1 | 0.00 | 0.00 0.01 | 97.56 -88.10 | 97.56 | -4.56 1.14 | 1.14 | -0.04 0.04 | 0.00 0.00 | -0.01 |
| VA10 - 2 | 0.00 | 0.00 0.00 | 127.31 -152.41 | 127.31 | -8.01 17.75 | 17.75 | -0.07 0.07 | -0.01 0.01 | -0.05 |
| VA11 - 1 | 0.00 | -0.01 0.00 | 199.92 -110.17 | 199.92 | -8.49 8.87 | 8.87 | -0.16 0.16 | -0.01 0.01 | 0.01 |
| VA11 - 2 | 0.00 | -0.02 0.00 | 141.51 -166.47 | 141.51 | -5.55 2.70 | 2.70 | -0.10 0.10 | 0.00 0.00 | -0.04 |
| VA11 - 3 | 0.00 | -0.02 0.00 | -166.59 -267.06 | 0.00 | 2.70 6.66 | 6.66 | -0.10 0.10 | 0.00 0.00 | -0.04 |
| VA12 - 1 | 0.00 | -0.01 0.00 | 0.00 -0.10 | 0.00 | 0.00 0.93 | 0.93 | 0.00 0.00 | 0.00 0.00 | -0.02 |
| VA12 - 2 | 0.00 | -0.01 0.00 | 0.03 0.00 | 0.03 | 0.93 0.00 | 0.93 | 0.00 0.00 | 0.00 0.00 | -0.02 |
| VA13 | 0.00 | 0.00 0.00 | 0.00 0.00 | 0.00 | 0.00 0.00 | 0.00 | 0.00 0.00 | 0.00 0.00 | 0.01 |
| VA14 - 1 | 0.00 | 0.00 0.03 | 0.00 0.00 | 0.00 | 0.00 1.23 | 1.23 | 0.00 0.00 | 0.00 0.00 | -0.03 |
| VA14 - 2 | 0.00 | 0.00 0.03 | 0.00 0.00 | 0.00 | 1.23 0.00 | 1.23 | 0.00 0.00 | 0.00 0.00 | -0.03 |
| VA15 | 0.00 | 0.00 0.01 | 0.00 0.00 | 0.00 | 0.00 0.00 | 0.00 | 0.00 0.00 | 0.00 0.00 | -0.01 |
| VA16 | 0.00 | -0.01 0.00 | 0.00 0.00 | 0.00 | 0.00 0.00 | 0.00 | 0.00 0.00 | 0.00 0.00 | -0.01 |
| VA17 - 1 | 0.00 | -0.02 0.00 | 0.00 0.00 | 0.00 | 0.00 -2.81 | 0.00 | 0.00 0.00 | 0.00 0.00 | 0.00 |


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|----------|------|---------------|-------------------|--------|-----------------|-------|---------------|---------------|-------|
| VA17 - 2 | 0.00 | -0.02 0.00 | 0.00 0.00 | 0.00 | 3.10 0.00 | 3.10 | 0.00 0.00 | 0.00 0.00 | -0.03 |
| VA18 | 0.00 | -0.01 0.00 | 180.05 -180.67 | 180.05 | 11.18 -12.98 | 11.18 | -0.19 0.19 | 0.01 -0.01 | 0.00 |
| VA19 | 0.00 | 0.00 0.00 | 0.00 0.00 | 0.00 | 0.00 0.00 | 0.00 | 0.00 0.00 | 0.00 0.00 | -0.03 |
| VA20 | 0.00 | 0.00 0.00 | 0.54 0.00 | 0.54 | 5.59 0.00 | 5.59 | 0.00 0.00 | 0.00 0.00 | 0.03 |
| VA21 - 1 | 0.00 | 0.00 0.00 | 98.67 -13.34 | 98.67 | 4.05 -3.16 | 4.05 | -0.03 0.03 | 0.00 0.00 | -0.05 |
| VA21 - 2 | 0.00 | 0.00 0.00 | -13.17 -105.25 | 0.00 | 1.75 -5.47 | 1.75 | -0.04 0.04 | 0.00 0.00 | 0.04 |
| VA22 | 0.00 | 0.00 0.00 | 192.52 -228.18 | 192.52 | 2.72 -3.23 | 2.72 | -0.12 0.12 | 0.00 0.00 | -0.04 |
| VA23 | 0.00 | 0.00 0.00 | 0.00 0.00 | 0.00 | 0.00 0.00 | 0.00 | 0.00 0.00 | 0.00 0.00 | 0.01 |
| VA24 - 1 | 0.00 | 0.00 0.01 | 153.54 -133.91 | 153.54 | 8.03 -5.01 | 8.03 | -0.05 0.05 | 0.00 0.00 | 0.01 |
| VA24 - 2 | 0.00 | 0.00 0.01 | 106.25 -107.22 | 106.25 | 2.61 -2.87 | 2.61 | -0.03 0.03 | 0.00 0.00 | 0.04 |
| VA25 - 1 | 0.00 | 0.00 0.01 | 126.46 32.60 | 126.46 | 2.72 1.13 | 0.00 | -0.05 0.05 | 0.00 0.00 | -0.02 |
| VA25 - 2 | 0.00 | 0.00 0.01 | 32.82 -111.62 | 32.82 | 1.13 -5.05 | 1.13 | -0.04 0.04 | 0.00 0.00 | -0.02 |
| VA25 - 3 | 0.00 | 0.00 0.00 | 163.13 -191.40 | 163.13 | 10.32 -15.22 | 10.32 | -0.09 0.09 | 0.01 -0.01 | -0.06 |

| CASO: Desaprumo Y- (D4) | | | | | | | | | |
|-------------------------|------------------|------------------|-----------------------|------------------|-----------------------|------------------|--------------------|--------------------|----------------|
| Elemento | Carga (kgf/m) | Rd Nd (tf) | Mxi Mxf (kgf.m) | MxMáx (kgf.m) | Myi Myf (kgf.m) | MyMáx (kgf.m) | Vxi Vxf (tf) | Vyi Vyf (tf) | Mtd (kgf/m) |
| VA1 - 1 | 0.00 | 0.00 0.00 | -20.02 -1.66 | 0.00 | -10.17 1.21 | 1.21 | 0.01 -0.01 | -0.01 0.01 | -0.45 |
| VA1 - 2 | 0.00 | 0.00 0.00 | -1.64 8.30 | 8.30 | 1.21 16.52 | 16.52 | 0.01 -0.01 | -0.01 0.01 | -0.45 |
| VA1 - 3 | 0.00 | 0.00 0.00 | 8.34 13.84 | 13.84 | 16.52 5.77 | 16.52 | 0.01 -0.01 | 0.02 -0.02 | -0.44 |
| VA1 - 4 | 0.00 | 0.00 0.00 | -12.55 8.12 | 8.12 | 4.52 -4.81 | 4.52 | 0.01 -0.01 | 0.00 0.00 | 0.22 |
| VA1 - 5 | 0.00 | 0.00 0.00 | 8.15 10.99 | 10.99 | -4.81 3.49 | 0.00 | 0.01 -0.01 | -0.02 0.02 | 0.13 |
| VA1 - 6 | 0.00 | 0.00 0.00 | -20.25 28.41 | 28.41 | 1.85 -1.79 | 1.85 | 0.01 -0.01 | 0.00 0.00 | 0.41 |
| VA2 | 0.00 | 0.00 0.00 | 0.00 0.00 | 0.00 | 0.00 0.00 | 0.00 | 0.00 0.00 | 0.00 0.00 | 0.13 |
| VA3 - 1 | 0.00 | 0.00 0.00 | 0.00 0.01 | 0.01 | 0.00 -1.71 | 0.00 | 0.00 0.00 | 0.00 0.00 | 0.00 |
| VA3 - 2 | 0.00 | 0.00 0.00 | -0.03 -0.03 | 0.00 | 4.19 0.00 | 4.19 | 0.00 0.00 | 0.00 0.00 | 0.00 |
| VA4 - 1 | 0.00 | 0.00 0.01 | 4.74 -3.48 | 4.74 | 3.65 1.94 | 3.65 | 0.00 0.00 | 0.00 0.00 | 0.08 |
| VA4 - 2 | 0.00 | 0.00 0.02 | -2.67 1.51 | 1.51 | -14.12 4.52 | 4.52 | 0.00 0.00 | -0.01 0.01 | -1.20 |
| VA4 - 3 | 0.00 | 0.00 0.02 | 1.49 2.14 | 2.14 | 4.52 4.74 | 4.74 | 0.00 0.00 | 0.00 0.00 | -1.20 |
| VA4 - 4 | 0.00 | 0.00 0.02 | 2.14 3.68 | 3.68 | 4.74 2.07 | 4.74 | 0.00 0.00 | 0.00 0.00 | -1.20 |
| VA4 - 5 | 0.00 | 0.00 0.02 | 3.66 4.83 | 4.83 | 2.07 18.58 | 18.58 | 0.00 0.00 | -0.03 0.03 | -1.15 |
| VA4 - 6 | 0.00 | 0.00 0.02 | 5.88 3.40 | 5.88 | 10.19 9.75 | 10.19 | 0.00 0.00 | 0.00 0.00 | 0.87 |
| VA4 - 7 | 0.00 | 0.00 | 3.40 | 3.40 | 9.75 | 9.75 | 0.00 | 0.01 | 0.90 |


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|----------|------|---------------|-------------------|--------|-----------------|-------|---------------|---------------|-------|
| | | 0.02 | 0.74 | | 1.23 | | 0.00 | -0.01 | |
| VA4 - 8 | 0.00 | 0.00 0.02 | 0.75 -3.41 | 0.75 | 1.23 -3.11 | 1.23 | 0.00 0.00 | 0.00 0.00 | 0.90 |
| VA4 - 9 | 0.00 | 0.00 0.02 | -3.41 -4.86 | 0.00 | -3.11 -14.26 | 0.00 | 0.00 0.00 | 0.02 -0.02 | 0.90 |
| VA4 - 10 | 0.00 | 0.00 0.01 | -10.14 -4.37 | 0.00 | -2.15 -0.98 | 0.00 | 0.01 -0.01 | 0.00 0.00 | -0.07 |
| VA4 - 11 | 0.00 | 0.00 0.01 | -4.40 -1.13 | 0.00 | -0.98 -1.80 | 0.00 | 0.01 -0.01 | 0.00 0.00 | -0.07 |
| VA4 - 12 | 0.00 | 0.00 0.00 | -1.16 9.68 | 9.68 | -1.80 0.48 | 0.48 | 0.01 -0.01 | 0.00 0.00 | -0.07 |
| VA4 - 13 | 0.00 | 0.00 0.01 | 4.43 0.19 | 4.43 | 1.58 6.52 | 6.52 | 0.00 0.00 | 0.00 0.00 | 0.03 |
| VA5 - 1 | 0.00 | -0.01 0.00 | 2.25 -2.86 | 2.25 | -10.08 1.67 | 1.67 | 0.00 0.00 | -0.01 0.01 | -0.84 |
| VA5 - 2 | 0.00 | -0.01 0.00 | -2.85 -5.76 | 0.00 | 1.67 13.96 | 13.96 | 0.00 0.00 | -0.01 0.01 | -0.84 |
| VA5 - 3 | 0.00 | -0.01 0.00 | 1.05 0.82 | 1.05 | 12.61 4.44 | 12.61 | 0.00 0.00 | 0.01 -0.01 | 0.73 |
| VA5 - 4 | 0.00 | -0.01 0.00 | 0.81 0.56 | 0.81 | 4.44 3.61 | 4.44 | 0.00 0.00 | 0.00 0.00 | 0.73 |
| VA5 - 5 | 0.00 | -0.01 0.00 | 0.54 0.01 | 0.54 | 3.61 -10.32 | 3.61 | 0.00 0.00 | 0.01 -0.01 | 0.73 |
| VA5 - 6 | 0.00 | 0.00 0.00 | 8.59 1.00 | 8.59 | 1.91 -1.16 | 1.91 | 0.00 0.00 | 0.00 0.00 | 0.24 |
| VA5 - 7 | 0.00 | 0.00 0.00 | 1.04 -7.31 | 1.04 | 4.43 -3.19 | 4.43 | -0.01 0.01 | 0.00 0.00 | -0.30 |
| VA6 - 1 | 0.00 | 0.00 0.00 | 0.09 -13.86 | 0.09 | 4.90 1.11 | 4.90 | -0.01 0.01 | 0.00 0.00 | -0.18 |
| VA6 - 2 | 0.00 | 0.00 0.00 | -13.87 -27.23 | 0.00 | 1.11 -3.44 | 1.11 | -0.01 0.01 | 0.00 0.00 | -0.18 |
| VA7 - 1 | 0.00 | 0.00 0.00 | 17.12 8.65 | 17.12 | 2.48 0.78 | 0.00 | -0.01 0.01 | 0.00 0.00 | 0.22 |
| VA7 - 2 | 0.00 | 0.00 0.00 | 8.67 0.00 | 8.67 | 0.78 0.00 | 0.78 | -0.01 0.01 | 0.00 0.00 | 0.22 |
| VA8 - 1 | 0.00 | 0.00 0.00 | -6.57 8.46 | 8.46 | -0.67 3.33 | 3.33 | 0.00 0.00 | 0.00 0.00 | -0.58 |
| VA8 - 2 | 0.00 | 0.00 0.00 | 4.24 -1.37 | 4.24 | 4.54 -1.36 | 4.54 | 0.00 0.00 | 0.00 0.00 | 0.45 |
| VA9 - 1 | 0.00 | -0.01 0.00 | -122.19 106.35 | 106.35 | 9.55 -6.67 | 9.55 | 0.04 -0.04 | 0.00 0.00 | -0.01 |
| VA9 - 2 | 0.00 | -0.01 0.00 | -84.05 85.49 | 85.49 | 3.75 -4.57 | 3.75 | 0.03 -0.03 | 0.00 0.00 | -0.04 |
| VA10 - 1 | 0.00 | -0.01 0.00 | -97.56 88.10 | 88.10 | 4.56 -1.14 | 4.56 | 0.04 -0.04 | 0.00 0.00 | 0.01 |
| VA10 - 2 | 0.00 | 0.00 0.00 | -127.31 152.41 | 152.41 | 8.01 -17.75 | 8.01 | 0.07 -0.07 | 0.01 -0.01 | 0.05 |
| VA11 - 1 | 0.00 | 0.00 0.01 | -199.92 110.17 | 110.17 | 8.49 -8.87 | 8.49 | 0.16 -0.16 | 0.01 -0.01 | -0.01 |
| VA11 - 2 | 0.00 | 0.00 0.02 | -141.51 166.47 | 166.47 | 5.55 -2.70 | 5.55 | 0.10 -0.10 | 0.00 0.00 | 0.04 |
| VA11 - 3 | 0.00 | 0.00 0.02 | 166.59 267.06 | 267.06 | -2.70 -6.66 | 0.00 | 0.10 -0.10 | 0.00 0.00 | 0.04 |
| VA12 - 1 | 0.00 | 0.00 0.01 | 0.00 0.10 | 0.10 | 0.00 -0.93 | 0.00 | 0.00 0.00 | 0.00 0.00 | 0.02 |
| VA12 - 2 | 0.00 | 0.00 0.01 | -0.03 0.00 | 0.00 | -0.93 0.00 | 0.00 | 0.00 0.00 | 0.00 0.00 | 0.02 |
| VA13 | 0.00 | 0.00 0.00 | 0.00 0.00 | 0.00 | 0.00 0.00 | 0.00 | 0.00 0.00 | 0.00 0.00 | -0.01 |
| VA14 - 1 | 0.00 | -0.03 0.00 | 0.00 0.00 | 0.00 | 0.00 -1.23 | 0.00 | 0.00 0.00 | 0.00 0.00 | 0.03 |
| VA14 - 2 | 0.00 | -0.03 0.00 | 0.00 0.00 | 0.00 | -1.23 0.00 | 0.00 | 0.00 0.00 | 0.00 0.00 | 0.03 |

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|----------|------|---------------|-------------------|--------|-----------------|-------|---------------|---------------|-------|
| VA15 | 0.00 | -0.01 0.00 | 0.00 0.00 | 0.00 | 0.00 0.00 | 0.00 | 0.00 0.00 | 0.00 0.00 | 0.01 |
| VA16 | 0.00 | 0.00 0.01 | 0.00 0.00 | 0.00 | 0.00 0.00 | 0.00 | 0.00 0.00 | 0.00 0.00 | 0.01 |
| VA17 - 1 | 0.00 | 0.00 0.02 | 0.00 0.00 | 0.00 | 0.00 2.81 | 2.81 | 0.00 0.00 | 0.00 0.00 | 0.00 |
| VA17 - 2 | 0.00 | 0.00 0.02 | 0.00 0.00 | 0.00 | -3.10 0.00 | 0.00 | 0.00 0.00 | 0.00 0.00 | 0.03 |
| VA18 | 0.00 | 0.00 0.01 | -180.05 180.67 | 180.67 | -11.18 12.98 | 12.98 | 0.19 -0.19 | -0.01 0.01 | 0.00 |
| VA19 | 0.00 | 0.00 0.00 | 0.00 0.00 | 0.00 | 0.00 0.00 | 0.00 | 0.00 0.00 | 0.00 0.00 | 0.03 |
| VA20 | 0.00 | 0.00 0.00 | -0.54 0.00 | 0.00 | -5.59 0.00 | 0.00 | 0.00 0.00 | 0.00 0.00 | -0.03 |
| VA21 - 1 | 0.00 | 0.00 0.00 | -98.67 13.34 | 13.34 | -4.05 3.16 | 3.16 | 0.03 -0.03 | 0.00 0.00 | 0.05 |
| VA21 - 2 | 0.00 | 0.00 0.00 | 13.17 105.25 | 105.25 | -1.75 5.47 | 0.00 | 0.04 -0.04 | 0.00 0.00 | -0.04 |
| VA22 | 0.00 | 0.00 0.00 | -192.52 228.18 | 228.18 | -2.72 3.23 | 3.23 | 0.12 -0.12 | 0.00 0.00 | 0.04 |
| VA23 | 0.00 | 0.00 0.00 | 0.00 0.00 | 0.00 | 0.00 0.00 | 0.00 | 0.00 0.00 | 0.00 0.00 | -0.01 |
| VA24 - 1 | 0.00 | -0.01 0.00 | -153.54 133.91 | 133.91 | -8.03 5.01 | 5.01 | 0.05 -0.05 | 0.00 0.00 | -0.01 |
| VA24 - 2 | 0.00 | -0.01 0.00 | -106.25 107.22 | 107.22 | -2.61 2.87 | 2.87 | 0.03 -0.03 | 0.00 0.00 | -0.04 |
| VA25 - 1 | 0.00 | -0.01 0.00 | -126.46 -32.60 | 0.00 | -2.72 -1.13 | 0.00 | 0.05 -0.05 | 0.00 0.00 | 0.02 |
| VA25 - 2 | 0.00 | -0.01 0.00 | -32.82 111.62 | 111.62 | -1.13 5.05 | 5.05 | 0.04 -0.04 | 0.00 0.00 | 0.02 |
| VA25 - 3 | 0.00 | 0.00 0.00 | -163.13 191.40 | 191.40 | -10.32 15.22 | 15.22 | 0.09 -0.09 | -0.01 0.01 | 0.06 |

| CASO: 1.3G1+1.4G2 | | | | | | | | | |
|-------------------|------------------|------------------|-----------------------|------------------|-----------------------|------------------|--------------------|--------------------|----------------|
| Elemento | Carga (kgf/m) | Rd Nd (tf) | Mxi Mxf (kgf.m) | MxMáx (kgf.m) | Myi Myf (kgf.m) | MyMáx (kgf.m) | Vxi Vxf (tf) | Vyi Vyf (tf) | Mtd (kgf/m) |
| VA1 - 1 | 1062.75 | 0.00 0.40 | -1797.29 2533.83 | 2533.83 | -10.90 1.31 | 1.31 | 3.26 -1.19 | -0.01 0.01 | 1.86 |
| VA1 - 2 | 1062.75 | 0.00 0.41 | 2533.95 57.91 | 2533.95 | 1.31 -14.25 | 0.00 | -1.80 2.91 | 0.01 -0.01 | 1.01 |
| VA1 - 3 | 1062.75 | 0.00 0.41 | 59.12 -3341.02 | 59.12 | -14.25 13.68 | 13.68 | -5.54 6.16 | -0.05 0.05 | 1.02 |
| VA1 - 4 | 1062.75 | 0.00 0.07 | -2734.46 353.09 | 992.37 | 19.54 -16.91 | 19.54 | 2.82 1.17 | 0.01 -0.01 | 0.54 |
| VA1 - 5 | 1062.75 | 0.00 0.06 | 355.13 -2142.62 | 355.13 | -16.91 20.61 | 20.61 | -4.59 5.13 | -0.07 0.07 | -3.52 |
| VA1 - 6 | 1062.75 | -0.02 0.00 | -1619.18 -417.73 | 457.60 | 16.71 -6.56 | 16.71 | 2.10 1.37 | 0.01 -0.01 | -0.88 |
| VA2 | 1062.75 | 0.00 0.00 | 0.00 0.00 | 518.17 | 0.00 0.00 | 0.00 | 1.06 1.06 | 0.00 0.00 | -3.68 |
| VA3 - 1 | 1062.75 | 0.00 0.00 | 0.00 -2143.55 | 1527.46 | 0.00 1.65 | 1.65 | 1.80 2.79 | 0.00 0.00 | 1.05 |
| VA3 - 2 | 1062.75 | 0.00 0.00 | -2152.52 7.32 | 7.32 | 7.58 0.00 | 7.58 | 2.21 -0.56 | 0.00 0.00 | 0.00 |
| VA4 - 1 | 1111.50 | 0.00 0.20 | -1889.54 -2487.97 | 1333.68 | 50.06 -17.34 | 50.06 | 2.68 2.91 | 0.01 -0.01 | 1.25 |
| VA4 - 2 | 1111.50 | 0.00 0.23 | -2581.46 2182.05 | 2182.05 | -7.83 -5.44 | 0.00 | 3.51 -1.32 | 0.00 0.00 | -0.92 |
| VA4 - 3 | 1111.50 | 0.00 0.23 | 2181.93 1780.30 | 2181.93 | -5.44 1.62 | 0.00 | -1.11 1.46 | -0.02 0.02 | -0.92 |
| VA4 - 4 | 1111.50 | 0.00 | 1780.31 | 1780.31 | 1.62 | 20.29 | -2.44 | -0.03 | -0.92 |


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|----------|---------|---------------|-----------------------|---------|------------------|-------|---------------|---------------|--------|
| | | 0.23 | -317.25 | | 20.29 | | 3.26 | 0.03 | |
| VA4 - 5 | 1111.50 | 0.00 0.23 | -318.42 -4256.98 | 0.00 | 20.29 -3.05 | 20.29 | -6.75 7.37 | 0.04 -0.04 | -5.72 |
| VA4 - 6 | 1111.50 | 0.00 0.11 | -4305.51 -177.47 | 0.00 | -12.42 1.23 | 1.23 | 4.66 -3.55 | -0.01 0.01 | 1.24 |
| VA4 - 7 | 1111.50 | 0.00 0.11 | -177.06 1941.82 | 1941.82 | 1.23 -1.61 | 1.23 | 2.57 -1.37 | 0.00 0.00 | -0.24 |
| VA4 - 8 | 1111.50 | 0.00 0.11 | 1940.88 1022.54 | 2007.61 | -1.61 16.36 | 0.00 | 0.39 1.48 | -0.01 0.01 | -0.24 |
| VA4 - 9 | 1111.50 | 0.00 0.12 | 1029.45 -3402.43 | 1029.45 | 16.36 -22.59 | 16.36 | -7.21 7.86 | 0.07 -0.07 | -0.24 |
| VA4 - 10 | 1111.50 | -0.01 0.00 | -3015.56 -258.72 | 0.00 | -9.51 2.60 | 2.60 | 3.38 -2.30 | -0.01 0.01 | 1.97 |
| VA4 - 11 | 1111.50 | -0.01 0.00 | -251.40 540.34 | 540.34 | 2.60 6.79 | 6.79 | 1.75 -1.13 | -0.01 0.01 | 1.97 |
| VA4 - 12 | 1111.50 | -0.01 0.00 | 540.89 -943.67 | 540.89 | 6.79 -9.04 | 6.79 | 0.11 1.82 | 0.01 -0.01 | 1.97 |
| VA4 - 13 | 1111.50 | 0.00 0.06 | -978.20 -461.73 | 498.80 | -2.19 -10.20 | 0.00 | 1.81 1.46 | 0.00 0.00 | -2.26 |
| VA5 - 1 | 1062.75 | 0.00 0.07 | -556.26 761.68 | 947.88 | 1.93 1.13 | 1.93 | 1.79 0.63 | 0.00 0.00 | -0.63 |
| VA5 - 2 | 1062.75 | 0.00 0.07 | 761.66 -2212.15 | 761.66 | 1.13 -2.91 | 1.13 | -1.61 2.99 | 0.00 0.00 | -0.63 |
| VA5 - 3 | 1062.75 | 0.00 0.12 | -2769.94 432.15 | 432.15 | 4.20 -2.67 | 4.20 | 3.72 -2.65 | 0.01 -0.01 | 0.71 |
| VA5 - 4 | 1062.75 | 0.00 0.12 | 431.73 1614.64 | 1614.64 | -2.67 6.39 | 0.00 | 1.67 -0.53 | -0.01 0.01 | 0.71 |
| VA5 - 5 | 1062.75 | 0.00 0.12 | 1615.58 -2161.33 | 1615.58 | 6.39 -4.69 | 6.39 | -0.45 2.87 | 0.00 0.00 | 0.71 |
| VA5 - 6 | 1062.75 | 0.00 0.09 | -2027.34 934.93 | 934.93 | 12.27 -15.50 | 12.27 | 2.76 -1.14 | 0.02 -0.02 | -0.63 |
| VA5 - 7 | 1062.75 | 0.00 0.09 | 934.38 -222.66 | 934.38 | -14.28 -16.75 | 0.00 | 0.11 1.57 | 0.00 0.00 | -13.00 |
| VA6 - 1 | 1062.75 | 0.00 0.03 | 9.58 851.46 | 896.62 | -9.92 -15.35 | 0.00 | 1.38 0.33 | 0.00 0.00 | 2.04 |
| VA6 - 2 | 1062.75 | 0.00 0.03 | 857.98 -3522.65 | 857.98 | -15.35 32.70 | 32.70 | -2.04 3.67 | -0.03 0.03 | 2.04 |
| VA7 - 1 | 1062.75 | -0.08 0.00 | -1067.31 2170.56 | 2170.56 | -46.58 4.04 | 4.04 | 2.90 -1.23 | -0.03 0.03 | -4.21 |
| VA7 - 2 | 1062.75 | -0.08 0.00 | 2164.04 0.00 | 2164.04 | 4.04 0.00 | 4.04 | -0.49 2.20 | 0.00 0.00 | -4.21 |
| VA8 - 1 | 1184.63 | 0.00 0.68 | -5033.56 -9076.66 | 4003.24 | -5.94 0.47 | 0.47 | 4.63 5.57 | 0.00 0.00 | -1.81 |
| VA8 - 2 | 1184.63 | 0.00 1.01 | -12048.90 -7813.52 | 6654.79 | 15.12 -4.05 | 15.12 | 6.66 5.86 | 0.00 0.00 | 1.46 |
| VA9 - 1 | 1111.50 | 0.00 0.17 | -2366.47 -3572.58 | 1735.68 | 46.34 -37.95 | 46.34 | 3.02 3.44 | 0.01 -0.01 | 4.02 |
| VA9 - 2 | 1111.50 | 0.00 0.24 | -3718.26 -3613.94 | 1960.30 | -19.72 13.08 | 13.08 | 3.55 3.52 | -0.01 0.01 | -0.36 |
| VA10 - 1 | 1111.50 | 0.00 0.14 | -2876.75 -2223.57 | 1242.72 | 29.96 -43.25 | 29.96 | 3.03 2.78 | 0.01 -0.01 | 0.58 |
| VA10 - 2 | 1111.50 | 0.00 0.07 | -1797.93 -1005.95 | 831.43 | -54.40 34.08 | 34.08 | 2.42 2.02 | -0.02 0.02 | -4.65 |
| VA11 - 1 | 1062.75 | 0.00 0.03 | -281.21 -813.38 | 0.00 | 2.87 5.82 | 5.82 | 0.75 1.30 | 0.00 0.00 | 2.24 |
| VA11 - 2 | 1062.75 | 0.00 0.05 | -1514.33 969.12 | 1310.12 | -5.05 2.21 | 2.21 | 2.45 0.85 | 0.00 0.00 | -1.53 |
| VA11 - 3 | 1062.75 | 0.00 0.05 | 965.45 -1514.26 | 965.45 | 2.21 8.54 | 8.54 | -1.91 2.99 | -0.01 0.01 | -1.53 |
| VA12 - 1 | 1062.75 | -0.02 0.00 | 0.00 2410.16 | 2786.91 | 0.00 2.91 | 2.91 | 2.43 0.89 | 0.00 0.00 | 0.12 |
| VA12 - 2 | 1062.75 | -0.02 0.00 | 2413.84 0.00 | 2413.84 | 2.91 0.00 | 2.91 | -1.95 2.99 | 0.00 0.00 | 0.12 |

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|  | AltoQi Eberick 2018 Plena | |
| | Leilson Campos Rezende Rezende Engenharia | 11/5/2021 12:14:59 |

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|----------|---------|---------------|----------------------|---------|------------------|-------|---------------|---------------|-------|
| VA13 | 1014.00 | 0.00 0.00 | 0.00 0.00 | 467.12 | 0.00 0.00 | 0.00 | 0.98 0.98 | 0.00 0.00 | 0.01 |
| VA14 - 1 | 1062.75 | 0.00 0.06 | 0.00 3085.57 | 3085.57 | 0.00 -1.78 | 0.00 | 3.50 -2.38 | 0.00 0.00 | 1.21 |
| VA14 - 2 | 1062.75 | 0.00 0.06 | 3086.61 0.00 | 3242.40 | -1.78 0.00 | 0.00 | 0.58 2.63 | 0.00 0.00 | 1.21 |
| VA15 | 1014.00 | -0.02 0.00 | 0.00 0.00 | 467.12 | 0.00 0.00 | 0.00 | 0.98 0.98 | 0.00 0.00 | 0.42 |
| VA16 | 1014.00 | 0.00 0.01 | 0.00 0.00 | 467.12 | 0.00 0.00 | 0.00 | 0.98 0.98 | 0.00 0.00 | -0.94 |
| VA17 - 1 | 1062.75 | 0.00 0.08 | 0.00 5422.74 | 5422.74 | 0.00 3.35 | 3.35 | 5.72 -4.61 | 0.00 0.00 | -6.91 |
| VA17 - 2 | 1062.75 | 0.00 0.08 | 5421.69 0.00 | 5421.69 | -2.58 0.00 | 0.00 | -0.40 3.42 | 0.00 0.00 | 2.06 |
| VA18 | 1062.75 | 0.00 0.07 | -389.54 225.58 | 461.17 | -14.24 19.06 | 19.06 | 1.34 0.71 | -0.02 0.02 | 1.44 |
| VA19 | 1062.75 | 0.00 0.00 | 0.00 0.00 | 140.55 | 0.00 0.00 | 0.00 | 0.56 0.56 | 0.00 0.00 | -7.32 |
| VA20 | 1062.75 | -0.02 0.00 | -12.37 0.00 | 484.08 | -1.22 0.00 | 0.00 | 1.03 1.02 | 0.00 0.00 | 0.55 |
| VA21 - 1 | 1062.75 | 0.00 0.21 | -2177.17 3188.09 | 3188.09 | 34.36 -42.37 | 34.36 | 3.38 0.03 | 0.02 -0.02 | 6.85 |
| VA21 - 2 | 1062.75 | 0.00 0.21 | 3190.12 -2154.60 | 3190.12 | -32.45 -12.29 | 0.00 | -1.41 3.65 | -0.01 0.01 | -2.73 |
| VA22 | 1062.75 | 0.00 0.11 | -672.36 -1001.04 | 931.17 | -11.00 14.37 | 14.37 | 1.85 2.03 | -0.01 0.01 | 0.37 |
| VA23 | 1062.75 | 0.00 0.03 | 0.00 0.00 | 1384.92 | 0.00 0.00 | 0.00 | 1.72 1.72 | 0.00 0.00 | 6.52 |
| VA24 - 1 | 1111.50 | 0.00 0.16 | -2417.85 -3528.61 | 1730.33 | -69.89 43.20 | 43.20 | 3.04 3.42 | -0.02 0.02 | -5.85 |
| VA24 - 2 | 1111.50 | 0.00 0.23 | -3578.59 -3925.39 | 1878.32 | 7.62 28.18 | 28.18 | 3.48 3.59 | 0.00 0.00 | -0.39 |
| VA25 - 1 | 1111.50 | 0.00 0.27 | -4229.00 2346.28 | 2346.28 | 95.24 -39.89 | 95.24 | 4.50 -2.37 | 0.07 -0.07 | 4.48 |
| VA25 - 2 | 1111.50 | 0.00 0.27 | 2350.50 -3166.78 | 2362.22 | -39.89 -16.15 | 0.00 | 0.17 3.51 | -0.01 0.01 | 4.48 |
| VA25 - 3 | 1111.50 | 0.00 0.10 | -2243.54 -845.61 | 729.14 | -18.56 2.87 | 2.87 | 2.57 1.87 | -0.01 0.01 | -1.51 |

| CASO: 1.3G1+1.4G2+0.84V1+1.4D1 | | | | | | | | | |
|--------------------------------|------------------|------------------|-----------------------|------------------|-----------------------|------------------|--------------------|--------------------|----------------|
| Elemento | Carga (kgf/m) | Rd Nd (tf) | Mxi Mxf (kgf.m) | MxMáx (kgf.m) | Myi Myf (kgf.m) | MyMáx (kgf.m) | Vxi Vxf (tf) | Vyi Vyf (tf) | Mtd (kgf/m) |
| VA1 - 1 | 1062.75 | 0.00 0.44 | -1043.67 2535.44 | 2535.44 | -13.48 1.46 | 1.46 | 2.87 -0.81 | -0.01 0.01 | 1.95 |
| VA1 - 2 | 1062.75 | 0.00 0.45 | 2535.75 -346.37 | 2535.75 | 1.46 -13.61 | 1.46 | -2.18 3.30 | 0.01 -0.01 | 1.09 |
| VA1 - 3 | 1062.75 | 0.00 0.44 | -344.79 -3969.58 | 0.00 | -13.61 11.90 | 11.90 | -5.93 6.54 | -0.04 0.04 | 0.69 |
| VA1 - 4 | 1062.75 | 0.00 0.08 | -2306.60 35.36 | 912.84 | 18.87 -15.63 | 18.87 | 2.62 1.37 | 0.01 -0.01 | 0.07 |
| VA1 - 5 | 1062.75 | 0.00 0.08 | 37.31 -2562.69 | 37.31 | -15.63 18.33 | 18.33 | -4.78 5.33 | -0.07 0.07 | -0.42 |
| VA1 - 6 | 1062.75 | -0.05 0.00 | -964.63 -1202.09 | 330.90 | 16.46 -5.54 | 16.46 | 1.66 1.81 | 0.01 -0.01 | -0.81 |
| VA2 | 1062.75 | 0.00 0.00 | 0.00 0.00 | 518.17 | 0.00 0.00 | 0.00 | 1.06 1.06 | 0.00 0.00 | -3.38 |
| VA3 - 1 | 1062.75 | 0.00 0.00 | 0.00 -2142.03 | 1528.04 | 0.00 2.51 | 2.51 | 1.80 2.79 | 0.00 0.00 | 0.95 |
| VA3 - 2 | 1062.75 | 0.00 0.00 | -2151.81 8.02 | 8.02 | 4.60 0.00 | 4.60 | 2.21 -0.56 | 0.00 0.00 | 0.00 |
| VA4 - 1 | 1111.50 | 0.00 | -866.35 | 1713.15 | 28.43 | 28.43 | 2.40 | 0.01 | 1.24 |


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|----------|---------|---------------|-----------------------|---------|------------------|-------|---------------|---------------|--------|
| | | 0.38 | -2879.89 | | -6.57 | | 3.20 | -0.01 | |
| VA4 - 2 | 1111.50 | 0.00 0.36 | -2296.38 1814.93 | 1814.93 | -7.10 -6.30 | 0.00 | 3.18 -0.99 | 0.00 0.00 | 0.70 |
| VA4 - 3 | 1111.50 | 0.00 0.36 | 1814.61 1309.29 | 1814.61 | -6.30 0.82 | 0.00 | -1.44 1.79 | -0.02 0.02 | 0.70 |
| VA4 - 4 | 1111.50 | 0.00 0.36 | 1309.05 -1032.66 | 1309.05 | 0.82 19.57 | 19.57 | -2.77 3.59 | -0.03 0.03 | 0.70 |
| VA4 - 5 | 1111.50 | 0.00 0.36 | -1034.13 -5157.60 | 0.00 | 19.57 -2.35 | 19.57 | -7.08 7.70 | 0.04 -0.04 | -14.87 |
| VA4 - 6 | 1111.50 | 0.00 0.25 | -3479.85 367.03 | 367.03 | -12.35 1.02 | 1.02 | 4.38 -3.27 | -0.01 0.01 | -2.24 |
| VA4 - 7 | 1111.50 | 0.00 0.25 | 367.33 2185.40 | 2185.40 | 1.02 -0.56 | 0.00 | 2.29 -1.09 | 0.00 0.00 | 0.83 |
| VA4 - 8 | 1111.50 | 0.00 0.25 | 2184.43 794.53 | 2184.43 | -0.56 15.96 | 0.00 | 0.11 1.76 | -0.01 0.01 | 0.83 |
| VA4 - 9 | 1111.50 | 0.00 0.25 | 802.35 -3793.90 | 802.35 | 15.96 -20.00 | 15.96 | -7.48 8.14 | 0.06 -0.06 | 0.83 |
| VA4 - 10 | 1111.50 | 0.00 0.11 | -2785.80 -244.26 | 0.00 | -17.49 4.21 | 4.21 | 3.16 -2.08 | -0.02 0.02 | 1.99 |
| VA4 - 11 | 1111.50 | 0.00 0.11 | -236.24 433.43 | 433.43 | 4.21 14.90 | 14.90 | 1.52 -0.91 | -0.02 0.02 | 1.99 |
| VA4 - 12 | 1111.50 | 0.00 0.11 | 433.87 -1437.87 | 433.87 | 14.90 -15.42 | 14.90 | -0.11 2.04 | 0.02 -0.02 | 1.99 |
| VA4 - 13 | 1111.50 | 0.00 0.03 | 191.70 -2038.91 | 539.27 | -12.70 15.77 | 15.77 | 0.88 2.39 | -0.01 0.01 | -2.21 |
| VA5 - 1 | 1062.75 | 0.00 0.07 | -19.35 546.51 | 977.32 | -4.67 1.41 | 1.41 | 1.46 0.96 | 0.00 0.00 | -0.70 |
| VA5 - 2 | 1062.75 | 0.00 0.07 | 546.75 -2854.98 | 546.75 | 1.41 1.37 | 1.41 | -1.94 3.32 | 0.00 0.00 | -0.70 |
| VA5 - 3 | 1062.75 | 0.00 0.10 | -2310.17 717.64 | 717.64 | 1.71 -2.85 | 1.71 | 3.55 -2.48 | 0.00 0.00 | 0.74 |
| VA5 - 4 | 1062.75 | 0.00 0.10 | 717.34 1713.80 | 1713.80 | -2.85 5.91 | 0.00 | 1.50 -0.35 | -0.01 0.01 | 0.74 |
| VA5 - 5 | 1062.75 | 0.00 0.10 | 1714.77 -2456.48 | 1714.77 | 5.91 -1.20 | 5.91 | -0.62 3.04 | 0.00 0.00 | 0.74 |
| VA5 - 6 | 1062.75 | 0.00 0.05 | -1691.23 860.70 | 860.70 | 2.42 -10.61 | 2.42 | 2.49 -0.87 | 0.01 -0.01 | -0.64 |
| VA5 - 7 | 1062.75 | 0.00 0.04 | 860.26 -722.95 | 860.26 | -18.76 25.95 | 25.95 | -0.16 1.84 | -0.03 0.03 | -11.91 |
| VA6 - 1 | 1062.75 | 0.00 0.00 | 14.07 272.50 | 495.13 | -46.62 -22.81 | 0.00 | 1.01 0.69 | -0.01 0.01 | 1.79 |
| VA6 - 2 | 1062.75 | 0.00 0.00 | 278.93 -4660.35 | 278.93 | -22.81 56.16 | 56.16 | -2.41 4.04 | -0.05 0.05 | 1.79 |
| VA7 - 1 | 1062.75 | -0.17 0.00 | -281.86 2567.84 | 2567.84 | -62.46 -2.48 | 0.00 | 2.65 -0.98 | -0.04 0.04 | -3.83 |
| VA7 - 2 | 1062.75 | -0.17 0.00 | 2561.41 0.00 | 2561.41 | -2.48 0.00 | 0.00 | -0.74 2.45 | 0.00 0.00 | -3.83 |
| VA8 - 1 | 1184.63 | 0.00 0.70 | -4111.48 -9841.46 | 4179.05 | 22.38 -5.88 | 22.38 | 4.43 5.76 | 0.00 0.00 | -1.82 |
| VA8 - 2 | 1184.63 | 0.00 0.96 | -11396.08 -8621.94 | 6540.76 | 22.01 -29.41 | 22.01 | 6.52 5.99 | 0.00 0.00 | 1.54 |
| VA9 - 1 | 1111.50 | 0.00 0.18 | -2344.23 -3596.43 | 1735.67 | 17.76 -8.75 | 17.76 | 3.01 3.44 | 0.00 0.00 | 0.10 |
| VA9 - 2 | 1111.50 | 0.00 0.26 | -3740.02 -3611.36 | 1951.10 | 3.43 18.25 | 18.25 | 3.56 3.52 | 0.00 0.00 | -0.41 |
| VA10 - 1 | 1111.50 | 0.00 0.16 | -2892.53 -2214.39 | 1240.37 | 36.57 -41.91 | 36.57 | 3.03 2.77 | 0.02 -0.02 | 2.60 |
| VA10 - 2 | 1111.50 | 0.00 0.08 | -1817.93 -978.51 | 836.40 | -44.29 9.94 | 9.94 | 2.43 2.01 | -0.01 0.01 | -2.14 |
| VA11 - 1 | 1062.75 | 0.00 0.03 | -287.15 -796.67 | 0.00 | 3.37 0.18 | 3.37 | 0.76 1.29 | 0.00 0.00 | 3.38 |
| VA11 - 2 | 1062.75 | 0.00 0.06 | -1501.97 965.92 | 1311.06 | -2.04 1.26 | 1.26 | 2.45 0.86 | 0.00 0.00 | -2.44 |

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|----------|---------|---------------|----------------------|---------|-------------------|--------|---------------|---------------|-------|
| VA11 - 3 | 1062.75 | 0.00 0.06 | 962.53 -1522.25 | 962.53 | 1.26 6.68 | 6.68 | -1.91 2.99 | -0.01 0.01 | -2.44 |
| VA12 - 1 | 1062.75 | -0.02 0.00 | 0.00 2410.39 | 2787.08 | 0.00 3.19 | 3.19 | 2.43 0.89 | 0.00 0.00 | 0.31 |
| VA12 - 2 | 1062.75 | -0.02 0.00 | 2413.77 0.00 | 2413.77 | 3.19 0.00 | 3.19 | -1.95 2.99 | 0.00 0.00 | 0.31 |
| VA13 | 1014.00 | 0.00 0.00 | 0.00 0.00 | 467.12 | 0.00 0.00 | 0.00 | 0.98 0.98 | 0.00 0.00 | -0.24 |
| VA14 - 1 | 1062.75 | 0.00 0.06 | 0.00 3085.87 | 3085.87 | 0.00 -1.33 | 0.00 | 3.50 -2.38 | 0.00 0.00 | 1.58 |
| VA14 - 2 | 1062.75 | 0.00 0.06 | 3086.81 0.00 | 3242.56 | -1.33 0.00 | 0.00 | 0.58 2.63 | 0.00 0.00 | 1.58 |
| VA15 | 1014.00 | -0.01 0.00 | 0.00 0.00 | 467.12 | 0.00 0.00 | 0.00 | 0.98 0.98 | 0.00 0.00 | 0.30 |
| VA16 | 1014.00 | 0.00 0.01 | 0.00 0.00 | 467.12 | 0.00 0.00 | 0.00 | 0.98 0.98 | 0.00 0.00 | -0.97 |
| VA17 - 1 | 1062.75 | 0.00 0.07 | 0.00 5422.44 | 5422.44 | 0.00 1.87 | 1.87 | 5.72 -4.61 | 0.00 0.00 | -7.83 |
| VA17 - 2 | 1062.75 | 0.00 0.07 | 5421.50 0.00 | 5421.50 | -0.21 0.00 | 0.00 | -0.40 3.42 | 0.00 0.00 | 1.96 |
| VA18 | 1062.75 | 0.00 0.07 | -404.48 243.40 | 468.06 | -5.98 8.84 | 8.84 | 1.36 0.69 | -0.01 0.01 | 1.78 |
| VA19 | 1062.75 | 0.00 0.00 | 0.00 0.00 | 140.55 | 0.00 0.00 | 0.00 | 0.56 0.56 | 0.00 0.00 | -8.02 |
| VA20 | 1062.75 | -0.04 0.00 | -11.28 0.00 | 484.57 | 8.15 0.00 | 8.15 | 1.03 1.02 | 0.00 0.00 | 0.44 |
| VA21 - 1 | 1062.75 | 0.00 0.16 | -2054.14 2864.04 | 2877.23 | 41.82 -42.62 | 41.82 | 3.24 0.17 | 0.03 -0.03 | 9.29 |
| VA21 - 2 | 1062.75 | 0.00 0.15 | 2865.83 -2004.06 | 2865.83 | 4.00 -48.72 | 4.00 | -1.18 3.43 | 0.02 -0.02 | -4.78 |
| VA22 | 1062.75 | 0.00 0.09 | -687.65 -993.15 | 927.47 | -9.58 13.06 | 13.06 | 1.85 2.02 | -0.01 0.01 | -0.07 |
| VA23 | 1062.75 | 0.00 0.04 | 0.00 0.00 | 1384.92 | 0.00 0.00 | 0.00 | 1.72 1.72 | 0.00 0.00 | 6.43 |
| VA24 - 1 | 1111.50 | 0.00 0.15 | -2390.95 -3546.37 | 1735.67 | -93.17 64.89 | 64.89 | 3.03 3.43 | -0.03 0.03 | -9.68 |
| VA24 - 2 | 1111.50 | 0.00 0.19 | -3510.64 -3990.12 | 1882.07 | 19.44 66.75 | 66.75 | 3.46 3.61 | -0.01 0.01 | -0.38 |
| VA25 - 1 | 1111.50 | 0.00 0.28 | -4323.86 2525.87 | 2525.87 | 163.43 -107.29 | 163.43 | 4.64 -2.52 | 0.14 -0.14 | 7.50 |
| VA25 - 2 | 1111.50 | 0.00 0.28 | 2529.70 -3330.45 | 2529.70 | -107.29 -3.09 | 0.00 | 0.07 3.61 | -0.03 0.03 | 7.50 |
| VA25 - 3 | 1111.50 | 0.00 0.08 | -2229.23 -902.67 | 702.13 | 6.37 -13.25 | 6.37 | 2.55 1.89 | 0.00 0.00 | -0.04 |

| CASO: 1.3G1+1.4G2+0.84V2+1.4D2 | | | | | | | | | |
|--------------------------------|------------------|------------------|-----------------------|------------------|-----------------------|------------------|--------------------|--------------------|----------------|
| Elemento | Carga (kgf/m) | Rd Nd (tf) | Mxi Mxf (kgf.m) | MxMáx (kgf.m) | Myi Myf (kgf.m) | MyMáx (kgf.m) | Vxi Vxf (tf) | Vyi Vyf (tf) | Mtd (kgf/m) |
| VA1 - 1 | 1062.75 | 0.00 0.37 | -2550.92 2532.23 | 2532.23 | -8.31 1.15 | 1.15 | 3.65 -1.58 | 0.00 0.00 | 1.77 |
| VA1 - 2 | 1062.75 | 0.00 0.37 | 2532.16 462.19 | 2532.16 | 1.15 -14.88 | 0.00 | -1.41 2.53 | 0.02 -0.02 | 0.93 |
| VA1 - 3 | 1062.75 | 0.00 0.37 | 463.04 -2712.46 | 463.04 | -14.88 15.47 | 15.47 | -5.15 5.77 | -0.05 0.05 | 1.34 |
| VA1 - 4 | 1062.75 | 0.00 0.06 | -3162.31 670.82 | 1108.67 | 20.21 -18.19 | 20.21 | 3.01 0.97 | 0.01 -0.01 | 1.00 |
| VA1 - 5 | 1062.75 | 0.00 0.05 | 672.94 -1722.56 | 672.94 | -18.19 22.88 | 22.88 | -4.39 4.93 | -0.08 0.08 | -6.62 |
| VA1 - 6 | 1062.75 | 0.00 0.00 | -2273.72 366.62 | 767.23 | 16.95 -7.58 | 16.95 | 2.54 0.92 | 0.01 -0.01 | -0.94 |
| VA2 | 1062.75 | 0.00 | 0.00 | 518.17 | 0.00 | 0.00 | 1.06 | 0.00 | -3.97 |

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| | | 0.00 | 0.00 | | 0.00 | | 1.06 | 0.00 | |
| VA3 - 1 | 1062.75 | 0.00 0.00 | 0.00 -2145.08 | 1526.88 | 0.00 0.79 | 0.79 | 1.80 2.79 | 0.00 0.00 | 1.15 |
| VA3 - 2 | 1062.75 | 0.00 0.00 | -2153.22 6.61 | 6.61 | 10.56 0.00 | 10.56 | 2.21 -0.56 | 0.01 -0.01 | 0.00 |
| VA4 - 1 | 1111.50 | 0.00 0.02 | -2912.74 -2096.05 | 1022.41 | 71.69 -28.12 | 71.69 | 2.96 2.63 | 0.02 -0.02 | 1.27 |
| VA4 - 2 | 1111.50 | 0.00 0.10 | -2866.54 2549.18 | 2549.18 | -8.57 -4.59 | 0.00 | 3.84 -1.66 | 0.00 0.00 | -2.55 |
| VA4 - 3 | 1111.50 | 0.00 0.10 | 2549.25 2251.31 | 2549.25 | -4.59 2.42 | 0.00 | -0.78 1.13 | -0.02 0.02 | -2.55 |
| VA4 - 4 | 1111.50 | 0.00 0.10 | 2251.57 398.16 | 2251.57 | 2.42 21.02 | 0.00 | -2.11 2.92 | -0.03 0.03 | -2.55 |
| VA4 - 5 | 1111.50 | 0.00 0.10 | 397.30 -3356.37 | 397.30 | 21.02 -3.74 | 21.02 | -6.42 7.04 | 0.04 -0.04 | 3.44 |
| VA4 - 6 | 1111.50 | -0.02 0.00 | -5131.18 -721.97 | 0.00 | -12.49 1.43 | 1.43 | 4.94 -3.83 | -0.01 0.01 | 4.72 |
| VA4 - 7 | 1111.50 | -0.02 0.00 | -721.45 1698.24 | 1698.24 | 1.43 -2.67 | 1.43 | 2.85 -1.65 | 0.00 0.00 | -1.31 |
| VA4 - 8 | 1111.50 | -0.02 0.00 | 1697.34 1250.56 | 1900.19 | -2.67 16.75 | 0.00 | 0.67 1.20 | -0.01 0.01 | -1.31 |
| VA4 - 9 | 1111.50 | -0.02 0.00 | 1256.55 -3010.95 | 1256.55 | 16.75 -25.17 | 16.75 | -6.93 7.58 | 0.07 -0.07 | -1.31 |
| VA4 - 10 | 1111.50 | -0.12 0.00 | -3245.31 -273.18 | 0.00 | -1.53 0.98 | 0.98 | 3.60 -2.52 | 0.00 0.00 | 1.95 |
| VA4 - 11 | 1111.50 | -0.12 0.00 | -266.56 647.25 | 647.25 | 0.98 -1.32 | 0.98 | 1.97 -1.36 | 0.00 0.00 | 1.95 |
| VA4 - 12 | 1111.50 | -0.13 0.00 | 647.90 -449.47 | 694.76 | -1.32 -2.66 | 0.00 | 0.34 1.60 | 0.00 0.00 | 1.95 |
| VA4 - 13 | 1111.50 | 0.00 0.09 | -2148.09 1115.45 | 1240.16 | 8.33 -36.16 | 8.33 | 2.75 0.53 | 0.02 -0.02 | -2.31 |
| VA5 - 1 | 1062.75 | 0.00 0.08 | -1093.18 976.84 | 1016.01 | 8.54 0.85 | 8.54 | 2.12 0.30 | 0.00 0.00 | -0.57 |
| VA5 - 2 | 1062.75 | 0.00 0.08 | 976.57 -1569.32 | 976.57 | 0.85 -7.18 | 0.85 | -1.28 2.65 | 0.01 -0.01 | -0.57 |
| VA5 - 3 | 1062.75 | 0.00 0.13 | -3229.70 146.66 | 146.66 | 6.68 -2.49 | 6.68 | 3.89 -2.82 | 0.01 -0.01 | 0.68 |
| VA5 - 4 | 1062.75 | 0.00 0.13 | 146.12 1515.49 | 1515.49 | -2.49 6.88 | 0.00 | 1.84 -0.70 | -0.01 0.01 | 0.68 |
| VA5 - 5 | 1062.75 | 0.00 0.13 | 1516.39 -1866.18 | 1516.39 | 6.88 -8.17 | 6.88 | -0.28 2.70 | 0.01 -0.01 | 0.68 |
| VA5 - 6 | 1062.75 | 0.00 0.13 | -2363.45 1009.17 | 1009.17 | 22.12 -20.38 | 22.12 | 3.03 -1.41 | 0.03 -0.03 | -0.62 |
| VA5 - 7 | 1062.75 | 0.00 0.14 | 1008.51 277.62 | 1070.96 | -9.79 -59.44 | 0.00 | 0.38 1.30 | 0.03 -0.03 | -14.09 |
| VA6 - 1 | 1062.75 | 0.00 0.07 | 5.09 1430.41 | 1430.41 | 26.77 -7.89 | 26.77 | 1.74 -0.04 | 0.02 -0.02 | 2.28 |
| VA6 - 2 | 1062.75 | 0.00 0.07 | 1437.03 -2384.96 | 1437.03 | -7.89 9.24 | 9.24 | -1.68 3.31 | -0.01 0.01 | 2.28 |
| VA7 - 1 | 1062.75 | 0.00 0.02 | -1852.76 1773.29 | 1773.29 | -30.69 10.56 | 10.56 | 3.14 -1.47 | -0.03 0.03 | -4.59 |
| VA7 - 2 | 1062.75 | 0.00 0.02 | 1766.68 0.00 | 1766.68 | 10.56 0.00 | 10.56 | -0.24 1.95 | 0.01 -0.01 | -4.59 |
| VA8 - 1 | 1184.63 | 0.00 0.66 | -5955.65 -8311.87 | 3865.75 | -34.26 6.81 | 6.81 | 4.82 5.37 | 0.00 0.00 | -1.81 |
| VA8 - 2 | 1184.63 | 0.00 1.06 | -12701.73 -7005.10 | 6788.79 | 8.22 21.31 | 21.31 | 6.80 5.72 | 0.00 0.00 | 1.38 |
| VA9 - 1 | 1111.50 | 0.00 0.16 | -2388.71 -3548.72 | 1735.70 | 74.93 -67.16 | 74.93 | 3.03 3.43 | 0.02 -0.02 | 7.93 |
| VA9 - 2 | 1111.50 | 0.00 0.22 | -3696.50 -3616.52 | 1969.50 | -42.87 7.92 | 7.92 | 3.55 3.53 | -0.01 0.01 | -0.31 |
| VA10 - 1 | 1111.50 | 0.00 0.13 | -2860.96 -2232.75 | 1245.06 | 23.34 -44.59 | 23.34 | 3.02 2.78 | 0.01 -0.01 | -1.43 |

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|----------|---------|---------------|----------------------|---------|-----------------|-------|---------------|---------------|-------|
| VA10 - 2 | 1111.50 | 0.00 0.07 | -1777.93 -1033.39 | 826.46 | -64.51 58.22 | 58.22 | 2.41 2.03 | -0.03 0.03 | -7.16 |
| VA11 - 1 | 1062.75 | 0.00 0.03 | -275.28 -830.08 | 0.00 | 2.38 11.46 | 11.46 | 0.74 1.31 | 0.00 0.00 | 1.10 |
| VA11 - 2 | 1062.75 | 0.00 0.05 | -1526.70 972.33 | 1309.17 | -8.06 3.17 | 3.17 | 2.46 0.85 | 0.00 0.00 | -0.61 |
| VA11 - 3 | 1062.75 | 0.00 0.05 | 968.36 -1506.27 | 968.36 | 3.17 10.40 | 10.40 | -1.90 2.98 | -0.01 0.01 | -0.61 |
| VA12 - 1 | 1062.75 | -0.02 0.00 | 0.00 2409.93 | 2786.74 | 0.00 2.62 | 2.62 | 2.43 0.89 | 0.00 0.00 | -0.07 |
| VA12 - 2 | 1062.75 | -0.02 0.00 | 2413.91 0.00 | 2413.91 | 2.62 0.00 | 2.62 | -1.95 2.99 | 0.00 0.00 | -0.07 |
| VA13 | 1014.00 | 0.00 0.00 | 0.00 0.00 | 467.12 | 0.00 0.00 | 0.00 | 0.98 0.98 | 0.00 0.00 | 0.27 |
| VA14 - 1 | 1062.75 | 0.00 0.07 | 0.00 3085.27 | 3085.27 | 0.00 -2.22 | 0.00 | 3.50 -2.38 | 0.00 0.00 | 0.85 |
| VA14 - 2 | 1062.75 | 0.00 0.07 | 3086.41 0.00 | 3242.24 | -2.22 0.00 | 0.00 | 0.58 2.63 | 0.00 0.00 | 0.85 |
| VA15 | 1014.00 | -0.02 0.00 | 0.00 0.00 | 467.12 | 0.00 0.00 | 0.00 | 0.98 0.98 | 0.00 0.00 | 0.54 |
| VA16 | 1014.00 | 0.00 0.02 | 0.00 0.00 | 467.12 | 0.00 0.00 | 0.00 | 0.98 0.98 | 0.00 0.00 | -0.90 |
| VA17 - 1 | 1062.75 | 0.00 0.08 | 0.00 5423.04 | 5423.04 | 0.00 4.83 | 4.83 | 5.72 -4.61 | 0.00 0.00 | -5.99 |
| VA17 - 2 | 1062.75 | 0.00 0.09 | 5421.89 0.00 | 5421.89 | -4.95 0.00 | 0.00 | -0.40 3.42 | 0.00 0.00 | 2.15 |
| VA18 | 1062.75 | 0.00 0.07 | -374.60 207.77 | 454.27 | -22.50 29.28 | 29.28 | 1.33 0.72 | -0.03 0.03 | 1.11 |
| VA19 | 1062.75 | 0.00 0.01 | 0.00 0.00 | 140.55 | 0.00 0.00 | 0.00 | 0.56 0.56 | 0.00 0.00 | -6.61 |
| VA20 | 1062.75 | 0.00 0.00 | -13.47 0.00 | 483.59 | -10.59 0.00 | 0.00 | 1.03 1.02 | -0.01 0.01 | 0.65 |
| VA21 - 1 | 1062.75 | 0.00 0.25 | -2300.20 3512.14 | 3512.14 | 26.90 -42.12 | 26.90 | 3.52 -0.11 | 0.02 -0.02 | 4.41 |
| VA21 - 2 | 1062.75 | 0.00 0.27 | 3514.42 -2305.15 | 3514.42 | -68.90 24.14 | 24.14 | -1.63 3.88 | -0.04 0.04 | -0.68 |
| VA22 | 1062.75 | 0.00 0.13 | -657.06 -1008.92 | 934.88 | -12.42 15.69 | 15.69 | 1.84 2.03 | -0.01 0.01 | 0.81 |
| VA23 | 1062.75 | 0.00 0.03 | 0.00 0.00 | 1384.92 | 0.00 0.00 | 0.00 | 1.72 1.72 | 0.00 0.00 | 6.61 |
| VA24 - 1 | 1111.50 | 0.00 0.17 | -2444.74 -3510.85 | 1725.00 | -46.61 21.51 | 21.51 | 3.05 3.41 | -0.01 0.01 | -2.02 |
| VA24 - 2 | 1111.50 | 0.00 0.27 | -3646.53 -3860.67 | 1874.57 | -4.20 -10.38 | 0.00 | 3.50 3.57 | 0.00 0.00 | -0.40 |
| VA25 - 1 | 1111.50 | 0.00 0.26 | -4134.14 2166.70 | 2166.70 | 27.05 27.51 | 27.51 | 4.36 -2.23 | 0.00 0.00 | 1.46 |
| VA25 - 2 | 1111.50 | 0.00 0.26 | 2171.29 -3003.11 | 2204.44 | 27.51 -29.22 | 27.51 | 0.28 3.40 | 0.02 -0.02 | 1.46 |
| VA25 - 3 | 1111.50 | 0.00 0.11 | -2257.85 -788.55 | 756.15 | -43.50 19.00 | 19.00 | 2.59 1.85 | -0.02 0.02 | -2.98 |

| CASO: 1.3G1+1.4G2+0.84V3+1.4D3 | | | | | | | | | |
|--------------------------------|------------------|------------------|-----------------------|------------------|-----------------------|------------------|--------------------|--------------------|----------------|
| Elemento | Carga (kgf/m) | Rd Nd (tf) | Mxi Mxf (kgf.m) | MxMáx (kgf.m) | Myi Myf (kgf.m) | MyMáx (kgf.m) | Vxi Vxf (tf) | Vyi Vyf (tf) | Mtd (kgf/m) |
| VA1 - 1 | 1062.75 | 0.00 0.40 | -1717.76 2540.77 | 2540.77 | 29.99 -3.09 | 29.99 | 3.22 -1.15 | 0.02 -0.02 | 3.67 |
| VA1 - 2 | 1062.75 | 0.00 0.41 | 2540.79 25.40 | 2540.79 | -3.09 -85.40 | 0.00 | -1.84 2.95 | 0.08 -0.08 | 2.82 |
| VA1 - 3 | 1062.75 | 0.00 0.40 | 26.48 -3395.42 | 26.48 | -85.40 -8.48 | 0.00 | -5.58 6.20 | -0.13 0.13 | 2.80 |
| VA1 - 4 | 1062.75 | 0.00 | -2684.67 | 982.81 | 1.20 | 5.29 | 2.79 | 0.00 | -0.37 |


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|----------|---------|---------------|-----------------------|---------|------------------|-------|---------------|---------------|--------|
| | | 0.06 | 320.71 | | 5.29 | | 1.19 | 0.00 | |
| VA1 - 5 | 1062.75 | 0.00 0.06 | 322.61 -2186.42 | 322.61 | 5.29 5.54 | 5.54 | -4.61 5.15 | 0.00 0.00 | -4.06 |
| VA1 - 6 | 1062.75 | -0.04 0.00 | -1538.20 -532.24 | 419.82 | 9.53 -1.09 | 9.53 | 2.04 1.43 | 0.00 0.00 | -2.50 |
| VA2 | 1062.75 | 0.00 0.01 | 0.00 0.00 | 518.17 | 0.00 0.00 | 0.00 | 1.06 1.06 | 0.00 0.00 | -4.20 |
| VA3 - 1 | 1062.75 | 0.00 0.00 | 0.00 -2143.58 | 1527.46 | 0.00 9.62 | 9.62 | 1.80 2.79 | 0.00 0.00 | 1.03 |
| VA3 - 2 | 1062.75 | 0.00 0.00 | -2152.40 7.43 | 7.43 | -7.62 0.00 | 0.00 | 2.21 -0.56 | 0.00 0.00 | 0.00 |
| VA4 - 1 | 1111.50 | 0.00 0.16 | -1910.27 -2473.50 | 1329.84 | 33.99 -23.24 | 33.99 | 2.68 2.91 | 0.01 -0.01 | 0.81 |
| VA4 - 2 | 1111.50 | 0.00 0.17 | -2570.53 2175.92 | 2175.92 | 50.86 -24.93 | 50.86 | 3.50 -1.32 | 0.04 -0.04 | 4.05 |
| VA4 - 3 | 1111.50 | 0.00 0.17 | 2175.91 1771.60 | 2175.91 | -24.93 -17.64 | 0.00 | -1.12 1.47 | -0.02 0.02 | 4.05 |
| VA4 - 4 | 1111.50 | 0.00 0.17 | 1771.65 -332.21 | 1771.65 | -17.64 14.43 | 14.43 | -2.45 3.26 | -0.04 0.04 | 4.05 |
| VA4 - 5 | 1111.50 | 0.00 0.17 | -333.31 -4276.64 | 0.00 | 14.43 -81.77 | 14.43 | -6.76 7.38 | 0.17 -0.17 | -0.97 |
| VA4 - 6 | 1111.50 | 0.00 0.05 | -4330.13 -191.65 | 0.00 | -57.08 -38.80 | 0.00 | 4.67 -3.56 | -0.02 0.02 | -2.34 |
| VA4 - 7 | 1111.50 | 0.00 0.05 | -191.25 1938.79 | 1938.79 | -38.80 -6.65 | 0.00 | 2.58 -1.38 | -0.03 0.03 | -3.94 |
| VA4 - 8 | 1111.50 | 0.00 0.05 | 1937.82 1036.98 | 2008.92 | -6.65 29.50 | 0.00 | 0.40 1.47 | -0.02 0.02 | -3.94 |
| VA4 - 9 | 1111.50 | 0.00 0.05 | 1043.88 -3381.89 | 1043.88 | 29.50 41.39 | 41.39 | -7.19 7.85 | -0.02 0.02 | -3.94 |
| VA4 - 10 | 1111.50 | -0.03 0.00 | -2973.37 -240.60 | 0.00 | 6.72 8.61 | 8.61 | 3.36 -2.28 | 0.00 0.00 | 2.29 |
| VA4 - 11 | 1111.50 | -0.03 0.00 | -233.17 544.92 | 544.92 | 8.61 12.37 | 12.37 | 1.72 -1.11 | -0.01 0.01 | 2.29 |
| VA4 - 12 | 1111.50 | -0.03 0.00 | 545.61 -984.33 | 545.61 | 12.37 -13.82 | 12.37 | 0.09 1.85 | 0.02 -0.02 | 2.29 |
| VA4 - 13 | 1111.50 | 0.00 0.04 | -997.82 -462.15 | 490.14 | -9.51 -31.62 | 0.00 | 1.82 1.46 | 0.01 -0.01 | -2.25 |
| VA5 - 1 | 1062.75 | 0.00 0.11 | -567.95 774.49 | 954.00 | 42.79 -5.71 | 42.79 | 1.80 0.62 | 0.02 -0.02 | 2.85 |
| VA5 - 2 | 1062.75 | 0.00 0.11 | 774.44 -2185.43 | 774.44 | -5.71 -59.45 | 0.00 | -1.60 2.97 | 0.04 -0.04 | 2.85 |
| VA5 - 3 | 1062.75 | 0.00 0.16 | -2776.46 427.37 | 427.37 | -47.12 -22.18 | 0.00 | 3.72 -2.65 | -0.02 0.02 | -2.33 |
| VA5 - 4 | 1062.75 | 0.00 0.16 | 426.99 1611.77 | 1611.77 | -22.18 -8.56 | 0.00 | 1.67 -0.53 | -0.01 0.01 | -2.33 |
| VA5 - 5 | 1062.75 | 0.00 0.16 | 1612.75 -2160.20 | 1612.75 | -8.56 39.45 | 39.45 | -0.45 2.87 | -0.02 0.02 | -2.33 |
| VA5 - 6 | 1062.75 | 0.00 0.09 | -2064.97 930.94 | 930.94 | 9.81 -9.60 | 9.81 | 2.78 -1.16 | 0.01 -0.01 | -1.62 |
| VA5 - 7 | 1062.75 | 0.00 0.08 | 930.24 -189.79 | 933.00 | -22.74 -8.31 | 0.00 | 0.13 1.55 | -0.01 0.01 | -11.55 |
| VA6 - 1 | 1062.75 | 0.00 0.03 | 9.25 899.41 | 937.26 | -28.79 -19.62 | 0.00 | 1.41 0.30 | -0.01 0.01 | 2.88 |
| VA6 - 2 | 1062.75 | 0.00 0.03 | 905.98 -3428.42 | 905.98 | -19.62 42.68 | 42.68 | -2.01 3.64 | -0.04 0.04 | 2.88 |
| VA7 - 1 | 1062.75 | -0.07 0.00 | -1141.16 2133.23 | 2133.23 | -55.00 -0.08 | 0.00 | 2.92 -1.25 | -0.03 0.03 | -5.23 |
| VA7 - 2 | 1062.75 | -0.07 0.00 | 2126.66 0.00 | 2126.66 | -0.08 0.00 | 0.00 | -0.47 2.18 | 0.00 0.00 | -5.23 |
| VA8 - 1 | 1184.63 | 0.00 0.70 | -5006.52 -9110.59 | 4002.43 | -3.00 -12.85 | 0.00 | 4.62 5.58 | 0.00 0.00 | 0.50 |
| VA8 - 2 | 1184.63 | 0.00 1.03 | -12066.81 -7806.23 | 6650.45 | -2.70 1.50 | 1.50 | 6.66 5.85 | 0.00 0.00 | -0.36 |

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|----------|---------|---------------|----------------------|---------|------------------|--------|---------------|---------------|-------|
| VA9 - 1 | 1111.50 | 0.00 0.23 | -1731.86 -4126.66 | 1834.41 | 9.59 -12.65 | 9.59 | 2.82 3.64 | 0.00 0.00 | 4.06 |
| VA9 - 2 | 1111.50 | 0.00 0.28 | -3278.68 -4060.23 | 1967.87 | -33.44 29.97 | 29.97 | 3.42 3.66 | -0.01 0.01 | -0.22 |
| VA10 - 1 | 1111.50 | 0.00 0.17 | -2366.34 -2687.17 | 1263.42 | 12.44 -39.12 | 12.44 | 2.84 2.96 | 0.01 -0.01 | 0.49 |
| VA10 - 2 | 1111.50 | 0.00 0.06 | -1134.31 -1795.49 | 765.02 | -82.89 101.30 | 101.30 | 2.06 2.39 | -0.05 0.05 | -4.80 |
| VA11 - 1 | 1062.75 | -0.01 0.00 | 549.56 -1271.58 | 549.56 | -31.77 41.53 | 41.53 | 0.08 1.97 | -0.04 0.04 | 2.28 |
| VA11 - 2 | 1062.75 | -0.03 0.00 | -926.61 278.01 | 1027.43 | -27.04 13.07 | 13.07 | 2.04 1.26 | -0.01 0.01 | -1.71 |
| VA11 - 3 | 1062.75 | -0.03 0.00 | 273.81 -2623.06 | 273.81 | 13.07 35.39 | 35.39 | -2.32 3.40 | -0.02 0.02 | -1.71 |
| VA12 - 1 | 1062.75 | -0.06 0.00 | 0.00 2409.76 | 2786.62 | 0.00 6.79 | 6.79 | 2.43 0.90 | 0.00 0.00 | 0.02 |
| VA12 - 2 | 1062.75 | -0.06 0.00 | 2413.96 0.00 | 2413.96 | 6.79 0.00 | 6.79 | -1.95 2.99 | 0.01 -0.01 | 0.02 |
| VA13 | 1014.00 | 0.00 0.02 | 0.00 0.00 | 467.12 | 0.00 0.00 | 0.00 | 0.98 0.98 | 0.00 0.00 | 0.05 |
| VA14 - 1 | 1062.75 | 0.00 0.21 | 0.00 3085.57 | 3085.57 | 0.00 3.02 | 3.02 | 3.50 -2.38 | 0.00 0.00 | 1.08 |
| VA14 - 2 | 1062.75 | 0.00 0.21 | 3086.60 0.00 | 3242.38 | 3.02 0.00 | 3.02 | 0.58 2.63 | 0.00 0.00 | 1.08 |
| VA15 | 1014.00 | 0.00 0.01 | 0.00 0.00 | 467.12 | 0.00 0.00 | 0.00 | 0.98 0.98 | 0.00 0.00 | 0.38 |
| VA16 | 1014.00 | -0.01 0.00 | 0.00 0.00 | 467.12 | 0.00 0.00 | 0.00 | 0.98 0.98 | 0.00 0.00 | -0.98 |
| VA17 - 1 | 1062.75 | 0.00 0.00 | 0.00 5422.74 | 5422.74 | 0.00 -7.62 | 0.00 | 5.72 -4.61 | 0.01 -0.01 | -6.90 |
| VA17 - 2 | 1062.75 | 0.00 0.00 | 5421.71 0.00 | 5421.71 | 9.62 0.00 | 9.62 | -0.40 3.42 | 0.00 0.00 | 1.92 |
| VA18 | 1062.75 | 0.00 0.02 | 352.25 -518.71 | 502.55 | 29.65 -32.08 | 29.65 | 0.58 1.48 | 0.03 -0.03 | 1.43 |
| VA19 | 1062.75 | 0.00 0.00 | 0.00 0.00 | 140.55 | 0.00 0.00 | 0.00 | 0.56 0.56 | 0.00 0.00 | -7.43 |
| VA20 | 1062.75 | -0.02 0.00 | -9.93 0.00 | 485.17 | 13.14 0.00 | 13.14 | 1.03 1.02 | 0.01 -0.01 | 0.69 |
| VA21 - 1 | 1062.75 | 0.00 0.21 | -1709.18 3115.26 | 3134.32 | 50.28 -54.66 | 50.28 | 3.21 0.20 | 0.03 -0.03 | 6.67 |
| VA21 - 2 | 1062.75 | 0.00 0.20 | 3118.14 -2646.05 | 3118.14 | -25.87 -24.29 | 0.00 | -1.61 3.85 | 0.00 0.00 | -2.58 |
| VA22 | 1062.75 | 0.00 0.09 | 143.79 -1967.97 | 1011.31 | -1.34 2.45 | 2.45 | 1.36 2.52 | 0.00 0.00 | 0.20 |
| VA23 | 1062.75 | 0.00 0.03 | 0.00 0.00 | 1384.92 | 0.00 0.00 | 0.00 | 1.72 1.72 | 0.00 0.00 | 6.57 |
| VA24 - 1 | 1111.50 | 0.00 0.22 | -1667.93 -4184.24 | 1843.86 | -38.96 24.05 | 24.05 | 2.80 3.66 | -0.01 0.01 | -5.79 |
| VA24 - 2 | 1111.50 | 0.00 0.27 | -3057.20 -4451.28 | 1892.96 | 17.12 18.07 | 18.07 | 3.32 3.76 | 0.00 0.00 | -0.23 |
| VA25 - 1 | 1111.50 | 0.00 0.30 | -3610.59 2508.04 | 2508.04 | 104.65 -35.99 | 104.65 | 4.26 -2.13 | 0.07 -0.07 | 4.36 |
| VA25 - 2 | 1111.50 | 0.00 0.30 | 2513.26 -3716.60 | 2513.26 | -35.99 -37.96 | 0.00 | -0.04 3.72 | 0.00 0.00 | 4.36 |
| VA25 - 3 | 1111.50 | 0.00 0.08 | -1443.68 -1779.45 | 609.79 | 25.29 -55.54 | 25.29 | 2.14 2.30 | 0.02 -0.02 | -1.69 |

| CASO: 1.3G1+1.4G2+0.84V4+1.4D4 | | | | | | | | | |
|--------------------------------|------------------|------------------|-----------------------|------------------|-----------------------|------------------|--------------------|--------------------|----------------|
| Elemento | Carga (kgf/m) | Rd Nd (tf) | Mxi Mxf (kgf.m) | MxMáx (kgf.m) | Myi Myf (kgf.m) | MyMáx (kgf.m) | Vxi Vxf (tf) | Vyi Vyf (tf) | Mtd (kgf/m) |
| VA1 - 1 | 1062.75 | 0.00 | -1876.83 | 2526.90 | -51.78 | 5.71 | 3.30 | -0.03 | 0.05 |

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| | | 0.41 | 2526.90 | | 5.71 | | -1.23 | 0.03 | |
| VA1 - 2 | 1062.75 | 0.00 0.41 | 2527.12 90.42 | 2527.12 | 5.71 56.91 | 0.00 | -1.76 2.88 | -0.05 0.05 | -0.80 |
| VA1 - 3 | 1062.75 | 0.00 0.41 | 91.76 -3286.62 | 91.76 | 56.91 35.85 | 56.91 | -5.50 6.12 | 0.04 -0.04 | -0.77 |
| VA1 - 4 | 1062.75 | 0.00 0.08 | -2784.24 385.47 | 1001.92 | 37.88 -39.12 | 37.88 | 2.84 1.15 | 0.02 -0.02 | 1.45 |
| VA1 - 5 | 1062.75 | 0.00 0.07 | 387.65 -2098.83 | 387.65 | -39.12 35.67 | 35.67 | -4.56 5.11 | -0.15 0.15 | -2.98 |
| VA1 - 6 | 1062.75 | -0.01 0.00 | -1700.15 -303.23 | 498.80 | 23.88 -12.02 | 23.88 | 2.16 1.31 | 0.01 -0.01 | 0.74 |
| VA2 | 1062.75 | 0.00 0.00 | 0.00 0.00 | 518.17 | 0.00 0.00 | 0.00 | 1.06 1.06 | 0.00 0.00 | -3.15 |
| VA3 - 1 | 1062.75 | 0.00 0.01 | 0.00 -2143.53 | 1527.47 | 0.00 -6.32 | 0.00 | 1.80 2.79 | 0.00 0.00 | 1.06 |
| VA3 - 2 | 1062.75 | 0.00 0.00 | -2152.64 7.20 | 7.20 | 22.78 0.00 | 22.78 | 2.21 -0.56 | 0.01 -0.01 | 0.00 |
| VA4 - 1 | 1111.50 | 0.00 0.24 | -1868.82 -2502.43 | 1337.51 | 66.13 -11.45 | 66.13 | 2.67 2.92 | 0.02 -0.02 | 1.70 |
| VA4 - 2 | 1111.50 | 0.00 0.29 | -2592.39 2188.18 | 2188.18 | -66.53 14.05 | 14.05 | 3.52 -1.33 | -0.04 0.04 | -5.89 |
| VA4 - 3 | 1111.50 | 0.00 0.29 | 2187.96 1789.00 | 2187.96 | 14.05 20.88 | 0.00 | -1.10 1.45 | -0.02 0.02 | -5.89 |
| VA4 - 4 | 1111.50 | 0.00 0.29 | 1788.98 -302.30 | 1788.98 | 20.88 26.15 | 26.15 | -2.43 3.25 | -0.01 0.01 | -5.89 |
| VA4 - 5 | 1111.50 | 0.00 0.29 | -303.52 -4237.33 | 0.00 | 26.15 75.68 | 75.68 | -6.74 7.36 | -0.09 0.09 | -10.47 |
| VA4 - 6 | 1111.50 | 0.00 0.18 | -4280.90 -163.29 | 0.00 | 32.23 41.25 | 41.25 | 4.65 -3.54 | -0.01 0.01 | 4.83 |
| VA4 - 7 | 1111.50 | 0.00 0.18 | -162.87 1944.84 | 1944.84 | 41.25 3.43 | 41.25 | 2.56 -1.36 | 0.04 -0.04 | 3.46 |
| VA4 - 8 | 1111.50 | 0.00 0.18 | 1943.95 1008.11 | 2006.30 | 3.43 3.22 | 0.00 | 0.38 1.49 | 0.00 0.00 | 3.46 |
| VA4 - 9 | 1111.50 | 0.00 0.19 | 1015.03 -3422.96 | 1015.03 | 3.22 -86.57 | 3.22 | -7.22 7.87 | 0.15 -0.15 | 3.46 |
| VA4 - 10 | 1111.50 | 0.00 0.02 | -3057.74 -276.83 | 0.00 | -25.74 -3.42 | 0.00 | 3.41 -2.33 | -0.02 0.02 | 1.65 |
| VA4 - 11 | 1111.50 | 0.00 0.02 | -269.63 535.75 | 535.75 | -3.42 1.20 | 1.20 | 1.77 -1.16 | -0.01 0.01 | 1.65 |
| VA4 - 12 | 1111.50 | 0.00 0.01 | 536.16 -903.01 | 540.30 | 1.20 -4.25 | 1.20 | 0.14 1.79 | 0.00 0.00 | 1.65 |
| VA4 - 13 | 1111.50 | 0.00 0.09 | -958.58 -461.30 | 507.45 | 5.14 11.23 | 11.23 | 1.81 1.47 | 0.00 0.00 | -2.27 |
| VA5 - 1 | 1062.75 | 0.00 0.03 | -544.57 748.87 | 941.75 | -38.92 7.98 | 7.98 | 1.78 0.64 | -0.02 0.02 | -4.11 |
| VA5 - 2 | 1062.75 | 0.00 0.03 | 748.89 -2238.86 | 748.89 | 7.98 53.64 | 53.64 | -1.62 3.00 | -0.04 0.04 | -4.11 |
| VA5 - 3 | 1062.75 | 0.00 0.07 | -2763.41 436.93 | 436.93 | 55.51 16.84 | 55.51 | 3.72 -2.65 | 0.04 -0.04 | 3.74 |
| VA5 - 4 | 1062.75 | 0.00 0.07 | 436.47 1617.51 | 1617.51 | 16.84 21.35 | 0.00 | 1.67 -0.53 | 0.00 0.00 | 3.74 |
| VA5 - 5 | 1062.75 | 0.00 0.07 | 1618.41 -2162.46 | 1618.41 | 21.35 -48.82 | 21.35 | -0.45 2.87 | 0.03 -0.03 | 3.74 |
| VA5 - 6 | 1062.75 | 0.00 0.10 | -1989.71 938.93 | 938.93 | 14.73 -21.40 | 14.73 | 2.73 -1.12 | 0.02 -0.02 | 0.37 |
| VA5 - 7 | 1062.75 | 0.00 0.10 | 938.52 -255.53 | 938.52 | -5.82 -25.18 | 0.00 | 0.09 1.60 | 0.01 -0.01 | -14.46 |
| VA6 - 1 | 1062.75 | 0.00 0.03 | 9.92 803.50 | 860.74 | 8.94 -11.08 | 0.00 | 1.35 0.36 | 0.01 -0.01 | 1.20 |
| VA6 - 2 | 1062.75 | 0.00 0.03 | 809.98 -3616.89 | 809.98 | -11.08 22.72 | 22.72 | -2.07 3.70 | -0.02 0.02 | 1.20 |
| VA7 - 1 | 1062.75 | -0.08 0.00 | -993.45 2207.90 | 2207.90 | -38.15 8.15 | 8.15 | 2.87 -1.20 | -0.03 0.03 | -3.20 |

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|----------|---------|---------------|-----------------------|---------|------------------|-------|---------------|---------------|-------|
| VA7 - 2 | 1062.75 | -0.08 0.00 | 2201.43 0.00 | 2201.43 | 8.15 0.00 | 8.15 | -0.51 2.22 | 0.01 -0.01 | -3.20 |
| VA8 - 1 | 1184.63 | 0.00 0.66 | -5060.60 -9042.74 | 4004.56 | -8.88 13.79 | 13.79 | 4.64 5.56 | 0.00 0.00 | -4.12 |
| VA8 - 2 | 1184.63 | 0.00 0.99 | -12031.00 -7820.81 | 6659.13 | 32.93 -9.60 | 32.93 | 6.65 5.86 | 0.00 0.00 | 3.28 |
| VA9 - 1 | 1111.50 | 0.00 0.12 | -3001.08 -3018.49 | 1674.93 | 83.10 -63.25 | 83.10 | 3.23 3.23 | 0.03 -0.03 | 3.97 |
| VA9 - 2 | 1111.50 | 0.00 0.21 | -4157.84 -3167.65 | 1977.94 | -5.99 -3.81 | 0.00 | 3.69 3.38 | 0.00 0.00 | -0.50 |
| VA10 - 1 | 1111.50 | 0.00 0.12 | -3387.15 -1759.97 | 1256.78 | 47.48 -47.38 | 47.48 | 3.21 2.59 | 0.02 -0.02 | 0.68 |
| VA10 - 2 | 1111.50 | 0.00 0.09 | -2461.55 -216.41 | 1021.45 | -25.91 -33.14 | 0.00 | 2.78 1.66 | 0.00 0.00 | -4.49 |
| VA11 - 1 | 1062.75 | 0.00 0.07 | -1111.99 -355.17 | 0.00 | 37.52 -29.89 | 37.52 | 1.42 0.63 | 0.03 -0.03 | 2.19 |
| VA11 - 2 | 1062.75 | 0.00 0.14 | -2102.06 1660.23 | 1751.42 | 16.94 -8.64 | 16.94 | 2.86 0.44 | 0.01 -0.01 | -1.35 |
| VA11 - 3 | 1062.75 | 0.00 0.14 | 1657.08 -405.46 | 1657.08 | -8.64 -18.32 | 0.00 | -1.50 2.57 | 0.01 -0.01 | -1.35 |
| VA12 - 1 | 1062.75 | 0.00 0.02 | 0.00 2410.56 | 2787.20 | 0.00 -0.98 | 0.00 | 2.43 0.89 | 0.00 0.00 | 0.22 |
| VA12 - 2 | 1062.75 | 0.00 0.02 | 2413.71 0.00 | 2413.71 | -0.98 0.00 | 0.00 | -1.95 2.99 | 0.00 0.00 | 0.22 |
| VA13 | 1014.00 | -0.01 0.00 | 0.00 0.00 | 467.12 | 0.00 0.00 | 0.00 | 0.98 0.98 | 0.00 0.00 | -0.02 |
| VA14 - 1 | 1062.75 | -0.09 0.00 | 0.00 3085.57 | 3085.57 | 0.00 -6.57 | 0.00 | 3.50 -2.38 | 0.01 -0.01 | 1.35 |
| VA14 - 2 | 1062.75 | -0.08 0.00 | 3086.63 0.00 | 3242.41 | -6.57 0.00 | 0.00 | 0.58 2.63 | 0.00 0.00 | 1.35 |
| VA15 | 1014.00 | -0.04 0.00 | 0.00 0.00 | 467.12 | 0.00 0.00 | 0.00 | 0.98 0.98 | 0.00 0.00 | 0.46 |
| VA16 | 1014.00 | 0.00 0.04 | 0.00 0.00 | 467.12 | 0.00 0.00 | 0.00 | 0.98 0.98 | 0.00 0.00 | -0.89 |
| VA17 - 1 | 1062.75 | 0.00 0.15 | 0.00 5422.74 | 5422.74 | 0.00 14.32 | 14.32 | 5.72 -4.61 | -0.01 0.01 | -6.92 |
| VA17 - 2 | 1062.75 | 0.00 0.17 | 5421.68 0.00 | 5421.68 | -14.78 0.00 | 0.00 | -0.40 3.42 | -0.01 0.01 | 2.19 |
| VA18 | 1062.75 | 0.00 0.11 | -1131.32 969.88 | 969.88 | -58.12 70.20 | 70.20 | 2.11 -0.06 | -0.07 0.07 | 1.46 |
| VA19 | 1062.75 | 0.00 0.01 | 0.00 0.00 | 140.55 | 0.00 0.00 | 0.00 | 0.56 0.56 | 0.00 0.00 | -7.20 |
| VA20 | 1062.75 | -0.01 0.00 | -14.82 0.00 | 482.99 | -15.58 0.00 | 0.00 | 1.03 1.02 | -0.01 0.01 | 0.41 |
| VA21 - 1 | 1062.75 | 0.00 0.21 | -2645.16 3260.91 | 3260.91 | 18.44 -30.09 | 18.44 | 3.55 -0.14 | 0.02 -0.02 | 7.03 |
| VA21 - 2 | 1062.75 | 0.00 0.22 | 3262.10 -1663.16 | 3262.10 | -39.03 -0.28 | 0.00 | -1.21 3.45 | -0.02 0.02 | -2.89 |
| VA22 | 1062.75 | 0.00 0.13 | -1488.50 -34.11 | 1080.86 | -20.65 26.29 | 26.29 | 2.34 1.54 | -0.01 0.01 | 0.53 |
| VA23 | 1062.75 | 0.00 0.03 | 0.00 0.00 | 1384.92 | 0.00 0.00 | 0.00 | 1.72 1.72 | 0.00 0.00 | 6.47 |
| VA24 - 1 | 1111.50 | 0.00 0.10 | -3167.76 -2872.98 | 1669.12 | -100.82 62.36 | 62.36 | 3.28 3.18 | -0.03 0.03 | -5.90 |
| VA24 - 2 | 1111.50 | 0.00 0.19 | -4099.98 -3399.50 | 1886.27 | -1.87 38.29 | 38.29 | 3.65 3.43 | -0.01 0.01 | -0.55 |
| VA25 - 1 | 1111.50 | 0.00 0.25 | -4847.41 2184.53 | 2184.53 | 85.83 -43.79 | 85.83 | 4.74 -2.61 | 0.07 -0.07 | 4.60 |
| VA25 - 2 | 1111.50 | 0.00 0.24 | 2187.73 -2616.96 | 2252.71 | -43.79 5.65 | 5.65 | 0.39 3.29 | -0.01 0.01 | 4.60 |
| VA25 - 3 | 1111.50 | 0.00 0.11 | -3043.40 88.23 | 1016.81 | -62.41 61.29 | 61.29 | 3.00 1.44 | -0.03 0.03 | -1.32 |

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| CASO: 1.3G1+1.4G2+0.98Q+0.84V1+1.4D1 | | | | | | | | | |
|--------------------------------------|------------------|------------------|-----------------------|------------------|-----------------------|------------------|--------------------|--------------------|----------------|
| Elemento | Carga (kgf/m) | Rd Nd (tf) | Mxi Mxf (kgf.m) | MxMáx (kgf.m) | Myi Myf (kgf.m) | MyMáx (kgf.m) | Vxi Vxf (tf) | Vyi Vyf (tf) | Mtd (kgf/m) |
| VA1 - 1 | 1062.75 | 0.00 0.43 | -1165.42 2590.58 | 2590.58 | -59.73 3.96 | 3.96 | 2.96 -0.90 | -0.03 0.03 | -0.75 |
| VA1 - 2 | 1062.75 | 0.00 0.44 | 2590.78 -195.89 | 2590.78 | 3.96 -75.21 | 3.96 | -2.09 3.21 | 0.08 -0.08 | -1.62 |
| VA1 - 3 | 1062.75 | 0.00 0.42 | -194.27 -3766.29 | 0.00 | -75.21 127.07 | 127.07 | -5.84 6.45 | -0.35 0.35 | -1.88 |
| VA1 - 4 | 1062.75 | -0.27 0.00 | -2427.35 77.88 | 900.94 | 111.59 -84.21 | 111.59 | 2.66 1.32 | 0.05 -0.05 | 0.14 |
| VA1 - 5 | 1062.75 | -0.29 0.00 | 79.93 -2497.65 | 79.93 | -84.21 109.86 | 109.86 | -4.74 5.29 | -0.38 0.38 | -0.84 |
| VA1 - 6 | 1062.75 | -0.33 0.00 | -775.02 -1474.89 | 310.95 | 88.47 -44.35 | 88.47 | 1.52 1.95 | 0.04 -0.04 | 1.08 |
| VA2 | 1062.75 | 0.00 0.00 | 0.00 0.00 | 518.17 | 0.00 0.00 | 0.00 | 1.06 1.06 | 0.00 0.00 | -3.73 |
| VA3 - 1 | 1062.75 | 0.00 0.01 | 0.00 -2141.03 | 1528.43 | 0.00 16.27 | 16.27 | 1.80 2.79 | 0.00 0.00 | 0.86 |
| VA3 - 2 | 1062.75 | 0.00 0.00 | -2150.95 8.89 | 8.89 | 49.11 0.00 | 49.11 | 2.21 -0.56 | 0.03 -0.03 | 0.00 |
| VA4 - 1 | 1111.50 | 0.00 0.36 | -978.67 -2812.63 | 1679.85 | 48.94 -29.32 | 48.94 | 2.43 3.16 | 0.02 -0.02 | 1.09 |
| VA4 - 2 | 1111.50 | 0.00 0.39 | -2258.76 1850.43 | 1850.43 | -61.83 -31.92 | 0.00 | 3.18 -0.99 | -0.02 0.02 | 0.14 |
| VA4 - 3 | 1111.50 | 0.00 0.39 | 1850.23 1344.59 | 1850.23 | -31.92 6.74 | 0.00 | -1.44 1.79 | -0.12 0.12 | 0.14 |
| VA4 - 4 | 1111.50 | 0.00 0.39 | 1344.42 -998.02 | 1344.42 | 6.74 137.85 | 137.85 | -2.77 3.59 | -0.18 0.18 | 0.14 |
| VA4 - 5 | 1111.50 | 0.00 0.38 | -999.53 -5123.66 | 0.00 | 137.85 -4.82 | 137.85 | -7.09 7.71 | 0.26 -0.26 | -14.91 |
| VA4 - 6 | 1111.50 | 0.00 0.14 | -3680.16 259.72 | 259.72 | -36.67 -1.65 | 0.00 | 4.48 -3.36 | -0.03 0.03 | -0.64 |
| VA4 - 7 | 1111.50 | 0.00 0.14 | 259.89 2177.45 | 2177.45 | -1.65 -0.13 | 0.00 | 2.38 -1.18 | 0.00 0.00 | 1.53 |
| VA4 - 8 | 1111.50 | 0.00 0.14 | 2176.25 942.33 | 2194.86 | -0.13 92.99 | 0.00 | 0.21 1.67 | -0.06 0.06 | 1.53 |
| VA4 - 9 | 1111.50 | 0.00 0.16 | 950.18 -3591.54 | 950.18 | 92.99 -108.89 | 92.99 | -7.39 8.05 | 0.34 -0.34 | 1.53 |
| VA4 - 10 | 1111.50 | -0.02 0.00 | -2556.50 -144.55 | 0.00 | -39.68 10.54 | 10.54 | 3.03 -1.95 | -0.05 0.05 | 1.76 |
| VA4 - 11 | 1111.50 | -0.02 0.00 | -135.66 460.52 | 460.52 | 10.54 21.68 | 21.68 | 1.39 -0.78 | -0.02 0.02 | 1.76 |
| VA4 - 12 | 1111.50 | -0.03 0.00 | 461.37 -1642.23 | 461.37 | 21.68 -54.41 | 21.68 | -0.24 2.18 | 0.04 -0.04 | 1.76 |
| VA4 - 13 | 1111.50 | 0.00 0.02 | 201.77 -2070.46 | 537.45 | -20.39 7.01 | 7.01 | 0.87 2.41 | -0.01 0.01 | -2.35 |
| VA5 - 1 | 1062.75 | 0.00 0.02 | -24.63 547.50 | 976.03 | -55.51 27.66 | 27.66 | 1.46 0.96 | -0.04 0.04 | -1.69 |
| VA5 - 2 | 1062.75 | 0.00 0.02 | 547.68 -2850.49 | 547.68 | 27.66 4.57 | 27.66 | -1.94 3.31 | 0.02 -0.02 | -1.69 |
| VA5 - 3 | 1062.75 | 0.00 0.04 | -2289.48 730.77 | 730.77 | -1.05 -0.33 | 0.00 | 3.54 -2.47 | 0.00 0.00 | 1.34 |
| VA5 - 4 | 1062.75 | 0.00 0.04 | 730.60 1718.97 | 1718.97 | -0.33 35.09 | 0.00 | 1.49 -0.35 | -0.03 0.03 | 1.34 |
| VA5 - 5 | 1062.75 | 0.00 0.04 | 1720.17 -2468.19 | 1720.17 | 35.09 -12.40 | 35.09 | -0.63 3.05 | 0.02 -0.02 | 1.34 |
| VA5 - 6 | 1062.75 | 0.00 0.05 | -1677.35 859.95 | 859.95 | 43.31 -37.90 | 43.31 | 2.48 -0.86 | 0.05 -0.05 | -0.54 |
| VA5 - 7 | 1062.75 | 0.00 0.06 | 859.10 -739.89 | 859.10 | -15.46 1.23 | 1.23 | -0.17 1.85 | -0.01 0.01 | -12.49 |
| VA6 - 1 | 1062.75 | 0.00 | 14.08 | 494.96 | -41.59 | 0.00 | 1.01 | -0.01 | 1.85 |


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|----------|---------|---------------|-----------------------|---------|-------------------|--------|---------------|---------------|-------|
| | | 0.01 | 272.21 | | -22.42 | | 0.69 | 0.01 | |
| VA6 - 2 | 1062.75 | 0.00 0.01 | 278.65 -4660.90 | 278.65 | -22.42 56.65 | 56.65 | -2.41 4.04 | -0.05 0.05 | 1.85 |
| VA7 - 1 | 1062.75 | -0.17 0.00 | -284.94 2566.28 | 2566.28 | -63.22 -0.51 | 0.00 | 2.65 -0.98 | -0.04 0.04 | -3.88 |
| VA7 - 2 | 1062.75 | -0.17 0.00 | 2559.85 0.00 | 2559.85 | -0.51 0.00 | 0.00 | -0.74 2.45 | 0.00 0.00 | -3.88 |
| VA8 - 1 | 1184.63 | 0.00 0.70 | -4110.20 -9842.20 | 4179.44 | 22.19 -5.17 | 22.19 | 4.43 5.76 | 0.00 0.00 | -1.85 |
| VA8 - 2 | 1184.63 | 0.00 0.96 | -11394.69 -8623.05 | 6540.85 | 22.04 -29.19 | 22.04 | 6.52 5.99 | 0.00 0.00 | 1.61 |
| VA9 - 1 | 1111.50 | 0.00 0.18 | -2358.64 -3583.84 | 1734.30 | 18.43 -9.16 | 18.43 | 3.02 3.44 | 0.00 0.00 | 0.11 |
| VA9 - 2 | 1111.50 | 0.00 0.26 | -3750.18 -3600.89 | 1951.59 | 3.71 17.76 | 17.76 | 3.56 3.51 | 0.00 0.00 | -0.41 |
| VA10 - 1 | 1111.50 | 0.00 0.15 | -2903.89 -2204.75 | 1240.32 | 36.62 -41.20 | 36.62 | 3.04 2.77 | 0.01 -0.01 | 2.60 |
| VA10 - 2 | 1111.50 | 0.00 0.08 | -1834.52 -958.52 | 839.05 | -44.36 11.30 | 11.30 | 2.44 2.00 | -0.01 0.01 | -2.09 |
| VA11 - 1 | 1062.75 | -0.07 0.00 | -250.60 -394.32 | 175.11 | 50.65 -34.34 | 50.65 | 0.95 1.10 | 0.04 -0.04 | 3.31 |
| VA11 - 2 | 1062.75 | -0.47 0.00 | -1259.64 571.10 | 1100.91 | 1.01 -3.18 | 1.01 | 2.24 1.06 | 0.00 0.00 | -2.45 |
| VA11 - 3 | 1062.75 | -0.47 0.00 | 567.37 -2125.25 | 567.37 | -3.18 -3.88 | 0.00 | -2.12 3.20 | 0.00 0.00 | -2.45 |
| VA12 - 1 | 1062.75 | -0.11 0.00 | 0.00 2410.12 | 2786.88 | 0.00 0.49 | 0.49 | 2.43 0.89 | 0.00 0.00 | 0.20 |
| VA12 - 2 | 1062.75 | -0.11 0.00 | 2413.85 0.00 | 2413.85 | 0.49 0.00 | 0.49 | -1.95 2.99 | 0.00 0.00 | 0.20 |
| VA13 | 1014.00 | 0.00 0.05 | 0.00 0.00 | 467.12 | 0.00 0.00 | 0.00 | 0.98 0.98 | 0.00 0.00 | -0.18 |
| VA14 - 1 | 1062.75 | 0.00 0.43 | 0.00 3086.07 | 3086.07 | 0.00 -7.84 | 0.00 | 3.50 -2.38 | 0.01 -0.01 | 1.62 |
| VA14 - 2 | 1062.75 | 0.00 0.42 | 3086.93 0.00 | 3242.65 | -7.84 0.00 | 0.00 | 0.58 2.63 | 0.00 0.00 | 1.62 |
| VA15 | 1014.00 | -0.03 0.00 | 0.00 0.00 | 467.12 | 0.00 0.00 | 0.00 | 0.98 0.98 | 0.00 0.00 | 0.17 |
| VA16 | 1014.00 | 0.00 0.05 | 0.00 0.00 | 467.12 | 0.00 0.00 | 0.00 | 0.98 0.98 | 0.00 0.00 | -1.20 |
| VA17 - 1 | 1062.75 | 0.00 0.40 | 0.00 5422.24 | 5422.24 | 0.00 16.58 | 16.58 | 5.72 -4.61 | -0.02 0.02 | -7.85 |
| VA17 - 2 | 1062.75 | 0.00 0.43 | 5421.39 0.00 | 5421.39 | -16.26 0.00 | 0.00 | -0.40 3.42 | -0.01 0.01 | 2.06 |
| VA18 | 1062.75 | 0.00 0.21 | -679.42 475.53 | 561.58 | -54.04 77.19 | 77.19 | 1.62 0.43 | -0.07 0.07 | 1.87 |
| VA19 | 1062.75 | 0.00 0.03 | 0.00 0.00 | 140.55 | 0.00 0.00 | 0.00 | 0.56 0.56 | 0.00 0.00 | -8.89 |
| VA20 | 1062.75 | -0.06 0.00 | -11.95 0.00 | 484.27 | -22.44 0.00 | 0.00 | 1.03 1.02 | -0.01 0.01 | 0.85 |
| VA21 - 1 | 1062.75 | 0.00 0.17 | -2030.45 2858.77 | 2873.78 | 42.85 -45.31 | 42.85 | 3.23 0.18 | 0.03 -0.03 | 9.29 |
| VA21 - 2 | 1062.75 | 0.00 0.16 | 2860.62 -2027.94 | 2860.62 | -3.72 -30.80 | 0.00 | -1.19 3.44 | 0.01 -0.01 | -4.79 |
| VA22 | 1062.75 | 0.00 0.14 | -550.57 -1104.68 | 949.20 | -43.00 62.07 | 62.07 | 1.79 2.09 | -0.03 0.03 | -0.37 |
| VA23 | 1062.75 | 0.00 0.04 | 0.00 0.00 | 1384.92 | 0.00 0.00 | 0.00 | 1.72 1.72 | 0.00 0.00 | 6.44 |
| VA24 - 1 | 1111.50 | 0.00 0.15 | -2331.28 -3599.16 | 1741.05 | -94.84 66.20 | 66.20 | 3.01 3.45 | -0.03 0.03 | -9.68 |
| VA24 - 2 | 1111.50 | 0.00 0.20 | -3468.11 -4033.08 | 1883.23 | 18.43 67.89 | 67.89 | 3.45 3.63 | -0.01 0.01 | -0.38 |
| VA25 - 1 | 1111.50 | 0.00 0.28 | -4274.64 2539.88 | 2539.88 | 162.16 -108.48 | 162.16 | 4.62 -2.50 | 0.14 -0.14 | 7.50 |


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| VA25 - 2 | 1111.50 | 0.00 0.28 | 2543.77 -3374.05 | 2543.77 | -108.48 0.34 | 0.34 | 0.05 3.63 | -0.03 0.03 | 7.50 |
| VA25 - 3 | 1111.50 | 0.00 0.08 | -2155.95 -990.00 | 682.42 | 13.84 -29.74 | 13.84 | 2.51 1.93 | 0.01 -0.01 | 0.03 |

| CASO: 1.3G1+1.4G2+0.98Q+0.84V2+1.4D2 | | | | | | | | | |
|--------------------------------------|------------------|------------------|-----------------------|------------------|-----------------------|------------------|--------------------|--------------------|----------------|
| Elemento | Carga (kgf/m) | Rd Nd (tf) | Mxi Mxf (kgf.m) | MxMáx (kgf.m) | Myi Myf (kgf.m) | MyMáx (kgf.m) | Vxi Vxf (tf) | Vyi Vyf (tf) | Mtd (kgf/m) |
| VA1 - 1 | 1062.75 | 0.00 0.36 | -2672.68 2587.37 | 2587.37 | -54.56 3.65 | 3.65 | 3.74 -1.67 | -0.03 0.03 | -0.94 |
| VA1 - 2 | 1062.75 | 0.00 0.36 | 2587.19 612.66 | 2587.19 | 3.65 -76.48 | 0.00 | -1.32 2.44 | 0.08 -0.08 | -1.79 |
| VA1 - 3 | 1062.75 | 0.00 0.34 | 613.56 -2509.16 | 613.56 | -76.48 130.64 | 130.64 | -5.06 5.68 | -0.36 0.36 | -1.23 |
| VA1 - 4 | 1062.75 | -0.29 0.00 | -3283.05 713.34 | 1114.91 | 112.92 -86.77 | 112.92 | 3.06 0.92 | 0.05 -0.05 | 1.07 |
| VA1 - 5 | 1062.75 | -0.32 0.00 | 715.56 -1657.52 | 715.56 | -86.77 114.41 | 114.41 | -4.34 4.89 | -0.39 0.39 | -7.03 |
| VA1 - 6 | 1062.75 | -0.28 0.00 | -2084.10 93.81 | 628.59 | 88.96 -46.39 | 88.96 | 2.40 1.07 | 0.04 -0.04 | 0.95 |
| VA2 | 1062.75 | 0.00 0.00 | 0.00 0.00 | 518.17 | 0.00 0.00 | 0.00 | 1.06 1.06 | 0.00 0.00 | -4.33 |
| VA3 - 1 | 1062.75 | 0.00 0.01 | 0.00 -2144.08 | 1527.26 | 0.00 14.55 | 14.55 | 1.80 2.79 | 0.00 0.00 | 1.06 |
| VA3 - 2 | 1062.75 | 0.00 0.00 | -2152.36 7.48 | 7.48 | 55.08 0.00 | 55.08 | 2.21 -0.56 | 0.04 -0.04 | 0.00 |
| VA4 - 1 | 1111.50 | -0.01 0.00 | -3025.06 -2028.79 | 1003.47 | 92.20 -50.88 | 92.20 | 2.99 2.60 | 0.03 -0.03 | 1.12 |
| VA4 - 2 | 1111.50 | 0.00 0.13 | -2828.92 2584.68 | 2584.68 | -63.31 -30.20 | 0.00 | 3.84 -1.65 | -0.02 0.02 | -3.11 |
| VA4 - 3 | 1111.50 | 0.00 0.13 | 2584.87 2286.61 | 2584.87 | -30.20 8.35 | 0.00 | -0.78 1.13 | -0.12 0.12 | -3.11 |
| VA4 - 4 | 1111.50 | 0.00 0.13 | 2286.94 432.80 | 2286.94 | 8.35 139.30 | 0.00 | -2.11 2.93 | -0.18 0.18 | -3.11 |
| VA4 - 5 | 1111.50 | 0.00 0.12 | 431.90 -3322.42 | 431.90 | 139.30 -6.21 | 139.30 | -6.42 7.04 | 0.26 -0.26 | 3.40 |
| VA4 - 6 | 1111.50 | -0.13 0.00 | -5331.48 -829.28 | 0.00 | -36.81 -1.24 | 0.00 | 5.04 -3.92 | -0.04 0.04 | 6.32 |
| VA4 - 7 | 1111.50 | -0.13 0.00 | -828.89 1690.29 | 1690.29 | -1.24 -2.24 | 0.00 | 2.94 -1.74 | 0.00 0.00 | -0.61 |
| VA4 - 8 | 1111.50 | -0.13 0.00 | 1689.16 1398.35 | 1950.50 | -2.24 93.77 | 0.00 | 0.76 1.11 | -0.06 0.06 | -0.61 |
| VA4 - 9 | 1111.50 | -0.11 0.00 | 1404.38 -2808.59 | 1404.38 | 93.77 -114.06 | 93.77 | -6.83 7.49 | 0.35 -0.35 | -0.61 |
| VA4 - 10 | 1111.50 | -0.25 0.00 | -3016.01 -173.47 | 0.00 | -23.72 7.31 | 7.31 | 3.47 -2.39 | -0.03 0.03 | 1.72 |
| VA4 - 11 | 1111.50 | -0.25 0.00 | -165.99 674.34 | 674.34 | 7.31 5.46 | 7.31 | 1.83 -1.22 | 0.00 0.00 | 1.72 |
| VA4 - 12 | 1111.50 | -0.27 0.00 | 675.40 -653.82 | 693.28 | 5.46 -41.66 | 5.46 | 0.20 1.73 | 0.03 -0.03 | 1.72 |
| VA4 - 13 | 1111.50 | 0.00 0.08 | -2138.02 1083.89 | 1214.56 | 0.64 -44.93 | 0.64 | 2.73 0.54 | 0.02 -0.02 | -2.45 |
| VA5 - 1 | 1062.75 | 0.00 0.03 | -1098.45 977.83 | 1016.43 | -42.30 27.10 | 27.10 | 2.12 0.30 | -0.03 0.03 | -1.56 |
| VA5 - 2 | 1062.75 | 0.00 0.03 | 977.50 -1564.84 | 977.50 | 27.10 -3.97 | 27.10 | -1.28 2.65 | 0.02 -0.02 | -1.56 |
| VA5 - 3 | 1062.75 | 0.00 0.08 | -3209.00 159.79 | 159.79 | 3.91 0.03 | 3.91 | 3.88 -2.82 | 0.00 0.00 | 1.28 |
| VA5 - 4 | 1062.75 | 0.00 0.08 | 159.38 1520.66 | 1520.66 | 0.03 36.07 | 0.00 | 1.84 -0.69 | -0.03 0.03 | 1.28 |
| VA5 - 5 | 1062.75 | 0.00 | 1521.79 | 1521.79 | 36.07 | 36.07 | -0.29 | 0.02 | 1.28 |

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|----------|---------|---------------|-----------------------|---------|-----------------|-------|---------------|---------------|--------|
| | | 0.08 | -1877.89 | | -19.37 | | 2.70 | -0.02 | |
| VA5 - 6 | 1062.75 | 0.00 0.13 | -2349.57 1008.42 | 1008.42 | 63.02 -47.67 | 63.02 | 3.02 -1.40 | 0.07 -0.07 | -0.52 |
| VA5 - 7 | 1062.75 | 0.00 0.15 | 1007.36 260.69 | 1065.29 | -6.49 -84.16 | 0.00 | 0.37 1.31 | 0.05 -0.05 | -14.67 |
| VA6 - 1 | 1062.75 | 0.00 0.08 | 5.10 1430.13 | 1430.13 | 31.81 -7.51 | 31.81 | 1.74 -0.04 | 0.02 -0.02 | 2.33 |
| VA6 - 2 | 1062.75 | 0.00 0.08 | 1436.75 -2385.51 | 1436.75 | -7.51 9.73 | 9.73 | -1.68 3.31 | -0.01 0.01 | 2.33 |
| VA7 - 1 | 1062.75 | 0.00 0.02 | -1855.83 1771.74 | 1771.74 | -31.45 12.54 | 12.54 | 3.14 -1.47 | -0.03 0.03 | -4.65 |
| VA7 - 2 | 1062.75 | 0.00 0.02 | 1765.12 0.00 | 1765.12 | 12.54 0.00 | 12.54 | -0.24 1.95 | 0.01 -0.01 | -4.65 |
| VA8 - 1 | 1184.63 | 0.00 0.66 | -5954.37 -8312.61 | 3866.09 | -34.45 7.52 | 7.52 | 4.82 5.37 | 0.00 0.00 | -1.84 |
| VA8 - 2 | 1184.63 | 0.00 1.06 | -12700.34 -7006.20 | 6788.83 | 8.24 21.54 | 21.54 | 6.80 5.72 | 0.00 0.00 | 1.45 |
| VA9 - 1 | 1111.50 | 0.00 0.16 | -2403.13 -3536.13 | 1734.32 | 75.61 -67.56 | 75.61 | 3.03 3.42 | 0.02 -0.02 | 7.93 |
| VA9 - 2 | 1111.50 | 0.00 0.22 | -3706.66 -3606.05 | 1969.99 | -42.59 7.43 | 7.43 | 3.55 3.52 | -0.01 0.01 | -0.31 |
| VA10 - 1 | 1111.50 | 0.00 0.13 | -2872.32 -2223.11 | 1245.00 | 23.39 -43.88 | 23.39 | 3.03 2.78 | 0.01 -0.01 | -1.43 |
| VA10 - 2 | 1111.50 | 0.00 0.07 | -1794.52 -1013.40 | 829.11 | -64.59 59.57 | 59.57 | 2.42 2.03 | -0.03 0.03 | -7.11 |
| VA11 - 1 | 1062.75 | -0.06 0.00 | -238.73 -427.73 | 166.85 | 49.66 -23.06 | 49.66 | 0.93 1.12 | 0.04 -0.04 | 1.03 |
| VA11 - 2 | 1062.75 | -0.48 0.00 | -1284.37 577.52 | 1096.95 | -5.02 -1.27 | 0.00 | 2.25 1.05 | 0.00 0.00 | -0.62 |
| VA11 - 3 | 1062.75 | -0.48 0.00 | 573.19 -2109.27 | 573.19 | -1.27 -0.16 | 0.00 | -2.11 3.19 | 0.00 0.00 | -0.62 |
| VA12 - 1 | 1062.75 | -0.11 0.00 | 0.00 2409.66 | 2786.55 | 0.00 -0.09 | 0.00 | 2.43 0.90 | 0.00 0.00 | -0.18 |
| VA12 - 2 | 1062.75 | -0.11 0.00 | 2413.99 0.00 | 2413.99 | -0.09 0.00 | 0.00 | -1.95 2.99 | 0.00 0.00 | -0.18 |
| VA13 | 1014.00 | 0.00 0.05 | 0.00 0.00 | 467.12 | 0.00 0.00 | 0.00 | 0.98 0.98 | 0.00 0.00 | 0.33 |
| VA14 - 1 | 1062.75 | 0.00 0.44 | 0.00 3085.47 | 3085.47 | 0.00 -8.74 | 0.00 | 3.50 -2.38 | 0.01 -0.01 | 0.90 |
| VA14 - 2 | 1062.75 | 0.00 0.43 | 3086.53 0.00 | 3242.33 | -8.74 0.00 | 0.00 | 0.58 2.63 | 0.00 0.00 | 0.90 |
| VA15 | 1014.00 | -0.04 0.00 | 0.00 0.00 | 467.12 | 0.00 0.00 | 0.00 | 0.98 0.98 | 0.00 0.00 | 0.41 |
| VA16 | 1014.00 | 0.00 0.06 | 0.00 0.00 | 467.12 | 0.00 0.00 | 0.00 | 0.98 0.98 | 0.00 0.00 | -1.14 |
| VA17 - 1 | 1062.75 | 0.00 0.41 | 0.00 5422.84 | 5422.84 | 0.00 19.54 | 19.54 | 5.72 -4.61 | -0.02 0.02 | -6.02 |
| VA17 - 2 | 1062.75 | 0.00 0.45 | 5421.78 0.00 | 5421.78 | -20.99 0.00 | 0.00 | -0.40 3.42 | -0.01 0.01 | 2.26 |
| VA18 | 1062.75 | 0.00 0.21 | -649.54 439.90 | 540.51 | -70.56 97.63 | 97.63 | 1.59 0.46 | -0.09 0.09 | 1.21 |
| VA19 | 1062.75 | 0.00 0.04 | 0.00 0.00 | 140.55 | 0.00 0.00 | 0.00 | 0.56 0.56 | 0.00 0.00 | -7.48 |
| VA20 | 1062.75 | -0.02 0.00 | -14.15 0.00 | 483.29 | -41.17 0.00 | 0.00 | 1.03 1.02 | -0.02 0.02 | 1.06 |
| VA21 - 1 | 1062.75 | 0.00 0.26 | -2276.51 3506.87 | 3506.87 | 27.93 -44.81 | 27.93 | 3.51 -0.10 | 0.02 -0.02 | 4.41 |
| VA21 - 2 | 1062.75 | 0.00 0.28 | 3509.21 -2329.03 | 3509.21 | -76.61 42.06 | 42.06 | -1.64 3.89 | -0.06 0.06 | -0.69 |
| VA22 | 1062.75 | 0.00 0.17 | -519.99 -1120.44 | 959.19 | -45.84 64.70 | 64.70 | 1.77 2.10 | -0.03 0.03 | 0.50 |
| VA23 | 1062.75 | 0.00 0.04 | 0.00 0.00 | 1384.92 | 0.00 0.00 | 0.00 | 1.72 1.72 | 0.00 0.00 | 6.62 |


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|----------|---------|--------------|----------------------|---------|-----------------|-------|---------------|---------------|-------|
| VA24 - 1 | 1111.50 | 0.00 0.18 | -2385.07 -3563.64 | 1730.38 | -48.28 22.82 | 22.82 | 3.03 3.43 | -0.01 0.01 | -2.01 |
| VA24 - 2 | 1111.50 | 0.00 0.27 | -3604.00 -3903.62 | 1875.74 | -5.21 -9.24 | 0.00 | 3.49 3.58 | 0.00 0.00 | -0.40 |
| VA25 - 1 | 1111.50 | 0.00 0.27 | -4084.91 2180.71 | 2180.71 | 25.78 26.32 | 26.32 | 4.34 -2.21 | 0.00 0.00 | 1.46 |
| VA25 - 2 | 1111.50 | 0.00 0.26 | 2185.36 -3046.71 | 2214.90 | 26.32 -25.80 | 26.32 | 0.26 3.42 | 0.02 -0.02 | 1.46 |
| VA25 - 3 | 1111.50 | 0.00 0.11 | -2184.57 -875.88 | 736.45 | -36.03 2.51 | 2.51 | 2.55 1.89 | -0.01 0.01 | -2.90 |

| CASO: 1.3G1+1.4G2+0.98Q+0.84V3+1.4D3 | | | | | | | | | |
|--------------------------------------|------------------|------------------|-----------------------|------------------|-----------------------|------------------|--------------------|--------------------|----------------|
| Elemento | Carga (kgf/m) | Rd Nd (tf) | Mxi Mxf (kgf.m) | MxMáx (kgf.m) | Myi Myf (kgf.m) | MyMáx (kgf.m) | Vxi Vxf (tf) | Vyi Vyf (tf) | Mtd (kgf/m) |
| VA1 - 1 | 1062.75 | 0.00 0.39 | -1839.51 2595.91 | 2595.91 | -16.26 -0.60 | 0.00 | 3.31 -1.25 | -0.01 0.01 | 0.96 |
| VA1 - 2 | 1062.75 | 0.00 0.40 | 2595.82 175.88 | 2595.82 | -0.60 -147.00 | 0.00 | -1.74 2.86 | 0.14 -0.14 | 0.10 |
| VA1 - 3 | 1062.75 | 0.00 0.37 | 177.01 -3192.12 | 177.01 | -147.00 106.69 | 106.69 | -5.49 6.10 | -0.44 0.44 | 0.23 |
| VA1 - 4 | 1062.75 | -0.29 0.00 | -2805.41 363.22 | 979.97 | 93.92 -63.28 | 93.92 | 2.84 1.15 | 0.04 -0.04 | -0.30 |
| VA1 - 5 | 1062.75 | -0.31 0.00 | 365.22 -2121.39 | 365.22 | -63.28 97.07 | 97.07 | -4.56 5.11 | -0.31 0.31 | -4.47 |
| VA1 - 6 | 1062.75 | -0.32 0.00 | -1348.58 -805.05 | 349.32 | 81.54 -39.91 | 81.54 | 1.90 1.57 | 0.04 -0.04 | -0.61 |
| VA2 | 1062.75 | 0.00 0.01 | 0.00 0.00 | 518.17 | 0.00 0.00 | 0.00 | 1.06 1.06 | 0.00 0.00 | -4.55 |
| VA3 - 1 | 1062.75 | 0.00 0.00 | 0.00 -2142.58 | 1527.84 | 0.00 23.38 | 23.38 | 1.80 2.79 | -0.01 0.01 | 0.94 |
| VA3 - 2 | 1062.75 | 0.00 0.00 | -2151.54 8.30 | 8.30 | 36.90 0.00 | 36.90 | 2.21 -0.56 | 0.02 -0.02 | 0.00 |
| VA4 - 1 | 1111.50 | 0.00 0.14 | -2022.59 -2406.25 | 1303.72 | 54.50 -46.00 | 54.50 | 2.72 2.87 | 0.02 -0.02 | 0.66 |
| VA4 - 2 | 1111.50 | 0.00 0.20 | -2532.91 2211.43 | 2211.43 | -3.87 -50.55 | 0.00 | 3.50 -1.31 | 0.02 -0.02 | 3.49 |
| VA4 - 3 | 1111.50 | 0.00 0.20 | 2211.52 1806.90 | 2211.52 | -50.55 -11.71 | 0.00 | -1.12 1.47 | -0.12 0.12 | 3.49 |
| VA4 - 4 | 1111.50 | 0.00 0.20 | 1807.02 -297.57 | 1807.02 | -11.71 132.72 | 132.72 | -2.45 3.27 | -0.20 0.20 | 3.49 |
| VA4 - 5 | 1111.50 | 0.00 0.19 | -298.71 -4242.70 | 0.00 | 132.72 -84.24 | 132.72 | -6.76 7.38 | 0.39 -0.39 | -1.01 |
| VA4 - 6 | 1111.50 | -0.05 0.00 | -4530.44 -298.96 | 0.00 | -81.39 -41.47 | 0.00 | 4.77 -3.65 | -0.04 0.04 | -0.74 |
| VA4 - 7 | 1111.50 | -0.05 0.00 | -298.69 1930.85 | 1930.85 | -41.47 -6.23 | 0.00 | 2.67 -1.47 | -0.03 0.03 | -3.24 |
| VA4 - 8 | 1111.50 | -0.05 0.00 | 1929.64 1184.78 | 2039.74 | -6.23 106.52 | 0.00 | 0.50 1.38 | -0.07 0.07 | -3.24 |
| VA4 - 9 | 1111.50 | -0.05 0.00 | 1191.70 -3179.53 | 1191.70 | 106.52 -47.49 | 106.52 | -7.10 7.76 | 0.26 -0.26 | -3.24 |
| VA4 - 10 | 1111.50 | -0.16 0.00 | -2744.07 -140.90 | 0.00 | -15.47 14.94 | 14.94 | 3.22 -2.14 | -0.03 0.03 | 2.06 |
| VA4 - 11 | 1111.50 | -0.16 0.00 | -132.60 572.01 | 572.01 | 14.94 19.16 | 19.16 | 1.59 -0.98 | -0.01 0.01 | 2.06 |
| VA4 - 12 | 1111.50 | -0.17 0.00 | 573.11 -1188.69 | 573.11 | 19.16 -52.82 | 19.16 | -0.05 1.98 | 0.04 -0.04 | 2.06 |
| VA4 - 13 | 1111.50 | 0.00 0.02 | -987.75 -493.71 | 476.43 | -17.20 -40.39 | 0.00 | 1.81 1.47 | 0.01 -0.01 | -2.39 |
| VA5 - 1 | 1062.75 | 0.00 0.06 | -573.23 775.47 | 953.28 | -8.05 20.54 | 20.54 | 1.80 0.62 | -0.01 0.01 | 1.86 |
| VA5 - 2 | 1062.75 | 0.00 | 775.36 | 775.36 | 20.54 | 20.54 | -1.60 | 0.06 | 1.86 |


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| | | 0.06 | -2180.95 | | -56.25 | | 2.97 | -0.06 | |
| VA5 - 3 | 1062.75 | 0.00 0.10 | -2755.77 440.50 | 440.50 | -49.89 -19.66 | 0.00 | 3.71 -2.64 | -0.03 0.03 | -1.73 |
| VA5 - 4 | 1062.75 | 0.00 0.10 | 440.25 1616.94 | 1616.94 | -19.66 20.63 | 0.00 | 1.67 -0.52 | -0.04 0.04 | -1.73 |
| VA5 - 5 | 1062.75 | 0.00 0.10 | 1618.16 -2171.91 | 1618.16 | 20.63 28.25 | 28.25 | -0.46 2.87 | 0.00 0.00 | -1.73 |
| VA5 - 6 | 1062.75 | 0.00 0.09 | -2051.09 930.19 | 930.19 | 50.71 -36.88 | 50.71 | 2.77 -1.15 | 0.06 -0.06 | -1.52 |
| VA5 - 7 | 1062.75 | 0.00 0.10 | 929.09 -206.73 | 929.59 | -19.44 -33.03 | 0.00 | 0.12 1.56 | 0.01 -0.01 | -12.13 |
| VA6 - 1 | 1062.75 | 0.00 0.05 | 9.25 899.13 | 937.01 | -23.76 -19.24 | 0.00 | 1.41 0.30 | 0.00 0.00 | 2.93 |
| VA6 - 2 | 1062.75 | 0.00 0.05 | 905.70 -3428.97 | 905.70 | -19.24 43.17 | 43.17 | -2.01 3.64 | -0.04 0.04 | 2.93 |
| VA7 - 1 | 1062.75 | -0.07 0.00 | -1144.24 2131.68 | 2131.68 | -55.76 1.90 | 1.90 | 2.92 -1.25 | -0.04 0.04 | -5.28 |
| VA7 - 2 | 1062.75 | -0.07 0.00 | 2125.10 0.00 | 2125.10 | 1.90 0.00 | 1.90 | -0.47 2.18 | 0.00 0.00 | -5.28 |
| VA8 - 1 | 1184.63 | 0.00 0.70 | -5005.24 -9111.33 | 4002.82 | -3.19 -12.15 | 0.00 | 4.62 5.58 | 0.00 0.00 | 0.47 |
| VA8 - 2 | 1184.63 | 0.00 1.03 | -12065.42 -7807.33 | 6650.50 | -2.67 1.72 | 1.72 | 6.66 5.85 | 0.00 0.00 | -0.29 |
| VA9 - 1 | 1111.50 | 0.00 0.22 | -1746.27 -4114.07 | 1832.10 | 10.27 -13.06 | 10.27 | 2.82 3.64 | 0.00 0.00 | 4.06 |
| VA9 - 2 | 1111.50 | 0.00 0.28 | -3288.84 -4049.76 | 1967.69 | -33.17 29.49 | 29.49 | 3.42 3.66 | -0.01 0.01 | -0.22 |
| VA10 - 1 | 1111.50 | 0.00 0.17 | -2377.70 -2677.53 | 1262.56 | 12.48 -38.41 | 12.48 | 2.85 2.96 | 0.01 -0.01 | 0.49 |
| VA10 - 2 | 1111.50 | 0.00 0.06 | -1150.90 -1775.50 | 765.76 | -82.96 102.66 | 102.66 | 2.06 2.38 | -0.05 0.05 | -4.76 |
| VA11 - 1 | 1062.75 | -0.11 0.00 | 586.11 -869.23 | 620.24 | 15.51 7.01 | 15.51 | 0.27 1.78 | 0.00 0.00 | 2.21 |
| VA11 - 2 | 1062.75 | -0.56 0.00 | -684.28 -116.80 | 895.24 | -24.00 8.63 | 8.63 | 1.83 1.47 | -0.01 0.01 | -1.72 |
| VA11 - 3 | 1062.75 | -0.56 0.00 | -121.35 -3226.07 | 0.00 | 8.63 24.83 | 24.83 | -2.52 3.60 | -0.02 0.02 | -1.72 |
| VA12 - 1 | 1062.75 | -0.15 0.00 | 0.00 2409.49 | 2786.42 | 0.00 4.08 | 4.08 | 2.43 0.90 | 0.00 0.00 | -0.09 |
| VA12 - 2 | 1062.75 | -0.15 0.00 | 2414.04 0.00 | 2414.04 | 4.08 0.00 | 4.08 | -1.95 2.99 | 0.00 0.00 | -0.09 |
| VA13 | 1014.00 | 0.00 0.07 | 0.00 0.00 | 467.12 | 0.00 0.00 | 0.00 | 0.98 0.98 | 0.00 0.00 | 0.11 |
| VA14 - 1 | 1062.75 | 0.00 0.58 | 0.00 3085.77 | 3085.77 | 0.00 -3.50 | 0.00 | 3.50 -2.38 | 0.00 0.00 | 1.13 |
| VA14 - 2 | 1062.75 | 0.00 0.58 | 3086.71 0.00 | 3242.48 | -3.50 0.00 | 0.00 | 0.58 2.63 | 0.00 0.00 | 1.13 |
| VA15 | 1014.00 | -0.01 0.00 | 0.00 0.00 | 467.12 | 0.00 0.00 | 0.00 | 0.98 0.98 | 0.00 0.00 | 0.25 |
| VA16 | 1014.00 | 0.00 0.03 | 0.00 0.00 | 467.12 | 0.00 0.00 | 0.00 | 0.98 0.98 | 0.00 0.00 | -1.21 |
| VA17 - 1 | 1062.75 | 0.00 0.33 | 0.00 5422.54 | 5422.54 | 0.00 7.09 | 7.09 | 5.72 -4.61 | -0.01 0.01 | -6.93 |
| VA17 - 2 | 1062.75 | 0.00 0.36 | 5421.60 0.00 | 5421.60 | -6.43 0.00 | 0.00 | -0.40 3.42 | 0.00 0.00 | 2.03 |
| VA18 | 1062.75 | 0.00 0.17 | 77.30 -286.58 | 405.16 | -18.42 36.27 | 36.27 | 0.84 1.21 | -0.03 0.03 | 1.53 |
| VA19 | 1062.75 | 0.00 0.02 | 0.00 0.00 | 140.55 | 0.00 0.00 | 0.00 | 0.56 0.56 | 0.00 0.00 | -8.30 |
| VA20 | 1062.75 | -0.05 0.00 | -10.60 0.00 | 484.87 | -17.44 0.00 | 0.00 | 1.03 1.02 | -0.01 0.01 | 1.10 |
| VA21 - 1 | 1062.75 | 0.00 0.22 | -1685.49 3110.00 | 3130.86 | 51.31 -57.34 | 51.31 | 3.20 0.21 | 0.03 -0.03 | 6.67 |

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| VA21 - 2 | 1062.75 | 0.00 0.21 | 3112.93 -2669.93 | 3112.93 | -33.59 -6.38 | 0.00 | -1.62 3.86 | -0.01 0.01 | -2.59 |
| VA22 | 1062.75 | 0.00 0.13 | 280.86 -2079.49 | 1065.52 | -34.76 51.47 | 51.47 | 1.29 2.59 | -0.02 0.02 | -0.10 |
| VA23 | 1062.75 | 0.00 0.04 | 0.00 0.00 | 1384.92 | 0.00 0.00 | 0.00 | 1.72 1.72 | 0.00 0.00 | 6.58 |
| VA24 - 1 | 1111.50 | 0.00 0.22 | -1608.27 -4237.03 | 1854.54 | -40.63 25.35 | 25.35 | 2.78 3.68 | -0.01 0.01 | -5.79 |
| VA24 - 2 | 1111.50 | 0.00 0.27 | -3014.66 -4494.24 | 1894.98 | 16.10 19.22 | 19.22 | 3.31 3.77 | 0.00 0.00 | -0.23 |
| VA25 - 1 | 1111.50 | 0.00 0.30 | -3561.37 2522.05 | 2522.05 | 103.38 -37.18 | 103.38 | 4.24 -2.11 | 0.07 -0.07 | 4.36 |
| VA25 - 2 | 1111.50 | 0.00 0.30 | 2527.33 -3760.20 | 2527.33 | -37.18 -34.54 | 0.00 | -0.06 3.74 | 0.00 0.00 | 4.36 |
| VA25 - 3 | 1111.50 | 0.00 0.08 | -1370.40 -1866.78 | 606.99 | 32.76 -72.03 | 32.76 | 2.10 2.35 | 0.03 -0.03 | -1.62 |

| CASO: 1.3G1+1.4G2+0.98Q+0.84V4+1.4D4 | | | | | | | | | |
|--------------------------------------|------------------|------------------|-----------------------|------------------|-----------------------|------------------|--------------------|--------------------|----------------|
| Elemento | Carga (kgf/m) | Rd Nd (tf) | Mxi Mxf (kgf.m) | MxMáx (kgf.m) | Myi Myf (kgf.m) | MyMáx (kgf.m) | Vxi Vxf (tf) | Vyi Vyf (tf) | Mtd (kgf/m) |
| VA1 - 1 | 1062.75 | 0.00 0.40 | -1998.58 2582.04 | 2582.04 | -98.03 8.20 | 8.20 | 3.39 -1.32 | -0.05 0.05 | -2.65 |
| VA1 - 2 | 1062.75 | 0.00 0.40 | 2582.15 240.89 | 2582.15 | 8.20 -4.69 | 0.00 | -1.67 2.79 | 0.01 -0.01 | -3.51 |
| VA1 - 3 | 1062.75 | 0.00 0.38 | 242.29 -3083.33 | 242.29 | -4.69 151.02 | 151.02 | -5.41 6.03 | -0.27 0.27 | -3.34 |
| VA1 - 4 | 1062.75 | -0.27 0.00 | -2904.99 427.99 | 999.09 | 130.59 -107.70 | 130.59 | 2.88 1.10 | 0.06 -0.06 | 1.51 |
| VA1 - 5 | 1062.75 | -0.30 0.00 | 430.27 -2033.79 | 430.27 | -107.70 127.20 | 127.20 | -4.52 5.07 | -0.46 0.46 | -3.39 |
| VA1 - 6 | 1062.75 | -0.29 0.00 | -1510.54 -576.03 | 407.28 | 95.89 -50.83 | 95.89 | 2.02 1.45 | 0.04 -0.04 | 2.63 |
| VA2 | 1062.75 | 0.00 0.00 | 0.00 0.00 | 518.17 | 0.00 0.00 | 0.00 | 1.06 1.06 | 0.00 0.00 | -3.51 |
| VA3 - 1 | 1062.75 | 0.00 0.02 | 0.00 -2142.53 | 1527.85 | 0.00 7.44 | 7.44 | 1.80 2.79 | 0.00 0.00 | 0.97 |
| VA3 - 2 | 1062.75 | 0.00 0.00 | -2151.77 8.07 | 8.07 | 67.30 0.00 | 67.30 | 2.21 -0.56 | 0.04 -0.04 | 0.00 |
| VA4 - 1 | 1111.50 | 0.00 0.21 | -1981.14 -2435.17 | 1311.39 | 86.64 -34.21 | 86.64 | 2.71 2.89 | 0.02 -0.02 | 1.55 |
| VA4 - 2 | 1111.50 | 0.00 0.33 | -2554.77 2223.69 | 2223.69 | -121.27 -11.57 | 0.00 | 3.52 -1.33 | -0.06 0.06 | -6.45 |
| VA4 - 3 | 1111.50 | 0.00 0.33 | 2223.57 1824.30 | 2223.57 | -11.57 26.80 | 0.00 | -1.10 1.45 | -0.12 0.12 | -6.45 |
| VA4 - 4 | 1111.50 | 0.00 0.33 | 1824.35 -267.65 | 1824.35 | 26.80 144.44 | 144.44 | -2.43 3.25 | -0.16 0.16 | -6.45 |
| VA4 - 5 | 1111.50 | 0.00 0.31 | -268.92 -4203.38 | 0.00 | 144.44 73.21 | 144.44 | -6.75 7.37 | 0.13 -0.13 | -10.51 |
| VA4 - 6 | 1111.50 | 0.00 0.07 | -4481.20 -270.59 | 0.00 | 7.92 38.58 | 38.58 | 4.75 -3.63 | -0.03 0.03 | 6.43 |
| VA4 - 7 | 1111.50 | 0.00 0.07 | -270.31 1936.90 | 1936.90 | 38.58 3.85 | 38.58 | 2.65 -1.45 | 0.03 -0.03 | 4.17 |
| VA4 - 8 | 1111.50 | 0.00 0.07 | 1935.77 1155.90 | 2037.12 | 3.85 80.24 | 0.00 | 0.47 1.40 | -0.05 0.05 | 4.17 |
| VA4 - 9 | 1111.50 | 0.00 0.10 | 1162.85 -3220.60 | 1162.85 | 80.24 -175.45 | 80.24 | -7.12 7.78 | 0.43 -0.43 | 4.17 |
| VA4 - 10 | 1111.50 | -0.11 0.00 | -2828.44 -177.13 | 0.00 | -47.93 2.91 | 2.91 | 3.27 -2.19 | -0.05 0.05 | 1.43 |
| VA4 - 11 | 1111.50 | -0.11 0.00 | -169.06 562.85 | 562.85 | 2.91 7.99 | 7.99 | 1.64 -1.03 | -0.01 0.01 | 1.43 |
| VA4 - 12 | 1111.50 | -0.13 | 563.66 | 563.66 | 7.99 | 7.99 | 0.01 | 0.03 | 1.43 |


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|----------|---------|---------------|-----------------------|---------|-------------------|--------|---------------|---------------|--------|
| | | 0.00 | -1107.37 | | -43.25 | | 1.93 | -0.03 | |
| VA4 - 13 | 1111.50 | 0.00 0.08 | -948.51 -492.86 | 493.73 | -2.55 2.47 | 2.47 | 1.79 1.48 | 0.00 0.00 | -2.40 |
| VA5 - 1 | 1062.75 | -0.02 0.00 | -549.85 749.85 | 941.03 | -89.76 34.23 | 34.23 | 1.78 0.64 | -0.05 0.05 | -5.11 |
| VA5 - 2 | 1062.75 | -0.02 0.00 | 749.81 -2234.38 | 749.81 | 34.23 56.85 | 56.85 | -1.62 2.99 | -0.02 0.02 | -5.11 |
| VA5 - 3 | 1062.75 | 0.00 0.02 | -2742.72 450.06 | 450.06 | 52.75 19.36 | 52.75 | 3.71 -2.64 | 0.03 -0.03 | 4.34 |
| VA5 - 4 | 1062.75 | 0.00 0.02 | 449.73 1622.68 | 1622.68 | 19.36 50.54 | 0.00 | 1.66 -0.52 | -0.03 0.03 | 4.34 |
| VA5 - 5 | 1062.75 | 0.00 0.02 | 1623.81 -2174.17 | 1623.81 | 50.54 -60.02 | 50.54 | -0.46 2.88 | 0.05 -0.05 | 4.34 |
| VA5 - 6 | 1062.75 | 0.00 0.10 | -1975.83 938.18 | 938.18 | 55.63 -48.68 | 55.63 | 2.73 -1.11 | 0.07 -0.07 | 0.47 |
| VA5 - 7 | 1062.75 | 0.00 0.12 | 937.37 -272.47 | 937.37 | -2.52 -49.90 | 0.00 | 0.08 1.61 | 0.03 -0.03 | -15.03 |
| VA6 - 1 | 1062.75 | 0.00 0.05 | 9.92 803.22 | 860.53 | 13.97 -10.69 | 13.97 | 1.35 0.36 | 0.02 -0.02 | 1.25 |
| VA6 - 2 | 1062.75 | 0.00 0.05 | 809.70 -3617.44 | 809.70 | -10.69 23.21 | 23.21 | -2.07 3.70 | -0.02 0.02 | 1.25 |
| VA7 - 1 | 1062.75 | -0.08 0.00 | -996.53 2206.35 | 2206.35 | -38.91 10.13 | 10.13 | 2.87 -1.20 | -0.03 0.03 | -3.25 |
| VA7 - 2 | 1062.75 | -0.08 0.00 | 2199.87 0.00 | 2199.87 | 10.13 0.00 | 10.13 | -0.51 2.22 | 0.01 -0.01 | -3.25 |
| VA8 - 1 | 1184.63 | 0.00 0.66 | -5059.33 -9043.48 | 4004.90 | -9.07 14.50 | 14.50 | 4.64 5.56 | 0.00 0.00 | -4.15 |
| VA8 - 2 | 1184.63 | 0.00 0.99 | -12029.61 -7821.91 | 6659.17 | 32.95 -9.37 | 32.95 | 6.65 5.86 | 0.00 0.00 | 3.35 |
| VA9 - 1 | 1111.50 | 0.00 0.12 | -3015.49 -3005.90 | 1673.88 | 83.77 -63.66 | 83.77 | 3.23 3.23 | 0.03 -0.03 | 3.98 |
| VA9 - 2 | 1111.50 | 0.00 0.20 | -4168.00 -3157.18 | 1978.43 | -5.72 -4.30 | 0.00 | 3.70 3.38 | 0.00 0.00 | -0.50 |
| VA10 - 1 | 1111.50 | 0.00 0.11 | -3398.51 -1750.33 | 1256.72 | 47.52 -46.67 | 47.52 | 3.22 2.59 | 0.02 -0.02 | 0.67 |
| VA10 - 2 | 1111.50 | 0.00 0.09 | -2478.15 -196.42 | 1027.97 | -25.99 -31.79 | 0.00 | 2.79 1.65 | 0.00 0.00 | -4.45 |
| VA11 - 1 | 1062.75 | -0.02 0.00 | -1075.44 47.18 | 140.42 | 84.80 -64.41 | 84.80 | 1.61 0.45 | 0.08 -0.08 | 2.12 |
| VA11 - 2 | 1062.75 | -0.39 0.00 | -1859.73 1265.42 | 1461.23 | 19.99 -13.08 | 19.99 | 2.66 0.65 | 0.01 -0.01 | -1.35 |
| VA11 - 3 | 1062.75 | -0.39 0.00 | 1261.92 -1008.46 | 1261.92 | -13.08 -28.88 | 0.00 | -1.70 2.78 | 0.02 -0.02 | -1.35 |
| VA12 - 1 | 1062.75 | -0.07 0.00 | 0.00 2410.29 | 2787.01 | 0.00 -3.68 | 0.00 | 2.43 0.89 | 0.00 0.00 | 0.11 |
| VA12 - 2 | 1062.75 | -0.07 0.00 | 2413.80 0.00 | 2413.80 | -3.68 0.00 | 0.00 | -1.95 2.99 | 0.00 0.00 | 0.11 |
| VA13 | 1014.00 | 0.00 0.04 | 0.00 0.00 | 467.12 | 0.00 0.00 | 0.00 | 0.98 0.98 | 0.00 0.00 | 0.04 |
| VA14 - 1 | 1062.75 | 0.00 0.28 | 0.00 3085.77 | 3085.77 | 0.00 -13.08 | 0.00 | 3.50 -2.38 | 0.01 -0.01 | 1.39 |
| VA14 - 2 | 1062.75 | 0.00 0.28 | 3086.74 0.00 | 3242.50 | -13.08 0.00 | 0.00 | 0.58 2.63 | 0.00 0.00 | 1.39 |
| VA15 | 1014.00 | -0.06 0.00 | 0.00 0.00 | 467.12 | 0.00 0.00 | 0.00 | 0.98 0.98 | 0.00 0.00 | 0.33 |
| VA16 | 1014.00 | 0.00 0.08 | 0.00 0.00 | 467.12 | 0.00 0.00 | 0.00 | 0.98 0.98 | 0.00 0.00 | -1.13 |
| VA17 - 1 | 1062.75 | 0.00 0.48 | 0.00 5422.54 | 5422.54 | 0.00 29.03 | 29.03 | 5.72 -4.61 | -0.03 0.03 | -6.95 |
| VA17 - 2 | 1062.75 | 0.00 0.52 | 5421.56 0.00 | 5421.56 | -30.82 0.00 | 0.00 | -0.40 3.42 | -0.01 0.01 | 2.29 |
| VA18 | 1062.75 | 0.00 0.25 | -1406.26 1202.01 | 1202.01 | -106.18 138.55 | 138.55 | 2.38 -0.32 | -0.13 0.13 | 1.56 |


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|----------|---------|---------------|----------------------|---------|------------------|-------|---------------|---------------|-------|
| VA19 | 1062.75 | 0.00 0.04 | 0.00 0.00 | 140.55 | 0.00 0.00 | 0.00 | 0.56 0.56 | 0.00 0.00 | -8.07 |
| VA20 | 1062.75 | -0.04 0.00 | -15.50 0.00 | 482.69 | -46.16 0.00 | 0.00 | 1.03 1.02 | -0.02 0.02 | 0.81 |
| VA21 - 1 | 1062.75 | 0.00 0.21 | -2621.47 3255.64 | 3255.64 | 19.47 -32.77 | 19.47 | 3.54 -0.13 | 0.02 -0.02 | 7.03 |
| VA21 - 2 | 1062.75 | 0.00 0.23 | 3256.89 -1687.04 | 3256.89 | -46.75 17.63 | 17.63 | -1.22 3.46 | -0.03 0.03 | -2.90 |
| VA22 | 1062.75 | 0.00 0.17 | -1351.43 -145.63 | 1066.02 | -54.07 75.31 | 75.31 | 2.27 1.61 | -0.04 0.04 | 0.23 |
| VA23 | 1062.75 | 0.00 0.04 | 0.00 0.00 | 1384.92 | 0.00 0.00 | 0.00 | 1.72 1.72 | 0.00 0.00 | 6.48 |
| VA24 - 1 | 1111.50 | 0.00 0.10 | -3108.09 -2925.77 | 1670.63 | -102.49 63.67 | 63.67 | 3.26 3.20 | -0.03 0.03 | -5.90 |
| VA24 - 2 | 1111.50 | 0.00 0.19 | -4057.45 -3442.46 | 1884.68 | -2.89 39.44 | 39.44 | 3.63 3.44 | -0.01 0.01 | -0.55 |
| VA25 - 1 | 1111.50 | 0.00 0.25 | -4798.19 2198.54 | 2198.54 | 84.55 -44.98 | 84.55 | 4.72 -2.59 | 0.07 -0.07 | 4.59 |
| VA25 - 2 | 1111.50 | 0.00 0.24 | 2201.79 -2660.56 | 2259.57 | -44.98 9.08 | 9.08 | 0.37 3.31 | -0.02 0.02 | 4.59 |
| VA25 - 3 | 1111.50 | 0.00 0.11 | -2970.12 0.90 | 980.20 | -54.94 44.80 | 44.80 | 2.96 1.48 | -0.02 0.02 | -1.25 |

| CASO: 1.3G1+1.4G2+0.98Q+1.4V1+0.84D1 | | | | | | | | | |
|--------------------------------------|------------------|------------------|-----------------------|------------------|-----------------------|------------------|--------------------|--------------------|----------------|
| Elemento | Carga (kgf/m) | Rd Nd (tf) | Mxi Mxf (kgf.m) | MxMáx (kgf.m) | Myi Myf (kgf.m) | MyMáx (kgf.m) | Vxi Vxf (tf) | Vyi Vyf (tf) | Mtd (kgf/m) |
| VA1 - 1 | 1062.75 | 0.00 0.45 | -894.35 2591.03 | 2591.03 | -61.25 3.68 | 3.68 | 2.83 -0.76 | -0.03 0.03 | -0.72 |
| VA1 - 2 | 1062.75 | 0.00 0.45 | 2591.30 -341.49 | 2591.30 | 3.68 -74.07 | 3.68 | -2.23 3.35 | 0.07 -0.07 | -1.59 |
| VA1 - 3 | 1062.75 | 0.00 0.43 | -339.72 -3992.58 | 0.00 | -74.07 127.03 | 127.03 | -5.98 6.59 | -0.35 0.35 | -2.00 |
| VA1 - 4 | 1062.75 | -0.27 0.00 | -2273.41 -36.47 | 876.02 | 111.09 -83.22 | 111.09 | 2.59 1.39 | 0.05 -0.05 | 0.01 |
| VA1 - 5 | 1062.75 | -0.29 0.00 | -34.45 -2648.82 | 0.00 | -83.22 108.97 | 108.97 | -4.81 5.36 | -0.37 0.37 | 0.31 |
| VA1 - 6 | 1062.75 | -0.34 0.00 | -539.08 -1757.83 | 329.76 | 87.52 -43.20 | 87.52 | 1.36 2.11 | 0.04 -0.04 | 1.12 |
| VA2 | 1062.75 | 0.00 0.00 | 0.00 0.00 | 518.17 | 0.00 0.00 | 0.00 | 1.06 1.06 | 0.00 0.00 | -3.61 |
| VA3 - 1 | 1062.75 | 0.00 0.01 | 0.00 -2140.45 | 1528.65 | 0.00 16.72 | 16.72 | 1.80 2.79 | 0.00 0.00 | 0.82 |
| VA3 - 2 | 1062.75 | 0.00 0.00 | -2150.68 9.16 | 9.16 | 48.57 0.00 | 48.57 | 2.21 -0.56 | 0.03 -0.03 | 0.00 |
| VA4 - 1 | 1111.50 | 0.00 0.43 | -590.09 -2961.56 | 1836.77 | 38.69 -23.01 | 38.69 | 2.32 3.27 | 0.01 -0.01 | 1.08 |
| VA4 - 2 | 1111.50 | 0.00 0.45 | -2150.87 1711.29 | 1711.29 | -62.85 -32.27 | 0.00 | 3.06 -0.87 | -0.02 0.02 | 0.71 |
| VA4 - 3 | 1111.50 | 0.00 0.45 | 1711.01 1166.11 | 1711.01 | -32.27 6.27 | 0.00 | -1.57 1.91 | -0.12 0.12 | 0.71 |
| VA4 - 4 | 1111.50 | 0.00 0.45 | 1165.82 -1269.09 | 1165.82 | 6.27 138.13 | 138.13 | -2.89 3.71 | -0.18 0.18 | 0.71 |
| VA4 - 5 | 1111.50 | 0.00 0.44 | -1270.72 -5464.88 | 0.00 | 138.13 -2.61 | 138.13 | -7.21 7.83 | 0.25 -0.25 | -18.43 |
| VA4 - 6 | 1111.50 | 0.00 0.19 | -3367.08 466.22 | 466.22 | -37.05 -1.73 | 0.00 | 4.37 -3.25 | -0.04 0.04 | -1.91 |
| VA4 - 7 | 1111.50 | 0.00 0.19 | 466.35 2269.89 | 2269.89 | -1.73 0.72 | 0.00 | 2.27 -1.08 | 0.00 0.00 | 1.98 |
| VA4 - 8 | 1111.50 | 0.00 0.19 | 2268.66 855.98 | 2268.66 | 0.72 93.19 | 0.00 | 0.10 1.77 | -0.05 0.05 | 1.98 |
| VA4 - 9 | 1111.50 | 0.00 | 864.19 | 864.19 | 93.19 | 93.19 | -7.50 | 0.34 | 1.98 |

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| | | 0.20 | -3739.84 | | -106.66 | | 8.15 | -0.34 | |
| VA4 - 10 | 1111.50 | 0.00 0.01 | -2469.11 -139.01 | 0.00 | -44.77 10.77 | 10.77 | 2.94 -1.86 | -0.06 0.06 | 1.79 |
| VA4 - 11 | 1111.50 | 0.00 0.01 | -129.86 419.91 | 419.91 | 10.77 25.11 | 25.11 | 1.31 -0.69 | -0.03 0.03 | 1.79 |
| VA4 - 12 | 1111.50 | 0.00 0.00 | 420.71 -1830.13 | 420.71 | 25.11 -57.46 | 25.11 | -0.33 2.26 | 0.05 -0.05 | 1.79 |
| VA4 - 13 | 1111.50 | 0.00 0.00 | 645.64 -2669.51 | 762.98 | -25.92 18.44 | 18.44 | 0.51 2.76 | -0.02 0.02 | -2.33 |
| VA5 - 1 | 1062.75 | 0.00 0.02 | 201.78 456.66 | 1022.85 | -61.60 28.46 | 0.00 | 1.32 1.10 | -0.04 0.04 | -1.74 |
| VA5 - 2 | 1062.75 | 0.00 0.02 | 456.94 -3121.73 | 456.94 | 28.46 7.51 | 28.46 | -2.08 3.45 | 0.02 -0.02 | -1.74 |
| VA5 - 3 | 1062.75 | 0.00 0.04 | -2095.47 851.24 | 851.24 | -2.21 -0.51 | 0.00 | 3.47 -2.40 | 0.00 0.00 | 1.39 |
| VA5 - 4 | 1062.75 | 0.00 0.04 | 851.11 1760.79 | 1760.79 | -0.51 34.93 | 0.00 | 1.42 -0.27 | -0.03 0.03 | 1.39 |
| VA5 - 5 | 1062.75 | 0.00 0.04 | 1762.02 -2592.74 | 1762.02 | 34.93 -9.68 | 34.93 | -0.71 3.12 | 0.02 -0.02 | 1.39 |
| VA5 - 6 | 1062.75 | 0.00 0.03 | -1535.60 828.59 | 828.59 | 36.83 -35.54 | 36.83 | 2.36 -0.75 | 0.05 -0.05 | -0.53 |
| VA5 - 7 | 1062.75 | 0.00 0.04 | 827.79 -950.98 | 827.79 | -20.14 20.86 | 20.86 | -0.28 1.97 | -0.03 0.03 | -12.03 |
| VA6 - 1 | 1062.75 | 0.00 0.00 | 16.00 25.79 | 361.74 | -57.99 -25.67 | 0.00 | 0.86 0.85 | -0.02 0.02 | 1.75 |
| VA6 - 2 | 1062.75 | 0.00 0.00 | 32.19 -5145.15 | 32.19 | -25.67 68.54 | 68.54 | -2.56 4.19 | -0.06 0.06 | 1.75 |
| VA7 - 1 | 1062.75 | -0.22 0.00 | 55.82 2738.64 | 2738.64 | -70.58 -2.91 | 0.00 | 2.54 -0.87 | -0.04 0.04 | -3.73 |
| VA7 - 2 | 1062.75 | -0.22 0.00 | 2732.24 0.00 | 2732.24 | -2.91 0.00 | 0.00 | -0.84 2.55 | 0.00 0.00 | -3.73 |
| VA8 - 1 | 1184.63 | 0.00 0.72 | -3713.62 -10171.18 | 4263.19 | 34.03 -7.41 | 34.03 | 4.35 5.85 | 0.00 0.00 | -1.87 |
| VA8 - 2 | 1184.63 | 0.00 0.94 | -11113.52 -8970.67 | 6495.54 | 24.90 -39.76 | 24.90 | 6.46 6.05 | 0.01 -0.01 | 1.67 |
| VA9 - 1 | 1111.50 | 0.00 0.19 | -2355.27 -3588.53 | 1733.77 | 7.02 2.60 | 7.02 | 3.02 3.44 | 0.00 0.00 | -1.54 |
| VA9 - 2 | 1111.50 | 0.00 0.27 | -3763.16 -3595.82 | 1947.92 | 13.28 19.88 | 19.88 | 3.56 3.51 | 0.00 0.00 | -0.47 |
| VA10 - 1 | 1111.50 | 0.00 0.16 | -2915.51 -2197.16 | 1239.05 | 39.63 -39.30 | 39.63 | 3.04 2.77 | 0.02 -0.02 | 3.46 |
| VA10 - 2 | 1111.50 | 0.00 0.08 | -1849.90 -938.34 | 842.39 | -39.06 -1.58 | 0.00 | 2.45 1.99 | -0.01 0.01 | -0.94 |
| VA11 - 1 | 1062.75 | -0.07 0.00 | -268.55 -378.96 | 171.96 | 52.52 -39.89 | 52.52 | 0.97 1.08 | 0.05 -0.05 | 3.77 |
| VA11 - 2 | 1062.75 | -0.47 0.00 | -1266.07 583.11 | 1106.77 | 1.67 -3.40 | 1.67 | 2.25 1.06 | 0.00 0.00 | -2.78 |
| VA11 - 3 | 1062.75 | -0.47 0.00 | 579.50 -2107.11 | 579.50 | -3.40 -4.20 | 0.00 | -2.11 3.19 | 0.00 0.00 | -2.78 |
| VA12 - 1 | 1062.75 | -0.11 0.00 | 0.00 2410.21 | 2786.95 | 0.00 0.62 | 0.62 | 2.43 0.89 | 0.00 0.00 | 0.27 |
| VA12 - 2 | 1062.75 | -0.11 0.00 | 2413.82 0.00 | 2413.82 | 0.62 0.00 | 0.62 | -1.95 2.99 | 0.00 0.00 | 0.27 |
| VA13 | 1014.00 | 0.00 0.06 | 0.00 0.00 | 467.12 | 0.00 0.00 | 0.00 | 0.98 0.98 | 0.00 0.00 | -0.28 |
| VA14 - 1 | 1062.75 | 0.00 0.42 | 0.00 3086.18 | 3086.18 | 0.00 -7.76 | 0.00 | 3.50 -2.38 | 0.01 -0.01 | 1.76 |
| VA14 - 2 | 1062.75 | 0.00 0.42 | 3087.00 0.00 | 3242.71 | -7.76 0.00 | 0.00 | 0.58 2.63 | 0.00 0.00 | 1.76 |
| VA15 | 1014.00 | -0.03 0.00 | 0.00 0.00 | 467.12 | 0.00 0.00 | 0.00 | 0.98 0.98 | 0.00 0.00 | 0.13 |
| VA16 | 1014.00 | 0.00 0.05 | 0.00 0.00 | 467.12 | 0.00 0.00 | 0.00 | 0.98 0.98 | 0.00 0.00 | -1.23 |


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|----------|---------|---------------|----------------------|---------|-------------------|--------|---------------|---------------|--------|
| VA17 - 1 | 1062.75 | 0.00 0.39 | 0.00 5422.13 | 5422.13 | 0.00 16.23 | 16.23 | 5.72 -4.61 | -0.02 0.02 | -8.20 |
| VA17 - 2 | 1062.75 | 0.00 0.43 | 5421.31 0.00 | 5421.31 | -15.62 0.00 | 0.00 | -0.40 3.42 | -0.01 0.01 | 2.03 |
| VA18 | 1062.75 | 0.00 0.21 | -683.89 481.06 | 564.89 | -48.68 70.56 | 70.56 | 1.63 0.42 | -0.06 0.06 | 2.01 |
| VA19 | 1062.75 | 0.00 0.03 | 0.00 0.00 | 140.55 | 0.00 0.00 | 0.00 | 0.56 0.56 | 0.00 0.00 | -9.16 |
| VA20 | 1062.75 | -0.07 0.00 | -11.50 0.00 | 484.47 | -15.40 0.00 | 0.00 | 1.03 1.02 | -0.01 0.01 | 0.80 |
| VA21 - 1 | 1062.75 | 0.00 0.15 | -1976.90 2720.78 | 2747.76 | 46.23 -45.48 | 46.23 | 3.17 0.24 | 0.03 -0.03 | 10.34 |
| VA21 - 2 | 1062.75 | 0.00 0.13 | 2722.53 -1964.72 | 2722.53 | 12.51 -48.06 | 12.51 | -1.10 3.34 | 0.03 -0.03 | -5.66 |
| VA22 | 1062.75 | 0.00 0.13 | -543.89 -1115.89 | 947.93 | -42.47 61.98 | 61.98 | 1.78 2.10 | -0.03 0.03 | -0.53 |
| VA23 | 1062.75 | 0.00 0.04 | 0.00 0.00 | 1384.92 | 0.00 0.00 | 0.00 | 1.72 1.72 | 0.00 0.00 | 6.40 |
| VA24 - 1 | 1111.50 | 0.00 0.15 | -2309.26 -3616.21 | 1744.67 | -105.20 75.66 | 75.66 | 3.00 3.45 | -0.03 0.03 | -11.29 |
| VA24 - 2 | 1111.50 | 0.00 0.18 | -3431.91 -4068.36 | 1884.85 | 22.78 84.67 | 84.67 | 3.44 3.64 | -0.01 0.01 | -0.40 |
| VA25 - 1 | 1111.50 | 0.00 0.29 | -4307.16 2620.56 | 2620.56 | 192.88 -137.66 | 192.88 | 4.68 -2.56 | 0.17 -0.17 | 8.80 |
| VA25 - 2 | 1111.50 | 0.00 0.29 | 2624.29 -3452.43 | 2624.29 | -137.66 6.95 | 6.95 | 0.00 3.68 | -0.04 0.04 | 8.80 |
| VA25 - 3 | 1111.50 | 0.00 0.08 | -2137.85 -1028.97 | 667.49 | 25.68 -38.87 | 25.68 | 2.50 1.94 | 0.02 -0.02 | 0.70 |

| CASO: 1.3G1+1.4G2+0.98Q+1.4V2+0.84D2 | | | | | | | | | |
|--------------------------------------|------------------|------------------|-----------------------|------------------|-----------------------|------------------|--------------------|--------------------|----------------|
| Elemento | Carga (kgf/m) | Rd Nd (tf) | Mxi Mxf (kgf.m) | MxMáx (kgf.m) | Myi Myf (kgf.m) | MyMáx (kgf.m) | Vxi Vxf (tf) | Vyi Vyf (tf) | Mtd (kgf/m) |
| VA1 - 1 | 1062.75 | 0.00 0.34 | -2943.74 2586.92 | 2586.92 | -53.03 3.93 | 3.93 | 3.88 -1.81 | -0.03 0.03 | -0.97 |
| VA1 - 2 | 1062.75 | 0.00 0.35 | 2586.67 758.26 | 2586.67 | 3.93 -77.62 | 0.00 | -1.18 2.30 | 0.08 -0.08 | -1.82 |
| VA1 - 3 | 1062.75 | 0.00 0.33 | 759.02 -2282.87 | 759.02 | -77.62 130.68 | 130.68 | -4.92 5.54 | -0.36 0.36 | -1.11 |
| VA1 - 4 | 1062.75 | -0.29 0.00 | -3436.99 827.69 | 1169.64 | 113.42 -87.76 | 113.42 | 3.13 0.85 | 0.05 -0.05 | 1.21 |
| VA1 - 5 | 1062.75 | -0.32 0.00 | 829.94 -1506.35 | 829.94 | -87.76 115.29 | 115.29 | -4.27 4.82 | -0.39 0.39 | -8.17 |
| VA1 - 6 | 1062.75 | -0.27 0.00 | -2320.04 376.75 | 763.25 | 89.91 -47.53 | 89.91 | 2.56 0.91 | 0.04 -0.04 | 0.90 |
| VA2 | 1062.75 | 0.00 0.00 | 0.00 0.00 | 518.17 | 0.00 0.00 | 0.00 | 1.06 1.06 | 0.00 0.00 | -4.45 |
| VA3 - 1 | 1062.75 | 0.00 0.01 | 0.00 -2144.66 | 1527.04 | 0.00 14.10 | 14.10 | 1.80 2.79 | 0.00 0.00 | 1.10 |
| VA3 - 2 | 1062.75 | 0.00 0.00 | -2152.63 7.21 | 7.21 | 55.62 0.00 | 55.62 | 2.21 -0.56 | 0.04 -0.04 | 0.00 |
| VA4 - 1 | 1111.50 | -0.08 0.00 | -3413.64 -1879.86 | 910.74 | 102.46 -57.20 | 102.46 | 3.10 2.49 | 0.03 -0.03 | 1.12 |
| VA4 - 2 | 1111.50 | 0.00 0.08 | -2936.81 2723.83 | 2723.83 | -62.29 -29.85 | 0.00 | 3.97 -1.78 | -0.02 0.02 | -3.67 |
| VA4 - 3 | 1111.50 | 0.00 0.08 | 2724.08 2465.10 | 2724.08 | -29.85 8.82 | 0.00 | -0.65 1.00 | -0.12 0.12 | -3.67 |
| VA4 - 4 | 1111.50 | 0.00 0.08 | 2465.54 703.88 | 2465.54 | 8.82 139.03 | 0.00 | -1.98 2.80 | -0.18 0.18 | -3.67 |
| VA4 - 5 | 1111.50 | 0.00 0.07 | 703.09 -2981.20 | 703.09 | 139.03 -8.42 | 139.03 | -6.30 6.92 | 0.26 -0.26 | 6.92 |
| VA4 - 6 | 1111.50 | -0.17 | -5644.56 | 0.00 | -36.43 | 0.00 | 5.14 | -0.04 | 7.60 |

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|----------|---------|---------------|-----------------------|---------|------------------|-------|---------------|---------------|--------|
| | | 0.00 | -1035.78 | | -1.15 | | -4.03 | 0.04 | |
| VA4 - 7 | 1111.50 | -0.17 0.00 | -1035.36 1597.86 | 1597.86 | -1.15 -3.09 | 0.00 | 3.05 -1.85 | 0.00 0.00 | -1.06 |
| VA4 - 8 | 1111.50 | -0.17 0.00 | 1596.75 1484.70 | 1935.81 | -3.09 93.57 | 0.00 | 0.87 1.00 | -0.06 0.06 | -1.06 |
| VA4 - 9 | 1111.50 | -0.15 0.00 | 1490.37 -2660.29 | 1490.37 | 93.57 -116.28 | 93.57 | -6.73 7.38 | 0.36 -0.36 | -1.06 |
| VA4 - 10 | 1111.50 | -0.27 0.00 | -3103.41 -179.01 | 0.00 | -18.64 7.08 | 7.08 | 3.55 -2.48 | -0.03 0.03 | 1.70 |
| VA4 - 11 | 1111.50 | -0.27 0.00 | -171.80 714.95 | 714.95 | 7.08 2.03 | 7.08 | 1.92 -1.31 | 0.01 -0.01 | 1.70 |
| VA4 - 12 | 1111.50 | -0.30 0.00 | 716.06 -465.92 | 752.34 | 2.03 -38.61 | 2.03 | 0.29 1.65 | 0.02 -0.02 | 1.70 |
| VA4 - 13 | 1111.50 | 0.00 0.10 | -2581.90 1682.94 | 1698.40 | 6.17 -56.36 | 6.17 | 3.08 0.19 | 0.02 -0.02 | -2.47 |
| VA5 - 1 | 1062.75 | 0.00 0.03 | -1324.86 1068.67 | 1078.43 | -36.21 26.31 | 26.31 | 2.26 0.16 | -0.03 0.03 | -1.51 |
| VA5 - 2 | 1062.75 | 0.00 0.03 | 1068.23 -1293.59 | 1068.23 | 26.31 -6.91 | 26.31 | -1.14 2.51 | 0.03 -0.03 | -1.51 |
| VA5 - 3 | 1062.75 | 0.00 0.08 | -3403.01 39.32 | 39.32 | 5.07 0.21 | 5.07 | 3.96 -2.89 | 0.00 0.00 | 1.23 |
| VA5 - 4 | 1062.75 | 0.00 0.08 | 38.87 1478.83 | 1478.83 | 0.21 36.24 | 0.00 | 1.91 -0.77 | -0.03 0.03 | 1.23 |
| VA5 - 5 | 1062.75 | 0.00 0.08 | 1479.95 -1753.34 | 1479.95 | 36.24 -22.09 | 36.24 | -0.21 2.63 | 0.03 -0.03 | 1.23 |
| VA5 - 6 | 1062.75 | 0.00 0.15 | -2491.32 1039.78 | 1039.78 | 69.51 -50.02 | 69.51 | 3.13 -1.52 | 0.08 -0.08 | -0.52 |
| VA5 - 7 | 1062.75 | 0.00 0.18 | 1038.67 471.79 | 1147.97 | -1.82 -103.79 | 0.00 | 0.48 1.20 | 0.06 -0.06 | -15.13 |
| VA6 - 1 | 1062.75 | 0.00 0.09 | 3.18 1676.56 | 1676.56 | 48.21 -4.26 | 48.21 | 1.90 -0.19 | 0.03 -0.03 | 2.43 |
| VA6 - 2 | 1062.75 | 0.00 0.09 | 1683.21 -1901.27 | 1683.21 | -4.26 -2.16 | 0.00 | -1.52 3.15 | 0.00 0.00 | 2.43 |
| VA7 - 1 | 1062.75 | 0.00 0.06 | -2196.59 1599.38 | 1599.38 | -24.09 14.94 | 14.94 | 3.25 -1.58 | -0.02 0.02 | -4.80 |
| VA7 - 2 | 1062.75 | 0.00 0.06 | 1592.73 0.00 | 1592.73 | 14.94 0.00 | 14.94 | -0.14 1.84 | 0.01 -0.01 | -4.80 |
| VA8 - 1 | 1184.63 | 0.00 0.64 | -6350.95 -7983.62 | 3816.48 | -46.28 9.76 | 9.76 | 4.91 5.29 | -0.01 0.01 | -1.82 |
| VA8 - 2 | 1184.63 | 0.00 1.08 | -12981.51 -6658.58 | 6846.24 | 5.37 32.11 | 32.11 | 6.85 5.66 | 0.00 0.00 | 1.39 |
| VA9 - 1 | 1111.50 | 0.00 0.16 | -2406.50 -3531.43 | 1734.84 | 87.02 -79.31 | 87.02 | 3.04 3.42 | 0.03 -0.03 | 9.58 |
| VA9 - 2 | 1111.50 | 0.00 0.21 | -3693.68 -3611.11 | 1973.65 | -52.17 5.30 | 5.30 | 3.55 3.52 | -0.01 0.01 | -0.25 |
| VA10 - 1 | 1111.50 | 0.00 0.12 | -2860.70 -2230.71 | 1246.28 | 20.37 -45.78 | 20.37 | 3.02 2.78 | 0.01 -0.01 | -2.30 |
| VA10 - 2 | 1111.50 | 0.00 0.06 | -1779.14 -1033.58 | 825.78 | -69.89 72.45 | 72.45 | 2.41 2.03 | -0.04 0.04 | -8.26 |
| VA11 - 1 | 1062.75 | -0.06 0.00 | -220.79 -443.09 | 170.00 | 47.79 -17.51 | 47.79 | 0.91 1.14 | 0.03 -0.03 | 0.56 |
| VA11 - 2 | 1062.75 | -0.48 0.00 | -1277.94 565.51 | 1091.09 | -5.68 -1.05 | 0.00 | 2.24 1.06 | 0.00 0.00 | -0.29 |
| VA11 - 3 | 1062.75 | -0.48 0.00 | 561.07 -2127.42 | 561.07 | -1.05 0.15 | 0.15 | -2.11 3.19 | 0.00 0.00 | -0.29 |
| VA12 - 1 | 1062.75 | -0.11 0.00 | 0.00 2409.57 | 2786.48 | 0.00 -0.22 | 0.00 | 2.43 0.90 | 0.00 0.00 | -0.25 |
| VA12 - 2 | 1062.75 | -0.11 0.00 | 2414.02 0.00 | 2414.02 | -0.22 0.00 | 0.00 | -1.95 2.99 | 0.00 0.00 | -0.25 |
| VA13 | 1014.00 | 0.00 0.05 | 0.00 0.00 | 467.12 | 0.00 0.00 | 0.00 | 0.98 0.98 | 0.00 0.00 | 0.44 |
| VA14 - 1 | 1062.75 | 0.00 0.44 | 0.00 3085.35 | 3085.35 | 0.00 -8.82 | 0.00 | 3.50 -2.38 | 0.01 -0.01 | 0.76 |

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|----------|---------|---------------|----------------------|---------|------------------|--------|---------------|---------------|-------|
| VA14 - 2 | 1062.75 | 0.00 0.44 | 3086.45 0.00 | 3242.27 | -8.82 0.00 | 0.00 | 0.58 2.63 | 0.00 0.00 | 0.76 |
| VA15 | 1014.00 | -0.04 0.00 | 0.00 0.00 | 467.12 | 0.00 0.00 | 0.00 | 0.98 0.98 | 0.00 0.00 | 0.45 |
| VA16 | 1014.00 | 0.00 0.06 | 0.00 0.00 | 467.12 | 0.00 0.00 | 0.00 | 0.98 0.98 | 0.00 0.00 | -1.11 |
| VA17 - 1 | 1062.75 | 0.00 0.41 | 0.00 5422.95 | 5422.95 | 0.00 19.89 | 19.89 | 5.72 -4.61 | -0.02 0.02 | -5.68 |
| VA17 - 2 | 1062.75 | 0.00 0.45 | 5421.85 0.00 | 5421.85 | -21.64 0.00 | 0.00 | -0.40 3.42 | -0.01 0.01 | 2.29 |
| VA18 | 1062.75 | 0.00 0.21 | -645.07 434.37 | 537.20 | -75.92 104.26 | 104.26 | 1.59 0.47 | -0.09 0.09 | 1.07 |
| VA19 | 1062.75 | 0.00 0.04 | 0.00 0.00 | 140.55 | 0.00 0.00 | 0.00 | 0.56 0.56 | 0.00 0.00 | -7.21 |
| VA20 | 1062.75 | -0.01 0.00 | -14.60 0.00 | 483.09 | -48.20 0.00 | 0.00 | 1.03 1.02 | -0.02 0.02 | 1.11 |
| VA21 - 1 | 1062.75 | 0.00 0.28 | -2330.06 3644.86 | 3644.86 | 24.55 -44.64 | 24.55 | 3.57 -0.16 | 0.02 -0.02 | 3.36 |
| VA21 - 2 | 1062.75 | 0.00 0.31 | 3647.29 -2392.25 | 3647.29 | -92.85 59.32 | 59.32 | -1.74 3.98 | -0.07 0.07 | 0.18 |
| VA22 | 1062.75 | 0.00 0.17 | -526.68 -1109.23 | 960.46 | -46.36 64.80 | 64.80 | 1.78 2.10 | -0.03 0.03 | 0.66 |
| VA23 | 1062.75 | 0.00 0.03 | 0.00 0.00 | 1384.92 | 0.00 0.00 | 0.00 | 1.72 1.72 | 0.00 0.00 | 6.66 |
| VA24 - 1 | 1111.50 | 0.00 0.18 | -2407.10 -3546.59 | 1727.21 | -37.92 13.37 | 13.37 | 3.03 3.43 | -0.01 0.01 | -0.40 |
| VA24 - 2 | 1111.50 | 0.00 0.29 | -3640.20 -3868.34 | 1874.13 | -9.57 -26.02 | 0.00 | 3.50 3.57 | 0.00 0.00 | -0.37 |
| VA25 - 1 | 1111.50 | 0.00 0.26 | -4052.39 2100.03 | 2100.03 | -4.94 55.50 | 55.50 | 4.28 -2.15 | -0.03 0.03 | 0.15 |
| VA25 - 2 | 1111.50 | 0.00 0.25 | 2104.84 -2968.33 | 2144.32 | 55.50 -32.40 | 55.50 | 0.31 3.37 | 0.03 -0.03 | 0.15 |
| VA25 - 3 | 1111.50 | 0.00 0.11 | -2202.67 -836.92 | 751.38 | -47.86 11.64 | 11.64 | 2.56 1.88 | -0.01 0.01 | -3.57 |

| CASO: 1.3G1+1.4G2+0.98Q+1.4V3+0.84D3 | | | | | | | | | |
|---|--------------------------|---------------------------|--------------------------------|--------------------------|--------------------------------|--------------------------|-----------------------------|-----------------------------|------------------------|
| Elemento | Carga (kgf/m) | Rd Nd (tf) | Mxi Mxf (kgf.m) | MxMáx (kgf.m) | Myi Myf (kgf.m) | MyMáx (kgf.m) | Vxi Vxf (tf) | Vyi Vyf (tf) | Mtd (kgf/m) |
| VA1 - 1 | 1062.75 | 0.00 0.38 | -1816.38 2598.05 | 2598.05 | -4.19 -1.72 | 0.00 | 3.30 -1.23 | 0.00 0.00 | 1.50 |
| VA1 - 2 | 1062.75 | 0.00 0.40 | 2597.93 166.61 | 2597.93 | -1.72 -169.77 | 0.00 | -1.76 2.87 | 0.16 -0.16 | 0.64 |
| VA1 - 3 | 1062.75 | 0.00 0.37 | 167.69 -3207.73 | 167.69 | -169.77 100.52 | 100.52 | -5.50 6.12 | -0.46 0.46 | 0.76 |
| VA1 - 4 | 1062.75 | -0.29 0.00 | -2790.96 353.76 | 977.15 | 88.44 -55.66 | 88.44 | 2.83 1.15 | 0.04 -0.04 | -0.58 |
| VA1 - 5 | 1062.75 | -0.31 0.00 | 355.72 -2134.17 | 355.72 | -55.66 92.23 | 92.23 | -4.57 5.12 | -0.29 0.29 | -4.64 |
| VA1 - 6 | 1062.75 | -0.33 0.00 | -1324.84 -838.97 | 340.63 | 79.52 -38.93 | 79.52 | 1.88 1.58 | 0.04 -0.04 | -1.08 |
| VA2 | 1062.75 | 0.00 0.01 | 0.00 0.00 | 518.17 | 0.00 0.00 | 0.00 | 1.06 1.06 | 0.00 0.00 | -4.72 |
| VA3 - 1 | 1062.75 | 0.00 0.00 | 0.00 -2142.59 | 1527.83 | 0.00 26.14 | 26.14 | 1.80 2.79 | -0.01 0.01 | 0.94 |
| VA3 - 2 | 1062.75 | 0.00 0.00 | -2151.50 8.34 | 8.34 | 33.03 0.00 | 33.03 | 2.21 -0.56 | 0.02 -0.02 | 0.00 |
| VA4 - 1 | 1111.50 | 0.00 0.13 | -2029.32 -2401.79 | 1302.36 | 49.24 -47.03 | 49.24 | 2.72 2.87 | 0.02 -0.02 | 0.48 |
| VA4 - 2 | 1111.50 | 0.00 0.18 | -2529.60 2209.60 | 2209.60 | 14.18 -56.80 | 14.18 | 3.50 -1.31 | 0.04 -0.04 | 5.01 |
| VA4 - 3 | 1111.50 | 0.00 | 2209.72 | 2209.72 | -56.80 | 0.00 | -1.12 | -0.13 | 5.01 |

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| | | 0.18 | 1804.31 | | -17.47 | | 1.47 | 0.13 | |
| VA4 - 4 | 1111.50 | 0.00 0.18 | 1804.43 -302.04 | 1804.43 | -17.47 131.89 | 131.89 | -2.45 3.27 | -0.20 0.20 | 5.01 |
| VA4 - 5 | 1111.50 | 0.00 0.18 | -303.17 -4248.59 | 0.00 | 131.89 -108.97 | 131.89 | -6.76 7.38 | 0.43 -0.43 | 0.45 |
| VA4 - 6 | 1111.50 | -0.07 0.00 | -4538.07 -303.34 | 0.00 | -95.94 -53.59 | 0.00 | 4.77 -3.65 | -0.04 0.04 | -1.84 |
| VA4 - 7 | 1111.50 | -0.07 0.00 | -303.08 1929.94 | 1929.94 | -53.59 -7.75 | 0.00 | 2.67 -1.48 | -0.04 0.04 | -4.38 |
| VA4 - 8 | 1111.50 | -0.07 0.00 | 1928.72 1189.31 | 2040.18 | -7.75 110.63 | 0.00 | 0.50 1.38 | -0.07 0.07 | -4.38 |
| VA4 - 9 | 1111.50 | -0.07 0.00 | 1196.23 -3173.10 | 1196.23 | 110.63 -26.14 | 110.63 | -7.10 7.75 | 0.23 -0.23 | -4.38 |
| VA4 - 10 | 1111.50 | -0.16 0.00 | -2731.08 -135.34 | 0.00 | -7.86 17.48 | 17.48 | 3.22 -2.14 | -0.03 0.03 | 2.16 |
| VA4 - 11 | 1111.50 | -0.16 0.00 | -127.01 573.39 | 573.39 | 17.48 20.19 | 20.19 | 1.58 -0.97 | 0.00 0.00 | 2.16 |
| VA4 - 12 | 1111.50 | -0.17 0.00 | 574.53 -1201.34 | 574.53 | 20.19 -55.29 | 20.19 | -0.05 1.99 | 0.04 -0.04 | 2.16 |
| VA4 - 13 | 1111.50 | 0.00 0.01 | -994.21 -493.72 | 473.65 | -19.73 -44.93 | 0.00 | 1.81 1.47 | 0.01 -0.01 | -2.34 |
| VA5 - 1 | 1062.75 | 0.00 0.08 | -577.66 779.74 | 955.18 | 4.13 18.47 | 18.47 | 1.81 0.61 | -0.01 0.01 | 2.92 |
| VA5 - 2 | 1062.75 | 0.00 0.08 | 779.62 -2171.74 | 779.62 | 18.47 -73.10 | 18.47 | -1.59 2.97 | 0.07 -0.07 | 2.92 |
| VA5 - 3 | 1062.75 | 0.00 0.11 | -2758.54 438.54 | 438.54 | -65.26 -26.03 | 0.00 | 3.71 -2.65 | -0.04 0.04 | -2.65 |
| VA5 - 4 | 1062.75 | 0.00 0.11 | 438.30 1615.86 | 1615.86 | -26.03 16.04 | 0.00 | 1.67 -0.52 | -0.04 0.04 | -2.65 |
| VA5 - 5 | 1062.75 | 0.00 0.11 | 1617.08 -2171.15 | 1617.08 | 16.04 42.26 | 42.26 | -0.46 2.87 | -0.01 0.01 | -2.65 |
| VA5 - 6 | 1062.75 | 0.00 0.09 | -2063.35 929.02 | 929.02 | 51.91 -34.68 | 51.91 | 2.78 -1.16 | 0.06 -0.06 | -1.83 |
| VA5 - 7 | 1062.75 | 0.00 0.09 | 927.87 -195.73 | 930.12 | -18.46 -32.17 | 0.00 | 0.13 1.55 | 0.01 -0.01 | -11.60 |
| VA6 - 1 | 1062.75 | 0.00 0.05 | 9.16 910.39 | 946.86 | -29.01 -20.42 | 0.00 | 1.41 0.29 | -0.01 0.01 | 3.23 |
| VA6 - 2 | 1062.75 | 0.00 0.05 | 916.98 -3406.81 | 916.98 | -20.42 44.69 | 44.69 | -2.00 3.63 | -0.04 0.04 | 3.23 |
| VA7 - 1 | 1062.75 | -0.07 0.00 | -1167.91 2119.71 | 2119.71 | -57.66 0.32 | 0.32 | 2.93 -1.26 | -0.04 0.04 | -5.63 |
| VA7 - 2 | 1062.75 | -0.07 0.00 | 2113.12 0.00 | 2113.12 | 0.32 0.00 | 0.32 | -0.46 2.17 | 0.00 0.00 | -5.63 |
| VA8 - 1 | 1184.63 | 0.00 0.70 | -4997.02 -9121.31 | 4003.00 | -2.23 -16.05 | 0.00 | 4.62 5.58 | 0.00 0.00 | 1.14 |
| VA8 - 2 | 1184.63 | 0.00 1.04 | -12071.03 -7804.52 | 6649.42 | -7.76 3.39 | 3.39 | 6.66 5.85 | 0.00 0.00 | -0.82 |
| VA9 - 1 | 1111.50 | 0.00 0.24 | -1505.67 -4324.64 | 1878.43 | 0.02 -6.15 | 0.02 | 2.74 3.71 | 0.00 0.00 | 4.08 |
| VA9 - 2 | 1111.50 | 0.00 0.29 | -3121.30 -4219.63 | 1971.97 | -36.72 33.92 | 33.92 | 3.37 3.71 | -0.01 0.01 | -0.18 |
| VA10 - 1 | 1111.50 | 0.00 0.17 | -2183.12 -2855.03 | 1274.52 | 7.60 -37.37 | 7.60 | 2.77 3.03 | 0.01 -0.01 | 0.45 |
| VA10 - 2 | 1111.50 | 0.00 0.05 | -898.60 -2074.25 | 769.74 | -89.98 120.97 | 120.97 | 1.93 2.52 | -0.05 0.05 | -4.78 |
| VA11 - 1 | 1062.75 | -0.11 0.00 | 841.41 -1010.18 | 841.41 | 5.09 17.57 | 17.57 | 0.07 1.98 | -0.01 0.01 | 2.22 |
| VA11 - 2 | 1062.75 | -0.59 0.00 | -503.78 -328.95 | 866.33 | -30.37 11.84 | 11.84 | 1.71 1.59 | -0.01 0.01 | -1.77 |
| VA11 - 3 | 1062.75 | -0.59 0.00 | -333.66 -3566.46 | 0.00 | 11.84 32.79 | 32.79 | -2.65 3.73 | -0.02 0.02 | -1.77 |
| VA12 - 1 | 1062.75 | -0.16 0.00 | 0.00 2409.37 | 2786.33 | 0.00 5.28 | 5.28 | 2.43 0.90 | 0.00 0.00 | -0.12 |


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|----------|---------|---------------|----------------------|---------|------------------|--------|---------------|---------------|-------|
| VA12 - 2 | 1062.75 | -0.16 0.00 | 2414.08 0.00 | 2414.08 | 5.28 0.00 | 5.28 | -1.95 2.99 | 0.01 -0.01 | -0.12 |
| VA13 | 1014.00 | 0.00 0.08 | 0.00 0.00 | 467.12 | 0.00 0.00 | 0.00 | 0.98 0.98 | 0.00 0.00 | 0.12 |
| VA14 - 1 | 1062.75 | 0.00 0.63 | 0.00 3085.77 | 3085.77 | 0.00 -2.14 | 0.00 | 3.50 -2.38 | 0.00 0.00 | 1.09 |
| VA14 - 2 | 1062.75 | 0.00 0.63 | 3086.70 0.00 | 3242.47 | -2.14 0.00 | 0.00 | 0.58 2.63 | 0.00 0.00 | 1.09 |
| VA15 | 1014.00 | 0.00 0.00 | 0.00 0.00 | 467.12 | 0.00 0.00 | 0.00 | 0.98 0.98 | 0.00 0.00 | 0.24 |
| VA16 | 1014.00 | 0.00 0.03 | 0.00 0.00 | 467.12 | 0.00 0.00 | 0.00 | 0.98 0.98 | 0.00 0.00 | -1.22 |
| VA17 - 1 | 1062.75 | 0.00 0.30 | 0.00 5422.54 | 5422.54 | 0.00 3.97 | 3.97 | 5.72 -4.61 | 0.00 0.00 | -6.93 |
| VA17 - 2 | 1062.75 | 0.00 0.33 | 5421.60 0.00 | 5421.60 | -2.92 0.00 | 0.00 | -0.40 3.42 | 0.00 0.00 | 1.99 |
| VA18 | 1062.75 | 0.00 0.16 | 302.96 -512.97 | 471.60 | -5.86 21.56 | 21.56 | 0.60 1.45 | -0.01 0.01 | 1.52 |
| VA19 | 1062.75 | 0.00 0.02 | 0.00 0.00 | 140.55 | 0.00 0.00 | 0.00 | 0.56 0.56 | 0.00 0.00 | -8.34 |
| VA20 | 1062.75 | -0.05 0.00 | -9.78 0.00 | 485.24 | -16.22 0.00 | 0.00 | 1.03 1.02 | -0.01 0.01 | 1.15 |
| VA21 - 1 | 1062.75 | 0.00 0.22 | -1520.85 3081.38 | 3114.32 | 55.87 -60.82 | 55.87 | 3.14 0.27 | 0.04 -0.04 | 6.62 |
| VA21 - 2 | 1062.75 | 0.00 0.21 | 3084.61 -2840.38 | 3084.61 | -31.81 -6.21 | 0.00 | -1.68 3.93 | -0.01 0.01 | -2.54 |
| VA22 | 1062.75 | 0.00 0.12 | 537.46 -2383.37 | 1144.78 | -32.38 48.34 | 48.34 | 1.14 2.74 | -0.02 0.02 | -0.15 |
| VA23 | 1062.75 | 0.00 0.04 | 0.00 0.00 | 1384.92 | 0.00 0.00 | 0.00 | 1.72 1.72 | 0.00 0.00 | 6.59 |
| VA24 - 1 | 1111.50 | 0.00 0.24 | -1337.62 -4474.15 | 1915.08 | -32.00 20.07 | 20.07 | 2.69 3.77 | -0.01 0.01 | -5.78 |
| VA24 - 2 | 1111.50 | 0.00 0.28 | -2825.74 -4684.72 | 1912.56 | 18.53 16.76 | 18.53 | 3.25 3.83 | 0.00 0.00 | -0.18 |
| VA25 - 1 | 1111.50 | 0.00 0.30 | -3337.94 2581.20 | 2581.20 | 105.59 -36.27 | 105.59 | 4.16 -2.03 | 0.07 -0.07 | 4.32 |
| VA25 - 2 | 1111.50 | 0.00 0.30 | 2586.83 -3960.06 | 2586.83 | -36.27 -41.53 | 0.00 | -0.14 3.82 | 0.00 0.00 | 4.32 |
| VA25 - 3 | 1111.50 | 0.00 0.07 | -1080.77 -2203.53 | 609.85 | 46.59 -88.24 | 46.59 | 1.94 2.50 | 0.03 -0.03 | -1.66 |

| CASO: 1.3G1+1.4G2+0.98Q+1.4V4+0.84D4 | | | | | | | | | |
|--------------------------------------|------------------|------------------|-----------------------|------------------|-----------------------|------------------|--------------------|--------------------|----------------|
| Elemento | Carga (kgf/m) | Rd Nd (tf) | Mxi Mxf (kgf.m) | MxMáx (kgf.m) | Myi Myf (kgf.m) | MyMáx (kgf.m) | Vxi Vxf (tf) | Vyi Vyf (tf) | Mtd (kgf/m) |
| VA1 - 1 | 1062.75 | 0.00 0.40 | -2021.71 2579.90 | 2579.90 | -110.09 9.32 | 9.32 | 3.40 -1.33 | -0.06 0.06 | -3.19 |
| VA1 - 2 | 1062.75 | 0.00 0.40 | 2580.04 250.17 | 2580.04 | 9.32 18.09 | 0.00 | -1.66 2.78 | -0.01 0.01 | -4.05 |
| VA1 - 3 | 1062.75 | 0.00 0.39 | 251.60 -3067.72 | 251.60 | 18.09 157.19 | 157.19 | -5.40 6.02 | -0.24 0.24 | -3.87 |
| VA1 - 4 | 1062.75 | -0.26 0.00 | -2919.44 437.45 | 1001.91 | 136.07 -115.32 | 136.07 | 2.89 1.10 | 0.07 -0.07 | 1.79 |
| VA1 - 5 | 1062.75 | -0.30 0.00 | 439.77 -2021.01 | 439.77 | -115.32 132.04 | 132.04 | -4.51 5.06 | -0.48 0.48 | -3.23 |
| VA1 - 6 | 1062.75 | -0.29 0.00 | -1534.28 -542.12 | 415.97 | 97.91 -51.80 | 97.91 | 2.04 1.43 | 0.05 -0.05 | 3.11 |
| VA2 | 1062.75 | -0.01 0.00 | 0.00 0.00 | 518.17 | 0.00 0.00 | 0.00 | 1.06 1.06 | 0.00 0.00 | -3.34 |
| VA3 - 1 | 1062.75 | 0.00 0.02 | 0.00 -2142.52 | 1527.86 | 0.00 4.68 | 4.68 | 1.80 2.79 | 0.00 0.00 | 0.98 |
| VA3 - 2 | 1062.75 | 0.00 | -2151.80 | 8.03 | 71.17 | 71.17 | 2.21 | 0.05 | 0.00 |


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|----------|---------|---------------|-----------------------|---------|------------------|--------|---------------|---------------|--------|
| | | 0.00 | 8.03 | | 0.00 | | -0.56 | -0.05 | |
| VA4 - 1 | 1111.50 | 0.00 0.22 | -1974.40 -2439.63 | 1312.76 | 91.90 -33.17 | 91.90 | 2.70 2.89 | 0.02 -0.02 | 1.72 |
| VA4 - 2 | 1111.50 | 0.00 0.35 | -2558.08 2225.51 | 2225.51 | -139.32 -5.32 | 0.00 | 3.52 -1.33 | -0.07 0.07 | -7.97 |
| VA4 - 3 | 1111.50 | 0.00 0.34 | 2225.37 1826.90 | 2225.37 | -5.32 32.56 | 0.00 | -1.10 1.45 | -0.12 0.12 | -7.97 |
| VA4 - 4 | 1111.50 | 0.00 0.34 | 1826.93 -263.17 | 1826.93 | 32.56 145.26 | 145.26 | -2.43 3.25 | -0.15 0.15 | -7.97 |
| VA4 - 5 | 1111.50 | 0.00 0.33 | -264.46 -4197.49 | 0.00 | 145.26 97.94 | 145.26 | -6.74 7.36 | 0.08 -0.08 | -11.96 |
| VA4 - 6 | 1111.50 | 0.00 0.09 | -4473.57 -266.21 | 0.00 | 22.47 50.71 | 50.71 | 4.74 -3.63 | -0.03 0.03 | 7.52 |
| VA4 - 7 | 1111.50 | 0.00 0.09 | -265.92 1937.81 | 1937.81 | 50.71 5.38 | 50.71 | 2.65 -1.45 | 0.04 -0.04 | 5.30 |
| VA4 - 8 | 1111.50 | 0.00 0.09 | 1936.69 1151.38 | 2036.68 | 5.38 76.13 | 0.00 | 0.47 1.40 | -0.04 0.04 | 5.30 |
| VA4 - 9 | 1111.50 | 0.00 0.12 | 1158.33 -3227.03 | 1158.33 | 76.13 -196.81 | 76.13 | -7.13 7.78 | 0.46 -0.46 | 5.30 |
| VA4 - 10 | 1111.50 | -0.10 0.00 | -2841.43 -182.68 | 0.00 | -55.54 0.37 | 0.37 | 3.28 -2.20 | -0.06 0.06 | 1.32 |
| VA4 - 11 | 1111.50 | -0.10 0.00 | -174.65 561.47 | 561.47 | 0.37 6.96 | 6.96 | 1.64 -1.03 | -0.01 0.01 | 1.32 |
| VA4 - 12 | 1111.50 | -0.13 0.00 | 562.24 -1094.71 | 562.24 | 6.96 -40.78 | 6.96 | 0.01 1.92 | 0.03 -0.03 | 1.32 |
| VA4 - 13 | 1111.50 | 0.00 0.09 | -942.04 -492.85 | 496.51 | -0.02 7.01 | 7.01 | 1.79 1.49 | 0.00 0.00 | -2.45 |
| VA5 - 1 | 1062.75 | -0.03 0.00 | -545.42 745.59 | 939.13 | -101.94 36.30 | 36.30 | 1.78 0.64 | -0.06 0.06 | -6.17 |
| VA5 - 2 | 1062.75 | -0.03 0.00 | 745.55 -2243.58 | 745.55 | 36.30 73.70 | 73.70 | -1.62 3.00 | -0.03 0.03 | -6.17 |
| VA5 - 3 | 1062.75 | 0.00 0.01 | -2739.94 452.02 | 452.02 | 68.12 25.73 | 68.12 | 3.71 -2.64 | 0.04 -0.04 | 5.27 |
| VA5 - 4 | 1062.75 | 0.00 0.01 | 451.68 1623.77 | 1623.77 | 25.73 55.13 | 0.00 | 1.66 -0.52 | -0.03 0.03 | 5.27 |
| VA5 - 5 | 1062.75 | 0.00 0.01 | 1624.88 -2174.93 | 1624.88 | 55.13 -74.03 | 55.13 | -0.46 2.88 | 0.06 -0.06 | 5.27 |
| VA5 - 6 | 1062.75 | 0.00 0.10 | -1963.57 939.35 | 939.35 | 54.42 -50.88 | 54.42 | 2.72 -1.10 | 0.07 -0.07 | 0.77 |
| VA5 - 7 | 1062.75 | 0.00 0.12 | 938.58 -283.47 | 938.58 | -3.50 -50.76 | 0.00 | 0.07 1.61 | 0.03 -0.03 | -15.55 |
| VA6 - 1 | 1062.75 | 0.00 0.05 | 10.02 791.95 | 852.10 | 19.23 -9.50 | 19.23 | 1.34 0.36 | 0.02 -0.02 | 0.95 |
| VA6 - 2 | 1062.75 | 0.00 0.05 | 798.42 -3639.60 | 798.42 | -9.50 21.69 | 21.69 | -2.08 3.71 | -0.02 0.02 | 0.95 |
| VA7 - 1 | 1062.75 | -0.09 0.00 | -972.86 2218.31 | 2218.31 | -37.00 11.71 | 11.71 | 2.87 -1.20 | -0.03 0.03 | -2.90 |
| VA7 - 2 | 1062.75 | -0.09 0.00 | 2211.85 0.00 | 2211.85 | 11.71 0.00 | 11.71 | -0.52 2.23 | 0.01 -0.01 | -2.90 |
| VA8 - 1 | 1184.63 | 0.00 0.65 | -5067.55 -9033.50 | 4005.14 | -10.02 18.40 | 18.40 | 4.64 5.56 | 0.00 0.00 | -4.83 |
| VA8 - 2 | 1184.63 | 0.00 0.99 | -12024.00 -7824.73 | 6660.25 | 38.04 -11.04 | 38.04 | 6.65 5.86 | 0.00 0.00 | 3.88 |
| VA9 - 1 | 1111.50 | 0.00 0.10 | -3256.09 -2795.33 | 1666.65 | 94.02 -70.57 | 94.02 | 3.31 3.15 | 0.03 -0.03 | 3.96 |
| VA9 - 2 | 1111.50 | 0.00 0.19 | -4335.54 -2987.31 | 1985.04 | -2.17 -8.73 | 0.00 | 3.75 3.33 | 0.00 0.00 | -0.54 |
| VA10 - 1 | 1111.50 | 0.00 0.11 | -3593.09 -1572.83 | 1272.91 | 52.40 -47.72 | 52.40 | 3.29 2.52 | 0.02 -0.02 | 0.72 |
| VA10 - 2 | 1111.50 | 0.00 0.10 | -2730.45 102.34 | 1125.29 | -18.96 -50.09 | 0.00 | 2.93 1.51 | 0.01 -0.01 | -4.42 |
| VA11 - 1 | 1062.75 | -0.01 0.00 | -1330.74 188.13 | 215.20 | 95.22 -74.97 | 95.22 | 1.81 0.24 | 0.09 -0.09 | 2.11 |

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|----------|---------|---------------|----------------------|---------|-------------------|--------|---------------|---------------|-------|
| VA11 - 2 | 1062.75 | -0.36 0.00 | -2040.23 1477.57 | 1601.36 | 26.36 -16.29 | 26.36 | 2.78 0.52 | 0.01 -0.01 | -1.30 |
| VA11 - 3 | 1062.75 | -0.36 0.00 | 1474.23 -668.06 | 1474.23 | -16.29 -36.84 | 0.00 | -1.57 2.65 | 0.02 -0.02 | -1.30 |
| VA12 - 1 | 1062.75 | -0.05 0.00 | 0.00 2410.41 | 2787.10 | 0.00 -4.88 | 0.00 | 2.43 0.89 | 0.00 0.00 | 0.14 |
| VA12 - 2 | 1062.75 | -0.05 0.00 | 2413.76 0.00 | 2413.76 | -4.88 0.00 | 0.00 | -1.95 2.99 | 0.00 0.00 | 0.14 |
| VA13 | 1014.00 | 0.00 0.03 | 0.00 0.00 | 467.12 | 0.00 0.00 | 0.00 | 0.98 0.98 | 0.00 0.00 | 0.03 |
| VA14 - 1 | 1062.75 | 0.00 0.23 | 0.00 3085.77 | 3085.77 | 0.00 -14.44 | 0.00 | 3.50 -2.38 | 0.01 -0.01 | 1.43 |
| VA14 - 2 | 1062.75 | 0.00 0.23 | 3086.75 0.00 | 3242.51 | -14.44 0.00 | 0.00 | 0.58 2.63 | 0.00 0.00 | 1.43 |
| VA15 | 1014.00 | -0.07 0.00 | 0.00 0.00 | 467.12 | 0.00 0.00 | 0.00 | 0.98 0.98 | 0.00 0.00 | 0.34 |
| VA16 | 1014.00 | 0.00 0.08 | 0.00 0.00 | 467.12 | 0.00 0.00 | 0.00 | 0.98 0.98 | 0.00 0.00 | -1.12 |
| VA17 - 1 | 1062.75 | 0.00 0.51 | 0.00 5422.54 | 5422.54 | 0.00 32.15 | 32.15 | 5.72 -4.61 | -0.03 0.03 | -6.95 |
| VA17 - 2 | 1062.75 | 0.00 0.55 | 5421.56 0.00 | 5421.56 | -34.33 0.00 | 0.00 | -0.40 3.42 | -0.01 0.01 | 2.33 |
| VA18 | 1062.75 | 0.00 0.27 | -1631.91 1428.40 | 1428.40 | -118.74 153.26 | 153.26 | 2.61 -0.56 | -0.14 0.14 | 1.56 |
| VA19 | 1062.75 | 0.00 0.05 | 0.00 0.00 | 140.55 | 0.00 0.00 | 0.00 | 0.56 0.56 | 0.00 0.00 | -8.03 |
| VA20 | 1062.75 | -0.04 0.00 | -16.32 0.00 | 482.33 | -47.38 0.00 | 0.00 | 1.03 1.02 | -0.02 0.02 | 0.77 |
| VA21 - 1 | 1062.75 | 0.00 0.21 | -2786.11 3284.27 | 3284.27 | 14.91 -29.30 | 14.91 | 3.60 -0.19 | 0.01 -0.01 | 7.08 |
| VA21 - 2 | 1062.75 | 0.00 0.23 | 3285.22 -1516.59 | 3285.22 | -48.52 17.46 | 17.46 | -1.15 3.40 | -0.03 0.03 | -2.94 |
| VA22 | 1062.75 | 0.00 0.18 | -1608.03 158.25 | 1151.93 | -56.46 78.43 | 78.43 | 2.42 1.45 | -0.04 0.04 | 0.28 |
| VA23 | 1062.75 | 0.00 0.04 | 0.00 0.00 | 1384.92 | 0.00 0.00 | 0.00 | 1.72 1.72 | 0.00 0.00 | 6.46 |
| VA24 - 1 | 1111.50 | 0.00 0.08 | -3378.74 -2688.65 | 1662.62 | -111.12 68.95 | 68.95 | 3.35 3.11 | -0.03 0.03 | -5.92 |
| VA24 - 2 | 1111.50 | 0.00 0.18 | -4246.37 -3251.98 | 1891.58 | -5.32 41.90 | 41.90 | 3.69 3.38 | -0.01 0.01 | -0.60 |
| VA25 - 1 | 1111.50 | 0.00 0.24 | -5021.61 2139.39 | 2139.39 | 82.35 -45.88 | 82.35 | 4.81 -2.68 | 0.07 -0.07 | 4.64 |
| VA25 - 2 | 1111.50 | 0.00 0.24 | 2142.29 -2460.71 | 2232.48 | -45.88 16.07 | 16.07 | 0.45 3.23 | -0.02 0.02 | 4.64 |
| VA25 - 3 | 1111.50 | 0.00 0.12 | -3259.75 337.64 | 1119.14 | -68.77 61.01 | 61.01 | 3.12 1.32 | -0.03 0.03 | -1.21 |

| CASO: 1.3G1+1.4G2+1.2D1 | | | | | | | | | |
|-------------------------|------------------|------------------|-----------------------|------------------|-----------------------|------------------|--------------------|--------------------|----------------|
| Elemento | Carga (kgf/m) | Rd Nd (tf) | Mxi Mxf (kgf.m) | MxMáx (kgf.m) | Myi Myf (kgf.m) | MyMáx (kgf.m) | Vxi Vxf (tf) | Vyi Vyf (tf) | Mtd (kgf/m) |
| VA1 - 1 | 1062.75 | 0.00 0.41 | -1611.38 2534.33 | 2534.33 | -11.06 1.62 | 1.62 | 3.16 -1.10 | -0.01 0.01 | 1.88 |
| VA1 - 2 | 1062.75 | 0.00 0.42 | 2534.50 -41.67 | 2534.50 | 1.62 -14.82 | 1.62 | -1.89 3.01 | 0.02 -0.02 | 1.03 |
| VA1 - 3 | 1062.75 | 0.00 0.42 | -40.38 -3495.91 | 0.00 | -14.82 12.75 | 12.75 | -5.64 6.25 | -0.05 0.05 | 0.94 |
| VA1 - 4 | 1062.75 | 0.00 0.08 | -2628.95 274.77 | 965.10 | 19.59 -17.02 | 19.59 | 2.77 1.22 | 0.01 -0.01 | 0.40 |
| VA1 - 5 | 1062.75 | 0.00 0.07 | 276.78 -2246.18 | 276.78 | -17.02 20.10 | 20.10 | -4.63 5.18 | -0.07 0.07 | -2.78 |
| VA1 - 6 | 1062.75 | -0.02 | -1458.12 | 410.79 | 17.34 | 17.34 | 1.99 | 0.01 | -0.88 |


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|----------|---------|---------------|-----------------------|---------|------------------|-------|---------------|---------------|--------|
| | | 0.00 | -610.56 | | -6.93 | | 1.47 | -0.01 | |
| VA2 | 1062.75 | 0.00 0.00 | 0.00 0.00 | 518.17 | 0.00 0.00 | 0.00 | 1.06 1.06 | 0.00 0.00 | -3.62 |
| VA3 - 1 | 1062.75 | 0.00 0.00 | 0.00 -2143.21 | 1527.60 | 0.00 1.75 | 1.75 | 1.80 2.79 | 0.00 0.00 | 1.02 |
| VA3 - 2 | 1062.75 | 0.00 0.00 | -2152.36 7.48 | 7.48 | 6.42 0.00 | 6.42 | 2.21 -0.56 | 0.00 0.00 | 0.00 |
| VA4 - 1 | 1111.50 | 0.00 0.23 | -1653.65 -2578.25 | 1413.01 | 46.71 -16.65 | 46.71 | 2.61 2.98 | 0.01 -0.01 | 1.25 |
| VA4 - 2 | 1111.50 | 0.00 0.26 | -2515.44 2097.19 | 2097.19 | -6.62 -5.62 | 0.00 | 3.44 -1.25 | 0.00 0.00 | -0.50 |
| VA4 - 3 | 1111.50 | 0.00 0.26 | 2097.02 1671.40 | 2097.02 | -5.62 1.57 | 0.00 | -1.19 1.53 | -0.02 0.02 | -0.50 |
| VA4 - 4 | 1111.50 | 0.00 0.26 | 1671.36 -482.68 | 1671.36 | 1.57 19.68 | 19.68 | -2.51 3.33 | -0.02 0.02 | -0.50 |
| VA4 - 5 | 1111.50 | 0.00 0.26 | -483.92 -4465.26 | 0.00 | 19.68 -4.45 | 19.68 | -6.83 7.45 | 0.04 -0.04 | -7.79 |
| VA4 - 6 | 1111.50 | 0.00 0.15 | -4114.78 -51.71 | 0.00 | -12.08 1.19 | 1.19 | 4.60 -3.48 | -0.01 0.01 | 0.41 |
| VA4 - 7 | 1111.50 | 0.00 0.15 | -51.33 1998.03 | 1998.03 | 1.19 -1.73 | 1.19 | 2.50 -1.31 | 0.00 0.00 | -0.03 |
| VA4 - 8 | 1111.50 | 0.00 0.15 | 1997.10 969.77 | 2041.53 | -1.73 15.98 | 0.00 | 0.33 1.55 | -0.01 0.01 | -0.03 |
| VA4 - 9 | 1111.50 | 0.00 0.15 | 976.90 -3492.97 | 976.90 | 15.98 -22.99 | 15.98 | -7.27 7.92 | 0.07 -0.07 | -0.03 |
| VA4 - 10 | 1111.50 | 0.00 0.03 | -2962.71 -255.42 | 0.00 | -9.70 3.28 | 3.28 | 3.33 -2.25 | -0.01 0.01 | 1.96 |
| VA4 - 11 | 1111.50 | 0.00 0.03 | -247.95 515.69 | 515.69 | 3.28 8.37 | 8.37 | 1.69 -1.08 | -0.01 0.01 | 1.96 |
| VA4 - 12 | 1111.50 | 0.00 0.03 | 516.23 -1057.43 | 516.23 | 8.37 -10.00 | 8.37 | 0.06 1.87 | 0.01 -0.01 | 1.96 |
| VA4 - 13 | 1111.50 | 0.00 0.07 | -708.16 -825.27 | 439.78 | -3.37 -5.47 | 0.00 | 1.60 1.68 | 0.00 0.00 | -2.25 |
| VA5 - 1 | 1062.75 | 0.00 0.07 | -450.57 719.41 | 945.96 | 3.29 0.64 | 3.29 | 1.72 0.69 | 0.00 0.00 | -0.62 |
| VA5 - 2 | 1062.75 | 0.00 0.07 | 719.45 -2338.56 | 719.45 | 0.64 -2.98 | 0.64 | -1.67 3.05 | 0.00 0.00 | -0.62 |
| VA5 - 3 | 1062.75 | 0.00 0.11 | -2679.53 488.29 | 488.29 | 3.80 -2.62 | 3.80 | 3.69 -2.62 | 0.01 -0.01 | 0.69 |
| VA5 - 4 | 1062.75 | 0.00 0.11 | 487.90 1634.15 | 1634.15 | -2.62 6.27 | 0.00 | 1.64 -0.49 | -0.01 0.01 | 0.69 |
| VA5 - 5 | 1062.75 | 0.00 0.11 | 1635.09 -2219.36 | 1635.09 | 6.27 -5.01 | 6.27 | -0.49 2.90 | 0.00 0.00 | 0.69 |
| VA5 - 6 | 1062.75 | 0.00 0.08 | -1961.18 920.37 | 920.37 | 12.20 -14.77 | 12.20 | 2.70 -1.09 | 0.02 -0.02 | -0.63 |
| VA5 - 7 | 1062.75 | 0.00 0.08 | 919.83 -321.04 | 919.83 | -12.92 -9.65 | 0.00 | 0.06 1.62 | 0.00 0.00 | -12.79 |
| VA6 - 1 | 1062.75 | 0.00 0.03 | 10.44 739.32 | 812.73 | -16.40 -16.74 | 0.00 | 1.31 0.40 | 0.00 0.00 | 1.99 |
| VA6 - 2 | 1062.75 | 0.00 0.03 | 745.82 -3743.00 | 745.82 | -16.74 35.71 | 35.71 | -2.11 3.74 | -0.03 0.03 | 1.99 |
| VA7 - 1 | 1062.75 | -0.09 0.00 | -920.36 2244.89 | 2244.89 | -49.17 2.48 | 2.48 | 2.85 -1.18 | -0.03 0.03 | -4.13 |
| VA7 - 2 | 1062.75 | -0.09 0.00 | 2238.39 0.00 | 2238.39 | 2.48 0.00 | 2.48 | -0.54 2.25 | 0.00 0.00 | -4.13 |
| VA8 - 1 | 1184.63 | 0.00 0.68 | -4858.27 -9222.01 | 4035.95 | -0.28 -1.13 | 0.00 | 4.59 5.61 | 0.00 0.00 | -1.80 |
| VA8 - 2 | 1184.63 | 0.00 1.00 | -11925.12 -7967.27 | 6629.13 | 16.51 -9.14 | 16.51 | 6.63 5.88 | 0.00 0.00 | 1.46 |
| VA9 - 1 | 1111.50 | 0.00 0.17 | -2357.26 -3581.58 | 1736.10 | 40.20 -31.75 | 40.20 | 3.02 3.44 | 0.01 -0.01 | 3.24 |
| VA9 - 2 | 1111.50 | 0.00 0.25 | -3719.49 -3616.63 | 1958.32 | -15.01 14.14 | 14.14 | 3.55 3.52 | 0.00 0.00 | -0.34 |

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|----------|---------|---------------|----------------------|---------|------------------|--------|---------------|---------------|-------|
| VA10 - 1 | 1111.50 | 0.00 0.15 | -2875.86 -2224.75 | 1242.48 | 31.08 -44.06 | 31.08 | 3.03 2.78 | 0.01 -0.01 | 0.96 |
| VA10 - 2 | 1111.50 | 0.00 0.07 | -1796.28 -1007.46 | 831.41 | -53.24 31.50 | 31.50 | 2.42 2.02 | -0.02 0.02 | -4.23 |
| VA11 - 1 | 1062.75 | 0.00 0.03 | -269.98 -816.77 | 0.00 | 1.64 7.26 | 7.26 | 0.74 1.31 | 0.00 0.00 | 2.47 |
| VA11 - 2 | 1062.75 | 0.00 0.05 | -1502.54 957.76 | 1304.93 | -3.97 1.88 | 1.88 | 2.44 0.86 | 0.00 0.00 | -1.75 |
| VA11 - 3 | 1062.75 | 0.00 0.05 | 954.14 -1533.12 | 954.14 | 1.88 7.80 | 7.80 | -1.92 2.99 | -0.01 0.01 | -1.75 |
| VA12 - 1 | 1062.75 | -0.02 0.00 | 0.00 2410.21 | 2786.94 | 0.00 2.95 | 2.95 | 2.43 0.89 | 0.00 0.00 | 0.17 |
| VA12 - 2 | 1062.75 | -0.02 0.00 | 2413.82 0.00 | 2413.82 | 2.95 0.00 | 2.95 | -1.95 2.99 | 0.00 0.00 | 0.17 |
| VA13 | 1014.00 | 0.00 0.00 | 0.00 0.00 | 467.12 | 0.00 0.00 | 0.00 | 0.98 0.98 | 0.00 0.00 | -0.04 |
| VA14 - 1 | 1062.75 | 0.00 0.06 | 0.00 3085.63 | 3085.63 | 0.00 -1.61 | 0.00 | 3.50 -2.38 | 0.00 0.00 | 1.30 |
| VA14 - 2 | 1062.75 | 0.00 0.06 | 3086.66 0.00 | 3242.43 | -1.61 0.00 | 0.00 | 0.58 2.63 | 0.00 0.00 | 1.30 |
| VA15 | 1014.00 | -0.01 0.00 | 0.00 0.00 | 467.12 | 0.00 0.00 | 0.00 | 0.98 0.98 | 0.00 0.00 | 0.39 |
| VA16 | 1014.00 | 0.00 0.01 | 0.00 0.00 | 467.12 | 0.00 0.00 | 0.00 | 0.98 0.98 | 0.00 0.00 | -0.93 |
| VA17 - 1 | 1062.75 | 0.00 0.08 | 0.00 5422.67 | 5422.67 | 0.00 2.84 | 2.84 | 5.72 -4.61 | 0.00 0.00 | -7.12 |
| VA17 - 2 | 1062.75 | 0.00 0.08 | 5421.65 0.00 | 5421.65 | -1.83 0.00 | 0.00 | -0.40 3.42 | 0.00 0.00 | 2.03 |
| VA18 | 1062.75 | 0.00 0.07 | -393.95 230.68 | 463.09 | -14.12 18.92 | 18.92 | 1.35 0.70 | -0.02 0.02 | 1.51 |
| VA19 | 1062.75 | 0.00 0.00 | 0.00 0.00 | 140.55 | 0.00 0.00 | 0.00 | 0.56 0.56 | 0.00 0.00 | -7.48 |
| VA20 | 1062.75 | -0.02 0.00 | -12.15 0.00 | 484.18 | -1.85 0.00 | 0.00 | 1.03 1.02 | 0.00 0.00 | 0.53 |
| VA21 - 1 | 1062.75 | 0.00 0.20 | -2154.29 3125.37 | 3125.37 | 35.65 -42.37 | 35.65 | 3.35 0.06 | 0.02 -0.02 | 7.31 |
| VA21 - 2 | 1062.75 | 0.00 0.20 | 3127.36 -2124.75 | 3127.36 | -25.97 -17.93 | 0.00 | -1.37 3.61 | 0.00 0.00 | -3.13 |
| VA22 | 1062.75 | 0.00 0.11 | -685.93 -987.80 | 931.01 | -10.66 13.74 | 13.74 | 1.86 2.02 | -0.01 0.01 | 0.25 |
| VA23 | 1062.75 | 0.00 0.03 | 0.00 0.00 | 1384.92 | 0.00 0.00 | 0.00 | 1.72 1.72 | 0.00 0.00 | 6.50 |
| VA24 - 1 | 1111.50 | 0.00 0.16 | -2421.14 -3524.42 | 1730.65 | -74.05 47.23 | 47.23 | 3.04 3.42 | -0.02 0.02 | -6.61 |
| VA24 - 2 | 1111.50 | 0.00 0.22 | -3571.28 -3931.71 | 1879.03 | 10.45 35.36 | 35.36 | 3.48 3.59 | 0.00 0.00 | -0.36 |
| VA25 - 1 | 1111.50 | 0.00 0.27 | -4253.69 2377.66 | 2377.66 | 107.09 -52.55 | 107.09 | 4.53 -2.40 | 0.08 -0.08 | 5.05 |
| VA25 - 2 | 1111.50 | 0.00 0.27 | 2381.80 -3191.47 | 2390.02 | -52.55 -14.46 | 0.00 | 0.15 3.52 | -0.01 0.01 | 5.05 |
| VA25 - 3 | 1111.50 | 0.00 0.09 | -2250.42 -844.87 | 726.67 | -14.71 1.57 | 1.57 | 2.57 1.87 | 0.00 0.00 | -1.26 |

| CASO: 1.3G1+1.4G2+1.2D2 | | | | | | | | | |
|-------------------------|------------------|------------------|-----------------------|------------------|-----------------------|------------------|--------------------|--------------------|----------------|
| Elemento | Carga (kgf/m) | Rd Nd (tf) | Mxi Mxf (kgf.m) | MxMáx (kgf.m) | Myi Myf (kgf.m) | MyMáx (kgf.m) | Vxi Vxf (tf) | Vyi Vyf (tf) | Mtd (kgf/m) |
| VA1 - 1 | 1062.75 | 0.00 0.39 | -1983.21 2533.34 | 2533.34 | -10.73 1.00 | 1.00 | 3.36 -1.29 | -0.01 0.01 | 1.83 |
| VA1 - 2 | 1062.75 | 0.00 0.40 | 2533.41 157.49 | 2533.41 | 1.00 -13.67 | 0.00 | -1.70 2.82 | 0.01 -0.01 | 0.99 |
| VA1 - 3 | 1062.75 | 0.00 | 158.62 | 158.62 | -13.67 | 14.62 | -5.45 | -0.05 | 1.09 |

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| | | 0.39 | -3186.14 | | 14.62 | | 6.06 | 0.05 | |
| VA1 - 4 | 1062.75 | 0.00 0.06 | -2839.96 431.42 | 1019.63 | 19.50 -16.80 | 19.50 | 2.86 1.12 | 0.01 -0.01 | 0.68 |
| VA1 - 5 | 1062.75 | 0.00 0.06 | 433.47 -2039.07 | 433.47 | -16.80 21.11 | 21.11 | -4.54 5.08 | -0.07 0.07 | -4.26 |
| VA1 - 6 | 1062.75 | -0.02 0.00 | -1780.23 -224.90 | 517.72 | 16.07 -6.18 | 16.07 | 2.21 1.26 | 0.01 -0.01 | -0.88 |
| VA2 | 1062.75 | 0.00 0.00 | 0.00 0.00 | 518.17 | 0.00 0.00 | 0.00 | 1.06 1.06 | 0.00 0.00 | -3.74 |
| VA3 - 1 | 1062.75 | 0.00 0.00 | 0.00 -2143.90 | 1527.33 | 0.00 1.55 | 1.55 | 1.80 2.79 | 0.00 0.00 | 1.07 |
| VA3 - 2 | 1062.75 | 0.00 0.00 | -2152.68 7.16 | 7.16 | 8.74 0.00 | 8.74 | 2.21 -0.56 | 0.01 -0.01 | 0.00 |
| VA4 - 1 | 1111.50 | 0.00 0.17 | -2125.43 -2397.69 | 1254.35 | 53.41 -18.04 | 53.41 | 2.74 2.85 | 0.01 -0.01 | 1.26 |
| VA4 - 2 | 1111.50 | 0.00 0.20 | -2647.48 2266.91 | 2266.91 | -9.05 -5.27 | 0.00 | 3.59 -1.40 | 0.00 0.00 | -1.34 |
| VA4 - 3 | 1111.50 | 0.00 0.20 | 2266.84 1889.20 | 2266.84 | -5.27 1.67 | 0.00 | -1.03 1.38 | -0.02 0.02 | -1.34 |
| VA4 - 4 | 1111.50 | 0.00 0.20 | 1889.26 -151.82 | 1889.26 | 1.67 20.90 | 20.90 | -2.36 3.18 | -0.03 0.03 | -1.34 |
| VA4 - 5 | 1111.50 | 0.00 0.20 | -152.92 -4048.71 | 0.00 | 20.90 -1.64 | 20.90 | -6.68 7.30 | 0.04 -0.04 | -3.64 |
| VA4 - 6 | 1111.50 | 0.00 0.08 | -4496.25 -303.23 | 0.00 | -12.76 1.27 | 1.27 | 4.73 -3.61 | -0.01 0.01 | 2.08 |
| VA4 - 7 | 1111.50 | 0.00 0.08 | -302.78 1885.61 | 1885.61 | 1.27 -1.50 | 1.27 | 2.63 -1.44 | 0.00 0.00 | -0.45 |
| VA4 - 8 | 1111.50 | 0.00 0.08 | 1884.67 1075.31 | 1978.65 | -1.50 16.73 | 0.00 | 0.46 1.42 | -0.01 0.01 | -0.45 |
| VA4 - 9 | 1111.50 | 0.00 0.08 | 1082.01 -3311.88 | 1082.01 | 16.73 -22.18 | 16.73 | -7.14 7.79 | 0.07 -0.07 | -0.45 |
| VA4 - 10 | 1111.50 | -0.05 0.00 | -3068.41 -262.01 | 0.00 | -9.32 1.91 | 1.91 | 3.43 -2.35 | -0.01 0.01 | 1.98 |
| VA4 - 11 | 1111.50 | -0.05 0.00 | -254.85 564.98 | 564.98 | 1.91 5.20 | 5.20 | 1.80 -1.18 | -0.01 0.01 | 1.98 |
| VA4 - 12 | 1111.50 | -0.05 0.00 | 565.55 -829.91 | 575.15 | 5.20 -8.07 | 5.20 | 0.17 1.77 | 0.01 -0.01 | 1.98 |
| VA4 - 13 | 1111.50 | 0.00 0.06 | -1248.24 -98.19 | 599.08 | -1.00 -14.92 | 0.00 | 2.03 1.25 | 0.00 0.00 | -2.27 |
| VA5 - 1 | 1062.75 | 0.00 0.08 | -661.96 803.94 | 949.79 | 0.57 1.62 | 1.62 | 1.85 0.56 | 0.00 0.00 | -0.64 |
| VA5 - 2 | 1062.75 | 0.00 0.08 | 803.88 -2085.74 | 803.88 | 1.62 -2.83 | 1.62 | -1.54 2.92 | 0.00 0.00 | -0.64 |
| VA5 - 3 | 1062.75 | 0.00 0.12 | -2860.34 376.01 | 376.01 | 4.60 -2.72 | 4.60 | 3.75 -2.68 | 0.01 -0.01 | 0.73 |
| VA5 - 4 | 1062.75 | 0.00 0.12 | 375.55 1595.13 | 1595.13 | -2.72 6.52 | 0.00 | 1.71 -0.56 | -0.01 0.01 | 0.73 |
| VA5 - 5 | 1062.75 | 0.00 0.12 | 1596.07 -2103.30 | 1596.07 | 6.52 -4.37 | 6.52 | -0.42 2.83 | 0.00 0.00 | 0.73 |
| VA5 - 6 | 1062.75 | 0.00 0.10 | -2093.50 949.50 | 949.50 | 12.34 -16.22 | 12.34 | 2.81 -1.19 | 0.02 -0.02 | -0.62 |
| VA5 - 7 | 1062.75 | 0.00 0.10 | 948.94 -124.28 | 958.38 | -15.63 -23.85 | 0.00 | 0.16 1.52 | 0.01 -0.01 | -13.22 |
| VA6 - 1 | 1062.75 | 0.00 0.04 | 8.72 963.59 | 993.35 | -3.45 -13.97 | 0.00 | 1.45 0.26 | 0.01 -0.01 | 2.09 |
| VA6 - 2 | 1062.75 | 0.00 0.04 | 970.13 -3302.30 | 970.13 | -13.97 29.68 | 29.68 | -1.97 3.60 | -0.03 0.03 | 2.09 |
| VA7 - 1 | 1062.75 | -0.06 0.00 | -1214.26 2096.24 | 2096.24 | -43.98 5.60 | 5.60 | 2.94 -1.27 | -0.03 0.03 | -4.29 |
| VA7 - 2 | 1062.75 | -0.06 0.00 | 2089.70 0.00 | 2089.70 | 5.60 0.00 | 5.60 | -0.44 2.15 | 0.00 0.00 | -4.29 |
| VA8 - 1 | 1184.63 | 0.00 0.68 | -5208.86 -8931.31 | 3977.08 | -11.60 2.06 | 2.06 | 4.67 5.53 | 0.00 0.00 | -1.83 |


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|----------|---------|---------------|-----------------------|---------|------------------|-------|---------------|---------------|-------|
| VA8 - 2 | 1184.63 | 0.00 1.02 | -12172.69 -7659.77 | 6680.44 | 13.72 1.04 | 13.72 | 6.68 5.83 | 0.00 0.00 | 1.47 |
| VA9 - 1 | 1111.50 | 0.00 0.17 | -2375.68 -3563.57 | 1735.27 | 52.49 -44.15 | 52.49 | 3.02 3.43 | 0.02 -0.02 | 4.79 |
| VA9 - 2 | 1111.50 | 0.00 0.24 | -3717.03 -3611.25 | 1962.28 | -24.42 12.03 | 12.03 | 3.55 3.52 | -0.01 0.01 | -0.38 |
| VA10 - 1 | 1111.50 | 0.00 0.14 | -2877.63 -2222.38 | 1242.95 | 28.84 -42.44 | 28.84 | 3.03 2.78 | 0.01 -0.01 | 0.20 |
| VA10 - 2 | 1111.50 | 0.00 0.07 | -1799.57 -1004.44 | 831.44 | -55.55 36.66 | 36.66 | 2.42 2.02 | -0.02 0.02 | -5.07 |
| VA11 - 1 | 1062.75 | 0.00 0.03 | -292.45 -809.99 | 0.00 | 4.11 4.39 | 4.39 | 0.76 1.29 | 0.00 0.00 | 2.00 |
| VA11 - 2 | 1062.75 | 0.00 0.06 | -1526.13 980.49 | 1315.31 | -6.13 2.55 | 2.55 | 2.46 0.84 | 0.00 0.00 | -1.30 |
| VA11 - 3 | 1062.75 | 0.00 0.06 | 976.75 -1495.40 | 976.75 | 2.55 9.28 | 9.28 | -1.90 2.98 | -0.01 0.01 | -1.30 |
| VA12 - 1 | 1062.75 | -0.02 0.00 | 0.00 2410.11 | 2786.88 | 0.00 2.86 | 2.86 | 2.43 0.89 | 0.00 0.00 | 0.07 |
| VA12 - 2 | 1062.75 | -0.02 0.00 | 2413.85 0.00 | 2413.85 | 2.86 0.00 | 2.86 | -1.95 2.99 | 0.00 0.00 | 0.07 |
| VA13 | 1014.00 | 0.00 0.00 | 0.00 0.00 | 467.12 | 0.00 0.00 | 0.00 | 0.98 0.98 | 0.00 0.00 | 0.06 |
| VA14 - 1 | 1062.75 | 0.00 0.06 | 0.00 3085.50 | 3085.50 | 0.00 -1.95 | 0.00 | 3.50 -2.38 | 0.00 0.00 | 1.13 |
| VA14 - 2 | 1062.75 | 0.00 0.06 | 3086.57 0.00 | 3242.36 | -1.95 0.00 | 0.00 | 0.58 2.63 | 0.00 0.00 | 1.13 |
| VA15 | 1014.00 | -0.02 0.00 | 0.00 0.00 | 467.12 | 0.00 0.00 | 0.00 | 0.98 0.98 | 0.00 0.00 | 0.45 |
| VA16 | 1014.00 | 0.00 0.01 | 0.00 0.00 | 467.12 | 0.00 0.00 | 0.00 | 0.98 0.98 | 0.00 0.00 | -0.94 |
| VA17 - 1 | 1062.75 | 0.00 0.08 | 0.00 5422.81 | 5422.81 | 0.00 3.86 | 3.86 | 5.72 -4.61 | 0.00 0.00 | -6.70 |
| VA17 - 2 | 1062.75 | 0.00 0.08 | 5421.74 0.00 | 5421.74 | -3.33 0.00 | 0.00 | -0.40 3.42 | 0.00 0.00 | 2.08 |
| VA18 | 1062.75 | 0.00 0.07 | -385.12 220.49 | 459.24 | -14.35 19.20 | 19.20 | 1.34 0.71 | -0.02 0.02 | 1.38 |
| VA19 | 1062.75 | 0.00 0.01 | 0.00 0.00 | 140.55 | 0.00 0.00 | 0.00 | 0.56 0.56 | 0.00 0.00 | -7.16 |
| VA20 | 1062.75 | -0.01 0.00 | -12.60 0.00 | 483.98 | -0.59 0.00 | 0.00 | 1.03 1.02 | 0.00 0.00 | 0.56 |
| VA21 - 1 | 1062.75 | 0.00 0.21 | -2200.05 3250.80 | 3250.80 | 33.08 -42.38 | 33.08 | 3.40 0.01 | 0.02 -0.02 | 6.39 |
| VA21 - 2 | 1062.75 | 0.00 0.22 | 3252.89 -2184.46 | 3252.89 | -38.93 -6.64 | 0.00 | -1.45 3.70 | -0.02 0.02 | -2.33 |
| VA22 | 1062.75 | 0.00 0.11 | -658.79 -1014.28 | 931.34 | -11.34 15.00 | 15.00 | 1.84 2.04 | -0.01 0.01 | 0.48 |
| VA23 | 1062.75 | 0.00 0.04 | 0.00 0.00 | 1384.92 | 0.00 0.00 | 0.00 | 1.72 1.72 | 0.00 0.00 | 6.54 |
| VA24 - 1 | 1111.50 | 0.00 0.16 | -2414.56 -3532.80 | 1730.01 | -65.74 39.18 | 39.18 | 3.04 3.42 | -0.02 0.02 | -5.09 |
| VA24 - 2 | 1111.50 | 0.00 0.24 | -3585.89 -3919.08 | 1877.61 | 4.79 21.00 | 21.00 | 3.49 3.59 | 0.00 0.00 | -0.42 |
| VA25 - 1 | 1111.50 | 0.00 0.27 | -4204.31 2314.91 | 2314.91 | 83.40 -27.23 | 83.40 | 4.47 -2.34 | 0.06 -0.06 | 3.91 |
| VA25 - 2 | 1111.50 | 0.00 0.27 | 2319.19 -3142.09 | 2334.42 | -27.23 -17.84 | 0.00 | 0.19 3.49 | 0.00 0.00 | 3.91 |
| VA25 - 3 | 1111.50 | 0.00 0.10 | -2236.66 -846.35 | 731.61 | -22.41 4.18 | 4.18 | 2.57 1.87 | -0.01 0.01 | -1.75 |

| CASO: 1.3G1+1.4G2+1.2D3 | | | | | | | | | |
|-------------------------|------------------|----------|------------|------------------|------------|------------------|------------|------------|----------------|
| Elemento | Carga (kgf/m) | Rd Nd | Mxi Mxf | MxMáx (kgf.m) | Myi Myf | MyMáx (kgf.m) | Vxi Vxf | Vyi Vyf | Mtd (kgf/m) |

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| | | (tf) | (kgf.m) | | (kgf.m) | | (tf) | (tf) | |
|----------|---------|---------------|----------------------|---------|------------------|-------|---------------|---------------|--------|
| VA1 - 1 | 1062.75 | 0.00 0.40 | -1773.27 2535.83 | 2535.83 | 1.31 -0.15 | 1.31 | 3.25 -1.18 | 0.00 0.00 | 2.39 |
| VA1 - 2 | 1062.75 | 0.00 0.41 | 2535.92 47.94 | 2535.92 | -0.15 -34.07 | 0.00 | -1.81 2.93 | 0.03 -0.03 | 1.55 |
| VA1 - 3 | 1062.75 | 0.00 0.40 | 49.12 -3357.63 | 49.12 | -34.07 6.77 | 6.77 | -5.55 6.17 | -0.07 0.07 | 1.54 |
| VA1 - 4 | 1062.75 | 0.00 0.07 | -2719.40 343.35 | 989.51 | 14.12 -11.14 | 14.12 | 2.81 1.17 | 0.01 -0.01 | 0.27 |
| VA1 - 5 | 1062.75 | 0.00 0.06 | 345.34 -2155.81 | 345.34 | -11.14 16.42 | 16.42 | -4.59 5.14 | -0.05 0.05 | -3.67 |
| VA1 - 6 | 1062.75 | -0.03 0.00 | -1594.87 -451.82 | 445.40 | 14.49 -4.41 | 14.49 | 2.08 1.38 | 0.01 -0.01 | -1.36 |
| VA2 | 1062.75 | 0.00 0.01 | 0.00 0.00 | 518.17 | 0.00 0.00 | 0.00 | 1.06 1.06 | 0.00 0.00 | -3.83 |
| VA3 - 1 | 1062.75 | 0.00 0.00 | 0.00 -2143.56 | 1527.46 | 0.00 3.70 | 3.70 | 1.80 2.79 | 0.00 0.00 | 1.04 |
| VA3 - 2 | 1062.75 | 0.00 0.00 | -2152.49 7.35 | 7.35 | 2.55 0.00 | 2.55 | 2.21 -0.56 | 0.00 0.00 | 0.00 |
| VA4 - 1 | 1111.50 | 0.00 0.19 | -1895.24 -2483.80 | 1332.72 | 45.68 -19.67 | 45.68 | 2.68 2.91 | 0.01 -0.01 | 1.15 |
| VA4 - 2 | 1111.50 | 0.00 0.21 | -2578.26 2180.24 | 2180.24 | 9.10 -10.87 | 9.10 | 3.51 -1.32 | 0.01 -0.01 | 0.52 |
| VA4 - 3 | 1111.50 | 0.00 0.21 | 2180.15 1777.73 | 2180.15 | -10.87 -4.07 | 0.00 | -1.11 1.46 | -0.02 0.02 | 0.52 |
| VA4 - 4 | 1111.50 | 0.00 0.21 | 1777.75 -321.67 | 1777.75 | -4.07 17.81 | 17.81 | -2.44 3.26 | -0.03 0.03 | 0.52 |
| VA4 - 5 | 1111.50 | 0.00 0.21 | -322.81 -4262.78 | 0.00 | 17.81 -25.35 | 17.81 | -6.76 7.38 | 0.08 -0.08 | -4.34 |
| VA4 - 6 | 1111.50 | 0.00 0.10 | -4312.57 -181.55 | 0.00 | -24.65 -10.47 | 0.00 | 4.67 -3.55 | -0.01 0.01 | 0.20 |
| VA4 - 7 | 1111.50 | 0.00 0.10 | -181.13 1940.93 | 1940.93 | -10.47 -3.09 | 0.00 | 2.57 -1.37 | -0.01 0.01 | -1.31 |
| VA4 - 8 | 1111.50 | 0.00 0.10 | 1939.98 1026.64 | 2007.96 | -3.09 20.09 | 0.00 | 0.40 1.48 | -0.01 0.01 | -1.31 |
| VA4 - 9 | 1111.50 | 0.00 0.10 | 1033.55 -3396.59 | 1033.55 | 20.09 -5.47 | 20.09 | -7.20 7.86 | 0.04 -0.04 | -1.31 |
| VA4 - 10 | 1111.50 | -0.02 0.00 | -3003.39 -253.48 | 0.00 | -6.93 3.78 | 3.78 | 3.37 -2.30 | -0.01 0.01 | 2.06 |
| VA4 - 11 | 1111.50 | -0.02 0.00 | -246.13 541.69 | 541.69 | 3.78 8.95 | 8.95 | 1.74 -1.13 | -0.01 0.01 | 2.06 |
| VA4 - 12 | 1111.50 | -0.01 0.00 | 542.28 -955.28 | 542.28 | 8.95 -9.62 | 8.95 | 0.11 1.83 | 0.01 -0.01 | 2.06 |
| VA4 - 13 | 1111.50 | 0.00 0.06 | -983.51 -461.95 | 496.39 | -4.08 -18.03 | 0.00 | 1.81 1.46 | 0.00 0.00 | -2.29 |
| VA5 - 1 | 1062.75 | 0.00 0.09 | -558.97 765.11 | 949.64 | 14.03 -0.87 | 14.03 | 1.79 0.63 | 0.01 -0.01 | 0.38 |
| VA5 - 2 | 1062.75 | 0.00 0.09 | 765.09 -2205.23 | 765.09 | -0.87 -19.66 | 0.00 | -1.61 2.98 | 0.01 -0.01 | 0.38 |
| VA5 - 3 | 1062.75 | 0.00 0.13 | -2771.20 431.17 | 431.17 | -10.94 -8.00 | 0.00 | 3.72 -2.65 | 0.00 0.00 | -0.17 |
| VA5 - 4 | 1062.75 | 0.00 0.13 | 430.76 1613.98 | 1613.98 | -8.00 2.07 | 0.00 | 1.67 -0.53 | -0.01 0.01 | -0.17 |
| VA5 - 5 | 1062.75 | 0.00 0.13 | 1614.93 -2161.34 | 1614.93 | 2.07 7.70 | 7.70 | -0.45 2.87 | 0.00 0.00 | -0.17 |
| VA5 - 6 | 1062.75 | 0.00 0.09 | -2037.65 933.73 | 933.73 | 9.98 -14.10 | 9.98 | 2.76 -1.15 | 0.02 -0.02 | -0.92 |
| VA5 - 7 | 1062.75 | 0.00 0.09 | 933.14 -213.89 | 933.14 | -19.60 -12.92 | 0.00 | 0.12 1.57 | 0.00 0.00 | -12.64 |
| VA6 - 1 | 1062.75 | 0.00 0.03 | 9.48 868.09 | 909.88 | -15.81 -16.69 | 0.00 | 1.39 0.32 | 0.00 0.00 | 2.25 |
| VA6 - 2 | 1062.75 | 0.00 0.03 | 874.63 -3489.98 | 874.63 | -16.69 36.83 | 36.83 | -2.03 3.66 | -0.03 0.03 | 2.25 |

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|----------|---------|---------------|-----------------------|---------|------------------|-------|---------------|---------------|-------|
| VA7 - 1 | 1062.75 | -0.08 0.00 | -1087.85 2160.18 | 2160.18 | -49.56 3.11 | 3.11 | 2.90 -1.23 | -0.03 0.03 | -4.47 |
| VA7 - 2 | 1062.75 | -0.08 0.00 | 2153.64 0.00 | 2153.64 | 3.11 0.00 | 3.11 | -0.48 2.19 | 0.00 0.00 | -4.47 |
| VA8 - 1 | 1184.63 | 0.00 0.69 | -5025.68 -9086.82 | 4002.73 | -5.13 -3.53 | 0.00 | 4.63 5.57 | 0.00 0.00 | -1.12 |
| VA8 - 2 | 1184.63 | 0.00 1.02 | -12053.99 -7811.88 | 6653.33 | 9.66 -2.42 | 9.66 | 6.66 5.85 | 0.00 0.00 | 0.92 |
| VA9 - 1 | 1111.50 | 0.00 0.19 | -2219.84 -3700.20 | 1756.35 | 34.89 -29.95 | 34.89 | 2.97 3.48 | 0.01 -0.01 | 4.03 |
| VA9 - 2 | 1111.50 | 0.00 0.26 | -3617.40 -3716.52 | 1959.36 | -24.22 18.57 | 18.57 | 3.52 3.55 | -0.01 0.01 | -0.32 |
| VA10 - 1 | 1111.50 | 0.00 0.15 | -2759.68 -2329.29 | 1245.69 | 24.49 -41.88 | 24.49 | 2.99 2.82 | 0.01 -0.01 | 0.57 |
| VA10 - 2 | 1111.50 | 0.00 0.07 | -1645.16 -1188.85 | 807.53 | -64.02 55.38 | 55.38 | 2.34 2.11 | -0.03 0.03 | -4.71 |
| VA11 - 1 | 1062.75 | 0.00 0.01 | -41.31 -945.58 | 100.45 | -7.32 16.47 | 16.47 | 0.56 1.49 | -0.01 0.01 | 2.25 |
| VA11 - 2 | 1062.75 | 0.00 0.03 | -1344.52 769.36 | 1208.91 | -11.71 5.45 | 5.45 | 2.33 0.97 | -0.01 0.01 | -1.58 |
| VA11 - 3 | 1062.75 | 0.00 0.03 | 765.53 -1834.73 | 765.53 | 5.45 16.53 | 16.53 | -2.03 3.10 | -0.01 0.01 | -1.58 |
| VA12 - 1 | 1062.75 | -0.03 0.00 | 0.00 2410.04 | 2786.83 | 0.00 4.03 | 4.03 | 2.43 0.89 | 0.00 0.00 | 0.09 |
| VA12 - 2 | 1062.75 | -0.03 0.00 | 2413.87 0.00 | 2413.87 | 4.03 0.00 | 4.03 | -1.95 2.99 | 0.00 0.00 | 0.09 |
| VA13 | 1014.00 | 0.00 0.01 | 0.00 0.00 | 467.12 | 0.00 0.00 | 0.00 | 0.98 0.98 | 0.00 0.00 | 0.02 |
| VA14 - 1 | 1062.75 | 0.00 0.10 | 0.00 3085.57 | 3085.57 | 0.00 -0.30 | 0.00 | 3.50 -2.38 | 0.00 0.00 | 1.18 |
| VA14 - 2 | 1062.75 | 0.00 0.10 | 3086.61 0.00 | 3242.39 | -0.30 0.00 | 0.00 | 0.58 2.63 | 0.00 0.00 | 1.18 |
| VA15 | 1014.00 | -0.01 0.00 | 0.00 0.00 | 467.12 | 0.00 0.00 | 0.00 | 0.98 0.98 | 0.00 0.00 | 0.41 |
| VA16 | 1014.00 | 0.00 0.01 | 0.00 0.00 | 467.12 | 0.00 0.00 | 0.00 | 0.98 0.98 | 0.00 0.00 | -0.95 |
| VA17 - 1 | 1062.75 | 0.00 0.06 | 0.00 5422.74 | 5422.74 | 0.00 -0.02 | 0.00 | 5.72 -4.61 | 0.00 0.00 | -6.91 |
| VA17 - 2 | 1062.75 | 0.00 0.06 | 5421.70 0.00 | 5421.70 | 1.13 0.00 | 1.13 | -0.40 3.42 | 0.00 0.00 | 2.02 |
| VA18 | 1062.75 | 0.00 0.05 | -173.48 8.78 | 417.36 | -0.82 3.48 | 3.48 | 1.12 0.93 | 0.00 0.00 | 1.44 |
| VA19 | 1062.75 | 0.00 0.00 | 0.00 0.00 | 140.55 | 0.00 0.00 | 0.00 | 0.56 0.56 | 0.00 0.00 | -7.35 |
| VA20 | 1062.75 | -0.02 0.00 | -11.73 0.00 | 484.37 | 5.50 0.00 | 5.50 | 1.03 1.02 | 0.00 0.00 | 0.59 |
| VA21 - 1 | 1062.75 | 0.00 0.21 | -2058.77 3172.07 | 3172.07 | 39.23 -46.16 | 39.23 | 3.34 0.07 | 0.03 -0.03 | 6.79 |
| VA21 - 2 | 1062.75 | 0.00 0.21 | 3174.32 -2280.91 | 3174.32 | -30.35 -18.85 | 0.00 | -1.46 3.71 | -0.01 0.01 | -2.69 |
| VA22 | 1062.75 | 0.00 0.11 | -441.33 -1274.85 | 934.26 | -7.74 10.50 | 10.50 | 1.71 2.17 | 0.00 0.00 | 0.32 |
| VA23 | 1062.75 | 0.00 0.04 | 0.00 0.00 | 1384.92 | 0.00 0.00 | 0.00 | 1.72 1.72 | 0.00 0.00 | 6.53 |
| VA24 - 1 | 1111.50 | 0.00 0.18 | -2233.59 -3689.30 | 1753.65 | -60.26 37.18 | 37.18 | 2.98 3.48 | -0.02 0.02 | -5.83 |
| VA24 - 2 | 1111.50 | 0.00 0.24 | -3451.09 -4054.06 | 1881.87 | 10.75 24.74 | 24.74 | 3.44 3.63 | 0.00 0.00 | -0.34 |
| VA25 - 1 | 1111.50 | 0.00 0.28 | -4077.24 2385.41 | 2385.41 | 98.51 -38.53 | 98.51 | 4.44 -2.31 | 0.07 -0.07 | 4.45 |
| VA25 - 2 | 1111.50 | 0.00 0.28 | 2389.88 -3300.73 | 2390.77 | -38.53 -22.21 | 0.00 | 0.12 3.56 | 0.00 0.00 | 4.45 |
| VA25 - 3 | 1111.50 | 0.00 | -2047.78 | 678.60 | -6.18 | 0.00 | 2.46 | 0.00 | -1.58 |

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|--|--|------|----------|--|--------|--|------|------|--|
| | | 0.10 | -1075.29 | | -15.39 | | 1.98 | 0.00 | |
|--|--|------|----------|--|--------|--|------|------|--|

| CASO: 1.3G1+1.4G2+1.2D4 | | | | | | | | | |
|-------------------------|------------------|------------------|-----------------------|------------------|-----------------------|------------------|--------------------|--------------------|----------------|
| Elemento | Carga (kgf/m) | Rd Nd (tf) | Mxi Mxf (kgf.m) | MxMáx (kgf.m) | Myi Myf (kgf.m) | MyMáx (kgf.m) | Vxi Vxf (tf) | Vyi Vyf (tf) | Mtd (kgf/m) |
| VA1 - 1 | 1062.75 | 0.00 0.41 | -1821.31 2531.84 | 2531.84 | -23.11 2.76 | 2.76 | 3.27 -1.20 | -0.01 0.01 | 1.32 |
| VA1 - 2 | 1062.75 | 0.00 0.41 | 2531.98 67.87 | 2531.98 | 2.76 5.57 | 0.00 | -1.79 2.90 | 0.00 0.00 | 0.48 |
| VA1 - 3 | 1062.75 | 0.00 0.41 | 69.12 -3324.42 | 69.12 | 5.57 20.60 | 20.60 | -5.53 6.15 | -0.03 0.03 | 0.49 |
| VA1 - 4 | 1062.75 | 0.00 0.07 | -2749.51 362.84 | 995.22 | 24.96 -22.68 | 24.96 | 2.82 1.16 | 0.01 -0.01 | 0.80 |
| VA1 - 5 | 1062.75 | 0.00 0.07 | 364.91 -2129.44 | 364.91 | -22.68 24.79 | 24.79 | -4.58 5.13 | -0.09 0.09 | -3.37 |
| VA1 - 6 | 1062.75 | -0.02 0.00 | -1643.48 -383.64 | 469.79 | 18.93 -8.70 | 18.93 | 2.12 1.35 | 0.01 -0.01 | -0.39 |
| VA2 | 1062.75 | 0.00 0.00 | 0.00 0.00 | 518.17 | 0.00 0.00 | 0.00 | 1.06 1.06 | 0.00 0.00 | -3.53 |
| VA3 - 1 | 1062.75 | 0.00 0.00 | 0.00 -2143.55 | 1527.47 | 0.00 -0.40 | 0.00 | 1.80 2.79 | 0.00 0.00 | 1.05 |
| VA3 - 2 | 1062.75 | 0.00 0.00 | -2152.55 7.28 | 7.28 | 12.61 0.00 | 12.61 | 2.21 -0.56 | 0.01 -0.01 | 0.00 |
| VA4 - 1 | 1111.50 | 0.00 0.21 | -1883.85 -2492.14 | 1334.64 | 54.43 -15.02 | 54.43 | 2.67 2.92 | 0.01 -0.01 | 1.35 |
| VA4 - 2 | 1111.50 | 0.00 0.25 | -2584.66 2183.87 | 2183.87 | -24.77 -0.02 | 0.00 | 3.52 -1.33 | -0.01 0.01 | -2.36 |
| VA4 - 3 | 1111.50 | 0.00 0.25 | 2183.72 1782.87 | 2183.72 | -0.02 7.31 | 0.00 | -1.11 1.45 | -0.02 0.02 | -2.36 |
| VA4 - 4 | 1111.50 | 0.00 0.25 | 1782.88 -312.84 | 1782.88 | 7.31 22.77 | 22.77 | -2.43 3.25 | -0.02 0.02 | -2.36 |
| VA4 - 5 | 1111.50 | 0.00 0.25 | -314.02 -4251.19 | 0.00 | 22.77 19.25 | 22.77 | -6.75 7.37 | 0.01 -0.01 | -7.09 |
| VA4 - 6 | 1111.50 | 0.00 0.13 | -4298.46 -173.40 | 0.00 | -0.19 12.93 | 12.93 | 4.66 -3.54 | -0.01 0.01 | 2.28 |
| VA4 - 7 | 1111.50 | 0.00 0.13 | -172.98 1942.71 | 1942.71 | 12.93 -0.14 | 12.93 | 2.56 -1.37 | 0.01 -0.01 | 0.83 |
| VA4 - 8 | 1111.50 | 0.00 0.13 | 1941.79 1018.45 | 2007.27 | -0.14 12.62 | 0.00 | 0.39 1.48 | -0.01 0.01 | 0.83 |
| VA4 - 9 | 1111.50 | 0.00 0.14 | 1025.36 -3408.26 | 1025.36 | 12.62 -39.70 | 12.62 | -7.21 7.86 | 0.09 -0.09 | 0.83 |
| VA4 - 10 | 1111.50 | 0.00 0.00 | -3027.72 -263.96 | 0.00 | -12.09 1.42 | 1.42 | 3.39 -2.31 | -0.01 0.01 | 1.89 |
| VA4 - 11 | 1111.50 | 0.00 0.00 | -256.68 538.99 | 538.99 | 1.42 4.62 | 4.62 | 1.75 -1.14 | -0.01 0.01 | 1.89 |
| VA4 - 12 | 1111.50 | -0.01 0.00 | 539.50 -932.06 | 539.58 | 4.62 -8.46 | 4.62 | 0.12 1.81 | 0.01 -0.01 | 1.89 |
| VA4 - 13 | 1111.50 | 0.00 0.07 | -972.88 -461.51 | 501.20 | -0.30 -2.37 | 0.00 | 1.81 1.46 | 0.00 0.00 | -2.22 |
| VA5 - 1 | 1062.75 | 0.00 0.06 | -553.56 758.24 | 946.12 | -10.17 3.14 | 3.14 | 1.79 0.63 | -0.01 0.01 | -1.64 |
| VA5 - 2 | 1062.75 | 0.00 0.06 | 758.24 -2219.07 | 758.24 | 3.14 13.85 | 13.85 | -1.61 2.99 | -0.01 0.01 | -1.64 |
| VA5 - 3 | 1062.75 | 0.00 0.10 | -2768.67 433.13 | 433.13 | 19.33 2.66 | 19.33 | 3.72 -2.65 | 0.02 -0.02 | 1.59 |
| VA5 - 4 | 1062.75 | 0.00 0.10 | 432.70 1615.31 | 1615.31 | 2.66 10.72 | 0.00 | 1.67 -0.53 | -0.01 0.01 | 1.59 |
| VA5 - 5 | 1062.75 | 0.00 0.10 | 1616.23 -2161.32 | 1616.23 | 10.72 -17.08 | 10.72 | -0.45 2.87 | 0.01 -0.01 | 1.59 |
| VA5 - 6 | 1062.75 | 0.00 0.09 | -2017.03 936.13 | 936.13 | 14.56 -16.89 | 14.56 | 2.75 -1.14 | 0.02 -0.02 | -0.34 |

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| VA5 - 7 | 1062.75 | 0.00 0.10 | 935.63 -231.43 | 935.63 | -8.96 -20.58 | 0.00 | 0.10 1.58 | 0.01 -0.01 | -13.36 |
| VA6 - 1 | 1062.75 | 0.00 0.03 | 9.68 834.82 | 884.17 | -4.04 -14.02 | 0.00 | 1.37 0.34 | 0.01 -0.01 | 1.83 |
| VA6 - 2 | 1062.75 | 0.00 0.03 | 841.33 -3555.33 | 841.33 | -14.02 28.57 | 28.57 | -2.05 3.68 | -0.03 0.03 | 1.83 |
| VA7 - 1 | 1062.75 | -0.08 0.00 | -1046.76 2180.95 | 2180.95 | -43.60 4.97 | 4.97 | 2.89 -1.22 | -0.03 0.03 | -3.95 |
| VA7 - 2 | 1062.75 | -0.08 0.00 | 2174.44 0.00 | 2174.44 | 4.97 0.00 | 4.97 | -0.50 2.21 | 0.00 0.00 | -3.95 |
| VA8 - 1 | 1184.63 | 0.00 0.67 | -5041.44 -9066.51 | 4003.75 | -6.75 4.46 | 4.46 | 4.63 5.57 | 0.00 0.00 | -2.51 |
| VA8 - 2 | 1184.63 | 0.00 1.01 | -12043.82 -7815.16 | 6656.25 | 20.57 -5.69 | 20.57 | 6.66 5.86 | 0.00 0.00 | 2.01 |
| VA9 - 1 | 1111.50 | 0.00 0.16 | -2513.10 -3444.95 | 1721.45 | 57.80 -45.95 | 57.80 | 3.07 3.39 | 0.02 -0.02 | 4.00 |
| VA9 - 2 | 1111.50 | 0.00 0.23 | -3819.12 -3511.36 | 1964.44 | -15.22 7.59 | 7.59 | 3.59 3.49 | 0.00 0.00 | -0.40 |
| VA10 - 1 | 1111.50 | 0.00 0.13 | -2993.81 -2117.84 | 1245.61 | 35.43 -44.62 | 35.43 | 3.07 2.73 | 0.02 -0.02 | 0.60 |
| VA10 - 2 | 1111.50 | 0.00 0.07 | -1950.70 -823.05 | 865.51 | -44.78 12.78 | 12.78 | 2.50 1.94 | -0.01 0.01 | -4.58 |
| VA11 - 1 | 1062.75 | 0.00 0.05 | -521.12 -681.17 | 0.00 | 13.06 -4.82 | 13.06 | 0.94 1.11 | 0.01 -0.01 | 2.22 |
| VA11 - 2 | 1062.75 | 0.00 0.08 | -1684.15 1168.88 | 1419.12 | 1.61 -1.02 | 1.61 | 2.57 0.73 | 0.00 0.00 | -1.47 |
| VA11 - 3 | 1062.75 | 0.00 0.08 | 1165.36 -1193.79 | 1165.36 | -1.02 0.55 | 0.55 | -1.79 2.87 | 0.00 0.00 | -1.47 |
| VA12 - 1 | 1062.75 | -0.01 0.00 | 0.00 2410.27 | 2786.99 | 0.00 1.79 | 1.79 | 2.43 0.89 | 0.00 0.00 | 0.15 |
| VA12 - 2 | 1062.75 | -0.01 0.00 | 2413.80 0.00 | 2413.80 | 1.79 0.00 | 1.79 | -1.95 2.99 | 0.00 0.00 | 0.15 |
| VA13 | 1014.00 | 0.00 0.00 | 0.00 0.00 | 467.12 | 0.00 0.00 | 0.00 | 0.98 0.98 | 0.00 0.00 | 0.00 |
| VA14 - 1 | 1062.75 | 0.00 0.02 | 0.00 3085.57 | 3085.57 | 0.00 -3.26 | 0.00 | 3.50 -2.38 | 0.00 0.00 | 1.25 |
| VA14 - 2 | 1062.75 | 0.00 0.02 | 3086.62 0.00 | 3242.40 | -3.26 0.00 | 0.00 | 0.58 2.63 | 0.00 0.00 | 1.25 |
| VA15 | 1014.00 | -0.02 0.00 | 0.00 0.00 | 467.12 | 0.00 0.00 | 0.00 | 0.98 0.98 | 0.00 0.00 | 0.43 |
| VA16 | 1014.00 | 0.00 0.02 | 0.00 0.00 | 467.12 | 0.00 0.00 | 0.00 | 0.98 0.98 | 0.00 0.00 | -0.92 |
| VA17 - 1 | 1062.75 | 0.00 0.10 | 0.00 5422.74 | 5422.74 | 0.00 6.72 | 6.72 | 5.72 -4.61 | -0.01 0.01 | -6.91 |
| VA17 - 2 | 1062.75 | 0.00 0.10 | 5421.69 0.00 | 5421.69 | -6.29 0.00 | 0.00 | -0.40 3.42 | 0.00 0.00 | 2.09 |
| VA18 | 1062.75 | 0.00 0.08 | -605.59 442.39 | 552.21 | -27.65 34.64 | 34.64 | 1.57 0.48 | -0.03 0.03 | 1.45 |
| VA19 | 1062.75 | 0.00 0.01 | 0.00 0.00 | 140.55 | 0.00 0.00 | 0.00 | 0.56 0.56 | 0.00 0.00 | -7.28 |
| VA20 | 1062.75 | -0.01 0.00 | -13.02 0.00 | 483.79 | -7.93 0.00 | 0.00 | 1.03 1.02 | 0.00 0.00 | 0.51 |
| VA21 - 1 | 1062.75 | 0.00 0.21 | -2295.58 3204.10 | 3204.10 | 29.50 -38.58 | 29.50 | 3.42 -0.01 | 0.02 -0.02 | 6.91 |
| VA21 - 2 | 1062.75 | 0.00 0.21 | 3205.92 -2028.30 | 3205.92 | -34.55 -5.72 | 0.00 | -1.36 3.60 | -0.01 0.01 | -2.78 |
| VA22 | 1062.75 | 0.00 0.11 | -903.38 -727.23 | 952.57 | -14.26 18.25 | 18.25 | 1.99 1.89 | -0.01 0.01 | 0.41 |
| VA23 | 1062.75 | 0.00 0.03 | 0.00 0.00 | 1384.92 | 0.00 0.00 | 0.00 | 1.72 1.72 | 0.00 0.00 | 6.51 |
| VA24 - 1 | 1111.50 | 0.00 0.14 | -2602.10 -3367.92 | 1712.60 | -79.53 49.22 | 49.22 | 3.10 3.36 | -0.02 0.02 | -5.87 |
| VA24 - 2 | 1111.50 | 0.00 | -3706.09 | 1874.77 | 4.49 | 31.63 | 3.52 | 0.00 | -0.44 |

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|----------|---------|--------------|---------------------|---------|------------------|-------|---------------|---------------|-------|
| | | 0.22 | -3796.73 | | 31.63 | | 3.55 | 0.00 | |
| VA25 - 1 | 1111.50 | 0.00 0.26 | -4380.75 2307.16 | 2307.16 | 91.97 -41.26 | 91.97 | 4.56 -2.43 | 0.07 -0.07 | 4.51 |
| VA25 - 2 | 1111.50 | 0.00 0.26 | 2311.11 -3032.83 | 2333.67 | -41.26 -10.09 | 0.00 | 0.22 3.45 | -0.01 0.01 | 4.51 |
| VA25 - 3 | 1111.50 | 0.00 0.09 | -2439.30 -615.93 | 779.69 | -30.94 21.14 | 21.14 | 2.68 1.76 | -0.01 0.01 | -1.44 |

| CASO: 1.3G1+1.4G2+1.4Q | | | | | | | | | |
|------------------------|------------------|------------------|-----------------------|------------------|-----------------------|------------------|--------------------|--------------------|----------------|
| Elemento | Carga (kgf/m) | Rd Nd (tf) | Mxi Mxf (kgf.m) | MxMáx (kgf.m) | Myi Myf (kgf.m) | MyMáx (kgf.m) | Vxi Vxf (tf) | Vyi Vyf (tf) | Mtd (kgf/m) |
| VA1 - 1 | 1062.75 | 0.00 0.39 | -1971.23 2612.61 | 2612.61 | -76.96 4.87 | 4.87 | 3.39 -1.32 | -0.04 0.04 | -2.00 |
| VA1 - 2 | 1062.75 | 0.00 0.39 | 2612.57 272.88 | 2612.57 | 4.87 -102.24 | 0.00 | -1.67 2.78 | 0.10 -0.10 | -2.87 |
| VA1 - 3 | 1062.75 | 0.00 0.37 | 274.16 -3050.60 | 274.16 | -102.24 178.21 | 178.21 | -5.41 6.03 | -0.48 0.48 | -2.66 |
| VA1 - 4 | 1062.75 | -0.43 0.00 | -2906.95 413.83 | 988.32 | 151.99 -114.88 | 151.99 | 2.88 1.11 | 0.07 -0.07 | 0.64 |
| VA1 - 5 | 1062.75 | -0.47 0.00 | 416.01 -2049.72 | 416.01 | -114.88 151.36 | 151.36 | -4.52 5.07 | -0.52 0.52 | -4.11 |
| VA1 - 6 | 1062.75 | -0.43 0.00 | -1348.29 -807.46 | 348.09 | 119.58 -62.00 | 119.58 | 1.90 1.57 | 0.06 -0.06 | 1.82 |
| VA2 | 1062.75 | 0.00 0.00 | 0.00 0.00 | 518.17 | 0.00 0.00 | 0.00 | 1.06 1.06 | 0.00 0.00 | -4.18 |
| VA3 - 1 | 1062.75 | 0.00 0.01 | 0.00 -2142.13 | 1528.01 | 0.00 21.30 | 21.30 | 1.80 2.79 | 0.00 0.00 | 0.92 |
| VA3 - 2 | 1062.75 | 0.00 0.00 | -2151.28 8.56 | 8.56 | 71.17 0.00 | 71.17 | 2.21 -0.56 | 0.05 -0.05 | 0.00 |
| VA4 - 1 | 1111.50 | 0.00 0.16 | -2050.00 -2391.88 | 1296.36 | 79.36 -49.86 | 79.36 | 2.73 2.86 | 0.03 -0.03 | 1.04 |
| VA4 - 2 | 1111.50 | 0.00 0.28 | -2527.72 2232.77 | 2232.77 | -86.03 -42.04 | 0.00 | 3.51 -1.32 | -0.02 0.02 | -1.72 |
| VA4 - 3 | 1111.50 | 0.00 0.28 | 2232.81 1830.73 | 2232.81 | -42.04 10.09 | 0.00 | -1.11 1.46 | -0.17 0.17 | -1.72 |
| VA4 - 4 | 1111.50 | 0.00 0.28 | 1830.84 -267.76 | 1830.84 | 10.09 189.27 | 189.27 | -2.44 3.26 | -0.24 0.24 | -1.72 |
| VA4 - 5 | 1111.50 | 0.00 0.26 | -268.99 -4208.49 | 0.00 | 189.27 -6.58 | 189.27 | -6.75 7.37 | 0.35 -0.35 | -5.77 |
| VA4 - 6 | 1111.50 | -0.04 0.00 | -4591.66 -330.76 | 0.00 | -47.16 -2.59 | 0.00 | 4.80 -3.68 | -0.04 0.04 | 3.53 |
| VA4 - 7 | 1111.50 | -0.04 0.00 | -330.55 1930.47 | 1930.47 | -2.59 -1.00 | 0.00 | 2.70 -1.50 | 0.00 0.00 | 0.76 |
| VA4 - 8 | 1111.50 | -0.04 0.00 | 1929.20 1233.68 | 2051.63 | -1.00 126.39 | 0.00 | 0.52 1.35 | -0.08 0.08 | 0.76 |
| VA4 - 9 | 1111.50 | -0.01 0.00 | 1240.63 -3113.34 | 1240.63 | 126.39 -149.57 | 126.39 | -7.07 7.73 | 0.47 -0.47 | 0.76 |
| VA4 - 10 | 1111.50 | -0.19 0.00 | -2687.99 -116.28 | 0.00 | -41.21 11.64 | 11.64 | 3.19 -2.11 | -0.05 0.05 | 1.65 |
| VA4 - 11 | 1111.50 | -0.19 0.00 | -107.72 579.04 | 579.04 | 11.64 16.48 | 16.48 | 1.55 -0.94 | -0.01 0.01 | 1.65 |
| VA4 - 12 | 1111.50 | -0.21 0.00 | 580.17 -1235.61 | 580.17 | 16.48 -64.75 | 16.48 | -0.08 2.01 | 0.05 -0.05 | 1.65 |
| VA4 - 13 | 1111.50 | 0.00 0.05 | -963.81 -506.81 | 479.20 | -13.17 -22.71 | 0.00 | 1.79 1.48 | 0.00 0.00 | -2.46 |
| VA5 - 1 | 1062.75 | 0.00 0.00 | -563.80 763.09 | 946.85 | -70.70 38.63 | 38.63 | 1.79 0.63 | -0.05 0.05 | -2.05 |
| VA5 - 2 | 1062.75 | 0.00 0.00 | 762.98 -2205.74 | 762.98 | 38.63 1.67 | 38.63 | -1.61 2.98 | 0.03 -0.03 | -2.05 |
| VA5 - 3 | 1062.75 | 0.00 0.04 | -2740.37 450.91 | 450.91 | 0.24 0.93 | 0.93 | 3.71 -2.64 | 0.00 0.00 | 1.57 |


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|----------|---------|---------------|-----------------------|---------|------------------|--------|---------------|---------------|--------|
| VA5 - 4 | 1062.75 | 0.00 0.04 | 450.67 1622.03 | 1622.03 | 0.93 48.09 | 0.00 | 1.66 -0.52 | -0.04 0.04 | 1.57 |
| VA5 - 5 | 1062.75 | 0.00 0.04 | 1623.30 -2178.06 | 1623.30 | 48.09 -20.68 | 48.09 | -0.46 2.88 | 0.03 -0.03 | 1.57 |
| VA5 - 6 | 1062.75 | 0.00 0.09 | -2007.51 933.86 | 933.86 | 70.70 -54.48 | 70.70 | 2.74 -1.13 | 0.08 -0.08 | -0.49 |
| VA5 - 7 | 1062.75 | 0.00 0.11 | 932.73 -246.86 | 932.73 | -9.56 -52.06 | 0.00 | 0.09 1.59 | 0.03 -0.03 | -13.83 |
| VA6 - 1 | 1062.75 | 0.00 0.05 | 9.59 851.05 | 896.32 | -2.73 -14.80 | 0.00 | 1.38 0.33 | 0.01 -0.01 | 2.11 |
| VA6 - 2 | 1062.75 | 0.00 0.05 | 857.58 -3523.44 | 857.58 | -14.80 33.40 | 33.40 | -2.04 3.67 | -0.03 0.03 | 2.11 |
| VA7 - 1 | 1062.75 | -0.08 0.00 | -1071.70 2168.35 | 2168.35 | -47.66 6.86 | 6.86 | 2.90 -1.23 | -0.03 0.03 | -4.29 |
| VA7 - 2 | 1062.75 | -0.08 0.00 | 2161.82 0.00 | 2161.82 | 6.86 0.00 | 6.86 | -0.49 2.20 | 0.00 0.00 | -4.29 |
| VA8 - 1 | 1184.63 | 0.00 0.68 | -5031.74 -9077.72 | 4003.72 | -6.21 1.48 | 1.48 | 4.63 5.57 | 0.00 0.00 | -1.86 |
| VA8 - 2 | 1184.63 | 0.00 1.01 | -12046.92 -7815.10 | 6654.85 | 15.15 -3.73 | 15.15 | 6.66 5.86 | 0.00 0.00 | 1.56 |
| VA9 - 1 | 1111.50 | 0.00 0.17 | -2387.06 -3554.59 | 1733.72 | 47.31 -38.53 | 47.31 | 3.03 3.43 | 0.01 -0.01 | 4.02 |
| VA9 - 2 | 1111.50 | 0.00 0.24 | -3732.78 -3598.98 | 1961.00 | -19.33 12.39 | 12.39 | 3.56 3.52 | 0.00 0.00 | -0.36 |
| VA10 - 1 | 1111.50 | 0.00 0.14 | -2892.97 -2209.80 | 1242.64 | 30.02 -42.24 | 30.02 | 3.03 2.77 | 0.01 -0.01 | 0.58 |
| VA10 - 2 | 1111.50 | 0.00 0.07 | -1821.64 -977.39 | 835.22 | -54.51 36.02 | 36.02 | 2.43 2.01 | -0.02 0.02 | -4.58 |
| VA11 - 1 | 1062.75 | -0.10 0.00 | -229.00 -238.59 | 256.32 | 70.42 -43.50 | 70.42 | 1.02 1.03 | 0.06 -0.06 | 2.13 |
| VA11 - 2 | 1062.75 | -0.70 0.00 | -1168.15 405.11 | 1020.75 | -0.70 -4.13 | 0.00 | 2.16 1.14 | 0.00 0.00 | -1.54 |
| VA11 - 3 | 1062.75 | -0.70 0.00 | 400.93 -2375.69 | 400.93 | -4.13 -6.55 | 0.00 | -2.20 3.28 | 0.00 0.00 | -1.54 |
| VA12 - 1 | 1062.75 | -0.14 0.00 | 0.00 2409.78 | 2786.63 | 0.00 -0.96 | 0.00 | 2.43 0.90 | 0.00 0.00 | -0.03 |
| VA12 - 2 | 1062.75 | -0.14 0.00 | 2413.96 0.00 | 2413.96 | -0.96 0.00 | 0.00 | -1.95 2.99 | 0.00 0.00 | -0.03 |
| VA13 | 1014.00 | 0.00 0.08 | 0.00 0.00 | 467.12 | 0.00 0.00 | 0.00 | 0.98 0.98 | 0.00 0.00 | 0.11 |
| VA14 - 1 | 1062.75 | 0.00 0.59 | 0.00 3085.86 | 3085.86 | 0.00 -11.08 | 0.00 | 3.50 -2.38 | 0.01 -0.01 | 1.28 |
| VA14 - 2 | 1062.75 | 0.00 0.59 | 3086.77 0.00 | 3242.53 | -11.08 0.00 | 0.00 | 0.58 2.63 | 0.00 0.00 | 1.28 |
| VA15 | 1014.00 | -0.04 0.00 | 0.00 0.00 | 467.12 | 0.00 0.00 | 0.00 | 0.98 0.98 | 0.00 0.00 | 0.24 |
| VA16 | 1014.00 | 0.00 0.07 | 0.00 0.00 | 467.12 | 0.00 0.00 | 0.00 | 0.98 0.98 | 0.00 0.00 | -1.27 |
| VA17 - 1 | 1062.75 | 0.00 0.54 | 0.00 5422.45 | 5422.45 | 0.00 24.37 | 24.37 | 5.72 -4.61 | -0.02 0.02 | -6.95 |
| VA17 - 2 | 1062.75 | 0.00 0.60 | 5421.53 0.00 | 5421.53 | -25.50 0.00 | 0.00 | -0.40 3.42 | -0.01 0.01 | 2.20 |
| VA18 | 1062.75 | 0.00 0.27 | -782.31 557.20 | 604.20 | -82.90 116.70 | 116.70 | 1.72 0.33 | -0.10 0.10 | 1.58 |
| VA19 | 1062.75 | 0.00 0.05 | 0.00 0.00 | 140.55 | 0.00 0.00 | 0.00 | 0.56 0.56 | 0.00 0.00 | -8.56 |
| VA20 | 1062.75 | -0.06 0.00 | -13.34 0.00 | 483.65 | -44.91 0.00 | 0.00 | 1.03 1.02 | -0.02 0.02 | 1.13 |
| VA21 - 1 | 1062.75 | 0.00 0.22 | -2143.32 3180.57 | 3180.57 | 35.83 -46.21 | 35.83 | 3.36 0.05 | 0.03 -0.03 | 6.85 |
| VA21 - 2 | 1062.75 | 0.00 0.22 | 3182.68 -2188.72 | 3182.68 | -43.47 13.31 | 13.31 | -1.42 3.67 | -0.03 0.03 | -2.74 |
| VA22 | 1062.75 | 0.00 | -476.53 | 965.59 | -58.74 | 84.40 | 1.75 | -0.04 | -0.06 |

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| | | 0.17 | -1160.35 | | 84.40 | | 2.13 | 0.04 | |
| VA23 | 1062.75 | 0.00 0.04 | 0.00 0.00 | 1384.92 | 0.00 0.00 | 0.00 | 1.72 1.72 | 0.00 0.00 | 6.53 |
| VA24 - 1 | 1111.50 | 0.00 0.17 | -2332.60 -3604.02 | 1738.02 | -72.27 45.07 | 45.07 | 3.01 3.45 | -0.02 0.02 | -5.85 |
| VA24 - 2 | 1111.50 | 0.00 0.23 | -3517.83 -3986.76 | 1879.99 | 6.17 29.82 | 29.82 | 3.46 3.61 | 0.00 0.00 | -0.39 |
| VA25 - 1 | 1111.50 | 0.00 0.27 | -4158.68 2366.30 | 2366.30 | 93.42 -41.59 | 93.42 | 4.47 -2.35 | 0.07 -0.07 | 4.48 |
| VA25 - 2 | 1111.50 | 0.00 0.27 | 2370.59 -3229.07 | 2377.16 | -41.59 -11.26 | 0.00 | 0.15 3.53 | -0.01 0.01 | 4.48 |
| VA25 - 3 | 1111.50 | 0.00 0.10 | -2138.86 -970.37 | 700.99 | -7.89 -20.68 | 0.00 | 2.51 1.93 | 0.00 0.00 | -1.41 |

| CASO: 1.3G1+1.4G2+1.4Q+0.84V1+0.84D1 | | | | | | | | | |
|--------------------------------------|------------------|------------------|-----------------------|------------------|-----------------------|------------------|--------------------|--------------------|----------------|
| Elemento | Carga (kgf/m) | Rd Nd (tf) | Mxi Mxf (kgf.m) | MxMáx (kgf.m) | Myi Myf (kgf.m) | MyMáx (kgf.m) | Vxi Vxf (tf) | Vyi Vyf (tf) | Mtd (kgf/m) |
| VA1 - 1 | 1062.75 | 0.00 0.42 | -1304.36 2613.98 | 2613.98 | -79.48 4.88 | 4.88 | 3.05 -0.98 | -0.04 0.04 | -1.92 |
| VA1 - 2 | 1062.75 | 0.00 0.43 | 2614.12 -84.93 | 2614.12 | 4.88 -101.34 | 4.88 | -2.01 3.13 | 0.10 -0.10 | -2.80 |
| VA1 - 3 | 1062.75 | 0.00 0.40 | -83.32 -3606.88 | 0.00 | -101.34 176.86 | 176.86 | -5.75 6.37 | -0.48 0.48 | -2.94 |
| VA1 - 4 | 1062.75 | -0.42 0.00 | -2528.33 132.65 | 903.79 | 151.30 -113.55 | 151.30 | 2.70 1.28 | 0.07 -0.07 | 0.24 |
| VA1 - 5 | 1062.75 | -0.46 0.00 | 134.76 -2421.45 | 134.76 | -113.55 149.32 | 149.32 | -4.70 5.25 | -0.51 0.51 | -1.36 |
| VA1 - 6 | 1062.75 | -0.45 0.00 | -768.91 -1501.83 | 302.60 | 119.03 -60.81 | 119.03 | 1.51 1.96 | 0.06 -0.06 | 1.89 |
| VA2 | 1062.75 | 0.00 0.00 | 0.00 0.00 | 518.17 | 0.00 0.00 | 0.00 | 1.06 1.06 | 0.00 0.00 | -3.91 |
| VA3 - 1 | 1062.75 | 0.00 0.01 | 0.00 -2140.77 | 1528.53 | 0.00 22.12 | 22.12 | 1.80 2.79 | -0.01 0.01 | 0.83 |
| VA3 - 2 | 1062.75 | 0.00 0.00 | -2150.65 9.18 | 9.18 | 68.73 0.00 | 68.73 | 2.21 -0.56 | 0.04 -0.04 | 0.00 |
| VA4 - 1 | 1111.50 | 0.00 0.33 | -1136.89 -2741.68 | 1622.47 | 59.29 -39.40 | 59.29 | 2.48 3.11 | 0.02 -0.02 | 1.02 |
| VA4 - 2 | 1111.50 | 0.00 0.40 | -2273.45 1905.25 | 1905.25 | -85.86 -42.81 | 0.00 | 3.22 -1.03 | -0.02 0.02 | -0.29 |
| VA4 - 3 | 1111.50 | 0.00 0.39 | 1905.11 1410.54 | 1905.11 | -42.81 9.31 | 0.00 | -1.41 1.75 | -0.17 0.17 | -0.29 |
| VA4 - 4 | 1111.50 | 0.00 0.39 | 1410.42 -905.97 | 1410.42 | 9.31 188.83 | 188.83 | -2.73 3.55 | -0.24 0.24 | -0.29 |
| VA4 - 5 | 1111.50 | 0.00 0.38 | -907.47 -5011.92 | 0.00 | 188.83 -5.23 | 188.83 | -7.05 7.67 | 0.35 -0.35 | -13.96 |
| VA4 - 6 | 1111.50 | 0.00 0.08 | -3855.01 155.05 | 155.05 | -47.25 -2.77 | 0.00 | 4.55 -3.43 | -0.04 0.04 | 0.44 |
| VA4 - 7 | 1111.50 | 0.00 0.08 | 155.17 2147.82 | 2147.82 | -2.77 0.11 | 0.00 | 2.45 -1.25 | 0.00 0.00 | 1.73 |
| VA4 - 8 | 1111.50 | 0.00 0.08 | 2146.51 1030.29 | 2179.83 | 0.11 126.17 | 0.00 | 0.28 1.60 | -0.07 0.07 | 1.73 |
| VA4 - 9 | 1111.50 | 0.00 0.10 | 1038.06 -3462.56 | 1038.06 | 126.17 -146.79 | 126.17 | -7.32 7.98 | 0.46 -0.46 | 1.73 |
| VA4 - 10 | 1111.50 | -0.09 0.00 | -2482.90 -103.36 | 0.00 | -49.10 12.93 | 12.93 | 2.99 -1.91 | -0.06 0.06 | 1.67 |
| VA4 - 11 | 1111.50 | -0.09 0.00 | -94.17 483.63 | 483.63 | 12.93 23.85 | 23.85 | 1.36 -0.74 | -0.02 0.02 | 1.67 |
| VA4 - 12 | 1111.50 | -0.11 0.00 | 484.66 -1676.73 | 484.66 | 23.85 -70.67 | 23.85 | -0.28 2.21 | 0.05 -0.05 | 1.67 |
| VA4 - 13 | 1111.50 | 0.00 0.02 | 80.06 -1914.34 | 495.13 | -23.13 1.05 | 1.05 | 0.96 2.31 | -0.01 0.01 | -2.41 |


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| VA5 - 1 | 1062.75 | 0.00 0.00 | -76.21 567.65 | 970.09 | -77.93 39.14 | 39.14 | 1.49 0.93 | -0.05 0.05 | -2.12 |
| VA5 - 2 | 1062.75 | 0.00 0.00 | 567.77 -2789.58 | 567.77 | 39.14 5.98 | 39.14 | -1.91 3.28 | 0.03 -0.03 | -2.12 |
| VA5 - 3 | 1062.75 | 0.00 0.02 | -2322.80 710.20 | 710.20 | -2.05 0.72 | 0.72 | 3.55 -2.48 | 0.00 0.00 | 1.61 |
| VA5 - 4 | 1062.75 | 0.00 0.02 | 710.07 1712.08 | 1712.08 | 0.72 47.66 | 0.00 | 1.50 -0.36 | -0.04 0.04 | 1.61 |
| VA5 - 5 | 1062.75 | 0.00 0.02 | 1713.38 -2446.13 | 1713.38 | 47.66 -17.05 | 47.66 | -0.62 3.04 | 0.03 -0.03 | 1.61 |
| VA5 - 6 | 1062.75 | 0.00 0.05 | -1702.27 866.43 | 866.43 | 60.87 -49.93 | 60.87 | 2.50 -0.88 | 0.07 -0.07 | -0.49 |
| VA5 - 7 | 1062.75 | 0.00 0.07 | 865.39 -701.23 | 865.39 | -14.68 -12.68 | 0.00 | -0.15 1.83 | 0.00 0.00 | -12.84 |
| VA6 - 1 | 1062.75 | 0.00 0.02 | 13.68 324.42 | 527.44 | -36.41 -21.61 | 0.00 | 1.05 0.66 | -0.01 0.01 | 1.90 |
| VA6 - 2 | 1062.75 | 0.00 0.02 | 330.87 -4558.31 | 330.87 | -21.61 55.45 | 55.45 | -2.37 4.00 | -0.05 0.05 | 1.90 |
| VA7 - 1 | 1062.75 | -0.17 0.00 | -354.83 2530.93 | 2530.93 | -62.33 1.07 | 1.07 | 2.67 -1.00 | -0.04 0.04 | -3.94 |
| VA7 - 2 | 1062.75 | -0.17 0.00 | 2524.49 0.00 | 2524.49 | 1.07 0.00 | 1.07 | -0.71 2.42 | 0.00 0.00 | -3.94 |
| VA8 - 1 | 1184.63 | 0.00 0.70 | -4191.46 -9774.69 | 4163.91 | 19.47 -4.12 | 19.47 | 4.45 5.75 | 0.00 0.00 | -1.87 |
| VA8 - 2 | 1184.63 | 0.00 0.97 | -11451.86 -8551.77 | 6550.37 | 21.39 -26.72 | 21.39 | 6.53 5.98 | 0.00 0.00 | 1.64 |
| VA9 - 1 | 1111.50 | 0.00 0.18 | -2369.11 -3574.24 | 1733.51 | 21.59 -12.22 | 21.59 | 3.02 3.44 | 0.01 -0.01 | 0.47 |
| VA9 - 2 | 1111.50 | 0.00 0.26 | -3753.96 -3595.15 | 1952.72 | 1.63 17.05 | 17.05 | 3.56 3.51 | 0.00 0.00 | -0.42 |
| VA10 - 1 | 1111.50 | 0.00 0.15 | -2909.17 -2200.07 | 1240.40 | 36.11 -40.52 | 36.11 | 3.04 2.77 | 0.01 -0.01 | 2.42 |
| VA10 - 2 | 1111.50 | 0.00 0.08 | -1842.40 -949.24 | 840.20 | -44.93 13.09 | 13.09 | 2.44 2.00 | -0.01 0.01 | -2.27 |
| VA11 - 1 | 1062.75 | -0.11 0.00 | -240.18 -220.30 | 260.45 | 71.49 -49.81 | 71.49 | 1.04 1.02 | 0.06 -0.06 | 3.16 |
| VA11 - 2 | 1062.75 | -0.70 0.00 | -1161.29 407.20 | 1024.43 | 1.81 -4.93 | 1.81 | 2.16 1.15 | 0.00 0.00 | -2.35 |
| VA11 - 3 | 1062.75 | -0.70 0.00 | 403.29 -2374.88 | 403.29 | -4.93 -8.07 | 0.00 | -2.20 3.28 | 0.00 0.00 | -2.35 |
| VA12 - 1 | 1062.75 | -0.14 0.00 | 0.00 2409.98 | 2786.78 | 0.00 -0.70 | 0.00 | 2.43 0.89 | 0.00 0.00 | 0.14 |
| VA12 - 2 | 1062.75 | -0.14 0.00 | 2413.89 0.00 | 2413.89 | -0.70 0.00 | 0.00 | -1.95 2.99 | 0.00 0.00 | 0.14 |
| VA13 | 1014.00 | 0.00 0.08 | 0.00 0.00 | 467.12 | 0.00 0.00 | 0.00 | 0.98 0.98 | 0.00 0.00 | -0.12 |
| VA14 - 1 | 1062.75 | 0.00 0.59 | 0.00 3086.12 | 3086.12 | 0.00 -10.71 | 0.00 | 3.50 -2.38 | 0.01 -0.01 | 1.60 |
| VA14 - 2 | 1062.75 | 0.00 0.58 | 3086.95 0.00 | 3242.67 | -10.71 0.00 | 0.00 | 0.58 2.63 | 0.00 0.00 | 1.60 |
| VA15 | 1014.00 | -0.04 0.00 | 0.00 0.00 | 467.12 | 0.00 0.00 | 0.00 | 0.98 0.98 | 0.00 0.00 | 0.13 |
| VA16 | 1014.00 | 0.00 0.07 | 0.00 0.00 | 467.12 | 0.00 0.00 | 0.00 | 0.98 0.98 | 0.00 0.00 | -1.30 |
| VA17 - 1 | 1062.75 | 0.00 0.54 | 0.00 5422.19 | 5422.19 | 0.00 23.13 | 23.13 | 5.72 -4.61 | -0.02 0.02 | -7.77 |
| VA17 - 2 | 1062.75 | 0.00 0.59 | 5421.36 0.00 | 5421.36 | -23.49 0.00 | 0.00 | -0.40 3.42 | -0.01 0.01 | 2.12 |
| VA18 | 1062.75 | 0.00 0.27 | -795.19 572.64 | 616.49 | -74.69 106.55 | 106.55 | 1.73 0.32 | -0.09 0.09 | 1.89 |
| VA19 | 1062.75 | 0.00 0.04 | 0.00 0.00 | 140.55 | 0.00 0.00 | 0.00 | 0.56 0.56 | 0.00 0.00 | -9.18 |
| VA20 | 1062.75 | -0.07 | -12.35 | 484.09 | -35.25 | 0.00 | 1.03 | -0.02 | 1.03 |

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|----------|---------|--------------|----------------------|---------|-------------------|--------|---------------|---------------|-------|
| | | 0.00 | 0.00 | | 0.00 | | 1.02 | 0.02 | |
| VA21 - 1 | 1062.75 | 0.00 0.18 | -2030.97 2885.78 | 2899.07 | 42.69 -46.46 | 42.69 | 3.24 0.17 | 0.03 -0.03 | 9.07 |
| VA21 - 2 | 1062.75 | 0.00 0.17 | 2887.68 -2052.10 | 2887.68 | -10.05 -20.49 | 0.00 | -1.22 3.46 | 0.00 0.00 | -4.61 |
| VA22 | 1062.75 | 0.00 0.15 | -485.50 -1158.65 | 961.37 | -57.48 83.37 | 83.37 | 1.75 2.12 | -0.04 0.04 | -0.45 |
| VA23 | 1062.75 | 0.00 0.04 | 0.00 0.00 | 1384.92 | 0.00 0.00 | 0.00 | 1.72 1.72 | 0.00 0.00 | 6.45 |
| VA24 - 1 | 1111.50 | 0.00 0.15 | -2304.17 -3623.73 | 1744.10 | -93.62 64.88 | 64.88 | 3.00 3.46 | -0.03 0.03 | -9.33 |
| VA24 - 2 | 1111.50 | 0.00 0.20 | -3453.29 -4048.54 | 1883.40 | 16.67 65.04 | 65.04 | 3.44 3.63 | -0.01 0.01 | -0.39 |
| VA25 - 1 | 1111.50 | 0.00 0.28 | -4242.02 2531.25 | 2531.25 | 156.08 -103.08 | 156.08 | 4.60 -2.48 | 0.14 -0.14 | 7.23 |
| VA25 - 2 | 1111.50 | 0.00 0.28 | 2535.19 -3381.21 | 2535.19 | -103.08 1.02 | 1.02 | 0.05 3.63 | -0.03 0.03 | 7.23 |
| VA25 - 3 | 1111.50 | 0.00 0.08 | -2121.34 -1027.78 | 675.13 | 15.25 -36.20 | 15.25 | 2.49 1.95 | 0.01 -0.01 | -0.05 |

| CASO: 1.3G1+1.4G2+1.4Q+0.84V2+0.84D2 | | | | | | | | | |
|--------------------------------------|------------------|------------------|-----------------------|------------------|-----------------------|------------------|--------------------|--------------------|----------------|
| Elemento | Carga (kgf/m) | Rd Nd (tf) | Mxi Mxf (kgf.m) | MxMáx (kgf.m) | Myi Myf (kgf.m) | MyMáx (kgf.m) | Vxi Vxf (tf) | Vyi Vyf (tf) | Mtd (kgf/m) |
| VA1 - 1 | 1062.75 | 0.00 0.36 | -2638.10 2611.23 | 2611.23 | -74.45 4.86 | 4.86 | 3.73 -1.66 | -0.04 0.04 | -2.08 |
| VA1 - 2 | 1062.75 | 0.00 0.36 | 2611.03 630.69 | 2611.03 | 4.86 -103.14 | 0.00 | -1.33 2.44 | 0.10 -0.10 | -2.94 |
| VA1 - 3 | 1062.75 | 0.00 0.33 | 631.64 -2494.32 | 631.64 | -103.14 179.57 | 179.57 | -5.07 5.69 | -0.49 0.49 | -2.37 |
| VA1 - 4 | 1062.75 | -0.44 0.00 | -3285.57 695.01 | 1100.10 | 152.68 -116.21 | 152.68 | 3.05 0.93 | 0.07 -0.07 | 1.04 |
| VA1 - 5 | 1062.75 | -0.48 0.00 | 697.26 -1677.98 | 697.26 | -116.21 153.40 | 153.40 | -4.35 4.89 | -0.52 0.52 | -6.86 |
| VA1 - 6 | 1062.75 | -0.41 0.00 | -1927.68 -113.10 | 535.23 | 120.12 -63.19 | 120.12 | 2.29 1.18 | 0.06 -0.06 | 1.76 |
| VA2 | 1062.75 | 0.00 0.00 | 0.00 0.00 | 518.17 | 0.00 0.00 | 0.00 | 1.06 1.06 | 0.00 0.00 | -4.45 |
| VA3 - 1 | 1062.75 | 0.00 0.01 | 0.00 -2143.49 | 1527.49 | 0.00 20.49 | 20.49 | 1.80 2.79 | 0.00 0.00 | 1.01 |
| VA3 - 2 | 1062.75 | 0.00 0.00 | -2151.91 7.93 | 7.93 | 73.62 0.00 | 73.62 | 2.21 -0.56 | 0.05 -0.05 | 0.00 |
| VA4 - 1 | 1111.50 | 0.00 0.00 | -2963.11 -2042.09 | 1026.28 | 99.43 -60.31 | 99.43 | 2.98 2.61 | 0.03 -0.03 | 1.05 |
| VA4 - 2 | 1111.50 | 0.00 0.16 | -2781.99 2560.30 | 2560.30 | -86.20 -41.26 | 0.00 | 3.81 -1.62 | -0.02 0.02 | -3.15 |
| VA4 - 3 | 1111.50 | 0.00 0.16 | 2560.50 2250.92 | 2560.50 | -41.26 10.87 | 0.00 | -0.82 1.16 | -0.17 0.17 | -3.15 |
| VA4 - 4 | 1111.50 | 0.00 0.16 | 2251.26 370.45 | 2251.26 | 10.87 189.72 | 0.00 | -2.14 2.96 | -0.24 0.24 | -3.15 |
| VA4 - 5 | 1111.50 | 0.00 0.14 | 369.50 -3405.07 | 369.50 | 189.72 -7.93 | 189.72 | -6.46 7.08 | 0.35 -0.35 | 2.41 |
| VA4 - 6 | 1111.50 | -0.15 0.00 | -5328.31 -816.58 | 0.00 | -47.07 -2.40 | 0.00 | 5.05 -3.93 | -0.04 0.04 | 6.61 |
| VA4 - 7 | 1111.50 | -0.15 0.00 | -816.26 1713.12 | 1713.12 | -2.40 -2.11 | 0.00 | 2.95 -1.75 | 0.00 0.00 | -0.21 |
| VA4 - 8 | 1111.50 | -0.15 0.00 | 1711.88 1437.07 | 1979.22 | -2.11 126.61 | 0.00 | 0.77 1.10 | -0.08 0.08 | -0.21 |
| VA4 - 9 | 1111.50 | -0.13 0.00 | 1443.20 -2764.12 | 1443.20 | 126.61 -152.34 | 126.61 | -6.82 7.48 | 0.47 -0.47 | -0.21 |
| VA4 - 10 | 1111.50 | -0.28 0.00 | -2893.07 -129.20 | 0.00 | -33.32 10.34 | 10.34 | 3.39 -2.31 | -0.05 0.05 | 1.62 |


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|----------|---------|---------------|-----------------------|---------|-----------------|-------|---------------|---------------|--------|
| VA4 - 11 | 1111.50 | -0.28 0.00 | -121.28 674.45 | 674.45 | 10.34 9.12 | 10.34 | 1.75 -1.14 | 0.00 0.00 | 1.62 |
| VA4 - 12 | 1111.50 | -0.31 0.00 | 675.68 -794.49 | 675.94 | 9.12 -58.82 | 9.12 | 0.12 1.81 | 0.04 -0.04 | 1.62 |
| VA4 - 13 | 1111.50 | 0.00 0.08 | -2007.68 900.72 | 1090.02 | -3.21 -46.48 | 0.00 | 2.62 0.65 | 0.01 -0.01 | -2.50 |
| VA5 - 1 | 1062.75 | 0.00 0.01 | -1051.39 958.53 | 1003.16 | -63.46 38.12 | 38.12 | 2.09 0.33 | -0.04 0.04 | -1.98 |
| VA5 - 2 | 1062.75 | 0.00 0.01 | 958.19 -1621.90 | 958.19 | 38.12 -2.63 | 38.12 | -1.31 2.68 | 0.03 -0.03 | -1.98 |
| VA5 - 3 | 1062.75 | 0.00 0.05 | -3157.94 191.62 | 191.62 | 2.54 1.13 | 2.54 | 3.87 -2.80 | 0.00 0.00 | 1.53 |
| VA5 - 4 | 1062.75 | 0.00 0.05 | 191.28 1531.98 | 1531.98 | 1.13 48.52 | 0.00 | 1.82 -0.67 | -0.04 0.04 | 1.53 |
| VA5 - 5 | 1062.75 | 0.00 0.05 | 1533.21 -1909.99 | 1533.21 | 48.52 -24.31 | 48.52 | -0.30 2.72 | 0.03 -0.03 | 1.53 |
| VA5 - 6 | 1062.75 | 0.00 0.13 | -2312.75 1001.30 | 1001.30 | 80.52 -59.02 | 80.52 | 2.99 -1.37 | 0.09 -0.09 | -0.48 |
| VA5 - 7 | 1062.75 | 0.00 0.16 | 1000.07 207.52 | 1049.61 | -4.45 -91.44 | 0.00 | 0.34 1.34 | 0.06 -0.06 | -14.82 |
| VA6 - 1 | 1062.75 | 0.00 0.08 | 5.50 1377.68 | 1377.68 | 30.94 -7.99 | 30.94 | 1.71 -0.01 | 0.02 -0.02 | 2.33 |
| VA6 - 2 | 1062.75 | 0.00 0.08 | 1384.29 -2488.58 | 1384.29 | -7.99 11.34 | 11.34 | -1.71 3.34 | -0.01 0.01 | 2.33 |
| VA7 - 1 | 1062.75 | 0.00 0.01 | -1788.57 1805.76 | 1805.76 | -32.98 12.65 | 12.65 | 3.12 -1.45 | -0.03 0.03 | -4.63 |
| VA7 - 2 | 1062.75 | 0.00 0.01 | 1799.15 0.00 | 1799.15 | 12.65 0.00 | 12.65 | -0.26 1.97 | 0.01 -0.01 | -4.63 |
| VA8 - 1 | 1184.63 | 0.00 0.66 | -5872.02 -8380.75 | 3878.44 | -31.89 7.08 | 7.08 | 4.81 5.39 | 0.00 0.00 | -1.84 |
| VA8 - 2 | 1184.63 | 0.00 1.06 | -12641.98 -7078.42 | 6776.88 | 8.90 19.26 | 19.26 | 6.78 5.73 | 0.00 0.00 | 1.47 |
| VA9 - 1 | 1111.50 | 0.00 0.16 | -2405.01 -3534.94 | 1733.92 | 73.03 -64.84 | 73.03 | 3.03 3.42 | 0.02 -0.02 | 7.57 |
| VA9 - 2 | 1111.50 | 0.00 0.22 | -3711.59 -3602.81 | 1969.27 | -40.28 7.72 | 7.72 | 3.55 3.52 | -0.01 0.01 | -0.30 |
| VA10 - 1 | 1111.50 | 0.00 0.13 | -2876.78 -2219.54 | 1244.87 | 23.93 -43.96 | 23.93 | 3.03 2.78 | 0.01 -0.01 | -1.26 |
| VA10 - 2 | 1111.50 | 0.00 0.06 | -1800.87 -1005.54 | 830.25 | -64.08 58.95 | 58.95 | 2.42 2.02 | -0.03 0.03 | -6.90 |
| VA11 - 1 | 1062.75 | -0.10 0.00 | -217.82 -256.88 | 254.40 | 69.35 -37.18 | 69.35 | 1.01 1.05 | 0.06 -0.06 | 1.11 |
| VA11 - 2 | 1062.75 | -0.70 0.00 | -1175.01 403.01 | 1017.06 | -3.21 -3.33 | 0.00 | 2.16 1.14 | 0.00 0.00 | -0.73 |
| VA11 - 3 | 1062.75 | -0.70 0.00 | 398.56 -2376.50 | 398.56 | -3.33 -5.04 | 0.00 | -2.20 3.28 | 0.00 0.00 | -0.73 |
| VA12 - 1 | 1062.75 | -0.14 0.00 | 0.00 2409.57 | 2786.48 | 0.00 -1.23 | 0.00 | 2.43 0.90 | 0.00 0.00 | -0.20 |
| VA12 - 2 | 1062.75 | -0.14 0.00 | 2414.02 0.00 | 2414.02 | -1.23 0.00 | 0.00 | -1.95 2.99 | 0.00 0.00 | -0.20 |
| VA13 | 1014.00 | 0.00 0.08 | 0.00 0.00 | 467.12 | 0.00 0.00 | 0.00 | 0.98 0.98 | 0.00 0.00 | 0.34 |
| VA14 - 1 | 1062.75 | 0.00 0.59 | 0.00 3085.59 | 3085.59 | 0.00 -11.45 | 0.00 | 3.50 -2.38 | 0.01 -0.01 | 0.96 |
| VA14 - 2 | 1062.75 | 0.00 0.59 | 3086.60 0.00 | 3242.38 | -11.45 0.00 | 0.00 | 0.58 2.63 | 0.00 0.00 | 0.96 |
| VA15 | 1014.00 | -0.05 0.00 | 0.00 0.00 | 467.12 | 0.00 0.00 | 0.00 | 0.98 0.98 | 0.00 0.00 | 0.34 |
| VA16 | 1014.00 | 0.00 0.08 | 0.00 0.00 | 467.12 | 0.00 0.00 | 0.00 | 0.98 0.98 | 0.00 0.00 | -1.24 |
| VA17 - 1 | 1062.75 | 0.00 0.55 | 0.00 5422.72 | 5422.72 | 0.00 25.60 | 25.60 | 5.72 -4.61 | -0.02 0.02 | -6.13 |
| VA17 - 2 | 1062.75 | 0.00 | 5421.71 | 5421.71 | -27.52 | 0.00 | -0.40 | -0.01 | 2.29 |

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|----------|---------|---------------|----------------------|---------|------------------|--------|---------------|---------------|-------|
| | | 0.60 | 0.00 | | 0.00 | | 3.42 | 0.01 | |
| VA18 | 1062.75 | 0.00 0.27 | -769.43 541.77 | 593.10 | -91.10 126.85 | 126.85 | 1.71 0.35 | -0.11 0.11 | 1.28 |
| VA19 | 1062.75 | 0.00 0.05 | 0.00 0.00 | 140.55 | 0.00 0.00 | 0.00 | 0.56 0.56 | 0.00 0.00 | -7.93 |
| VA20 | 1062.75 | -0.04 0.00 | -14.34 0.00 | 483.21 | -54.57 0.00 | 0.00 | 1.03 1.02 | -0.03 0.03 | 1.23 |
| VA21 - 1 | 1062.75 | 0.00 0.26 | -2255.68 3475.35 | 3475.35 | 28.96 -45.96 | 28.96 | 3.49 -0.08 | 0.02 -0.02 | 4.62 |
| VA21 - 2 | 1062.75 | 0.00 0.28 | 3477.68 -2325.34 | 3477.68 | -76.90 47.10 | 47.10 | -1.63 3.87 | -0.06 0.06 | -0.88 |
| VA22 | 1062.75 | 0.00 0.18 | -467.57 -1162.06 | 969.81 | -60.00 85.42 | 85.42 | 1.75 2.13 | -0.04 0.04 | 0.32 |
| VA23 | 1062.75 | 0.00 0.04 | 0.00 0.00 | 1384.92 | 0.00 0.00 | 0.00 | 1.72 1.72 | 0.00 0.00 | 6.61 |
| VA24 - 1 | 1111.50 | 0.00 0.18 | -2361.04 -3584.31 | 1732.83 | -50.93 25.26 | 25.26 | 3.02 3.44 | -0.01 0.01 | -2.37 |
| VA24 - 2 | 1111.50 | 0.00 0.27 | -3582.36 -3924.98 | 1876.57 | -4.33 -5.40 | 0.00 | 3.48 3.59 | 0.00 0.00 | -0.39 |
| VA25 - 1 | 1111.50 | 0.00 0.27 | -4075.34 2201.36 | 2201.36 | 30.76 19.91 | 30.76 | 4.34 -2.22 | 0.01 -0.01 | 1.72 |
| VA25 - 2 | 1111.50 | 0.00 0.26 | 2205.99 -3076.92 | 2232.36 | 19.91 -23.54 | 19.91 | 0.24 3.44 | 0.01 -0.01 | 1.72 |
| VA25 - 3 | 1111.50 | 0.00 0.11 | -2156.38 -912.96 | 726.85 | -31.03 -5.16 | 0.00 | 2.53 1.91 | -0.01 0.01 | -2.76 |

| CASO: 1.3G1+1.4G2+1.4Q+0.84V3+0.84D3 | | | | | | | | | |
|--------------------------------------|------------------|------------------|-----------------------|------------------|-----------------------|------------------|--------------------|--------------------|----------------|
| Elemento | Carga (kgf/m) | Rd Nd (tf) | Mxi Mxf (kgf.m) | MxMáx (kgf.m) | Myi Myf (kgf.m) | MyMáx (kgf.m) | Vxi Vxf (tf) | Vyi Vyf (tf) | Mtd (kgf/m) |
| VA1 - 1 | 1062.75 | 0.00 0.38 | -1902.90 2618.61 | 2618.61 | -41.78 1.15 | 1.15 | 3.36 -1.29 | -0.02 0.02 | -0.44 |
| VA1 - 2 | 1062.75 | 0.00 0.39 | 2618.49 245.02 | 2618.49 | 1.15 -164.15 | 0.00 | -1.70 2.82 | 0.16 -0.16 | -1.31 |
| VA1 - 3 | 1062.75 | 0.00 0.36 | 246.19 -3097.25 | 246.19 | -164.15 159.28 | 159.28 | -5.44 6.06 | -0.56 0.56 | -1.12 |
| VA1 - 4 | 1062.75 | -0.44 0.00 | -2864.19 385.99 | 980.09 | 136.18 -95.37 | 136.18 | 2.86 1.12 | 0.06 -0.06 | -0.15 |
| VA1 - 5 | 1062.75 | -0.47 0.00 | 388.06 -2087.36 | 388.06 | -95.37 138.25 | 138.25 | -4.54 5.09 | -0.45 0.45 | -4.58 |
| VA1 - 6 | 1062.75 | -0.44 0.00 | -1278.66 -906.06 | 323.09 | 113.44 -57.54 | 113.44 | 1.85 1.62 | 0.05 -0.05 | 0.43 |
| VA2 | 1062.75 | 0.00 0.00 | 0.00 0.00 | 518.17 | 0.00 0.00 | 0.00 | 1.06 1.06 | 0.00 0.00 | -4.63 |
| VA3 - 1 | 1062.75 | 0.00 0.01 | 0.00 -2142.15 | 1528.00 | 0.00 28.32 | 28.32 | 1.80 2.79 | -0.01 0.01 | 0.91 |
| VA3 - 2 | 1062.75 | 0.00 0.00 | -2151.18 8.66 | 8.66 | 58.32 0.00 | 58.32 | 2.21 -0.56 | 0.04 -0.04 | 0.00 |
| VA4 - 1 | 1111.50 | 0.00 0.13 | -2068.07 -2379.37 | 1292.97 | 65.34 -54.67 | 65.34 | 2.73 2.86 | 0.02 -0.02 | 0.64 |
| VA4 - 2 | 1111.50 | 0.00 0.22 | -2518.28 2227.49 | 2227.49 | -35.24 -59.00 | 0.00 | 3.50 -1.32 | 0.01 -0.01 | 2.58 |
| VA4 - 3 | 1111.50 | 0.00 0.23 | 2227.61 1823.23 | 2227.61 | -59.00 -6.52 | 0.00 | -1.12 1.47 | -0.17 0.17 | 2.58 |
| VA4 - 4 | 1111.50 | 0.00 0.23 | 1823.37 -280.66 | 1823.37 | -6.52 184.57 | 184.57 | -2.45 3.26 | -0.26 0.26 | 2.58 |
| VA4 - 5 | 1111.50 | 0.00 0.21 | -281.83 -4225.45 | 0.00 | 184.57 -74.89 | 184.57 | -6.76 7.38 | 0.47 -0.47 | -1.67 |
| VA4 - 6 | 1111.50 | -0.09 0.00 | -4612.99 -343.04 | 0.00 | -86.11 -37.15 | 0.00 | 4.81 -3.69 | -0.05 0.05 | 0.43 |
| VA4 - 7 | 1111.50 | -0.09 0.00 | -342.83 1927.86 | 1927.86 | -37.15 -5.35 | 0.00 | 2.71 -1.51 | -0.03 0.03 | -2.44 |

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|----------|---------|---------------|-----------------------|---------|------------------|--------|---------------|---------------|--------|
| VA4 - 8 | 1111.50 | -0.09 0.00 | 1926.55 1246.21 | 2052.78 | -5.35 137.79 | 0.00 | 0.53 1.34 | -0.08 0.08 | -2.44 |
| VA4 - 9 | 1111.50 | -0.07 0.00 | 1253.15 -3095.53 | 1253.15 | 137.79 -93.57 | 137.79 | -7.06 7.72 | 0.39 -0.39 | -2.44 |
| VA4 - 10 | 1111.50 | -0.21 0.00 | -2651.48 -100.61 | 0.00 | -26.19 17.10 | 17.10 | 3.17 -2.09 | -0.04 0.04 | 1.92 |
| VA4 - 11 | 1111.50 | -0.21 0.00 | -91.95 582.99 | 582.99 | 17.10 21.06 | 21.06 | 1.53 -0.92 | -0.01 0.01 | 1.92 |
| VA4 - 12 | 1111.50 | -0.22 0.00 | 584.25 -1270.85 | 584.25 | 21.06 -69.26 | 21.06 | -0.10 2.03 | 0.05 -0.05 | 1.92 |
| VA4 - 13 | 1111.50 | 0.00 0.02 | -980.95 -507.13 | 471.67 | -19.61 -40.49 | 0.00 | 1.80 1.48 | 0.01 -0.01 | -2.43 |
| VA5 - 1 | 1062.75 | 0.00 0.04 | -574.23 774.30 | 952.15 | -35.49 32.72 | 32.72 | 1.80 0.62 | -0.03 0.03 | 0.96 |
| VA5 - 2 | 1062.75 | 0.00 0.04 | 774.16 -2182.25 | 774.16 | 32.72 -47.06 | 32.72 | -1.60 2.97 | 0.06 -0.06 | 0.96 |
| VA5 - 3 | 1062.75 | 0.00 0.07 | -2746.31 446.59 | 446.59 | -44.01 -16.09 | 0.00 | 3.71 -2.64 | -0.03 0.03 | -1.06 |
| VA5 - 4 | 1062.75 | 0.00 0.07 | 446.39 1619.47 | 1619.47 | -16.09 35.15 | 0.00 | 1.66 -0.52 | -0.05 0.05 | -1.06 |
| VA5 - 5 | 1062.75 | 0.00 0.07 | 1620.78 -2176.93 | 1620.78 | 35.15 17.67 | 35.15 | -0.46 2.88 | 0.01 -0.01 | -1.06 |
| VA5 - 6 | 1062.75 | 0.00 0.09 | -2040.33 930.43 | 930.43 | 69.30 -49.23 | 69.30 | 2.76 -1.15 | 0.08 -0.08 | -1.35 |
| VA5 - 7 | 1062.75 | 0.00 0.10 | 929.17 -218.08 | 929.17 | -15.54 -45.41 | 0.00 | 0.12 1.57 | 0.02 -0.02 | -12.54 |
| VA6 - 1 | 1062.75 | 0.00 0.05 | 9.31 891.24 | 930.12 | -18.85 -18.45 | 0.00 | 1.40 0.30 | 0.00 0.00 | 2.86 |
| VA6 - 2 | 1062.75 | 0.00 0.05 | 897.81 -3444.46 | 897.81 | -18.45 41.45 | 41.45 | -2.02 3.65 | -0.04 0.04 | 2.86 |
| VA7 - 1 | 1062.75 | -0.08 0.00 | -1135.97 2135.86 | 2135.86 | -54.69 3.18 | 3.18 | 2.92 -1.25 | -0.04 0.04 | -5.18 |
| VA7 - 2 | 1062.75 | -0.08 0.00 | 2129.28 0.00 | 2129.28 | 3.18 0.00 | 3.18 | -0.47 2.18 | 0.00 0.00 | -5.18 |
| VA8 - 1 | 1184.63 | 0.00 0.70 | -5008.37 -9106.91 | 4003.03 | -3.64 -9.98 | 0.00 | 4.62 5.57 | 0.00 0.00 | 0.13 |
| VA8 - 2 | 1184.63 | 0.00 1.03 | -12062.45 -7808.57 | 6651.20 | -0.12 1.06 | 1.06 | 6.66 5.85 | 0.00 0.00 | -0.01 |
| VA9 - 1 | 1111.50 | 0.00 0.22 | -1820.88 -4049.11 | 1820.06 | 15.90 -16.97 | 15.90 | 2.85 3.61 | 0.01 -0.01 | 4.06 |
| VA9 - 2 | 1111.50 | 0.00 0.28 | -3340.26 -3997.40 | 1966.48 | -30.95 26.71 | 26.71 | 3.43 3.64 | -0.01 0.01 | -0.24 |
| VA10 - 1 | 1111.50 | 0.00 0.16 | -2437.20 -2624.07 | 1259.54 | 15.05 -38.75 | 15.05 | 2.87 2.94 | 0.01 -0.01 | 0.49 |
| VA10 - 2 | 1111.50 | 0.00 0.06 | -1229.31 -1681.58 | 768.98 | -78.51 93.30 | 93.30 | 2.11 2.33 | -0.04 0.04 | -4.71 |
| VA11 - 1 | 1062.75 | -0.14 0.00 | 489.81 -635.10 | 582.54 | 40.53 -12.75 | 40.53 | 0.44 1.61 | 0.03 -0.03 | 2.17 |
| VA11 - 2 | 1062.75 | -0.77 0.00 | -659.67 -192.78 | 866.20 | -19.59 5.22 | 5.22 | 1.80 1.50 | -0.01 0.01 | -1.69 |
| VA11 - 3 | 1062.75 | -0.77 0.00 | -197.42 -3334.94 | 0.00 | 5.22 16.57 | 16.57 | -2.56 3.63 | -0.01 0.01 | -1.69 |
| VA12 - 1 | 1062.75 | -0.18 0.00 | 0.00 2409.43 | 2786.37 | 0.00 2.40 | 2.40 | 2.43 0.90 | 0.00 0.00 | -0.12 |
| VA12 - 2 | 1062.75 | -0.18 0.00 | 2414.06 0.00 | 2414.06 | 2.40 0.00 | 2.40 | -1.95 2.99 | 0.00 0.00 | -0.12 |
| VA13 | 1014.00 | 0.00 0.09 | 0.00 0.00 | 467.12 | 0.00 0.00 | 0.00 | 0.98 0.98 | 0.00 0.00 | 0.14 |
| VA14 - 1 | 1062.75 | 0.00 0.72 | 0.00 3085.86 | 3085.86 | 0.00 -6.98 | 0.00 | 3.50 -2.38 | 0.01 -0.01 | 1.17 |
| VA14 - 2 | 1062.75 | 0.00 0.71 | 3086.76 0.00 | 3242.52 | -6.98 0.00 | 0.00 | 0.58 2.63 | 0.00 0.00 | 1.17 |
| VA15 | 1014.00 | -0.02 | 0.00 | 467.12 | 0.00 | 0.00 | 0.98 | 0.00 | 0.20 |


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| | | 0.00 | 0.00 | | 0.00 | | 0.98 | 0.00 | |
| VA16 | 1014.00 | 0.00 0.06 | 0.00 0.00 | 467.12 | 0.00 0.00 | 0.00 | 0.98 0.98 | 0.00 0.00 | -1.31 |
| VA17 - 1 | 1062.75 | 0.00 0.48 | 0.00 5422.45 | 5422.45 | 0.00 14.97 | 14.97 | 5.72 -4.61 | -0.01 0.01 | -6.94 |
| VA17 - 2 | 1062.75 | 0.00 0.52 | 5421.55 0.00 | 5421.55 | -15.04 0.00 | 0.00 | -0.40 3.42 | -0.01 0.01 | 2.09 |
| VA18 | 1062.75 | 0.00 0.24 | -141.35 -85.92 | 379.03 | -45.28 72.83 | 72.83 | 1.06 1.00 | -0.06 0.06 | 1.57 |
| VA19 | 1062.75 | 0.00 0.04 | 0.00 0.00 | 140.55 | 0.00 0.00 | 0.00 | 0.56 0.56 | 0.00 0.00 | -8.66 |
| VA20 | 1062.75 | -0.06 0.00 | -11.20 0.00 | 484.61 | -33.68 0.00 | 0.00 | 1.03 1.02 | -0.02 0.02 | 1.26 |
| VA21 - 1 | 1062.75 | 0.00 0.22 | -1730.59 3115.22 | 3132.94 | 49.48 -56.72 | 49.48 | 3.22 0.19 | 0.03 -0.03 | 6.69 |
| VA21 - 2 | 1062.75 | 0.00 0.22 | 3118.08 -2621.22 | 3118.08 | -37.87 4.37 | 4.37 | -1.60 3.84 | -0.02 0.02 | -2.61 |
| VA22 | 1062.75 | 0.00 0.15 | 231.80 -1999.51 | 1059.47 | -50.60 74.28 | 74.28 | 1.33 2.55 | -0.03 0.03 | -0.21 |
| VA23 | 1062.75 | 0.00 0.04 | 0.00 0.00 | 1384.92 | 0.00 0.00 | 0.00 | 1.72 1.72 | 0.00 0.00 | 6.57 |
| VA24 - 1 | 1111.50 | 0.00 0.22 | -1668.68 -4184.67 | 1843.26 | -45.84 28.72 | 28.72 | 2.80 3.66 | -0.01 0.01 | -5.80 |
| VA24 - 2 | 1111.50 | 0.00 0.27 | -3055.94 -4452.61 | 1892.97 | 14.20 21.31 | 21.31 | 3.32 3.76 | 0.00 0.00 | -0.25 |
| VA25 - 1 | 1111.50 | 0.00 0.29 | -3611.09 2509.80 | 2509.80 | 101.31 -38.32 | 101.31 | 4.26 -2.13 | 0.07 -0.07 | 4.37 |
| VA25 - 2 | 1111.50 | 0.00 0.29 | 2514.98 -3716.38 | 2514.98 | -38.32 -30.24 | 0.00 | -0.04 3.72 | 0.00 0.00 | 4.37 |
| VA25 - 3 | 1111.50 | 0.00 0.08 | -1430.35 -1797.03 | 608.48 | 30.18 -70.57 | 30.18 | 2.13 2.31 | 0.03 -0.03 | -1.56 |

| CASO: 1.3G1+1.4G2+1.4Q+0.84V4+0.84D4 | | | | | | | | | |
|--------------------------------------|------------------|------------------|-----------------------|------------------|-----------------------|------------------|--------------------|--------------------|----------------|
| Elemento | Carga (kgf/m) | Rd Nd (tf) | Mxi Mxf (kgf.m) | MxMáx (kgf.m) | Myi Myf (kgf.m) | MyMáx (kgf.m) | Vxi Vxf (tf) | Vyi Vyf (tf) | Mtd (kgf/m) |
| VA1 - 1 | 1062.75 | 0.00 0.40 | -2039.55 2606.60 | 2606.60 | -112.15 8.59 | 8.59 | 3.42 -1.35 | -0.06 0.06 | -3.56 |
| VA1 - 2 | 1062.75 | 0.00 0.40 | 2606.66 300.74 | 2606.66 | 8.59 -40.33 | 0.00 | -1.64 2.75 | 0.05 -0.05 | -4.43 |
| VA1 - 3 | 1062.75 | 0.00 0.37 | 302.13 -3003.95 | 302.13 | -40.33 197.15 | 197.15 | -5.38 6.00 | -0.41 0.41 | -4.19 |
| VA1 - 4 | 1062.75 | -0.42 0.00 | -2949.71 441.66 | 996.54 | 167.80 -134.39 | 167.80 | 2.90 1.09 | 0.08 -0.08 | 1.42 |
| VA1 - 5 | 1062.75 | -0.46 0.00 | 443.97 -2012.07 | 443.97 | -134.39 164.47 | 164.47 | -4.50 5.05 | -0.58 0.58 | -3.64 |
| VA1 - 6 | 1062.75 | -0.42 0.00 | -1417.93 -708.86 | 373.08 | 125.71 -66.46 | 125.71 | 1.95 1.52 | 0.06 -0.06 | 3.22 |
| VA2 | 1062.75 | -0.01 0.00 | 0.00 0.00 | 518.17 | 0.00 0.00 | 0.00 | 1.06 1.06 | 0.00 0.00 | -3.73 |
| VA3 - 1 | 1062.75 | 0.00 0.02 | 0.00 -2142.11 | 1528.02 | 0.00 14.29 | 14.29 | 1.80 2.79 | 0.00 0.00 | 0.93 |
| VA3 - 2 | 1062.75 | 0.00 0.00 | -2151.38 8.45 | 8.45 | 84.02 0.00 | 84.02 | 2.21 -0.56 | 0.05 -0.05 | 0.00 |
| VA4 - 1 | 1111.50 | 0.00 0.20 | -2031.93 -2404.40 | 1299.75 | 93.38 -45.05 | 93.38 | 2.72 2.87 | 0.03 -0.03 | 1.44 |
| VA4 - 2 | 1111.50 | 0.00 0.33 | -2537.16 2238.06 | 2238.06 | -136.82 -25.08 | 0.00 | 3.52 -1.33 | -0.06 0.06 | -6.02 |
| VA4 - 3 | 1111.50 | 0.00 0.33 | 2238.00 1838.23 | 2238.00 | -25.08 26.69 | 0.00 | -1.10 1.45 | -0.17 0.17 | -6.02 |
| VA4 - 4 | 1111.50 | 0.00 0.33 | 1838.31 -254.87 | 1838.31 | 26.69 193.98 | 193.98 | -2.43 3.25 | -0.23 0.23 | -6.02 |

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| VA4 - 5 | 1111.50 | 0.00 0.31 | -256.14 -4191.54 | 0.00 | 193.98 61.74 | 193.98 | -6.75 7.37 | 0.24 -0.24 | -9.88 |
| VA4 - 6 | 1111.50 | 0.00 0.02 | -4570.34 -318.48 | 0.00 | -8.21 31.98 | 31.98 | 4.79 -3.67 | -0.04 0.04 | 6.63 |
| VA4 - 7 | 1111.50 | 0.00 0.02 | -318.26 1933.08 | 1933.08 | 31.98 3.35 | 31.98 | 2.69 -1.50 | 0.03 -0.03 | 3.97 |
| VA4 - 8 | 1111.50 | 0.00 0.02 | 1931.84 1221.16 | 2050.48 | 3.35 114.99 | 0.00 | 0.52 1.36 | -0.07 0.07 | 3.97 |
| VA4 - 9 | 1111.50 | 0.00 0.05 | 1228.12 -3131.15 | 1228.12 | 114.99 -205.56 | 114.99 | -7.08 7.74 | 0.54 -0.54 | 3.97 |
| VA4 - 10 | 1111.50 | -0.17 0.00 | -2724.49 -131.95 | 0.00 | -56.24 6.17 | 6.17 | 3.21 -2.13 | -0.06 0.06 | 1.37 |
| VA4 - 11 | 1111.50 | -0.17 0.00 | -123.49 575.09 | 575.09 | 6.17 11.91 | 11.91 | 1.58 -0.96 | -0.01 0.01 | 1.37 |
| VA4 - 12 | 1111.50 | -0.19 0.00 | 576.10 -1200.37 | 576.10 | 11.91 -60.23 | 11.91 | -0.05 1.99 | 0.04 -0.04 | 1.37 |
| VA4 - 13 | 1111.50 | 0.00 0.07 | -946.67 -506.49 | 486.73 | -6.72 -4.94 | 0.00 | 1.79 1.49 | 0.00 0.00 | -2.48 |
| VA5 - 1 | 1062.75 | -0.03 0.00 | -553.37 751.88 | 941.54 | -105.90 44.54 | 44.54 | 1.78 0.64 | -0.07 0.07 | -5.06 |
| VA5 - 2 | 1062.75 | -0.03 0.00 | 751.80 -2229.23 | 751.80 | 44.54 50.40 | 50.40 | -1.61 2.99 | 0.00 0.00 | -5.06 |
| VA5 - 3 | 1062.75 | 0.00 0.00 | -2734.44 455.23 | 455.23 | 44.50 17.95 | 44.50 | 3.71 -2.64 | 0.03 -0.03 | 4.19 |
| VA5 - 4 | 1062.75 | 0.00 0.00 | 454.96 1624.59 | 1624.59 | 17.95 61.03 | 0.00 | 1.66 -0.52 | -0.04 0.04 | 4.19 |
| VA5 - 5 | 1062.75 | 0.00 0.00 | 1625.82 -2179.19 | 1625.82 | 61.03 -59.03 | 61.03 | -0.46 2.88 | 0.05 -0.05 | 4.19 |
| VA5 - 6 | 1062.75 | 0.00 0.10 | -1974.69 937.30 | 937.30 | 72.09 -59.73 | 72.09 | 2.72 -1.11 | 0.09 -0.09 | 0.37 |
| VA5 - 7 | 1062.75 | 0.00 0.13 | 936.29 -275.64 | 936.29 | -3.59 -58.71 | 0.00 | 0.07 1.61 | 0.03 -0.03 | -15.11 |
| VA6 - 1 | 1062.75 | 0.00 0.05 | 9.88 810.86 | 866.25 | 13.38 -11.15 | 13.38 | 1.35 0.35 | 0.02 -0.02 | 1.37 |
| VA6 - 2 | 1062.75 | 0.00 0.05 | 817.35 -3602.43 | 817.35 | -11.15 25.34 | 25.34 | -2.07 3.70 | -0.02 0.02 | 1.37 |
| VA7 - 1 | 1062.75 | -0.08 0.00 | -1007.43 2200.84 | 2200.84 | -40.62 10.54 | 10.54 | 2.88 -1.21 | -0.03 0.03 | -3.40 |
| VA7 - 2 | 1062.75 | -0.08 0.00 | 2194.35 0.00 | 2194.35 | 10.54 0.00 | 10.54 | -0.51 2.22 | 0.01 -0.01 | -3.40 |
| VA8 - 1 | 1184.63 | 0.00 0.66 | -5055.10 -9048.53 | 4004.80 | -8.77 12.93 | 12.93 | 4.63 5.56 | 0.00 0.00 | -3.84 |
| VA8 - 2 | 1184.63 | 0.00 0.99 | -12031.39 -7821.62 | 6658.51 | 30.41 -8.51 | 30.41 | 6.65 5.86 | 0.00 0.00 | 3.12 |
| VA9 - 1 | 1111.50 | 0.00 0.12 | -2953.24 -3060.06 | 1679.60 | 78.72 -60.10 | 78.72 | 3.21 3.25 | 0.02 -0.02 | 3.98 |
| VA9 - 2 | 1111.50 | 0.00 0.21 | -4125.29 -3200.56 | 1976.71 | -7.70 -1.94 | 0.00 | 3.68 3.39 | 0.00 0.00 | -0.48 |
| VA10 - 1 | 1111.50 | 0.00 0.12 | -3348.75 -1795.54 | 1255.34 | 44.99 -45.73 | 44.99 | 3.20 2.61 | 0.02 -0.02 | 0.67 |
| VA10 - 2 | 1111.50 | 0.00 0.08 | -2413.96 -273.20 | 1003.11 | -30.51 -21.26 | 0.00 | 2.76 1.69 | 0.00 0.00 | -4.46 |
| VA11 - 1 | 1062.75 | -0.07 0.00 | -947.82 157.92 | 254.91 | 100.31 -74.24 | 100.31 | 1.60 0.45 | 0.09 -0.09 | 2.10 |
| VA11 - 2 | 1062.75 | -0.63 0.00 | -1676.63 1003.00 | 1291.68 | 18.18 -13.47 | 18.18 | 2.51 0.79 | 0.01 -0.01 | -1.38 |
| VA11 - 3 | 1062.75 | -0.63 0.00 | 999.27 -1416.44 | 999.27 | -13.47 -29.68 | 0.00 | -1.84 2.92 | 0.02 -0.02 | -1.38 |
| VA12 - 1 | 1062.75 | -0.11 0.00 | 0.00 2410.12 | 2786.88 | 0.00 -4.32 | 0.00 | 2.43 0.89 | 0.00 0.00 | 0.05 |
| VA12 - 2 | 1062.75 | -0.11 0.00 | 2413.85 0.00 | 2413.85 | -4.32 0.00 | 0.00 | -1.95 2.99 | 0.00 0.00 | 0.05 |
| VA13 | 1014.00 | 0.00 | 0.00 | 467.12 | 0.00 | 0.00 | 0.98 | 0.00 | 0.08 |

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| | | 0.06 | 0.00 | | 0.00 | | 0.98 | 0.00 | |
| VA14 - 1 | 1062.75 | 0.00 0.46 | 0.00 3085.86 | 3085.86 | 0.00 -15.18 | 0.00 | 3.50 -2.38 | 0.01 -0.01 | 1.39 |
| VA14 - 2 | 1062.75 | 0.00 0.46 | 3086.79 0.00 | 3242.54 | -15.18 0.00 | 0.00 | 0.58 2.63 | -0.01 0.01 | 1.39 |
| VA15 | 1014.00 | -0.07 0.00 | 0.00 0.00 | 467.12 | 0.00 0.00 | 0.00 | 0.98 0.98 | 0.00 0.00 | 0.27 |
| VA16 | 1014.00 | 0.00 0.09 | 0.00 0.00 | 467.12 | 0.00 0.00 | 0.00 | 0.98 0.98 | 0.00 0.00 | -1.23 |
| VA17 - 1 | 1062.75 | 0.00 0.61 | 0.00 5422.45 | 5422.45 | 0.00 33.77 | 33.77 | 5.72 -4.61 | -0.03 0.03 | -6.96 |
| VA17 - 2 | 1062.75 | 0.00 0.67 | 5421.52 0.00 | 5421.52 | -35.97 0.00 | 0.00 | -0.40 3.42 | -0.01 0.01 | 2.32 |
| VA18 | 1062.75 | 0.00 0.31 | -1423.27 1200.32 | 1200.32 | -120.52 160.57 | 160.57 | 2.38 -0.33 | -0.15 0.15 | 1.60 |
| VA19 | 1062.75 | 0.00 0.05 | 0.00 0.00 | 140.55 | 0.00 0.00 | 0.00 | 0.56 0.56 | 0.00 0.00 | -8.45 |
| VA20 | 1062.75 | -0.05 0.00 | -15.49 0.00 | 482.70 | -56.14 0.00 | 0.00 | 1.03 1.02 | -0.03 0.03 | 1.01 |
| VA21 - 1 | 1062.75 | 0.00 0.22 | -2556.05 3245.92 | 3245.92 | 22.18 -35.69 | 22.18 | 3.51 -0.10 | 0.02 -0.02 | 7.00 |
| VA21 - 2 | 1062.75 | 0.00 0.23 | 3247.29 -1756.22 | 3247.29 | -49.07 22.25 | 22.25 | -1.25 3.49 | -0.03 0.03 | -2.88 |
| VA22 | 1062.75 | 0.00 0.19 | -1184.87 -321.20 | 1040.99 | -66.88 94.51 | 94.51 | 2.18 1.70 | -0.04 0.04 | 0.08 |
| VA23 | 1062.75 | 0.00 0.04 | 0.00 0.00 | 1384.92 | 0.00 0.00 | 0.00 | 1.72 1.72 | 0.00 0.00 | 6.49 |
| VA24 - 1 | 1111.50 | 0.00 0.11 | -2996.53 -3023.38 | 1674.92 | -98.71 61.42 | 61.42 | 3.22 3.23 | -0.03 0.03 | -5.89 |
| VA24 - 2 | 1111.50 | 0.00 0.20 | -3979.72 -3520.91 | 1881.80 | -1.86 38.32 | 38.32 | 3.61 3.47 | -0.01 0.01 | -0.53 |
| VA25 - 1 | 1111.50 | 0.00 0.25 | -4706.27 2222.81 | 2222.81 | 85.53 -44.85 | 85.53 | 4.68 -2.56 | 0.07 -0.07 | 4.58 |
| VA25 - 2 | 1111.50 | 0.00 0.25 | 2226.20 -2741.76 | 2272.26 | -44.85 7.72 | 7.72 | 0.34 3.34 | -0.02 0.02 | 4.58 |
| VA25 - 3 | 1111.50 | 0.00 0.11 | -2847.36 -143.71 | 925.23 | -45.96 29.21 | 29.21 | 2.90 1.54 | -0.02 0.02 | -1.25 |

| CASO: 1.3G1+1.4G2+1.4Q+1.2D1 | | | | | | | | | |
|------------------------------|------------------|------------------|-----------------------|------------------|-----------------------|------------------|--------------------|--------------------|----------------|
| Elemento | Carga (kgf/m) | Rd Nd (tf) | Mxi Mxf (kgf.m) | MxMáx (kgf.m) | Myi Myf (kgf.m) | MyMáx (kgf.m) | Vxi Vxf (tf) | Vyi Vyf (tf) | Mtd (kgf/m) |
| VA1 - 1 | 1062.75 | 0.00 0.40 | -1785.32 2613.10 | 2613.10 | -77.13 5.18 | 5.18 | 3.29 -1.23 | -0.04 0.04 | -1.98 |
| VA1 - 2 | 1062.75 | 0.00 0.40 | 2613.12 173.30 | 2613.12 | 5.18 -102.82 | 0.00 | -1.76 2.88 | 0.10 -0.10 | -2.85 |
| VA1 - 3 | 1062.75 | 0.00 0.38 | 174.66 -3205.48 | 174.66 | -102.82 177.28 | 177.28 | -5.51 6.12 | -0.48 0.48 | -2.73 |
| VA1 - 4 | 1062.75 | -0.42 0.00 | -2801.44 335.50 | 961.06 | 152.03 -114.99 | 152.03 | 2.83 1.15 | 0.07 -0.07 | 0.50 |
| VA1 - 5 | 1062.75 | -0.46 0.00 | 337.66 -2153.27 | 337.66 | -114.99 150.86 | 150.86 | -4.57 5.12 | -0.52 0.52 | -3.37 |
| VA1 - 6 | 1062.75 | -0.43 0.00 | -1187.24 -1000.29 | 320.50 | 120.21 -62.37 | 120.21 | 1.79 1.68 | 0.06 -0.06 | 1.82 |
| VA2 | 1062.75 | 0.00 0.00 | 0.00 0.00 | 518.17 | 0.00 0.00 | 0.00 | 1.06 1.06 | 0.00 0.00 | -4.12 |
| VA3 - 1 | 1062.75 | 0.00 0.01 | 0.00 -2141.78 | 1528.14 | 0.00 21.40 | 21.40 | 1.80 2.79 | 0.00 0.00 | 0.90 |
| VA3 - 2 | 1062.75 | 0.00 0.00 | -2151.12 8.72 | 8.72 | 70.01 0.00 | 70.01 | 2.21 -0.56 | 0.04 -0.04 | 0.00 |
| VA4 - 1 | 1111.50 | 0.00 0.20 | -1814.11 -2482.17 | 1375.69 | 76.01 -49.16 | 76.01 | 2.66 2.93 | 0.02 -0.02 | 1.03 |


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|----------|---------|---------------|-----------------------|---------|-------------------|--------|---------------|---------------|--------|
| VA4 - 2 | 1111.50 | 0.00 0.31 | -2461.70 2147.91 | 2147.91 | -84.81 -42.21 | 0.00 | 3.44 -1.25 | -0.02 0.02 | -1.31 |
| VA4 - 3 | 1111.50 | 0.00 0.31 | 2147.90 1721.84 | 2147.90 | -42.21 10.03 | 0.00 | -1.19 1.54 | -0.17 0.17 | -1.31 |
| VA4 - 4 | 1111.50 | 0.00 0.31 | 1721.89 -433.19 | 1721.89 | 10.03 188.67 | 188.67 | -2.51 3.33 | -0.24 0.24 | -1.31 |
| VA4 - 5 | 1111.50 | 0.00 0.29 | -434.49 -4416.77 | 0.00 | 188.67 -7.98 | 188.67 | -6.83 7.45 | 0.35 -0.35 | -7.85 |
| VA4 - 6 | 1111.50 | 0.00 0.00 | -4400.92 -205.01 | 0.00 | -46.82 -2.63 | 0.00 | 4.73 -3.61 | -0.04 0.04 | 2.69 |
| VA4 - 7 | 1111.50 | 0.00 0.00 | -204.82 1986.68 | 1986.68 | -2.63 -1.12 | 0.00 | 2.64 -1.44 | 0.00 0.00 | 0.98 |
| VA4 - 8 | 1111.50 | 0.00 0.00 | 1985.41 1180.91 | 2080.60 | -1.12 126.02 | 0.00 | 0.46 1.41 | -0.08 0.08 | 0.98 |
| VA4 - 9 | 1111.50 | 0.00 0.02 | 1188.07 -3203.89 | 1188.07 | 126.02 -149.97 | 126.02 | -7.14 7.79 | 0.47 -0.47 | 0.98 |
| VA4 - 10 | 1111.50 | -0.15 0.00 | -2635.13 -112.99 | 0.00 | -41.40 12.32 | 12.32 | 3.14 -2.06 | -0.06 0.06 | 1.64 |
| VA4 - 11 | 1111.50 | -0.15 0.00 | -104.27 554.40 | 554.40 | 12.32 18.07 | 18.07 | 1.50 -0.89 | -0.01 0.01 | 1.64 |
| VA4 - 12 | 1111.50 | -0.17 0.00 | 555.51 -1349.37 | 555.51 | 18.07 -65.71 | 18.07 | -0.13 2.06 | 0.05 -0.05 | 1.64 |
| VA4 - 13 | 1111.50 | 0.00 0.05 | -693.77 -870.35 | 424.43 | -14.35 -17.99 | 0.00 | 1.58 1.70 | 0.00 0.00 | -2.45 |
| VA5 - 1 | 1062.75 | 0.00 0.00 | -458.10 720.82 | 944.93 | -69.34 38.14 | 38.14 | 1.73 0.69 | -0.05 0.05 | -2.04 |
| VA5 - 2 | 1062.75 | 0.00 0.00 | 720.76 -2332.15 | 720.76 | 38.14 1.60 | 38.14 | -1.67 3.05 | 0.03 -0.03 | -2.04 |
| VA5 - 3 | 1062.75 | 0.00 0.03 | -2649.97 507.05 | 507.05 | -0.16 0.98 | 0.98 | 3.67 -2.61 | 0.00 0.00 | 1.55 |
| VA5 - 4 | 1062.75 | 0.00 0.03 | 506.85 1641.54 | 1641.54 | 0.98 47.96 | 0.00 | 1.63 -0.48 | -0.04 0.04 | 1.55 |
| VA5 - 5 | 1062.75 | 0.00 0.03 | 1642.81 -2236.09 | 1642.81 | 47.96 -21.00 | 47.96 | -0.50 2.91 | 0.03 -0.03 | 1.55 |
| VA5 - 6 | 1062.75 | 0.00 0.08 | -1941.35 919.30 | 919.30 | 70.63 -53.75 | 70.63 | 2.69 -1.07 | 0.08 -0.08 | -0.49 |
| VA5 - 7 | 1062.75 | 0.00 0.11 | 918.18 -345.24 | 918.18 | -8.21 -44.96 | 0.00 | 0.04 1.64 | 0.02 -0.02 | -13.61 |
| VA6 - 1 | 1062.75 | 0.00 0.05 | 10.45 738.91 | 812.43 | -9.21 -16.18 | 0.00 | 1.31 0.40 | 0.00 0.00 | 2.06 |
| VA6 - 2 | 1062.75 | 0.00 0.05 | 745.43 -3743.79 | 745.43 | -16.18 36.41 | 36.41 | -2.11 3.74 | -0.03 0.03 | 2.06 |
| VA7 - 1 | 1062.75 | -0.10 0.00 | -924.75 2242.67 | 2242.67 | -50.25 5.30 | 5.30 | 2.85 -1.18 | -0.04 0.04 | -4.21 |
| VA7 - 2 | 1062.75 | -0.10 0.00 | 2236.16 0.00 | 2236.16 | 5.30 0.00 | 5.30 | -0.54 2.24 | 0.00 0.00 | -4.21 |
| VA8 - 1 | 1184.63 | 0.00 0.68 | -4856.44 -9223.07 | 4036.50 | -0.54 -0.12 | 0.00 | 4.59 5.61 | 0.00 0.00 | -1.84 |
| VA8 - 2 | 1184.63 | 0.00 1.00 | -11923.13 -7968.85 | 6629.20 | 16.54 -8.82 | 16.54 | 6.63 5.88 | 0.00 0.00 | 1.55 |
| VA9 - 1 | 1111.50 | 0.00 0.17 | -2377.85 -3563.59 | 1734.13 | 41.17 -32.33 | 41.17 | 3.02 3.43 | 0.01 -0.01 | 3.25 |
| VA9 - 2 | 1111.50 | 0.00 0.25 | -3734.00 -3601.67 | 1959.02 | -14.62 13.44 | 13.44 | 3.56 3.52 | 0.00 0.00 | -0.34 |
| VA10 - 1 | 1111.50 | 0.00 0.14 | -2892.09 -2210.99 | 1242.41 | 31.14 -43.05 | 31.14 | 3.03 2.77 | 0.01 -0.01 | 0.96 |
| VA10 - 2 | 1111.50 | 0.00 0.07 | -1819.99 -978.90 | 835.21 | -53.35 33.44 | 33.44 | 2.43 2.01 | -0.02 0.02 | -4.16 |
| VA11 - 1 | 1062.75 | -0.10 0.00 | -217.76 -241.98 | 261.06 | 69.18 -42.06 | 69.18 | 1.01 1.04 | 0.06 -0.06 | 2.37 |
| VA11 - 2 | 1062.75 | -0.70 0.00 | -1156.36 393.74 | 1017.10 | 0.38 -4.46 | 0.38 | 2.15 1.15 | 0.00 0.00 | -1.76 |
| VA11 - 3 | 1062.75 | -0.70 | 389.62 | 389.62 | -4.46 | 0.00 | -2.21 | 0.00 | -1.76 |

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|----------|---------|---------------|----------------------|---------|------------------|--------|---------------|---------------|-------|
| | | 0.00 | -2394.55 | | -7.29 | | 3.29 | 0.00 | |
| VA12 - 1 | 1062.75 | -0.15 0.00 | 0.00 2409.82 | 2786.66 | 0.00 -0.92 | 0.00 | 2.43 0.90 | 0.00 0.00 | 0.01 |
| VA12 - 2 | 1062.75 | -0.15 0.00 | 2413.94 0.00 | 2413.94 | -0.92 0.00 | 0.00 | -1.95 2.99 | 0.00 0.00 | 0.01 |
| VA13 | 1014.00 | 0.00 0.08 | 0.00 0.00 | 467.12 | 0.00 0.00 | 0.00 | 0.98 0.98 | 0.00 0.00 | 0.06 |
| VA14 - 1 | 1062.75 | 0.00 0.59 | 0.00 3085.92 | 3085.92 | 0.00 -10.91 | 0.00 | 3.50 -2.38 | 0.01 -0.01 | 1.36 |
| VA14 - 2 | 1062.75 | 0.00 0.59 | 3086.82 0.00 | 3242.56 | -10.91 0.00 | 0.00 | 0.58 2.63 | 0.00 0.00 | 1.36 |
| VA15 | 1014.00 | -0.04 0.00 | 0.00 0.00 | 467.12 | 0.00 0.00 | 0.00 | 0.98 0.98 | 0.00 0.00 | 0.20 |
| VA16 | 1014.00 | 0.00 0.07 | 0.00 0.00 | 467.12 | 0.00 0.00 | 0.00 | 0.98 0.98 | 0.00 0.00 | -1.27 |
| VA17 - 1 | 1062.75 | 0.00 0.54 | 0.00 5422.38 | 5422.38 | 0.00 23.86 | 23.86 | 5.72 -4.61 | -0.02 0.02 | -7.16 |
| VA17 - 2 | 1062.75 | 0.00 0.59 | 5421.49 0.00 | 5421.49 | -24.75 0.00 | 0.00 | -0.40 3.42 | -0.01 0.01 | 2.18 |
| VA18 | 1062.75 | 0.00 0.27 | -786.72 562.30 | 608.24 | -82.78 116.56 | 116.56 | 1.72 0.33 | -0.10 0.10 | 1.65 |
| VA19 | 1062.75 | 0.00 0.04 | 0.00 0.00 | 140.55 | 0.00 0.00 | 0.00 | 0.56 0.56 | 0.00 0.00 | -8.72 |
| VA20 | 1062.75 | -0.06 0.00 | -13.12 0.00 | 483.75 | -45.54 0.00 | 0.00 | 1.03 1.02 | -0.02 0.02 | 1.12 |
| VA21 - 1 | 1062.75 | 0.00 0.21 | -2120.44 3117.85 | 3117.85 | 37.11 -46.20 | 37.11 | 3.34 0.07 | 0.03 -0.03 | 7.31 |
| VA21 - 2 | 1062.75 | 0.00 0.21 | 3119.92 -2158.87 | 3119.92 | -36.99 7.66 | 7.66 | -1.38 3.62 | -0.02 0.02 | -3.14 |
| VA22 | 1062.75 | 0.00 0.17 | -490.10 -1147.12 | 963.94 | -58.40 83.77 | 83.77 | 1.76 2.12 | -0.04 0.04 | -0.18 |
| VA23 | 1062.75 | 0.00 0.04 | 0.00 0.00 | 1384.92 | 0.00 0.00 | 0.00 | 1.72 1.72 | 0.00 0.00 | 6.51 |
| VA24 - 1 | 1111.50 | 0.00 0.16 | -2335.89 -3599.84 | 1738.34 | -76.43 49.09 | 49.09 | 3.01 3.45 | -0.02 0.02 | -6.61 |
| VA24 - 2 | 1111.50 | 0.00 0.23 | -3510.52 -3993.08 | 1880.70 | 9.00 37.00 | 37.00 | 3.46 3.61 | 0.00 0.00 | -0.36 |
| VA25 - 1 | 1111.50 | 0.00 0.28 | -4183.37 2397.68 | 2397.68 | 105.27 -54.25 | 105.27 | 4.50 -2.37 | 0.08 -0.08 | 5.05 |
| VA25 - 2 | 1111.50 | 0.00 0.27 | 2401.89 -3253.76 | 2404.97 | -54.25 -9.57 | 0.00 | 0.13 3.55 | -0.01 0.01 | 5.05 |
| VA25 - 3 | 1111.50 | 0.00 0.09 | -2145.74 -969.63 | 698.52 | -4.04 -21.98 | 0.00 | 2.52 1.93 | 0.00 0.00 | -1.16 |

| CASO: 1.3G1+1.4G2+1.4Q+1.2D2 | | | | | | | | | |
|------------------------------|------------------|------------------|-----------------------|------------------|-----------------------|------------------|--------------------|--------------------|----------------|
| Elemento | Carga (kgf/m) | Rd Nd (tf) | Mxi Mxf (kgf.m) | MxMáx (kgf.m) | Myi Myf (kgf.m) | MyMáx (kgf.m) | Vxi Vxf (tf) | Vyi Vyf (tf) | Mtd (kgf/m) |
| VA1 - 1 | 1062.75 | 0.00 0.38 | -2157.14 2612.11 | 2612.11 | -76.80 4.56 | 4.56 | 3.48 -1.42 | -0.04 0.04 | -2.03 |
| VA1 - 2 | 1062.75 | 0.00 0.38 | 2612.03 372.46 | 2612.03 | 4.56 -101.66 | 0.00 | -1.57 2.69 | 0.10 -0.10 | -2.89 |
| VA1 - 3 | 1062.75 | 0.00 0.36 | 373.66 -2895.71 | 373.66 | -101.66 179.14 | 179.14 | -5.32 5.93 | -0.48 0.48 | -2.58 |
| VA1 - 4 | 1062.75 | -0.43 0.00 | -3012.45 492.15 | 1015.58 | 151.94 -114.77 | 151.94 | 2.93 1.06 | 0.07 -0.07 | 0.78 |
| VA1 - 5 | 1062.75 | -0.47 0.00 | 494.36 -1946.16 | 494.36 | -114.77 151.86 | 151.86 | -4.47 5.02 | -0.52 0.52 | -4.85 |
| VA1 - 6 | 1062.75 | -0.43 0.00 | -1509.35 -614.63 | 386.09 | 118.94 -61.63 | 118.94 | 2.01 1.46 | 0.06 -0.06 | 1.82 |
| VA2 | 1062.75 | 0.00 0.00 | 0.00 0.00 | 518.17 | 0.00 0.00 | 0.00 | 1.06 1.06 | 0.00 0.00 | -4.24 |


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|----------|---------|---------------|-----------------------|---------|-------------------|--------|---------------|---------------|--------|
| VA3 - 1 | 1062.75 | 0.00 0.01 | 0.00 -2142.47 | 1527.88 | 0.00 21.21 | 21.21 | 1.80 2.79 | 0.00 0.00 | 0.94 |
| VA3 - 2 | 1062.75 | 0.00 0.00 | -2151.44 8.39 | 8.39 | 72.33 0.00 | 72.33 | 2.21 -0.56 | 0.05 -0.05 | 0.00 |
| VA4 - 1 | 1111.50 | 0.00 0.13 | -2285.89 -2301.60 | 1217.03 | 82.71 -50.55 | 82.71 | 2.79 2.80 | 0.03 -0.03 | 1.04 |
| VA4 - 2 | 1111.50 | 0.00 0.25 | -2593.74 2317.64 | 2317.64 | -87.24 -41.87 | 0.00 | 3.59 -1.40 | -0.02 0.02 | -2.14 |
| VA4 - 3 | 1111.50 | 0.00 0.25 | 2317.72 1939.63 | 2317.72 | -41.87 10.14 | 0.00 | -1.03 1.38 | -0.17 0.17 | -2.14 |
| VA4 - 4 | 1111.50 | 0.00 0.25 | 1939.79 -102.33 | 1939.79 | 10.14 189.88 | 189.88 | -2.36 3.18 | -0.24 0.24 | -2.14 |
| VA4 - 5 | 1111.50 | 0.00 0.23 | -103.49 -4000.22 | 0.00 | 189.88 -5.17 | 189.88 | -6.68 7.30 | 0.35 -0.35 | -3.70 |
| VA4 - 6 | 1111.50 | -0.07 0.00 | -4782.40 -456.52 | 0.00 | -47.50 -2.55 | 0.00 | 4.86 -3.74 | -0.04 0.04 | 4.36 |
| VA4 - 7 | 1111.50 | -0.07 0.00 | -456.28 1874.26 | 1874.26 | -2.55 -0.89 | 0.00 | 2.76 -1.57 | 0.00 0.00 | 0.55 |
| VA4 - 8 | 1111.50 | -0.07 0.00 | 1872.99 1286.45 | 2023.43 | -0.89 126.76 | 0.00 | 0.59 1.28 | -0.08 0.08 | 0.55 |
| VA4 - 9 | 1111.50 | -0.05 0.00 | 1293.19 -3022.79 | 1293.19 | 126.76 -149.16 | 126.76 | -7.01 7.66 | 0.47 -0.47 | 0.55 |
| VA4 - 10 | 1111.50 | -0.23 0.00 | -2740.84 -119.57 | 0.00 | -41.03 10.95 | 10.95 | 3.24 -2.16 | -0.05 0.05 | 1.65 |
| VA4 - 11 | 1111.50 | -0.23 0.00 | -111.18 603.69 | 603.69 | 10.95 14.90 | 14.90 | 1.61 -0.99 | -0.01 0.01 | 1.65 |
| VA4 - 12 | 1111.50 | -0.25 0.00 | 604.83 -1121.85 | 604.83 | 14.90 -63.78 | 14.90 | -0.03 1.96 | 0.05 -0.05 | 1.65 |
| VA4 - 13 | 1111.50 | 0.00 0.04 | -1233.85 -143.27 | 575.24 | -11.98 -27.44 | 0.00 | 2.01 1.27 | 0.01 -0.01 | -2.47 |
| VA5 - 1 | 1062.75 | 0.00 0.01 | -669.50 805.36 | 948.76 | -72.05 39.12 | 39.12 | 1.86 0.56 | -0.05 0.05 | -2.06 |
| VA5 - 2 | 1062.75 | 0.00 0.01 | 805.20 -2079.33 | 805.20 | 39.12 1.74 | 39.12 | -1.54 2.92 | 0.03 -0.03 | -2.06 |
| VA5 - 3 | 1062.75 | 0.00 0.04 | -2830.78 394.77 | 394.77 | 0.64 0.88 | 0.88 | 3.74 -2.67 | 0.00 0.00 | 1.59 |
| VA5 - 4 | 1062.75 | 0.00 0.04 | 394.50 1602.52 | 1602.52 | 0.88 48.22 | 0.00 | 1.69 -0.55 | -0.04 0.04 | 1.59 |
| VA5 - 5 | 1062.75 | 0.00 0.04 | 1603.79 -2120.03 | 1603.79 | 48.22 -20.36 | 48.22 | -0.43 2.85 | 0.03 -0.03 | 1.59 |
| VA5 - 6 | 1062.75 | 0.00 0.10 | -2073.67 948.43 | 948.43 | 70.77 -55.20 | 70.77 | 2.80 -1.18 | 0.08 -0.08 | -0.48 |
| VA5 - 7 | 1062.75 | 0.00 0.12 | 947.28 -148.48 | 953.51 | -10.92 -59.16 | 0.00 | 0.15 1.53 | 0.03 -0.03 | -14.04 |
| VA6 - 1 | 1062.75 | 0.00 0.06 | 8.73 963.19 | 993.00 | 3.74 -13.41 | 0.00 | 1.45 0.26 | 0.01 -0.01 | 2.17 |
| VA6 - 2 | 1062.75 | 0.00 0.06 | 969.74 -3303.09 | 969.74 | -13.41 30.38 | 30.38 | -1.97 3.60 | -0.03 0.03 | 2.17 |
| VA7 - 1 | 1062.75 | -0.06 0.00 | -1218.65 2094.02 | 2094.02 | -45.06 8.42 | 8.42 | 2.94 -1.27 | -0.03 0.03 | -4.37 |
| VA7 - 2 | 1062.75 | -0.06 0.00 | 2087.47 0.00 | 2087.47 | 8.42 0.00 | 8.42 | -0.44 2.15 | 0.01 -0.01 | -4.37 |
| VA8 - 1 | 1184.63 | 0.00 0.68 | -5207.03 -8932.37 | 3977.57 | -11.87 3.08 | 3.08 | 4.67 5.53 | 0.00 0.00 | -1.87 |
| VA8 - 2 | 1184.63 | 0.00 1.02 | -12170.71 -7661.35 | 6680.51 | 13.75 1.36 | 13.75 | 6.68 5.83 | 0.00 0.00 | 1.56 |
| VA9 - 1 | 1111.50 | 0.00 0.17 | -2396.27 -3545.58 | 1733.30 | 53.45 -44.73 | 53.45 | 3.03 3.43 | 0.02 -0.02 | 4.79 |
| VA9 - 2 | 1111.50 | 0.00 0.24 | -3731.55 -3596.29 | 1962.98 | -24.03 11.33 | 11.33 | 3.56 3.52 | -0.01 0.01 | -0.38 |
| VA10 - 1 | 1111.50 | 0.00 0.14 | -2893.85 -2208.62 | 1242.87 | 28.90 -41.43 | 28.90 | 3.03 2.77 | 0.01 -0.01 | 0.20 |
| VA10 - 2 | 1111.50 | 0.00 | -1823.28 | 835.24 | -55.66 | 38.60 | 2.43 | -0.02 | -5.00 |

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|----------|---------|---------------|----------------------|---------|------------------|--------|---------------|---------------|-------|
| | | 0.07 | -975.88 | | 38.60 | | 2.01 | 0.02 | |
| VA11 - 1 | 1062.75 | -0.10 0.00 | -240.24 -235.20 | 252.14 | 71.65 -44.93 | 71.65 | 1.03 1.02 | 0.06 -0.06 | 1.90 |
| VA11 - 2 | 1062.75 | -0.70 0.00 | -1179.94 416.47 | 1024.39 | -1.79 -3.79 | 0.00 | 2.16 1.14 | 0.00 0.00 | -1.31 |
| VA11 - 3 | 1062.75 | -0.70 0.00 | 412.23 -2356.83 | 412.23 | -3.79 -5.81 | 0.00 | -2.19 3.27 | 0.00 0.00 | -1.31 |
| VA12 - 1 | 1062.75 | -0.14 0.00 | 0.00 2409.73 | 2786.59 | 0.00 -1.00 | 0.00 | 2.43 0.90 | 0.00 0.00 | -0.08 |
| VA12 - 2 | 1062.75 | -0.14 0.00 | 2413.97 0.00 | 2413.97 | -1.00 0.00 | 0.00 | -1.95 2.99 | 0.00 0.00 | -0.08 |
| VA13 | 1014.00 | 0.00 0.08 | 0.00 0.00 | 467.12 | 0.00 0.00 | 0.00 | 0.98 0.98 | 0.00 0.00 | 0.16 |
| VA14 - 1 | 1062.75 | 0.00 0.59 | 0.00 3085.79 | 3085.79 | 0.00 -11.25 | 0.00 | 3.50 -2.38 | 0.01 -0.01 | 1.20 |
| VA14 - 2 | 1062.75 | 0.00 0.59 | 3086.73 0.00 | 3242.49 | -11.25 0.00 | 0.00 | 0.58 2.63 | 0.00 0.00 | 1.20 |
| VA15 | 1014.00 | -0.04 0.00 | 0.00 0.00 | 467.12 | 0.00 0.00 | 0.00 | 0.98 0.98 | 0.00 0.00 | 0.27 |
| VA16 | 1014.00 | 0.00 0.07 | 0.00 0.00 | 467.12 | 0.00 0.00 | 0.00 | 0.98 0.98 | 0.00 0.00 | -1.27 |
| VA17 - 1 | 1062.75 | 0.00 0.54 | 0.00 5422.52 | 5422.52 | 0.00 24.87 | 24.87 | 5.72 -4.61 | -0.02 0.02 | -6.74 |
| VA17 - 2 | 1062.75 | 0.00 0.60 | 5421.58 0.00 | 5421.58 | -26.26 0.00 | 0.00 | -0.40 3.42 | -0.01 0.01 | 2.23 |
| VA18 | 1062.75 | 0.00 0.27 | -777.90 552.11 | 600.16 | -83.01 116.84 | 116.84 | 1.71 0.34 | -0.10 0.10 | 1.52 |
| VA19 | 1062.75 | 0.00 0.05 | 0.00 0.00 | 140.55 | 0.00 0.00 | 0.00 | 0.56 0.56 | 0.00 0.00 | -8.39 |
| VA20 | 1062.75 | -0.05 0.00 | -13.56 0.00 | 483.55 | -44.28 0.00 | 0.00 | 1.03 1.02 | -0.02 0.02 | 1.15 |
| VA21 - 1 | 1062.75 | 0.00 0.22 | -2166.20 3243.28 | 3243.28 | 34.54 -46.21 | 34.54 | 3.39 0.02 | 0.03 -0.03 | 6.39 |
| VA21 - 2 | 1062.75 | 0.00 0.24 | 3245.45 -2218.57 | 3245.45 | -49.96 18.95 | 18.95 | -1.47 3.71 | -0.03 0.03 | -2.34 |
| VA22 | 1062.75 | 0.00 0.17 | -462.97 -1173.59 | 967.25 | -59.08 85.03 | 85.03 | 1.74 2.13 | -0.04 0.04 | 0.05 |
| VA23 | 1062.75 | 0.00 0.04 | 0.00 0.00 | 1384.92 | 0.00 0.00 | 0.00 | 1.72 1.72 | 0.00 0.00 | 6.55 |
| VA24 - 1 | 1111.50 | 0.00 0.17 | -2329.31 -3608.21 | 1737.70 | -68.12 41.05 | 41.05 | 3.01 3.45 | -0.02 0.02 | -5.09 |
| VA24 - 2 | 1111.50 | 0.00 0.24 | -3525.13 -3980.44 | 1879.27 | 3.34 22.64 | 22.64 | 3.47 3.61 | 0.00 0.00 | -0.41 |
| VA25 - 1 | 1111.50 | 0.00 0.27 | -4133.99 2334.92 | 2334.92 | 81.58 -28.93 | 81.58 | 4.44 -2.32 | 0.06 -0.06 | 3.90 |
| VA25 - 2 | 1111.50 | 0.00 0.27 | 2339.29 -3204.38 | 2349.36 | -28.93 -12.95 | 0.00 | 0.16 3.51 | 0.00 0.00 | 3.90 |
| VA25 - 3 | 1111.50 | 0.00 0.10 | -2131.97 -971.11 | 703.46 | -11.74 -19.38 | 0.00 | 2.51 1.93 | 0.00 0.00 | -1.65 |

| CASO: 1.3G1+1.4G2+1.4Q+1.2D3 | | | | | | | | | |
|------------------------------|------------------|------------------|-----------------------|------------------|-----------------------|------------------|--------------------|--------------------|----------------|
| Elemento | Carga (kgf/m) | Rd Nd (tf) | Mxi Mxf (kgf.m) | MxMáx (kgf.m) | Myi Myf (kgf.m) | MyMáx (kgf.m) | Vxi Vxf (tf) | Vyi Vyf (tf) | Mtd (kgf/m) |
| VA1 - 1 | 1062.75 | 0.00 0.39 | -1947.21 2614.60 | 2614.60 | -64.76 3.42 | 3.42 | 3.38 -1.31 | -0.04 0.04 | -1.47 |
| VA1 - 2 | 1062.75 | 0.00 0.39 | 2614.54 262.91 | 2614.54 | 3.42 -122.06 | 0.00 | -1.68 2.80 | 0.12 -0.12 | -2.33 |
| VA1 - 3 | 1062.75 | 0.00 0.36 | 264.16 -3067.20 | 264.16 | -122.06 171.29 | 171.29 | -5.42 6.04 | -0.50 0.50 | -2.13 |
| VA1 - 4 | 1062.75 | -0.43 0.00 | -2891.89 404.08 | 985.46 | 146.57 -109.11 | 146.57 | 2.87 1.11 | 0.07 -0.07 | 0.37 |


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|----------|---------|---------------|-----------------------|---------|-------------------|--------|---------------|---------------|--------|
| VA1 - 5 | 1062.75 | -0.47 0.00 | 406.22 -2062.90 | 406.22 | -109.11 147.17 | 147.17 | -4.53 5.08 | -0.50 0.50 | -4.26 |
| VA1 - 6 | 1062.75 | -0.43 0.00 | -1323.99 -841.55 | 339.55 | 117.36 -59.86 | 117.36 | 1.88 1.59 | 0.05 -0.05 | 1.34 |
| VA2 | 1062.75 | 0.00 0.00 | 0.00 0.00 | 518.17 | 0.00 0.00 | 0.00 | 1.06 1.06 | 0.00 0.00 | -4.33 |
| VA3 - 1 | 1062.75 | 0.00 0.01 | 0.00 -2142.14 | 1528.00 | 0.00 23.35 | 23.35 | 1.80 2.79 | -0.01 0.01 | 0.91 |
| VA3 - 2 | 1062.75 | 0.00 0.00 | -2151.25 8.59 | 8.59 | 66.14 0.00 | 66.14 | 2.21 -0.56 | 0.04 -0.04 | 0.00 |
| VA4 - 1 | 1111.50 | 0.00 0.15 | -2055.69 -2387.71 | 1295.40 | 74.99 -52.19 | 74.99 | 2.73 2.86 | 0.03 -0.03 | 0.94 |
| VA4 - 2 | 1111.50 | 0.00 0.26 | -2524.52 2230.96 | 2230.96 | -69.09 -47.46 | 0.00 | 3.51 -1.32 | -0.01 0.01 | -0.28 |
| VA4 - 3 | 1111.50 | 0.00 0.26 | 2231.02 1828.16 | 2231.02 | -47.46 4.40 | 0.00 | -1.11 1.46 | -0.17 0.17 | -0.28 |
| VA4 - 4 | 1111.50 | 0.00 0.26 | 1828.28 -272.18 | 1828.28 | 4.40 186.79 | 186.79 | -2.44 3.26 | -0.25 0.25 | -0.28 |
| VA4 - 5 | 1111.50 | 0.00 0.24 | -273.38 -4214.29 | 0.00 | 186.79 -28.88 | 186.79 | -6.76 7.38 | 0.39 -0.39 | -4.40 |
| VA4 - 6 | 1111.50 | -0.06 0.00 | -4598.72 -334.84 | 0.00 | -59.39 -14.29 | 0.00 | 4.80 -3.68 | -0.04 0.04 | 2.49 |
| VA4 - 7 | 1111.50 | -0.06 0.00 | -334.63 1929.58 | 1929.58 | -14.29 -2.48 | 0.00 | 2.70 -1.51 | -0.01 0.01 | -0.31 |
| VA4 - 8 | 1111.50 | -0.06 0.00 | 1928.30 1237.78 | 2051.98 | -2.48 130.13 | 0.00 | 0.53 1.35 | -0.08 0.08 | -0.31 |
| VA4 - 9 | 1111.50 | -0.04 0.00 | 1244.72 -3107.50 | 1244.72 | 130.13 -132.45 | 130.13 | -7.07 7.72 | 0.45 -0.45 | -0.31 |
| VA4 - 10 | 1111.50 | -0.19 0.00 | -2675.82 -111.04 | 0.00 | -38.63 12.82 | 12.82 | 3.18 -2.11 | -0.05 0.05 | 1.73 |
| VA4 - 11 | 1111.50 | -0.19 0.00 | -102.45 580.39 | 580.39 | 12.82 18.65 | 18.65 | 1.55 -0.94 | -0.01 0.01 | 1.73 |
| VA4 - 12 | 1111.50 | -0.21 0.00 | 581.56 -1247.22 | 581.56 | 18.65 -65.33 | 18.65 | -0.08 2.02 | 0.05 -0.05 | 1.73 |
| VA4 - 13 | 1111.50 | 0.00 0.04 | -969.13 -507.03 | 476.80 | -15.06 -30.54 | 0.00 | 1.79 1.48 | 0.01 -0.01 | -2.49 |
| VA5 - 1 | 1062.75 | 0.00 0.01 | -566.51 766.52 | 948.61 | -58.60 36.63 | 36.63 | 1.79 0.62 | -0.04 0.04 | -1.04 |
| VA5 - 2 | 1062.75 | 0.00 0.01 | 766.40 -2198.82 | 766.40 | 36.63 -15.08 | 36.63 | -1.60 2.98 | 0.04 -0.04 | -1.04 |
| VA5 - 3 | 1062.75 | 0.00 0.05 | -2741.63 449.93 | 449.93 | -14.89 -4.40 | 0.00 | 3.71 -2.64 | -0.01 0.01 | 0.69 |
| VA5 - 4 | 1062.75 | 0.00 0.05 | 449.71 1621.36 | 1621.36 | -4.40 43.76 | 0.00 | 1.66 -0.52 | -0.04 0.04 | 0.69 |
| VA5 - 5 | 1062.75 | 0.00 0.05 | 1622.65 -2178.07 | 1622.65 | 43.76 -8.29 | 43.76 | -0.46 2.88 | 0.02 -0.02 | 0.69 |
| VA5 - 6 | 1062.75 | 0.00 0.09 | -2017.82 932.66 | 932.66 | 68.41 -53.08 | 68.41 | 2.75 -1.13 | 0.08 -0.08 | -0.77 |
| VA5 - 7 | 1062.75 | 0.00 0.11 | 931.49 -238.09 | 931.49 | -14.88 -48.23 | 0.00 | 0.10 1.58 | 0.02 -0.02 | -13.47 |
| VA6 - 1 | 1062.75 | 0.00 0.05 | 9.49 867.69 | 909.53 | -8.62 -16.13 | 0.00 | 1.39 0.32 | 0.00 0.00 | 2.32 |
| VA6 - 2 | 1062.75 | 0.00 0.05 | 874.23 -3490.77 | 874.23 | -16.13 37.53 | 37.53 | -2.03 3.66 | -0.03 0.03 | 2.32 |
| VA7 - 1 | 1062.75 | -0.08 0.00 | -1092.24 2157.96 | 2157.96 | -50.64 5.93 | 5.93 | 2.90 -1.23 | -0.04 0.04 | -4.55 |
| VA7 - 2 | 1062.75 | -0.08 0.00 | 2151.42 0.00 | 2151.42 | 5.93 0.00 | 5.93 | -0.48 2.19 | 0.00 0.00 | -4.55 |
| VA8 - 1 | 1184.63 | 0.00 0.69 | -5023.86 -9087.88 | 4003.21 | -5.40 -2.52 | 0.00 | 4.63 5.57 | 0.00 0.00 | -1.16 |
| VA8 - 2 | 1184.63 | 0.00 1.02 | -12052.00 -7813.45 | 6653.39 | 9.69 -2.09 | 9.69 | 6.66 5.86 | 0.00 0.00 | 1.01 |
| VA9 - 1 | 1111.50 | 0.00 | -2240.43 | 1753.05 | 35.85 | 35.85 | 2.98 | 0.01 | 4.03 |


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|----------|---------|-------|----------|---------|--------|--------|-------|-------|-------|
| | | 0.18 | -3682.21 | | -30.53 | | 3.48 | -0.01 | |
| VA9 - 2 | 1111.50 | 0.00 | -3631.91 | 1959.10 | -23.83 | 17.87 | 3.53 | -0.01 | -0.32 |
| | | 0.25 | -3701.56 | | 17.87 | | 3.55 | 0.01 | |
| VA10 - 1 | 1111.50 | 0.00 | -2775.90 | 1244.46 | 24.55 | 24.55 | 2.99 | 0.01 | 0.56 |
| | | 0.15 | -2315.53 | | -40.87 | | 2.81 | -0.01 | |
| VA10 - 2 | 1111.50 | 0.00 | -1668.87 | 811.33 | -64.12 | 57.32 | 2.35 | -0.03 | -4.65 |
| | | 0.07 | -1160.29 | | 57.32 | | 2.09 | 0.03 | |
| VA11 - 1 | 1062.75 | -0.12 | 10.91 | 330.84 | 60.23 | 60.23 | 0.83 | 0.05 | 2.15 |
| | | 0.00 | -370.80 | | -32.85 | | 1.22 | -0.05 | |
| VA11 - 2 | 1062.75 | -0.72 | -998.34 | 955.14 | -7.36 | 0.00 | 2.04 | 0.00 | -1.59 |
| | | 0.00 | 205.35 | | -0.89 | | 1.26 | 0.00 | |
| VA11 - 3 | 1062.75 | -0.72 | 201.02 | 201.02 | -0.89 | 1.44 | -2.32 | 0.00 | -1.59 |
| | | 0.00 | -2696.16 | | 1.44 | | 3.40 | 0.00 | |
| VA12 - 1 | 1062.75 | -0.15 | 0.00 | 2786.54 | 0.00 | 0.16 | 2.43 | 0.00 | -0.06 |
| | | 0.00 | 2409.66 | | 0.16 | | 0.90 | 0.00 | |
| VA12 - 2 | 1062.75 | -0.15 | 2413.99 | 2413.99 | 0.16 | 0.16 | -1.95 | 0.00 | -0.06 |
| | | 0.00 | 0.00 | | 0.00 | | 2.99 | 0.00 | |
| VA13 | 1014.00 | 0.00 | 0.00 | 467.12 | 0.00 | 0.00 | 0.98 | 0.00 | 0.12 |
| | | 0.08 | 0.00 | | 0.00 | | 0.98 | 0.00 | |
| VA14 - 1 | 1062.75 | 0.00 | 0.00 | 3085.86 | 0.00 | 0.00 | 3.50 | 0.01 | 1.24 |
| | | 0.63 | 3085.86 | | -9.60 | | -2.38 | -0.01 | |
| VA14 - 2 | 1062.75 | 0.00 | 3086.77 | 3242.52 | -9.60 | 0.00 | 0.58 | 0.00 | 1.24 |
| | | 0.63 | 0.00 | | 0.00 | | 2.63 | 0.00 | |
| VA15 | 1014.00 | -0.03 | 0.00 | 467.12 | 0.00 | 0.00 | 0.98 | 0.00 | 0.22 |
| | | 0.00 | 0.00 | | 0.00 | | 0.98 | 0.00 | |
| VA16 | 1014.00 | 0.00 | 0.00 | 467.12 | 0.00 | 0.00 | 0.98 | 0.00 | -1.28 |
| | | 0.07 | 0.00 | | 0.00 | | 0.98 | 0.00 | |
| VA17 - 1 | 1062.75 | 0.00 | 0.00 | 5422.45 | 0.00 | 21.00 | 5.72 | -0.02 | -6.95 |
| | | 0.52 | 5422.45 | | 21.00 | | -4.61 | 0.02 | |
| VA17 - 2 | 1062.75 | 0.00 | 5421.54 | 5421.54 | -21.79 | 0.00 | -0.40 | -0.01 | 2.17 |
| | | 0.57 | 0.00 | | 0.00 | | 3.42 | 0.01 | |
| VA18 | 1062.75 | 0.00 | -566.26 | 481.62 | -69.48 | 101.12 | 1.50 | -0.09 | 1.58 |
| | | 0.26 | 340.40 | | 101.12 | | 0.56 | 0.09 | |
| VA19 | 1062.75 | 0.00 | 0.00 | 140.55 | 0.00 | 0.00 | 0.56 | 0.00 | -8.59 |
| | | 0.04 | 0.00 | | 0.00 | | 0.56 | 0.00 | |
| VA20 | 1062.75 | -0.06 | -12.69 | 483.94 | -38.20 | 0.00 | 1.03 | -0.02 | 1.17 |
| | | 0.00 | 0.00 | | 0.00 | | 1.02 | 0.02 | |
| VA21 - 1 | 1062.75 | 0.00 | -2024.92 | 3164.56 | 40.69 | 40.69 | 3.32 | 0.03 | 6.79 |
| | | 0.22 | 3164.56 | | -50.00 | | 0.09 | -0.03 | |
| VA21 - 2 | 1062.75 | 0.00 | 3166.88 | 3166.88 | -41.38 | 6.74 | -1.47 | -0.02 | -2.70 |
| | | 0.22 | -2315.02 | | 6.74 | | 3.72 | 0.02 | |
| VA22 | 1062.75 | 0.00 | -245.51 | 972.80 | -55.48 | 80.52 | 1.61 | -0.04 | -0.11 |
| | | 0.16 | -1434.17 | | 80.52 | | 2.26 | 0.04 | |
| VA23 | 1062.75 | 0.00 | 0.00 | 1384.92 | 0.00 | 0.00 | 1.72 | 0.00 | 6.54 |
| | | 0.04 | 0.00 | | 0.00 | | 1.72 | 0.00 | |
| VA24 - 1 | 1111.50 | 0.00 | -2148.35 | 1766.87 | -62.64 | 39.05 | 2.95 | -0.02 | -5.83 |
| | | 0.18 | -3764.71 | | 39.05 | | 3.51 | 0.02 | |
| VA24 - 2 | 1111.50 | 0.00 | -3390.33 | 1883.54 | 9.30 | 26.38 | 3.42 | 0.00 | -0.34 |
| | | 0.25 | -4115.42 | | 26.38 | | 3.65 | 0.00 | |
| VA25 - 1 | 1111.50 | 0.00 | -4006.93 | 2405.43 | 96.69 | 96.69 | 4.41 | 0.07 | 4.45 |
| | | 0.28 | 2405.43 | | -40.22 | | -2.29 | -0.07 | |
| VA25 - 2 | 1111.50 | 0.00 | 2409.97 | 2409.97 | -40.22 | 0.00 | 0.09 | -0.01 | 4.45 |
| | | 0.28 | -3363.02 | | -17.32 | | 3.58 | 0.01 | |
| VA25 - 3 | 1111.50 | 0.00 | -1943.10 | 660.50 | 4.49 | 4.49 | 2.41 | 0.01 | -1.47 |
| | | 0.10 | -1200.05 | | -38.95 | | 2.03 | -0.01 | |

| CASO: 1.3G1+1.4G2+1.4Q+1.2D4 | | | | | | | | | |
|------------------------------|------------------|------------------|-----------------------|------------------|-----------------------|------------------|--------------------|--------------------|----------------|
| Elemento | Carga (kgf/m) | Rd Nd (tf) | Mxi Mxf (kgf.m) | MxMáx (kgf.m) | Myi Myf (kgf.m) | MyMáx (kgf.m) | Vxi Vxf (tf) | Vyi Vyf (tf) | Mtd (kgf/m) |
| VA1 - 1 | 1062.75 | 0.00 0.39 | -1995.25 2610.61 | 2610.61 | -89.17 6.33 | 6.33 | 3.40 -1.33 | -0.05 0.05 | -2.54 |

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|----------|---------|---------------|----------------------|---------|-------------------|--------|---------------|---------------|--------|
| VA1 - 2 | 1062.75 | 0.00 0.40 | 2610.60 282.84 | 2610.60 | 6.33 -82.42 | 0.00 | -1.66 2.77 | 0.08 -0.08 | -3.40 |
| VA1 - 3 | 1062.75 | 0.00 0.37 | 284.16 -3034.00 | 284.16 | -82.42 185.13 | 185.13 | -5.40 6.02 | -0.46 0.46 | -3.18 |
| VA1 - 4 | 1062.75 | -0.42 0.00 | -2922.00 423.57 | 991.17 | 157.41 -120.65 | 157.41 | 2.88 1.10 | 0.07 -0.07 | 0.90 |
| VA1 - 5 | 1062.75 | -0.46 0.00 | 425.80 -2036.53 | 425.80 | -120.65 155.55 | 155.55 | -4.52 5.06 | -0.54 0.54 | -3.96 |
| VA1 - 6 | 1062.75 | -0.42 0.00 | -1372.60 -773.37 | 356.63 | 121.80 -64.14 | 121.80 | 1.92 1.55 | 0.06 -0.06 | 2.31 |
| VA2 | 1062.75 | 0.00 0.00 | 0.00 0.00 | 518.17 | 0.00 0.00 | 0.00 | 1.06 1.06 | 0.00 0.00 | -4.03 |
| VA3 - 1 | 1062.75 | 0.00 0.02 | 0.00 -2142.12 | 1528.01 | 0.00 19.25 | 19.25 | 1.80 2.79 | 0.00 0.00 | 0.92 |
| VA3 - 2 | 1062.75 | 0.00 0.00 | -2151.31 8.52 | 8.52 | 76.21 0.00 | 76.21 | 2.21 -0.56 | 0.05 -0.05 | 0.00 |
| VA4 - 1 | 1111.50 | 0.00 0.18 | -2044.31 -2396.05 | 1297.32 | 83.74 -47.53 | 83.74 | 2.73 2.87 | 0.03 -0.03 | 1.14 |
| VA4 - 2 | 1111.50 | 0.00 0.30 | -2530.92 2234.59 | 2234.59 | -102.97 -36.62 | 0.00 | 3.51 -1.33 | -0.03 0.03 | -3.16 |
| VA4 - 3 | 1111.50 | 0.00 0.30 | 2234.60 1833.31 | 2234.60 | -36.62 15.77 | 0.00 | -1.11 1.46 | -0.17 0.17 | -3.16 |
| VA4 - 4 | 1111.50 | 0.00 0.30 | 1833.40 -263.35 | 1833.40 | 15.77 191.75 | 191.75 | -2.44 3.25 | -0.24 0.24 | -3.16 |
| VA4 - 5 | 1111.50 | 0.00 0.28 | -264.59 -4202.70 | 0.00 | 191.75 15.72 | 191.75 | -6.75 7.37 | 0.32 -0.32 | -7.15 |
| VA4 - 6 | 1111.50 | -0.02 0.00 | -4584.61 -326.69 | 0.00 | -34.93 9.11 | 9.11 | 4.79 -3.68 | -0.04 0.04 | 4.57 |
| VA4 - 7 | 1111.50 | -0.02 0.00 | -326.47 1931.36 | 1931.36 | 9.11 0.47 | 9.11 | 2.70 -1.50 | 0.01 -0.01 | 1.84 |
| VA4 - 8 | 1111.50 | -0.02 0.00 | 1930.10 1229.59 | 2051.29 | 0.47 122.66 | 0.00 | 0.52 1.35 | -0.07 0.07 | 1.84 |
| VA4 - 9 | 1111.50 | 0.00 0.01 | 1236.54 -3119.17 | 1236.54 | 122.66 -166.68 | 122.66 | -7.08 7.73 | 0.49 -0.49 | 1.84 |
| VA4 - 10 | 1111.50 | -0.18 0.00 | -2700.15 -121.52 | 0.00 | -43.80 10.46 | 10.46 | 3.20 -2.12 | -0.06 0.06 | 1.56 |
| VA4 - 11 | 1111.50 | -0.18 0.00 | -113.00 577.69 | 577.69 | 10.46 14.32 | 14.32 | 1.56 -0.95 | -0.01 0.01 | 1.56 |
| VA4 - 12 | 1111.50 | -0.20 0.00 | 578.78 -1224.00 | 578.78 | 14.32 -64.17 | 14.32 | -0.07 2.00 | 0.05 -0.05 | 1.56 |
| VA4 - 13 | 1111.50 | 0.00 0.05 | -958.50 -506.59 | 481.61 | -11.28 -14.89 | 0.00 | 1.79 1.48 | 0.00 0.00 | -2.42 |
| VA5 - 1 | 1062.75 | -0.01 0.00 | -561.10 759.65 | 945.09 | -82.80 40.64 | 40.64 | 1.79 0.63 | -0.05 0.05 | -3.06 |
| VA5 - 2 | 1062.75 | -0.01 0.00 | 759.56 -2212.66 | 759.56 | 40.64 18.43 | 40.64 | -1.61 2.98 | 0.02 -0.02 | -3.06 |
| VA5 - 3 | 1062.75 | 0.00 0.02 | -2739.11 451.89 | 451.89 | 15.38 6.26 | 15.38 | 3.71 -2.64 | 0.01 -0.01 | 2.45 |
| VA5 - 4 | 1062.75 | 0.00 0.02 | 451.64 1622.70 | 1622.70 | 6.26 52.42 | 0.00 | 1.66 -0.52 | -0.04 0.04 | 2.45 |
| VA5 - 5 | 1062.75 | 0.00 0.02 | 1623.95 -2178.05 | 1623.95 | 52.42 -33.07 | 52.42 | -0.46 2.88 | 0.04 -0.04 | 2.45 |
| VA5 - 6 | 1062.75 | 0.00 0.09 | -1997.20 935.07 | 935.07 | 72.98 -55.87 | 72.98 | 2.74 -1.12 | 0.08 -0.08 | -0.20 |
| VA5 - 7 | 1062.75 | 0.00 0.12 | 933.97 -255.63 | 933.97 | -4.25 -55.89 | 0.00 | 0.09 1.59 | 0.03 -0.03 | -14.19 |
| VA6 - 1 | 1062.75 | 0.00 0.05 | 9.70 834.42 | 883.87 | 3.15 -13.46 | 0.00 | 1.37 0.34 | 0.01 -0.01 | 1.90 |
| VA6 - 2 | 1062.75 | 0.00 0.05 | 840.94 -3556.12 | 840.94 | -13.46 29.27 | 29.27 | -2.05 3.68 | -0.03 0.03 | 1.90 |
| VA7 - 1 | 1062.75 | -0.08 0.00 | -1051.16 2178.73 | 2178.73 | -44.67 7.79 | 7.79 | 2.89 -1.22 | -0.03 0.03 | -4.03 |
| VA7 - 2 | 1062.75 | -0.08 | 2172.21 | 2172.21 | 7.79 | 7.79 | -0.50 | 0.00 | -4.03 |

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| | | 0.00 | 0.00 | | 0.00 | | 2.21 | 0.00 | |
| VA8 - 1 | 1184.63 | 0.00 0.67 | -5039.62 -9067.56 | 4004.23 | -7.02 5.48 | 5.48 | 4.63 5.57 | 0.00 0.00 | -2.55 |
| VA8 - 2 | 1184.63 | 0.00 1.01 | -12041.84 -7816.74 | 6656.32 | 20.60 -5.36 | 20.60 | 6.66 5.86 | 0.00 0.00 | 2.10 |
| VA9 - 1 | 1111.50 | 0.00 0.16 | -2533.69 -3426.96 | 1719.48 | 58.77 -46.53 | 58.77 | 3.08 3.38 | 0.02 -0.02 | 4.01 |
| VA9 - 2 | 1111.50 | 0.00 0.23 | -3833.64 -3496.40 | 1965.14 | -14.82 6.90 | 6.90 | 3.59 3.48 | 0.00 0.00 | -0.40 |
| VA10 - 1 | 1111.50 | 0.00 0.13 | -3010.04 -2104.08 | 1245.53 | 35.49 -43.61 | 35.49 | 3.08 2.73 | 0.02 -0.02 | 0.60 |
| VA10 - 2 | 1111.50 | 0.00 0.07 | -1974.41 -794.49 | 872.06 | -44.89 14.72 | 14.72 | 2.52 1.93 | -0.01 0.01 | -4.52 |
| VA11 - 1 | 1062.75 | -0.09 0.00 | -468.91 -106.38 | 222.08 | 80.61 -54.14 | 80.61 | 1.21 0.84 | 0.07 -0.07 | 2.12 |
| VA11 - 2 | 1062.75 | -0.68 0.00 | -1337.97 604.87 | 1097.31 | 5.96 -7.37 | 5.96 | 2.28 1.03 | 0.00 0.00 | -1.49 |
| VA11 - 3 | 1062.75 | -0.68 0.00 | 600.84 -2055.22 | 600.84 | -7.37 -14.54 | 0.00 | -2.08 3.16 | 0.01 -0.01 | -1.49 |
| VA12 - 1 | 1062.75 | -0.13 0.00 | 0.00 2409.89 | 2786.71 | 0.00 -2.08 | 0.00 | 2.43 0.89 | 0.00 0.00 | 0.00 |
| VA12 - 2 | 1062.75 | -0.13 0.00 | 2413.92 0.00 | 2413.92 | -2.08 0.00 | 0.00 | -1.95 2.99 | 0.00 0.00 | 0.00 |
| VA13 | 1014.00 | 0.00 0.07 | 0.00 0.00 | 467.12 | 0.00 0.00 | 0.00 | 0.98 0.98 | 0.00 0.00 | 0.10 |
| VA14 - 1 | 1062.75 | 0.00 0.55 | 0.00 3085.86 | 3085.86 | 0.00 -12.56 | 0.00 | 3.50 -2.38 | 0.01 -0.01 | 1.32 |
| VA14 - 2 | 1062.75 | 0.00 0.55 | 3086.78 0.00 | 3242.53 | -12.56 0.00 | 0.00 | 0.58 2.63 | 0.00 0.00 | 1.32 |
| VA15 | 1014.00 | -0.05 0.00 | 0.00 0.00 | 467.12 | 0.00 0.00 | 0.00 | 0.98 0.98 | 0.00 0.00 | 0.25 |
| VA16 | 1014.00 | 0.00 0.08 | 0.00 0.00 | 467.12 | 0.00 0.00 | 0.00 | 0.98 0.98 | 0.00 0.00 | -1.26 |
| VA17 - 1 | 1062.75 | 0.00 0.56 | 0.00 5422.45 | 5422.45 | 0.00 27.73 | 27.73 | 5.72 -4.61 | -0.03 0.03 | -6.95 |
| VA17 - 2 | 1062.75 | 0.00 0.62 | 5421.53 0.00 | 5421.53 | -29.22 0.00 | 0.00 | -0.40 3.42 | -0.01 0.01 | 2.24 |
| VA18 | 1062.75 | 0.00 0.29 | -998.37 774.01 | 774.01 | -96.32 132.28 | 132.28 | 1.94 0.11 | -0.12 0.12 | 1.59 |
| VA19 | 1062.75 | 0.00 0.05 | 0.00 0.00 | 140.55 | 0.00 0.00 | 0.00 | 0.56 0.56 | 0.00 0.00 | -8.52 |
| VA20 | 1062.75 | -0.05 0.00 | -13.99 0.00 | 483.36 | -51.62 0.00 | 0.00 | 1.03 1.02 | -0.03 0.03 | 1.09 |
| VA21 - 1 | 1062.75 | 0.00 0.22 | -2261.73 3196.58 | 3196.58 | 30.96 -42.42 | 30.96 | 3.41 0.00 | 0.02 -0.02 | 6.90 |
| VA21 - 2 | 1062.75 | 0.00 0.23 | 3198.48 -2062.42 | 3198.48 | -45.57 19.87 | 19.87 | -1.37 3.61 | -0.03 0.03 | -2.79 |
| VA22 | 1062.75 | 0.00 0.17 | -707.56 -886.54 | 970.82 | -62.00 88.27 | 88.27 | 1.89 1.99 | -0.04 0.04 | -0.02 |
| VA23 | 1062.75 | 0.00 0.04 | 0.00 0.00 | 1384.92 | 0.00 0.00 | 0.00 | 1.72 1.72 | 0.00 0.00 | 6.52 |
| VA24 - 1 | 1111.50 | 0.00 0.15 | -2516.86 -3443.33 | 1720.29 | -81.91 51.09 | 51.09 | 3.07 3.39 | -0.02 0.02 | -5.87 |
| VA24 - 2 | 1111.50 | 0.00 0.22 | -3645.33 -3858.10 | 1876.43 | 3.04 33.26 | 33.26 | 3.50 3.57 | 0.00 0.00 | -0.44 |
| VA25 - 1 | 1111.50 | 0.00 0.27 | -4310.44 2327.18 | 2327.18 | 90.15 -42.95 | 90.15 | 4.53 -2.40 | 0.07 -0.07 | 4.50 |
| VA25 - 2 | 1111.50 | 0.00 0.26 | 2331.21 -3095.12 | 2348.61 | -42.95 -5.20 | 0.00 | 0.20 3.48 | -0.01 0.01 | 4.50 |
| VA25 - 3 | 1111.50 | 0.00 0.09 | -2334.62 -740.69 | 751.54 | -20.27 -2.41 | 0.00 | 2.62 1.82 | 0.00 0.00 | -1.34 |

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| CASO: 1.3G1+1.4G2+1.4Q+D1 | | | | | | | | | |
|---------------------------|------------------|------------------|-----------------------|------------------|-----------------------|------------------|--------------------|--------------------|----------------|
| Elemento | Carga (kgf/m) | Rd Nd (tf) | Mxi Mxf (kgf.m) | MxMáx (kgf.m) | Myi Myf (kgf.m) | MyMáx (kgf.m) | Vxi Vxf (tf) | Vyi Vyf (tf) | Mtd (kgf/m) |
| VA1 - 1 | 1062.75 | 0.00 0.40 | -1816.30 2613.02 | 2613.02 | -77.10 5.13 | 5.13 | 3.31 -1.24 | -0.04 0.04 | -1.98 |
| VA1 - 2 | 1062.75 | 0.00 0.40 | 2613.03 189.90 | 2613.03 | 5.13 -102.72 | 0.00 | -1.75 2.86 | 0.10 -0.10 | -2.85 |
| VA1 - 3 | 1062.75 | 0.00 0.38 | 191.25 -3179.67 | 191.25 | -102.72 177.44 | 177.44 | -5.49 6.11 | -0.48 0.48 | -2.72 |
| VA1 - 4 | 1062.75 | -0.42 0.00 | -2819.03 348.56 | 965.60 | 152.03 -114.97 | 152.03 | 2.84 1.15 | 0.07 -0.07 | 0.52 |
| VA1 - 5 | 1062.75 | -0.46 0.00 | 350.72 -2136.01 | 350.72 | -114.97 150.94 | 150.94 | -4.56 5.11 | -0.52 0.52 | -3.49 |
| VA1 - 6 | 1062.75 | -0.43 0.00 | -1214.08 -968.15 | 323.14 | 120.10 -62.31 | 120.10 | 1.81 1.66 | 0.06 -0.06 | 1.82 |
| VA2 | 1062.75 | 0.00 0.00 | 0.00 0.00 | 518.17 | 0.00 0.00 | 0.00 | 1.06 1.06 | 0.00 0.00 | -4.13 |
| VA3 - 1 | 1062.75 | 0.00 0.01 | 0.00 -2141.84 | 1528.12 | 0.00 21.39 | 21.39 | 1.80 2.79 | 0.00 0.00 | 0.90 |
| VA3 - 2 | 1062.75 | 0.00 0.00 | -2151.15 8.69 | 8.69 | 70.21 0.00 | 70.21 | 2.21 -0.56 | 0.05 -0.05 | 0.00 |
| VA4 - 1 | 1111.50 | 0.00 0.19 | -1853.42 -2467.12 | 1362.47 | 76.57 -49.28 | 76.57 | 2.67 2.92 | 0.03 -0.03 | 1.03 |
| VA4 - 2 | 1111.50 | 0.00 0.30 | -2472.70 2162.06 | 2162.06 | -85.02 -42.18 | 0.00 | 3.45 -1.26 | -0.02 0.02 | -1.37 |
| VA4 - 3 | 1111.50 | 0.00 0.30 | 2162.05 1739.98 | 2162.05 | -42.18 10.04 | 0.00 | -1.17 1.52 | -0.17 0.17 | -1.37 |
| VA4 - 4 | 1111.50 | 0.00 0.30 | 1740.05 -405.62 | 1740.05 | 10.04 188.77 | 188.77 | -2.50 3.32 | -0.24 0.24 | -1.37 |
| VA4 - 5 | 1111.50 | 0.00 0.29 | -406.90 -4382.06 | 0.00 | 188.77 -7.75 | 188.77 | -6.82 7.44 | 0.35 -0.35 | -7.50 |
| VA4 - 6 | 1111.50 | -0.01 0.00 | -4432.71 -225.97 | 0.00 | -46.88 -2.62 | 0.00 | 4.74 -3.63 | -0.04 0.04 | 2.83 |
| VA4 - 7 | 1111.50 | -0.01 0.00 | -225.77 1977.31 | 1977.31 | -2.62 -1.10 | 0.00 | 2.65 -1.45 | 0.00 0.00 | 0.94 |
| VA4 - 8 | 1111.50 | -0.01 0.00 | 1976.04 1189.71 | 2075.77 | -1.10 126.08 | 0.00 | 0.47 1.40 | -0.08 0.08 | 0.94 |
| VA4 - 9 | 1111.50 | 0.00 0.02 | 1196.83 -3188.79 | 1196.83 | 126.08 -149.90 | 126.08 | -7.13 7.78 | 0.47 -0.47 | 0.94 |
| VA4 - 10 | 1111.50 | -0.15 0.00 | -2643.94 -113.54 | 0.00 | -41.37 12.21 | 12.21 | 3.15 -2.07 | -0.06 0.06 | 1.64 |
| VA4 - 11 | 1111.50 | -0.15 0.00 | -104.85 558.50 | 558.50 | 12.21 17.81 | 17.81 | 1.51 -0.90 | -0.01 0.01 | 1.64 |
| VA4 - 12 | 1111.50 | -0.18 0.00 | 559.62 -1330.41 | 559.62 | 17.81 -65.55 | 17.81 | -0.12 2.05 | 0.05 -0.05 | 1.64 |
| VA4 - 13 | 1111.50 | 0.00 0.05 | -738.77 -809.76 | 432.22 | -14.16 -18.78 | 0.00 | 1.61 1.66 | 0.00 0.00 | -2.45 |
| VA5 - 1 | 1062.75 | 0.00 0.00 | -475.72 727.87 | 945.25 | -69.56 38.23 | 38.23 | 1.74 0.68 | -0.05 0.05 | -2.04 |
| VA5 - 2 | 1062.75 | 0.00 0.00 | 727.80 -2311.08 | 727.80 | 38.23 1.61 | 38.23 | -1.66 3.04 | 0.03 -0.03 | -2.04 |
| VA5 - 3 | 1062.75 | 0.00 0.03 | -2665.03 497.69 | 497.69 | -0.09 0.97 | 0.97 | 3.68 -2.61 | 0.00 0.00 | 1.55 |
| VA5 - 4 | 1062.75 | 0.00 0.03 | 497.49 1638.29 | 1638.29 | 0.97 47.98 | 0.00 | 1.63 -0.49 | -0.04 0.04 | 1.55 |
| VA5 - 5 | 1062.75 | 0.00 0.03 | 1639.56 -2226.41 | 1639.56 | 47.98 -20.95 | 47.98 | -0.49 2.91 | 0.03 -0.03 | 1.55 |
| VA5 - 6 | 1062.75 | 0.00 0.08 | -1952.38 921.73 | 921.73 | 70.64 -53.87 | 70.64 | 2.70 -1.08 | 0.08 -0.08 | -0.49 |
| VA5 - 7 | 1062.75 | 0.00 0.11 | 920.61 -328.84 | 920.61 | -8.43 -46.14 | 0.00 | 0.05 1.63 | 0.02 -0.02 | -13.65 |
| VA6 - 1 | 1062.75 | 0.00 | 10.31 | 826.41 | -8.13 | 0.00 | 1.32 | 0.00 | 2.07 |


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|----------|---------|---------------|-----------------------|---------|------------------|--------|---------------|---------------|-------|
| | | 0.05 | 757.60 | | -15.95 | | 0.38 | 0.00 | |
| VA6 - 2 | 1062.75 | 0.00 0.05 | 764.12 -3707.07 | 764.12 | -15.95 35.91 | 35.91 | -2.10 3.73 | -0.03 0.03 | 2.07 |
| VA7 - 1 | 1062.75 | -0.09 0.00 | -949.24 2230.28 | 2230.28 | -49.82 5.56 | 5.56 | 2.86 -1.19 | -0.04 0.04 | -4.22 |
| VA7 - 2 | 1062.75 | -0.09 0.00 | 2223.77 0.00 | 2223.77 | 5.56 0.00 | 5.56 | -0.53 2.24 | 0.00 0.00 | -4.22 |
| VA8 - 1 | 1184.63 | 0.00 0.68 | -4885.66 -9198.84 | 4030.90 | -1.49 0.15 | 0.15 | 4.60 5.60 | 0.00 0.00 | -1.84 |
| VA8 - 2 | 1184.63 | 0.00 1.00 | -11943.76 -7943.22 | 6633.48 | 16.31 -7.97 | 16.31 | 6.64 5.88 | 0.00 0.00 | 1.55 |
| VA9 - 1 | 1111.50 | 0.00 0.17 | -2379.39 -3562.09 | 1734.06 | 42.19 -33.37 | 42.19 | 3.03 3.43 | 0.01 -0.01 | 3.37 |
| VA9 - 2 | 1111.50 | 0.00 0.25 | -3733.80 -3601.22 | 1959.35 | -15.40 13.27 | 13.27 | 3.56 3.52 | 0.00 0.00 | -0.35 |
| VA10 - 1 | 1111.50 | 0.00 0.14 | -2892.24 -2210.79 | 1242.44 | 30.95 -42.91 | 30.95 | 3.03 2.77 | 0.01 -0.01 | 0.90 |
| VA10 - 2 | 1111.50 | 0.00 0.07 | -1820.26 -978.65 | 835.21 | -53.54 33.87 | 33.87 | 2.43 2.01 | -0.02 0.02 | -4.23 |
| VA11 - 1 | 1062.75 | -0.10 0.00 | -219.64 -241.41 | 260.27 | 69.39 -42.30 | 69.39 | 1.02 1.04 | 0.06 -0.06 | 2.33 |
| VA11 - 2 | 1062.75 | -0.70 0.00 | -1158.32 395.64 | 1017.71 | 0.20 -4.41 | 0.20 | 2.15 1.15 | 0.00 0.00 | -1.72 |
| VA11 - 3 | 1062.75 | -0.70 0.00 | 391.51 -2391.41 | 391.51 | -4.41 -7.17 | 0.00 | -2.21 3.28 | 0.00 0.00 | -1.72 |
| VA12 - 1 | 1062.75 | -0.15 0.00 | 0.00 2409.81 | 2786.66 | 0.00 -0.92 | 0.00 | 2.43 0.90 | 0.00 0.00 | 0.01 |
| VA12 - 2 | 1062.75 | -0.15 0.00 | 2413.94 0.00 | 2413.94 | -0.92 0.00 | 0.00 | -1.95 2.99 | 0.00 0.00 | 0.01 |
| VA13 | 1014.00 | 0.00 0.08 | 0.00 0.00 | 467.12 | 0.00 0.00 | 0.00 | 0.98 0.98 | 0.00 0.00 | 0.07 |
| VA14 - 1 | 1062.75 | 0.00 0.59 | 0.00 3085.91 | 3085.91 | 0.00 -10.94 | 0.00 | 3.50 -2.38 | 0.01 -0.01 | 1.35 |
| VA14 - 2 | 1062.75 | 0.00 0.59 | 3086.81 0.00 | 3242.56 | -10.94 0.00 | 0.00 | 0.58 2.63 | 0.00 0.00 | 1.35 |
| VA15 | 1014.00 | -0.04 0.00 | 0.00 0.00 | 467.12 | 0.00 0.00 | 0.00 | 0.98 0.98 | 0.00 0.00 | 0.21 |
| VA16 | 1014.00 | 0.00 0.07 | 0.00 0.00 | 467.12 | 0.00 0.00 | 0.00 | 0.98 0.98 | 0.00 0.00 | -1.27 |
| VA17 - 1 | 1062.75 | 0.00 0.54 | 0.00 5422.40 | 5422.40 | 0.00 23.94 | 23.94 | 5.72 -4.61 | -0.02 0.02 | -7.13 |
| VA17 - 2 | 1062.75 | 0.00 0.59 | 5421.50 0.00 | 5421.50 | -24.88 0.00 | 0.00 | -0.40 3.42 | -0.01 0.01 | 2.18 |
| VA18 | 1062.75 | 0.00 0.27 | -785.99 561.45 | 607.57 | -82.80 116.58 | 116.58 | 1.72 0.33 | -0.10 0.10 | 1.64 |
| VA19 | 1062.75 | 0.00 0.05 | 0.00 0.00 | 140.55 | 0.00 0.00 | 0.00 | 0.56 0.56 | 0.00 0.00 | -8.69 |
| VA20 | 1062.75 | -0.06 0.00 | -13.16 0.00 | 483.74 | -45.44 0.00 | 0.00 | 1.03 1.02 | -0.02 0.02 | 1.12 |
| VA21 - 1 | 1062.75 | 0.00 0.21 | -2124.26 3128.31 | 3128.31 | 36.90 -46.20 | 36.90 | 3.34 0.07 | 0.03 -0.03 | 7.23 |
| VA21 - 2 | 1062.75 | 0.00 0.22 | 3130.38 -2163.84 | 3130.38 | -38.07 8.60 | 8.60 | -1.39 3.63 | -0.02 0.02 | -3.08 |
| VA22 | 1062.75 | 0.00 0.17 | -487.84 -1149.32 | 964.21 | -58.46 83.87 | 83.87 | 1.76 2.12 | -0.04 0.04 | -0.16 |
| VA23 | 1062.75 | 0.00 0.04 | 0.00 0.00 | 1384.92 | 0.00 0.00 | 0.00 | 1.72 1.72 | 0.00 0.00 | 6.51 |
| VA24 - 1 | 1111.50 | 0.00 0.16 | -2335.35 -3600.53 | 1738.29 | -75.73 48.42 | 48.42 | 3.01 3.45 | -0.02 0.02 | -6.48 |
| VA24 - 2 | 1111.50 | 0.00 0.23 | -3511.74 -3992.03 | 1880.58 | 8.53 35.80 | 35.80 | 3.46 3.61 | 0.00 0.00 | -0.36 |
| VA25 - 1 | 1111.50 | 0.00 0.28 | -4179.25 2392.45 | 2392.45 | 103.29 -52.14 | 103.29 | 4.50 -2.37 | 0.08 -0.08 | 4.95 |


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|----------|---------|--------------|---------------------|---------|-----------------|------|--------------|---------------|-------|
| VA25 - 2 | 1111.50 | 0.00 0.27 | 2396.67 -3249.64 | 2400.33 | -52.14 -9.85 | 0.00 | 0.13 3.55 | -0.01 0.01 | 4.95 |
| VA25 - 3 | 1111.50 | 0.00 0.09 | -2144.59 -969.75 | 698.93 | -4.68 -21.77 | 0.00 | 2.51 1.93 | 0.00 0.00 | -1.20 |

| CASO: 1.3G1+1.4G2+1.4Q+D2 | | | | | | | | | |
|---------------------------|------------------|------------------|-----------------------|------------------|-----------------------|------------------|--------------------|--------------------|----------------|
| Elemento | Carga (kgf/m) | Rd Nd (tf) | Mxi Mxf (kgf.m) | MxMáx (kgf.m) | Myi Myf (kgf.m) | MyMáx (kgf.m) | Vxi Vxf (tf) | Vyi Vyf (tf) | Mtd (kgf/m) |
| VA1 - 1 | 1062.75 | 0.00 0.38 | -2126.15 2612.19 | 2612.19 | -76.83 4.62 | 4.62 | 3.47 -1.40 | -0.04 0.04 | -2.02 |
| VA1 - 2 | 1062.75 | 0.00 0.39 | 2612.12 355.86 | 2612.12 | 4.62 -101.76 | 0.00 | -1.59 2.71 | 0.10 -0.10 | -2.89 |
| VA1 - 3 | 1062.75 | 0.00 0.36 | 357.07 -2921.53 | 357.07 | -101.76 178.99 | 178.99 | -5.33 5.95 | -0.48 0.48 | -2.59 |
| VA1 - 4 | 1062.75 | -0.43 0.00 | -2994.87 479.10 | 1011.03 | 151.95 -114.79 | 151.95 | 2.92 1.06 | 0.07 -0.07 | 0.75 |
| VA1 - 5 | 1062.75 | -0.47 0.00 | 481.30 -1963.42 | 481.30 | -114.79 151.78 | 151.78 | -4.48 5.03 | -0.52 0.52 | -4.72 |
| VA1 - 6 | 1062.75 | -0.43 0.00 | -1482.51 -646.77 | 379.76 | 119.05 -61.69 | 119.05 | 1.99 1.48 | 0.06 -0.06 | 1.82 |
| VA2 | 1062.75 | 0.00 0.00 | 0.00 0.00 | 518.17 | 0.00 0.00 | 0.00 | 1.06 1.06 | 0.00 0.00 | -4.23 |
| VA3 - 1 | 1062.75 | 0.00 0.01 | 0.00 -2142.42 | 1527.90 | 0.00 21.22 | 21.22 | 1.80 2.79 | 0.00 0.00 | 0.94 |
| VA3 - 2 | 1062.75 | 0.00 0.00 | -2151.42 8.42 | 8.42 | 72.14 0.00 | 72.14 | 2.21 -0.56 | 0.05 -0.05 | 0.00 |
| VA4 - 1 | 1111.50 | 0.00 0.14 | -2246.58 -2316.65 | 1230.25 | 82.15 -50.44 | 82.15 | 2.78 2.81 | 0.03 -0.03 | 1.04 |
| VA4 - 2 | 1111.50 | 0.00 0.25 | -2582.74 2303.49 | 2303.49 | -87.04 -41.89 | 0.00 | 3.58 -1.39 | -0.02 0.02 | -2.07 |
| VA4 - 3 | 1111.50 | 0.00 0.25 | 2303.57 1921.48 | 2303.57 | -41.89 10.13 | 0.00 | -1.05 1.39 | -0.17 0.17 | -2.07 |
| VA4 - 4 | 1111.50 | 0.00 0.25 | 1921.63 -129.90 | 1921.63 | 10.13 189.78 | 189.78 | -2.37 3.19 | -0.24 0.24 | -2.07 |
| VA4 - 5 | 1111.50 | 0.00 0.24 | -131.07 -4034.93 | 0.00 | 189.78 -5.40 | 189.78 | -6.69 7.31 | 0.35 -0.35 | -4.04 |
| VA4 - 6 | 1111.50 | -0.07 0.00 | -4750.61 -435.56 | 0.00 | -47.44 -2.56 | 0.00 | 4.85 -3.73 | -0.04 0.04 | 4.22 |
| VA4 - 7 | 1111.50 | -0.07 0.00 | -435.32 1883.63 | 1883.63 | -2.56 -0.91 | 0.00 | 2.75 -1.56 | 0.00 0.00 | 0.59 |
| VA4 - 8 | 1111.50 | -0.07 0.00 | 1882.36 1277.66 | 2027.49 | -0.91 126.70 | 0.00 | 0.58 1.30 | -0.08 0.08 | 0.59 |
| VA4 - 9 | 1111.50 | -0.04 0.00 | 1284.43 -3037.88 | 1284.43 | 126.70 -149.23 | 126.70 | -7.02 7.67 | 0.47 -0.47 | 0.59 |
| VA4 - 10 | 1111.50 | -0.22 0.00 | -2732.03 -119.02 | 0.00 | -41.06 11.07 | 11.07 | 3.23 -2.15 | -0.05 0.05 | 1.65 |
| VA4 - 11 | 1111.50 | -0.22 0.00 | -110.60 599.58 | 599.58 | 11.07 15.16 | 15.16 | 1.60 -0.99 | -0.01 0.01 | 1.65 |
| VA4 - 12 | 1111.50 | -0.24 0.00 | 600.72 -1140.81 | 600.72 | 15.16 -63.94 | 15.16 | -0.03 1.97 | 0.05 -0.05 | 1.65 |
| VA4 - 13 | 1111.50 | 0.00 0.04 | -1188.85 -203.86 | 555.87 | -12.18 -26.65 | 0.00 | 1.97 1.30 | 0.00 0.00 | -2.46 |
| VA5 - 1 | 1062.75 | 0.00 0.01 | -651.88 798.31 | 948.44 | -71.83 39.04 | 39.04 | 1.85 0.57 | -0.05 0.05 | -2.06 |
| VA5 - 2 | 1062.75 | 0.00 0.01 | 798.16 -2100.40 | 798.16 | 39.04 1.73 | 39.04 | -1.55 2.93 | 0.03 -0.03 | -2.06 |
| VA5 - 3 | 1062.75 | 0.00 0.04 | -2815.71 404.13 | 404.13 | 0.58 0.89 | 0.89 | 3.74 -2.67 | 0.00 0.00 | 1.59 |
| VA5 - 4 | 1062.75 | 0.00 0.04 | 403.86 1605.77 | 1605.77 | 0.89 48.20 | 0.00 | 1.69 -0.55 | -0.04 0.04 | 1.59 |
| VA5 - 5 | 1062.75 | 0.00 | 1607.04 | 1607.04 | 48.20 | 48.20 | -0.43 | 0.03 | 1.59 |

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|----------|---------|---------------|-----------------------|---------|------------------|--------|---------------|---------------|--------|
| | | 0.04 | -2129.70 | | -20.42 | | 2.85 | -0.03 | |
| VA5 - 6 | 1062.75 | 0.00 0.10 | -2062.64 946.00 | 946.00 | 70.75 -55.08 | 70.75 | 2.79 -1.17 | 0.08 -0.08 | -0.48 |
| VA5 - 7 | 1062.75 | 0.00 0.12 | 944.86 -164.87 | 949.09 | -10.69 -57.98 | 0.00 | 0.14 1.54 | 0.03 -0.03 | -14.01 |
| VA6 - 1 | 1062.75 | 0.00 0.06 | 8.88 944.50 | 976.67 | 2.66 -13.64 | 0.00 | 1.44 0.27 | 0.01 -0.01 | 2.16 |
| VA6 - 2 | 1062.75 | 0.00 0.06 | 951.05 -3339.82 | 951.05 | -13.64 30.89 | 30.89 | -1.98 3.61 | -0.03 0.03 | 2.16 |
| VA7 - 1 | 1062.75 | -0.07 0.00 | -1194.16 2106.41 | 2106.41 | -45.49 8.16 | 8.16 | 2.94 -1.27 | -0.03 0.03 | -4.35 |
| VA7 - 2 | 1062.75 | -0.07 0.00 | 2099.86 0.00 | 2099.86 | 8.16 0.00 | 8.16 | -0.45 2.16 | 0.01 -0.01 | -4.35 |
| VA8 - 1 | 1184.63 | 0.00 0.68 | -5177.81 -8956.60 | 3981.93 | -10.93 2.81 | 2.81 | 4.66 5.54 | 0.00 0.00 | -1.87 |
| VA8 - 2 | 1184.63 | 0.00 1.02 | -12150.08 -7686.97 | 6676.23 | 13.99 0.51 | 13.99 | 6.68 5.83 | 0.00 0.00 | 1.56 |
| VA9 - 1 | 1111.50 | 0.00 0.17 | -2394.73 -3547.08 | 1733.37 | 52.43 -43.70 | 52.43 | 3.03 3.43 | 0.02 -0.02 | 4.67 |
| VA9 - 2 | 1111.50 | 0.00 0.24 | -3731.75 -3596.74 | 1962.65 | -23.25 11.51 | 11.51 | 3.56 3.52 | -0.01 0.01 | -0.38 |
| VA10 - 1 | 1111.50 | 0.00 0.14 | -2893.71 -2208.82 | 1242.83 | 29.09 -41.57 | 29.09 | 3.03 2.77 | 0.01 -0.01 | 0.26 |
| VA10 - 2 | 1111.50 | 0.00 0.07 | -1823.01 -976.13 | 835.24 | -55.47 38.17 | 38.17 | 2.43 2.01 | -0.02 0.02 | -4.93 |
| VA11 - 1 | 1062.75 | -0.10 0.00 | -238.37 -235.76 | 252.66 | 71.45 -44.69 | 71.45 | 1.03 1.03 | 0.06 -0.06 | 1.94 |
| VA11 - 2 | 1062.75 | -0.70 0.00 | -1177.98 414.58 | 1023.79 | -1.61 -3.85 | 0.00 | 2.16 1.14 | 0.00 0.00 | -1.35 |
| VA11 - 3 | 1062.75 | -0.70 0.00 | 410.35 -2359.98 | 410.35 | -3.85 -5.93 | 0.00 | -2.19 3.27 | 0.00 0.00 | -1.35 |
| VA12 - 1 | 1062.75 | -0.14 0.00 | 0.00 2409.74 | 2786.60 | 0.00 -1.00 | 0.00 | 2.43 0.90 | 0.00 0.00 | -0.07 |
| VA12 - 2 | 1062.75 | -0.14 0.00 | 2413.97 0.00 | 2413.97 | -1.00 0.00 | 0.00 | -1.95 2.99 | 0.00 0.00 | -0.07 |
| VA13 | 1014.00 | 0.00 0.08 | 0.00 0.00 | 467.12 | 0.00 0.00 | 0.00 | 0.98 0.98 | 0.00 0.00 | 0.15 |
| VA14 - 1 | 1062.75 | 0.00 0.59 | 0.00 3085.80 | 3085.80 | 0.00 -11.22 | 0.00 | 3.50 -2.38 | 0.01 -0.01 | 1.21 |
| VA14 - 2 | 1062.75 | 0.00 0.59 | 3086.74 0.00 | 3242.50 | -11.22 0.00 | 0.00 | 0.58 2.63 | 0.00 0.00 | 1.21 |
| VA15 | 1014.00 | -0.04 0.00 | 0.00 0.00 | 467.12 | 0.00 0.00 | 0.00 | 0.98 0.98 | 0.00 0.00 | 0.26 |
| VA16 | 1014.00 | 0.00 0.07 | 0.00 0.00 | 467.12 | 0.00 0.00 | 0.00 | 0.98 0.98 | 0.00 0.00 | -1.27 |
| VA17 - 1 | 1062.75 | 0.00 0.54 | 0.00 5422.51 | 5422.51 | 0.00 24.79 | 24.79 | 5.72 -4.61 | -0.02 0.02 | -6.78 |
| VA17 - 2 | 1062.75 | 0.00 0.60 | 5421.57 0.00 | 5421.57 | -26.13 0.00 | 0.00 | -0.40 3.42 | -0.01 0.01 | 2.22 |
| VA18 | 1062.75 | 0.00 0.27 | -778.63 552.95 | 600.83 | -83.00 116.82 | 116.82 | 1.72 0.34 | -0.10 0.10 | 1.53 |
| VA19 | 1062.75 | 0.00 0.05 | 0.00 0.00 | 140.55 | 0.00 0.00 | 0.00 | 0.56 0.56 | 0.00 0.00 | -8.42 |
| VA20 | 1062.75 | -0.05 0.00 | -13.53 0.00 | 483.57 | -44.38 0.00 | 0.00 | 1.03 1.02 | -0.02 0.02 | 1.14 |
| VA21 - 1 | 1062.75 | 0.00 0.22 | -2162.39 3232.83 | 3232.83 | 34.76 -46.21 | 34.76 | 3.39 0.02 | 0.03 -0.03 | 6.46 |
| VA21 - 2 | 1062.75 | 0.00 0.23 | 3234.99 -2213.60 | 3234.99 | -48.88 18.01 | 18.01 | -1.46 3.70 | -0.03 0.03 | -2.41 |
| VA22 | 1062.75 | 0.00 0.17 | -465.23 -1171.39 | 966.97 | -59.02 84.92 | 84.92 | 1.74 2.13 | -0.04 0.04 | 0.03 |
| VA23 | 1062.75 | 0.00 0.04 | 0.00 0.00 | 1384.92 | 0.00 0.00 | 0.00 | 1.72 1.72 | 0.00 0.00 | 6.55 |


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| VA24 - 1 | 1111.50 | 0.00 0.17 | -2329.86 -3607.51 | 1737.75 | -68.81 41.72 | 41.72 | 3.01 3.45 | -0.02 0.02 | -5.22 |
| VA24 - 2 | 1111.50 | 0.00 0.24 | -3523.92 -3981.50 | 1879.39 | 3.81 23.84 | 23.84 | 3.47 3.61 | 0.00 0.00 | -0.41 |
| VA25 - 1 | 1111.50 | 0.00 0.27 | -4138.11 2340.15 | 2340.15 | 83.55 -31.04 | 83.55 | 4.45 -2.32 | 0.06 -0.06 | 4.00 |
| VA25 - 2 | 1111.50 | 0.00 0.27 | 2344.51 -3208.49 | 2354.00 | -31.04 -12.67 | 0.00 | 0.16 3.52 | -0.01 0.01 | 4.00 |
| VA25 - 3 | 1111.50 | 0.00 0.10 | -2133.12 -970.99 | 703.05 | -11.10 -19.60 | 0.00 | 2.51 1.93 | 0.00 0.00 | -1.61 |

| CASO: 1.3G1+1.4G2+1.4Q+D3 | | | | | | | | | |
|---------------------------|------------------|------------------|-----------------------|------------------|-----------------------|------------------|--------------------|--------------------|----------------|
| Elemento | Carga (kgf/m) | Rd Nd (tf) | Mxi Mxf (kgf.m) | MxMáx (kgf.m) | Myi Myf (kgf.m) | MyMáx (kgf.m) | Vxi Vxf (tf) | Vyi Vyf (tf) | Mtd (kgf/m) |
| VA1 - 1 | 1062.75 | 0.00 0.39 | -1951.21 2614.27 | 2614.27 | -66.79 3.66 | 3.66 | 3.38 -1.31 | -0.04 0.04 | -1.56 |
| VA1 - 2 | 1062.75 | 0.00 0.39 | 2614.21 264.57 | 2614.21 | 3.66 -118.76 | 0.00 | -1.68 2.79 | 0.12 -0.12 | -2.42 |
| VA1 - 3 | 1062.75 | 0.00 0.37 | 265.82 -3064.43 | 265.82 | -118.76 172.45 | 172.45 | -5.42 6.04 | -0.50 0.50 | -2.22 |
| VA1 - 4 | 1062.75 | -0.43 0.00 | -2894.40 405.71 | 985.94 | 147.47 -110.07 | 147.47 | 2.87 1.11 | 0.07 -0.07 | 0.42 |
| VA1 - 5 | 1062.75 | -0.47 0.00 | 407.86 -2060.71 | 407.86 | -110.07 147.87 | 147.87 | -4.53 5.08 | -0.50 0.50 | -4.24 |
| VA1 - 6 | 1062.75 | -0.43 0.00 | -1328.04 -835.87 | 340.97 | 117.73 -60.21 | 117.73 | 1.88 1.58 | 0.05 -0.05 | 1.42 |
| VA2 | 1062.75 | 0.00 0.00 | 0.00 0.00 | 518.17 | 0.00 0.00 | 0.00 | 1.06 1.06 | 0.00 0.00 | -4.31 |
| VA3 - 1 | 1062.75 | 0.00 0.01 | 0.00 -2142.13 | 1528.01 | 0.00 23.01 | 23.01 | 1.80 2.79 | -0.01 0.01 | 0.92 |
| VA3 - 2 | 1062.75 | 0.00 0.00 | -2151.25 8.58 | 8.58 | 66.98 0.00 | 66.98 | 2.21 -0.56 | 0.04 -0.04 | 0.00 |
| VA4 - 1 | 1111.50 | 0.00 0.15 | -2054.74 -2388.41 | 1295.56 | 75.71 -51.80 | 75.71 | 2.73 2.86 | 0.03 -0.03 | 0.95 |
| VA4 - 2 | 1111.50 | 0.00 0.26 | -2525.05 2231.26 | 2231.26 | -71.91 -46.56 | 0.00 | 3.51 -1.32 | -0.01 0.01 | -0.52 |
| VA4 - 3 | 1111.50 | 0.00 0.26 | 2231.32 1828.59 | 2231.32 | -46.56 5.35 | 0.00 | -1.11 1.46 | -0.17 0.17 | -0.52 |
| VA4 - 4 | 1111.50 | 0.00 0.26 | 1828.70 -271.44 | 1828.70 | 5.35 187.21 | 187.21 | -2.44 3.26 | -0.25 0.25 | -0.52 |
| VA4 - 5 | 1111.50 | 0.00 0.25 | -272.65 -4213.32 | 0.00 | 187.21 -25.16 | 187.21 | -6.76 7.38 | 0.38 -0.38 | -4.63 |
| VA4 - 6 | 1111.50 | -0.05 0.00 | -4597.54 -334.16 | 0.00 | -57.35 -12.34 | 0.00 | 4.80 -3.68 | -0.04 0.04 | 2.66 |
| VA4 - 7 | 1111.50 | -0.05 0.00 | -333.95 1929.73 | 1929.73 | -12.34 -2.23 | 0.00 | 2.70 -1.51 | -0.01 0.01 | -0.13 |
| VA4 - 8 | 1111.50 | -0.05 0.00 | 1928.45 1237.09 | 2051.92 | -2.23 129.50 | 0.00 | 0.53 1.35 | -0.08 0.08 | -0.13 |
| VA4 - 9 | 1111.50 | -0.03 0.00 | 1244.04 -3108.48 | 1244.04 | 129.50 -135.30 | 129.50 | -7.07 7.72 | 0.45 -0.45 | -0.13 |
| VA4 - 10 | 1111.50 | -0.19 0.00 | -2677.85 -111.91 | 0.00 | -39.06 12.62 | 12.62 | 3.18 -2.11 | -0.05 0.05 | 1.72 |
| VA4 - 11 | 1111.50 | -0.19 0.00 | -103.33 580.17 | 580.17 | 12.62 18.29 | 18.29 | 1.55 -0.94 | -0.01 0.01 | 1.72 |
| VA4 - 12 | 1111.50 | -0.21 0.00 | 581.33 -1245.29 | 581.33 | 18.29 -65.23 | 18.29 | -0.08 2.02 | 0.05 -0.05 | 1.72 |
| VA4 - 13 | 1111.50 | 0.00 0.04 | -968.24 -506.99 | 477.20 | -14.74 -29.24 | 0.00 | 1.79 1.48 | 0.00 0.00 | -2.49 |
| VA5 - 1 | 1062.75 | 0.00 0.01 | -566.06 765.95 | 948.31 | -60.61 36.96 | 36.96 | 1.79 0.62 | -0.04 0.04 | -1.21 |
| VA5 - 2 | 1062.75 | 0.00 | 765.83 | 765.83 | 36.96 | 36.96 | -1.60 | 0.04 | -1.21 |

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|----------|---------|---------------|-----------------------|---------|------------------|--------|---------------|---------------|--------|
| | | 0.01 | -2199.98 | | -12.29 | | 2.98 | -0.04 | |
| VA5 - 3 | 1062.75 | 0.00 0.05 | -2741.42 450.09 | 450.09 | -12.37 -3.51 | 0.00 | 3.71 -2.64 | -0.01 0.01 | 0.83 |
| VA5 - 4 | 1062.75 | 0.00 0.05 | 449.87 1621.47 | 1621.47 | -3.51 44.49 | 0.00 | 1.66 -0.52 | -0.04 0.04 | 0.83 |
| VA5 - 5 | 1062.75 | 0.00 0.05 | 1622.75 -2178.07 | 1622.75 | 44.49 -10.36 | 44.49 | -0.46 2.88 | 0.02 -0.02 | 0.83 |
| VA5 - 6 | 1062.75 | 0.00 0.09 | -2016.11 932.86 | 932.86 | 68.79 -53.31 | 68.79 | 2.75 -1.13 | 0.08 -0.08 | -0.73 |
| VA5 - 7 | 1062.75 | 0.00 0.11 | 931.70 -239.55 | 931.70 | -14.00 -48.87 | 0.00 | 0.10 1.58 | 0.02 -0.02 | -13.53 |
| VA6 - 1 | 1062.75 | 0.00 0.05 | 9.51 864.92 | 907.11 | -7.64 -15.91 | 0.00 | 1.39 0.32 | 0.01 -0.01 | 2.29 |
| VA6 - 2 | 1062.75 | 0.00 0.05 | 871.46 -3496.21 | 871.46 | -15.91 36.84 | 36.84 | -2.03 3.66 | -0.03 0.03 | 2.29 |
| VA7 - 1 | 1062.75 | -0.08 0.00 | -1088.82 2159.69 | 2159.69 | -50.14 6.08 | 6.08 | 2.90 -1.23 | -0.04 0.04 | -4.50 |
| VA7 - 2 | 1062.75 | -0.08 0.00 | 2153.15 0.00 | 2153.15 | 6.08 0.00 | 6.08 | -0.48 2.19 | 0.00 0.00 | -4.50 |
| VA8 - 1 | 1184.63 | 0.00 0.68 | -5025.17 -9086.18 | 4003.30 | -5.53 -1.85 | 0.00 | 4.63 5.57 | 0.00 0.00 | -1.28 |
| VA8 - 2 | 1184.63 | 0.00 1.02 | -12051.16 -7813.73 | 6653.64 | 10.60 -2.36 | 10.60 | 6.66 5.86 | 0.00 0.00 | 1.10 |
| VA9 - 1 | 1111.50 | 0.00 0.18 | -2264.87 -3660.94 | 1749.11 | 37.76 -31.86 | 37.76 | 2.99 3.47 | 0.01 -0.01 | 4.03 |
| VA9 - 2 | 1111.50 | 0.00 0.25 | -3648.72 -3684.47 | 1958.70 | -23.08 16.96 | 16.96 | 3.53 3.54 | -0.01 0.01 | -0.33 |
| VA10 - 1 | 1111.50 | 0.00 0.15 | -2795.42 -2297.91 | 1243.52 | 25.46 -41.09 | 25.46 | 3.00 2.81 | 0.01 -0.01 | 0.57 |
| VA10 - 2 | 1111.50 | 0.00 0.07 | -1694.33 -1129.81 | 815.31 | -62.52 53.77 | 53.77 | 2.36 2.08 | -0.03 0.03 | -4.64 |
| VA11 - 1 | 1062.75 | -0.12 0.00 | -29.08 -348.76 | 318.42 | 61.93 -34.62 | 61.93 | 0.86 1.19 | 0.05 -0.05 | 2.15 |
| VA11 - 2 | 1062.75 | -0.72 0.00 | -1026.64 238.64 | 963.79 | -6.25 -1.43 | 0.00 | 2.06 1.24 | 0.00 0.00 | -1.58 |
| VA11 - 3 | 1062.75 | -0.72 0.00 | 234.33 -2642.75 | 234.33 | -1.43 0.11 | 0.11 | -2.30 3.38 | 0.00 0.00 | -1.58 |
| VA12 - 1 | 1062.75 | -0.15 0.00 | 0.00 2409.68 | 2786.56 | 0.00 -0.03 | 0.00 | 2.43 0.90 | 0.00 0.00 | -0.06 |
| VA12 - 2 | 1062.75 | -0.15 0.00 | 2413.99 0.00 | 2413.99 | -0.03 0.00 | 0.00 | -1.95 2.99 | 0.00 0.00 | -0.06 |
| VA13 | 1014.00 | 0.00 0.08 | 0.00 0.00 | 467.12 | 0.00 0.00 | 0.00 | 0.98 0.98 | 0.00 0.00 | 0.12 |
| VA14 - 1 | 1062.75 | 0.00 0.62 | 0.00 3085.86 | 3085.86 | 0.00 -9.85 | 0.00 | 3.50 -2.38 | 0.01 -0.01 | 1.25 |
| VA14 - 2 | 1062.75 | 0.00 0.62 | 3086.77 0.00 | 3242.52 | -9.85 0.00 | 0.00 | 0.58 2.63 | 0.00 0.00 | 1.25 |
| VA15 | 1014.00 | -0.04 0.00 | 0.00 0.00 | 467.12 | 0.00 0.00 | 0.00 | 0.98 0.98 | 0.00 0.00 | 0.23 |
| VA16 | 1014.00 | 0.00 0.07 | 0.00 0.00 | 467.12 | 0.00 0.00 | 0.00 | 0.98 0.98 | 0.00 0.00 | -1.28 |
| VA17 - 1 | 1062.75 | 0.00 0.53 | 0.00 5422.45 | 5422.45 | 0.00 21.56 | 21.56 | 5.72 -4.61 | -0.02 0.02 | -6.95 |
| VA17 - 2 | 1062.75 | 0.00 0.58 | 5421.54 0.00 | 5421.54 | -22.41 0.00 | 0.00 | -0.40 3.42 | -0.01 0.01 | 2.17 |
| VA18 | 1062.75 | 0.00 0.26 | -602.26 376.53 | 501.73 | -71.72 103.72 | 103.72 | 1.53 0.52 | -0.09 0.09 | 1.58 |
| VA19 | 1062.75 | 0.00 0.04 | 0.00 0.00 | 140.55 | 0.00 0.00 | 0.00 | 0.56 0.56 | 0.00 0.00 | -8.58 |
| VA20 | 1062.75 | -0.06 0.00 | -12.80 0.00 | 483.89 | -39.32 0.00 | 0.00 | 1.03 1.02 | -0.02 0.02 | 1.16 |
| VA21 - 1 | 1062.75 | 0.00 0.22 | -2044.65 3167.22 | 3167.22 | 39.88 -49.37 | 39.88 | 3.33 0.08 | 0.03 -0.03 | 6.80 |

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|----------|---------|--------------|----------------------|---------|------------------|-------|---------------|---------------|-------|
| VA21 - 2 | 1062.75 | 0.00 0.22 | 3169.51 -2293.97 | 3169.51 | -41.73 7.84 | 7.84 | -1.47 3.71 | -0.02 0.02 | -2.71 |
| VA22 | 1062.75 | 0.00 0.17 | -284.01 -1388.53 | 971.14 | -56.02 81.17 | 81.17 | 1.64 2.24 | -0.04 0.04 | -0.10 |
| VA23 | 1062.75 | 0.00 0.04 | 0.00 0.00 | 1384.92 | 0.00 0.00 | 0.00 | 1.72 1.72 | 0.00 0.00 | 6.54 |
| VA24 - 1 | 1111.50 | 0.00 0.18 | -2179.06 -3737.93 | 1761.93 | -64.25 40.06 | 40.06 | 2.96 3.50 | -0.02 0.02 | -5.83 |
| VA24 - 2 | 1111.50 | 0.00 0.24 | -3411.58 -4093.98 | 1882.95 | 8.78 26.95 | 26.95 | 3.43 3.65 | 0.00 0.00 | -0.35 |
| VA25 - 1 | 1111.50 | 0.00 0.28 | -4032.22 2398.91 | 2398.91 | 96.15 -40.45 | 96.15 | 4.42 -2.30 | 0.07 -0.07 | 4.45 |
| VA25 - 2 | 1111.50 | 0.00 0.28 | 2403.41 -3340.69 | 2403.41 | -40.45 -16.31 | 0.00 | 0.10 3.57 | -0.01 0.01 | 4.45 |
| VA25 - 3 | 1111.50 | 0.00 0.10 | -1975.72 -1161.77 | 665.20 | 2.43 -35.91 | 2.43 | 2.42 2.02 | 0.01 -0.01 | -1.46 |

| CASO: 1.3G1+1.4G2+1.4Q+D4 | | | | | | | | | |
|---------------------------|------------------|------------------|-----------------------|------------------|-----------------------|------------------|--------------------|--------------------|----------------|
| Elemento | Carga (kgf/m) | Rd Nd (tf) | Mxi Mxf (kgf.m) | MxMáx (kgf.m) | Myi Myf (kgf.m) | MyMáx (kgf.m) | Vxi Vxf (tf) | Vyi Vyf (tf) | Mtd (kgf/m) |
| VA1 - 1 | 1062.75 | 0.00 0.39 | -1991.24 2610.94 | 2610.94 | -87.14 6.08 | 6.08 | 3.40 -1.33 | -0.05 0.05 | -2.45 |
| VA1 - 2 | 1062.75 | 0.00 0.39 | 2610.93 281.18 | 2610.93 | 6.08 -85.72 | 0.00 | -1.66 2.78 | 0.09 -0.09 | -3.31 |
| VA1 - 3 | 1062.75 | 0.00 0.37 | 282.50 -3036.76 | 282.50 | -85.72 183.98 | 183.98 | -5.40 6.02 | -0.46 0.46 | -3.09 |
| VA1 - 4 | 1062.75 | -0.42 0.00 | -2919.49 421.95 | 990.70 | 156.51 -119.69 | 156.51 | 2.88 1.10 | 0.07 -0.07 | 0.86 |
| VA1 - 5 | 1062.75 | -0.47 0.00 | 424.17 -2038.72 | 424.17 | -119.69 154.85 | 154.85 | -4.52 5.06 | -0.53 0.53 | -3.98 |
| VA1 - 6 | 1062.75 | -0.43 0.00 | -1368.55 -779.05 | 355.21 | 121.43 -63.79 | 121.43 | 1.91 1.55 | 0.06 -0.06 | 2.23 |
| VA2 | 1062.75 | 0.00 0.00 | 0.00 0.00 | 518.17 | 0.00 0.00 | 0.00 | 1.06 1.06 | 0.00 0.00 | -4.06 |
| VA3 - 1 | 1062.75 | 0.00 0.02 | 0.00 -2142.12 | 1528.01 | 0.00 19.60 | 19.60 | 1.80 2.79 | 0.00 0.00 | 0.92 |
| VA3 - 2 | 1062.75 | 0.00 0.00 | -2151.31 8.53 | 8.53 | 75.37 0.00 | 75.37 | 2.21 -0.56 | 0.05 -0.05 | 0.00 |
| VA4 - 1 | 1111.50 | 0.00 0.17 | -2045.26 -2395.36 | 1297.16 | 83.01 -47.92 | 83.01 | 2.73 2.87 | 0.03 -0.03 | 1.12 |
| VA4 - 2 | 1111.50 | 0.00 0.29 | -2530.39 2234.29 | 2234.29 | -100.14 -37.52 | 0.00 | 3.51 -1.33 | -0.03 0.03 | -2.92 |
| VA4 - 3 | 1111.50 | 0.00 0.29 | 2234.30 1832.88 | 2234.30 | -37.52 14.83 | 0.00 | -1.11 1.46 | -0.17 0.17 | -2.92 |
| VA4 - 4 | 1111.50 | 0.00 0.29 | 1832.98 -264.08 | 1832.98 | 14.83 191.34 | 191.34 | -2.44 3.25 | -0.24 0.24 | -2.92 |
| VA4 - 5 | 1111.50 | 0.00 0.28 | -265.32 -4203.66 | 0.00 | 191.34 12.01 | 191.34 | -6.75 7.37 | 0.32 -0.32 | -6.92 |
| VA4 - 6 | 1111.50 | -0.02 0.00 | -4585.78 -327.37 | 0.00 | -36.97 7.16 | 7.16 | 4.79 -3.68 | -0.04 0.04 | 4.39 |
| VA4 - 7 | 1111.50 | -0.02 0.00 | -327.15 1931.21 | 1931.21 | 7.16 0.23 | 7.16 | 2.70 -1.50 | 0.01 -0.01 | 1.66 |
| VA4 - 8 | 1111.50 | -0.02 0.00 | 1929.95 1230.27 | 2051.34 | 0.23 123.28 | 0.00 | 0.52 1.35 | -0.07 0.07 | 1.66 |
| VA4 - 9 | 1111.50 | 0.00 0.01 | 1237.22 -3118.20 | 1237.22 | 123.28 -163.83 | 123.28 | -7.08 7.73 | 0.49 -0.49 | 1.66 |
| VA4 - 10 | 1111.50 | -0.18 0.00 | -2698.12 -120.65 | 0.00 | -43.37 10.65 | 10.65 | 3.20 -2.12 | -0.06 0.06 | 1.57 |
| VA4 - 11 | 1111.50 | -0.18 0.00 | -112.12 577.92 | 577.92 | 10.65 14.68 | 14.68 | 1.56 -0.95 | -0.01 0.01 | 1.57 |
| VA4 - 12 | 1111.50 | -0.21 | 579.01 | 579.01 | 14.68 | 14.68 | -0.07 | 0.05 | 1.57 |


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|----------|---------|---------------|-----------------------|---------|------------------|--------|---------------|---------------|--------|
| | | 0.00 | -1225.93 | | -64.26 | | 2.00 | -0.05 | |
| VA4 - 13 | 1111.50 | 0.00 0.05 | -959.38 -506.62 | 481.21 | -11.59 -16.19 | 0.00 | 1.79 1.48 | 0.00 0.00 | -2.43 |
| VA5 - 1 | 1062.75 | -0.01 0.00 | -561.55 760.23 | 945.38 | -80.78 40.30 | 40.30 | 1.79 0.63 | -0.05 0.05 | -2.89 |
| VA5 - 2 | 1062.75 | -0.01 0.00 | 760.13 -2211.50 | 760.13 | 40.30 15.63 | 40.30 | -1.61 2.98 | 0.02 -0.02 | -2.89 |
| VA5 - 3 | 1062.75 | 0.00 0.03 | -2739.32 451.73 | 451.73 | 12.86 5.37 | 12.86 | 3.71 -2.64 | 0.01 -0.01 | 2.30 |
| VA5 - 4 | 1062.75 | 0.00 0.03 | 451.48 1622.58 | 1622.58 | 5.37 51.70 | 0.00 | 1.66 -0.52 | -0.04 0.04 | 2.30 |
| VA5 - 5 | 1062.75 | 0.00 0.03 | 1623.84 -2178.05 | 1623.84 | 51.70 -31.00 | 51.70 | -0.46 2.88 | 0.04 -0.04 | 2.30 |
| VA5 - 6 | 1062.75 | 0.00 0.09 | -1998.92 934.87 | 934.87 | 72.60 -55.64 | 72.60 | 2.74 -1.12 | 0.08 -0.08 | -0.25 |
| VA5 - 7 | 1062.75 | 0.00 0.12 | 933.77 -254.17 | 933.77 | -5.13 -55.25 | 0.00 | 0.09 1.59 | 0.03 -0.03 | -14.13 |
| VA6 - 1 | 1062.75 | 0.00 0.05 | 9.68 837.19 | 885.95 | 2.17 -13.68 | 0.00 | 1.37 0.33 | 0.01 -0.01 | 1.94 |
| VA6 - 2 | 1062.75 | 0.00 0.05 | 843.71 -3550.67 | 843.71 | -13.68 29.96 | 29.96 | -2.05 3.68 | -0.03 0.03 | 1.94 |
| VA7 - 1 | 1062.75 | -0.08 0.00 | -1054.58 2177.00 | 2177.00 | -45.17 7.64 | 7.64 | 2.89 -1.22 | -0.03 0.03 | -4.07 |
| VA7 - 2 | 1062.75 | -0.08 0.00 | 2170.48 0.00 | 2170.48 | 7.64 0.00 | 7.64 | -0.49 2.20 | 0.00 0.00 | -4.07 |
| VA8 - 1 | 1184.63 | 0.00 0.67 | -5038.30 -9069.26 | 4004.15 | -6.88 4.81 | 4.81 | 4.63 5.57 | 0.00 0.00 | -2.43 |
| VA8 - 2 | 1184.63 | 0.00 1.01 | -12042.68 -7816.47 | 6656.07 | 19.69 -5.09 | 19.69 | 6.66 5.86 | 0.00 0.00 | 2.01 |
| VA9 - 1 | 1111.50 | 0.00 0.16 | -2509.25 -3448.24 | 1721.86 | 56.86 -45.20 | 56.86 | 3.07 3.39 | 0.02 -0.02 | 4.01 |
| VA9 - 2 | 1111.50 | 0.00 0.23 | -3816.83 -3513.49 | 1964.45 | -15.57 7.81 | 7.81 | 3.59 3.49 | 0.00 0.00 | -0.40 |
| VA10 - 1 | 1111.50 | 0.00 0.13 | -2990.53 -2121.70 | 1245.05 | 34.58 -43.38 | 34.58 | 3.07 2.74 | 0.01 -0.01 | 0.59 |
| VA10 - 2 | 1111.50 | 0.00 0.07 | -1948.94 -824.98 | 865.13 | -46.49 18.27 | 18.27 | 2.50 1.94 | -0.02 0.02 | -4.53 |
| VA11 - 1 | 1062.75 | -0.09 0.00 | -428.93 -128.41 | 227.61 | 78.91 -52.37 | 78.91 | 1.18 0.87 | 0.07 -0.07 | 2.12 |
| VA11 - 2 | 1062.75 | -0.68 0.00 | -1309.66 571.57 | 1084.55 | 4.85 -6.83 | 4.85 | 2.26 1.05 | 0.00 0.00 | -1.49 |
| VA11 - 3 | 1062.75 | -0.68 0.00 | 567.52 -2108.64 | 567.52 | -6.83 -13.21 | 0.00 | -2.10 3.18 | 0.01 -0.01 | -1.49 |
| VA12 - 1 | 1062.75 | -0.14 0.00 | 0.00 2409.87 | 2786.70 | 0.00 -1.89 | 0.00 | 2.43 0.89 | 0.00 0.00 | -0.01 |
| VA12 - 2 | 1062.75 | -0.14 0.00 | 2413.93 0.00 | 2413.93 | -1.89 0.00 | 0.00 | -1.95 2.99 | 0.00 0.00 | -0.01 |
| VA13 | 1014.00 | 0.00 0.07 | 0.00 0.00 | 467.12 | 0.00 0.00 | 0.00 | 0.98 0.98 | 0.00 0.00 | 0.10 |
| VA14 - 1 | 1062.75 | 0.00 0.56 | 0.00 3085.86 | 3085.86 | 0.00 -12.31 | 0.00 | 3.50 -2.38 | 0.01 -0.01 | 1.31 |
| VA14 - 2 | 1062.75 | 0.00 0.55 | 3086.78 0.00 | 3242.53 | -12.31 0.00 | 0.00 | 0.58 2.63 | 0.00 0.00 | 1.31 |
| VA15 | 1014.00 | -0.05 0.00 | 0.00 0.00 | 467.12 | 0.00 0.00 | 0.00 | 0.98 0.98 | 0.00 0.00 | 0.24 |
| VA16 | 1014.00 | 0.00 0.08 | 0.00 0.00 | 467.12 | 0.00 0.00 | 0.00 | 0.98 0.98 | 0.00 0.00 | -1.26 |
| VA17 - 1 | 1062.75 | 0.00 0.56 | 0.00 5422.45 | 5422.45 | 0.00 27.17 | 27.17 | 5.72 -4.61 | -0.03 0.03 | -6.95 |
| VA17 - 2 | 1062.75 | 0.00 0.61 | 5421.53 0.00 | 5421.53 | -28.60 0.00 | 0.00 | -0.40 3.42 | -0.01 0.01 | 2.23 |
| VA18 | 1062.75 | 0.00 0.29 | -962.36 737.87 | 744.79 | -94.08 129.69 | 129.69 | 1.91 0.15 | -0.12 0.12 | 1.59 |


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|----------|---------|---------------|----------------------|---------|-----------------|-------|---------------|---------------|-------|
| VA19 | 1062.75 | 0.00 0.05 | 0.00 0.00 | 140.55 | 0.00 0.00 | 0.00 | 0.56 0.56 | 0.00 0.00 | -8.53 |
| VA20 | 1062.75 | -0.05 0.00 | -13.88 0.00 | 483.41 | -50.51 0.00 | 0.00 | 1.03 1.02 | -0.03 0.03 | 1.10 |
| VA21 - 1 | 1062.75 | 0.00 0.22 | -2241.99 3193.91 | 3193.91 | 31.77 -43.05 | 31.77 | 3.40 0.01 | 0.02 -0.02 | 6.89 |
| VA21 - 2 | 1062.75 | 0.00 0.23 | 3195.85 -2083.47 | 3195.85 | -45.22 18.78 | 18.78 | -1.38 3.62 | -0.03 0.03 | -2.78 |
| VA22 | 1062.75 | 0.00 0.17 | -669.05 -932.18 | 967.26 | -61.46 87.62 | 87.62 | 1.87 2.01 | -0.04 0.04 | -0.02 |
| VA23 | 1062.75 | 0.00 0.04 | 0.00 0.00 | 1384.92 | 0.00 0.00 | 0.00 | 1.72 1.72 | 0.00 0.00 | 6.52 |
| VA24 - 1 | 1111.50 | 0.00 0.15 | -2486.15 -3470.12 | 1723.24 | -80.30 50.09 | 50.09 | 3.06 3.40 | -0.02 0.02 | -5.86 |
| VA24 - 2 | 1111.50 | 0.00 0.23 | -3624.08 -3879.54 | 1877.03 | 3.56 32.69 | 32.69 | 3.50 3.58 | 0.00 0.00 | -0.43 |
| VA25 - 1 | 1111.50 | 0.00 0.27 | -4285.14 2333.70 | 2333.70 | 90.70 -42.72 | 90.70 | 4.52 -2.39 | 0.07 -0.07 | 4.50 |
| VA25 - 2 | 1111.50 | 0.00 0.26 | 2337.77 -3117.44 | 2353.37 | -42.72 -6.21 | 0.00 | 0.19 3.49 | -0.01 0.01 | 4.50 |
| VA25 - 3 | 1111.50 | 0.00 0.09 | -2301.99 -778.97 | 743.11 | -18.21 -5.46 | 0.00 | 2.60 1.84 | 0.00 0.00 | -1.35 |

| CASO: 1.3G1+1.4G2+1.4V1+0.84D1 | | | | | | | | | |
|--------------------------------|------------------|------------------|-----------------------|------------------|-----------------------|------------------|--------------------|--------------------|----------------|
| Elemento | Carga (kgf/m) | Rd Nd (tf) | Mxi Mxf (kgf.m) | MxMáx (kgf.m) | Myi Myf (kgf.m) | MyMáx (kgf.m) | Vxi Vxf (tf) | Vyi Vyf (tf) | Mtd (kgf/m) |
| VA1 - 1 | 1062.75 | 0.00 0.46 | -772.60 2535.89 | 2535.89 | -15.01 1.18 | 1.18 | 2.73 -0.67 | -0.01 0.01 | 1.98 |
| VA1 - 2 | 1062.75 | 0.00 0.46 | 2536.27 -491.97 | 2536.27 | 1.18 -12.47 | 1.18 | -2.32 3.44 | 0.01 -0.01 | 1.12 |
| VA1 - 3 | 1062.75 | 0.00 0.46 | -490.25 -4195.88 | 0.00 | -12.47 11.86 | 11.86 | -6.07 6.68 | -0.04 0.04 | 0.57 |
| VA1 - 4 | 1062.75 | 0.00 0.08 | -2152.66 -78.99 | 887.92 | 18.37 -14.64 | 18.37 | 2.54 1.44 | 0.01 -0.01 | -0.06 |
| VA1 - 5 | 1062.75 | 0.00 0.08 | -77.06 -2713.86 | 0.00 | -14.64 17.44 | 17.44 | -4.86 5.40 | -0.06 0.06 | 0.72 |
| VA1 - 6 | 1062.75 | -0.06 0.00 | -728.70 -1485.02 | 332.57 | 15.51 -4.39 | 15.51 | 1.50 1.97 | 0.01 -0.01 | -0.77 |
| VA2 | 1062.75 | 0.00 0.00 | 0.00 0.00 | 518.17 | 0.00 0.00 | 0.00 | 1.06 1.06 | 0.00 0.00 | -3.26 |
| VA3 - 1 | 1062.75 | 0.00 0.00 | 0.00 -2141.45 | 1528.27 | 0.00 2.96 | 2.96 | 1.80 2.79 | 0.00 0.00 | 0.91 |
| VA3 - 2 | 1062.75 | 0.00 0.00 | -2151.55 8.29 | 8.29 | 4.05 0.00 | 4.05 | 2.21 -0.56 | 0.00 0.00 | 0.00 |
| VA4 - 1 | 1111.50 | 0.00 0.46 | -477.77 -3028.82 | 1877.26 | 18.17 -0.25 | 18.17 | 2.29 3.30 | 0.00 0.00 | 1.24 |
| VA4 - 2 | 1111.50 | 0.00 0.41 | -2188.49 1675.78 | 1675.78 | -8.11 -6.65 | 0.00 | 3.06 -0.87 | 0.00 0.00 | 1.27 |
| VA4 - 3 | 1111.50 | 0.00 0.41 | 1675.40 1130.80 | 1675.40 | -6.65 0.35 | 0.00 | -1.57 1.91 | -0.02 0.02 | 1.27 |
| VA4 - 4 | 1111.50 | 0.00 0.41 | 1130.45 -1303.74 | 1130.45 | 0.35 19.84 | 19.84 | -2.89 3.71 | -0.03 0.03 | 1.27 |
| VA4 - 5 | 1111.50 | 0.00 0.41 | -1305.32 -5498.83 | 0.00 | 19.84 -0.14 | 19.84 | -7.21 7.83 | 0.04 -0.04 | -18.39 |
| VA4 - 6 | 1111.50 | 0.00 0.30 | -3166.77 573.53 | 573.53 | -12.73 0.94 | 0.94 | 4.28 -3.16 | -0.01 0.01 | -3.51 |
| VA4 - 7 | 1111.50 | 0.00 0.30 | 573.80 2277.84 | 2277.84 | 0.94 0.29 | 0.00 | 2.18 -0.99 | 0.00 0.00 | 1.28 |
| VA4 - 8 | 1111.50 | 0.00 0.30 | 2276.84 708.19 | 2276.84 | 0.29 16.17 | 0.00 | 0.01 1.87 | -0.01 0.01 | 1.28 |
| VA4 - 9 | 1111.50 | 0.00 | 716.36 | 716.36 | 16.17 | 16.17 | -7.59 | 0.06 | 1.28 |

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|----------|---------|---------------|-----------------------|---------|------------------|-------|---------------|---------------|--------|
| | | 0.30 | -3942.20 | | -17.78 | | 8.24 | -0.06 | |
| VA4 - 10 | 1111.50 | 0.00 0.13 | -2698.41 -238.72 | 0.00 | -22.57 4.44 | 4.44 | 3.07 -2.00 | -0.03 0.03 | 2.01 |
| VA4 - 11 | 1111.50 | 0.00 0.13 | -230.43 392.82 | 392.82 | 4.44 18.33 | 18.33 | 1.44 -0.83 | -0.03 0.03 | 2.01 |
| VA4 - 12 | 1111.50 | 0.00 0.14 | 393.21 -1625.78 | 393.21 | 18.33 -18.47 | 18.33 | -0.19 2.13 | 0.02 -0.02 | 2.01 |
| VA4 - 13 | 1111.50 | 0.00 0.01 | 635.57 -2637.95 | 758.86 | -18.23 27.20 | 27.20 | 0.53 2.75 | -0.02 0.02 | -2.19 |
| VA5 - 1 | 1062.75 | 0.00 0.07 | 207.06 455.67 | 1024.71 | -10.76 2.21 | 0.00 | 1.32 1.10 | -0.01 0.01 | -0.75 |
| VA5 - 2 | 1062.75 | 0.00 0.07 | 456.02 -3126.22 | 456.02 | 2.21 4.31 | 4.31 | -2.08 3.45 | 0.00 0.00 | -0.75 |
| VA5 - 3 | 1062.75 | 0.00 0.10 | -2116.17 838.10 | 838.10 | 0.56 -3.04 | 0.56 | 3.47 -2.40 | 0.00 0.00 | 0.79 |
| VA5 - 4 | 1062.75 | 0.00 0.10 | 837.84 1755.62 | 1755.62 | -3.04 5.74 | 0.00 | 1.42 -0.28 | -0.01 0.01 | 0.79 |
| VA5 - 5 | 1062.75 | 0.00 0.10 | 1756.62 -2581.03 | 1756.62 | 5.74 1.51 | 5.74 | -0.70 3.12 | 0.00 0.00 | 0.79 |
| VA5 - 6 | 1062.75 | 0.00 0.03 | -1549.49 829.34 | 829.34 | -4.07 -8.26 | 0.00 | 2.37 -0.76 | 0.00 0.00 | -0.63 |
| VA5 - 7 | 1062.75 | 0.00 0.02 | 828.94 -934.05 | 828.94 | -23.44 45.58 | 45.58 | -0.27 1.96 | -0.04 0.04 | -11.45 |
| VA6 - 1 | 1062.75 | -0.01 0.00 | 15.99 26.07 | 361.88 | -63.02 -26.06 | 0.00 | 0.86 0.84 | -0.02 0.02 | 1.70 |
| VA6 - 2 | 1062.75 | -0.01 0.00 | 32.47 -5144.59 | 32.47 | -26.06 68.05 | 68.05 | -2.56 4.19 | -0.06 0.06 | 1.70 |
| VA7 - 1 | 1062.75 | -0.22 0.00 | 58.90 2740.19 | 2740.19 | -69.82 -4.89 | 0.00 | 2.54 -0.87 | -0.04 0.04 | -3.67 |
| VA7 - 2 | 1062.75 | -0.22 0.00 | 2733.80 0.00 | 2733.80 | -4.89 0.00 | 0.00 | -0.84 2.55 | 0.00 0.00 | -3.67 |
| VA8 - 1 | 1184.63 | 0.00 0.72 | -3714.90 -10170.44 | 4262.76 | 34.22 -8.12 | 34.22 | 4.35 5.85 | 0.00 0.00 | -1.84 |
| VA8 - 2 | 1184.63 | 0.00 0.94 | -11114.91 -8969.56 | 6495.44 | 24.88 -39.99 | 24.88 | 6.46 6.05 | 0.01 -0.01 | 1.61 |
| VA9 - 1 | 1111.50 | 0.00 0.19 | -2340.86 -3601.13 | 1735.15 | 6.34 3.00 | 6.34 | 3.01 3.45 | 0.00 0.00 | -1.54 |
| VA9 - 2 | 1111.50 | 0.00 0.27 | -3753.00 -3606.29 | 1947.43 | 13.01 20.37 | 20.37 | 3.56 3.51 | 0.00 0.00 | -0.47 |
| VA10 - 1 | 1111.50 | 0.00 0.16 | -2904.15 -2206.79 | 1239.10 | 39.59 -40.01 | 39.59 | 3.04 2.77 | 0.02 -0.02 | 3.47 |
| VA10 - 2 | 1111.50 | 0.00 0.08 | -1833.31 -958.33 | 839.73 | -38.98 -2.93 | 0.00 | 2.44 2.00 | -0.01 0.01 | -0.99 |
| VA11 - 1 | 1062.75 | 0.00 0.03 | -305.09 -781.31 | 0.00 | 5.24 -5.37 | 5.24 | 0.78 1.27 | 0.01 -0.01 | 3.84 |
| VA11 - 2 | 1062.75 | 0.00 0.06 | -1508.40 977.92 | 1318.15 | -1.37 1.04 | 1.04 | 2.45 0.85 | 0.00 0.00 | -2.77 |
| VA11 - 3 | 1062.75 | 0.00 0.06 | 974.66 -1504.11 | 974.66 | 1.04 6.36 | 6.36 | -1.91 2.98 | -0.01 0.01 | -2.77 |
| VA12 - 1 | 1062.75 | -0.02 0.00 | 0.00 2410.48 | 2787.14 | 0.00 3.33 | 3.33 | 2.43 0.89 | 0.00 0.00 | 0.38 |
| VA12 - 2 | 1062.75 | -0.02 0.00 | 2413.74 0.00 | 2413.74 | 3.33 0.00 | 3.33 | -1.95 2.99 | 0.00 0.00 | 0.38 |
| VA13 | 1014.00 | 0.00 0.00 | 0.00 0.00 | 467.12 | 0.00 0.00 | 0.00 | 0.98 0.98 | 0.00 0.00 | -0.35 |
| VA14 - 1 | 1062.75 | 0.00 0.06 | 0.00 3085.98 | 3085.98 | 0.00 -1.25 | 0.00 | 3.50 -2.38 | 0.00 0.00 | 1.72 |
| VA14 - 2 | 1062.75 | 0.00 0.06 | 3086.89 0.00 | 3242.62 | -1.25 0.00 | 0.00 | 0.58 2.63 | 0.00 0.00 | 1.72 |
| VA15 | 1014.00 | -0.01 0.00 | 0.00 0.00 | 467.12 | 0.00 0.00 | 0.00 | 0.98 0.98 | 0.00 0.00 | 0.26 |
| VA16 | 1014.00 | 0.00 0.01 | 0.00 0.00 | 467.12 | 0.00 0.00 | 0.00 | 0.98 0.98 | 0.00 0.00 | -0.99 |

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|----------|---------|---------------|----------------------|---------|-------------------|--------|---------------|---------------|--------|
| VA17 - 1 | 1062.75 | 0.00 0.07 | 0.00 5422.33 | 5422.33 | 0.00 1.52 | 1.52 | 5.72 -4.61 | 0.00 0.00 | -8.17 |
| VA17 - 2 | 1062.75 | 0.00 0.07 | 5421.42 0.00 | 5421.42 | 0.43 0.00 | 0.43 | -0.40 3.42 | 0.00 0.00 | 1.92 |
| VA18 | 1062.75 | 0.00 0.06 | -408.94 248.93 | 470.26 | -0.61 2.21 | 2.21 | 1.37 0.69 | 0.00 0.00 | 1.92 |
| VA19 | 1062.75 | 0.00 0.00 | 0.00 0.00 | 140.55 | 0.00 0.00 | 0.00 | 0.56 0.56 | 0.00 0.00 | -8.29 |
| VA20 | 1062.75 | -0.05 0.00 | -10.82 0.00 | 484.77 | 15.18 0.00 | 15.18 | 1.03 1.02 | 0.01 -0.01 | 0.39 |
| VA21 - 1 | 1062.75 | 0.00 0.14 | -2000.59 2726.05 | 2751.21 | 45.20 -42.80 | 45.20 | 3.18 0.23 | 0.03 -0.03 | 10.34 |
| VA21 - 2 | 1062.75 | 0.00 0.12 | 2727.74 -1940.84 | 2727.74 | 20.23 -65.98 | 20.23 | -1.09 3.33 | 0.04 -0.04 | -5.65 |
| VA22 | 1062.75 | 0.00 0.09 | -680.96 -1004.37 | 925.20 | -9.05 12.96 | 12.96 | 1.85 2.03 | -0.01 0.01 | -0.23 |
| VA23 | 1062.75 | 0.00 0.04 | 0.00 0.00 | 1384.92 | 0.00 0.00 | 0.00 | 1.72 1.72 | 0.00 0.00 | 6.40 |
| VA24 - 1 | 1111.50 | 0.00 0.14 | -2368.93 -3563.42 | 1738.83 | -103.53 74.35 | 74.35 | 3.02 3.43 | -0.03 0.03 | -11.29 |
| VA24 - 2 | 1111.50 | 0.00 0.18 | -3474.44 -4025.41 | 1883.68 | 23.80 83.53 | 83.53 | 3.45 3.62 | -0.01 0.01 | -0.40 |
| VA25 - 1 | 1111.50 | 0.00 0.28 | -4356.38 2606.55 | 2606.55 | 194.15 -136.47 | 194.15 | 4.70 -2.57 | 0.17 -0.17 | 8.81 |
| VA25 - 2 | 1111.50 | 0.00 0.29 | 2610.22 -3408.83 | 2610.22 | -136.47 3.52 | 3.52 | 0.02 3.66 | -0.04 0.04 | 8.81 |
| VA25 - 3 | 1111.50 | 0.00 0.08 | -2211.13 -941.64 | 687.20 | 18.21 -22.38 | 18.21 | 2.54 1.90 | 0.01 -0.01 | 0.63 |

| CASO: 1.3G1+1.4G2+1.4V2+0.84D2 | | | | | | | | | |
|--------------------------------|------------------|------------------|-----------------------|------------------|-----------------------|------------------|--------------------|--------------------|----------------|
| Elemento | Carga (kgf/m) | Rd Nd (tf) | Mxi Mxf (kgf.m) | MxMáx (kgf.m) | Myi Myf (kgf.m) | MyMáx (kgf.m) | Vxi Vxf (tf) | Vyi Vyf (tf) | Mtd (kgf/m) |
| VA1 - 1 | 1062.75 | 0.00 0.35 | -2821.99 2531.78 | 2531.78 | -6.79 1.43 | 1.43 | 3.79 -1.72 | 0.00 0.00 | 1.74 |
| VA1 - 2 | 1062.75 | 0.00 0.36 | 2531.63 607.78 | 2531.63 | 1.43 -16.02 | 0.00 | -1.27 2.39 | 0.02 -0.02 | 0.90 |
| VA1 - 3 | 1062.75 | 0.00 0.35 | 608.49 -2486.17 | 608.49 | -16.02 15.51 | 15.51 | -5.01 5.63 | -0.05 0.05 | 1.46 |
| VA1 - 4 | 1062.75 | 0.00 0.06 | -3316.25 785.17 | 1163.40 | 20.71 -19.18 | 20.71 | 3.09 0.90 | 0.01 -0.01 | 1.14 |
| VA1 - 5 | 1062.75 | 0.00 0.05 | 787.32 -1571.39 | 787.32 | -19.18 23.77 | 23.77 | -4.31 4.86 | -0.08 0.08 | -7.76 |
| VA1 - 6 | 1062.75 | 0.00 0.01 | -2509.65 649.55 | 920.45 | 17.91 -8.72 | 17.91 | 2.70 0.77 | 0.01 -0.01 | -0.99 |
| VA2 | 1062.75 | 0.00 0.00 | 0.00 0.00 | 518.17 | 0.00 0.00 | 0.00 | 1.06 1.06 | 0.00 0.00 | -4.10 |
| VA3 - 1 | 1062.75 | 0.00 0.00 | 0.00 -2145.66 | 1526.66 | 0.00 0.34 | 0.34 | 1.80 2.79 | 0.00 0.00 | 1.19 |
| VA3 - 2 | 1062.75 | 0.00 0.00 | -2153.49 6.34 | 6.34 | 11.11 0.00 | 11.11 | 2.21 -0.56 | 0.01 -0.01 | 0.00 |
| VA4 - 1 | 1111.50 | -0.06 0.00 | -3301.32 -1947.11 | 922.50 | 81.94 -34.44 | 81.94 | 3.06 2.53 | 0.02 -0.02 | 1.27 |
| VA4 - 2 | 1111.50 | 0.00 0.05 | -2974.43 2688.32 | 2688.32 | -7.55 -4.23 | 0.00 | 3.97 -1.78 | 0.00 0.00 | -3.11 |
| VA4 - 3 | 1111.50 | 0.00 0.05 | 2688.47 2429.80 | 2688.47 | -4.23 2.89 | 0.00 | -0.65 1.00 | -0.02 0.02 | -3.11 |
| VA4 - 4 | 1111.50 | 0.00 0.05 | 2430.17 669.23 | 2430.17 | 2.89 20.74 | 0.00 | -1.98 2.80 | -0.02 0.02 | -3.11 |
| VA4 - 5 | 1111.50 | 0.00 0.05 | 668.49 -3015.14 | 668.49 | 20.74 -5.95 | 20.74 | -6.30 6.92 | 0.05 -0.05 | 6.96 |
| VA4 - 6 | 1111.50 | -0.07 | -5444.26 | 0.00 | -12.11 | 1.52 | 5.05 | -0.01 | 6.00 |

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|----------|---------|---------------|-----------------------|---------|-----------------|-------|---------------|---------------|--------|
| | | 0.00 | -928.47 | | 1.52 | | -3.93 | 0.01 | |
| VA4 - 7 | 1111.50 | -0.07 0.00 | -927.91 1605.80 | 1605.80 | 1.52 -3.52 | 1.52 | 2.95 -1.76 | 0.00 0.00 | -1.76 |
| VA4 - 8 | 1111.50 | -0.07 0.00 | 1604.93 1336.90 | 1874.81 | -3.52 16.54 | 0.00 | 0.78 1.10 | -0.01 0.01 | -1.76 |
| VA4 - 9 | 1111.50 | -0.06 0.00 | 1342.55 -2862.65 | 1342.55 | 16.54 -27.40 | 16.54 | -6.82 7.47 | 0.07 -0.07 | -1.76 |
| VA4 - 10 | 1111.50 | -0.15 0.00 | -3332.71 -278.72 | 0.00 | 3.56 0.75 | 3.56 | 3.69 -2.61 | 0.00 0.00 | 1.93 |
| VA4 - 11 | 1111.50 | -0.15 0.00 | -272.37 687.85 | 687.85 | 0.75 -4.75 | 0.75 | 2.05 -1.44 | 0.01 -0.01 | 1.93 |
| VA4 - 12 | 1111.50 | -0.16 0.00 | 688.56 -261.56 | 766.51 | -4.75 0.39 | 0.39 | 0.42 1.51 | 0.00 0.00 | 1.93 |
| VA4 - 13 | 1111.50 | 0.00 0.12 | -2591.97 1714.50 | 1726.98 | 13.86 -47.60 | 13.86 | 3.10 0.18 | 0.02 -0.02 | -2.33 |
| VA5 - 1 | 1062.75 | 0.00 0.08 | -1319.58 1067.68 | 1078.01 | 14.63 0.06 | 14.63 | 2.26 0.16 | 0.01 -0.01 | -0.52 |
| VA5 - 2 | 1062.75 | 0.00 0.08 | 1067.31 -1298.08 | 1067.31 | 0.06 -10.12 | 0.06 | -1.14 2.52 | 0.01 -0.01 | -0.52 |
| VA5 - 3 | 1062.75 | 0.00 0.13 | -3423.70 26.19 | 26.19 | 7.84 -2.31 | 7.84 | 3.97 -2.90 | 0.01 -0.01 | 0.63 |
| VA5 - 4 | 1062.75 | 0.00 0.13 | 25.61 1473.66 | 1473.66 | -2.31 7.05 | 0.00 | 1.92 -0.77 | -0.01 0.01 | 0.63 |
| VA5 - 5 | 1062.75 | 0.00 0.13 | 1474.54 -1741.63 | 1474.54 | 7.05 -10.89 | 7.05 | -0.20 2.62 | 0.01 -0.01 | 0.63 |
| VA5 - 6 | 1062.75 | 0.00 0.15 | -2505.20 1040.53 | 1040.53 | 28.61 -22.74 | 28.61 | 3.14 -1.53 | 0.03 -0.03 | -0.62 |
| VA5 - 7 | 1062.75 | 0.00 0.16 | 1039.82 488.72 | 1153.63 | -5.12 -79.07 | 0.00 | 0.49 1.19 | 0.05 -0.05 | -14.55 |
| VA6 - 1 | 1062.75 | 0.00 0.08 | 3.17 1676.84 | 1676.84 | 43.18 -4.65 | 43.18 | 1.90 -0.19 | 0.03 -0.03 | 2.38 |
| VA6 - 2 | 1062.75 | 0.00 0.08 | 1683.49 -1900.71 | 1683.49 | -4.65 -2.65 | 0.00 | -1.52 3.15 | 0.00 0.00 | 2.38 |
| VA7 - 1 | 1062.75 | 0.00 0.06 | -2193.52 1600.94 | 1600.94 | -23.33 12.97 | 12.97 | 3.25 -1.58 | -0.02 0.02 | -4.75 |
| VA7 - 2 | 1062.75 | 0.00 0.06 | 1594.29 0.00 | 1594.29 | 12.97 0.00 | 12.97 | -0.14 1.85 | 0.01 -0.01 | -4.75 |
| VA8 - 1 | 1184.63 | 0.00 0.64 | -6352.22 -7982.88 | 3816.19 | -46.09 9.05 | 9.05 | 4.91 5.29 | -0.01 0.01 | -1.79 |
| VA8 - 2 | 1184.63 | 0.00 1.08 | -12982.90 -6657.48 | 6846.20 | 5.35 31.89 | 31.89 | 6.86 5.66 | 0.00 0.00 | 1.32 |
| VA9 - 1 | 1111.50 | 0.00 0.16 | -2392.08 -3544.03 | 1736.22 | 86.34 -78.91 | 86.34 | 3.03 3.43 | 0.03 -0.03 | 9.57 |
| VA9 - 2 | 1111.50 | 0.00 0.22 | -3683.52 -3621.58 | 1973.16 | -52.44 5.79 | 5.79 | 3.55 3.53 | -0.01 0.01 | -0.25 |
| VA10 - 1 | 1111.50 | 0.00 0.12 | -2849.34 -2240.34 | 1246.33 | 20.33 -46.49 | 20.33 | 3.02 2.79 | 0.01 -0.01 | -2.30 |
| VA10 - 2 | 1111.50 | 0.00 0.06 | -1762.55 -1053.57 | 823.12 | -69.81 71.09 | 71.09 | 2.40 2.04 | -0.04 0.04 | -8.31 |
| VA11 - 1 | 1062.75 | 0.00 0.04 | -257.33 -845.44 | 0.00 | 0.51 17.01 | 17.01 | 0.72 1.33 | -0.01 0.01 | 0.63 |
| VA11 - 2 | 1062.75 | 0.00 0.05 | -1520.27 960.32 | 1302.08 | -8.73 3.39 | 3.39 | 2.45 0.85 | 0.00 0.00 | -0.28 |
| VA11 - 3 | 1062.75 | 0.00 0.05 | 956.23 -1524.41 | 956.23 | 3.39 10.72 | 10.72 | -1.91 2.99 | -0.01 0.01 | -0.28 |
| VA12 - 1 | 1062.75 | -0.02 0.00 | 0.00 2409.84 | 2786.68 | 0.00 2.48 | 2.48 | 2.43 0.89 | 0.00 0.00 | -0.14 |
| VA12 - 2 | 1062.75 | -0.02 0.00 | 2413.94 0.00 | 2413.94 | 2.48 0.00 | 2.48 | -1.95 2.99 | 0.00 0.00 | -0.14 |
| VA13 | 1014.00 | 0.00 0.00 | 0.00 0.00 | 467.12 | 0.00 0.00 | 0.00 | 0.98 0.98 | 0.00 0.00 | 0.37 |
| VA14 - 1 | 1062.75 | 0.00 0.07 | 0.00 3085.15 | 3085.15 | 0.00 -2.31 | 0.00 | 3.50 -2.38 | 0.00 0.00 | 0.71 |


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| VA14 - 2 | 1062.75 | 0.00 0.07 | 3086.34 0.00 | 3242.18 | -2.31 0.00 | 0.00 | 0.58 2.63 | 0.00 0.00 | 0.71 |
| VA15 | 1014.00 | -0.02 0.00 | 0.00 0.00 | 467.12 | 0.00 0.00 | 0.00 | 0.98 0.98 | 0.00 0.00 | 0.58 |
| VA16 | 1014.00 | 0.00 0.02 | 0.00 0.00 | 467.12 | 0.00 0.00 | 0.00 | 0.98 0.98 | 0.00 0.00 | -0.88 |
| VA17 - 1 | 1062.75 | 0.00 0.09 | 0.00 5423.15 | 5423.15 | 0.00 5.18 | 5.18 | 5.72 -4.61 | 0.00 0.00 | -5.65 |
| VA17 - 2 | 1062.75 | 0.00 0.09 | 5421.96 0.00 | 5421.96 | -5.59 0.00 | 0.00 | -0.40 3.42 | 0.00 0.00 | 2.19 |
| VA18 | 1062.75 | 0.00 0.07 | -370.13 202.24 | 452.07 | -27.86 35.91 | 35.91 | 1.32 0.73 | -0.03 0.03 | 0.97 |
| VA19 | 1062.75 | 0.00 0.01 | 0.00 0.00 | 140.55 | 0.00 0.00 | 0.00 | 0.56 0.56 | 0.00 0.00 | -6.34 |
| VA20 | 1062.75 | 0.00 0.01 | -13.93 0.00 | 483.39 | -17.62 0.00 | 0.00 | 1.03 1.02 | -0.01 0.01 | 0.71 |
| VA21 - 1 | 1062.75 | 0.00 0.27 | -2353.75 3650.12 | 3650.12 | 23.52 -41.95 | 23.52 | 3.58 -0.17 | 0.02 -0.02 | 3.36 |
| VA21 - 2 | 1062.75 | 0.00 0.30 | 3652.50 -2368.37 | 3652.50 | -85.13 41.40 | 41.40 | -1.73 3.97 | -0.06 0.06 | 0.19 |
| VA22 | 1062.75 | 0.00 0.13 | -663.75 -997.70 | 937.14 | -12.94 15.78 | 15.78 | 1.85 2.03 | -0.01 0.01 | 0.96 |
| VA23 | 1062.75 | 0.00 0.03 | 0.00 0.00 | 1384.92 | 0.00 0.00 | 0.00 | 1.72 1.72 | 0.00 0.00 | 6.65 |
| VA24 - 1 | 1111.50 | 0.00 0.18 | -2466.77 -3493.80 | 1721.83 | -36.26 12.06 | 12.06 | 3.05 3.41 | -0.01 0.01 | -0.40 |
| VA24 - 2 | 1111.50 | 0.00 0.28 | -3682.74 -3825.38 | 1872.96 | -8.56 -27.16 | 0.00 | 3.52 3.56 | 0.00 0.00 | -0.37 |
| VA25 - 1 | 1111.50 | 0.00 0.26 | -4101.62 2086.02 | 2086.02 | -3.67 56.69 | 56.69 | 4.30 -2.17 | -0.03 0.03 | 0.16 |
| VA25 - 2 | 1111.50 | 0.00 0.25 | 2090.77 -2924.73 | 2133.86 | 56.69 -35.83 | 56.69 | 0.32 3.35 | 0.03 -0.03 | 0.16 |
| VA25 - 3 | 1111.50 | 0.00 0.11 | -2275.95 -749.59 | 771.09 | -55.33 28.13 | 28.13 | 2.60 1.84 | -0.02 0.02 | -3.65 |

| CASO: 1.3G1+1.4G2+1.4V3+0.84D3 | | | | | | | | | |
|--------------------------------|------------------|------------------|-----------------------|------------------|-----------------------|------------------|--------------------|--------------------|----------------|
| Elemento | Carga (kgf/m) | Rd Nd (tf) | Mxi Mxf (kgf.m) | MxMáx (kgf.m) | Myi Myf (kgf.m) | MyMáx (kgf.m) | Vxi Vxf (tf) | Vyi Vyf (tf) | Mtd (kgf/m) |
| VA1 - 1 | 1062.75 | 0.00 0.39 | -1694.63 2542.91 | 2542.91 | 42.05 -4.21 | 42.05 | 3.21 -1.14 | 0.02 -0.02 | 4.21 |
| VA1 - 2 | 1062.75 | 0.00 0.41 | 2542.89 16.13 | 2542.89 | -4.21 -108.18 | 0.00 | -1.85 2.96 | 0.10 -0.10 | 3.36 |
| VA1 - 3 | 1062.75 | 0.00 0.40 | 17.17 -3411.03 | 17.17 | -108.18 -14.65 | 0.00 | -5.59 6.21 | -0.16 0.16 | 3.33 |
| VA1 - 4 | 1062.75 | 0.00 0.06 | -2670.22 311.25 | 979.99 | -4.27 12.92 | 12.92 | 2.79 1.20 | 0.00 0.00 | -0.64 |
| VA1 - 5 | 1062.75 | 0.00 0.06 | 313.10 -2199.21 | 313.10 | 12.92 0.70 | 12.92 | -4.61 5.16 | 0.02 -0.02 | -4.23 |
| VA1 - 6 | 1062.75 | -0.04 0.00 | -1514.46 -566.16 | 411.12 | 7.51 -0.12 | 7.51 | 2.02 1.44 | 0.00 0.00 | -2.98 |
| VA2 | 1062.75 | 0.00 0.01 | 0.00 0.00 | 518.17 | 0.00 0.00 | 0.00 | 1.06 1.06 | 0.00 0.00 | -4.36 |
| VA3 - 1 | 1062.75 | -0.01 0.00 | 0.00 -2143.59 | 1527.45 | 0.00 12.38 | 12.38 | 1.80 2.79 | 0.00 0.00 | 1.03 |
| VA3 - 2 | 1062.75 | 0.00 0.00 | -2152.37 7.47 | 7.47 | -11.49 0.00 | 0.00 | 2.21 -0.56 | -0.01 0.01 | 0.00 |
| VA4 - 1 | 1111.50 | 0.00 0.15 | -1917.00 -2469.05 | 1328.48 | 28.73 -24.28 | 28.73 | 2.69 2.91 | 0.01 -0.01 | 0.63 |
| VA4 - 2 | 1111.50 | 0.00 0.15 | -2567.22 2174.10 | 2174.10 | 68.92 -31.18 | 68.92 | 3.50 -1.31 | 0.05 -0.05 | 5.57 |
| VA4 - 3 | 1111.50 | 0.00 | 2174.11 | 2174.11 | -31.18 | 0.00 | -1.12 | -0.02 | 5.57 |


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| | | 0.15 | 1769.00 | | -23.40 | | 1.47 | 0.02 | |
| VA4 - 4 | 1111.50 | 0.00 0.15 | 1769.06 -336.69 | 1769.06 | -23.40 13.60 | 13.60 | -2.45 3.27 | -0.05 0.05 | 5.57 |
| VA4 - 5 | 1111.50 | 0.00 0.15 | -337.78 -4282.53 | 0.00 | 13.60 -106.50 | 13.60 | -6.76 7.38 | 0.22 -0.22 | 0.48 |
| VA4 - 6 | 1111.50 | 0.00 0.04 | -4337.76 -196.04 | 0.00 | -71.63 -50.92 | 0.00 | 4.68 -3.56 | -0.02 0.02 | -3.44 |
| VA4 - 7 | 1111.50 | 0.00 0.04 | -195.63 1937.89 | 1937.89 | -50.92 -8.18 | 0.00 | 2.58 -1.39 | -0.04 0.04 | -5.08 |
| VA4 - 8 | 1111.50 | 0.00 0.04 | 1936.90 1041.51 | 2009.36 | -8.18 33.61 | 0.00 | 0.41 1.47 | -0.02 0.02 | -5.08 |
| VA4 - 9 | 1111.50 | 0.00 0.03 | 1048.41 -3375.47 | 1048.41 | 33.61 62.75 | 62.75 | -7.19 7.85 | -0.05 0.05 | -5.08 |
| VA4 - 10 | 1111.50 | -0.04 0.00 | -2960.38 -235.05 | 0.00 | 14.33 11.15 | 14.33 | 3.35 -2.27 | 0.00 0.00 | 2.39 |
| VA4 - 11 | 1111.50 | -0.04 0.00 | -227.58 546.30 | 546.30 | 11.15 13.40 | 13.40 | 1.71 -1.10 | 0.00 0.00 | 2.39 |
| VA4 - 12 | 1111.50 | -0.03 0.00 | 547.03 -996.98 | 547.03 | 13.40 -16.29 | 13.40 | 0.08 1.85 | 0.02 -0.02 | 2.39 |
| VA4 - 13 | 1111.50 | 0.00 0.03 | -1004.29 -462.16 | 487.37 | -12.04 -36.17 | 0.00 | 1.82 1.45 | 0.01 -0.01 | -2.20 |
| VA5 - 1 | 1062.75 | 0.00 0.13 | -572.38 778.75 | 955.90 | 54.97 -7.78 | 54.97 | 1.80 0.62 | 0.03 -0.03 | 3.91 |
| VA5 - 2 | 1062.75 | 0.00 0.13 | 778.70 -2176.23 | 778.70 | -7.78 -76.30 | 0.00 | -1.59 2.97 | 0.05 -0.05 | 3.91 |
| VA5 - 3 | 1062.75 | 0.00 0.17 | -2779.24 425.40 | 425.40 | -62.49 -28.55 | 0.00 | 3.72 -2.65 | -0.03 0.03 | -3.26 |
| VA5 - 4 | 1062.75 | 0.00 0.17 | 425.04 1610.69 | 1610.69 | -28.55 -13.15 | 0.00 | 1.67 -0.53 | -0.01 0.01 | -3.26 |
| VA5 - 5 | 1062.75 | 0.00 0.17 | 1611.68 -2159.44 | 1611.68 | -13.15 53.45 | 53.45 | -0.45 2.87 | -0.03 0.03 | -3.26 |
| VA5 - 6 | 1062.75 | 0.00 0.08 | -2077.23 929.77 | 929.77 | 11.01 -7.40 | 11.01 | 2.79 -1.17 | 0.01 -0.01 | -1.93 |
| VA5 - 7 | 1062.75 | 0.00 0.08 | 929.03 -178.79 | 933.53 | -21.76 -7.45 | 0.00 | 0.14 1.54 | -0.01 0.01 | -11.03 |
| VA6 - 1 | 1062.75 | 0.00 0.04 | 9.15 910.67 | 947.10 | -34.04 -20.81 | 0.00 | 1.41 0.29 | -0.01 0.01 | 3.18 |
| VA6 - 2 | 1062.75 | 0.00 0.04 | 917.26 -3406.26 | 917.26 | -20.81 44.20 | 44.20 | -2.00 3.63 | -0.04 0.04 | 3.18 |
| VA7 - 1 | 1062.75 | -0.07 0.00 | -1164.84 2121.26 | 2121.26 | -56.91 -1.66 | 0.00 | 2.93 -1.26 | -0.04 0.04 | -5.58 |
| VA7 - 2 | 1062.75 | -0.07 0.00 | 2114.68 0.00 | 2114.68 | -1.66 0.00 | 0.00 | -0.46 2.17 | 0.00 0.00 | -5.58 |
| VA8 - 1 | 1184.63 | 0.00 0.71 | -4998.30 -9120.57 | 4002.61 | -2.04 -16.76 | 0.00 | 4.62 5.58 | 0.00 0.00 | 1.17 |
| VA8 - 2 | 1184.63 | 0.00 1.04 | -12072.42 -7803.41 | 6649.38 | -7.78 3.16 | 3.16 | 6.66 5.85 | 0.00 0.00 | -0.89 |
| VA9 - 1 | 1111.50 | 0.00 0.24 | -1491.26 -4337.23 | 1881.67 | -0.65 -5.75 | 0.00 | 2.74 3.72 | 0.00 0.00 | 4.07 |
| VA9 - 2 | 1111.50 | 0.00 0.29 | -3111.14 -4230.10 | 1972.14 | -36.99 34.40 | 34.40 | 3.36 3.71 | -0.01 0.01 | -0.18 |
| VA10 - 1 | 1111.50 | 0.00 0.18 | -2171.76 -2864.66 | 1276.19 | 7.56 -38.07 | 7.56 | 2.77 3.04 | 0.01 -0.01 | 0.45 |
| VA10 - 2 | 1111.50 | 0.00 0.05 | -882.01 -2094.24 | 770.93 | -89.91 119.61 | 119.61 | 1.92 2.52 | -0.05 0.05 | -4.83 |
| VA11 - 1 | 1062.75 | -0.02 0.00 | 804.86 -1412.53 | 804.86 | -42.19 52.09 | 52.09 | -0.12 2.17 | -0.05 0.05 | 2.30 |
| VA11 - 2 | 1062.75 | -0.06 0.00 | -746.11 65.86 | 972.34 | -33.42 16.28 | 16.28 | 1.91 1.39 | -0.02 0.02 | -1.76 |
| VA11 - 3 | 1062.75 | -0.06 0.00 | 61.50 -2963.46 | 61.50 | 16.28 43.35 | 43.35 | -2.45 3.52 | -0.03 0.03 | -1.76 |
| VA12 - 1 | 1062.75 | -0.08 0.00 | 0.00 2409.64 | 2786.53 | 0.00 7.99 | 7.99 | 2.43 0.90 | 0.00 0.00 | -0.01 |

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| VA12 - 2 | 1062.75 | -0.08 0.00 | 2414.00 0.00 | 2414.00 | 7.99 0.00 | 7.99 | -1.95 2.99 | 0.01 -0.01 | -0.01 |
| VA13 | 1014.00 | 0.00 0.03 | 0.00 0.00 | 467.12 | 0.00 0.00 | 0.00 | 0.98 0.98 | 0.00 0.00 | 0.06 |
| VA14 - 1 | 1062.75 | 0.00 0.26 | 0.00 3085.57 | 3085.57 | 0.00 4.37 | 4.37 | 3.50 -2.38 | 0.00 0.00 | 1.04 |
| VA14 - 2 | 1062.75 | 0.00 0.26 | 3086.59 0.00 | 3242.38 | 4.37 0.00 | 4.37 | 0.58 2.63 | 0.00 0.00 | 1.04 |
| VA15 | 1014.00 | 0.00 0.02 | 0.00 0.00 | 467.12 | 0.00 0.00 | 0.00 | 0.98 0.98 | 0.00 0.00 | 0.37 |
| VA16 | 1014.00 | -0.01 0.00 | 0.00 0.00 | 467.12 | 0.00 0.00 | 0.00 | 0.98 0.98 | 0.00 0.00 | -0.99 |
| VA17 - 1 | 1062.75 | -0.02 0.00 | 0.00 5422.74 | 5422.74 | 0.00 -10.74 | 0.00 | 5.72 -4.61 | 0.01 -0.01 | -6.90 |
| VA17 - 2 | 1062.75 | -0.03 0.00 | 5421.71 0.00 | 5421.71 | 13.13 0.00 | 13.13 | -0.40 3.42 | 0.00 0.00 | 1.89 |
| VA18 | 1062.75 | 0.00 0.01 | 577.90 -745.10 | 626.73 | 42.20 -46.79 | 42.20 | 0.34 1.71 | 0.05 -0.05 | 1.42 |
| VA19 | 1062.75 | -0.01 0.00 | 0.00 0.00 | 140.55 | 0.00 0.00 | 0.00 | 0.56 0.56 | 0.00 0.00 | -7.47 |
| VA20 | 1062.75 | -0.02 0.00 | -9.10 0.00 | 485.54 | 14.36 0.00 | 14.36 | 1.03 1.02 | 0.01 -0.01 | 0.74 |
| VA21 - 1 | 1062.75 | 0.00 0.21 | -1544.54 3086.64 | 3117.77 | 54.84 -58.13 | 54.84 | 3.15 0.26 | 0.04 -0.04 | 6.62 |
| VA21 - 2 | 1062.75 | 0.00 0.20 | 3089.82 -2816.50 | 3089.82 | -24.09 -24.12 | 0.00 | -1.68 3.92 | 0.00 0.00 | -2.53 |
| VA22 | 1062.75 | 0.00 0.08 | 400.39 -2271.85 | 1081.08 | 1.04 -0.67 | 1.04 | 1.21 2.67 | 0.00 0.00 | 0.15 |
| VA23 | 1062.75 | 0.00 0.03 | 0.00 0.00 | 1384.92 | 0.00 0.00 | 0.00 | 1.72 1.72 | 0.00 0.00 | 6.59 |
| VA24 - 1 | 1111.50 | 0.00 0.24 | -1397.29 -4421.36 | 1901.94 | -30.33 18.76 | 18.76 | 2.71 3.75 | -0.01 0.01 | -5.78 |
| VA24 - 2 | 1111.50 | 0.00 0.28 | -2868.27 -4641.77 | 1908.64 | 19.55 15.62 | 19.55 | 3.26 3.82 | 0.00 0.00 | -0.18 |
| VA25 - 1 | 1111.50 | 0.00 0.30 | -3387.17 2567.19 | 2567.19 | 106.86 -35.09 | 106.86 | 4.17 -2.05 | 0.07 -0.07 | 4.32 |
| VA25 - 2 | 1111.50 | 0.00 0.30 | 2572.76 -3916.46 | 2572.76 | -35.09 -44.96 | 0.00 | -0.12 3.80 | 0.00 0.00 | 4.32 |
| VA25 - 3 | 1111.50 | 0.00 0.07 | -1154.05 -2116.19 | 604.19 | 39.12 -71.75 | 39.12 | 1.98 2.46 | 0.03 -0.03 | -1.74 |

| CASO: 1.3G1+1.4G2+1.4V4+0.84D4 | | | | | | | | | |
|--------------------------------|------------------|------------------|-----------------------|------------------|-----------------------|------------------|--------------------|--------------------|----------------|
| Elemento | Carga (kgf/m) | Rd Nd (tf) | Mxi Mxf (kgf.m) | MxMáx (kgf.m) | Myi Myf (kgf.m) | MyMáx (kgf.m) | Vxi Vxf (tf) | Vyi Vyf (tf) | Mtd (kgf/m) |
| VA1 - 1 | 1062.75 | 0.00 0.41 | -1899.96 2524.76 | 2524.76 | -63.85 6.83 | 6.83 | 3.31 -1.24 | -0.04 0.04 | -0.49 |
| VA1 - 2 | 1062.75 | 0.00 0.41 | 2525.01 99.69 | 2525.01 | 6.83 79.68 | 0.00 | -1.75 2.87 | -0.07 0.07 | -1.34 |
| VA1 - 3 | 1062.75 | 0.00 0.41 | 101.07 -3271.02 | 101.07 | 79.68 42.02 | 79.68 | -5.49 6.11 | 0.06 -0.06 | -1.30 |
| VA1 - 4 | 1062.75 | 0.00 0.08 | -2798.70 394.94 | 1004.74 | 43.35 -46.74 | 43.35 | 2.84 1.14 | 0.02 -0.02 | 1.72 |
| VA1 - 5 | 1062.75 | 0.00 0.07 | 397.15 -2086.04 | 397.15 | -46.74 40.51 | 40.51 | -4.56 5.10 | -0.17 0.17 | -2.81 |
| VA1 - 6 | 1062.75 | 0.00 0.00 | -1723.89 -269.31 | 511.09 | 25.90 -12.99 | 25.90 | 2.18 1.29 | 0.01 -0.01 | 1.22 |
| VA2 | 1062.75 | 0.00 0.00 | 0.00 0.00 | 518.17 | 0.00 0.00 | 0.00 | 1.06 1.06 | 0.00 0.00 | -2.99 |
| VA3 - 1 | 1062.75 | 0.00 0.01 | 0.00 -2143.52 | 1527.48 | 0.00 -9.08 | 0.00 | 1.80 2.79 | 0.00 0.00 | 1.07 |
| VA3 - 2 | 1062.75 | 0.00 | -2152.67 | 7.17 | 26.65 | 26.65 | 2.21 | 0.02 | 0.00 |

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|----------|---------|---------------|-----------------------|---------|------------------|--------|---------------|---------------|--------|
| | | 0.00 | 7.17 | | 0.00 | | -0.56 | -0.02 | |
| VA4 - 1 | 1111.50 | 0.00 0.25 | -1862.08 -2506.89 | 1338.88 | 71.39 -10.41 | 71.39 | 2.67 2.92 | 0.02 -0.02 | 1.87 |
| VA4 - 2 | 1111.50 | 0.00 0.31 | -2595.70 2190.01 | 2190.01 | -84.58 20.29 | 20.29 | 3.52 -1.34 | -0.05 0.05 | -7.41 |
| VA4 - 3 | 1111.50 | 0.00 0.31 | 2189.76 1791.60 | 2189.76 | 20.29 26.64 | 0.00 | -1.10 1.45 | -0.02 0.02 | -7.41 |
| VA4 - 4 | 1111.50 | 0.00 0.31 | 1791.56 -297.82 | 1791.56 | 26.64 26.98 | 26.98 | -2.43 3.24 | 0.00 0.00 | -7.41 |
| VA4 - 5 | 1111.50 | 0.00 0.31 | -299.06 -4231.43 | 0.00 | 26.98 100.41 | 100.41 | -6.74 7.36 | -0.13 0.13 | -11.92 |
| VA4 - 6 | 1111.50 | 0.00 0.19 | -4273.27 -158.91 | 0.00 | 46.78 53.38 | 53.38 | 4.65 -3.53 | -0.01 0.01 | 5.93 |
| VA4 - 7 | 1111.50 | 0.00 0.19 | -158.48 1945.75 | 1945.75 | 53.38 4.95 | 53.38 | 2.55 -1.36 | 0.05 -0.05 | 4.60 |
| VA4 - 8 | 1111.50 | 0.00 0.19 | 1944.87 1003.58 | 2005.86 | 4.95 -0.90 | 0.00 | 0.38 1.50 | 0.00 0.00 | 4.60 |
| VA4 - 9 | 1111.50 | 0.00 0.21 | 1010.50 -3429.39 | 1010.50 | -0.90 -107.92 | 0.00 | -7.22 7.87 | 0.18 -0.18 | 4.60 |
| VA4 - 10 | 1111.50 | 0.00 0.02 | -3070.73 -282.39 | 0.00 | -33.35 -5.96 | 0.00 | 3.41 -2.34 | -0.03 0.03 | 1.55 |
| VA4 - 11 | 1111.50 | 0.00 0.02 | -275.22 534.38 | 534.38 | -5.96 0.17 | 0.17 | 1.78 -1.17 | -0.01 0.01 | 1.55 |
| VA4 - 12 | 1111.50 | 0.00 0.01 | 534.74 -890.36 | 540.64 | 0.17 -1.79 | 0.17 | 0.15 1.79 | 0.00 0.00 | 1.55 |
| VA4 - 13 | 1111.50 | 0.00 0.10 | -952.11 -461.30 | 510.22 | 7.67 15.77 | 15.77 | 1.80 1.47 | 0.00 0.00 | -2.31 |
| VA5 - 1 | 1062.75 | 0.00 0.02 | -540.14 744.60 | 939.85 | -51.10 10.05 | 10.05 | 1.77 0.64 | -0.03 0.03 | -5.18 |
| VA5 - 2 | 1062.75 | 0.00 0.02 | 744.63 -2248.07 | 744.63 | 10.05 70.49 | 70.49 | -1.62 3.00 | -0.05 0.05 | -5.18 |
| VA5 - 3 | 1062.75 | 0.00 0.06 | -2760.64 438.89 | 438.89 | 70.89 23.21 | 70.89 | 3.72 -2.65 | 0.05 -0.05 | 4.67 |
| VA5 - 4 | 1062.75 | 0.00 0.06 | 438.42 1618.60 | 1618.60 | 23.21 25.94 | 0.00 | 1.67 -0.53 | 0.00 0.00 | 4.67 |
| VA5 - 5 | 1062.75 | 0.00 0.06 | 1619.48 -2163.22 | 1619.48 | 25.94 -62.83 | 25.94 | -0.45 2.87 | 0.04 -0.04 | 4.67 |
| VA5 - 6 | 1062.75 | 0.00 0.10 | -1977.45 940.10 | 940.10 | 13.53 -23.60 | 13.53 | 2.73 -1.11 | 0.02 -0.02 | 0.67 |
| VA5 - 7 | 1062.75 | 0.00 0.11 | 939.74 -266.53 | 939.74 | -6.80 -26.04 | 0.00 | 0.08 1.60 | 0.01 -0.01 | -14.98 |
| VA6 - 1 | 1062.75 | 0.00 0.03 | 10.01 792.24 | 852.31 | 14.19 -9.89 | 14.19 | 1.34 0.36 | 0.02 -0.02 | 0.90 |
| VA6 - 2 | 1062.75 | 0.00 0.03 | 798.69 -3639.05 | 798.69 | -9.89 21.20 | 21.20 | -2.08 3.71 | -0.02 0.02 | 0.90 |
| VA7 - 1 | 1062.75 | -0.08 0.00 | -969.78 2219.87 | 2219.87 | -36.24 9.74 | 9.74 | 2.86 -1.19 | -0.03 0.03 | -2.84 |
| VA7 - 2 | 1062.75 | -0.08 0.00 | 2213.41 0.00 | 2213.41 | 9.74 0.00 | 9.74 | -0.52 2.23 | 0.01 -0.01 | -2.84 |
| VA8 - 1 | 1184.63 | 0.00 0.66 | -5068.83 -9032.76 | 4004.80 | -9.84 17.69 | 17.69 | 4.64 5.56 | 0.00 0.00 | -4.80 |
| VA8 - 2 | 1184.63 | 0.00 0.99 | -12025.39 -7823.63 | 6660.20 | 38.01 -11.26 | 38.01 | 6.65 5.86 | 0.00 0.00 | 3.81 |
| VA9 - 1 | 1111.50 | 0.00 0.10 | -3241.68 -2807.92 | 1667.09 | 93.34 -70.16 | 93.34 | 3.30 3.15 | 0.03 -0.03 | 3.96 |
| VA9 - 2 | 1111.50 | 0.00 0.19 | -4325.38 -2997.78 | 1984.55 | -2.44 -8.24 | 0.00 | 3.75 3.33 | 0.00 0.00 | -0.54 |
| VA10 - 1 | 1111.50 | 0.00 0.11 | -3581.73 -1582.47 | 1272.16 | 52.36 -48.43 | 52.36 | 3.29 2.52 | 0.02 -0.02 | 0.72 |
| VA10 - 2 | 1111.50 | 0.00 0.10 | -2713.85 82.35 | 1117.19 | -18.89 -51.45 | 0.00 | 2.92 1.52 | 0.01 -0.01 | -4.47 |
| VA11 - 1 | 1062.75 | 0.00 0.08 | -1367.29 -214.22 | 0.00 | 47.94 -40.44 | 47.94 | 1.62 0.43 | 0.05 -0.05 | 2.18 |


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|----------|---------|---------------|----------------------|---------|------------------|-------|---------------|---------------|-------|
| VA11 - 2 | 1062.75 | 0.00 0.17 | -2282.55 1872.38 | 1914.60 | 23.32 -11.85 | 23.32 | 2.99 0.31 | 0.01 -0.01 | -1.29 |
| VA11 - 3 | 1062.75 | 0.00 0.17 | 1869.39 -65.06 | 1869.39 | -11.85 -26.28 | 0.00 | -1.37 2.45 | 0.01 -0.01 | -1.29 |
| VA12 - 1 | 1062.75 | 0.00 0.03 | 0.00 2410.68 | 2787.29 | 0.00 -2.17 | 0.00 | 2.43 0.89 | 0.00 0.00 | 0.25 |
| VA12 - 2 | 1062.75 | 0.00 0.03 | 2413.67 0.00 | 2413.67 | -2.17 0.00 | 0.00 | -1.95 2.99 | 0.00 0.00 | 0.25 |
| VA13 | 1014.00 | -0.02 0.00 | 0.00 0.00 | 467.12 | 0.00 0.00 | 0.00 | 0.98 0.98 | 0.00 0.00 | -0.03 |
| VA14 - 1 | 1062.75 | -0.14 0.00 | 0.00 3085.57 | 3085.57 | 0.00 -7.92 | 0.00 | 3.50 -2.38 | 0.01 -0.01 | 1.39 |
| VA14 - 2 | 1062.75 | -0.13 0.00 | 3086.63 0.00 | 3242.42 | -7.92 0.00 | 0.00 | 0.58 2.63 | 0.00 0.00 | 1.39 |
| VA15 | 1014.00 | -0.05 0.00 | 0.00 0.00 | 467.12 | 0.00 0.00 | 0.00 | 0.98 0.98 | 0.00 0.00 | 0.47 |
| VA16 | 1014.00 | 0.00 0.04 | 0.00 0.00 | 467.12 | 0.00 0.00 | 0.00 | 0.98 0.98 | 0.00 0.00 | -0.88 |
| VA17 - 1 | 1062.75 | 0.00 0.18 | 0.00 5422.74 | 5422.74 | 0.00 17.44 | 17.44 | 5.72 -4.61 | -0.02 0.02 | -6.92 |
| VA17 - 2 | 1062.75 | 0.00 0.19 | 5421.67 0.00 | 5421.67 | -18.29 0.00 | 0.00 | -0.40 3.42 | -0.01 0.01 | 2.22 |
| VA18 | 1062.75 | 0.00 0.12 | -1356.97 1196.27 | 1196.27 | -70.68 84.91 | 84.91 | 2.35 -0.30 | -0.08 0.08 | 1.46 |
| VA19 | 1062.75 | 0.00 0.02 | 0.00 0.00 | 140.55 | 0.00 0.00 | 0.00 | 0.56 0.56 | 0.00 0.00 | -7.17 |
| VA20 | 1062.75 | -0.01 0.00 | -15.65 0.00 | 482.63 | -16.80 0.00 | 0.00 | 1.03 1.02 | -0.01 0.01 | 0.36 |
| VA21 - 1 | 1062.75 | 0.00 0.20 | -2809.80 3289.53 | 3289.53 | 13.88 -26.61 | 13.88 | 3.61 -0.20 | 0.01 -0.01 | 7.08 |
| VA21 - 2 | 1062.75 | 0.00 0.22 | 3290.42 -1492.71 | 3290.42 | -40.81 -0.45 | 0.00 | -1.14 3.39 | -0.02 0.02 | -2.93 |
| VA22 | 1062.75 | 0.00 0.14 | -1745.10 269.77 | 1169.59 | -23.04 29.42 | 29.42 | 2.49 1.39 | -0.01 0.01 | 0.58 |
| VA23 | 1062.75 | 0.00 0.04 | 0.00 0.00 | 1384.92 | 0.00 0.00 | 0.00 | 1.72 1.72 | 0.00 0.00 | 6.46 |
| VA24 - 1 | 1111.50 | 0.00 0.08 | -3438.41 -2635.86 | 1661.11 | -109.45 67.64 | 67.64 | 3.37 3.09 | -0.03 0.03 | -5.92 |
| VA24 - 2 | 1111.50 | 0.00 0.18 | -4288.90 -3209.02 | 1893.17 | -4.30 40.75 | 40.75 | 3.71 3.37 | -0.01 0.01 | -0.60 |
| VA25 - 1 | 1111.50 | 0.00 0.24 | -5070.83 2125.38 | 2125.38 | 83.62 -44.70 | 83.62 | 4.82 -2.70 | 0.07 -0.07 | 4.64 |
| VA25 - 2 | 1111.50 | 0.00 0.24 | 2128.23 -2417.10 | 2225.63 | -44.70 12.65 | 12.65 | 0.47 3.21 | -0.02 0.02 | 4.64 |
| VA25 - 3 | 1111.50 | 0.00 0.12 | -3333.03 424.97 | 1156.87 | -76.24 77.50 | 77.50 | 3.16 1.28 | -0.04 0.04 | -1.28 |

| CASO: 1.3G1+1.4G2+D1 | | | | | | | | | |
|----------------------|------------------|------------------|-----------------------|------------------|-----------------------|------------------|--------------------|--------------------|----------------|
| Elemento | Carga (kgf/m) | Rd Nd (tf) | Mxi Mxf (kgf.m) | MxMáx (kgf.m) | Myi Myf (kgf.m) | MyMáx (kgf.m) | Vxi Vxf (tf) | Vyi Vyf (tf) | Mtd (kgf/m) |
| VA1 - 1 | 1062.75 | 0.00 0.41 | -1642.37 2534.25 | 2534.25 | -11.03 1.56 | 1.56 | 3.18 -1.11 | -0.01 0.01 | 1.88 |
| VA1 - 2 | 1062.75 | 0.00 0.42 | 2534.41 -25.07 | 2534.41 | 1.56 -14.73 | 1.56 | -1.88 2.99 | 0.02 -0.02 | 1.03 |
| VA1 - 3 | 1062.75 | 0.00 0.41 | -23.79 -3470.09 | 0.00 | -14.73 12.91 | 12.91 | -5.62 6.24 | -0.05 0.05 | 0.95 |
| VA1 - 4 | 1062.75 | 0.00 0.08 | -2646.54 287.82 | 969.65 | 19.58 -17.00 | 19.58 | 2.77 1.21 | 0.01 -0.01 | 0.42 |
| VA1 - 5 | 1062.75 | 0.00 0.07 | 289.84 -2228.92 | 289.84 | -17.00 20.19 | 20.19 | -4.63 5.17 | -0.07 0.07 | -2.91 |
| VA1 - 6 | 1062.75 | -0.02 | -1484.96 | 417.13 | 17.24 | 17.24 | 2.01 | 0.01 | -0.88 |

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|----------|---------|---------------|-----------------------|---------|------------------|-------|---------------|---------------|--------|
| | | 0.00 | -578.43 | | -6.87 | | 1.46 | -0.01 | |
| VA2 | 1062.75 | 0.00 0.00 | 0.00 0.00 | 518.17 | 0.00 0.00 | 0.00 | 1.06 1.06 | 0.00 0.00 | -3.63 |
| VA3 - 1 | 1062.75 | 0.00 0.00 | 0.00 -2143.27 | 1527.57 | 0.00 1.73 | 1.73 | 1.80 2.79 | 0.00 0.00 | 1.03 |
| VA3 - 2 | 1062.75 | 0.00 0.00 | -2152.38 7.45 | 7.45 | 6.61 0.00 | 6.61 | 2.21 -0.56 | 0.00 0.00 | 0.00 |
| VA4 - 1 | 1111.50 | 0.00 0.23 | -1692.97 -2563.20 | 1399.79 | 47.27 -16.76 | 47.27 | 2.62 2.97 | 0.01 -0.01 | 1.25 |
| VA4 - 2 | 1111.50 | 0.00 0.26 | -2526.44 2111.33 | 2111.33 | -6.82 -5.59 | 0.00 | 3.45 -1.26 | 0.00 0.00 | -0.57 |
| VA4 - 3 | 1111.50 | 0.00 0.26 | 2111.17 1689.55 | 2111.17 | -5.59 1.57 | 0.00 | -1.17 1.52 | -0.02 0.02 | -0.57 |
| VA4 - 4 | 1111.50 | 0.00 0.26 | 1689.52 -455.11 | 1689.52 | 1.57 19.78 | 19.78 | -2.50 3.32 | -0.02 0.02 | -0.57 |
| VA4 - 5 | 1111.50 | 0.00 0.25 | -456.33 -4430.55 | 0.00 | 19.78 -4.22 | 19.78 | -6.82 7.44 | 0.04 -0.04 | -7.45 |
| VA4 - 6 | 1111.50 | 0.00 0.15 | -4146.57 -72.67 | 0.00 | -12.14 1.20 | 1.20 | 4.61 -3.49 | -0.01 0.01 | 0.54 |
| VA4 - 7 | 1111.50 | 0.00 0.15 | -72.28 1988.66 | 1988.66 | 1.20 -1.71 | 1.20 | 2.51 -1.32 | 0.00 0.00 | -0.06 |
| VA4 - 8 | 1111.50 | 0.00 0.15 | 1987.73 978.57 | 2034.43 | -1.71 16.04 | 0.00 | 0.34 1.54 | -0.01 0.01 | -0.06 |
| VA4 - 9 | 1111.50 | 0.00 0.15 | 985.66 -3477.88 | 985.66 | 16.04 -22.92 | 16.04 | -7.26 7.91 | 0.07 -0.07 | -0.06 |
| VA4 - 10 | 1111.50 | 0.00 0.02 | -2971.51 -255.97 | 0.00 | -9.66 3.17 | 3.17 | 3.34 -2.26 | -0.01 0.01 | 1.97 |
| VA4 - 11 | 1111.50 | 0.00 0.02 | -248.52 519.80 | 519.80 | 3.17 8.11 | 8.11 | 1.70 -1.09 | -0.01 0.01 | 1.97 |
| VA4 - 12 | 1111.50 | 0.00 0.02 | 520.34 -1038.47 | 520.34 | 8.11 -9.84 | 8.11 | 0.07 1.86 | 0.01 -0.01 | 1.97 |
| VA4 - 13 | 1111.50 | 0.00 0.07 | -753.16 -764.68 | 447.57 | -3.18 -6.26 | 0.00 | 1.63 1.64 | 0.00 0.00 | -2.25 |
| VA5 - 1 | 1062.75 | 0.00 0.07 | -468.18 726.45 | 946.28 | 3.06 0.73 | 3.06 | 1.73 0.68 | 0.00 0.00 | -0.62 |
| VA5 - 2 | 1062.75 | 0.00 0.07 | 726.48 -2317.49 | 726.48 | 0.73 -2.97 | 0.73 | -1.66 3.04 | 0.00 0.00 | -0.62 |
| VA5 - 3 | 1062.75 | 0.00 0.11 | -2694.60 478.93 | 478.93 | 3.87 -2.63 | 3.87 | 3.69 -2.62 | 0.01 -0.01 | 0.69 |
| VA5 - 4 | 1062.75 | 0.00 0.11 | 478.54 1630.90 | 1630.90 | -2.63 6.29 | 0.00 | 1.64 -0.50 | -0.01 0.01 | 0.69 |
| VA5 - 5 | 1062.75 | 0.00 0.11 | 1631.84 -2209.69 | 1631.84 | 6.29 -4.95 | 6.29 | -0.48 2.90 | 0.00 0.00 | 0.69 |
| VA5 - 6 | 1062.75 | 0.00 0.08 | -1972.21 922.79 | 922.79 | 12.21 -14.89 | 12.21 | 2.71 -1.10 | 0.02 -0.02 | -0.63 |
| VA5 - 7 | 1062.75 | 0.00 0.08 | 922.26 -304.65 | 922.26 | -13.15 -10.83 | 0.00 | 0.06 1.62 | 0.00 0.00 | -12.82 |
| VA6 - 1 | 1062.75 | 0.00 0.03 | 10.30 758.01 | 826.71 | -15.32 -16.51 | 0.00 | 1.32 0.38 | 0.00 0.00 | 1.99 |
| VA6 - 2 | 1062.75 | 0.00 0.03 | 764.51 -3706.28 | 764.51 | -16.51 35.21 | 35.21 | -2.10 3.73 | -0.03 0.03 | 1.99 |
| VA7 - 1 | 1062.75 | -0.09 0.00 | -944.85 2232.50 | 2232.50 | -48.74 2.74 | 2.74 | 2.86 -1.19 | -0.03 0.03 | -4.15 |
| VA7 - 2 | 1062.75 | -0.09 0.00 | 2226.00 0.00 | 2226.00 | 2.74 0.00 | 2.74 | -0.53 2.24 | 0.00 0.00 | -4.15 |
| VA8 - 1 | 1184.63 | 0.00 0.68 | -4887.48 -9197.79 | 4030.34 | -1.22 -0.86 | 0.00 | 4.60 5.60 | 0.00 0.00 | -1.80 |
| VA8 - 2 | 1184.63 | 0.00 1.01 | -11945.75 -7941.64 | 6633.41 | 16.28 -8.29 | 16.28 | 6.64 5.88 | 0.00 0.00 | 1.46 |
| VA9 - 1 | 1111.50 | 0.00 0.17 | -2358.80 -3580.08 | 1736.03 | 41.23 -32.79 | 41.23 | 3.02 3.44 | 0.01 -0.01 | 3.37 |
| VA9 - 2 | 1111.50 | 0.00 0.25 | -3719.28 -3616.18 | 1958.65 | -15.80 13.96 | 13.96 | 3.55 3.52 | 0.00 0.00 | -0.35 |

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|----------|---------|---------------|----------------------|---------|------------------|--------|---------------|---------------|-------|
| VA10 - 1 | 1111.50 | 0.00 0.15 | -2876.01 -2224.55 | 1242.52 | 30.89 -43.92 | 30.89 | 3.03 2.78 | 0.01 -0.01 | 0.90 |
| VA10 - 2 | 1111.50 | 0.00 0.07 | -1796.56 -1007.21 | 831.41 | -53.44 31.93 | 31.93 | 2.42 2.02 | -0.02 0.02 | -4.30 |
| VA11 - 1 | 1062.75 | 0.00 0.03 | -271.85 -816.20 | 0.00 | 1.84 7.02 | 7.02 | 0.74 1.31 | 0.00 0.00 | 2.44 |
| VA11 - 2 | 1062.75 | 0.00 0.05 | -1504.51 959.65 | 1305.79 | -4.15 1.93 | 1.93 | 2.44 0.86 | 0.00 0.00 | -1.71 |
| VA11 - 3 | 1062.75 | 0.00 0.05 | 956.02 -1529.98 | 956.02 | 1.93 7.92 | 7.92 | -1.91 2.99 | -0.01 0.01 | -1.71 |
| VA12 - 1 | 1062.75 | -0.02 0.00 | 0.00 2410.20 | 2786.94 | 0.00 2.94 | 2.94 | 2.43 0.89 | 0.00 0.00 | 0.16 |
| VA12 - 2 | 1062.75 | -0.02 0.00 | 2413.82 0.00 | 2413.82 | 2.94 0.00 | 2.94 | -1.95 2.99 | 0.00 0.00 | 0.16 |
| VA13 | 1014.00 | 0.00 0.00 | 0.00 0.00 | 467.12 | 0.00 0.00 | 0.00 | 0.98 0.98 | 0.00 0.00 | -0.03 |
| VA14 - 1 | 1062.75 | 0.00 0.06 | 0.00 3085.62 | 3085.62 | 0.00 -1.63 | 0.00 | 3.50 -2.38 | 0.00 0.00 | 1.28 |
| VA14 - 2 | 1062.75 | 0.00 0.06 | 3086.65 0.00 | 3242.43 | -1.63 0.00 | 0.00 | 0.58 2.63 | 0.00 0.00 | 1.28 |
| VA15 | 1014.00 | -0.01 0.00 | 0.00 0.00 | 467.12 | 0.00 0.00 | 0.00 | 0.98 0.98 | 0.00 0.00 | 0.39 |
| VA16 | 1014.00 | 0.00 0.01 | 0.00 0.00 | 467.12 | 0.00 0.00 | 0.00 | 0.98 0.98 | 0.00 0.00 | -0.93 |
| VA17 - 1 | 1062.75 | 0.00 0.08 | 0.00 5422.68 | 5422.68 | 0.00 2.93 | 2.93 | 5.72 -4.61 | 0.00 0.00 | -7.09 |
| VA17 - 2 | 1062.75 | 0.00 0.08 | 5421.66 0.00 | 5421.66 | -1.95 0.00 | 0.00 | -0.40 3.42 | 0.00 0.00 | 2.03 |
| VA18 | 1062.75 | 0.00 0.07 | -393.21 229.83 | 462.77 | -14.14 18.94 | 18.94 | 1.35 0.70 | -0.02 0.02 | 1.50 |
| VA19 | 1062.75 | 0.00 0.00 | 0.00 0.00 | 140.55 | 0.00 0.00 | 0.00 | 0.56 0.56 | 0.00 0.00 | -7.45 |
| VA20 | 1062.75 | -0.02 0.00 | -12.19 0.00 | 484.16 | -1.74 0.00 | 0.00 | 1.03 1.02 | 0.00 0.00 | 0.54 |
| VA21 - 1 | 1062.75 | 0.00 0.20 | -2158.11 3135.82 | 3135.82 | 35.43 -42.37 | 35.43 | 3.35 0.06 | 0.02 -0.02 | 7.23 |
| VA21 - 2 | 1062.75 | 0.00 0.20 | 3137.82 -2129.73 | 3137.82 | -27.05 -16.99 | 0.00 | -1.37 3.62 | 0.00 0.00 | -3.07 |
| VA22 | 1062.75 | 0.00 0.11 | -683.66 -990.01 | 931.04 | -10.71 13.85 | 13.85 | 1.85 2.02 | -0.01 0.01 | 0.27 |
| VA23 | 1062.75 | 0.00 0.03 | 0.00 0.00 | 1384.92 | 0.00 0.00 | 0.00 | 1.72 1.72 | 0.00 0.00 | 6.51 |
| VA24 - 1 | 1111.50 | 0.00 0.16 | -2420.59 -3525.12 | 1730.60 | -73.35 46.56 | 46.56 | 3.04 3.42 | -0.02 0.02 | -6.48 |
| VA24 - 2 | 1111.50 | 0.00 0.22 | -3572.50 -3930.66 | 1878.91 | 9.98 34.17 | 34.17 | 3.48 3.59 | 0.00 0.00 | -0.37 |
| VA25 - 1 | 1111.50 | 0.00 0.27 | -4249.57 2372.43 | 2372.43 | 105.11 -50.44 | 105.11 | 4.52 -2.40 | 0.08 -0.08 | 4.96 |
| VA25 - 2 | 1111.50 | 0.00 0.27 | 2376.58 -3187.36 | 2385.39 | -50.44 -14.75 | 0.00 | 0.16 3.52 | -0.01 0.01 | 4.96 |
| VA25 - 3 | 1111.50 | 0.00 0.09 | -2249.27 -844.99 | 727.09 | -15.36 1.79 | 1.79 | 2.57 1.87 | 0.00 0.00 | -1.30 |

| CASO: 1.3G1+1.4G2+D2 | | | | | | | | | |
|----------------------|------------------|------------------|-----------------------|------------------|-----------------------|------------------|--------------------|--------------------|----------------|
| Elemento | Carga (kgf/m) | Rd Nd (tf) | Mxi Mxf (kgf.m) | MxMáx (kgf.m) | Myi Myf (kgf.m) | MyMáx (kgf.m) | Vxi Vxf (tf) | Vyi Vyf (tf) | Mtd (kgf/m) |
| VA1 - 1 | 1062.75 | 0.00 0.40 | -1952.22 2533.42 | 2533.42 | -10.76 1.05 | 1.05 | 3.34 -1.27 | -0.01 0.01 | 1.84 |
| VA1 - 2 | 1062.75 | 0.00 0.40 | 2533.50 140.89 | 2533.50 | 1.05 -13.77 | 0.00 | -1.72 2.84 | 0.01 -0.01 | 0.99 |
| VA1 - 3 | 1062.75 | 0.00 | 142.03 | 142.03 | -13.77 | 14.46 | -5.46 | -0.05 | 1.08 |


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|----------|---------|---------------|----------------------|---------|------------------|-------|---------------|---------------|--------|
| | | 0.40 | -3211.95 | | 14.46 | | 6.08 | 0.05 | |
| VA1 - 4 | 1062.75 | 0.00 0.06 | -2822.38 418.36 | 1015.08 | 19.50 -16.82 | 19.50 | 2.86 1.13 | 0.01 -0.01 | 0.65 |
| VA1 - 5 | 1062.75 | 0.00 0.06 | 420.42 -2056.33 | 420.42 | -16.82 21.03 | 21.03 | -4.54 5.09 | -0.07 0.07 | -4.14 |
| VA1 - 6 | 1062.75 | -0.02 0.00 | -1753.39 -257.04 | 507.70 | 16.18 -6.25 | 16.18 | 2.19 1.28 | 0.01 -0.01 | -0.88 |
| VA2 | 1062.75 | 0.00 0.00 | 0.00 0.00 | 518.17 | 0.00 0.00 | 0.00 | 1.06 1.06 | 0.00 0.00 | -3.73 |
| VA3 - 1 | 1062.75 | 0.00 0.00 | 0.00 -2143.84 | 1527.35 | 0.00 1.57 | 1.57 | 1.80 2.79 | 0.00 0.00 | 1.07 |
| VA3 - 2 | 1062.75 | 0.00 0.00 | -2152.65 7.18 | 7.18 | 8.55 0.00 | 8.55 | 2.21 -0.56 | 0.01 -0.01 | 0.00 |
| VA4 - 1 | 1111.50 | 0.00 0.17 | -2086.12 -2412.73 | 1267.57 | 52.85 -17.93 | 52.85 | 2.73 2.86 | 0.01 -0.01 | 1.26 |
| VA4 - 2 | 1111.50 | 0.00 0.21 | -2636.48 2252.77 | 2252.77 | -8.85 -5.30 | 0.00 | 3.58 -1.39 | 0.00 0.00 | -1.27 |
| VA4 - 3 | 1111.50 | 0.00 0.21 | 2252.69 1871.05 | 2252.69 | -5.30 1.66 | 0.00 | -1.05 1.39 | -0.02 0.02 | -1.27 |
| VA4 - 4 | 1111.50 | 0.00 0.21 | 1871.10 -179.39 | 1871.10 | 1.66 20.80 | 20.80 | -2.37 3.19 | -0.03 0.03 | -1.27 |
| VA4 - 5 | 1111.50 | 0.00 0.21 | -180.50 -4083.42 | 0.00 | 20.80 -1.88 | 20.80 | -6.69 7.31 | 0.04 -0.04 | -3.99 |
| VA4 - 6 | 1111.50 | 0.00 0.08 | -4464.46 -282.27 | 0.00 | -12.71 1.26 | 1.26 | 4.72 -3.60 | -0.01 0.01 | 1.94 |
| VA4 - 7 | 1111.50 | 0.00 0.08 | -281.83 1894.98 | 1894.98 | 1.26 -1.52 | 1.26 | 2.62 -1.43 | 0.00 0.00 | -0.42 |
| VA4 - 8 | 1111.50 | 0.00 0.08 | 1894.04 1066.52 | 1983.47 | -1.52 16.67 | 0.00 | 0.45 1.43 | -0.01 0.01 | -0.42 |
| VA4 - 9 | 1111.50 | 0.00 0.09 | 1073.25 -3326.97 | 1073.25 | 16.67 -22.25 | 16.67 | -7.15 7.81 | 0.07 -0.07 | -0.42 |
| VA4 - 10 | 1111.50 | -0.04 0.00 | -3059.60 -261.46 | 0.00 | -9.35 2.03 | 2.03 | 3.42 -2.35 | -0.01 0.01 | 1.98 |
| VA4 - 11 | 1111.50 | -0.04 0.00 | -254.28 560.88 | 560.88 | 2.03 5.46 | 5.46 | 1.79 -1.18 | -0.01 0.01 | 1.98 |
| VA4 - 12 | 1111.50 | -0.04 0.00 | 561.44 -848.87 | 569.18 | 5.46 -8.23 | 5.46 | 0.16 1.78 | 0.01 -0.01 | 1.98 |
| VA4 - 13 | 1111.50 | 0.00 0.06 | -1203.23 -158.78 | 576.20 | -1.20 -14.14 | 0.00 | 1.99 1.28 | 0.00 0.00 | -2.27 |
| VA5 - 1 | 1062.75 | 0.00 0.08 | -644.34 796.90 | 949.47 | 0.80 1.54 | 1.54 | 1.84 0.58 | 0.00 0.00 | -0.64 |
| VA5 - 2 | 1062.75 | 0.00 0.08 | 796.84 -2106.81 | 796.84 | 1.54 -2.85 | 1.54 | -1.55 2.93 | 0.00 0.00 | -0.64 |
| VA5 - 3 | 1062.75 | 0.00 0.12 | -2845.28 385.36 | 385.36 | 4.53 -2.71 | 4.53 | 3.75 -2.68 | 0.01 -0.01 | 0.73 |
| VA5 - 4 | 1062.75 | 0.00 0.12 | 384.92 1598.38 | 1598.38 | -2.71 6.50 | 0.00 | 1.70 -0.56 | -0.01 0.01 | 0.73 |
| VA5 - 5 | 1062.75 | 0.00 0.12 | 1599.32 -2112.97 | 1599.32 | 6.50 -4.42 | 6.50 | -0.42 2.84 | 0.00 0.00 | 0.73 |
| VA5 - 6 | 1062.75 | 0.00 0.10 | -2082.47 947.07 | 947.07 | 12.33 -16.10 | 12.33 | 2.80 -1.19 | 0.02 -0.02 | -0.62 |
| VA5 - 7 | 1062.75 | 0.00 0.10 | 946.51 -140.68 | 953.96 | -15.41 -22.66 | 0.00 | 0.15 1.53 | 0.00 0.00 | -13.18 |
| VA6 - 1 | 1062.75 | 0.00 0.04 | 8.87 944.90 | 977.02 | -4.53 -14.20 | 0.00 | 1.44 0.27 | 0.01 -0.01 | 2.08 |
| VA6 - 2 | 1062.75 | 0.00 0.04 | 951.44 -3339.03 | 951.44 | -14.20 30.19 | 30.19 | -1.98 3.61 | -0.03 0.03 | 2.08 |
| VA7 - 1 | 1062.75 | -0.06 0.00 | -1189.77 2108.63 | 2108.63 | -44.41 5.34 | 5.34 | 2.93 -1.26 | -0.03 0.03 | -4.28 |
| VA7 - 2 | 1062.75 | -0.06 0.00 | 2102.09 0.00 | 2102.09 | 5.34 0.00 | 5.34 | -0.45 2.16 | 0.00 0.00 | -4.28 |
| VA8 - 1 | 1184.63 | 0.00 0.68 | -5179.64 -8955.54 | 3981.44 | -10.66 1.80 | 1.80 | 4.66 5.54 | 0.00 0.00 | -1.83 |

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|----------|---------|---------------|-----------------------|---------|------------------|-------|---------------|---------------|-------|
| VA8 - 2 | 1184.63 | 0.00 1.02 | -12152.06 -7685.40 | 6676.17 | 13.95 0.19 | 13.95 | 6.68 5.83 | 0.00 0.00 | 1.47 |
| VA9 - 1 | 1111.50 | 0.00 0.17 | -2374.14 -3565.07 | 1735.34 | 51.46 -43.12 | 51.46 | 3.02 3.43 | 0.02 -0.02 | 4.66 |
| VA9 - 2 | 1111.50 | 0.00 0.24 | -3717.24 -3611.70 | 1961.95 | -23.64 12.20 | 12.20 | 3.55 3.52 | -0.01 0.01 | -0.38 |
| VA10 - 1 | 1111.50 | 0.00 0.14 | -2877.48 -2222.58 | 1242.91 | 29.03 -42.58 | 29.03 | 3.03 2.78 | 0.01 -0.01 | 0.27 |
| VA10 - 2 | 1111.50 | 0.00 0.07 | -1799.30 -1004.69 | 831.44 | -55.36 36.23 | 36.23 | 2.42 2.02 | -0.02 0.02 | -5.00 |
| VA11 - 1 | 1062.75 | 0.00 0.03 | -290.58 -810.55 | 0.00 | 3.90 4.62 | 4.62 | 0.76 1.30 | 0.00 0.00 | 2.04 |
| VA11 - 2 | 1062.75 | 0.00 0.06 | -1524.16 978.59 | 1314.44 | -5.95 2.49 | 2.49 | 2.46 0.85 | 0.00 0.00 | -1.34 |
| VA11 - 3 | 1062.75 | 0.00 0.06 | 974.87 -1498.54 | 974.87 | 2.49 9.16 | 9.16 | -1.90 2.98 | -0.01 0.01 | -1.34 |
| VA12 - 1 | 1062.75 | -0.02 0.00 | 0.00 2410.12 | 2786.88 | 0.00 2.87 | 2.87 | 2.43 0.89 | 0.00 0.00 | 0.08 |
| VA12 - 2 | 1062.75 | -0.02 0.00 | 2413.85 0.00 | 2413.85 | 2.87 0.00 | 2.87 | -1.95 2.99 | 0.00 0.00 | 0.08 |
| VA13 | 1014.00 | 0.00 0.00 | 0.00 0.00 | 467.12 | 0.00 0.00 | 0.00 | 0.98 0.98 | 0.00 0.00 | 0.05 |
| VA14 - 1 | 1062.75 | 0.00 0.06 | 0.00 3085.51 | 3085.51 | 0.00 -1.92 | 0.00 | 3.50 -2.38 | 0.00 0.00 | 1.15 |
| VA14 - 2 | 1062.75 | 0.00 0.06 | 3086.58 0.00 | 3242.37 | -1.92 0.00 | 0.00 | 0.58 2.63 | 0.00 0.00 | 1.15 |
| VA15 | 1014.00 | -0.02 0.00 | 0.00 0.00 | 467.12 | 0.00 0.00 | 0.00 | 0.98 0.98 | 0.00 0.00 | 0.45 |
| VA16 | 1014.00 | 0.00 0.01 | 0.00 0.00 | 467.12 | 0.00 0.00 | 0.00 | 0.98 0.98 | 0.00 0.00 | -0.94 |
| VA17 - 1 | 1062.75 | 0.00 0.08 | 0.00 5422.80 | 5422.80 | 0.00 3.77 | 3.77 | 5.72 -4.61 | 0.00 0.00 | -6.73 |
| VA17 - 2 | 1062.75 | 0.00 0.08 | 5421.73 0.00 | 5421.73 | -3.21 0.00 | 0.00 | -0.40 3.42 | 0.00 0.00 | 2.08 |
| VA18 | 1062.75 | 0.00 0.07 | -385.86 221.34 | 459.56 | -14.33 19.18 | 19.18 | 1.34 0.71 | -0.02 0.02 | 1.39 |
| VA19 | 1062.75 | 0.00 0.01 | 0.00 0.00 | 140.55 | 0.00 0.00 | 0.00 | 0.56 0.56 | 0.00 0.00 | -7.18 |
| VA20 | 1062.75 | -0.01 0.00 | -12.56 0.00 | 484.00 | -0.69 0.00 | 0.00 | 1.03 1.02 | 0.00 0.00 | 0.56 |
| VA21 - 1 | 1062.75 | 0.00 0.21 | -2196.24 3240.35 | 3240.35 | 33.29 -42.38 | 33.29 | 3.40 0.01 | 0.02 -0.02 | 6.47 |
| VA21 - 2 | 1062.75 | 0.00 0.22 | 3242.43 -2179.48 | 3242.43 | -37.85 -7.58 | 0.00 | -1.45 3.69 | -0.01 0.01 | -2.40 |
| VA22 | 1062.75 | 0.00 0.11 | -661.05 -1012.07 | 931.31 | -11.28 14.90 | 14.90 | 1.84 2.03 | -0.01 0.01 | 0.46 |
| VA23 | 1062.75 | 0.00 0.03 | 0.00 0.00 | 1384.92 | 0.00 0.00 | 0.00 | 1.72 1.72 | 0.00 0.00 | 6.54 |
| VA24 - 1 | 1111.50 | 0.00 0.16 | -2415.10 -3532.10 | 1730.07 | -66.43 39.85 | 39.85 | 3.04 3.42 | -0.02 0.02 | -5.22 |
| VA24 - 2 | 1111.50 | 0.00 0.24 | -3584.68 -3920.13 | 1877.72 | 5.27 22.20 | 22.20 | 3.49 3.59 | 0.00 0.00 | -0.41 |
| VA25 - 1 | 1111.50 | 0.00 0.27 | -4208.43 2320.13 | 2320.13 | 85.37 -29.34 | 85.37 | 4.47 -2.35 | 0.06 -0.06 | 4.01 |
| VA25 - 2 | 1111.50 | 0.00 0.27 | 2324.41 -3146.20 | 2339.05 | -29.34 -17.56 | 0.00 | 0.19 3.49 | 0.00 0.00 | 4.01 |
| VA25 - 3 | 1111.50 | 0.00 0.10 | -2237.80 -846.23 | 731.20 | -21.77 3.96 | 3.96 | 2.57 1.87 | -0.01 0.01 | -1.71 |


| CASO: 1.3G1+1.4G2+D3 | | | | | | | | | |
|----------------------|------------------|----------|------------|------------------|------------|------------------|------------|------------|----------------|
| Elemento | Carga (kgf/m) | Rd Nd | Mxi Mxf | MxMáx (kgf.m) | Myi Myf | MyMáx (kgf.m) | Vxi Vxf | Vyi Vyf | Mtd (kgf/m) |

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| | | (tf) | (kgf.m) | | (kgf.m) | | (tf) | (tf) | |
|----------|---------|---------------|----------------------|---------|------------------|-------|---------------|---------------|--------|
| VA1 - 1 | 1062.75 | 0.00 0.40 | -1777.28 2535.50 | 2535.50 | -0.72 0.10 | 0.10 | 3.25 -1.18 | 0.00 0.00 | 2.30 |
| VA1 - 2 | 1062.75 | 0.00 0.41 | 2535.59 49.61 | 2535.59 | 0.10 -30.76 | 0.00 | -1.81 2.92 | 0.03 -0.03 | 1.46 |
| VA1 - 3 | 1062.75 | 0.00 0.40 | 50.78 -3354.86 | 50.78 | -30.76 7.92 | 7.92 | -5.55 6.17 | -0.07 0.07 | 1.46 |
| VA1 - 4 | 1062.75 | 0.00 0.07 | -2721.91 344.97 | 989.99 | 15.02 -12.10 | 15.02 | 2.81 1.17 | 0.01 -0.01 | 0.32 |
| VA1 - 5 | 1062.75 | 0.00 0.06 | 346.97 -2153.62 | 346.97 | -12.10 17.12 | 17.12 | -4.59 5.14 | -0.06 0.06 | -3.65 |
| VA1 - 6 | 1062.75 | -0.03 0.00 | -1598.92 -446.14 | 447.44 | 14.86 -4.77 | 14.86 | 2.09 1.38 | 0.01 -0.01 | -1.28 |
| VA2 | 1062.75 | 0.00 0.01 | 0.00 0.00 | 518.17 | 0.00 0.00 | 0.00 | 1.06 1.06 | 0.00 0.00 | -3.80 |
| VA3 - 1 | 1062.75 | 0.00 0.00 | 0.00 -2143.56 | 1527.46 | 0.00 3.36 | 3.36 | 1.80 2.79 | 0.00 0.00 | 1.04 |
| VA3 - 2 | 1062.75 | 0.00 0.00 | -2152.49 7.34 | 7.34 | 3.39 0.00 | 3.39 | 2.21 -0.56 | 0.00 0.00 | 0.00 |
| VA4 - 1 | 1111.50 | 0.00 0.19 | -1894.29 -2484.49 | 1332.88 | 46.41 -19.29 | 46.41 | 2.68 2.91 | 0.01 -0.01 | 1.17 |
| VA4 - 2 | 1111.50 | 0.00 0.22 | -2578.79 2180.54 | 2180.54 | 6.28 -9.96 | 6.28 | 3.51 -1.32 | 0.01 -0.01 | 0.28 |
| VA4 - 3 | 1111.50 | 0.00 0.22 | 2180.44 1778.16 | 2180.44 | -9.96 -3.12 | 0.00 | -1.11 1.46 | -0.02 0.02 | 0.28 |
| VA4 - 4 | 1111.50 | 0.00 0.22 | 1778.18 -320.93 | 1778.18 | -3.12 18.22 | 18.22 | -2.44 3.26 | -0.03 0.03 | 0.28 |
| VA4 - 5 | 1111.50 | 0.00 0.22 | -322.08 -4261.81 | 0.00 | 18.22 -21.63 | 18.22 | -6.75 7.37 | 0.07 -0.07 | -4.57 |
| VA4 - 6 | 1111.50 | 0.00 0.10 | -4311.39 -180.87 | 0.00 | -22.61 -8.52 | 0.00 | 4.67 -3.55 | -0.01 0.01 | 0.38 |
| VA4 - 7 | 1111.50 | 0.00 0.10 | -180.46 1941.08 | 1941.08 | -8.52 -2.85 | 0.00 | 2.57 -1.37 | -0.01 0.01 | -1.13 |
| VA4 - 8 | 1111.50 | 0.00 0.10 | 1940.13 1025.96 | 2007.90 | -2.85 19.47 | 0.00 | 0.40 1.48 | -0.01 0.01 | -1.13 |
| VA4 - 9 | 1111.50 | 0.00 0.10 | 1032.86 -3397.56 | 1032.86 | 19.47 -8.32 | 19.47 | -7.20 7.86 | 0.05 -0.05 | -1.13 |
| VA4 - 10 | 1111.50 | -0.02 0.00 | -3005.42 -254.35 | 0.00 | -7.36 3.58 | 3.58 | 3.38 -2.30 | -0.01 0.01 | 2.04 |
| VA4 - 11 | 1111.50 | -0.02 0.00 | -247.00 541.46 | 541.46 | 3.58 8.59 | 8.59 | 1.74 -1.13 | -0.01 0.01 | 2.04 |
| VA4 - 12 | 1111.50 | -0.01 0.00 | 542.05 -953.35 | 542.05 | 8.59 -9.52 | 8.59 | 0.11 1.83 | 0.01 -0.01 | 2.04 |
| VA4 - 13 | 1111.50 | 0.00 0.06 | -982.63 -461.91 | 496.79 | -3.76 -16.72 | 0.00 | 1.81 1.46 | 0.00 0.00 | -2.29 |
| VA5 - 1 | 1062.75 | 0.00 0.08 | -558.52 764.54 | 949.34 | 12.02 -0.54 | 12.02 | 1.79 0.63 | 0.01 -0.01 | 0.21 |
| VA5 - 2 | 1062.75 | 0.00 0.08 | 764.52 -2206.39 | 764.52 | -0.54 -16.87 | 0.00 | -1.61 2.98 | 0.01 -0.01 | 0.21 |
| VA5 - 3 | 1062.75 | 0.00 0.13 | -2770.99 431.33 | 431.33 | -8.41 -7.12 | 0.00 | 3.72 -2.65 | 0.00 0.00 | -0.02 |
| VA5 - 4 | 1062.75 | 0.00 0.13 | 430.92 1614.09 | 1614.09 | -7.12 2.79 | 0.00 | 1.67 -0.53 | -0.01 0.01 | -0.02 |
| VA5 - 5 | 1062.75 | 0.00 0.13 | 1615.03 -2161.34 | 1615.03 | 2.79 5.63 | 5.63 | -0.45 2.87 | 0.00 0.00 | -0.02 |
| VA5 - 6 | 1062.75 | 0.00 0.09 | -2035.94 933.93 | 933.93 | 10.36 -14.33 | 10.36 | 2.76 -1.15 | 0.02 -0.02 | -0.87 |
| VA5 - 7 | 1062.75 | 0.00 0.09 | 933.35 -215.35 | 933.35 | -18.71 -13.56 | 0.00 | 0.11 1.57 | 0.00 0.00 | -12.70 |
| VA6 - 1 | 1062.75 | 0.00 0.03 | 9.50 865.32 | 907.46 | -14.83 -16.47 | 0.00 | 1.39 0.32 | 0.00 0.00 | 2.21 |
| VA6 - 2 | 1062.75 | 0.00 0.03 | 871.85 -3495.42 | 871.85 | -16.47 36.14 | 36.14 | -2.03 3.66 | -0.03 0.03 | 2.21 |

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|----------|---------|---------------|-----------------------|---------|------------------|-------|---------------|---------------|-------|
| VA7 - 1 | 1062.75 | -0.08 0.00 | -1084.43 2161.91 | 2161.91 | -49.06 3.26 | 3.26 | 2.90 -1.23 | -0.03 0.03 | -4.43 |
| VA7 - 2 | 1062.75 | -0.08 0.00 | 2155.38 0.00 | 2155.38 | 3.26 0.00 | 3.26 | -0.49 2.19 | 0.00 0.00 | -4.43 |
| VA8 - 1 | 1184.63 | 0.00 0.69 | -5027.00 -9085.13 | 4002.82 | -5.27 -2.87 | 0.00 | 4.63 5.57 | 0.00 0.00 | -1.24 |
| VA8 - 2 | 1184.63 | 0.00 1.02 | -12053.14 -7812.15 | 6653.57 | 10.57 -2.69 | 10.57 | 6.66 5.85 | 0.00 0.00 | 1.01 |
| VA9 - 1 | 1111.50 | 0.00 0.18 | -2244.28 -3678.93 | 1752.40 | 36.80 -31.28 | 36.80 | 2.98 3.48 | 0.01 -0.01 | 4.03 |
| VA9 - 2 | 1111.50 | 0.00 0.25 | -3634.21 -3699.42 | 1958.95 | -23.47 17.66 | 17.66 | 3.53 3.55 | -0.01 0.01 | -0.33 |
| VA10 - 1 | 1111.50 | 0.00 0.15 | -2779.19 -2311.67 | 1244.75 | 25.40 -42.11 | 25.40 | 2.99 2.81 | 0.01 -0.01 | 0.57 |
| VA10 - 2 | 1111.50 | 0.00 0.07 | -1670.62 -1158.36 | 811.51 | -62.41 51.83 | 51.83 | 2.35 2.09 | -0.03 0.03 | -4.70 |
| VA11 - 1 | 1062.75 | 0.00 0.02 | -81.29 -923.55 | 78.58 | -5.62 14.69 | 14.69 | 0.59 1.46 | -0.01 0.01 | 2.25 |
| VA11 - 2 | 1062.75 | 0.00 0.03 | -1372.82 802.66 | 1225.78 | -10.60 4.91 | 4.91 | 2.35 0.95 | 0.00 0.00 | -1.57 |
| VA11 - 3 | 1062.75 | 0.00 0.03 | 798.85 -1781.32 | 798.85 | 4.91 15.20 | 15.20 | -2.01 3.08 | -0.01 0.01 | -1.57 |
| VA12 - 1 | 1062.75 | -0.03 0.00 | 0.00 2410.06 | 2786.84 | 0.00 3.84 | 3.84 | 2.43 0.89 | 0.00 0.00 | 0.09 |
| VA12 - 2 | 1062.75 | -0.03 0.00 | 2413.87 0.00 | 2413.87 | 3.84 0.00 | 3.84 | -1.95 2.99 | 0.00 0.00 | 0.09 |
| VA13 | 1014.00 | 0.00 0.01 | 0.00 0.00 | 467.12 | 0.00 0.00 | 0.00 | 0.98 0.98 | 0.00 0.00 | 0.02 |
| VA14 - 1 | 1062.75 | 0.00 0.10 | 0.00 3085.57 | 3085.57 | 0.00 -0.54 | 0.00 | 3.50 -2.38 | 0.00 0.00 | 1.18 |
| VA14 - 2 | 1062.75 | 0.00 0.10 | 3086.61 0.00 | 3242.39 | -0.54 0.00 | 0.00 | 0.58 2.63 | 0.00 0.00 | 1.18 |
| VA15 | 1014.00 | -0.01 0.00 | 0.00 0.00 | 467.12 | 0.00 0.00 | 0.00 | 0.98 0.98 | 0.00 0.00 | 0.41 |
| VA16 | 1014.00 | 0.00 0.01 | 0.00 0.00 | 467.12 | 0.00 0.00 | 0.00 | 0.98 0.98 | 0.00 0.00 | -0.95 |
| VA17 - 1 | 1062.75 | 0.00 0.06 | 0.00 5422.74 | 5422.74 | 0.00 0.54 | 0.54 | 5.72 -4.61 | 0.00 0.00 | -6.91 |
| VA17 - 2 | 1062.75 | 0.00 0.06 | 5421.70 0.00 | 5421.70 | 0.51 0.00 | 0.51 | -0.40 3.42 | 0.00 0.00 | 2.02 |
| VA18 | 1062.75 | 0.00 0.05 | -209.49 44.91 | 421.43 | -3.05 6.08 | 6.08 | 1.16 0.89 | 0.00 0.00 | 1.44 |
| VA19 | 1062.75 | 0.00 0.00 | 0.00 0.00 | 140.55 | 0.00 0.00 | 0.00 | 0.56 0.56 | 0.00 0.00 | -7.34 |
| VA20 | 1062.75 | -0.02 0.00 | -11.83 0.00 | 484.32 | 4.38 0.00 | 4.38 | 1.03 1.02 | 0.00 0.00 | 0.58 |
| VA21 - 1 | 1062.75 | 0.00 0.21 | -2078.50 3174.74 | 3174.74 | 38.42 -45.53 | 38.42 | 3.34 0.07 | 0.03 -0.03 | 6.80 |
| VA21 - 2 | 1062.75 | 0.00 0.21 | 3176.96 -2259.86 | 3176.96 | -30.70 -17.76 | 0.00 | -1.45 3.70 | -0.01 0.01 | -2.69 |
| VA22 | 1062.75 | 0.00 0.11 | -479.84 -1229.21 | 933.15 | -8.28 11.14 | 11.14 | 1.73 2.14 | -0.01 0.01 | 0.33 |
| VA23 | 1062.75 | 0.00 0.04 | 0.00 0.00 | 1384.92 | 0.00 0.00 | 0.00 | 1.72 1.72 | 0.00 0.00 | 6.53 |
| VA24 - 1 | 1111.50 | 0.00 0.17 | -2264.30 -3662.52 | 1748.71 | -61.87 38.19 | 38.19 | 2.99 3.47 | -0.02 0.02 | -5.83 |
| VA24 - 2 | 1111.50 | 0.00 0.24 | -3472.34 -4032.61 | 1881.28 | 10.23 25.31 | 25.31 | 3.45 3.63 | 0.00 0.00 | -0.35 |
| VA25 - 1 | 1111.50 | 0.00 0.28 | -4102.54 2378.89 | 2378.89 | 97.97 -38.76 | 97.97 | 4.45 -2.32 | 0.07 -0.07 | 4.46 |
| VA25 - 2 | 1111.50 | 0.00 0.28 | 2383.32 -3278.40 | 2386.01 | -38.76 -21.20 | 0.00 | 0.13 3.55 | -0.01 0.01 | 4.46 |
| VA25 - 3 | 1111.50 | 0.00 | -2080.40 | 687.02 | -8.25 | 0.00 | 2.48 | 0.00 | -1.56 |

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|--|--|------|----------|--|--------|--|------|------|--|
| | | 0.10 | -1037.01 | | -12.35 | | 1.96 | 0.00 | |
|--|--|------|----------|--|--------|--|------|------|--|

| CASO: 1.3G1+1.4G2+D4 | | | | | | | | | |
|----------------------|------------------|------------------|-----------------------|------------------|-----------------------|------------------|--------------------|--------------------|----------------|
| Elemento | Carga (kgf/m) | Rd Nd (tf) | Mxi Mxf (kgf.m) | MxMáx (kgf.m) | Myi Myf (kgf.m) | MyMáx (kgf.m) | Vxi Vxf (tf) | Vyi Vyf (tf) | Mtd (kgf/m) |
| VA1 - 1 | 1062.75 | 0.00 0.41 | -1817.31 2532.17 | 2532.17 | -21.07 2.52 | 2.52 | 3.27 -1.20 | -0.01 0.01 | 1.41 |
| VA1 - 2 | 1062.75 | 0.00 0.41 | 2532.31 66.21 | 2532.31 | 2.52 2.27 | 0.00 | -1.79 2.91 | 0.00 0.00 | 0.57 |
| VA1 - 3 | 1062.75 | 0.00 0.41 | 67.46 -3327.19 | 67.46 | 2.27 19.45 | 19.45 | -5.53 6.15 | -0.03 0.03 | 0.58 |
| VA1 - 4 | 1062.75 | 0.00 0.07 | -2747.00 361.21 | 994.75 | 24.06 -21.72 | 24.06 | 2.82 1.16 | 0.01 -0.01 | 0.76 |
| VA1 - 5 | 1062.75 | 0.00 0.07 | 363.28 -2131.63 | 363.28 | -21.72 24.09 | 24.09 | -4.58 5.13 | -0.09 0.09 | -3.39 |
| VA1 - 6 | 1062.75 | -0.02 0.00 | -1639.43 -389.33 | 467.76 | 18.56 -8.34 | 18.56 | 2.12 1.35 | 0.01 -0.01 | -0.47 |
| VA2 | 1062.75 | 0.00 0.00 | 0.00 0.00 | 518.17 | 0.00 0.00 | 0.00 | 1.06 1.06 | 0.00 0.00 | -3.55 |
| VA3 - 1 | 1062.75 | 0.00 0.00 | 0.00 -2143.55 | 1527.47 | 0.00 -0.06 | 0.00 | 1.80 2.79 | 0.00 0.00 | 1.05 |
| VA3 - 2 | 1062.75 | 0.00 0.00 | -2152.55 7.29 | 7.29 | 11.77 0.00 | 11.77 | 2.21 -0.56 | 0.01 -0.01 | 0.00 |
| VA4 - 1 | 1111.50 | 0.00 0.21 | -1884.80 -2491.44 | 1334.48 | 53.71 -15.40 | 53.71 | 2.68 2.92 | 0.01 -0.01 | 1.34 |
| VA4 - 2 | 1111.50 | 0.00 0.25 | -2584.13 2183.57 | 2183.57 | -21.95 -0.92 | 0.00 | 3.52 -1.33 | -0.01 0.01 | -2.12 |
| VA4 - 3 | 1111.50 | 0.00 0.25 | 2183.42 1782.44 | 2183.42 | -0.92 6.36 | 0.00 | -1.11 1.46 | -0.02 0.02 | -2.12 |
| VA4 - 4 | 1111.50 | 0.00 0.25 | 1782.45 -313.57 | 1782.45 | 6.36 22.36 | 22.36 | -2.43 3.25 | -0.02 0.02 | -2.12 |
| VA4 - 5 | 1111.50 | 0.00 0.25 | -314.75 -4252.15 | 0.00 | 22.36 15.54 | 22.36 | -6.75 7.37 | 0.01 -0.01 | -6.87 |
| VA4 - 6 | 1111.50 | 0.00 0.13 | -4299.63 -174.08 | 0.00 | -2.23 10.98 | 10.98 | 4.66 -3.54 | -0.01 0.01 | 2.11 |
| VA4 - 7 | 1111.50 | 0.00 0.13 | -173.66 1942.56 | 1942.56 | 10.98 -0.38 | 10.98 | 2.57 -1.37 | 0.01 -0.01 | 0.66 |
| VA4 - 8 | 1111.50 | 0.00 0.13 | 1941.64 1019.13 | 2007.32 | -0.38 13.24 | 0.00 | 0.39 1.48 | -0.01 0.01 | 0.66 |
| VA4 - 9 | 1111.50 | 0.00 0.14 | 1026.04 -3407.29 | 1026.04 | 13.24 -36.85 | 13.24 | -7.21 7.86 | 0.09 -0.09 | 0.66 |
| VA4 - 10 | 1111.50 | 0.00 0.00 | -3025.69 -263.09 | 0.00 | -11.66 1.61 | 1.61 | 3.39 -2.31 | -0.01 0.01 | 1.90 |
| VA4 - 11 | 1111.50 | 0.00 0.00 | -255.80 539.21 | 539.21 | 1.61 4.98 | 4.98 | 1.75 -1.14 | -0.01 0.01 | 1.90 |
| VA4 - 12 | 1111.50 | -0.01 0.00 | 539.73 -933.99 | 539.73 | 4.98 -8.56 | 4.98 | 0.12 1.81 | 0.01 -0.01 | 1.90 |
| VA4 - 13 | 1111.50 | 0.00 0.07 | -973.77 -461.54 | 500.80 | -0.61 -3.67 | 0.00 | 1.81 1.46 | 0.00 0.00 | -2.23 |
| VA5 - 1 | 1062.75 | 0.00 0.06 | -554.01 758.82 | 946.41 | -8.15 2.80 | 2.80 | 1.79 0.63 | 0.00 0.00 | -1.48 |
| VA5 - 2 | 1062.75 | 0.00 0.06 | 758.81 -2217.91 | 758.81 | 2.80 11.06 | 11.06 | -1.61 2.99 | -0.01 0.01 | -1.48 |
| VA5 - 3 | 1062.75 | 0.00 0.10 | -2768.88 432.96 | 432.96 | 16.81 1.77 | 16.81 | 3.72 -2.65 | 0.01 -0.01 | 1.44 |
| VA5 - 4 | 1062.75 | 0.00 0.10 | 432.54 1615.20 | 1615.20 | 1.77 10.00 | 0.00 | 1.67 -0.53 | -0.01 0.01 | 1.44 |
| VA5 - 5 | 1062.75 | 0.00 0.10 | 1616.12 -2161.32 | 1616.12 | 10.00 -15.01 | 10.00 | -0.45 2.87 | 0.01 -0.01 | 1.44 |
| VA5 - 6 | 1062.75 | 0.00 0.09 | -2018.75 935.93 | 935.93 | 14.18 -16.66 | 14.18 | 2.75 -1.14 | 0.02 -0.02 | -0.39 |

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|----------|---------|---------------|-----------------------|---------|-----------------|-------|---------------|---------------|--------|
| VA5 - 7 | 1062.75 | 0.00 0.10 | 935.42 -229.97 | 935.42 | -9.85 -19.94 | 0.00 | 0.10 1.58 | 0.01 -0.01 | -13.30 |
| VA6 - 1 | 1062.75 | 0.00 0.03 | 9.67 837.59 | 886.25 | -5.02 -14.24 | 0.00 | 1.37 0.33 | 0.01 -0.01 | 1.86 |
| VA6 - 2 | 1062.75 | 0.00 0.03 | 844.10 -3549.88 | 844.10 | -14.24 29.26 | 29.26 | -2.05 3.68 | -0.03 0.03 | 1.86 |
| VA7 - 1 | 1062.75 | -0.08 0.00 | -1050.19 2179.22 | 2179.22 | -44.09 4.82 | 4.82 | 2.89 -1.22 | -0.03 0.03 | -3.99 |
| VA7 - 2 | 1062.75 | -0.08 0.00 | 2172.71 0.00 | 2172.71 | 4.82 0.00 | 4.82 | -0.50 2.21 | 0.00 0.00 | -3.99 |
| VA8 - 1 | 1184.63 | 0.00 0.68 | -5040.13 -9068.20 | 4003.66 | -6.61 3.80 | 3.80 | 4.63 5.57 | 0.00 0.00 | -2.39 |
| VA8 - 2 | 1184.63 | 0.00 1.01 | -12044.67 -7814.89 | 6656.01 | 19.66 -5.42 | 19.66 | 6.66 5.86 | 0.00 0.00 | 1.92 |
| VA9 - 1 | 1111.50 | 0.00 0.16 | -2488.66 -3466.22 | 1723.82 | 55.89 -44.62 | 55.89 | 3.06 3.40 | 0.02 -0.02 | 4.01 |
| VA9 - 2 | 1111.50 | 0.00 0.23 | -3802.31 -3528.45 | 1963.75 | -15.97 8.51 | 8.51 | 3.58 3.49 | 0.00 0.00 | -0.40 |
| VA10 - 1 | 1111.50 | 0.00 0.14 | -2974.30 -2135.46 | 1245.13 | 34.52 -44.40 | 34.52 | 3.06 2.74 | 0.02 -0.02 | 0.60 |
| VA10 - 2 | 1111.50 | 0.00 0.07 | -1925.24 -853.53 | 858.58 | -46.38 16.33 | 16.33 | 2.49 1.95 | -0.02 0.02 | -4.59 |
| VA11 - 1 | 1062.75 | 0.00 0.05 | -481.14 -703.20 | 0.00 | 11.37 -3.05 | 11.37 | 0.91 1.14 | 0.01 -0.01 | 2.23 |
| VA11 - 2 | 1062.75 | 0.00 0.07 | -1655.85 1135.59 | 1398.14 | 0.50 -0.48 | 0.50 | 2.55 0.75 | 0.00 0.00 | -1.48 |
| VA11 - 3 | 1062.75 | 0.00 0.07 | 1132.04 -1247.20 | 1132.04 | -0.48 1.88 | 1.88 | -1.81 2.89 | 0.00 0.00 | -1.48 |
| VA12 - 1 | 1062.75 | -0.01 0.00 | 0.00 2410.26 | 2786.98 | 0.00 1.97 | 1.97 | 2.43 0.89 | 0.00 0.00 | 0.14 |
| VA12 - 2 | 1062.75 | -0.01 0.00 | 2413.81 0.00 | 2413.81 | 1.97 0.00 | 1.97 | -1.95 2.99 | 0.00 0.00 | 0.14 |
| VA13 | 1014.00 | 0.00 0.00 | 0.00 0.00 | 467.12 | 0.00 0.00 | 0.00 | 0.98 0.98 | 0.00 0.00 | 0.00 |
| VA14 - 1 | 1062.75 | 0.00 0.03 | 0.00 3085.57 | 3085.57 | 0.00 -3.01 | 0.00 | 3.50 -2.38 | 0.00 0.00 | 1.25 |
| VA14 - 2 | 1062.75 | 0.00 0.03 | 3086.62 0.00 | 3242.40 | -3.01 0.00 | 0.00 | 0.58 2.63 | 0.00 0.00 | 1.25 |
| VA15 | 1014.00 | -0.02 0.00 | 0.00 0.00 | 467.12 | 0.00 0.00 | 0.00 | 0.98 0.98 | 0.00 0.00 | 0.43 |
| VA16 | 1014.00 | 0.00 0.02 | 0.00 0.00 | 467.12 | 0.00 0.00 | 0.00 | 0.98 0.98 | 0.00 0.00 | -0.93 |
| VA17 - 1 | 1062.75 | 0.00 0.09 | 0.00 5422.74 | 5422.74 | 0.00 6.16 | 6.16 | 5.72 -4.61 | -0.01 0.01 | -6.91 |
| VA17 - 2 | 1062.75 | 0.00 0.10 | 5421.69 0.00 | 5421.69 | -5.68 0.00 | 0.00 | -0.40 3.42 | 0.00 0.00 | 2.09 |
| VA18 | 1062.75 | 0.00 0.08 | -569.58 406.26 | 532.11 | -25.42 32.04 | 32.04 | 1.53 0.52 | -0.03 0.03 | 1.45 |
| VA19 | 1062.75 | 0.00 0.01 | 0.00 0.00 | 140.55 | 0.00 0.00 | 0.00 | 0.56 0.56 | 0.00 0.00 | -7.29 |
| VA20 | 1062.75 | -0.01 0.00 | -12.91 0.00 | 483.84 | -6.81 0.00 | 0.00 | 1.03 1.02 | 0.00 0.00 | 0.52 |
| VA21 - 1 | 1062.75 | 0.00 0.21 | -2275.85 3201.43 | 3201.43 | 30.31 -39.22 | 30.31 | 3.41 0.00 | 0.02 -0.02 | 6.90 |
| VA21 - 2 | 1062.75 | 0.00 0.21 | 3203.29 -2049.35 | 3203.29 | -34.20 -6.82 | 0.00 | -1.37 3.61 | -0.01 0.01 | -2.77 |
| VA22 | 1062.75 | 0.00 0.11 | -864.88 -772.86 | 949.00 | -13.71 17.60 | 17.60 | 1.96 1.91 | -0.01 0.01 | 0.41 |
| VA23 | 1062.75 | 0.00 0.03 | 0.00 0.00 | 1384.92 | 0.00 0.00 | 0.00 | 1.72 1.72 | 0.00 0.00 | 6.51 |
| VA24 - 1 | 1111.50 | 0.00 0.14 | -2571.39 -3394.70 | 1715.56 | -77.92 48.22 | 48.22 | 3.09 3.37 | -0.02 0.02 | -5.86 |
| VA24 - 2 | 1111.50 | 0.00 | -3684.84 | 1875.36 | 5.01 | 31.05 | 3.52 | 0.00 | -0.43 |


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|----------|---------|--------------|---------------------|---------|------------------|-------|---------------|---------------|-------|
| | | 0.22 | -3818.18 | | 31.05 | | 3.56 | 0.00 | |
| VA25 - 1 | 1111.50 | 0.00 0.26 | -4355.46 2313.68 | 2313.68 | 92.52 -41.03 | 92.52 | 4.55 -2.42 | 0.07 -0.07 | 4.50 |
| VA25 - 2 | 1111.50 | 0.00 0.26 | 2317.68 -3055.16 | 2338.43 | -41.03 -11.10 | 0.00 | 0.22 3.46 | -0.01 0.01 | 4.50 |
| VA25 - 3 | 1111.50 | 0.00 0.09 | -2406.67 -654.21 | 771.26 | -28.88 18.10 | 18.10 | 2.66 1.78 | -0.01 0.01 | -1.45 |

| CASO: G1+G2 | | | | | | | | | |
|-------------|------------------|------------------|-----------------------|------------------|-----------------------|------------------|--------------------|--------------------|----------------|
| Elemento | Carga (kgf/m) | Rd Nd (tf) | Mxi Mxf (kgf.m) | MxMáx (kgf.m) | Myi Myf (kgf.m) | MyMáx (kgf.m) | Vxi Vxf (tf) | Vyi Vyf (tf) | Mtd (kgf/m) |
| VA1 - 1 | 772.50 | 0.00 0.29 | -1307.04 1842.13 | 1842.13 | -8.14 0.94 | 0.94 | 2.37 -0.87 | 0.00 0.00 | 1.34 |
| VA1 - 2 | 772.50 | 0.00 0.30 | 1842.21 42.90 | 1842.21 | 0.94 -10.71 | 0.00 | -1.31 2.12 | 0.01 -0.01 | 0.72 |
| VA1 - 3 | 772.50 | 0.00 0.29 | 43.78 -2427.46 | 43.78 | -10.71 10.57 | 10.57 | -4.03 4.48 | -0.04 0.04 | 0.73 |
| VA1 - 4 | 772.50 | 0.00 0.05 | -1988.27 256.84 | 721.30 | 14.70 -12.65 | 14.70 | 2.05 0.85 | 0.01 -0.01 | 0.39 |
| VA1 - 5 | 772.50 | 0.00 0.04 | 258.33 -1557.15 | 258.33 | -12.65 15.46 | 15.46 | -3.33 3.73 | -0.05 0.05 | -2.56 |
| VA1 - 6 | 772.50 | -0.02 0.00 | -1175.88 -305.13 | 332.10 | 12.53 -4.98 | 12.53 | 1.53 0.99 | 0.01 -0.01 | -0.63 |
| VA2 | 772.50 | 0.00 0.00 | 0.00 0.00 | 376.65 | 0.00 0.00 | 0.00 | 0.77 0.77 | 0.00 0.00 | -2.67 |
| VA3 - 1 | 772.50 | 0.00 0.00 | 0.00 -1558.12 | 1110.30 | 0.00 1.27 | 1.27 | 1.31 2.03 | 0.00 0.00 | 0.76 |
| VA3 - 2 | 772.50 | 0.00 0.00 | -1564.64 5.32 | 5.32 | 5.74 0.00 | 5.74 | 1.61 -0.41 | 0.00 0.00 | 0.00 |
| VA4 - 1 | 810.00 | 0.00 0.14 | -1378.81 -1811.23 | 971.87 | 36.78 -12.85 | 36.78 | 1.95 2.12 | 0.01 -0.01 | 0.91 |
| VA4 - 2 | 810.00 | 0.00 0.17 | -1878.76 1586.51 | 1586.51 | -6.03 -4.10 | 0.00 | 2.56 -0.96 | 0.00 0.00 | -0.67 |
| VA4 - 3 | 810.00 | 0.00 0.17 | 1586.43 1294.18 | 1586.43 | -4.10 1.21 | 0.00 | -0.81 1.06 | -0.02 0.02 | -0.67 |
| VA4 - 4 | 810.00 | 0.00 0.17 | 1294.19 -230.55 | 1294.19 | 1.21 15.38 | 15.38 | -1.77 2.37 | -0.02 0.02 | -0.67 |
| VA4 - 5 | 810.00 | 0.00 0.17 | -231.39 -3095.07 | 0.00 | 15.38 -2.24 | 15.38 | -4.91 5.36 | 0.03 -0.03 | -4.16 |
| VA4 - 6 | 810.00 | 0.00 0.08 | -3132.13 -130.14 | 0.00 | -9.17 0.87 | 0.87 | 3.39 -2.58 | -0.01 0.01 | 0.92 |
| VA4 - 7 | 810.00 | 0.00 0.08 | -129.84 1411.65 | 1411.65 | 0.87 -1.17 | 0.87 | 1.87 -1.00 | 0.00 0.00 | -0.17 |
| VA4 - 8 | 810.00 | 0.00 0.08 | 1410.97 744.04 | 1460.17 | -1.17 12.30 | 0.00 | 0.29 1.08 | -0.01 0.01 | -0.17 |
| VA4 - 9 | 810.00 | 0.00 0.08 | 749.06 -2473.59 | 749.06 | 12.30 -16.87 | 12.30 | -5.24 5.72 | 0.05 -0.05 | -0.17 |
| VA4 - 10 | 810.00 | -0.01 0.00 | -2192.26 -186.85 | 0.00 | -7.08 1.95 | 1.95 | 2.46 -1.67 | -0.01 0.01 | 1.43 |
| VA4 - 11 | 810.00 | -0.01 0.00 | -181.53 393.96 | 393.96 | 1.95 5.04 | 5.04 | 1.27 -0.82 | -0.01 0.01 | 1.43 |
| VA4 - 12 | 810.00 | -0.01 0.00 | 394.36 -688.92 | 394.36 | 5.04 -6.88 | 5.04 | 0.08 1.33 | 0.01 -0.01 | 1.43 |
| VA4 - 13 | 810.00 | 0.00 0.05 | -712.59 -337.15 | 363.23 | -1.74 -7.21 | 0.00 | 1.32 1.07 | 0.00 0.00 | -1.64 |
| VA5 - 1 | 772.50 | 0.00 0.05 | -404.50 553.20 | 688.63 | 1.14 0.96 | 1.14 | 1.30 0.46 | 0.00 0.00 | -0.47 |
| VA5 - 2 | 772.50 | 0.00 0.05 | 553.19 -1606.02 | 553.19 | 0.96 -2.12 | 0.96 | -1.17 2.17 | 0.00 0.00 | -0.47 |
| VA5 - 3 | 772.50 | 0.00 0.08 | -2011.02 313.58 | 313.58 | 3.04 -1.93 | 3.04 | 2.70 -1.92 | 0.00 0.00 | 0.52 |


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|----------|--------|---------------|----------------------|---------|------------------|-------|---------------|---------------|-------|
| VA5 - 4 | 772.50 | 0.00 0.08 | 313.28 1172.10 | 1172.10 | -1.93 4.80 | 0.00 | 1.21 -0.38 | -0.01 0.01 | 0.52 |
| VA5 - 5 | 772.50 | 0.00 0.08 | 1172.78 -1570.24 | 1172.78 | 4.80 -3.46 | 4.80 | -0.33 2.08 | 0.00 0.00 | 0.52 |
| VA5 - 6 | 772.50 | 0.00 0.07 | -1473.24 679.79 | 679.79 | 9.08 -11.33 | 9.08 | 2.00 -0.83 | 0.01 -0.01 | -0.46 |
| VA5 - 7 | 772.50 | 0.00 0.07 | 679.39 -161.86 | 679.39 | -10.29 -11.79 | 0.00 | 0.08 1.14 | 0.00 0.00 | -9.43 |
| VA6 - 1 | 772.50 | 0.00 0.02 | 6.97 616.63 | 650.03 | -7.63 -11.12 | 0.00 | 1.00 0.24 | 0.00 0.00 | 1.48 |
| VA6 - 2 | 772.50 | 0.00 0.02 | 621.37 -2565.04 | 621.37 | -11.12 23.80 | 23.80 | -1.49 2.67 | -0.02 0.02 | 1.48 |
| VA7 - 1 | 772.50 | -0.06 0.00 | -775.56 1577.88 | 1577.88 | -33.63 2.81 | 2.81 | 2.10 -0.89 | -0.02 0.02 | -3.05 |
| VA7 - 2 | 772.50 | -0.06 0.00 | 1573.14 0.00 | 1573.14 | 2.81 0.00 | 2.81 | -0.36 1.60 | 0.00 0.00 | -3.05 |
| VA8 - 1 | 866.25 | 0.00 0.49 | -3684.78 -6633.55 | 2926.92 | -4.67 0.65 | 0.65 | 3.39 4.07 | 0.00 0.00 | -1.33 |
| VA8 - 2 | 866.25 | 0.00 0.73 | -8809.89 -5717.23 | 4864.68 | 11.16 -3.23 | 11.16 | 4.87 4.28 | 0.00 0.00 | 1.07 |
| VA9 - 1 | 810.00 | 0.00 0.13 | -1725.00 -2603.17 | 1264.80 | 33.99 -27.88 | 33.99 | 2.20 2.50 | 0.01 -0.01 | 2.95 |
| VA9 - 2 | 810.00 | 0.00 0.18 | -2709.60 -2633.63 | 1428.59 | -14.49 9.56 | 9.56 | 2.59 2.57 | 0.00 0.00 | -0.26 |
| VA10 - 1 | 810.00 | 0.00 0.10 | -2096.51 -1620.22 | 905.68 | 21.88 -31.67 | 21.88 | 2.21 2.02 | 0.01 -0.01 | 0.42 |
| VA10 - 2 | 810.00 | 0.00 0.05 | -1310.02 -733.29 | 605.88 | -39.94 25.21 | 25.21 | 1.76 1.47 | -0.02 0.02 | -3.41 |
| VA11 - 1 | 772.50 | 0.00 0.02 | -204.89 -587.97 | 0.00 | 2.36 4.06 | 4.06 | 0.55 0.94 | 0.00 0.00 | 1.63 |
| VA11 - 2 | 772.50 | 0.00 0.04 | -1098.71 702.18 | 951.19 | -3.71 1.60 | 1.60 | 1.78 0.62 | 0.00 0.00 | -1.11 |
| VA11 - 3 | 772.50 | 0.00 0.04 | 699.50 -1104.37 | 699.50 | 1.60 6.18 | 6.18 | -1.39 2.17 | 0.00 0.00 | -1.11 |
| VA12 - 1 | 772.50 | -0.02 0.00 | 0.00 1751.91 | 2025.77 | 0.00 2.09 | 2.09 | 1.77 0.65 | 0.00 0.00 | 0.09 |
| VA12 - 2 | 772.50 | -0.02 0.00 | 1754.59 0.00 | 1754.59 | 2.09 0.00 | 2.09 | -1.42 2.17 | 0.00 0.00 | 0.09 |
| VA13 | 735.00 | 0.00 0.00 | 0.00 0.00 | 338.60 | 0.00 0.00 | 0.00 | 0.71 0.71 | 0.00 0.00 | 0.01 |
| VA14 - 1 | 772.50 | 0.00 0.05 | 0.00 2242.86 | 2242.86 | 0.00 -1.32 | 0.00 | 2.54 -1.73 | 0.00 0.00 | 0.88 |
| VA14 - 2 | 772.50 | 0.00 0.05 | 2243.62 0.00 | 2356.86 | -1.32 0.00 | 0.00 | 0.42 1.91 | 0.00 0.00 | 0.88 |
| VA15 | 735.00 | -0.01 0.00 | 0.00 0.00 | 338.60 | 0.00 0.00 | 0.00 | 0.71 0.71 | 0.00 0.00 | 0.30 |
| VA16 | 735.00 | 0.00 0.01 | 0.00 0.00 | 338.60 | 0.00 0.00 | 0.00 | 0.71 0.71 | 0.00 0.00 | -0.68 |
| VA17 - 1 | 772.50 | 0.00 0.06 | 0.00 3941.72 | 3941.72 | 0.00 2.51 | 2.51 | 4.16 -3.35 | 0.00 0.00 | -5.02 |
| VA17 - 2 | 772.50 | 0.00 0.06 | 3940.96 0.00 | 3940.96 | -1.96 0.00 | 0.00 | -0.29 2.48 | 0.00 0.00 | 1.49 |
| VA18 | 772.50 | 0.00 0.05 | -285.23 165.87 | 335.79 | -10.53 14.14 | 14.14 | 0.98 0.51 | -0.01 0.01 | 1.05 |
| VA19 | 772.50 | 0.00 0.00 | 0.00 0.00 | 102.16 | 0.00 0.00 | 0.00 | 0.41 0.41 | 0.00 0.00 | -5.32 |
| VA20 | 772.50 | -0.01 0.00 | -8.98 0.00 | 351.88 | -1.04 0.00 | 0.00 | 0.75 0.74 | 0.00 0.00 | 0.40 |
| VA21 - 1 | 772.50 | 0.00 0.15 | -1583.22 2314.35 | 2314.35 | 24.82 -30.46 | 24.82 | 2.45 0.02 | 0.02 -0.02 | 4.98 |
| VA21 - 2 | 772.50 | 0.00 0.15 | 2315.83 -1567.73 | 2315.83 | -22.83 -9.37 | 0.00 | -1.02 2.65 | -0.01 0.01 | -1.99 |
| VA22 | 772.50 | 0.00 | -487.98 | 676.95 | -8.17 | 10.71 | 1.34 | -0.01 | 0.26 |


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|----------|--------|--------------|----------------------|---------|------------------|-------|---------------|---------------|-------|
| | | 0.08 | -728.21 | | 10.71 | | 1.47 | 0.01 | |
| VA23 | 772.50 | 0.00 0.02 | 0.00 0.00 | 1006.68 | 0.00 0.00 | 0.00 | 1.25 1.25 | 0.00 0.00 | 4.74 |
| VA24 - 1 | 810.00 | 0.00 0.12 | -1762.43 -2571.18 | 1260.88 | -51.07 31.66 | 31.66 | 2.21 2.49 | -0.01 0.01 | -4.28 |
| VA24 - 2 | 810.00 | 0.00 0.17 | -2608.12 -2859.86 | 1369.05 | 5.53 20.89 | 20.89 | 2.54 2.62 | 0.00 0.00 | -0.28 |
| VA25 - 1 | 810.00 | 0.00 0.20 | -3079.35 1707.18 | 1707.18 | 70.37 -30.16 | 70.37 | 3.28 -1.73 | 0.05 -0.05 | 3.27 |
| VA25 - 2 | 810.00 | 0.00 0.20 | 1710.23 -2306.14 | 1719.05 | -30.16 -11.13 | 0.00 | 0.13 2.55 | -0.01 0.01 | 3.27 |
| VA25 - 3 | 810.00 | 0.00 0.07 | -1634.11 -616.65 | 531.48 | -12.88 1.57 | 1.57 | 1.87 1.36 | 0.00 0.00 | -1.08 |

| CASO: G1+G2+0.84V1+1.4D1 | | | | | | | | | |
|--------------------------|------------------|------------------|-----------------------|------------------|-----------------------|------------------|--------------------|--------------------|----------------|
| Elemento | Carga (kgf/m) | Rd Nd (tf) | Mxi Mxf (kgf.m) | MxMáx (kgf.m) | Myi Myf (kgf.m) | MyMáx (kgf.m) | Vxi Vxf (tf) | Vyi Vyf (tf) | Mtd (kgf/m) |
| VA1 - 1 | 772.50 | 0.00 0.33 | -553.41 1843.73 | 1843.73 | -10.72 1.10 | 1.10 | 1.98 -0.48 | -0.01 0.01 | 1.43 |
| VA1 - 2 | 772.50 | 0.00 0.34 | 1844.01 -361.37 | 1844.01 | 1.10 -10.07 | 1.10 | -1.69 2.50 | 0.01 -0.01 | 0.80 |
| VA1 - 3 | 772.50 | 0.00 0.33 | -360.13 -3056.03 | 0.00 | -10.07 8.78 | 8.78 | -4.41 4.86 | -0.03 0.03 | 0.40 |
| VA1 - 4 | 772.50 | 0.00 0.06 | -1560.42 -60.89 | 644.94 | 14.03 -11.37 | 14.03 | 1.85 1.05 | 0.01 -0.01 | -0.07 |
| VA1 - 5 | 772.50 | 0.00 0.06 | -59.49 -1977.21 | 0.00 | -11.37 13.19 | 13.19 | -3.53 3.93 | -0.05 0.05 | 0.54 |
| VA1 - 6 | 772.50 | -0.04 0.00 | -521.34 -1089.48 | 242.05 | 12.28 -3.96 | 12.28 | 1.09 1.43 | 0.00 0.00 | -0.56 |
| VA2 | 772.50 | 0.00 0.00 | 0.00 0.00 | 376.65 | 0.00 0.00 | 0.00 | 0.77 0.77 | 0.00 0.00 | -2.38 |
| VA3 - 1 | 772.50 | 0.00 0.00 | 0.00 -1556.59 | 1110.88 | 0.00 2.13 | 2.13 | 1.31 2.03 | 0.00 0.00 | 0.66 |
| VA3 - 2 | 772.50 | 0.00 0.00 | -1563.93 6.03 | 6.03 | 2.76 0.00 | 2.76 | 1.61 -0.41 | 0.00 0.00 | 0.00 |
| VA4 - 1 | 810.00 | 0.00 0.33 | -355.61 -2203.15 | 1365.21 | 15.15 -2.07 | 15.15 | 1.67 2.40 | 0.00 0.00 | 0.90 |
| VA4 - 2 | 810.00 | 0.00 0.30 | -1593.68 1219.38 | 1219.38 | -5.29 -4.95 | 0.00 | 2.23 -0.63 | 0.00 0.00 | 0.95 |
| VA4 - 3 | 810.00 | 0.00 0.30 | 1219.11 823.17 | 1219.11 | -4.95 0.40 | 0.00 | -1.14 1.39 | -0.02 0.02 | 0.95 |
| VA4 - 4 | 810.00 | 0.00 0.30 | 822.93 -945.96 | 822.93 | 0.40 14.66 | 14.66 | -2.10 2.70 | -0.02 0.02 | 0.95 |
| VA4 - 5 | 810.00 | 0.00 0.30 | -947.11 -3995.68 | 0.00 | 14.66 -1.55 | 14.66 | -5.24 5.69 | 0.03 -0.03 | -13.31 |
| VA4 - 6 | 810.00 | 0.00 0.22 | -2306.47 414.37 | 414.37 | -9.10 0.67 | 0.67 | 3.11 -2.30 | -0.01 0.01 | -2.56 |
| VA4 - 7 | 810.00 | 0.00 0.22 | 414.55 1655.23 | 1655.23 | 0.67 -0.11 | 0.00 | 1.59 -0.72 | 0.00 0.00 | 0.90 |
| VA4 - 8 | 810.00 | 0.00 0.22 | 1654.51 516.02 | 1654.51 | -0.11 11.91 | 0.00 | 0.01 1.36 | -0.01 0.01 | 0.90 |
| VA4 - 9 | 810.00 | 0.00 0.22 | 521.96 -2865.07 | 521.96 | 11.91 -14.29 | 11.91 | -5.52 5.99 | 0.04 -0.04 | 0.90 |
| VA4 - 10 | 810.00 | 0.00 0.11 | -1962.51 -172.39 | 0.00 | -15.06 3.57 | 3.57 | 2.24 -1.45 | -0.02 0.02 | 1.45 |
| VA4 - 11 | 810.00 | 0.00 0.11 | -166.37 287.05 | 287.05 | 3.57 13.15 | 13.15 | 1.05 -0.60 | -0.02 0.02 | 1.45 |
| VA4 - 12 | 810.00 | 0.00 0.11 | 287.35 -1183.12 | 287.35 | 13.15 -13.26 | 13.15 | -0.14 1.55 | 0.02 -0.02 | 1.45 |
| VA4 - 13 | 810.00 | 0.00 0.02 | 457.30 -1914.33 | 549.14 | -12.25 18.75 | 18.75 | 0.39 2.00 | -0.01 0.01 | -1.59 |


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|----------|--------|---------------|----------------------|---------|------------------|-------|---------------|---------------|-------|
| VA5 - 1 | 772.50 | 0.00 0.04 | 132.41 338.04 | 740.34 | -5.47 1.24 | 0.00 | 0.97 0.79 | 0.00 0.00 | -0.53 |
| VA5 - 2 | 772.50 | 0.00 0.04 | 338.28 -2248.85 | 338.28 | 1.24 2.16 | 2.16 | -1.50 2.50 | 0.00 0.00 | -0.53 |
| VA5 - 3 | 772.50 | 0.00 0.07 | -1551.25 599.07 | 599.07 | 0.55 -2.12 | 0.55 | 2.53 -1.75 | 0.00 0.00 | 0.55 |
| VA5 - 4 | 772.50 | 0.00 0.07 | 598.89 1271.25 | 1271.25 | -2.12 4.31 | 0.00 | 1.04 -0.21 | -0.01 0.01 | 0.55 |
| VA5 - 5 | 772.50 | 0.00 0.07 | 1271.97 -1865.39 | 1271.97 | 4.31 0.03 | 4.31 | -0.50 2.26 | 0.00 0.00 | 0.55 |
| VA5 - 6 | 772.50 | 0.00 0.02 | -1137.13 605.56 | 605.56 | -0.77 -6.45 | 0.00 | 1.73 -0.56 | 0.00 0.00 | -0.46 |
| VA5 - 7 | 772.50 | 0.00 0.02 | 605.26 -662.14 | 605.26 | -14.77 30.90 | 30.90 | -0.19 1.41 | -0.03 0.03 | -8.34 |
| VA6 - 1 | 772.50 | -0.01 0.00 | 11.45 37.67 | 272.32 | -44.33 -18.58 | 0.00 | 0.64 0.60 | -0.02 0.02 | 1.24 |
| VA6 - 2 | 772.50 | -0.01 0.00 | 42.32 -3702.74 | 42.32 | -18.58 47.26 | 47.26 | -1.85 3.03 | -0.04 0.04 | 1.24 |
| VA7 - 1 | 772.50 | -0.15 0.00 | 9.89 1975.16 | 1975.16 | -49.52 -3.71 | 0.00 | 1.86 -0.64 | -0.03 0.03 | -2.67 |
| VA7 - 2 | 772.50 | -0.15 0.00 | 1970.51 0.00 | 1970.51 | -3.71 0.00 | 0.00 | -0.60 1.85 | 0.00 0.00 | -2.67 |
| VA8 - 1 | 866.25 | 0.00 0.51 | -2762.70 -7398.35 | 3106.47 | 23.65 -5.70 | 23.65 | 3.19 4.27 | 0.00 0.00 | -1.33 |
| VA8 - 2 | 866.25 | 0.00 0.68 | -8157.06 -6525.65 | 4752.92 | 18.06 -28.59 | 18.06 | 4.73 4.42 | 0.00 0.00 | 1.16 |
| VA9 - 1 | 810.00 | 0.00 0.14 | -1702.76 -2627.03 | 1264.78 | 5.40 1.32 | 5.40 | 2.19 2.51 | 0.00 0.00 | -0.96 |
| VA9 - 2 | 810.00 | 0.00 0.20 | -2731.36 -2631.05 | 1419.39 | 8.66 14.72 | 14.72 | 2.59 2.56 | 0.00 0.00 | -0.32 |
| VA10 - 1 | 810.00 | 0.00 0.12 | -2112.29 -1611.04 | 903.34 | 28.50 -30.33 | 28.50 | 2.21 2.02 | 0.01 -0.01 | 2.43 |
| VA10 - 2 | 810.00 | 0.00 0.06 | -1330.02 -705.85 | 610.85 | -29.83 1.07 | 1.07 | 1.77 1.46 | -0.01 0.01 | -0.90 |
| VA11 - 1 | 772.50 | 0.00 0.02 | -210.83 -571.26 | 0.00 | 2.85 -1.58 | 2.85 | 0.56 0.93 | 0.00 0.00 | 2.77 |
| VA11 - 2 | 772.50 | 0.00 0.04 | -1086.34 698.97 | 952.14 | -0.69 0.65 | 0.65 | 1.77 0.63 | 0.00 0.00 | -2.02 |
| VA11 - 3 | 772.50 | 0.00 0.04 | 696.59 -1112.36 | 696.59 | 0.65 4.32 | 4.32 | -1.39 2.18 | 0.00 0.00 | -2.02 |
| VA12 - 1 | 772.50 | -0.02 0.00 | 0.00 1752.14 | 2025.94 | 0.00 2.38 | 2.38 | 1.77 0.65 | 0.00 0.00 | 0.28 |
| VA12 - 2 | 772.50 | -0.02 0.00 | 1754.52 0.00 | 1754.52 | 2.38 0.00 | 2.38 | -1.42 2.17 | 0.00 0.00 | 0.28 |
| VA13 | 735.00 | 0.00 0.00 | 0.00 0.00 | 338.60 | 0.00 0.00 | 0.00 | 0.71 0.71 | 0.00 0.00 | -0.24 |
| VA14 - 1 | 772.50 | 0.00 0.04 | 0.00 2243.16 | 2243.16 | 0.00 -0.88 | 0.00 | 2.54 -1.73 | 0.00 0.00 | 1.25 |
| VA14 - 2 | 772.50 | 0.00 0.04 | 2243.82 0.00 | 2357.02 | -0.88 0.00 | 0.00 | 0.42 1.91 | 0.00 0.00 | 1.25 |
| VA15 | 735.00 | -0.01 0.00 | 0.00 0.00 | 338.60 | 0.00 0.00 | 0.00 | 0.71 0.71 | 0.00 0.00 | 0.18 |
| VA16 | 735.00 | 0.00 0.01 | 0.00 0.00 | 338.60 | 0.00 0.00 | 0.00 | 0.71 0.71 | 0.00 0.00 | -0.72 |
| VA17 - 1 | 772.50 | 0.00 0.05 | 0.00 3941.43 | 3941.43 | 0.00 1.03 | 1.03 | 4.16 -3.35 | 0.00 0.00 | -5.94 |
| VA17 - 2 | 772.50 | 0.00 0.05 | 3940.77 0.00 | 3940.77 | 0.41 0.00 | 0.41 | -0.29 2.48 | 0.00 0.00 | 1.40 |
| VA18 | 772.50 | 0.00 0.05 | -300.17 183.68 | 342.68 | -2.27 3.92 | 3.92 | 1.00 0.50 | 0.00 0.00 | 1.39 |
| VA19 | 772.50 | 0.00 0.00 | 0.00 0.00 | 102.16 | 0.00 0.00 | 0.00 | 0.41 0.41 | 0.00 0.00 | -6.03 |
| VA20 | 772.50 | -0.03 | -7.88 | 352.37 | 8.33 | 8.33 | 0.75 | 0.00 | 0.30 |


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| | | 0.00 | 0.00 | | 0.00 | | 0.74 | 0.00 | |
| VA21 - 1 | 772.50 | 0.00 0.10 | -1460.19 1990.30 | 2007.67 | 32.28 -30.71 | 32.28 | 2.31 0.16 | 0.02 -0.02 | 7.42 |
| VA21 - 2 | 772.50 | 0.00 0.09 | 1991.54 -1417.18 | 1991.54 | 13.62 -45.80 | 13.62 | -0.80 2.43 | 0.03 -0.03 | -4.04 |
| VA22 | 772.50 | 0.00 0.06 | -503.27 -720.32 | 673.25 | -6.75 9.39 | 9.39 | 1.35 1.47 | 0.00 0.00 | -0.17 |
| VA23 | 772.50 | 0.00 0.03 | 0.00 0.00 | 1006.68 | 0.00 0.00 | 0.00 | 1.25 1.25 | 0.00 0.00 | 4.65 |
| VA24 - 1 | 810.00 | 0.00 0.10 | -1735.54 -2588.94 | 1266.22 | -74.35 53.35 | 53.35 | 2.21 2.50 | -0.02 0.02 | -8.12 |
| VA24 - 2 | 810.00 | 0.00 0.13 | -2540.18 -2924.59 | 1372.80 | 17.35 59.45 | 59.45 | 2.52 2.64 | -0.01 0.01 | -0.27 |
| VA25 - 1 | 810.00 | 0.00 0.21 | -3174.21 1886.77 | 1886.77 | 138.56 -97.56 | 138.56 | 3.42 -1.87 | 0.12 -0.12 | 6.29 |
| VA25 - 2 | 810.00 | 0.00 0.21 | 1889.44 -2469.81 | 1889.44 | -97.56 1.93 | 1.93 | 0.02 2.66 | -0.03 0.03 | 6.29 |
| VA25 - 3 | 810.00 | 0.00 0.06 | -1619.80 -673.71 | 504.47 | 12.05 -14.55 | 12.05 | 1.86 1.38 | 0.01 -0.01 | 0.38 |

| CASO: G1+G2+0.84V2+1.4D2 | | | | | | | | | |
|--------------------------|------------------|------------------|-----------------------|------------------|-----------------------|------------------|--------------------|--------------------|----------------|
| Elemento | Carga (kgf/m) | Rd Nd (tf) | Mxi Mxf (kgf.m) | MxMáx (kgf.m) | Myi Myf (kgf.m) | MyMáx (kgf.m) | Vxi Vxf (tf) | Vyi Vyf (tf) | Mtd (kgf/m) |
| VA1 - 1 | 772.50 | 0.00 0.26 | -2060.67 1840.52 | 1840.52 | -5.55 0.79 | 0.79 | 2.76 -1.25 | 0.00 0.00 | 1.24 |
| VA1 - 2 | 772.50 | 0.00 0.26 | 1840.41 447.18 | 1840.41 | 0.79 -11.35 | 0.00 | -0.92 1.73 | 0.01 -0.01 | 0.64 |
| VA1 - 3 | 772.50 | 0.00 0.26 | 447.70 -1798.90 | 447.70 | -11.35 12.35 | 12.35 | -3.64 4.09 | -0.04 0.04 | 1.05 |
| VA1 - 4 | 772.50 | 0.00 0.04 | -2416.13 574.58 | 847.41 | 15.37 -13.93 | 15.37 | 2.25 0.65 | 0.01 -0.01 | 0.86 |
| VA1 - 5 | 772.50 | 0.00 0.03 | 576.14 -1137.08 | 576.14 | -13.93 17.73 | 17.73 | -3.13 3.53 | -0.06 0.06 | -5.66 |
| VA1 - 6 | 772.50 | 0.00 0.00 | -1830.43 479.23 | 672.82 | 12.77 -6.00 | 12.77 | 1.97 0.55 | 0.01 -0.01 | -0.69 |
| VA2 | 772.50 | 0.00 0.00 | 0.00 0.00 | 376.65 | 0.00 0.00 | 0.00 | 0.77 0.77 | 0.00 0.00 | -2.97 |
| VA3 - 1 | 772.50 | 0.00 0.00 | 0.00 -1559.64 | 1109.72 | 0.00 0.42 | 0.42 | 1.31 2.03 | 0.00 0.00 | 0.86 |
| VA3 - 2 | 772.50 | 0.00 0.00 | -1565.34 4.62 | 4.62 | 8.72 0.00 | 8.72 | 1.61 -0.41 | 0.01 -0.01 | 0.00 |
| VA4 - 1 | 810.00 | -0.04 0.00 | -2402.00 -1419.30 | 673.74 | 58.41 -23.63 | 58.41 | 2.23 1.84 | 0.02 -0.02 | 0.93 |
| VA4 - 2 | 810.00 | 0.00 0.04 | -2163.84 1953.64 | 1953.64 | -6.77 -3.24 | 0.00 | 2.89 -1.29 | 0.00 0.00 | -2.30 |
| VA4 - 3 | 810.00 | 0.00 0.04 | 1953.74 1765.19 | 1953.74 | -3.24 2.01 | 0.00 | -0.48 0.73 | -0.02 0.02 | -2.30 |
| VA4 - 4 | 810.00 | 0.00 0.04 | 1765.45 484.87 | 1765.45 | 2.01 16.11 | 0.00 | -1.44 2.04 | -0.02 0.02 | -2.30 |
| VA4 - 5 | 810.00 | 0.00 0.04 | 484.33 -2194.45 | 484.33 | 16.11 -2.94 | 16.11 | -4.58 5.03 | 0.03 -0.03 | 5.00 |
| VA4 - 6 | 810.00 | -0.05 0.00 | -3957.79 -674.64 | 0.00 | -9.24 1.08 | 1.08 | 3.67 -2.86 | -0.01 0.01 | 4.40 |
| VA4 - 7 | 810.00 | -0.05 0.00 | -674.23 1168.07 | 1168.07 | 1.08 -2.23 | 1.08 | 2.15 -1.28 | 0.00 0.00 | -1.24 |
| VA4 - 8 | 810.00 | -0.05 0.00 | 1167.42 972.05 | 1364.08 | -2.23 12.69 | 0.00 | 0.57 0.80 | -0.01 0.01 | -1.24 |
| VA4 - 9 | 810.00 | -0.05 0.00 | 976.16 -2082.12 | 976.16 | 12.69 -19.45 | 12.69 | -4.96 5.44 | 0.05 -0.05 | -1.24 |
| VA4 - 10 | 810.00 | -0.12 0.00 | -2422.01 -201.31 | 0.00 | 0.90 0.33 | 0.90 | 2.68 -1.90 | 0.00 0.00 | 1.41 |


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|----------|--------|---------------|----------------------|---------|-----------------|-------|---------------|---------------|--------|
| VA4 - 11 | 810.00 | -0.12 0.00 | -196.69 500.87 | 500.87 | 0.33 -3.07 | 0.33 | 1.49 -1.05 | 0.01 -0.01 | 1.41 |
| VA4 - 12 | 810.00 | -0.13 0.00 | 501.38 -194.71 | 557.26 | -3.07 -0.50 | 0.00 | 0.30 1.10 | 0.00 0.00 | 1.41 |
| VA4 - 13 | 810.00 | 0.00 0.07 | -1882.49 1240.03 | 1250.26 | 8.77 -33.18 | 8.77 | 2.25 0.13 | 0.01 -0.01 | -1.70 |
| VA5 - 1 | 772.50 | 0.00 0.06 | -941.41 768.37 | 778.19 | 7.74 0.68 | 7.74 | 1.63 0.13 | 0.00 0.00 | -0.41 |
| VA5 - 2 | 772.50 | 0.00 0.06 | 768.10 -963.19 | 768.10 | 0.68 -6.39 | 0.68 | -0.84 1.84 | 0.01 -0.01 | -0.41 |
| VA5 - 3 | 772.50 | 0.00 0.10 | -2470.78 28.09 | 28.09 | 5.52 -1.75 | 5.52 | 2.87 -2.10 | 0.01 -0.01 | 0.49 |
| VA5 - 4 | 772.50 | 0.00 0.10 | 27.66 1072.94 | 1072.94 | -1.75 5.29 | 0.00 | 1.39 -0.56 | -0.01 0.01 | 0.49 |
| VA5 - 5 | 772.50 | 0.00 0.10 | 1073.59 -1275.09 | 1073.59 | 5.29 -6.94 | 5.29 | -0.15 1.91 | 0.01 -0.01 | 0.49 |
| VA5 - 6 | 772.50 | 0.00 0.11 | -1809.35 754.03 | 754.03 | 18.94 -16.21 | 18.94 | 2.27 -1.10 | 0.02 -0.02 | -0.45 |
| VA5 - 7 | 772.50 | 0.00 0.11 | 753.52 338.43 | 832.10 | -5.80 -54.49 | 0.00 | 0.35 0.87 | 0.03 -0.03 | -10.52 |
| VA6 - 1 | 772.50 | 0.00 0.06 | 2.48 1195.59 | 1195.59 | 29.06 -3.66 | 29.06 | 1.36 -0.13 | 0.02 -0.02 | 1.72 |
| VA6 - 2 | 772.50 | 0.00 0.06 | 1200.42 -1427.35 | 1200.42 | -3.66 0.34 | 0.34 | -1.12 2.31 | 0.00 0.00 | 1.72 |
| VA7 - 1 | 772.50 | 0.00 0.04 | -1561.01 1180.61 | 1180.61 | -17.74 9.34 | 9.34 | 2.35 -1.14 | -0.02 0.02 | -3.43 |
| VA7 - 2 | 772.50 | 0.00 0.04 | 1175.78 0.00 | 1175.78 | 9.34 0.00 | 9.34 | -0.11 1.35 | 0.01 -0.01 | -3.43 |
| VA8 - 1 | 866.25 | 0.00 0.47 | -4606.86 -5868.76 | 2794.79 | -32.99 6.99 | 6.99 | 3.58 3.87 | 0.00 0.00 | -1.33 |
| VA8 - 2 | 866.25 | 0.00 0.78 | -9462.71 -4908.81 | 4998.68 | 4.26 22.13 | 22.13 | 5.01 4.14 | 0.00 0.00 | 0.99 |
| VA9 - 1 | 810.00 | 0.00 0.12 | -1747.24 -2579.32 | 1264.81 | 62.57 -57.08 | 62.57 | 2.21 2.50 | 0.02 -0.02 | 6.86 |
| VA9 - 2 | 810.00 | 0.00 0.16 | -2687.84 -2636.21 | 1437.79 | -37.64 4.40 | 4.40 | 2.59 2.57 | -0.01 0.01 | -0.21 |
| VA10 - 1 | 810.00 | 0.00 0.09 | -2080.73 -1629.40 | 908.02 | 15.27 -33.01 | 15.27 | 2.20 2.03 | 0.01 -0.01 | -1.60 |
| VA10 - 2 | 810.00 | 0.00 0.05 | -1290.02 -760.73 | 600.91 | -50.06 49.34 | 49.34 | 1.75 1.49 | -0.02 0.02 | -5.92 |
| VA11 - 1 | 772.50 | 0.00 0.03 | -198.96 -604.68 | 0.00 | 1.86 9.70 | 9.70 | 0.54 0.96 | 0.00 0.00 | 0.49 |
| VA11 - 2 | 772.50 | 0.00 0.03 | -1111.07 705.38 | 950.25 | -6.72 2.55 | 2.55 | 1.78 0.62 | 0.00 0.00 | -0.20 |
| VA11 - 3 | 772.50 | 0.00 0.03 | 702.41 -1096.38 | 702.41 | 2.55 8.04 | 8.04 | -1.38 2.17 | -0.01 0.01 | -0.20 |
| VA12 - 1 | 772.50 | -0.01 0.00 | 0.00 1751.69 | 2025.60 | 0.00 1.81 | 1.81 | 1.77 0.65 | 0.00 0.00 | -0.11 |
| VA12 - 2 | 772.50 | -0.01 0.00 | 1754.66 0.00 | 1754.66 | 1.81 0.00 | 1.81 | -1.42 2.17 | 0.00 0.00 | -0.11 |
| VA13 | 735.00 | 0.00 0.00 | 0.00 0.00 | 338.60 | 0.00 0.00 | 0.00 | 0.71 0.71 | 0.00 0.00 | 0.27 |
| VA14 - 1 | 772.50 | 0.00 0.05 | 0.00 2242.56 | 2242.56 | 0.00 -1.77 | 0.00 | 2.54 -1.73 | 0.00 0.00 | 0.52 |
| VA14 - 2 | 772.50 | 0.00 0.05 | 2243.42 0.00 | 2356.70 | -1.77 0.00 | 0.00 | 0.42 1.91 | 0.00 0.00 | 0.52 |
| VA15 | 735.00 | -0.01 0.00 | 0.00 0.00 | 338.60 | 0.00 0.00 | 0.00 | 0.71 0.71 | 0.00 0.00 | 0.42 |
| VA16 | 735.00 | 0.00 0.01 | 0.00 0.00 | 338.60 | 0.00 0.00 | 0.00 | 0.71 0.71 | 0.00 0.00 | -0.65 |
| VA17 - 1 | 772.50 | 0.00 0.06 | 0.00 3942.02 | 3942.02 | 0.00 3.98 | 3.98 | 4.16 -3.35 | 0.00 0.00 | -4.11 |
| VA17 - 2 | 772.50 | 0.00 | 3941.16 | 3941.16 | -4.33 | 0.00 | -0.29 | 0.00 | 1.59 |


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| | | 0.07 | 0.00 | | 0.00 | | 2.48 | 0.00 | |
| VA18 | 772.50 | 0.00 0.05 | -270.29 148.05 | 328.89 | -18.79 24.36 | 24.36 | 0.96 0.53 | -0.02 0.02 | 0.72 |
| VA19 | 772.50 | 0.00 0.01 | 0.00 0.00 | 102.16 | 0.00 0.00 | 0.00 | 0.41 0.41 | 0.00 0.00 | -4.62 |
| VA20 | 772.50 | 0.00 0.01 | -10.08 0.00 | 351.39 | -10.41 0.00 | 0.00 | 0.75 0.74 | -0.01 0.01 | 0.51 |
| VA21 - 1 | 772.50 | 0.00 0.19 | -1706.25 2638.40 | 2638.40 | 17.36 -30.21 | 17.36 | 2.59 -0.11 | 0.01 -0.01 | 2.54 |
| VA21 - 2 | 772.50 | 0.00 0.21 | 2640.12 -1718.28 | 2640.12 | -59.28 27.06 | 27.06 | -1.25 2.88 | -0.04 0.04 | 0.07 |
| VA22 | 772.50 | 0.00 0.10 | -472.69 -736.09 | 680.66 | -9.59 12.02 | 12.02 | 1.34 1.48 | -0.01 0.01 | 0.70 |
| VA23 | 772.50 | 0.00 0.02 | 0.00 0.00 | 1006.68 | 0.00 0.00 | 0.00 | 1.25 1.25 | 0.00 0.00 | 4.83 |
| VA24 - 1 | 810.00 | 0.00 0.13 | -1789.33 -2553.42 | 1255.54 | -27.78 9.97 | 9.97 | 2.22 2.48 | -0.01 0.01 | -0.45 |
| VA24 - 2 | 810.00 | 0.00 0.20 | -2676.07 -2795.14 | 1365.30 | -6.29 -17.68 | 0.00 | 2.56 2.60 | 0.00 0.00 | -0.29 |
| VA25 - 1 | 810.00 | 0.00 0.19 | -2984.48 1527.60 | 1527.60 | 2.18 37.24 | 37.24 | 3.13 -1.58 | -0.02 0.02 | 0.25 |
| VA25 - 2 | 810.00 | 0.00 0.18 | 1531.03 -2142.47 | 1561.27 | 37.24 -24.20 | 37.24 | 0.23 2.45 | 0.02 -0.02 | 0.25 |
| VA25 - 3 | 810.00 | 0.00 0.08 | -1648.42 -559.59 | 558.49 | -37.82 17.70 | 17.70 | 1.89 1.35 | -0.01 0.01 | -2.55 |

| CASO: G1+G2+0.84V3+1.4D3 | | | | | | | | | |
|--------------------------|------------------|------------------|-----------------------|------------------|-----------------------|------------------|--------------------|--------------------|----------------|
| Elemento | Carga (kgf/m) | Rd Nd (tf) | Mxi Mxf (kgf.m) | MxMáx (kgf.m) | Myi Myf (kgf.m) | MyMáx (kgf.m) | Vxi Vxf (tf) | Vyi Vyf (tf) | Mtd (kgf/m) |
| VA1 - 1 | 772.50 | 0.00 0.29 | -1227.51 1849.06 | 1849.06 | 32.75 -3.45 | 32.75 | 2.33 -0.83 | 0.02 -0.02 | 3.14 |
| VA1 - 2 | 772.50 | 0.00 0.29 | 1849.05 10.40 | 1849.05 | -3.45 -81.87 | 0.00 | -1.34 2.16 | 0.07 -0.07 | 2.53 |
| VA1 - 3 | 772.50 | 0.00 0.29 | 11.14 -2481.86 | 11.14 | -81.87 -11.60 | 0.00 | -4.06 4.51 | -0.12 0.12 | 2.51 |
| VA1 - 4 | 772.50 | 0.00 0.04 | -1938.49 224.46 | 711.74 | -3.64 9.56 | 9.56 | 2.02 0.87 | 0.00 0.00 | -0.52 |
| VA1 - 5 | 772.50 | 0.00 0.04 | 225.80 -1600.94 | 225.80 | 9.56 0.39 | 9.56 | -3.35 3.75 | 0.02 -0.02 | -3.10 |
| VA1 - 6 | 772.50 | -0.03 0.00 | -1094.90 -419.63 | 296.88 | 5.35 0.48 | 5.35 | 1.47 1.05 | 0.00 0.00 | -2.25 |
| VA2 | 772.50 | 0.00 0.01 | 0.00 0.00 | 376.65 | 0.00 0.00 | 0.00 | 0.77 0.77 | 0.00 0.00 | -3.20 |
| VA3 - 1 | 772.50 | 0.00 0.00 | 0.00 -1558.14 | 1110.29 | 0.00 9.24 | 9.24 | 1.31 2.03 | 0.00 0.00 | 0.74 |
| VA3 - 2 | 772.50 | 0.00 0.00 | -1564.52 5.44 | 5.44 | -9.46 0.00 | 0.00 | 1.61 -0.41 | -0.01 0.01 | 0.00 |
| VA4 - 1 | 810.00 | 0.00 0.11 | -1399.53 -1796.76 | 968.03 | 20.71 -18.74 | 20.71 | 1.96 2.12 | 0.01 -0.01 | 0.47 |
| VA4 - 2 | 810.00 | 0.00 0.10 | -1867.83 1580.38 | 1580.38 | 52.67 -23.59 | 52.67 | 2.55 -0.95 | 0.04 -0.04 | 4.30 |
| VA4 - 3 | 810.00 | 0.00 0.11 | 1580.40 1285.48 | 1580.40 | -23.59 -18.05 | 0.00 | -0.82 1.07 | -0.02 0.02 | 4.30 |
| VA4 - 4 | 810.00 | 0.00 0.11 | 1285.53 -245.50 | 1285.53 | -18.05 9.52 | 9.52 | -1.78 2.38 | -0.04 0.04 | 4.30 |
| VA4 - 5 | 810.00 | 0.00 0.11 | -246.29 -3114.72 | 0.00 | 9.52 -80.97 | 9.52 | -4.92 5.37 | 0.16 -0.16 | 0.59 |
| VA4 - 6 | 810.00 | 0.00 0.02 | -3156.75 -144.32 | 0.00 | -53.83 -39.15 | 0.00 | 3.40 -2.59 | -0.01 0.01 | -2.67 |
| VA4 - 7 | 810.00 | 0.00 0.02 | -144.03 1408.63 | 1408.63 | -39.15 -6.21 | 0.00 | 1.88 -1.01 | -0.03 0.03 | -3.88 |


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| VA4 - 8 | 810.00 | 0.00 0.02 | 1407.90 758.47 | 1461.48 | -6.21 25.44 | 0.00 | 0.30 1.07 | -0.02 0.02 | -3.88 |
| VA4 - 9 | 810.00 | 0.00 0.01 | 763.49 -2453.06 | 763.49 | 25.44 47.11 | 47.11 | -5.23 5.70 | -0.04 0.04 | -3.88 |
| VA4 - 10 | 810.00 | -0.03 0.00 | -2150.08 -168.74 | 0.00 | 9.15 7.96 | 9.15 | 2.44 -1.65 | 0.00 0.00 | 1.75 |
| VA4 - 11 | 810.00 | -0.03 0.00 | -163.30 398.54 | 398.54 | 7.96 10.63 | 10.63 | 1.24 -0.80 | 0.00 0.00 | 1.75 |
| VA4 - 12 | 810.00 | -0.02 0.00 | 399.09 -729.57 | 399.09 | 10.63 -11.67 | 10.63 | 0.06 1.35 | 0.01 -0.01 | 1.75 |
| VA4 - 13 | 810.00 | 0.00 0.02 | -732.21 -337.57 | 354.58 | -9.06 -28.64 | 0.00 | 1.33 1.06 | 0.01 -0.01 | -1.64 |
| VA5 - 1 | 772.50 | 0.00 0.09 | -416.19 566.01 | 694.76 | 41.99 -5.89 | 41.99 | 1.31 0.45 | 0.02 -0.02 | 3.01 |
| VA5 - 2 | 772.50 | 0.00 0.09 | 565.97 -1579.31 | 565.97 | -5.89 -58.67 | 0.00 | -1.16 2.16 | 0.04 -0.04 | 3.01 |
| VA5 - 3 | 772.50 | 0.00 0.13 | -2017.54 308.80 | 308.80 | -48.28 -21.44 | 0.00 | 2.70 -1.93 | -0.03 0.03 | -2.52 |
| VA5 - 4 | 772.50 | 0.00 0.13 | 308.54 1169.23 | 1169.23 | -21.44 -10.16 | 0.00 | 1.22 -0.38 | -0.01 0.01 | -2.52 |
| VA5 - 5 | 772.50 | 0.00 0.13 | 1169.95 -1569.12 | 1169.95 | -10.16 40.68 | 40.68 | -0.33 2.08 | -0.02 0.02 | -2.52 |
| VA5 - 6 | 772.50 | 0.00 0.06 | -1510.88 675.79 | 675.79 | 6.62 -5.43 | 6.62 | 2.03 -0.85 | 0.01 -0.01 | -1.45 |
| VA5 - 7 | 772.50 | 0.00 0.05 | 675.25 -128.98 | 678.67 | -18.75 -3.36 | 0.00 | 0.10 1.12 | -0.01 0.01 | -7.98 |
| VA6 - 1 | 772.50 | 0.00 0.02 | 6.63 664.58 | 690.73 | -26.50 -15.39 | 0.00 | 1.03 0.21 | -0.01 0.01 | 2.32 |
| VA6 - 2 | 772.50 | 0.00 0.02 | 669.37 -2470.81 | 669.37 | -15.39 33.78 | 33.78 | -1.46 2.64 | -0.03 0.03 | 2.32 |
| VA7 - 1 | 772.50 | -0.05 0.00 | -849.42 1540.55 | 1540.55 | -42.06 -1.30 | 0.00 | 2.13 -0.91 | -0.03 0.03 | -4.07 |
| VA7 - 2 | 772.50 | -0.05 0.00 | 1535.76 0.00 | 1535.76 | -1.30 0.00 | 0.00 | -0.33 1.58 | 0.00 0.00 | -4.07 |
| VA8 - 1 | 866.25 | 0.00 0.51 | -3657.74 -6667.48 | 2926.18 | -1.73 -12.67 | 0.00 | 3.38 4.08 | 0.00 0.00 | 0.98 |
| VA8 - 2 | 866.25 | 0.00 0.75 | -8827.79 -5709.94 | 4860.35 | -6.65 2.32 | 2.32 | 4.87 4.28 | 0.00 0.00 | -0.74 |
| VA9 - 1 | 810.00 | 0.00 0.18 | -1090.39 -3157.26 | 1370.56 | -2.77 -2.58 | 0.00 | 2.00 2.71 | 0.00 0.00 | 2.99 |
| VA9 - 2 | 810.00 | 0.00 0.22 | -2270.02 -3079.92 | 1437.08 | -28.22 26.45 | 26.45 | 2.45 2.71 | -0.01 0.01 | -0.13 |
| VA10 - 1 | 810.00 | 0.00 0.13 | -1586.11 -2083.82 | 929.91 | 4.36 -27.54 | 4.36 | 2.02 2.21 | 0.01 -0.01 | 0.33 |
| VA10 - 2 | 810.00 | 0.00 0.04 | -646.40 -1522.83 | 561.11 | -68.43 92.43 | 92.43 | 1.40 1.84 | -0.04 0.04 | -3.56 |
| VA11 - 1 | 772.50 | -0.02 0.00 | 625.88 -1046.18 | 625.88 | -32.29 39.77 | 39.77 | -0.12 1.61 | -0.04 0.04 | 1.67 |
| VA11 - 2 | 772.50 | -0.05 0.00 | -510.98 11.07 | 697.24 | -25.70 12.45 | 12.45 | 1.37 1.03 | -0.01 0.01 | -1.29 |
| VA11 - 3 | 772.50 | -0.05 0.00 | 7.87 -2213.18 | 7.87 | 12.45 33.03 | 33.03 | -1.80 2.58 | -0.02 0.02 | -1.29 |
| VA12 - 1 | 772.50 | -0.06 0.00 | 0.00 1751.52 | 2025.48 | 0.00 5.98 | 5.98 | 1.77 0.65 | 0.00 0.00 | -0.02 |
| VA12 - 2 | 772.50 | -0.06 0.00 | 1754.71 0.00 | 1754.71 | 5.98 0.00 | 5.98 | -1.42 2.17 | 0.01 -0.01 | -0.02 |
| VA13 | 735.00 | 0.00 0.02 | 0.00 0.00 | 338.60 | 0.00 0.00 | 0.00 | 0.71 0.71 | 0.00 0.00 | 0.05 |
| VA14 - 1 | 772.50 | 0.00 0.20 | 0.00 2242.86 | 2242.86 | 0.00 3.47 | 3.47 | 2.54 -1.73 | 0.00 0.00 | 0.75 |
| VA14 - 2 | 772.50 | 0.00 0.20 | 2243.61 0.00 | 2356.85 | 3.47 0.00 | 3.47 | 0.42 1.91 | 0.00 0.00 | 0.75 |
| VA15 | 735.00 | 0.00 | 0.00 | 338.60 | 0.00 | 0.00 | 0.71 | 0.00 | 0.26 |

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| | | 0.02 | 0.00 | | 0.00 | | 0.71 | 0.00 | |
| VA16 | 735.00 | -0.01 0.00 | 0.00 0.00 | 338.60 | 0.00 0.00 | 0.00 | 0.71 0.71 | 0.00 0.00 | -0.72 |
| VA17 - 1 | 772.50 | -0.02 0.00 | 0.00 3941.72 | 3941.72 | 0.00 -8.47 | 0.00 | 4.16 -3.35 | 0.01 -0.01 | -5.01 |
| VA17 - 2 | 772.50 | -0.02 0.00 | 3940.98 0.00 | 3940.98 | 10.24 0.00 | 10.24 | -0.29 2.48 | 0.00 0.00 | 1.36 |
| VA18 | 772.50 | 0.00 0.01 | 456.55 -578.43 | 483.90 | 33.36 -37.00 | 33.36 | 0.21 1.28 | 0.04 -0.04 | 1.04 |
| VA19 | 772.50 | -0.01 0.00 | 0.00 0.00 | 102.16 | 0.00 0.00 | 0.00 | 0.41 0.41 | 0.00 0.00 | -5.44 |
| VA20 | 772.50 | -0.02 0.00 | -6.53 0.00 | 352.97 | 13.32 0.00 | 13.32 | 0.75 0.74 | 0.01 -0.01 | 0.54 |
| VA21 - 1 | 772.50 | 0.00 0.15 | -1115.23 2241.53 | 2264.76 | 40.74 -42.75 | 40.74 | 2.29 0.19 | 0.03 -0.03 | 4.80 |
| VA21 - 2 | 772.50 | 0.00 0.14 | 2243.85 -2059.17 | 2243.85 | -16.25 -21.37 | 0.00 | -1.22 2.85 | 0.00 0.00 | -1.83 |
| VA22 | 772.50 | 0.00 0.06 | 328.17 -1695.14 | 797.34 | 1.49 -1.21 | 1.49 | 0.85 1.96 | 0.00 0.00 | 0.10 |
| VA23 | 772.50 | 0.00 0.03 | 0.00 0.00 | 1006.68 | 0.00 0.00 | 0.00 | 1.25 1.25 | 0.00 0.00 | 4.79 |
| VA24 - 1 | 810.00 | 0.00 0.18 | -1012.52 -3226.81 | 1387.43 | -20.14 12.51 | 12.51 | 1.97 2.73 | -0.01 0.01 | -4.23 |
| VA24 - 2 | 810.00 | 0.00 0.21 | -2086.73 -3385.75 | 1391.44 | 15.02 10.78 | 15.02 | 2.37 2.78 | 0.00 0.00 | -0.12 |
| VA25 - 1 | 810.00 | 0.00 0.22 | -2460.94 1868.94 | 1868.94 | 79.78 -26.26 | 79.78 | 3.04 -1.49 | 0.06 -0.06 | 3.16 |
| VA25 - 2 | 810.00 | 0.00 0.22 | 1873.00 -2855.96 | 1873.00 | -26.26 -32.94 | 0.00 | -0.09 2.77 | 0.00 0.00 | 3.16 |
| VA25 - 3 | 810.00 | 0.00 0.06 | -834.25 -1550.49 | 440.71 | 30.97 -56.84 | 30.97 | 1.44 1.80 | 0.02 -0.02 | -1.27 |

| CASO: G1+G2+0.84V4+1.4D4 | | | | | | | | | |
|--------------------------|------------------|------------------|-----------------------|------------------|-----------------------|------------------|--------------------|--------------------|----------------|
| Elemento | Carga (kgf/m) | Rd Nd (tf) | Mxi Mxf (kgf.m) | MxMáx (kgf.m) | Myi Myf (kgf.m) | MyMáx (kgf.m) | Vxi Vxf (tf) | Vyi Vyf (tf) | Mtd (kgf/m) |
| VA1 - 1 | 772.50 | 0.00 0.30 | -1386.57 1835.19 | 1835.19 | -49.02 5.34 | 5.34 | 2.41 -0.90 | -0.03 0.03 | -0.47 |
| VA1 - 2 | 772.50 | 0.00 0.30 | 1835.38 75.41 | 1835.38 | 5.34 60.45 | 0.00 | -1.27 2.08 | -0.05 0.05 | -1.09 |
| VA1 - 3 | 772.50 | 0.00 0.30 | 76.43 -2373.07 | 76.43 | 60.45 32.73 | 60.45 | -3.99 4.44 | 0.05 -0.05 | -1.06 |
| VA1 - 4 | 772.50 | 0.00 0.06 | -2038.06 289.23 | 730.86 | 33.04 -34.85 | 33.04 | 2.07 0.83 | 0.02 -0.02 | 1.30 |
| VA1 - 5 | 772.50 | 0.00 0.05 | 290.85 -1513.35 | 290.85 | -34.85 30.53 | 30.53 | -3.31 3.71 | -0.13 0.13 | -2.02 |
| VA1 - 6 | 772.50 | 0.00 0.00 | -1256.86 -190.62 | 373.30 | 19.70 -10.44 | 19.70 | 1.59 0.93 | 0.01 -0.01 | 0.99 |
| VA2 | 772.50 | 0.00 0.00 | 0.00 0.00 | 376.65 | 0.00 0.00 | 0.00 | 0.77 0.77 | 0.00 0.00 | -2.15 |
| VA3 - 1 | 772.50 | 0.00 0.01 | 0.00 -1558.09 | 1110.31 | 0.00 -6.69 | 0.00 | 1.31 2.03 | 0.00 0.00 | 0.78 |
| VA3 - 2 | 772.50 | 0.00 0.00 | -1564.75 5.21 | 5.21 | 20.94 0.00 | 20.94 | 1.61 -0.41 | 0.01 -0.01 | 0.00 |
| VA4 - 1 | 810.00 | 0.00 0.18 | -1358.08 -1825.69 | 975.70 | 52.84 -6.95 | 52.84 | 1.94 2.13 | 0.01 -0.01 | 1.36 |
| VA4 - 2 | 810.00 | 0.00 0.23 | -1889.69 1592.64 | 1592.64 | -64.73 15.39 | 15.39 | 2.57 -0.97 | -0.04 0.04 | -5.65 |
| VA4 - 3 | 810.00 | 0.00 0.23 | 1592.45 1302.88 | 1592.45 | 15.39 20.46 | 0.00 | -0.80 1.05 | -0.02 0.02 | -5.65 |
| VA4 - 4 | 810.00 | 0.00 0.23 | 1302.86 -215.59 | 1302.86 | 20.46 21.25 | 21.25 | -1.76 2.36 | 0.00 0.00 | -5.65 |

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|----------|--------|---------------|----------------------|---------|------------------|-------|---------------|---------------|--------|
| VA4 - 5 | 810.00 | 0.00 0.23 | -216.49 -3075.41 | 0.00 | 21.25 76.48 | 76.48 | -4.90 5.35 | -0.10 0.10 | -8.91 |
| VA4 - 6 | 810.00 | 0.00 0.14 | -3107.51 -115.95 | 0.00 | 35.48 40.90 | 40.90 | 3.38 -2.57 | -0.01 0.01 | 4.50 |
| VA4 - 7 | 810.00 | 0.00 0.14 | -115.65 1414.68 | 1414.68 | 40.90 3.87 | 40.90 | 1.86 -0.99 | 0.03 -0.03 | 3.53 |
| VA4 - 8 | 810.00 | 0.00 0.14 | 1414.03 729.60 | 1458.86 | 3.87 -0.84 | 0.00 | 0.28 1.09 | 0.00 0.00 | 3.53 |
| VA4 - 9 | 810.00 | 0.00 0.16 | 734.63 -2494.13 | 734.63 | -0.84 -80.85 | 0.00 | -5.25 5.73 | 0.14 -0.14 | 3.53 |
| VA4 - 10 | 810.00 | 0.00 0.02 | -2234.45 -204.97 | 0.00 | -23.31 -4.07 | 0.00 | 2.49 -1.70 | -0.02 0.02 | 1.11 |
| VA4 - 11 | 810.00 | 0.00 0.02 | -199.76 389.38 | 389.38 | -4.07 -0.54 | 0.00 | 1.29 -0.85 | -0.01 0.01 | 1.11 |
| VA4 - 12 | 810.00 | 0.00 0.01 | 389.64 -648.26 | 394.01 | -0.54 -2.10 | 0.00 | 0.11 1.30 | 0.00 0.00 | 1.11 |
| VA4 - 13 | 810.00 | 0.00 0.07 | -692.97 -336.72 | 371.88 | 5.59 14.21 | 14.21 | 1.31 1.07 | 0.00 0.00 | -1.65 |
| VA5 - 1 | 772.50 | 0.00 0.01 | -392.81 540.39 | 682.50 | -39.72 7.80 | 7.80 | 1.29 0.47 | -0.02 0.02 | -3.95 |
| VA5 - 2 | 772.50 | 0.00 0.01 | 540.42 -1632.74 | 540.42 | 7.80 54.43 | 54.43 | -1.18 2.18 | -0.04 0.04 | -3.95 |
| VA5 - 3 | 772.50 | 0.00 0.04 | -2004.49 318.36 | 318.36 | 54.35 17.58 | 54.35 | 2.70 -1.92 | 0.04 -0.04 | 3.55 |
| VA5 - 4 | 772.50 | 0.00 0.04 | 318.02 1174.97 | 1174.97 | 17.58 19.76 | 0.00 | 1.21 -0.38 | 0.00 0.00 | 3.55 |
| VA5 - 5 | 772.50 | 0.00 0.04 | 1175.61 -1571.37 | 1175.61 | 19.76 -47.59 | 19.76 | -0.33 2.09 | 0.03 -0.03 | 3.55 |
| VA5 - 6 | 772.50 | 0.00 0.07 | -1435.61 683.79 | 683.79 | 11.54 -17.23 | 11.54 | 1.98 -0.81 | 0.02 -0.02 | 0.54 |
| VA5 - 7 | 772.50 | 0.00 0.08 | 683.53 -194.73 | 683.53 | -1.83 -20.23 | 0.00 | 0.06 1.17 | 0.01 -0.01 | -10.89 |
| VA6 - 1 | 772.50 | 0.00 0.02 | 7.30 568.68 | 614.15 | 11.23 -6.85 | 11.23 | 0.97 0.27 | 0.01 -0.01 | 0.64 |
| VA6 - 2 | 772.50 | 0.00 0.02 | 573.37 -2659.28 | 573.37 | -6.85 13.82 | 13.82 | -1.52 2.70 | -0.01 0.01 | 0.64 |
| VA7 - 1 | 772.50 | -0.06 0.00 | -701.71 1615.22 | 1615.22 | -25.21 6.93 | 6.93 | 2.08 -0.87 | -0.02 0.02 | -2.04 |
| VA7 - 2 | 772.50 | -0.06 0.00 | 1610.53 0.00 | 1610.53 | 6.93 0.00 | 6.93 | -0.38 1.62 | 0.00 0.00 | -2.04 |
| VA8 - 1 | 866.25 | 0.00 0.47 | -3711.82 -6599.62 | 2928.24 | -7.61 13.97 | 13.97 | 3.39 4.06 | 0.00 0.00 | -3.64 |
| VA8 - 2 | 866.25 | 0.00 0.71 | -8791.98 -5724.52 | 4869.02 | 28.97 -8.78 | 28.97 | 4.87 4.28 | 0.00 0.00 | 2.89 |
| VA9 - 1 | 810.00 | 0.00 0.07 | -2359.61 -2049.09 | 1214.75 | 70.74 -53.18 | 70.74 | 2.41 2.30 | 0.02 -0.02 | 2.91 |
| VA9 - 2 | 810.00 | 0.00 0.14 | -3149.19 -2187.34 | 1446.23 | -0.77 -7.33 | 0.00 | 2.73 2.43 | 0.00 0.00 | -0.40 |
| VA10 - 1 | 810.00 | 0.00 0.08 | -2606.91 -1156.62 | 926.49 | 39.40 -35.80 | 39.40 | 2.39 1.84 | 0.01 -0.01 | 0.51 |
| VA10 - 2 | 810.00 | 0.00 0.07 | -1973.64 56.25 | 813.27 | -11.46 -42.02 | 0.00 | 2.13 1.11 | 0.01 -0.01 | -3.25 |
| VA11 - 1 | 772.50 | 0.00 0.07 | -1035.67 -129.76 | 0.00 | 37.00 -31.65 | 37.00 | 1.22 0.28 | 0.04 -0.04 | 1.58 |
| VA11 - 2 | 772.50 | 0.00 0.12 | -1686.43 1393.29 | 1420.01 | 18.29 -9.26 | 18.29 | 2.19 0.21 | 0.01 -0.01 | -0.93 |
| VA11 - 3 | 772.50 | 0.00 0.12 | 1391.14 4.43 | 1391.14 | -9.26 -20.68 | 0.00 | -0.98 1.76 | 0.01 -0.01 | -0.93 |
| VA12 - 1 | 772.50 | 0.00 0.02 | 0.00 1752.31 | 2026.06 | 0.00 -1.79 | 0.00 | 1.77 0.65 | 0.00 0.00 | 0.19 |
| VA12 - 2 | 772.50 | 0.00 0.02 | 1754.46 0.00 | 1754.46 | -1.79 0.00 | 0.00 | -1.42 2.17 | 0.00 0.00 | 0.19 |
| VA13 | 735.00 | -0.02 | 0.00 | 338.60 | 0.00 | 0.00 | 0.71 | 0.00 | -0.02 |


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|----------|--------|---------------|----------------------|---------|-----------------|-------|---------------|---------------|-------|
| | | 0.00 | 0.00 | | 0.00 | | 0.71 | 0.00 | |
| VA14 - 1 | 772.50 | -0.10 0.00 | 0.00 2242.86 | 2242.86 | 0.00 -6.12 | 0.00 | 2.54 -1.73 | 0.01 -0.01 | 1.01 |
| VA14 - 2 | 772.50 | -0.10 0.00 | 2243.64 0.00 | 2356.87 | -6.12 0.00 | 0.00 | 0.42 1.91 | 0.00 0.00 | 1.01 |
| VA15 | 735.00 | -0.04 0.00 | 0.00 0.00 | 338.60 | 0.00 0.00 | 0.00 | 0.71 0.71 | 0.00 0.00 | 0.34 |
| VA16 | 735.00 | 0.00 0.03 | 0.00 0.00 | 338.60 | 0.00 0.00 | 0.00 | 0.71 0.71 | 0.00 0.00 | -0.64 |
| VA17 - 1 | 772.50 | 0.00 0.13 | 0.00 3941.72 | 3941.72 | 0.00 13.48 | 13.48 | 4.16 -3.35 | -0.01 0.01 | -5.04 |
| VA17 - 2 | 772.50 | 0.00 0.15 | 3940.95 0.00 | 3940.95 | -14.16 0.00 | 0.00 | -0.29 2.48 | 0.00 0.00 | 1.62 |
| VA18 | 772.50 | 0.00 0.09 | -1027.01 910.16 | 910.16 | -54.41 65.28 | 65.28 | 1.75 -0.26 | -0.06 0.06 | 1.07 |
| VA19 | 772.50 | 0.00 0.01 | 0.00 0.00 | 102.16 | 0.00 0.00 | 0.00 | 0.41 0.41 | 0.00 0.00 | -5.21 |
| VA20 | 772.50 | -0.01 0.00 | -11.43 0.00 | 350.79 | -15.40 0.00 | 0.00 | 0.75 0.74 | -0.01 0.01 | 0.26 |
| VA21 - 1 | 772.50 | 0.00 0.15 | -2051.21 2387.17 | 2387.17 | 8.90 -18.18 | 8.90 | 2.62 -0.14 | 0.01 -0.01 | 5.16 |
| VA21 - 2 | 772.50 | 0.00 0.16 | 2387.81 -1076.29 | 2387.81 | -29.41 2.64 | 2.64 | -0.83 2.46 | -0.02 0.02 | -2.14 |
| VA22 | 772.50 | 0.00 0.10 | -1304.12 238.73 | 866.70 | -17.82 22.63 | 22.63 | 1.83 0.99 | -0.01 0.01 | 0.43 |
| VA23 | 772.50 | 0.00 0.02 | 0.00 0.00 | 1006.68 | 0.00 0.00 | 0.00 | 1.25 1.25 | 0.00 0.00 | 4.69 |
| VA24 - 1 | 810.00 | 0.00 0.05 | -2512.34 -1915.55 | 1210.08 | -81.99 50.82 | 50.82 | 2.46 2.25 | -0.02 0.02 | -4.34 |
| VA24 - 2 | 810.00 | 0.00 0.13 | -3129.51 -2333.97 | 1380.07 | -3.97 31.00 | 31.00 | 2.70 2.45 | -0.01 0.01 | -0.44 |
| VA25 - 1 | 810.00 | 0.00 0.17 | -3697.76 1545.43 | 1545.43 | 60.96 -34.06 | 60.96 | 3.51 -1.96 | 0.05 -0.05 | 3.39 |
| VA25 - 2 | 810.00 | 0.00 0.17 | 1547.47 -1756.32 | 1619.52 | -34.06 10.67 | 10.67 | 0.34 2.34 | -0.01 0.01 | 3.39 |
| VA25 - 3 | 810.00 | 0.00 0.08 | -2433.97 317.20 | 847.27 | -56.73 59.99 | 59.99 | 2.31 0.93 | -0.03 0.03 | -0.90 |

| CASO: G1+G2+0.98Q+0.84V1+1.4D1 | | | | | | | | | |
|--------------------------------|------------------|------------------|-----------------------|------------------|-----------------------|------------------|--------------------|--------------------|----------------|
| Elemento | Carga (kgf/m) | Rd Nd (tf) | Mxi Mxf (kgf.m) | MxMáx (kgf.m) | Myi Myf (kgf.m) | MyMáx (kgf.m) | Vxi Vxf (tf) | Vyi Vyf (tf) | Mtd (kgf/m) |
| VA1 - 1 | 772.50 | 0.00 0.32 | -675.16 1898.87 | 1898.87 | -56.97 3.59 | 3.59 | 2.07 -0.57 | -0.03 0.03 | -1.27 |
| VA1 - 2 | 772.50 | 0.00 0.33 | 1899.04 -210.90 | 1899.04 | 3.59 -71.67 | 3.59 | -1.60 2.41 | 0.07 -0.07 | -1.91 |
| VA1 - 3 | 772.50 | 0.00 0.31 | -209.60 -2852.73 | 0.00 | -71.67 123.95 | 123.95 | -4.32 4.77 | -0.34 0.34 | -2.17 |
| VA1 - 4 | 772.50 | -0.29 0.00 | -1681.16 -18.37 | 632.64 | 106.75 -79.94 | 106.75 | 1.89 1.00 | 0.05 -0.05 | -0.01 |
| VA1 - 5 | 772.50 | -0.31 0.00 | -16.87 -1912.18 | 0.00 | -79.94 104.72 | 104.72 | -3.49 3.89 | -0.36 0.36 | 0.12 |
| VA1 - 6 | 772.50 | -0.33 0.00 | -331.72 -1362.29 | 245.57 | 84.29 -42.77 | 84.29 | 0.94 1.58 | 0.04 -0.04 | 1.33 |
| VA2 | 772.50 | 0.00 0.00 | 0.00 0.00 | 376.65 | 0.00 0.00 | 0.00 | 0.77 0.77 | 0.00 0.00 | -2.73 |
| VA3 - 1 | 772.50 | 0.00 0.01 | 0.00 -1555.59 | 1111.26 | 0.00 15.89 | 15.89 | 1.31 2.03 | 0.00 0.00 | 0.57 |
| VA3 - 2 | 772.50 | 0.00 0.00 | -1563.06 6.89 | 6.89 | 47.27 0.00 | 47.27 | 1.61 -0.41 | 0.03 -0.03 | 0.00 |
| VA4 - 1 | 810.00 | 0.00 0.30 | -467.93 -2135.89 | 1324.72 | 35.66 -24.83 | 35.66 | 1.71 2.37 | 0.01 -0.01 | 0.75 |


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|----------|--------|---------------|----------------------|---------|------------------|--------|---------------|---------------|--------|
| VA4 - 2 | 810.00 | 0.00 0.33 | -1556.06 1254.89 | 1254.89 | -60.03 -30.57 | 0.00 | 2.22 -0.63 | -0.01 0.01 | 0.39 |
| VA4 - 3 | 810.00 | 0.00 0.33 | 1254.72 858.48 | 1254.72 | -30.57 6.33 | 0.00 | -1.14 1.39 | -0.12 0.12 | 0.39 |
| VA4 - 4 | 810.00 | 0.00 0.33 | 858.30 -911.32 | 858.30 | 6.33 132.95 | 132.95 | -2.10 2.70 | -0.17 0.17 | 0.39 |
| VA4 - 5 | 810.00 | 0.00 0.32 | -912.51 -3961.74 | 0.00 | 132.95 -4.02 | 132.95 | -5.24 5.69 | 0.25 -0.25 | -13.35 |
| VA4 - 6 | 810.00 | 0.00 0.11 | -2506.77 307.06 | 307.06 | -33.42 -2.00 | 0.00 | 3.21 -2.39 | -0.03 0.03 | -0.96 |
| VA4 - 7 | 810.00 | 0.00 0.11 | 307.11 1647.28 | 1647.28 | -2.00 0.31 | 0.00 | 1.68 -0.81 | 0.00 0.00 | 1.60 |
| VA4 - 8 | 810.00 | 0.00 0.11 | 1646.33 663.82 | 1649.48 | 0.31 88.94 | 0.00 | 0.10 1.27 | -0.05 0.05 | 1.60 |
| VA4 - 9 | 810.00 | 0.00 0.13 | 669.79 -2662.70 | 669.79 | 88.94 -103.17 | 88.94 | -5.43 5.90 | 0.33 -0.33 | 1.60 |
| VA4 - 10 | 810.00 | -0.02 0.00 | -1733.21 -72.69 | 0.00 | -37.25 9.89 | 9.89 | 2.10 -1.32 | -0.05 0.05 | 1.22 |
| VA4 - 11 | 810.00 | -0.02 0.00 | -65.79 314.14 | 314.14 | 9.89 19.94 | 19.94 | 0.91 -0.47 | -0.02 0.02 | 1.22 |
| VA4 - 12 | 810.00 | -0.03 0.00 | 314.85 -1387.48 | 314.85 | 19.94 -52.26 | 19.94 | -0.27 1.68 | 0.04 -0.04 | 1.22 |
| VA4 - 13 | 810.00 | 0.00 0.00 | 467.37 -1945.88 | 553.26 | -19.94 9.99 | 9.99 | 0.37 2.01 | -0.01 0.01 | -1.73 |
| VA5 - 1 | 772.50 | 0.00 0.00 | 127.14 339.03 | 738.49 | -56.31 27.49 | 0.00 | 0.97 0.79 | -0.04 0.04 | -1.52 |
| VA5 - 2 | 772.50 | 0.00 0.00 | 339.20 -2244.36 | 339.20 | 27.49 5.36 | 27.49 | -1.50 2.50 | 0.02 -0.02 | -1.52 |
| VA5 - 3 | 772.50 | 0.00 0.01 | -1530.56 612.20 | 612.20 | -2.21 0.41 | 0.41 | 2.52 -1.74 | 0.00 0.00 | 1.15 |
| VA5 - 4 | 772.50 | 0.00 0.01 | 612.15 1276.43 | 1276.43 | 0.41 33.50 | 0.00 | 1.03 -0.20 | -0.03 0.03 | 1.15 |
| VA5 - 5 | 772.50 | 0.00 0.01 | 1277.37 -1877.10 | 1277.37 | 33.50 -11.17 | 33.50 | -0.51 2.27 | 0.02 -0.02 | 1.15 |
| VA5 - 6 | 772.50 | 0.00 0.02 | -1123.25 604.81 | 604.81 | 40.13 -33.73 | 40.13 | 1.72 -0.55 | 0.05 -0.05 | -0.37 |
| VA5 - 7 | 772.50 | 0.00 0.04 | 604.10 -679.08 | 604.10 | -11.47 6.19 | 6.19 | -0.20 1.42 | -0.01 0.01 | -8.92 |
| VA6 - 1 | 772.50 | 0.00 0.00 | 11.46 37.39 | 272.18 | -39.30 -18.19 | 0.00 | 0.63 0.60 | -0.01 0.01 | 1.29 |
| VA6 - 2 | 772.50 | 0.00 0.00 | 42.04 -3703.29 | 42.04 | -18.19 47.75 | 47.75 | -1.85 3.03 | -0.04 0.04 | 1.29 |
| VA7 - 1 | 772.50 | -0.15 0.00 | 6.81 1973.60 | 1973.60 | -50.27 -1.73 | 0.00 | 1.86 -0.64 | -0.03 0.03 | -2.72 |
| VA7 - 2 | 772.50 | -0.15 0.00 | 1968.95 0.00 | 1968.95 | -1.73 0.00 | 0.00 | -0.60 1.85 | 0.00 0.00 | -2.72 |
| VA8 - 1 | 866.25 | 0.00 0.51 | -2761.42 -7399.09 | 3106.90 | 23.47 -4.99 | 23.47 | 3.19 4.27 | 0.00 0.00 | -1.36 |
| VA8 - 2 | 866.25 | 0.00 0.68 | -8155.67 -6526.76 | 4753.02 | 18.08 -28.36 | 18.08 | 4.73 4.42 | 0.00 0.00 | 1.22 |
| VA9 - 1 | 810.00 | 0.00 0.13 | -1717.17 -2614.43 | 1263.41 | 6.08 0.92 | 6.08 | 2.20 2.51 | 0.00 0.00 | -0.96 |
| VA9 - 2 | 810.00 | 0.00 0.20 | -2741.53 -2620.58 | 1419.88 | 8.93 14.23 | 14.23 | 2.60 2.56 | 0.00 0.00 | -0.32 |
| VA10 - 1 | 810.00 | 0.00 0.12 | -2123.65 -1601.41 | 903.28 | 28.54 -29.62 | 28.54 | 2.22 2.02 | 0.01 -0.01 | 2.43 |
| VA10 - 2 | 810.00 | 0.00 0.06 | -1346.62 -685.86 | 613.51 | -29.91 2.43 | 2.43 | 1.78 1.45 | -0.01 0.01 | -0.85 |
| VA11 - 1 | 772.50 | -0.08 0.00 | -174.28 -168.91 | 184.57 | 50.13 -36.10 | 50.13 | 0.75 0.74 | 0.04 -0.04 | 2.70 |
| VA11 - 2 | 772.50 | -0.49 0.00 | -844.01 304.16 | 750.13 | 2.35 -3.79 | 2.35 | 1.57 0.83 | 0.00 0.00 | -2.03 |
| VA11 - 3 | 772.50 | -0.49 | 301.43 | 301.43 | -3.79 | 0.00 | -1.60 | 0.00 | -2.03 |

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|----------|--------|---------------|----------------------|---------|------------------|--------|---------------|---------------|-------|
| | | 0.00 | -1715.37 | | -6.24 | | 2.38 | 0.00 | |
| VA12 - 1 | 772.50 | -0.10 0.00 | 0.00 1751.87 | 2025.74 | 0.00 -0.33 | 0.00 | 1.77 0.65 | 0.00 0.00 | 0.17 |
| VA12 - 2 | 772.50 | -0.10 0.00 | 1754.60 0.00 | 1754.60 | -0.33 0.00 | 0.00 | -1.42 2.17 | 0.00 0.00 | 0.17 |
| VA13 | 735.00 | 0.00 0.05 | 0.00 0.00 | 338.60 | 0.00 0.00 | 0.00 | 0.71 0.71 | 0.00 0.00 | -0.18 |
| VA14 - 1 | 772.50 | 0.00 0.41 | 0.00 2243.36 | 2243.36 | 0.00 -7.39 | 0.00 | 2.54 -1.73 | 0.01 -0.01 | 1.29 |
| VA14 - 2 | 772.50 | 0.00 0.41 | 2243.93 0.00 | 2357.11 | -7.39 0.00 | 0.00 | 0.42 1.91 | 0.00 0.00 | 1.29 |
| VA15 | 735.00 | -0.03 0.00 | 0.00 0.00 | 338.60 | 0.00 0.00 | 0.00 | 0.71 0.71 | 0.00 0.00 | 0.05 |
| VA16 | 735.00 | 0.00 0.05 | 0.00 0.00 | 338.60 | 0.00 0.00 | 0.00 | 0.71 0.71 | 0.00 0.00 | -0.95 |
| VA17 - 1 | 772.50 | 0.00 0.38 | 0.00 3941.22 | 3941.22 | 0.00 15.74 | 15.74 | 4.16 -3.35 | -0.01 0.01 | -5.97 |
| VA17 - 2 | 772.50 | 0.00 0.41 | 3940.65 0.00 | 3940.65 | -15.64 0.00 | 0.00 | -0.29 2.48 | -0.01 0.01 | 1.50 |
| VA18 | 772.50 | 0.00 0.19 | -575.11 415.81 | 448.06 | -50.33 72.27 | 72.27 | 1.26 0.23 | -0.06 0.06 | 1.48 |
| VA19 | 772.50 | 0.00 0.03 | 0.00 0.00 | 102.16 | 0.00 0.00 | 0.00 | 0.41 0.41 | 0.00 0.00 | -6.89 |
| VA20 | 772.50 | -0.06 0.00 | -8.56 0.00 | 352.07 | -22.26 0.00 | 0.00 | 0.75 0.74 | -0.01 0.01 | 0.71 |
| VA21 - 1 | 772.50 | 0.00 0.11 | -1436.50 1985.04 | 2004.22 | 33.31 -33.40 | 33.31 | 2.31 0.17 | 0.02 -0.02 | 7.42 |
| VA21 - 2 | 772.50 | 0.00 0.10 | 1986.33 -1441.06 | 1986.33 | 5.90 -27.88 | 5.90 | -0.81 2.44 | 0.02 -0.02 | -4.04 |
| VA22 | 772.50 | 0.00 0.11 | -366.20 -831.84 | 696.03 | -40.17 58.41 | 58.41 | 1.28 1.54 | -0.03 0.03 | -0.48 |
| VA23 | 772.50 | 0.00 0.03 | 0.00 0.00 | 1006.68 | 0.00 0.00 | 0.00 | 1.25 1.25 | 0.00 0.00 | 4.65 |
| VA24 - 1 | 810.00 | 0.00 0.11 | -1675.87 -2641.73 | 1272.39 | -76.01 54.66 | 54.66 | 2.19 2.52 | -0.02 0.02 | -8.12 |
| VA24 - 2 | 810.00 | 0.00 0.13 | -2497.64 -2967.55 | 1373.97 | 16.33 60.60 | 60.60 | 2.50 2.65 | -0.01 0.01 | -0.27 |
| VA25 - 1 | 810.00 | 0.00 0.21 | -3124.99 1900.78 | 1900.78 | 137.29 -98.74 | 137.29 | 3.40 -1.85 | 0.12 -0.12 | 6.29 |
| VA25 - 2 | 810.00 | 0.00 0.21 | 1903.51 -2513.41 | 1903.51 | -98.74 5.36 | 5.36 | 0.01 2.67 | -0.03 0.03 | 6.29 |
| VA25 - 3 | 810.00 | 0.00 0.06 | -1546.52 -761.04 | 484.76 | 19.52 -31.04 | 19.52 | 1.81 1.42 | 0.01 -0.01 | 0.46 |

| CASO: G1+G2+0.98Q+0.84V2+1.4D2 | | | | | | | | | |
|--------------------------------|------------------|------------------|-----------------------|------------------|-----------------------|------------------|--------------------|--------------------|----------------|
| Elemento | Carga (kgf/m) | Rd Nd (tf) | Mxi Mxf (kgf.m) | MxMáx (kgf.m) | Myi Myf (kgf.m) | MyMáx (kgf.m) | Vxi Vxf (tf) | Vyi Vyf (tf) | Mtd (kgf/m) |
| VA1 - 1 | 772.50 | 0.00 0.24 | -2182.42 1895.66 | 1895.66 | -51.80 3.28 | 3.28 | 2.85 -1.34 | -0.03 0.03 | -1.46 |
| VA1 - 2 | 772.50 | 0.00 0.25 | 1895.45 597.66 | 1895.45 | 3.28 -72.94 | 0.00 | -0.83 1.64 | 0.07 -0.07 | -2.08 |
| VA1 - 3 | 772.50 | 0.00 0.23 | 598.23 -1595.61 | 598.23 | -72.94 127.52 | 127.52 | -3.55 4.00 | -0.34 0.34 | -1.52 |
| VA1 - 4 | 772.50 | -0.31 0.00 | -2536.87 617.09 | 853.65 | 108.08 -82.50 | 108.08 | 2.29 0.61 | 0.05 -0.05 | 0.93 |
| VA1 - 5 | 772.50 | -0.34 0.00 | 618.76 -1072.05 | 618.76 | -82.50 109.26 | 109.26 | -3.09 3.49 | -0.37 0.37 | -6.07 |
| VA1 - 6 | 772.50 | -0.28 0.00 | -1640.81 206.42 | 515.62 | 84.78 -44.81 | 84.78 | 1.83 0.69 | 0.04 -0.04 | 1.20 |
| VA2 | 772.50 | 0.00 0.00 | 0.00 0.00 | 376.65 | 0.00 0.00 | 0.00 | 0.77 0.77 | 0.00 0.00 | -3.32 |

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|----------|--------|---------------|----------------------|---------|------------------|--------|---------------|---------------|--------|
| VA3 - 1 | 772.50 | 0.00 0.01 | 0.00 -1558.64 | 1110.10 | 0.00 14.17 | 14.17 | 1.31 2.03 | 0.00 0.00 | 0.77 |
| VA3 - 2 | 772.50 | 0.00 0.00 | -1564.47 5.48 | 5.48 | 53.24 0.00 | 53.24 | 1.61 -0.41 | 0.03 -0.03 | 0.00 |
| VA4 - 1 | 810.00 | -0.06 0.00 | -2514.32 -1352.05 | 661.99 | 78.92 -46.38 | 78.92 | 2.27 1.81 | 0.02 -0.02 | 0.77 |
| VA4 - 2 | 810.00 | 0.00 0.07 | -2126.22 1989.14 | 1989.14 | -61.50 -28.86 | 0.00 | 2.89 -1.29 | -0.02 0.02 | -2.86 |
| VA4 - 3 | 810.00 | 0.00 0.07 | 1989.36 1800.49 | 1989.36 | -28.86 7.94 | 0.00 | -0.48 0.73 | -0.12 0.12 | -2.86 |
| VA4 - 4 | 810.00 | 0.00 0.07 | 1800.82 519.51 | 1800.82 | 7.94 134.40 | 0.00 | -1.44 2.04 | -0.17 0.17 | -2.86 |
| VA4 - 5 | 810.00 | 0.00 0.06 | 518.93 -2160.51 | 518.93 | 134.40 -5.41 | 134.40 | -4.58 5.03 | 0.25 -0.25 | 4.96 |
| VA4 - 6 | 810.00 | -0.16 0.00 | -4158.10 -781.94 | 0.00 | -33.56 -1.60 | 0.00 | 3.77 -2.95 | -0.03 0.03 | 5.99 |
| VA4 - 7 | 810.00 | -0.16 0.00 | -781.67 1160.13 | 1160.13 | -1.60 -1.80 | 0.00 | 2.24 -1.37 | 0.00 0.00 | -0.54 |
| VA4 - 8 | 810.00 | -0.16 0.00 | 1159.24 1119.85 | 1427.46 | -1.80 89.72 | 0.00 | 0.66 0.71 | -0.05 0.05 | -0.54 |
| VA4 - 9 | 810.00 | -0.14 0.00 | 1123.98 -1879.76 | 1123.98 | 89.72 -108.34 | 89.72 | -4.87 5.34 | 0.34 -0.34 | -0.54 |
| VA4 - 10 | 810.00 | -0.25 0.00 | -2192.71 -101.60 | 0.00 | -21.30 6.66 | 6.66 | 2.55 -1.76 | -0.03 0.03 | 1.18 |
| VA4 - 11 | 810.00 | -0.25 0.00 | -96.12 527.97 | 527.97 | 6.66 3.72 | 6.66 | 1.36 -0.91 | 0.01 -0.01 | 1.18 |
| VA4 - 12 | 810.00 | -0.27 0.00 | 528.88 -399.07 | 547.00 | 3.72 -39.50 | 3.72 | 0.17 1.24 | 0.02 -0.02 | 1.18 |
| VA4 - 13 | 810.00 | 0.00 0.06 | -1872.41 1208.47 | 1221.68 | 1.09 -41.94 | 1.09 | 2.24 0.15 | 0.01 -0.01 | -1.83 |
| VA5 - 1 | 772.50 | 0.00 0.01 | -946.69 769.36 | 778.61 | -43.10 26.93 | 26.93 | 1.63 0.12 | -0.03 0.03 | -1.40 |
| VA5 - 2 | 772.50 | 0.00 0.01 | 769.02 -958.71 | 769.02 | 26.93 -3.19 | 26.93 | -0.83 1.83 | 0.02 -0.02 | -1.40 |
| VA5 - 3 | 772.50 | 0.00 0.04 | -2450.08 41.22 | 41.22 | 2.76 0.77 | 2.76 | 2.87 -2.09 | 0.00 0.00 | 1.09 |
| VA5 - 4 | 772.50 | 0.00 0.04 | 40.93 1078.11 | 1078.11 | 0.77 34.48 | 0.00 | 1.38 -0.55 | -0.03 0.03 | 1.09 |
| VA5 - 5 | 772.50 | 0.00 0.04 | 1079.00 -1286.80 | 1079.00 | 34.48 -18.13 | 34.48 | -0.16 1.92 | 0.02 -0.02 | 1.09 |
| VA5 - 6 | 772.50 | 0.00 0.11 | -1795.47 753.28 | 753.28 | 59.83 -43.50 | 59.83 | 2.26 -1.09 | 0.07 -0.07 | -0.35 |
| VA5 - 7 | 772.50 | 0.00 0.13 | 752.36 321.50 | 826.44 | -2.50 -79.21 | 0.00 | 0.34 0.88 | 0.05 -0.05 | -11.10 |
| VA6 - 1 | 772.50 | 0.00 0.07 | 2.48 1195.31 | 1195.31 | 34.10 -3.27 | 34.10 | 1.36 -0.13 | 0.02 -0.02 | 1.77 |
| VA6 - 2 | 772.50 | 0.00 0.07 | 1200.14 -1427.91 | 1200.14 | -3.27 0.83 | 0.83 | -1.12 2.31 | 0.00 0.00 | 1.77 |
| VA7 - 1 | 772.50 | 0.00 0.04 | -1564.08 1179.06 | 1179.06 | -18.50 11.31 | 11.31 | 2.35 -1.14 | -0.02 0.02 | -3.49 |
| VA7 - 2 | 772.50 | 0.00 0.04 | 1174.22 0.00 | 1174.22 | 11.31 0.00 | 11.31 | -0.11 1.35 | 0.01 -0.01 | -3.49 |
| VA8 - 1 | 866.25 | 0.00 0.47 | -4605.59 -5869.50 | 2795.09 | -33.18 7.70 | 7.70 | 3.58 3.87 | 0.00 0.00 | -1.36 |
| VA8 - 2 | 866.25 | 0.00 0.78 | -9461.33 -4909.91 | 4998.73 | 4.29 22.36 | 22.36 | 5.01 4.14 | 0.00 0.00 | 1.06 |
| VA9 - 1 | 810.00 | 0.00 0.11 | -1761.66 -2566.72 | 1263.43 | 63.25 -57.49 | 63.25 | 2.21 2.49 | 0.02 -0.02 | 6.86 |
| VA9 - 2 | 810.00 | 0.00 0.16 | -2698.00 -2625.74 | 1438.28 | -37.37 3.91 | 3.91 | 2.59 2.57 | -0.01 0.01 | -0.21 |
| VA10 - 1 | 810.00 | 0.00 0.09 | -2092.09 -1619.77 | 907.97 | 15.31 -32.30 | 15.31 | 2.21 2.02 | 0.01 -0.01 | -1.60 |
| VA10 - 2 | 810.00 | 0.00 | -1306.62 | 603.57 | -50.13 | 50.70 | 1.76 | -0.03 | -5.87 |

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| | | 0.05 | -740.74 | | 50.70 | | 1.48 | 0.03 | |
| VA11 - 1 | 772.50 | -0.07 0.00 | -162.41 -202.33 | 175.72 | 49.14 -24.82 | 49.14 | 0.73 0.77 | 0.04 -0.04 | 0.42 |
| VA11 - 2 | 772.50 | -0.49 0.00 | -868.74 310.57 | 746.16 | -3.68 -1.89 | 0.00 | 1.58 0.82 | 0.00 0.00 | -0.21 |
| VA11 - 3 | 772.50 | -0.49 0.00 | 307.25 -1699.39 | 307.25 | -1.89 -2.52 | 0.00 | -1.59 2.37 | 0.00 0.00 | -0.21 |
| VA12 - 1 | 772.50 | -0.10 0.00 | 0.00 1751.42 | 2025.41 | 0.00 -0.90 | 0.00 | 1.77 0.65 | 0.00 0.00 | -0.21 |
| VA12 - 2 | 772.50 | -0.10 0.00 | 1754.74 0.00 | 1754.74 | -0.90 0.00 | 0.00 | -1.42 2.17 | 0.00 0.00 | -0.21 |
| VA13 | 735.00 | 0.00 0.05 | 0.00 0.00 | 338.60 | 0.00 0.00 | 0.00 | 0.71 0.71 | 0.00 0.00 | 0.33 |
| VA14 - 1 | 772.50 | 0.00 0.42 | 0.00 2242.76 | 2242.76 | 0.00 -8.28 | 0.00 | 2.54 -1.73 | 0.01 -0.01 | 0.57 |
| VA14 - 2 | 772.50 | 0.00 0.42 | 2243.54 0.00 | 2356.79 | -8.28 0.00 | 0.00 | 0.42 1.91 | 0.00 0.00 | 0.57 |
| VA15 | 735.00 | -0.03 0.00 | 0.00 0.00 | 338.60 | 0.00 0.00 | 0.00 | 0.71 0.71 | 0.00 0.00 | 0.29 |
| VA16 | 735.00 | 0.00 0.05 | 0.00 0.00 | 338.60 | 0.00 0.00 | 0.00 | 0.71 0.71 | 0.00 0.00 | -0.88 |
| VA17 - 1 | 772.50 | 0.00 0.39 | 0.00 3941.82 | 3941.82 | 0.00 18.69 | 18.69 | 4.16 -3.35 | -0.02 0.02 | -4.14 |
| VA17 - 2 | 772.50 | 0.00 0.43 | 3941.05 0.00 | 3941.05 | -20.37 0.00 | 0.00 | -0.29 2.48 | -0.01 0.01 | 1.70 |
| VA18 | 772.50 | 0.00 0.20 | -545.23 380.19 | 423.65 | -66.85 92.71 | 92.71 | 1.23 0.27 | -0.08 0.08 | 0.81 |
| VA19 | 772.50 | 0.00 0.03 | 0.00 0.00 | 102.16 | 0.00 0.00 | 0.00 | 0.41 0.41 | 0.00 0.00 | -5.48 |
| VA20 | 772.50 | -0.02 0.00 | -10.75 0.00 | 351.09 | -40.99 0.00 | 0.00 | 0.75 0.74 | -0.02 0.02 | 0.91 |
| VA21 - 1 | 772.50 | 0.00 0.20 | -1682.56 2633.14 | 2633.14 | 18.38 -32.90 | 18.38 | 2.58 -0.11 | 0.02 -0.02 | 2.54 |
| VA21 - 2 | 772.50 | 0.00 0.22 | 2634.91 -1742.16 | 2634.91 | -66.99 44.98 | 44.98 | -1.26 2.89 | -0.05 0.05 | 0.06 |
| VA22 | 772.50 | 0.00 0.14 | -335.61 -847.61 | 706.01 | -43.01 61.04 | 61.04 | 1.27 1.55 | -0.03 0.03 | 0.40 |
| VA23 | 772.50 | 0.00 0.03 | 0.00 0.00 | 1006.68 | 0.00 0.00 | 0.00 | 1.25 1.25 | 0.00 0.00 | 4.84 |
| VA24 - 1 | 810.00 | 0.00 0.13 | -1729.66 -2606.21 | 1260.92 | -29.45 11.28 | 11.28 | 2.20 2.50 | -0.01 0.01 | -0.45 |
| VA24 - 2 | 810.00 | 0.00 0.21 | -2633.53 -2838.09 | 1366.47 | -7.31 -16.53 | 0.00 | 2.55 2.61 | 0.00 0.00 | -0.29 |
| VA25 - 1 | 810.00 | 0.00 0.19 | -2935.26 1541.61 | 1541.61 | 0.91 36.06 | 36.06 | 3.11 -1.56 | -0.02 0.02 | 0.25 |
| VA25 - 2 | 810.00 | 0.00 0.18 | 1545.09 -2186.08 | 1571.73 | 36.06 -20.78 | 36.06 | 0.21 2.47 | 0.02 -0.02 | 0.25 |
| VA25 - 3 | 810.00 | 0.00 0.08 | -1575.14 -646.92 | 538.79 | -30.35 1.21 | 1.21 | 1.85 1.39 | -0.01 0.01 | -2.48 |

| CASO: G1+G2+0.98Q+0.84V3+1.4D3 | | | | | | | | | |
|--------------------------------|------------------|------------------|-----------------------|------------------|-----------------------|------------------|--------------------|--------------------|----------------|
| Elemento | Carga (kgf/m) | Rd Nd (tf) | Mxi Mxf (kgf.m) | MxMáx (kgf.m) | Myi Myf (kgf.m) | MyMáx (kgf.m) | Vxi Vxf (tf) | Vyi Vyf (tf) | Mtd (kgf/m) |
| VA1 - 1 | 772.50 | 0.00 0.28 | -1349.26 1904.20 | 1904.20 | -13.50 -0.96 | 0.00 | 2.42 -0.92 | -0.01 0.01 | 0.44 |
| VA1 - 2 | 772.50 | 0.00 0.29 | 1904.08 160.87 | 1904.08 | -0.96 -143.46 | 0.00 | -1.25 2.06 | 0.14 -0.14 | -0.19 |
| VA1 - 3 | 772.50 | 0.00 0.26 | 161.67 -2278.57 | 161.67 | -143.46 103.57 | 103.57 | -3.97 4.42 | -0.42 0.42 | -0.06 |
| VA1 - 4 | 772.50 | -0.31 0.00 | -2059.23 266.98 | 708.91 | 89.08 -59.02 | 89.08 | 2.07 0.83 | 0.04 -0.04 | -0.45 |

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| VA1 - 5 | 772.50 | -0.33 0.00 | 268.42 -1535.91 | 268.42 | -59.02 91.92 | 91.92 | -3.31 3.71 | -0.29 0.29 | -3.51 |
| VA1 - 6 | 772.50 | -0.32 0.00 | -905.29 -692.44 | 229.14 | 77.36 -38.33 | 77.36 | 1.33 1.20 | 0.04 -0.04 | -0.36 |
| VA2 | 772.50 | 0.00 0.00 | 0.00 0.00 | 376.65 | 0.00 0.00 | 0.00 | 0.77 0.77 | 0.00 0.00 | -3.55 |
| VA3 - 1 | 772.50 | 0.00 0.00 | 0.00 -1557.14 | 1110.67 | 0.00 23.00 | 23.00 | 1.31 2.03 | -0.01 0.01 | 0.65 |
| VA3 - 2 | 772.50 | 0.00 0.00 | -1563.65 6.31 | 6.31 | 35.05 0.00 | 35.05 | 1.61 -0.41 | 0.02 -0.02 | 0.00 |
| VA4 - 1 | 810.00 | 0.00 0.08 | -1511.86 -1729.50 | 941.91 | 41.22 -41.50 | 41.22 | 1.99 2.08 | 0.02 -0.02 | 0.31 |
| VA4 - 2 | 810.00 | 0.00 0.14 | -1830.21 1615.89 | 1615.89 | -2.07 -49.20 | 0.00 | 2.55 -0.95 | 0.02 -0.02 | 3.74 |
| VA4 - 3 | 810.00 | 0.00 0.14 | 1616.01 1320.78 | 1616.01 | -49.20 -12.13 | 0.00 | -0.82 1.07 | -0.12 0.12 | 3.74 |
| VA4 - 4 | 810.00 | 0.00 0.14 | 1320.90 -210.86 | 1320.90 | -12.13 127.81 | 127.81 | -1.78 2.38 | -0.19 0.19 | 3.74 |
| VA4 - 5 | 810.00 | 0.00 0.13 | -211.69 -3080.78 | 0.00 | 127.81 -83.44 | 127.81 | -4.92 5.37 | 0.38 -0.38 | 0.55 |
| VA4 - 6 | 810.00 | -0.09 0.00 | -3357.05 -251.62 | 0.00 | -78.14 -41.82 | 0.00 | 3.50 -2.68 | -0.04 0.04 | -1.07 |
| VA4 - 7 | 810.00 | -0.09 0.00 | -251.47 1400.68 | 1400.68 | -41.82 -5.78 | 0.00 | 1.97 -1.10 | -0.03 0.03 | -3.17 |
| VA4 - 8 | 810.00 | -0.09 0.00 | 1399.72 906.27 | 1492.29 | -5.78 102.47 | 0.00 | 0.39 0.98 | -0.06 0.06 | -3.17 |
| VA4 - 9 | 810.00 | -0.08 0.00 | 911.31 -2250.70 | 911.31 | 102.47 -41.77 | 102.47 | -5.14 5.61 | 0.25 -0.25 | -3.17 |
| VA4 - 10 | 810.00 | -0.16 0.00 | -1920.77 -69.03 | 0.00 | -13.04 14.29 | 14.29 | 2.30 -1.52 | -0.03 0.03 | 1.52 |
| VA4 - 11 | 810.00 | -0.16 0.00 | -62.72 425.64 | 425.64 | 14.29 17.42 | 17.42 | 1.11 -0.67 | -0.01 0.01 | 1.52 |
| VA4 - 12 | 810.00 | -0.16 0.00 | 426.59 -933.93 | 426.59 | 17.42 -50.66 | 17.42 | -0.08 1.49 | 0.04 -0.04 | 1.52 |
| VA4 - 13 | 810.00 | 0.00 0.01 | -722.14 -369.13 | 340.86 | -16.75 -37.40 | 0.00 | 1.31 1.07 | 0.01 -0.01 | -1.77 |
| VA5 - 1 | 772.50 | 0.00 0.04 | -421.47 567.00 | 694.04 | -8.85 20.36 | 20.36 | 1.31 0.44 | -0.01 0.01 | 2.02 |
| VA5 - 2 | 772.50 | 0.00 0.04 | 566.89 -1574.82 | 566.89 | 20.36 -55.46 | 20.36 | -1.15 2.15 | 0.06 -0.06 | 2.02 |
| VA5 - 3 | 772.50 | 0.00 0.07 | -1996.84 321.93 | 321.93 | -51.04 -18.92 | 0.00 | 2.69 -1.92 | -0.03 0.03 | -1.92 |
| VA5 - 4 | 772.50 | 0.00 0.07 | 321.80 1174.40 | 1174.40 | -18.92 19.03 | 0.00 | 1.21 -0.38 | -0.04 0.04 | -1.92 |
| VA5 - 5 | 772.50 | 0.00 0.07 | 1175.36 -1580.83 | 1175.36 | 19.03 29.48 | 29.48 | -0.33 2.09 | 0.00 0.00 | -1.92 |
| VA5 - 6 | 772.50 | 0.00 0.06 | -1496.99 675.05 | 675.05 | 47.52 -32.71 | 47.52 | 2.02 -0.84 | 0.05 -0.05 | -1.35 |
| VA5 - 7 | 772.50 | 0.00 0.07 | 674.09 -145.92 | 675.26 | -15.45 -28.08 | 0.00 | 0.09 1.13 | 0.01 -0.01 | -8.56 |
| VA6 - 1 | 772.50 | 0.00 0.04 | 6.64 664.30 | 690.49 | -21.47 -15.00 | 0.00 | 1.03 0.21 | 0.00 0.00 | 2.37 |
| VA6 - 2 | 772.50 | 0.00 0.04 | 669.09 -2471.36 | 669.09 | -15.00 34.27 | 34.27 | -1.46 2.64 | -0.03 0.03 | 2.37 |
| VA7 - 1 | 772.50 | -0.05 0.00 | -852.49 1538.99 | 1538.99 | -42.81 0.67 | 0.67 | 2.13 -0.91 | -0.03 0.03 | -4.12 |
| VA7 - 2 | 772.50 | -0.05 0.00 | 1534.20 0.00 | 1534.20 | 0.67 0.00 | 0.67 | -0.33 1.58 | 0.00 0.00 | -4.12 |
| VA8 - 1 | 866.25 | 0.00 0.51 | -3656.46 -6668.22 | 2926.56 | -1.91 -11.97 | 0.00 | 3.38 4.08 | 0.00 0.00 | 0.95 |
| VA8 - 2 | 866.25 | 0.00 0.75 | -8826.40 -5711.04 | 4860.39 | -6.63 2.55 | 2.55 | 4.87 4.28 | 0.00 0.00 | -0.68 |
| VA9 - 1 | 810.00 | 0.00 | -1104.80 | 1367.32 | -2.09 | 0.00 | 2.00 | 0.00 | 2.99 |


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| | | 0.18 | -3144.66 | | -2.98 | | 2.70 | 0.00 | |
| VA9 - 2 | 810.00 | 0.00 0.22 | -2280.18 -3069.45 | 1436.90 | -27.94 25.96 | 25.96 | 2.45 2.70 | -0.01 0.01 | -0.13 |
| VA10 - 1 | 810.00 | 0.00 0.13 | -1597.47 -2074.19 | 928.24 | 4.40 -26.83 | 4.40 | 2.02 2.21 | 0.01 -0.01 | 0.32 |
| VA10 - 2 | 810.00 | 0.00 0.04 | -662.99 -1502.84 | 559.92 | -68.51 93.79 | 93.79 | 1.41 1.83 | -0.04 0.04 | -3.52 |
| VA11 - 1 | 772.50 | -0.12 0.00 | 662.43 -643.83 | 662.43 | 14.99 5.25 | 14.99 | 0.07 1.42 | 0.01 -0.01 | 1.60 |
| VA11 - 2 | 772.50 | -0.58 0.00 | -268.65 -383.74 | 605.78 | -22.66 8.02 | 8.02 | 1.16 1.24 | -0.01 0.01 | -1.30 |
| VA11 - 3 | 772.50 | -0.58 0.00 | -387.30 -2816.18 | 0.00 | 8.02 22.47 | 22.47 | -2.00 2.79 | -0.01 0.01 | -1.30 |
| VA12 - 1 | 772.50 | -0.14 0.00 | 0.00 1751.25 | 2025.28 | 0.00 3.27 | 3.27 | 1.77 0.65 | 0.00 0.00 | -0.12 |
| VA12 - 2 | 772.50 | -0.14 0.00 | 1754.80 0.00 | 1754.80 | 3.27 0.00 | 3.27 | -1.42 2.17 | 0.00 0.00 | -0.12 |
| VA13 | 735.00 | 0.00 0.07 | 0.00 0.00 | 338.60 | 0.00 0.00 | 0.00 | 0.71 0.71 | 0.00 0.00 | 0.11 |
| VA14 - 1 | 772.50 | 0.00 0.57 | 0.00 2243.06 | 2243.06 | 0.00 -3.04 | 0.00 | 2.54 -1.73 | 0.00 0.00 | 0.80 |
| VA14 - 2 | 772.50 | 0.00 0.56 | 2243.72 0.00 | 2356.94 | -3.04 0.00 | 0.00 | 0.42 1.91 | 0.00 0.00 | 0.80 |
| VA15 | 735.00 | 0.00 0.00 | 0.00 0.00 | 338.60 | 0.00 0.00 | 0.00 | 0.71 0.71 | 0.00 0.00 | 0.13 |
| VA16 | 735.00 | 0.00 0.03 | 0.00 0.00 | 338.60 | 0.00 0.00 | 0.00 | 0.71 0.71 | 0.00 0.00 | -0.96 |
| VA17 - 1 | 772.50 | 0.00 0.31 | 0.00 3941.52 | 3941.52 | 0.00 6.25 | 6.25 | 4.16 -3.35 | -0.01 0.01 | -5.04 |
| VA17 - 2 | 772.50 | 0.00 0.34 | 3940.87 0.00 | 3940.87 | -5.81 0.00 | 0.00 | -0.29 2.48 | 0.00 0.00 | 1.47 |
| VA18 | 772.50 | 0.00 0.15 | 181.61 -346.30 | 325.92 | -14.71 31.35 | 31.35 | 0.47 1.02 | -0.02 0.02 | 1.13 |
| VA19 | 772.50 | 0.00 0.02 | 0.00 0.00 | 102.16 | 0.00 0.00 | 0.00 | 0.41 0.41 | 0.00 0.00 | -6.31 |
| VA20 | 772.50 | -0.04 0.00 | -7.21 0.00 | 352.67 | -17.27 0.00 | 0.00 | 0.75 0.74 | -0.01 0.01 | 0.95 |
| VA21 - 1 | 772.50 | 0.00 0.16 | -1091.54 2236.27 | 2261.31 | 41.77 -45.43 | 41.77 | 2.28 0.20 | 0.03 -0.03 | 4.80 |
| VA21 - 2 | 772.50 | 0.00 0.15 | 2238.64 -2083.06 | 2238.64 | -23.97 -3.45 | 0.00 | -1.23 2.86 | -0.01 0.01 | -1.84 |
| VA22 | 772.50 | 0.00 0.10 | 465.24 -1806.66 | 865.37 | -31.93 47.80 | 47.80 | 0.79 2.03 | -0.02 0.02 | -0.20 |
| VA23 | 772.50 | 0.00 0.03 | 0.00 0.00 | 1006.68 | 0.00 0.00 | 0.00 | 1.25 1.25 | 0.00 0.00 | 4.79 |
| VA24 - 1 | 810.00 | 0.00 0.18 | -952.85 -3279.60 | 1400.56 | -21.80 13.81 | 13.81 | 1.95 2.75 | -0.01 0.01 | -4.23 |
| VA24 - 2 | 810.00 | 0.00 0.21 | -2044.20 -3428.71 | 1395.36 | 14.00 11.92 | 14.00 | 2.36 2.80 | 0.00 0.00 | -0.12 |
| VA25 - 1 | 810.00 | 0.00 0.22 | -2411.72 1882.95 | 1882.95 | 78.51 -27.44 | 78.51 | 3.02 -1.47 | 0.06 -0.06 | 3.15 |
| VA25 - 2 | 810.00 | 0.00 0.22 | 1887.07 -2899.56 | 1887.07 | -27.44 -29.52 | 0.00 | -0.11 2.79 | 0.00 0.00 | 3.15 |
| VA25 - 3 | 810.00 | 0.00 0.06 | -760.97 -1637.82 | 446.36 | 38.44 -73.33 | 38.44 | 1.40 1.84 | 0.03 -0.03 | -1.20 |

| CASO: G1+G2+0.98Q+0.84V4+1.4D4 | | | | | | | | | |
|--------------------------------|------------------|------------------|-----------------------|------------------|-----------------------|------------------|--------------------|--------------------|----------------|
| Elemento | Carga (kgf/m) | Rd Nd (tf) | Mxi Mxf (kgf.m) | MxMáx (kgf.m) | Myi Myf (kgf.m) | MyMáx (kgf.m) | Vxi Vxf (tf) | Vyi Vyf (tf) | Mtd (kgf/m) |
| VA1 - 1 | 772.50 | 0.00 0.29 | -1508.33 1890.33 | 1890.33 | -95.27 7.84 | 7.84 | 2.50 -0.99 | -0.05 0.05 | -3.17 |

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|----------|--------|---------------|----------------------|---------|-------------------|--------|---------------|---------------|--------|
| VA1 - 2 | 772.50 | 0.00 0.29 | 1890.41 225.89 | 1890.41 | 7.84 -1.15 | 0.00 | -1.18 1.99 | 0.01 -0.01 | -3.80 |
| VA1 - 3 | 772.50 | 0.00 0.27 | 226.95 -2169.77 | 226.95 | -1.15 147.90 | 147.90 | -3.90 4.35 | -0.26 0.26 | -3.63 |
| VA1 - 4 | 772.50 | -0.29 0.00 | -2158.80 331.75 | 728.02 | 125.75 -103.43 | 125.75 | 2.11 0.78 | 0.06 -0.06 | 1.37 |
| VA1 - 5 | 772.50 | -0.32 0.00 | 333.47 -1448.31 | 333.47 | -103.43 122.06 | 122.06 | -3.27 3.66 | -0.44 0.44 | -2.44 |
| VA1 - 6 | 772.50 | -0.29 0.00 | -1067.24 -463.43 | 284.35 | 91.71 -49.25 | 91.71 | 1.45 1.08 | 0.04 -0.04 | 2.88 |
| VA2 | 772.50 | -0.01 0.00 | 0.00 0.00 | 376.65 | 0.00 0.00 | 0.00 | 0.77 0.77 | 0.00 0.00 | -2.50 |
| VA3 - 1 | 772.50 | 0.00 0.02 | 0.00 -1557.09 | 1110.69 | 0.00 7.06 | 7.06 | 1.31 2.03 | 0.00 0.00 | 0.69 |
| VA3 - 2 | 772.50 | 0.00 0.00 | -1563.89 6.07 | 6.07 | 65.45 0.00 | 65.45 | 1.61 -0.41 | 0.04 -0.04 | 0.00 |
| VA4 - 1 | 810.00 | 0.00 0.16 | -1470.40 -1758.43 | 949.58 | 73.36 -29.71 | 73.36 | 1.98 2.09 | 0.02 -0.02 | 1.21 |
| VA4 - 2 | 810.00 | 0.00 0.26 | -1852.07 1628.15 | 1628.15 | -119.46 -10.22 | 0.00 | 2.56 -0.97 | -0.06 0.06 | -6.21 |
| VA4 - 3 | 810.00 | 0.00 0.26 | 1628.07 1338.18 | 1628.07 | -10.22 26.39 | 0.00 | -0.80 1.05 | -0.12 0.12 | -6.21 |
| VA4 - 4 | 810.00 | 0.00 0.26 | 1338.23 -180.95 | 1338.23 | 26.39 139.54 | 139.54 | -1.76 2.36 | -0.15 0.15 | -6.21 |
| VA4 - 5 | 810.00 | 0.00 0.25 | -181.89 -3041.47 | 0.00 | 139.54 74.01 | 139.54 | -4.90 5.35 | 0.12 -0.12 | -8.95 |
| VA4 - 6 | 810.00 | 0.00 0.04 | -3307.82 -223.26 | 0.00 | 11.16 38.23 | 38.23 | 3.48 -2.66 | -0.03 0.03 | 6.10 |
| VA4 - 7 | 810.00 | 0.00 0.04 | -223.09 1406.73 | 1406.73 | 38.23 4.30 | 38.23 | 1.95 -1.08 | 0.03 -0.03 | 4.24 |
| VA4 - 8 | 810.00 | 0.00 0.04 | 1405.86 877.40 | 1489.68 | 4.30 76.19 | 0.00 | 0.37 1.00 | -0.04 0.04 | 4.24 |
| VA4 - 9 | 810.00 | 0.00 0.06 | 882.46 -2291.76 | 882.46 | 76.19 -169.74 | 76.19 | -5.16 5.63 | 0.42 -0.42 | 4.24 |
| VA4 - 10 | 810.00 | -0.11 0.00 | -2005.15 -105.26 | 0.00 | -45.51 2.26 | 2.26 | 2.35 -1.57 | -0.05 0.05 | 0.89 |
| VA4 - 11 | 810.00 | -0.11 0.00 | -99.19 416.47 | 416.47 | 2.26 6.25 | 6.25 | 1.16 -0.71 | -0.01 0.01 | 0.89 |
| VA4 - 12 | 810.00 | -0.13 0.00 | 417.14 -852.62 | 417.14 | 6.25 -41.09 | 6.25 | -0.03 1.43 | 0.03 -0.03 | 0.89 |
| VA4 - 13 | 810.00 | 0.00 0.06 | -682.90 -368.28 | 358.17 | -2.10 5.45 | 5.45 | 1.30 1.09 | 0.00 0.00 | -1.79 |
| VA5 - 1 | 772.50 | -0.04 0.00 | -398.08 541.38 | 681.78 | -90.56 34.05 | 34.05 | 1.29 0.47 | -0.05 0.05 | -4.94 |
| VA5 - 2 | 772.50 | -0.04 0.00 | 541.34 -1628.25 | 541.34 | 34.05 57.64 | 57.64 | -1.18 2.18 | -0.02 0.02 | -4.94 |
| VA5 - 3 | 772.50 | -0.01 0.00 | -1983.79 331.49 | 331.49 | 51.59 20.10 | 51.59 | 2.69 -1.91 | 0.03 -0.03 | 4.15 |
| VA5 - 4 | 772.50 | -0.01 0.00 | 331.28 1180.14 | 1180.14 | 20.10 48.95 | 0.00 | 1.20 -0.37 | -0.03 0.03 | 4.15 |
| VA5 - 5 | 772.50 | -0.01 0.00 | 1181.01 -1583.08 | 1181.01 | 48.95 -58.78 | 48.95 | -0.34 2.09 | 0.05 -0.05 | 4.15 |
| VA5 - 6 | 772.50 | 0.00 0.07 | -1421.73 683.04 | 683.04 | 52.44 -44.52 | 52.44 | 1.97 -0.80 | 0.06 -0.06 | 0.64 |
| VA5 - 7 | 772.50 | 0.00 0.09 | 682.37 -211.66 | 682.37 | 1.47 -44.95 | 1.47 | 0.05 1.18 | 0.03 -0.03 | -11.47 |
| VA6 - 1 | 772.50 | 0.00 0.04 | 7.31 568.40 | 613.94 | 16.26 -6.46 | 16.26 | 0.97 0.27 | 0.01 -0.01 | 0.69 |
| VA6 - 2 | 772.50 | 0.00 0.04 | 573.09 -2659.83 | 573.09 | -6.46 14.31 | 14.31 | -1.52 2.70 | -0.01 0.01 | 0.69 |
| VA7 - 1 | 772.50 | -0.06 0.00 | -704.78 1613.67 | 1613.67 | -25.96 8.91 | 8.91 | 2.08 -0.87 | -0.02 0.02 | -2.09 |
| VA7 - 2 | 772.50 | -0.06 | 1608.97 | 1608.97 | 8.91 | 8.91 | -0.38 | 0.01 | -2.09 |

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|----------|--------|---------------|----------------------|---------|-------------------|--------|---------------|---------------|-------|
| | | 0.00 | 0.00 | | 0.00 | | 1.62 | -0.01 | |
| VA8 - 1 | 866.25 | 0.00 0.47 | -3710.54 -6600.36 | 2928.57 | -7.80 14.68 | 14.68 | 3.39 4.06 | 0.00 0.00 | -3.67 |
| VA8 - 2 | 866.25 | 0.00 0.71 | -8790.59 -5725.62 | 4869.07 | 28.99 -8.55 | 28.99 | 4.87 4.28 | 0.00 0.00 | 2.96 |
| VA9 - 1 | 810.00 | 0.00 0.07 | -2374.03 -2036.49 | 1214.30 | 71.42 -53.58 | 71.42 | 2.41 2.29 | 0.02 -0.02 | 2.91 |
| VA9 - 2 | 810.00 | 0.00 0.14 | -3159.35 -2176.87 | 1446.72 | -0.49 -7.82 | 0.00 | 2.73 2.42 | 0.00 0.00 | -0.40 |
| VA10 - 1 | 810.00 | 0.00 0.07 | -2618.27 -1146.99 | 927.24 | 39.45 -35.09 | 39.45 | 2.40 1.83 | 0.01 -0.01 | 0.51 |
| VA10 - 2 | 810.00 | 0.00 0.07 | -1990.24 76.24 | 821.05 | -11.53 -40.66 | 0.00 | 2.14 1.10 | 0.01 -0.01 | -3.21 |
| VA11 - 1 | 772.50 | -0.03 0.00 | -999.12 272.59 | 273.64 | 84.29 -66.17 | 84.29 | 1.40 0.09 | 0.08 -0.08 | 1.51 |
| VA11 - 2 | 772.50 | -0.41 0.00 | -1444.10 998.48 | 1106.62 | 21.33 -13.70 | 21.33 | 1.99 0.41 | 0.01 -0.01 | -0.94 |
| VA11 - 3 | 772.50 | -0.41 0.00 | 995.97 -598.57 | 995.97 | -13.70 -31.24 | 0.00 | -1.18 1.96 | 0.02 -0.02 | -0.94 |
| VA12 - 1 | 772.50 | -0.06 0.00 | 0.00 1752.05 | 2025.87 | 0.00 -4.50 | 0.00 | 1.77 0.65 | 0.00 0.00 | 0.08 |
| VA12 - 2 | 772.50 | -0.06 0.00 | 1754.55 0.00 | 1754.55 | -4.50 0.00 | 0.00 | -1.42 2.17 | 0.00 0.00 | 0.08 |
| VA13 | 735.00 | 0.00 0.04 | 0.00 0.00 | 338.60 | 0.00 0.00 | 0.00 | 0.71 0.71 | 0.00 0.00 | 0.04 |
| VA14 - 1 | 772.50 | 0.00 0.27 | 0.00 2243.06 | 2243.06 | 0.00 -12.63 | 0.00 | 2.54 -1.73 | 0.01 -0.01 | 1.06 |
| VA14 - 2 | 772.50 | 0.00 0.27 | 2243.75 0.00 | 2356.96 | -12.63 0.00 | 0.00 | 0.42 1.91 | 0.00 0.00 | 1.06 |
| VA15 | 735.00 | -0.06 0.00 | 0.00 0.00 | 338.60 | 0.00 0.00 | 0.00 | 0.71 0.71 | 0.00 0.00 | 0.21 |
| VA16 | 735.00 | 0.00 0.07 | 0.00 0.00 | 338.60 | 0.00 0.00 | 0.00 | 0.71 0.71 | 0.00 0.00 | -0.87 |
| VA17 - 1 | 772.50 | 0.00 0.46 | 0.00 3941.52 | 3941.52 | 0.00 28.19 | 28.19 | 4.16 -3.35 | -0.03 0.03 | -5.06 |
| VA17 - 2 | 772.50 | 0.00 0.50 | 3940.83 0.00 | 3940.83 | -30.20 0.00 | 0.00 | -0.29 2.48 | -0.01 0.01 | 1.73 |
| VA18 | 772.50 | 0.00 0.24 | -1301.95 1142.29 | 1142.29 | -102.47 133.63 | 133.63 | 2.01 -0.52 | -0.12 0.12 | 1.16 |
| VA19 | 772.50 | 0.00 0.04 | 0.00 0.00 | 102.16 | 0.00 0.00 | 0.00 | 0.41 0.41 | 0.00 0.00 | -6.07 |
| VA20 | 772.50 | -0.03 0.00 | -12.10 0.00 | 350.49 | -45.99 0.00 | 0.00 | 0.75 0.74 | -0.02 0.02 | 0.67 |
| VA21 - 1 | 772.50 | 0.00 0.15 | -2027.52 2381.91 | 2381.91 | 9.93 -20.86 | 9.93 | 2.61 -0.13 | 0.01 -0.01 | 5.16 |
| VA21 - 2 | 772.50 | 0.00 0.17 | 2382.60 -1100.17 | 2382.60 | -37.13 20.55 | 20.55 | -0.83 2.47 | -0.03 0.03 | -2.15 |
| VA22 | 772.50 | 0.00 0.14 | -1167.05 127.20 | 845.47 | -51.24 71.64 | 71.64 | 1.76 1.05 | -0.03 0.03 | 0.13 |
| VA23 | 772.50 | 0.00 0.03 | 0.00 0.00 | 1006.68 | 0.00 0.00 | 0.00 | 1.25 1.25 | 0.00 0.00 | 4.70 |
| VA24 - 1 | 810.00 | 0.00 0.06 | -2452.67 -1968.34 | 1211.58 | -83.66 52.13 | 52.13 | 2.44 2.27 | -0.02 0.02 | -4.34 |
| VA24 - 2 | 810.00 | 0.00 0.13 | -3086.98 -2376.93 | 1378.48 | -4.99 32.14 | 32.14 | 2.69 2.47 | -0.01 0.01 | -0.44 |
| VA25 - 1 | 810.00 | 0.00 0.18 | -3648.53 1559.44 | 1559.44 | 59.68 -35.24 | 59.68 | 3.50 -1.95 | 0.05 -0.05 | 3.38 |
| VA25 - 2 | 810.00 | 0.00 0.17 | 1561.53 -1799.92 | 1626.38 | -35.24 14.10 | 14.10 | 0.32 2.36 | -0.01 0.01 | 3.38 |
| VA25 - 3 | 810.00 | 0.00 0.08 | -2360.69 229.86 | 809.18 | -49.26 43.50 | 43.50 | 2.27 0.97 | -0.02 0.02 | -0.83 |

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|  | AltoQi Eberick 2018 Plena | |
| | Leilson Campos Rezende Rezende Engenharia | 11/5/2021 12:14:59 |

| CASO: G1+G2+0.98Q+1.4V1+0.84D1 | | | | | | | | | |
|--------------------------------|------------------|------------------|-----------------------|------------------|-----------------------|------------------|--------------------|--------------------|----------------|
| Elemento | Carga (kgf/m) | Rd Nd (tf) | Mxi Mxf (kgf.m) | MxMáx (kgf.m) | Myi Myf (kgf.m) | MyMáx (kgf.m) | Vxi Vxf (tf) | Vyi Vyf (tf) | Mtd (kgf/m) |
| VA1 - 1 | 772.50 | 0.00 0.34 | -404.10 1899.32 | 1899.32 | -58.50 3.31 | 3.31 | 1.94 -0.43 | -0.03 0.03 | -1.24 |
| VA1 - 2 | 772.50 | 0.00 0.34 | 1899.56 -356.49 | 1899.56 | 3.31 -70.53 | 3.31 | -1.74 2.55 | 0.07 -0.07 | -1.88 |
| VA1 - 3 | 772.50 | 0.00 0.32 | -355.06 -3079.02 | 0.00 | -70.53 123.92 | 123.92 | -4.46 4.91 | -0.33 0.33 | -2.29 |
| VA1 - 4 | 772.50 | -0.29 0.00 | -1527.22 -132.72 | 613.95 | 106.25 -78.95 | 106.25 | 1.82 1.08 | 0.05 -0.05 | -0.14 |
| VA1 - 5 | 772.50 | -0.31 0.00 | -131.25 -2063.35 | 0.00 | -78.95 103.83 | 103.83 | -3.56 3.96 | -0.36 0.36 | 1.27 |
| VA1 - 6 | 772.50 | -0.34 0.00 | -95.79 -1645.22 | 303.46 | 83.34 -41.63 | 83.34 | 0.79 1.74 | 0.04 -0.04 | 1.37 |
| VA2 | 772.50 | 0.00 0.00 | 0.00 0.00 | 376.65 | 0.00 0.00 | 0.00 | 0.77 0.77 | 0.00 0.00 | -2.61 |
| VA3 - 1 | 772.50 | 0.00 0.01 | 0.00 -1555.01 | 1111.48 | 0.00 16.34 | 16.34 | 1.31 2.03 | 0.00 0.00 | 0.53 |
| VA3 - 2 | 772.50 | 0.00 0.00 | -1562.80 7.16 | 7.16 | 46.73 0.00 | 46.73 | 1.61 -0.41 | 0.03 -0.03 | 0.00 |
| VA4 - 1 | 810.00 | 0.00 0.38 | -79.36 -2284.82 | 1498.30 | 25.40 -18.51 | 25.40 | 1.60 2.48 | 0.01 -0.01 | 0.74 |
| VA4 - 2 | 810.00 | 0.00 0.38 | -1448.17 1115.75 | 1115.75 | -61.05 -30.92 | 0.00 | 2.10 -0.50 | -0.02 0.02 | 0.96 |
| VA4 - 3 | 810.00 | 0.00 0.38 | 1115.51 679.99 | 1115.51 | -30.92 5.86 | 0.00 | -1.26 1.52 | -0.12 0.12 | 0.96 |
| VA4 - 4 | 810.00 | 0.00 0.38 | 679.70 -1182.39 | 679.70 | 5.86 133.22 | 133.22 | -2.23 2.83 | -0.17 0.17 | 0.96 |
| VA4 - 5 | 810.00 | 0.00 0.37 | -1183.70 -4302.97 | 0.00 | 133.22 -1.81 | 133.22 | -5.37 5.82 | 0.24 -0.24 | -16.87 |
| VA4 - 6 | 810.00 | 0.00 0.16 | -2193.69 513.56 | 513.56 | -33.80 -2.09 | 0.00 | 3.10 -2.29 | -0.03 0.03 | -2.24 |
| VA4 - 7 | 810.00 | 0.00 0.16 | 513.57 1739.72 | 1739.72 | -2.09 1.16 | 0.00 | 1.58 -0.70 | 0.00 0.00 | 2.05 |
| VA4 - 8 | 810.00 | 0.00 0.16 | 1738.75 577.48 | 1738.75 | 1.16 89.14 | 0.00 | -0.01 1.37 | -0.05 0.05 | 2.05 |
| VA4 - 9 | 810.00 | 0.00 0.17 | 583.79 -2811.01 | 583.79 | 89.14 -100.95 | 89.14 | -5.53 6.01 | 0.32 -0.32 | 2.05 |
| VA4 - 10 | 810.00 | 0.00 0.01 | -1645.81 -67.15 | 0.00 | -42.34 10.12 | 10.12 | 2.02 -1.23 | -0.05 0.05 | 1.24 |
| VA4 - 11 | 810.00 | 0.00 0.01 | -59.98 273.54 | 273.54 | 10.12 23.37 | 23.37 | 0.83 -0.38 | -0.02 0.02 | 1.24 |
| VA4 - 12 | 810.00 | 0.00 0.00 | 274.19 -1575.38 | 274.19 | 23.37 -55.31 | 23.37 | -0.36 1.77 | 0.05 -0.05 | 1.24 |
| VA4 - 13 | 810.00 | -0.02 0.00 | 911.25 -2544.93 | 911.25 | -25.47 21.42 | 21.42 | 0.02 2.37 | -0.02 0.02 | -1.71 |
| VA5 - 1 | 772.50 | 0.00 0.00 | 353.54 248.18 | 801.42 | -62.40 28.28 | 0.00 | 0.83 0.93 | -0.04 0.04 | -1.58 |
| VA5 - 2 | 772.50 | 0.00 0.00 | 248.47 -2515.61 | 248.47 | 28.28 8.30 | 28.28 | -1.64 2.64 | 0.02 -0.02 | -1.58 |
| VA5 - 3 | 772.50 | 0.00 0.01 | -1336.55 732.67 | 732.67 | -3.37 0.22 | 0.22 | 2.45 -1.67 | 0.00 0.00 | 1.20 |
| VA5 - 4 | 772.50 | 0.00 0.01 | 732.66 1318.25 | 1318.25 | 0.22 33.34 | 0.00 | 0.96 -0.13 | -0.03 0.03 | 1.20 |
| VA5 - 5 | 772.50 | 0.00 0.01 | 1319.22 -2001.65 | 1319.22 | 33.34 -8.45 | 33.34 | -0.58 2.34 | 0.02 -0.02 | 1.20 |
| VA5 - 6 | 772.50 | 0.00 0.01 | -981.51 573.45 | 573.45 | 33.64 -31.38 | 33.64 | 1.61 -0.44 | 0.04 -0.04 | -0.36 |
| VA5 - 7 | 772.50 | 0.00 0.01 | 572.79 -890.18 | 572.79 | -16.15 25.81 | 25.81 | -0.31 1.54 | -0.03 0.03 | -8.46 |
| VA6 - 1 | 772.50 | -0.01 | 13.38 | 162.25 | -55.70 | 0.00 | 0.48 | -0.02 | 1.19 |

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|----------|--------|---------------|----------------------|---------|-------------------|--------|---------------|---------------|-------|
| | | 0.00 | -209.03 | | -21.43 | | 0.76 | 0.02 | |
| VA6 - 2 | 772.50 | -0.01 0.00 | -204.42 -4187.54 | 0.00 | -21.43 59.64 | 59.64 | -2.00 3.19 | -0.05 0.05 | 1.19 |
| VA7 - 1 | 772.50 | -0.20 0.00 | 347.57 2145.96 | 2145.96 | -57.63 -4.14 | 0.00 | 1.75 -0.54 | -0.03 0.03 | -2.57 |
| VA7 - 2 | 772.50 | -0.20 0.00 | 2141.34 0.00 | 2141.34 | -4.14 0.00 | 0.00 | -0.71 1.95 | 0.00 0.00 | -2.57 |
| VA8 - 1 | 866.25 | 0.00 0.53 | -2364.84 -7728.07 | 3199.76 | 35.30 -7.23 | 35.30 | 3.10 4.35 | 0.00 0.00 | -1.39 |
| VA8 - 2 | 866.25 | 0.00 0.66 | -7874.50 -6874.38 | 4707.70 | 20.95 -38.94 | 20.95 | 4.67 4.48 | 0.01 -0.01 | 1.28 |
| VA9 - 1 | 810.00 | 0.00 0.14 | -1713.80 -2619.13 | 1262.88 | -5.34 12.67 | 12.67 | 2.20 2.51 | 0.00 0.00 | -2.61 |
| VA9 - 2 | 810.00 | 0.00 0.20 | -2754.51 -2615.51 | 1416.22 | 18.51 16.36 | 18.51 | 2.60 2.56 | 0.00 0.00 | -0.37 |
| VA10 - 1 | 810.00 | 0.00 0.12 | -2135.27 -1593.81 | 902.01 | 31.55 -27.72 | 31.55 | 2.22 2.01 | 0.01 -0.01 | 3.30 |
| VA10 - 2 | 810.00 | 0.00 0.06 | -1362.00 -665.68 | 617.67 | -24.60 -10.45 | 0.00 | 1.79 1.44 | 0.00 0.00 | 0.30 |
| VA11 - 1 | 772.50 | -0.08 0.00 | -192.22 -153.55 | 185.13 | 52.00 -41.65 | 52.00 | 0.77 0.73 | 0.05 -0.05 | 3.16 |
| VA11 - 2 | 772.50 | -0.48 0.00 | -850.44 316.16 | 755.99 | 3.01 -4.01 | 3.01 | 1.58 0.82 | 0.00 0.00 | -2.36 |
| VA11 - 3 | 772.50 | -0.48 0.00 | 313.56 -1697.22 | 313.56 | -4.01 -6.56 | 0.00 | -1.59 2.38 | 0.00 0.00 | -2.36 |
| VA12 - 1 | 772.50 | -0.10 0.00 | 0.00 1751.96 | 2025.81 | 0.00 -0.19 | 0.00 | 1.77 0.65 | 0.00 0.00 | 0.24 |
| VA12 - 2 | 772.50 | -0.10 0.00 | 1754.57 0.00 | 1754.57 | -0.19 0.00 | 0.00 | -1.42 2.17 | 0.00 0.00 | 0.24 |
| VA13 | 735.00 | 0.00 0.06 | 0.00 0.00 | 338.60 | 0.00 0.00 | 0.00 | 0.71 0.71 | 0.00 0.00 | -0.28 |
| VA14 - 1 | 772.50 | 0.00 0.41 | 0.00 2243.48 | 2243.48 | 0.00 -7.30 | 0.00 | 2.54 -1.73 | 0.01 -0.01 | 1.43 |
| VA14 - 2 | 772.50 | 0.00 0.41 | 2244.01 0.00 | 2357.17 | -7.30 0.00 | 0.00 | 0.42 1.91 | 0.00 0.00 | 1.43 |
| VA15 | 735.00 | -0.03 0.00 | 0.00 0.00 | 338.60 | 0.00 0.00 | 0.00 | 0.71 0.71 | 0.00 0.00 | 0.01 |
| VA16 | 735.00 | 0.00 0.05 | 0.00 0.00 | 338.60 | 0.00 0.00 | 0.00 | 0.71 0.71 | 0.00 0.00 | -0.98 |
| VA17 - 1 | 772.50 | 0.00 0.38 | 0.00 3941.11 | 3941.11 | 0.00 15.39 | 15.39 | 4.16 -3.35 | -0.01 0.01 | -6.32 |
| VA17 - 2 | 772.50 | 0.00 0.41 | 3940.58 0.00 | 3940.58 | -15.00 0.00 | 0.00 | -0.29 2.48 | -0.01 0.01 | 1.47 |
| VA18 | 772.50 | 0.00 0.19 | -579.58 421.34 | 452.48 | -44.97 65.64 | 65.64 | 1.26 0.23 | -0.06 0.06 | 1.62 |
| VA19 | 772.50 | 0.00 0.03 | 0.00 0.00 | 102.16 | 0.00 0.00 | 0.00 | 0.41 0.41 | 0.00 0.00 | -7.16 |
| VA20 | 772.50 | -0.07 0.00 | -8.10 0.00 | 352.27 | -15.23 0.00 | 0.00 | 0.75 0.74 | -0.01 0.01 | 0.65 |
| VA21 - 1 | 772.50 | 0.00 0.09 | -1382.95 1847.05 | 1878.28 | 36.69 -33.57 | 36.69 | 2.25 0.23 | 0.02 -0.02 | 8.47 |
| VA21 - 2 | 772.50 | 0.00 0.07 | 1848.24 -1377.85 | 1848.24 | 22.13 -45.14 | 22.13 | -0.71 2.34 | 0.03 -0.03 | -4.91 |
| VA22 | 772.50 | 0.00 0.10 | -359.51 -843.06 | 694.76 | -39.64 58.32 | 58.32 | 1.28 1.54 | -0.03 0.03 | -0.63 |
| VA23 | 772.50 | 0.00 0.03 | 0.00 0.00 | 1006.68 | 0.00 0.00 | 0.00 | 1.25 1.25 | 0.00 0.00 | 4.62 |
| VA24 - 1 | 810.00 | 0.00 0.10 | -1653.84 -2658.78 | 1276.90 | -86.37 64.12 | 64.12 | 2.18 2.53 | -0.03 0.03 | -9.73 |
| VA24 - 2 | 810.00 | 0.00 0.12 | -2461.44 -3002.83 | 1375.58 | 20.69 77.37 | 77.37 | 2.49 2.66 | -0.01 0.01 | -0.29 |
| VA25 - 1 | 810.00 | 0.00 0.21 | -3157.51 1981.46 | 1981.46 | 168.00 -127.92 | 168.00 | 3.46 -1.91 | 0.15 -0.15 | 7.59 |


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|----------|--------|--------------|---------------------|---------|------------------|-------|---------------|---------------|------|
| VA25 - 2 | 810.00 | 0.00 0.21 | 1984.03 -2591.79 | 1984.03 | -127.92 11.97 | 11.97 | -0.04 2.72 | -0.04 0.04 | 7.59 |
| VA25 - 3 | 810.00 | 0.00 0.05 | -1528.42 -800.00 | 469.83 | 31.36 -40.17 | 31.36 | 1.80 1.44 | 0.02 -0.02 | 1.13 |

| CASO: G1+G2+0.98Q+1.4V2+0.84D2 | | | | | | | | | |
|--------------------------------|------------------|------------------|-----------------------|------------------|-----------------------|------------------|--------------------|--------------------|----------------|
| Elemento | Carga (kgf/m) | Rd Nd (tf) | Mxi Mxf (kgf.m) | MxMáx (kgf.m) | Myi Myf (kgf.m) | MyMáx (kgf.m) | Vxi Vxf (tf) | Vyi Vyf (tf) | Mtd (kgf/m) |
| VA1 - 1 | 772.50 | 0.00 0.23 | -2453.49 1895.21 | 1895.21 | -50.28 3.56 | 3.56 | 2.99 -1.48 | -0.03 0.03 | -1.49 |
| VA1 - 2 | 772.50 | 0.00 0.23 | 1894.93 743.26 | 1894.93 | 3.56 -74.08 | 0.00 | -0.69 1.50 | 0.07 -0.07 | -2.11 |
| VA1 - 3 | 772.50 | 0.00 0.21 | 743.68 -1369.31 | 743.68 | -74.08 127.56 | 127.56 | -3.41 3.86 | -0.35 0.35 | -1.40 |
| VA1 - 4 | 772.50 | -0.31 0.00 | -2690.81 731.44 | 914.37 | 108.58 -83.50 | 108.58 | 2.36 0.53 | 0.05 -0.05 | 1.06 |
| VA1 - 5 | 772.50 | -0.34 0.00 | 733.14 -920.88 | 733.14 | -83.50 110.15 | 110.15 | -3.02 3.42 | -0.38 0.38 | -7.22 |
| VA1 - 6 | 772.50 | -0.27 0.00 | -1876.74 489.35 | 672.15 | 85.73 -45.95 | 85.73 | 1.99 0.54 | 0.04 -0.04 | 1.15 |
| VA2 | 772.50 | 0.00 0.00 | 0.00 0.00 | 376.65 | 0.00 0.00 | 0.00 | 0.77 0.77 | 0.00 0.00 | -3.45 |
| VA3 - 1 | 772.50 | 0.00 0.01 | 0.00 -1559.22 | 1109.88 | 0.00 13.72 | 13.72 | 1.31 2.03 | 0.00 0.00 | 0.81 |
| VA3 - 2 | 772.50 | 0.00 0.00 | -1564.74 5.22 | 5.22 | 53.78 0.00 | 53.78 | 1.61 -0.41 | 0.03 -0.03 | 0.00 |
| VA4 - 1 | 810.00 | -0.14 0.00 | -2902.90 -1203.11 | 576.81 | 89.17 -52.70 | 89.17 | 2.38 1.70 | 0.03 -0.03 | 0.78 |
| VA4 - 2 | 810.00 | 0.00 0.02 | -2234.11 2128.29 | 2128.29 | -60.49 -28.50 | 0.00 | 3.01 -1.42 | -0.02 0.02 | -3.42 |
| VA4 - 3 | 810.00 | 0.00 0.02 | 2128.57 1978.98 | 2128.57 | -28.50 8.41 | 0.00 | -0.35 0.60 | -0.12 0.12 | -3.42 |
| VA4 - 4 | 810.00 | 0.00 0.02 | 1979.42 790.58 | 1979.42 | 8.41 134.12 | 0.00 | -1.31 1.91 | -0.17 0.17 | -3.42 |
| VA4 - 5 | 810.00 | 0.00 0.01 | 790.12 -1819.28 | 790.12 | 134.12 -7.62 | 134.12 | -4.45 4.91 | 0.25 -0.25 | 8.48 |
| VA4 - 6 | 810.00 | -0.20 0.00 | -4471.18 -988.44 | 0.00 | -33.18 -1.51 | 0.00 | 3.87 -3.06 | -0.03 0.03 | 7.27 |
| VA4 - 7 | 810.00 | -0.20 0.00 | -988.14 1067.69 | 1067.69 | -1.51 -2.65 | 0.00 | 2.35 -1.48 | 0.00 0.00 | -0.99 |
| VA4 - 8 | 810.00 | -0.20 0.00 | 1066.83 1206.19 | 1424.42 | -2.65 89.52 | 0.00 | 0.77 0.60 | -0.05 0.05 | -0.99 |
| VA4 - 9 | 810.00 | -0.19 0.00 | 1209.98 -1731.45 | 1209.98 | 89.52 -110.56 | 89.52 | -4.76 5.24 | 0.34 -0.34 | -0.99 |
| VA4 - 10 | 810.00 | -0.27 0.00 | -2280.11 -107.14 | 0.00 | -16.21 6.44 | 6.44 | 2.63 -1.85 | -0.02 0.02 | 1.16 |
| VA4 - 11 | 810.00 | -0.27 0.00 | -101.93 568.57 | 568.57 | 6.44 0.29 | 6.44 | 1.44 -1.00 | 0.01 -0.01 | 1.16 |
| VA4 - 12 | 810.00 | -0.30 0.00 | 569.54 -211.17 | 606.06 | 0.29 -36.45 | 0.29 | 0.26 1.15 | 0.02 -0.02 | 1.16 |
| VA4 - 13 | 810.00 | 0.00 0.09 | -2316.29 1807.52 | 1807.52 | 6.62 -53.37 | 6.62 | 2.59 -0.21 | 0.02 -0.02 | -1.85 |
| VA5 - 1 | 772.50 | 0.00 0.01 | -1173.09 860.20 | 860.20 | -37.01 26.13 | 26.13 | 1.77 -0.01 | -0.03 0.03 | -1.34 |
| VA5 - 2 | 772.50 | 0.00 0.01 | 859.76 -687.46 | 859.76 | 26.13 -6.13 | 26.13 | -0.70 1.70 | 0.02 -0.02 | -1.34 |
| VA5 - 3 | 772.50 | 0.00 0.04 | -2644.09 -79.25 | 0.00 | 3.91 0.95 | 3.91 | 2.94 -2.16 | 0.00 0.00 | 1.04 |
| VA5 - 4 | 772.50 | 0.00 0.04 | -79.58 1036.29 | 1036.29 | 0.95 34.64 | 34.64 | 1.45 -0.62 | -0.03 0.03 | 1.04 |
| VA5 - 5 | 772.50 | 0.00 | 1037.15 | 1037.15 | 34.64 | 34.64 | -0.09 | 0.02 | 1.04 |

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|----------|--------|---------------|----------------------|---------|-----------------|-------|---------------|---------------|--------|
| | | 0.04 | -1162.25 | | -20.85 | | 1.85 | -0.02 | |
| VA5 - 6 | 772.50 | 0.00 0.13 | -1937.22 784.64 | 784.64 | 66.32 -45.85 | 66.32 | 2.38 -1.20 | 0.07 -0.07 | -0.35 |
| VA5 - 7 | 772.50 | 0.00 0.15 | 783.67 532.59 | 912.68 | 2.17 -98.83 | 0.00 | 0.45 0.77 | 0.06 -0.06 | -11.56 |
| VA6 - 1 | 772.50 | 0.00 0.08 | 0.56 1441.73 | 1441.73 | 50.50 -0.02 | 50.50 | 1.52 -0.28 | 0.03 -0.03 | 1.87 |
| VA6 - 2 | 772.50 | 0.00 0.08 | 1446.60 -943.66 | 1446.60 | -0.02 -11.06 | 0.00 | -0.97 2.15 | 0.01 -0.01 | 1.87 |
| VA7 - 1 | 772.50 | 0.00 0.08 | -1904.84 1006.70 | 1006.70 | -11.14 13.72 | 13.72 | 2.46 -1.25 | -0.02 0.02 | -3.64 |
| VA7 - 2 | 772.50 | 0.00 0.08 | 1001.83 0.00 | 1001.83 | 13.72 0.00 | 13.72 | 0.00 1.24 | 0.01 -0.01 | -3.64 |
| VA8 - 1 | 866.25 | 0.00 0.46 | -5002.17 -5540.51 | 2752.85 | -45.01 9.94 | 9.94 | 3.67 3.79 | -0.01 0.01 | -1.33 |
| VA8 - 2 | 866.25 | 0.00 0.80 | -9742.50 -4562.29 | 5066.40 | 1.42 32.94 | 32.94 | 5.07 4.08 | 0.00 0.00 | 1.00 |
| VA9 - 1 | 810.00 | 0.00 0.11 | -1765.03 -2562.02 | 1263.95 | 74.66 -69.24 | 74.66 | 2.22 2.49 | 0.02 -0.02 | 8.51 |
| VA9 - 2 | 810.00 | 0.00 0.15 | -2685.02 -2630.80 | 1441.94 | -46.94 1.78 | 1.78 | 2.59 2.57 | -0.01 0.01 | -0.16 |
| VA10 - 1 | 810.00 | 0.00 0.08 | -2080.47 -1627.36 | 909.24 | 12.29 -34.20 | 12.29 | 2.20 2.03 | 0.01 -0.01 | -2.47 |
| VA10 - 2 | 810.00 | 0.00 0.04 | -1291.24 -760.92 | 600.24 | -55.44 63.58 | 63.58 | 1.75 1.49 | -0.03 0.03 | -7.02 |
| VA11 - 1 | 772.50 | -0.07 0.00 | -144.46 -217.68 | 178.87 | 47.28 -19.27 | 47.28 | 0.71 0.78 | 0.03 -0.03 | -0.05 |
| VA11 - 2 | 772.50 | -0.50 0.00 | -862.31 298.57 | 740.30 | -4.34 -1.67 | 0.00 | 1.57 0.83 | 0.00 0.00 | 0.12 |
| VA11 - 3 | 772.50 | -0.50 0.00 | 295.12 -1717.53 | 295.12 | -1.67 -2.21 | 0.00 | -1.59 2.38 | 0.00 0.00 | 0.12 |
| VA12 - 1 | 772.50 | -0.10 0.00 | 0.00 1751.33 | 2025.34 | 0.00 -1.04 | 0.00 | 1.77 0.65 | 0.00 0.00 | -0.28 |
| VA12 - 2 | 772.50 | -0.10 0.00 | 1754.77 0.00 | 1754.77 | -1.04 0.00 | 0.00 | -1.42 2.17 | 0.00 0.00 | -0.28 |
| VA13 | 735.00 | 0.00 0.05 | 0.00 0.00 | 338.60 | 0.00 0.00 | 0.00 | 0.71 0.71 | 0.00 0.00 | 0.44 |
| VA14 - 1 | 772.50 | 0.00 0.42 | 0.00 2242.65 | 2242.65 | 0.00 -8.36 | 0.00 | 2.54 -1.73 | 0.01 -0.01 | 0.43 |
| VA14 - 2 | 772.50 | 0.00 0.42 | 2243.46 0.00 | 2356.73 | -8.36 0.00 | 0.00 | 0.42 1.91 | 0.00 0.00 | 0.43 |
| VA15 | 735.00 | -0.03 0.00 | 0.00 0.00 | 338.60 | 0.00 0.00 | 0.00 | 0.71 0.71 | 0.00 0.00 | 0.33 |
| VA16 | 735.00 | 0.00 0.06 | 0.00 0.00 | 338.60 | 0.00 0.00 | 0.00 | 0.71 0.71 | 0.00 0.00 | -0.86 |
| VA17 - 1 | 772.50 | 0.00 0.39 | 0.00 3941.93 | 3941.93 | 0.00 19.05 | 19.05 | 4.16 -3.35 | -0.02 0.02 | -3.79 |
| VA17 - 2 | 772.50 | 0.00 0.43 | 3941.12 0.00 | 3941.12 | -21.01 0.00 | 0.00 | -0.29 2.48 | -0.01 0.01 | 1.73 |
| VA18 | 772.50 | 0.00 0.20 | -540.76 374.65 | 420.34 | -72.21 99.34 | 99.34 | 1.22 0.27 | -0.09 0.09 | 0.68 |
| VA19 | 772.50 | 0.00 0.03 | 0.00 0.00 | 102.16 | 0.00 0.00 | 0.00 | 0.41 0.41 | 0.00 0.00 | -5.22 |
| VA20 | 772.50 | -0.01 0.00 | -11.21 0.00 | 350.89 | -48.03 0.00 | 0.00 | 0.75 0.74 | -0.02 0.02 | 0.97 |
| VA21 - 1 | 772.50 | 0.00 0.22 | -1736.11 2771.13 | 2771.13 | 15.01 -32.73 | 15.01 | 2.64 -0.17 | 0.01 -0.01 | 1.49 |
| VA21 - 2 | 772.50 | 0.00 0.25 | 2773.00 -1805.38 | 2773.00 | -83.23 62.24 | 62.24 | -1.35 2.98 | -0.07 0.07 | 0.93 |
| VA22 | 772.50 | 0.00 0.14 | -342.30 -836.39 | 707.28 | -43.53 61.13 | 61.13 | 1.27 1.54 | -0.03 0.03 | 0.56 |
| VA23 | 772.50 | 0.00 0.02 | 0.00 0.00 | 1006.68 | 0.00 0.00 | 0.00 | 1.25 1.25 | 0.00 0.00 | 4.87 |

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|----------|--------|--------------|----------------------|---------|------------------|-------|---------------|---------------|-------|
| VA24 - 1 | 810.00 | 0.00 0.14 | -1751.68 -2589.16 | 1257.76 | -19.10 1.83 | 1.83 | 2.21 2.50 | 0.00 0.00 | 1.16 |
| VA24 - 2 | 810.00 | 0.00 0.22 | -2669.74 -2802.81 | 1364.86 | -11.67 -33.31 | 0.00 | 2.56 2.60 | 0.00 0.00 | -0.27 |
| VA25 - 1 | 810.00 | 0.00 0.19 | -2902.74 1460.93 | 1460.93 | -29.81 65.24 | 65.24 | 3.06 -1.50 | -0.05 0.05 | -1.06 |
| VA25 - 2 | 810.00 | 0.00 0.18 | 1464.58 -2107.69 | 1503.07 | 65.24 -27.39 | 65.24 | 0.26 2.42 | 0.03 -0.03 | -1.06 |
| VA25 - 3 | 810.00 | 0.00 0.09 | -1593.24 -607.95 | 553.72 | -42.18 10.34 | 10.34 | 1.86 1.37 | -0.01 0.01 | -3.15 |

| CASO: G1+G2+0.98Q+1.4V3+0.84D3 | | | | | | | | | |
|--------------------------------|------------------|------------------|-----------------------|------------------|-----------------------|------------------|--------------------|--------------------|----------------|
| Elemento | Carga (kgf/m) | Rd Nd (tf) | Mxi Mxf (kgf.m) | MxMáx (kgf.m) | Myi Myf (kgf.m) | MyMáx (kgf.m) | Vxi Vxf (tf) | Vyi Vyf (tf) | Mtd (kgf/m) |
| VA1 - 1 | 772.50 | 0.00 0.27 | -1326.13 1906.34 | 1906.34 | -1.44 -2.08 | 0.00 | 2.41 -0.91 | 0.00 0.00 | 0.98 |
| VA1 - 2 | 772.50 | 0.00 0.28 | 1906.19 151.60 | 1906.19 | -2.08 -166.23 | 0.00 | -1.26 2.08 | 0.16 -0.16 | 0.35 |
| VA1 - 3 | 772.50 | 0.00 0.26 | 152.36 -2294.17 | 152.36 | -166.23 97.40 | 97.40 | -3.98 4.43 | -0.45 0.45 | 0.47 |
| VA1 - 4 | 772.50 | -0.31 0.00 | -2044.78 257.52 | 706.09 | 83.60 -51.39 | 83.60 | 2.06 0.83 | 0.04 -0.04 | -0.72 |
| VA1 - 5 | 772.50 | -0.33 0.00 | 258.92 -1548.69 | 258.92 | -51.39 87.09 | 87.09 | -3.32 3.71 | -0.27 0.27 | -3.68 |
| VA1 - 6 | 772.50 | -0.32 0.00 | -881.55 -726.36 | 224.06 | 75.34 -37.35 | 75.34 | 1.31 1.21 | 0.03 -0.03 | -0.83 |
| VA2 | 772.50 | 0.00 0.01 | 0.00 0.00 | 376.65 | 0.00 0.00 | 0.00 | 0.77 0.77 | 0.00 0.00 | -3.71 |
| VA3 - 1 | 772.50 | 0.00 0.00 | 0.00 -1557.15 | 1110.67 | 0.00 25.76 | 25.76 | 1.31 2.03 | -0.01 0.01 | 0.65 |
| VA3 - 2 | 772.50 | 0.00 0.00 | -1563.62 6.34 | 6.34 | 31.18 0.00 | 31.18 | 1.61 -0.41 | 0.02 -0.02 | 0.00 |
| VA4 - 1 | 810.00 | 0.00 0.07 | -1518.59 -1725.05 | 940.54 | 35.96 -42.54 | 35.96 | 2.00 2.08 | 0.02 -0.02 | 0.14 |
| VA4 - 2 | 810.00 | 0.00 0.12 | -1826.90 1614.06 | 1614.06 | 15.98 -55.45 | 15.98 | 2.54 -0.95 | 0.04 -0.04 | 5.26 |
| VA4 - 3 | 810.00 | 0.00 0.12 | 1614.22 1318.19 | 1614.22 | -55.45 -17.89 | 0.00 | -0.82 1.07 | -0.12 0.12 | 5.26 |
| VA4 - 4 | 810.00 | 0.00 0.12 | 1318.31 -215.34 | 1318.31 | -17.89 126.99 | 126.99 | -1.78 2.38 | -0.20 0.20 | 5.26 |
| VA4 - 5 | 810.00 | 0.00 0.11 | -216.15 -3086.67 | 0.00 | 126.99 -108.17 | 126.99 | -4.92 5.37 | 0.42 -0.42 | 2.00 |
| VA4 - 6 | 810.00 | -0.10 0.00 | -3364.68 -256.00 | 0.00 | -92.70 -53.95 | 0.00 | 3.50 -2.68 | -0.04 0.04 | -2.17 |
| VA4 - 7 | 810.00 | -0.10 0.00 | -255.86 1399.77 | 1399.77 | -53.95 -7.30 | 0.00 | 1.97 -1.10 | -0.04 0.04 | -4.31 |
| VA4 - 8 | 810.00 | -0.10 0.00 | 1398.80 910.80 | 1492.74 | -7.30 106.58 | 0.00 | 0.39 0.97 | -0.07 0.07 | -4.31 |
| VA4 - 9 | 810.00 | -0.10 0.00 | 915.84 -2244.27 | 915.84 | 106.58 -20.42 | 106.58 | -5.13 5.61 | 0.22 -0.22 | -4.31 |
| VA4 - 10 | 810.00 | -0.16 0.00 | -1907.79 -63.48 | 0.00 | -5.43 16.83 | 16.83 | 2.29 -1.51 | -0.02 0.02 | 1.62 |
| VA4 - 11 | 810.00 | -0.16 0.00 | -57.14 427.01 | 427.01 | 16.83 18.45 | 18.45 | 1.10 -0.66 | 0.00 0.00 | 1.62 |
| VA4 - 12 | 810.00 | -0.17 0.00 | 428.01 -946.59 | 428.01 | 18.45 -53.13 | 18.45 | -0.09 1.49 | 0.04 -0.04 | 1.62 |
| VA4 - 13 | 810.00 | 0.00 0.00 | -728.61 -369.14 | 338.09 | -19.28 -41.95 | 0.00 | 1.32 1.07 | 0.01 -0.01 | -1.73 |
| VA5 - 1 | 772.50 | 0.00 0.06 | -425.89 571.27 | 695.93 | 3.33 18.29 | 18.29 | 1.32 0.44 | -0.01 0.01 | 3.09 |
| VA5 - 2 | 772.50 | 0.00 | 571.15 | 571.15 | 18.29 | 18.29 | -1.15 | 0.07 | 3.09 |

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|----------|--------|---------------|----------------------|---------|------------------|--------|---------------|---------------|-------|
| | | 0.06 | -1565.62 | | -72.31 | | 2.15 | -0.07 | |
| VA5 - 3 | 772.50 | 0.00 0.08 | -1999.62 319.97 | 319.97 | -66.42 -25.29 | 0.00 | 2.70 -1.92 | -0.04 0.04 | -2.84 |
| VA5 - 4 | 772.50 | 0.00 0.08 | 319.85 1173.32 | 1173.32 | -25.29 14.45 | 0.00 | 1.21 -0.38 | -0.04 0.04 | -2.84 |
| VA5 - 5 | 772.50 | 0.00 0.08 | 1174.29 -1580.06 | 1174.29 | 14.45 43.49 | 43.49 | -0.33 2.09 | -0.01 0.01 | -2.84 |
| VA5 - 6 | 772.50 | 0.00 0.06 | -1509.25 673.88 | 673.88 | 48.72 -30.52 | 48.72 | 2.02 -0.85 | 0.05 -0.05 | -1.65 |
| VA5 - 7 | 772.50 | 0.00 0.07 | 672.88 -134.92 | 675.79 | -14.47 -27.22 | 0.00 | 0.10 1.12 | 0.01 -0.01 | -8.04 |
| VA6 - 1 | 772.50 | 0.00 0.04 | 6.54 675.57 | 700.33 | -26.72 -16.19 | 0.00 | 1.04 0.20 | -0.01 0.01 | 2.67 |
| VA6 - 2 | 772.50 | 0.00 0.04 | 680.38 -2449.20 | 680.38 | -16.19 35.79 | 35.79 | -1.45 2.63 | -0.03 0.03 | 2.67 |
| VA7 - 1 | 772.50 | -0.05 0.00 | -876.16 1527.03 | 1527.03 | -44.72 -0.91 | 0.00 | 2.14 -0.92 | -0.03 0.03 | -4.47 |
| VA7 - 2 | 772.50 | -0.05 0.00 | 1522.22 0.00 | 1522.22 | -0.91 0.00 | 0.00 | -0.32 1.57 | 0.00 0.00 | -4.47 |
| VA8 - 1 | 866.25 | 0.00 0.52 | -3648.24 -6678.20 | 2926.74 | -0.96 -15.87 | 0.00 | 3.38 4.08 | 0.00 0.00 | 1.62 |
| VA8 - 2 | 866.25 | 0.00 0.76 | -8832.02 -5708.23 | 4859.32 | -11.72 4.21 | 4.21 | 4.87 4.28 | 0.00 0.00 | -1.21 |
| VA9 - 1 | 810.00 | 0.00 0.19 | -864.21 -3355.24 | 1421.23 | -12.33 3.92 | 3.92 | 1.92 2.78 | 0.00 0.00 | 3.01 |
| VA9 - 2 | 810.00 | 0.00 0.23 | -2112.65 -3239.32 | 1443.36 | -31.49 30.39 | 30.39 | 2.40 2.76 | -0.01 0.01 | -0.09 |
| VA10 - 1 | 810.00 | 0.00 0.14 | -1402.88 -2251.69 | 951.09 | -0.47 -25.78 | 0.00 | 1.95 2.28 | 0.00 0.00 | 0.28 |
| VA10 - 2 | 810.00 | 0.00 0.03 | -410.69 -1801.60 | 581.74 | -75.53 112.09 | 112.09 | 1.27 1.97 | -0.05 0.05 | -3.54 |
| VA11 - 1 | 772.50 | -0.12 0.00 | 917.73 -784.77 | 917.73 | 4.57 15.80 | 15.80 | -0.14 1.63 | -0.01 0.01 | 1.61 |
| VA11 - 2 | 772.50 | -0.60 0.00 | -88.16 -595.89 | 603.74 | -29.03 11.22 | 11.22 | 1.04 1.36 | -0.01 0.01 | -1.35 |
| VA11 - 3 | 772.50 | -0.60 0.00 | -599.61 -3156.57 | 0.00 | 11.22 30.43 | 30.43 | -2.13 2.91 | -0.02 0.02 | -1.35 |
| VA12 - 1 | 772.50 | -0.16 0.00 | 0.00 1751.12 | 2025.19 | 0.00 4.47 | 4.47 | 1.77 0.65 | 0.00 0.00 | -0.15 |
| VA12 - 2 | 772.50 | -0.16 0.00 | 1754.84 0.00 | 1754.84 | 4.47 0.00 | 4.47 | -1.42 2.17 | 0.00 0.00 | -0.15 |
| VA13 | 735.00 | 0.00 0.08 | 0.00 0.00 | 338.60 | 0.00 0.00 | 0.00 | 0.71 0.71 | 0.00 0.00 | 0.12 |
| VA14 - 1 | 772.50 | 0.00 0.62 | 0.00 2243.06 | 2243.06 | 0.00 -1.69 | 0.00 | 2.54 -1.73 | 0.00 0.00 | 0.76 |
| VA14 - 2 | 772.50 | 0.00 0.61 | 2243.71 0.00 | 2356.93 | -1.69 0.00 | 0.00 | 0.42 1.91 | 0.00 0.00 | 0.76 |
| VA15 | 735.00 | 0.00 0.00 | 0.00 0.00 | 338.60 | 0.00 0.00 | 0.00 | 0.71 0.71 | 0.00 0.00 | 0.12 |
| VA16 | 735.00 | 0.00 0.02 | 0.00 0.00 | 338.60 | 0.00 0.00 | 0.00 | 0.71 0.71 | 0.00 0.00 | -0.97 |
| VA17 - 1 | 772.50 | 0.00 0.28 | 0.00 3941.52 | 3941.52 | 0.00 3.12 | 3.12 | 4.16 -3.35 | 0.00 0.00 | -5.04 |
| VA17 - 2 | 772.50 | 0.00 0.31 | 3940.87 0.00 | 3940.87 | -2.30 0.00 | 0.00 | -0.29 2.48 | 0.00 0.00 | 1.43 |
| VA18 | 772.50 | 0.00 0.14 | 407.26 -572.69 | 440.73 | -2.15 16.64 | 16.64 | 0.24 1.25 | -0.01 0.01 | 1.13 |
| VA19 | 772.50 | 0.00 0.02 | 0.00 0.00 | 102.16 | 0.00 0.00 | 0.00 | 0.41 0.41 | 0.00 0.00 | -6.34 |
| VA20 | 772.50 | -0.04 0.00 | -6.38 0.00 | 353.03 | -16.05 0.00 | 0.00 | 0.75 0.74 | -0.01 0.01 | 1.00 |
| VA21 - 1 | 772.50 | 0.00 0.16 | -926.90 2207.65 | 2250.81 | 46.32 -48.91 | 46.32 | 2.22 0.26 | 0.03 -0.03 | 4.75 |


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|----------|--------|--------------|----------------------|---------|------------------|-------|---------------|---------------|-------|
| VA21 - 2 | 772.50 | 0.00 0.15 | 2210.32 -2253.51 | 2210.32 | -22.19 -3.29 | 0.00 | -1.30 2.93 | -0.01 0.01 | -1.79 |
| VA22 | 772.50 | 0.00 0.09 | 721.84 -2110.54 | 980.85 | -29.55 44.68 | 44.68 | 0.63 2.19 | -0.02 0.02 | -0.25 |
| VA23 | 772.50 | 0.00 0.03 | 0.00 0.00 | 1006.68 | 0.00 0.00 | 0.00 | 1.25 1.25 | 0.00 0.00 | 4.81 |
| VA24 - 1 | 810.00 | 0.00 0.20 | -682.20 -3516.72 | 1461.30 | -13.17 8.53 | 8.53 | 1.87 2.84 | 0.00 0.00 | -4.21 |
| VA24 - 2 | 810.00 | 0.00 0.22 | -1855.27 -3619.19 | 1412.94 | 16.43 9.46 | 16.43 | 2.30 2.86 | 0.00 0.00 | -0.07 |
| VA25 - 1 | 810.00 | 0.00 0.23 | -2188.29 1942.10 | 1942.10 | 80.72 -26.54 | 80.72 | 2.93 -1.38 | 0.06 -0.06 | 3.11 |
| VA25 - 2 | 810.00 | 0.00 0.23 | 1946.57 -3099.42 | 1946.57 | -26.54 -36.51 | 0.00 | -0.18 2.87 | 0.00 0.00 | 3.11 |
| VA25 - 3 | 810.00 | 0.00 0.04 | -471.34 -1974.56 | 479.71 | 52.27 -89.54 | 52.27 | 1.24 1.99 | 0.04 -0.04 | -1.24 |

| CASO: G1+G2+0.98Q+1.4V4+0.84D4 | | | | | | | | | |
|--------------------------------|------------------|------------------|-----------------------|------------------|-----------------------|------------------|--------------------|--------------------|----------------|
| Elemento | Carga (kgf/m) | Rd Nd (tf) | Mxi Mxf (kgf.m) | MxMáx (kgf.m) | Myi Myf (kgf.m) | MyMáx (kgf.m) | Vxi Vxf (tf) | Vyi Vyf (tf) | Mtd (kgf/m) |
| VA1 - 1 | 772.50 | 0.00 0.29 | -1531.46 1888.19 | 1888.19 | -107.34 8.96 | 8.96 | 2.51 -1.01 | -0.06 0.06 | -3.71 |
| VA1 - 2 | 772.50 | 0.00 0.29 | 1888.30 235.16 | 1888.30 | 8.96 21.62 | 0.00 | -1.17 1.98 | -0.01 0.01 | -4.34 |
| VA1 - 3 | 772.50 | 0.00 0.28 | 236.26 -2154.16 | 236.26 | 21.62 154.07 | 154.07 | -3.89 4.34 | -0.23 0.23 | -4.16 |
| VA1 - 4 | 772.50 | -0.28 0.00 | -2173.26 341.21 | 730.84 | 131.23 -111.06 | 131.23 | 2.12 0.78 | 0.06 -0.06 | 1.64 |
| VA1 - 5 | 772.50 | -0.32 0.00 | 342.97 -1435.53 | 342.97 | -111.06 126.89 | 126.89 | -3.26 3.66 | -0.46 0.46 | -2.27 |
| VA1 - 6 | 772.50 | -0.28 0.00 | -1090.98 -429.51 | 293.04 | 93.73 -50.22 | 93.73 | 1.46 1.06 | 0.04 -0.04 | 3.36 |
| VA2 | 772.50 | -0.01 0.00 | 0.00 0.00 | 376.65 | 0.00 0.00 | 0.00 | 0.77 0.77 | 0.00 0.00 | -2.34 |
| VA3 - 1 | 772.50 | 0.00 0.02 | 0.00 -1557.09 | 1110.69 | 0.00 4.30 | 4.30 | 1.31 2.03 | 0.00 0.00 | 0.69 |
| VA3 - 2 | 772.50 | 0.00 0.00 | -1563.92 6.04 | 6.04 | 69.32 0.00 | 69.32 | 1.61 -0.41 | 0.04 -0.04 | 0.00 |
| VA4 - 1 | 810.00 | 0.00 0.17 | -1463.67 -1762.89 | 950.94 | 78.62 -28.67 | 78.62 | 1.98 2.10 | 0.02 -0.02 | 1.38 |
| VA4 - 2 | 810.00 | 0.00 0.28 | -1855.38 1629.97 | 1629.97 | -137.52 -3.98 | 0.00 | 2.57 -0.97 | -0.07 0.07 | -7.73 |
| VA4 - 3 | 810.00 | 0.00 0.28 | 1629.86 1340.78 | 1629.86 | -3.98 32.15 | 0.00 | -0.80 1.05 | -0.12 0.12 | -7.73 |
| VA4 - 4 | 810.00 | 0.00 0.28 | 1340.81 -176.47 | 1340.81 | 32.15 140.36 | 140.36 | -1.76 2.36 | -0.15 0.15 | -7.73 |
| VA4 - 5 | 810.00 | 0.00 0.27 | -177.43 -3035.57 | 0.00 | 140.36 98.74 | 140.36 | -4.90 5.35 | 0.07 -0.07 | -10.40 |
| VA4 - 6 | 810.00 | 0.00 0.06 | -3300.19 -218.88 | 0.00 | 25.72 50.35 | 50.35 | 3.47 -2.66 | -0.02 0.02 | 7.20 |
| VA4 - 7 | 810.00 | 0.00 0.06 | -218.71 1407.64 | 1407.64 | 50.35 5.82 | 50.35 | 1.95 -1.08 | 0.04 -0.04 | 5.37 |
| VA4 - 8 | 810.00 | 0.00 0.06 | 1406.78 872.87 | 1489.24 | 5.82 72.08 | 0.00 | 0.37 1.00 | -0.04 0.04 | 5.37 |
| VA4 - 9 | 810.00 | 0.00 0.09 | 877.93 -2298.19 | 877.93 | 72.08 -191.09 | 72.08 | -5.16 5.64 | 0.45 -0.45 | 5.37 |
| VA4 - 10 | 810.00 | -0.10 0.00 | -2018.13 -110.82 | 0.00 | -53.11 -0.28 | 0.00 | 2.36 -1.57 | -0.05 0.05 | 0.78 |
| VA4 - 11 | 810.00 | -0.10 0.00 | -104.78 415.10 | 415.10 | -0.28 5.21 | 5.21 | 1.17 -0.72 | -0.01 0.01 | 0.78 |
| VA4 - 12 | 810.00 | -0.13 | 415.72 | 415.72 | 5.21 | 5.21 | -0.02 | 0.03 | 0.78 |

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|----------|--------|---------------|----------------------|---------|-------------------|--------|---------------|---------------|--------|
| | | 0.00 | -839.96 | | -38.63 | | 1.43 | -0.03 | |
| VA4 - 13 | 810.00 | 0.00 0.07 | -676.43 -368.27 | 360.94 | 0.43 9.99 | 9.99 | 1.30 1.09 | 0.00 0.00 | -1.84 |
| VA5 - 1 | 772.50 | -0.05 0.00 | -393.66 537.11 | 679.89 | -102.74 36.12 | 36.12 | 1.29 0.47 | -0.06 0.06 | -6.00 |
| VA5 - 2 | 772.50 | -0.05 0.00 | 537.08 -1637.45 | 537.08 | 36.12 74.48 | 74.48 | -1.18 2.18 | -0.03 0.03 | -6.00 |
| VA5 - 3 | 772.50 | -0.03 0.00 | -1981.02 333.45 | 333.45 | 66.96 26.47 | 66.96 | 2.69 -1.91 | 0.04 -0.04 | 5.08 |
| VA5 - 4 | 772.50 | -0.03 0.00 | 333.23 1181.22 | 1181.22 | 26.47 53.53 | 0.00 | 1.20 -0.37 | -0.03 0.03 | 5.08 |
| VA5 - 5 | 772.50 | -0.03 0.00 | 1182.08 -1583.84 | 1182.08 | 53.53 -72.79 | 53.53 | -0.34 2.09 | 0.06 -0.06 | 5.08 |
| VA5 - 6 | 772.50 | 0.00 0.07 | -1409.47 684.21 | 684.21 | 51.24 -46.71 | 51.24 | 1.96 -0.79 | 0.06 -0.06 | 0.94 |
| VA5 - 7 | 772.50 | 0.00 0.10 | 683.59 -222.66 | 683.59 | 0.49 -45.80 | 0.49 | 0.04 1.18 | 0.03 -0.03 | -11.99 |
| VA6 - 1 | 772.50 | 0.00 0.04 | 7.40 557.13 | 605.52 | 21.52 -5.27 | 21.52 | 0.96 0.28 | 0.02 -0.02 | 0.39 |
| VA6 - 2 | 772.50 | 0.00 0.04 | 561.81 -2681.99 | 561.81 | -5.27 12.79 | 12.79 | -1.52 2.71 | -0.01 0.01 | 0.39 |
| VA7 - 1 | 772.50 | -0.07 0.00 | -681.11 1625.63 | 1625.63 | -24.05 10.49 | 10.49 | 2.07 -0.86 | -0.02 0.02 | -1.74 |
| VA7 - 2 | 772.50 | -0.07 0.00 | 1620.95 0.00 | 1620.95 | 10.49 0.00 | 10.49 | -0.39 1.63 | 0.01 -0.01 | -1.74 |
| VA8 - 1 | 866.25 | 0.00 0.47 | -3718.77 -6590.38 | 2928.82 | -8.75 18.58 | 18.58 | 3.39 4.06 | 0.00 0.00 | -4.35 |
| VA8 - 2 | 866.25 | 0.00 0.71 | -8784.98 -5728.44 | 4870.14 | 34.08 -10.21 | 34.08 | 4.86 4.29 | 0.00 0.00 | 3.49 |
| VA9 - 1 | 810.00 | 0.00 0.05 | -2614.63 -1825.92 | 1207.07 | 81.66 -60.49 | 81.66 | 2.49 2.22 | 0.02 -0.02 | 2.89 |
| VA9 - 2 | 810.00 | 0.00 0.13 | -3326.88 -2007.00 | 1461.75 | 3.06 -12.25 | 3.06 | 2.79 2.37 | 0.00 0.00 | -0.44 |
| VA10 - 1 | 810.00 | 0.00 0.07 | -2812.86 -969.49 | 947.32 | 44.32 -36.14 | 44.32 | 2.47 1.76 | 0.02 -0.02 | 0.55 |
| VA10 - 2 | 810.00 | 0.00 0.08 | -2242.54 374.99 | 945.79 | -4.51 -58.97 | 0.00 | 2.27 0.96 | 0.01 -0.01 | -3.18 |
| VA11 - 1 | 772.50 | -0.02 0.00 | -1254.42 413.54 | 413.54 | 94.70 -76.73 | 94.70 | 1.61 -0.12 | 0.09 -0.09 | 1.50 |
| VA11 - 2 | 772.50 | -0.38 0.00 | -1624.60 1210.63 | 1263.52 | 27.70 -16.90 | 27.70 | 2.11 0.29 | 0.01 -0.01 | -0.88 |
| VA11 - 3 | 772.50 | -0.38 0.00 | 1208.28 -258.18 | 1208.28 | -16.90 -39.20 | 0.00 | -1.06 1.84 | 0.02 -0.02 | -0.88 |
| VA12 - 1 | 772.50 | -0.05 0.00 | 0.00 1752.17 | 2025.96 | 0.00 -5.69 | 0.00 | 1.77 0.65 | 0.00 0.00 | 0.11 |
| VA12 - 2 | 772.50 | -0.05 0.00 | 1754.51 0.00 | 1754.51 | -5.69 0.00 | 0.00 | -1.42 2.17 | -0.01 0.01 | 0.11 |
| VA13 | 735.00 | 0.00 0.03 | 0.00 0.00 | 338.60 | 0.00 0.00 | 0.00 | 0.71 0.71 | 0.00 0.00 | 0.03 |
| VA14 - 1 | 772.50 | 0.00 0.22 | 0.00 2243.06 | 2243.06 | 0.00 -13.98 | 0.00 | 2.54 -1.73 | 0.01 -0.01 | 1.10 |
| VA14 - 2 | 772.50 | 0.00 0.22 | 2243.76 0.00 | 2356.97 | -13.98 0.00 | 0.00 | 0.42 1.91 | 0.00 0.00 | 1.10 |
| VA15 | 735.00 | -0.07 0.00 | 0.00 0.00 | 338.60 | 0.00 0.00 | 0.00 | 0.71 0.71 | 0.00 0.00 | 0.22 |
| VA16 | 735.00 | 0.00 0.08 | 0.00 0.00 | 338.60 | 0.00 0.00 | 0.00 | 0.71 0.71 | 0.00 0.00 | -0.86 |
| VA17 - 1 | 772.50 | 0.00 0.49 | 0.00 3941.52 | 3941.52 | 0.00 31.31 | 31.31 | 4.16 -3.35 | -0.03 0.03 | -5.07 |
| VA17 - 2 | 772.50 | 0.00 0.53 | 3940.83 0.00 | 3940.83 | -33.71 0.00 | 0.00 | -0.29 2.48 | -0.01 0.01 | 1.77 |
| VA18 | 772.50 | 0.00 0.25 | -1527.61 1368.69 | 1368.69 | -115.03 148.34 | 148.34 | 2.25 -0.75 | -0.14 0.14 | 1.17 |

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|----------|--------|---------------|----------------------|---------|-----------------|-------|---------------|---------------|-------|
| VA19 | 772.50 | 0.00 0.04 | 0.00 0.00 | 102.16 | 0.00 0.00 | 0.00 | 0.41 0.41 | 0.00 0.00 | -6.04 |
| VA20 | 772.50 | -0.04 0.00 | -12.93 0.00 | 350.13 | -47.21 0.00 | 0.00 | 0.75 0.74 | -0.02 0.02 | 0.62 |
| VA21 - 1 | 772.50 | 0.00 0.15 | -2192.16 2410.53 | 2410.53 | 5.37 -17.39 | 5.37 | 2.67 -0.19 | 0.01 -0.01 | 5.21 |
| VA21 - 2 | 772.50 | 0.00 0.17 | 2410.92 -929.72 | 2410.92 | -38.90 20.39 | 20.39 | -0.77 2.40 | -0.03 0.03 | -2.19 |
| VA22 | 772.50 | 0.00 0.15 | -1423.65 431.08 | 955.10 | -53.63 74.77 | 74.77 | 1.92 0.90 | -0.04 0.04 | 0.18 |
| VA23 | 772.50 | 0.00 0.03 | 0.00 0.00 | 1006.68 | 0.00 0.00 | 0.00 | 1.25 1.25 | 0.00 0.00 | 4.68 |
| VA24 - 1 | 810.00 | 0.00 0.04 | -2723.32 -1731.22 | 1205.27 | -92.29 57.41 | 57.41 | 2.52 2.18 | -0.03 0.03 | -4.36 |
| VA24 - 2 | 810.00 | 0.00 0.12 | -3275.91 -2186.45 | 1386.36 | -7.42 34.60 | 34.60 | 2.75 2.41 | -0.01 0.01 | -0.49 |
| VA25 - 1 | 810.00 | 0.00 0.17 | -3871.96 1500.29 | 1500.29 | 57.48 -36.15 | 57.48 | 3.58 -2.03 | 0.05 -0.05 | 3.43 |
| VA25 - 2 | 810.00 | 0.00 0.16 | 1502.03 -1600.07 | 1599.30 | -36.15 21.09 | 21.09 | 0.40 2.28 | -0.02 0.02 | 3.43 |
| VA25 - 3 | 810.00 | 0.00 0.10 | -2650.32 566.61 | 974.11 | -63.09 59.71 | 59.71 | 2.42 0.81 | -0.03 0.03 | -0.78 |

| CASO: G1+G2+1.2D1 | | | | | | | | | |
|-------------------|------------------|------------------|-----------------------|------------------|-----------------------|------------------|--------------------|--------------------|----------------|
| Elemento | Carga (kgf/m) | Rd Nd (tf) | Mxi Mxf (kgf.m) | MxMáx (kgf.m) | Myi Myf (kgf.m) | MyMáx (kgf.m) | Vxi Vxf (tf) | Vyi Vyf (tf) | Mtd (kgf/m) |
| VA1 - 1 | 772.50 | 0.00 0.30 | -1121.13 1842.62 | 1842.62 | -8.30 1.25 | 1.25 | 2.27 -0.77 | 0.00 0.00 | 1.36 |
| VA1 - 2 | 772.50 | 0.00 0.31 | 1842.75 -56.68 | 1842.75 | 1.25 -11.29 | 1.25 | -1.40 2.21 | 0.01 -0.01 | 0.74 |
| VA1 - 3 | 772.50 | 0.00 0.30 | -55.71 -2582.35 | 0.00 | -11.29 9.64 | 9.64 | -4.12 4.57 | -0.04 0.04 | 0.65 |
| VA1 - 4 | 772.50 | 0.00 0.06 | -1882.77 178.52 | 696.70 | 14.75 -12.76 | 14.75 | 2.00 0.90 | 0.01 -0.01 | 0.25 |
| VA1 - 5 | 772.50 | 0.00 0.05 | 179.98 -1660.71 | 179.98 | -12.76 14.96 | 14.96 | -3.38 3.78 | -0.05 0.05 | -1.82 |
| VA1 - 6 | 772.50 | -0.02 0.00 | -1014.83 -497.96 | 287.86 | 13.16 -5.35 | 13.16 | 1.42 1.10 | 0.01 -0.01 | -0.63 |
| VA2 | 772.50 | 0.00 0.00 | 0.00 0.00 | 376.65 | 0.00 0.00 | 0.00 | 0.77 0.77 | 0.00 0.00 | -2.61 |
| VA3 - 1 | 772.50 | 0.00 0.00 | 0.00 -1557.77 | 1110.43 | 0.00 1.37 | 1.37 | 1.31 2.03 | 0.00 0.00 | 0.74 |
| VA3 - 2 | 772.50 | 0.00 0.00 | -1564.47 5.48 | 5.48 | 4.58 0.00 | 4.58 | 1.61 -0.41 | 0.00 0.00 | 0.00 |
| VA4 - 1 | 810.00 | 0.00 0.18 | -1142.92 -1901.51 | 1051.19 | 33.43 -12.15 | 33.43 | 1.89 2.19 | 0.01 -0.01 | 0.91 |
| VA4 - 2 | 810.00 | 0.00 0.20 | -1812.74 1501.65 | 1501.65 | -4.81 -4.27 | 0.00 | 2.48 -0.89 | 0.00 0.00 | -0.26 |
| VA4 - 3 | 810.00 | 0.00 0.20 | 1501.52 1185.28 | 1501.52 | -4.27 1.15 | 0.00 | -0.88 1.14 | -0.02 0.02 | -0.26 |
| VA4 - 4 | 810.00 | 0.00 0.20 | 1185.24 -395.98 | 1185.24 | 1.15 14.78 | 14.78 | -1.85 2.44 | -0.02 0.02 | -0.26 |
| VA4 - 5 | 810.00 | 0.00 0.19 | -396.89 -3303.34 | 0.00 | 14.78 -3.65 | 14.78 | -4.99 5.44 | 0.03 -0.03 | -6.24 |
| VA4 - 6 | 810.00 | 0.00 0.12 | -2941.39 -4.38 | 0.00 | -8.83 0.83 | 0.83 | 3.33 -2.51 | -0.01 0.01 | 0.08 |
| VA4 - 7 | 810.00 | 0.00 0.12 | -4.11 1467.86 | 1467.86 | 0.83 -1.29 | 0.83 | 1.80 -0.93 | 0.00 0.00 | 0.04 |
| VA4 - 8 | 810.00 | 0.00 0.12 | 1467.18 691.27 | 1496.15 | -1.29 11.93 | 0.00 | 0.22 1.14 | -0.01 0.01 | 0.04 |
| VA4 - 9 | 810.00 | 0.00 | 696.50 | 696.50 | 11.93 | 11.93 | -5.30 | 0.05 | 0.04 |

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|----------|--------|---------------|----------------------|---------|------------------|-------|---------------|---------------|-------|
| | | 0.12 | -2564.14 | | -17.27 | | 5.78 | -0.05 | |
| VA4 - 10 | 810.00 | 0.00 0.03 | -2139.41 -183.56 | 0.00 | -7.27 2.63 | 2.63 | 2.41 -1.62 | -0.01 0.01 | 1.42 |
| VA4 - 11 | 810.00 | 0.00 0.03 | -178.08 369.32 | 369.32 | 2.63 6.63 | 6.63 | 1.22 -0.77 | -0.01 0.01 | 1.42 |
| VA4 - 12 | 810.00 | 0.00 0.03 | 369.70 -802.68 | 369.70 | 6.63 -7.85 | 6.63 | 0.03 1.38 | 0.01 -0.01 | 1.42 |
| VA4 - 13 | 810.00 | 0.00 0.05 | -442.55 -700.69 | 308.10 | -2.93 -2.49 | 0.00 | 1.11 1.28 | 0.00 0.00 | -1.63 |
| VA5 - 1 | 772.50 | 0.00 0.05 | -298.80 510.94 | 686.72 | 2.50 0.47 | 2.50 | 1.23 0.52 | 0.00 0.00 | -0.46 |
| VA5 - 2 | 772.50 | 0.00 0.05 | 510.97 -1732.43 | 510.97 | 0.47 -2.19 | 0.47 | -1.23 2.23 | 0.00 0.00 | -0.46 |
| VA5 - 3 | 772.50 | 0.00 0.07 | -1920.61 369.72 | 369.72 | 2.64 -1.88 | 2.64 | 2.67 -1.89 | 0.00 0.00 | 0.50 |
| VA5 - 4 | 772.50 | 0.00 0.07 | 369.45 1191.61 | 1191.61 | -1.88 4.67 | 0.00 | 1.18 -0.35 | -0.01 0.01 | 0.50 |
| VA5 - 5 | 772.50 | 0.00 0.07 | 1192.29 -1628.27 | 1192.29 | 4.67 -3.77 | 4.67 | -0.36 2.12 | 0.00 0.00 | 0.50 |
| VA5 - 6 | 772.50 | 0.00 0.06 | -1407.08 665.23 | 665.23 | 9.01 -10.61 | 9.01 | 1.95 -0.78 | 0.01 -0.01 | -0.46 |
| VA5 - 7 | 772.50 | 0.00 0.06 | 664.84 -260.24 | 664.84 | -8.93 -4.69 | 0.00 | 0.03 1.20 | 0.00 0.00 | -9.22 |
| VA6 - 1 | 772.50 | 0.00 0.02 | 7.83 504.49 | 566.14 | -14.11 -12.50 | 0.00 | 0.93 0.31 | 0.00 0.00 | 1.43 |
| VA6 - 2 | 772.50 | 0.00 0.02 | 509.21 -2785.39 | 509.21 | -12.50 26.81 | 26.81 | -1.56 2.74 | -0.03 0.03 | 1.43 |
| VA7 - 1 | 772.50 | -0.08 0.00 | -628.61 1652.21 | 1652.21 | -36.23 1.25 | 1.25 | 2.06 -0.84 | -0.02 0.02 | -2.97 |
| VA7 - 2 | 772.50 | -0.08 0.00 | 1647.49 0.00 | 1647.49 | 1.25 0.00 | 1.25 | -0.40 1.65 | 0.00 0.00 | -2.97 |
| VA8 - 1 | 866.25 | 0.00 0.49 | -3509.49 -6778.90 | 2959.69 | 1.00 -0.95 | 1.00 | 3.35 4.11 | 0.00 0.00 | -1.31 |
| VA8 - 2 | 866.25 | 0.00 0.72 | -8686.10 -5870.98 | 4839.03 | 12.55 -8.32 | 12.55 | 4.84 4.31 | 0.00 0.00 | 1.07 |
| VA9 - 1 | 810.00 | 0.00 0.13 | -1715.79 -2612.18 | 1265.21 | 27.85 -21.68 | 27.85 | 2.20 2.51 | 0.01 -0.01 | 2.17 |
| VA9 - 2 | 810.00 | 0.00 0.18 | -2710.83 -2636.32 | 1426.61 | -9.78 10.62 | 10.62 | 2.59 2.57 | 0.00 0.00 | -0.25 |
| VA10 - 1 | 810.00 | 0.00 0.11 | -2095.63 -1621.41 | 905.45 | 23.00 -32.48 | 23.00 | 2.21 2.02 | 0.01 -0.01 | 0.80 |
| VA10 - 2 | 810.00 | 0.00 0.05 | -1308.38 -734.80 | 605.87 | -38.79 22.62 | 22.62 | 1.76 1.47 | -0.02 0.02 | -2.99 |
| VA11 - 1 | 772.50 | 0.00 0.02 | -193.65 -591.36 | 0.00 | 1.12 5.50 | 5.50 | 0.54 0.95 | 0.00 0.00 | 1.86 |
| VA11 - 2 | 772.50 | 0.00 0.04 | -1086.91 690.81 | 946.00 | -2.62 1.26 | 1.26 | 1.77 0.63 | 0.00 0.00 | -1.33 |
| VA11 - 3 | 772.50 | 0.00 0.04 | 688.20 -1123.23 | 688.20 | 1.26 5.44 | 5.44 | -1.40 2.18 | 0.00 0.00 | -1.33 |
| VA12 - 1 | 772.50 | -0.02 0.00 | 0.00 1751.96 | 2025.80 | 0.00 2.14 | 2.14 | 1.77 0.65 | 0.00 0.00 | 0.13 |
| VA12 - 2 | 772.50 | -0.02 0.00 | 1754.57 0.00 | 1754.57 | 2.14 0.00 | 2.14 | -1.42 2.17 | 0.00 0.00 | 0.13 |
| VA13 | 735.00 | 0.00 0.00 | 0.00 0.00 | 338.60 | 0.00 0.00 | 0.00 | 0.71 0.71 | 0.00 0.00 | -0.04 |
| VA14 - 1 | 772.50 | 0.00 0.05 | 0.00 2242.93 | 2242.93 | 0.00 -1.15 | 0.00 | 2.54 -1.73 | 0.00 0.00 | 0.97 |
| VA14 - 2 | 772.50 | 0.00 0.05 | 2243.67 0.00 | 2356.90 | -1.15 0.00 | 0.00 | 0.42 1.91 | 0.00 0.00 | 0.97 |
| VA15 | 735.00 | -0.01 0.00 | 0.00 0.00 | 338.60 | 0.00 0.00 | 0.00 | 0.71 0.71 | 0.00 0.00 | 0.27 |
| VA16 | 735.00 | 0.00 0.01 | 0.00 0.00 | 338.60 | 0.00 0.00 | 0.00 | 0.71 0.71 | 0.00 0.00 | -0.68 |

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|----------|--------|---------------|----------------------|---------|------------------|-------|---------------|---------------|-------|
| VA17 - 1 | 772.50 | 0.00 0.06 | 0.00 3941.65 | 3941.65 | 0.00 2.00 | 2.00 | 4.16 -3.35 | 0.00 0.00 | -5.24 |
| VA17 - 2 | 772.50 | 0.00 0.06 | 3940.92 0.00 | 3940.92 | -1.21 0.00 | 0.00 | -0.29 2.48 | 0.00 0.00 | 1.47 |
| VA18 | 772.50 | 0.00 0.05 | -289.64 170.96 | 337.71 | -10.41 14.00 | 14.00 | 0.98 0.51 | -0.01 0.01 | 1.12 |
| VA19 | 772.50 | 0.00 0.00 | 0.00 0.00 | 102.16 | 0.00 0.00 | 0.00 | 0.41 0.41 | 0.00 0.00 | -5.48 |
| VA20 | 772.50 | -0.02 0.00 | -8.76 0.00 | 351.98 | -1.67 0.00 | 0.00 | 0.75 0.74 | 0.00 0.00 | 0.39 |
| VA21 - 1 | 772.50 | 0.00 0.14 | -1560.34 2251.64 | 2251.64 | 26.10 -30.46 | 26.10 | 2.43 0.05 | 0.02 -0.02 | 5.44 |
| VA21 - 2 | 772.50 | 0.00 0.14 | 2253.07 -1537.88 | 2253.07 | -16.35 -15.01 | 0.00 | -0.98 2.61 | 0.00 0.00 | -2.39 |
| VA22 | 772.50 | 0.00 0.08 | -501.55 -714.97 | 676.79 | -7.83 10.08 | 10.08 | 1.35 1.47 | 0.00 0.00 | 0.15 |
| VA23 | 772.50 | 0.00 0.02 | 0.00 0.00 | 1006.68 | 0.00 0.00 | 0.00 | 1.25 1.25 | 0.00 0.00 | 4.72 |
| VA24 - 1 | 810.00 | 0.00 0.11 | -1765.72 -2567.00 | 1261.20 | -55.22 35.69 | 35.69 | 2.22 2.49 | -0.02 0.02 | -5.04 |
| VA24 - 2 | 810.00 | 0.00 0.16 | -2600.81 -2866.18 | 1369.77 | 8.35 28.06 | 28.06 | 2.54 2.62 | 0.00 0.00 | -0.26 |
| VA25 - 1 | 810.00 | 0.00 0.20 | -3104.04 1738.56 | 1738.56 | 82.22 -42.82 | 82.22 | 3.31 -1.75 | 0.07 -0.07 | 3.84 |
| VA25 - 2 | 810.00 | 0.00 0.20 | 1741.54 -2330.83 | 1746.85 | -42.82 -9.45 | 0.00 | 0.11 2.57 | -0.01 0.01 | 3.84 |
| VA25 - 3 | 810.00 | 0.00 0.07 | -1640.99 -615.90 | 529.01 | -9.03 0.27 | 0.27 | 1.87 1.36 | 0.00 0.00 | -0.84 |

| CASO: G1+G2+1.2D2 | | | | | | | | | |
|-------------------|------------------|------------------|-----------------------|------------------|-----------------------|------------------|--------------------|--------------------|----------------|
| Elemento | Carga (kgf/m) | Rd Nd (tf) | Mxi Mxf (kgf.m) | MxMáx (kgf.m) | Myi Myf (kgf.m) | MyMáx (kgf.m) | Vxi Vxf (tf) | Vyi Vyf (tf) | Mtd (kgf/m) |
| VA1 - 1 | 772.50 | 0.00 0.28 | -1492.95 1841.63 | 1841.63 | -7.98 0.64 | 0.64 | 2.47 -0.96 | 0.00 0.00 | 1.31 |
| VA1 - 2 | 772.50 | 0.00 0.29 | 1841.67 142.48 | 1841.67 | 0.64 -10.13 | 0.00 | -1.21 2.02 | 0.01 -0.01 | 0.70 |
| VA1 - 3 | 772.50 | 0.00 0.28 | 143.28 -2272.58 | 143.28 | -10.13 11.50 | 11.50 | -3.93 4.38 | -0.04 0.04 | 0.80 |
| VA1 - 4 | 772.50 | 0.00 0.04 | -2093.78 335.17 | 748.56 | 14.65 -12.53 | 14.65 | 2.10 0.80 | 0.01 -0.01 | 0.53 |
| VA1 - 5 | 772.50 | 0.00 0.04 | 336.67 -1453.59 | 336.67 | -12.53 15.97 | 15.97 | -3.28 3.68 | -0.06 0.06 | -3.30 |
| VA1 - 6 | 772.50 | -0.02 0.00 | -1336.94 -112.30 | 392.22 | 11.89 -4.60 | 11.89 | 1.64 0.88 | 0.01 -0.01 | -0.63 |
| VA2 | 772.50 | 0.00 0.00 | 0.00 0.00 | 376.65 | 0.00 0.00 | 0.00 | 0.77 0.77 | 0.00 0.00 | -2.73 |
| VA3 - 1 | 772.50 | 0.00 0.00 | 0.00 -1558.46 | 1110.17 | 0.00 1.18 | 1.18 | 1.31 2.03 | 0.00 0.00 | 0.78 |
| VA3 - 2 | 772.50 | 0.00 0.00 | -1564.80 5.16 | 5.16 | 6.90 0.00 | 6.90 | 1.61 -0.41 | 0.00 0.00 | 0.00 |
| VA4 - 1 | 810.00 | 0.00 0.11 | -1614.70 -1720.95 | 892.54 | 40.13 -13.54 | 40.13 | 2.02 2.06 | 0.01 -0.01 | 0.92 |
| VA4 - 2 | 810.00 | 0.00 0.14 | -1944.78 1671.37 | 1671.37 | -7.24 -3.92 | 0.00 | 2.63 -1.04 | 0.00 0.00 | -1.09 |
| VA4 - 3 | 810.00 | 0.00 0.14 | 1671.34 1403.08 | 1671.34 | -3.92 1.26 | 0.00 | -0.73 0.98 | -0.02 0.02 | -1.09 |
| VA4 - 4 | 810.00 | 0.00 0.14 | 1403.14 -65.12 | 1403.14 | 1.26 15.99 | 15.99 | -1.69 2.29 | -0.02 0.02 | -1.09 |
| VA4 - 5 | 810.00 | 0.00 0.14 | -65.89 -2886.79 | 0.00 | 15.99 -0.84 | 15.99 | -4.83 5.28 | 0.03 -0.03 | -2.08 |
| VA4 - 6 | 810.00 | 0.00 | -3322.87 | 0.00 | -9.51 | 0.91 | 3.46 | -0.01 | 1.75 |

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|----------|--------|---------------|----------------------|---------|------------------|-------|---------------|---------------|-------|
| | | 0.05 | -255.89 | | 0.91 | | -2.64 | 0.01 | |
| VA4 - 7 | 810.00 | 0.00 0.05 | -255.57 1355.44 | 1355.44 | 0.91 -1.05 | 0.91 | 1.93 -1.06 | 0.00 0.00 | -0.38 |
| VA4 - 8 | 810.00 | 0.00 0.05 | 1354.76 796.80 | 1431.20 | -1.05 12.68 | 0.00 | 0.35 1.01 | -0.01 0.01 | -0.38 |
| VA4 - 9 | 810.00 | 0.00 0.05 | 801.62 -2383.05 | 801.62 | 12.68 -16.46 | 12.68 | -5.17 5.65 | 0.05 -0.05 | -0.38 |
| VA4 - 10 | 810.00 | -0.05 0.00 | -2245.11 -190.15 | 0.00 | -6.89 1.26 | 1.26 | 2.51 -1.73 | -0.01 0.01 | 1.44 |
| VA4 - 11 | 810.00 | -0.05 0.00 | -184.98 418.61 | 418.61 | 1.26 3.46 | 3.46 | 1.32 -0.87 | 0.00 0.00 | 1.44 |
| VA4 - 12 | 810.00 | -0.05 0.00 | 419.02 -575.16 | 428.86 | 3.46 -5.92 | 3.46 | 0.13 1.28 | 0.01 -0.01 | 1.44 |
| VA4 - 13 | 810.00 | 0.00 0.04 | -982.64 26.39 | 473.48 | -0.55 -11.94 | 0.00 | 1.54 0.85 | 0.00 0.00 | -1.65 |
| VA5 - 1 | 772.50 | 0.00 0.06 | -510.20 595.47 | 691.90 | -0.22 1.45 | 1.45 | 1.36 0.39 | 0.00 0.00 | -0.48 |
| VA5 - 2 | 772.50 | 0.00 0.06 | 595.41 -1479.61 | 595.41 | 1.45 -2.05 | 1.45 | -1.10 2.10 | 0.00 0.00 | -0.48 |
| VA5 - 3 | 772.50 | 0.00 0.09 | -2101.42 257.44 | 257.44 | 3.44 -1.98 | 3.44 | 2.73 -1.96 | 0.01 -0.01 | 0.54 |
| VA5 - 4 | 772.50 | 0.00 0.09 | 257.10 1152.59 | 1152.59 | -1.98 4.93 | 0.00 | 1.25 -0.42 | -0.01 0.01 | 0.54 |
| VA5 - 5 | 772.50 | 0.00 0.09 | 1153.27 -1512.22 | 1153.27 | 4.93 -3.14 | 4.93 | -0.29 2.05 | 0.00 0.00 | 0.54 |
| VA5 - 6 | 772.50 | 0.00 0.07 | -1539.40 694.36 | 694.36 | 9.15 -12.05 | 9.15 | 2.06 -0.88 | 0.01 -0.01 | -0.45 |
| VA5 - 7 | 772.50 | 0.00 0.07 | 693.94 -63.47 | 704.05 | -11.64 -18.89 | 0.00 | 0.13 1.09 | 0.00 0.00 | -9.65 |
| VA6 - 1 | 772.50 | 0.00 0.03 | 6.11 728.77 | 746.83 | -1.16 -9.73 | 0.00 | 1.07 0.17 | 0.01 -0.01 | 1.53 |
| VA6 - 2 | 772.50 | 0.00 0.03 | 733.53 -2344.69 | 733.53 | -9.73 20.78 | 20.78 | -1.41 2.60 | -0.02 0.02 | 1.53 |
| VA7 - 1 | 772.50 | -0.04 0.00 | -922.51 1503.56 | 1503.56 | -31.03 4.38 | 4.38 | 2.15 -0.94 | -0.02 0.02 | -3.13 |
| VA7 - 2 | 772.50 | -0.04 0.00 | 1498.80 0.00 | 1498.80 | 4.38 0.00 | 4.38 | -0.31 1.55 | 0.00 0.00 | -3.13 |
| VA8 - 1 | 866.25 | 0.00 0.49 | -3860.07 -6488.20 | 2900.76 | -10.33 2.24 | 2.24 | 3.42 4.03 | 0.00 0.00 | -1.35 |
| VA8 - 2 | 866.25 | 0.00 0.74 | -8933.68 -5563.48 | 4890.34 | 9.77 1.86 | 9.77 | 4.89 4.26 | 0.00 0.00 | 1.08 |
| VA9 - 1 | 810.00 | 0.00 0.12 | -1734.21 -2594.16 | 1264.38 | 40.13 -34.08 | 40.13 | 2.21 2.50 | 0.01 -0.01 | 3.72 |
| VA9 - 2 | 810.00 | 0.00 0.17 | -2708.38 -2630.94 | 1430.57 | -19.20 8.51 | 8.51 | 2.59 2.57 | 0.00 0.00 | -0.28 |
| VA10 - 1 | 810.00 | 0.00 0.10 | -2097.39 -1619.04 | 905.91 | 20.76 -30.86 | 20.76 | 2.21 2.02 | 0.01 -0.01 | 0.04 |
| VA10 - 2 | 810.00 | 0.00 0.05 | -1311.67 -731.78 | 605.90 | -41.10 27.79 | 27.79 | 1.76 1.47 | -0.02 0.02 | -3.83 |
| VA11 - 1 | 772.50 | 0.00 0.02 | -216.13 -584.58 | 0.00 | 3.59 2.62 | 3.59 | 0.56 0.94 | 0.00 0.00 | 1.39 |
| VA11 - 2 | 772.50 | 0.00 0.04 | -1110.50 713.54 | 956.38 | -4.79 1.93 | 1.93 | 1.79 0.61 | 0.00 0.00 | -0.89 |
| VA11 - 3 | 772.50 | 0.00 0.04 | 710.81 -1085.51 | 710.81 | 1.93 6.92 | 6.92 | -1.38 2.16 | 0.00 0.00 | -0.89 |
| VA12 - 1 | 772.50 | -0.01 0.00 | 0.00 1751.87 | 2025.74 | 0.00 2.05 | 2.05 | 1.77 0.65 | 0.00 0.00 | 0.04 |
| VA12 - 2 | 772.50 | -0.01 0.00 | 1754.60 0.00 | 1754.60 | 2.05 0.00 | 2.05 | -1.42 2.17 | 0.00 0.00 | 0.04 |
| VA13 | 735.00 | 0.00 0.00 | 0.00 0.00 | 338.60 | 0.00 0.00 | 0.00 | 0.71 0.71 | 0.00 0.00 | 0.06 |
| VA14 - 1 | 772.50 | 0.00 0.05 | 0.00 2242.79 | 2242.79 | 0.00 -1.49 | 0.00 | 2.54 -1.73 | 0.00 0.00 | 0.80 |

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|----------|--------|---------------|----------------------|---------|------------------|-------|---------------|---------------|-------|
| VA14 - 2 | 772.50 | 0.00 0.05 | 2243.58 0.00 | 2356.82 | -1.49 0.00 | 0.00 | 0.42 1.91 | 0.00 0.00 | 0.80 |
| VA15 | 735.00 | -0.01 0.00 | 0.00 0.00 | 338.60 | 0.00 0.00 | 0.00 | 0.71 0.71 | 0.00 0.00 | 0.33 |
| VA16 | 735.00 | 0.00 0.01 | 0.00 0.00 | 338.60 | 0.00 0.00 | 0.00 | 0.71 0.71 | 0.00 0.00 | -0.69 |
| VA17 - 1 | 772.50 | 0.00 0.06 | 0.00 3941.79 | 3941.79 | 0.00 3.01 | 3.01 | 4.16 -3.35 | 0.00 0.00 | -4.81 |
| VA17 - 2 | 772.50 | 0.00 0.06 | 3941.01 0.00 | 3941.01 | -2.71 0.00 | 0.00 | -0.29 2.48 | 0.00 0.00 | 1.52 |
| VA18 | 772.50 | 0.00 0.05 | -280.82 160.77 | 333.86 | -10.64 14.28 | 14.28 | 0.97 0.52 | -0.01 0.01 | 0.98 |
| VA19 | 772.50 | 0.00 0.00 | 0.00 0.00 | 102.16 | 0.00 0.00 | 0.00 | 0.41 0.41 | 0.00 0.00 | -5.16 |
| VA20 | 772.50 | -0.01 0.00 | -9.20 0.00 | 351.78 | -0.41 0.00 | 0.00 | 0.75 0.74 | 0.00 0.00 | 0.42 |
| VA21 - 1 | 772.50 | 0.00 0.15 | -1606.10 2377.07 | 2377.07 | 23.54 -30.47 | 23.54 | 2.48 0.00 | 0.02 -0.02 | 4.52 |
| VA21 - 2 | 772.50 | 0.00 0.16 | 2378.60 -1597.58 | 2378.60 | -29.31 -3.72 | 0.00 | -1.07 2.70 | -0.01 0.01 | -1.59 |
| VA22 | 772.50 | 0.00 0.08 | -474.41 -741.44 | 677.12 | -8.51 11.34 | 11.34 | 1.34 1.48 | -0.01 0.01 | 0.38 |
| VA23 | 772.50 | 0.00 0.03 | 0.00 0.00 | 1006.68 | 0.00 0.00 | 0.00 | 1.25 1.25 | 0.00 0.00 | 4.76 |
| VA24 - 1 | 810.00 | 0.00 0.12 | -1759.14 -2575.37 | 1260.56 | -46.91 27.64 | 27.64 | 2.21 2.49 | -0.01 0.01 | -3.53 |
| VA24 - 2 | 810.00 | 0.00 0.17 | -2615.43 -2853.54 | 1368.34 | 2.70 13.71 | 13.71 | 2.54 2.62 | 0.00 0.00 | -0.31 |
| VA25 - 1 | 810.00 | 0.00 0.20 | -3054.66 1675.80 | 1675.80 | 58.52 -17.50 | 58.52 | 3.25 -1.70 | 0.04 -0.04 | 2.70 |
| VA25 - 2 | 810.00 | 0.00 0.19 | 1678.93 -2281.45 | 1691.25 | -17.50 -12.82 | 0.00 | 0.14 2.54 | 0.00 0.00 | 2.70 |
| VA25 - 3 | 810.00 | 0.00 0.07 | -1627.23 -617.39 | 533.95 | -16.73 2.88 | 2.88 | 1.87 1.37 | 0.00 0.00 | -1.33 |

| CASO: G1+G2+1.2D3 | | | | | | | | | |
|-------------------|------------------|------------------|-----------------------|------------------|-----------------------|------------------|--------------------|--------------------|----------------|
| Elemento | Carga (kgf/m) | Rd Nd (tf) | Mxi Mxf (kgf.m) | MxMáx (kgf.m) | Myi Myf (kgf.m) | MyMáx (kgf.m) | Vxi Vxf (tf) | Vyi Vyf (tf) | Mtd (kgf/m) |
| VA1 - 1 | 772.50 | 0.00 0.29 | -1283.02 1844.12 | 1844.12 | 4.07 -0.51 | 4.07 | 2.36 -0.86 | 0.00 0.00 | 1.87 |
| VA1 - 2 | 772.50 | 0.00 0.30 | 1844.18 32.94 | 1844.18 | -0.51 -30.53 | 0.00 | -1.32 2.13 | 0.03 -0.03 | 1.26 |
| VA1 - 3 | 772.50 | 0.00 0.29 | 33.78 -2444.07 | 33.78 | -30.53 3.65 | 3.65 | -4.04 4.49 | -0.06 0.06 | 1.25 |
| VA1 - 4 | 772.50 | 0.00 0.05 | -1973.22 247.10 | 718.44 | 9.28 -6.88 | 9.28 | 2.04 0.85 | 0.00 0.00 | 0.13 |
| VA1 - 5 | 772.50 | 0.00 0.04 | 248.54 -1570.34 | 248.54 | -6.88 11.28 | 11.28 | -3.34 3.74 | -0.04 0.04 | -2.71 |
| VA1 - 6 | 772.50 | -0.02 0.00 | -1151.58 -339.22 | 319.91 | 10.31 -2.83 | 10.31 | 1.51 1.01 | 0.00 0.00 | -1.11 |
| VA2 | 772.50 | 0.00 0.00 | 0.00 0.00 | 376.65 | 0.00 0.00 | 0.00 | 0.77 0.77 | 0.00 0.00 | -2.82 |
| VA3 - 1 | 772.50 | 0.00 0.00 | 0.00 -1558.12 | 1110.29 | 0.00 3.33 | 3.33 | 1.31 2.03 | 0.00 0.00 | 0.76 |
| VA3 - 2 | 772.50 | 0.00 0.00 | -1564.60 5.36 | 5.36 | 0.71 0.00 | 0.71 | 1.61 -0.41 | 0.00 0.00 | 0.00 |
| VA4 - 1 | 810.00 | 0.00 0.13 | -1384.50 -1807.06 | 970.91 | 32.40 -15.18 | 32.40 | 1.95 2.12 | 0.01 -0.01 | 0.81 |
| VA4 - 2 | 810.00 | 0.00 0.15 | -1875.56 1584.69 | 1584.69 | 10.91 -9.52 | 10.91 | 2.55 -0.96 | 0.01 -0.01 | 0.77 |
| VA4 - 3 | 810.00 | 0.00 | 1584.64 | 1584.64 | -9.52 | 0.00 | -0.81 | -0.02 | 0.77 |


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|----------|--------|---------------|----------------------|---------|------------------|-------|---------------|---------------|-------|
| | | 0.15 | 1291.61 | | -4.48 | | 1.06 | 0.02 | |
| VA4 - 4 | 810.00 | 0.00 0.15 | 1291.63 -234.96 | 1291.63 | -4.48 12.90 | 12.90 | -1.77 2.37 | -0.02 0.02 | 0.77 |
| VA4 - 5 | 810.00 | 0.00 0.15 | -235.79 -3100.86 | 0.00 | 12.90 -24.54 | 12.90 | -4.91 5.36 | 0.07 -0.07 | -2.78 |
| VA4 - 6 | 810.00 | 0.00 0.06 | -3139.19 -134.21 | 0.00 | -21.40 -10.83 | 0.00 | 3.40 -2.58 | -0.01 0.01 | -0.12 |
| VA4 - 7 | 810.00 | 0.00 0.06 | -133.92 1410.76 | 1410.76 | -10.83 -2.65 | 0.00 | 1.87 -1.00 | -0.01 0.01 | -1.25 |
| VA4 - 8 | 810.00 | 0.00 0.06 | 1410.07 748.13 | 1460.52 | -2.65 16.04 | 0.00 | 0.29 1.08 | -0.01 0.01 | -1.25 |
| VA4 - 9 | 810.00 | 0.00 0.06 | 753.15 -2467.76 | 753.15 | 16.04 0.25 | 16.04 | -5.24 5.71 | 0.03 -0.03 | -1.25 |
| VA4 - 10 | 810.00 | -0.02 0.00 | -2180.10 -181.61 | 0.00 | -4.50 3.13 | 3.13 | 2.45 -1.67 | -0.01 0.01 | 1.51 |
| VA4 - 11 | 810.00 | -0.02 0.00 | -176.25 395.31 | 395.31 | 3.13 7.21 | 7.21 | 1.26 -0.82 | -0.01 0.01 | 1.51 |
| VA4 - 12 | 810.00 | -0.01 0.00 | 395.75 -700.53 | 395.75 | 7.21 -7.46 | 7.21 | 0.07 1.33 | 0.01 -0.01 | 1.51 |
| VA4 - 13 | 810.00 | 0.00 0.04 | -717.91 -337.37 | 360.82 | -3.63 -15.04 | 0.00 | 1.32 1.06 | 0.00 0.00 | -1.68 |
| VA5 - 1 | 772.50 | 0.00 0.07 | -407.20 556.64 | 690.39 | 13.24 -1.05 | 13.24 | 1.30 0.46 | 0.01 -0.01 | 0.54 |
| VA5 - 2 | 772.50 | 0.00 0.07 | 556.62 -1599.10 | 556.62 | -1.05 -18.87 | 0.00 | -1.17 2.17 | 0.01 -0.01 | 0.54 |
| VA5 - 3 | 772.50 | 0.00 0.10 | -2012.28 312.60 | 312.60 | -12.10 -7.27 | 0.00 | 2.70 -1.92 | 0.00 0.00 | -0.36 |
| VA5 - 4 | 772.50 | 0.00 0.10 | 312.31 1171.43 | 1171.43 | -7.27 0.47 | 0.00 | 1.21 -0.38 | -0.01 0.01 | -0.36 |
| VA5 - 5 | 772.50 | 0.00 0.10 | 1172.13 -1570.25 | 1172.13 | 0.47 8.93 | 8.93 | -0.33 2.08 | 0.00 0.00 | -0.36 |
| VA5 - 6 | 772.50 | 0.00 0.06 | -1483.56 678.59 | 678.59 | 6.80 -9.93 | 6.80 | 2.01 -0.84 | 0.01 -0.01 | -0.74 |
| VA5 - 7 | 772.50 | 0.00 0.06 | 678.15 -153.08 | 678.15 | -15.61 -7.96 | 0.00 | 0.09 1.14 | 0.00 0.00 | -9.07 |
| VA6 - 1 | 772.50 | 0.00 0.02 | 6.86 633.27 | 663.36 | -13.52 -12.45 | 0.00 | 1.01 0.23 | 0.00 0.00 | 1.69 |
| VA6 - 2 | 772.50 | 0.00 0.02 | 638.02 -2532.37 | 638.02 | -12.45 27.93 | 27.93 | -1.47 2.66 | -0.03 0.03 | 1.69 |
| VA7 - 1 | 772.50 | -0.06 0.00 | -796.10 1567.50 | 1567.50 | -36.61 1.88 | 1.88 | 2.11 -0.90 | -0.02 0.02 | -3.31 |
| VA7 - 2 | 772.50 | -0.06 0.00 | 1562.75 0.00 | 1562.75 | 1.88 0.00 | 1.88 | -0.35 1.59 | 0.00 0.00 | -3.31 |
| VA8 - 1 | 866.25 | 0.00 0.50 | -3676.90 -6643.71 | 2926.41 | -3.86 -3.35 | 0.00 | 3.38 4.07 | 0.00 0.00 | -0.64 |
| VA8 - 2 | 866.25 | 0.00 0.74 | -8814.97 -5715.59 | 4863.22 | 5.71 -1.59 | 5.71 | 4.87 4.28 | 0.00 0.00 | 0.53 |
| VA9 - 1 | 810.00 | 0.00 0.14 | -1578.37 -2730.79 | 1286.26 | 22.53 -19.88 | 22.53 | 2.15 2.55 | 0.01 -0.01 | 2.96 |
| VA9 - 2 | 810.00 | 0.00 0.19 | -2608.74 -2736.21 | 1428.56 | -18.99 15.05 | 15.05 | 2.56 2.60 | -0.01 0.01 | -0.22 |
| VA10 - 1 | 810.00 | 0.00 0.11 | -1979.44 -1725.95 | 909.38 | 16.41 -30.30 | 16.41 | 2.16 2.07 | 0.01 -0.01 | 0.40 |
| VA10 - 2 | 810.00 | 0.00 0.05 | -1157.25 -916.19 | 581.99 | -49.56 46.51 | 46.51 | 1.68 1.56 | -0.02 0.02 | -3.47 |
| VA11 - 1 | 772.50 | 0.00 0.00 | 35.02 -720.18 | 116.30 | -7.83 14.70 | 14.70 | 0.36 1.14 | -0.01 0.01 | 1.64 |
| VA11 - 2 | 772.50 | 0.00 0.01 | -928.89 502.42 | 854.01 | -10.37 4.84 | 4.84 | 1.66 0.74 | 0.00 0.00 | -1.16 |
| VA11 - 3 | 772.50 | 0.00 0.01 | 499.59 -1424.84 | 499.59 | 4.84 14.17 | 14.17 | -1.51 2.29 | -0.01 0.01 | -1.16 |
| VA12 - 1 | 772.50 | -0.03 0.00 | 0.00 1751.80 | 2025.69 | 0.00 3.21 | 3.21 | 1.77 0.65 | 0.00 0.00 | 0.06 |

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|----------|--------|---------------|----------------------|---------|------------------|-------|---------------|---------------|-------|
| VA12 - 2 | 772.50 | -0.03 0.00 | 1754.62 0.00 | 1754.62 | 3.21 0.00 | 3.21 | -1.42 2.17 | 0.00 0.00 | 0.06 |
| VA13 | 735.00 | 0.00 0.01 | 0.00 0.00 | 338.60 | 0.00 0.00 | 0.00 | 0.71 0.71 | 0.00 0.00 | 0.02 |
| VA14 - 1 | 772.50 | 0.00 0.09 | 0.00 2242.86 | 2242.86 | 0.00 0.16 | 0.16 | 2.54 -1.73 | 0.00 0.00 | 0.84 |
| VA14 - 2 | 772.50 | 0.00 0.09 | 2243.62 0.00 | 2356.86 | 0.16 0.00 | 0.16 | 0.42 1.91 | 0.00 0.00 | 0.84 |
| VA15 | 735.00 | 0.00 0.00 | 0.00 0.00 | 338.60 | 0.00 0.00 | 0.00 | 0.71 0.71 | 0.00 0.00 | 0.29 |
| VA16 | 735.00 | 0.00 0.00 | 0.00 0.00 | 338.60 | 0.00 0.00 | 0.00 | 0.71 0.71 | 0.00 0.00 | -0.70 |
| VA17 - 1 | 772.50 | 0.00 0.04 | 0.00 3941.72 | 3941.72 | 0.00 -0.86 | 0.00 | 4.16 -3.35 | 0.00 0.00 | -5.02 |
| VA17 - 2 | 772.50 | 0.00 0.04 | 3940.97 0.00 | 3940.97 | 1.76 0.00 | 1.76 | -0.29 2.48 | 0.00 0.00 | 1.46 |
| VA18 | 772.50 | 0.00 0.03 | -69.18 -50.94 | 296.83 | 2.89 -1.44 | 2.89 | 0.76 0.74 | 0.00 0.00 | 1.05 |
| VA19 | 772.50 | 0.00 0.00 | 0.00 0.00 | 102.16 | 0.00 0.00 | 0.00 | 0.41 0.41 | 0.00 0.00 | -5.36 |
| VA20 | 772.50 | -0.02 0.00 | -8.33 0.00 | 352.17 | 5.67 0.00 | 5.67 | 0.75 0.74 | 0.00 0.00 | 0.44 |
| VA21 - 1 | 772.50 | 0.00 0.15 | -1464.82 2298.34 | 2298.34 | 29.68 -34.25 | 29.68 | 2.41 0.07 | 0.02 -0.02 | 4.92 |
| VA21 - 2 | 772.50 | 0.00 0.15 | 2300.03 -1694.03 | 2300.03 | -20.73 -15.93 | 0.00 | -1.08 2.71 | 0.00 0.00 | -1.94 |
| VA22 | 772.50 | 0.00 0.08 | -256.96 -1002.02 | 681.08 | -4.91 6.83 | 6.83 | 1.20 1.61 | 0.00 0.00 | 0.22 |
| VA23 | 772.50 | 0.00 0.03 | 0.00 0.00 | 1006.68 | 0.00 0.00 | 0.00 | 1.25 1.25 | 0.00 0.00 | 4.75 |
| VA24 - 1 | 810.00 | 0.00 0.13 | -1578.18 -2731.87 | 1285.88 | -41.43 25.65 | 25.65 | 2.15 2.55 | -0.01 0.01 | -4.27 |
| VA24 - 2 | 810.00 | 0.00 0.18 | -2480.62 -2988.52 | 1372.60 | 8.66 17.44 | 17.44 | 2.50 2.66 | 0.00 0.00 | -0.23 |
| VA25 - 1 | 810.00 | 0.00 0.21 | -2927.59 1746.31 | 1746.31 | 73.64 -28.79 | 73.64 | 3.22 -1.67 | 0.05 -0.05 | 3.25 |
| VA25 - 2 | 810.00 | 0.00 0.21 | 1749.62 -2440.09 | 1749.62 | -28.79 -17.19 | 0.00 | 0.07 2.61 | 0.00 0.00 | 3.25 |
| VA25 - 3 | 810.00 | 0.00 0.07 | -1438.35 -846.32 | 485.61 | -0.50 -16.69 | 0.00 | 1.77 1.47 | 0.00 0.00 | -1.15 |

| CASO: G1+G2+1.2D4 | | | | | | | | | |
|-------------------|------------------|------------------|-----------------------|------------------|-----------------------|------------------|--------------------|--------------------|----------------|
| Elemento | Carga (kgf/m) | Rd Nd (tf) | Mxi Mxf (kgf.m) | MxMáx (kgf.m) | Myi Myf (kgf.m) | MyMáx (kgf.m) | Vxi Vxf (tf) | Vyi Vyf (tf) | Mtd (kgf/m) |
| VA1 - 1 | 772.50 | 0.00 0.30 | -1331.06 1840.13 | 1840.13 | -20.35 2.40 | 2.40 | 2.38 -0.88 | -0.01 0.01 | 0.80 |
| VA1 - 2 | 772.50 | 0.00 0.30 | 1840.24 52.87 | 1840.24 | 2.40 9.11 | 0.00 | -1.29 2.11 | -0.01 0.01 | 0.19 |
| VA1 - 3 | 772.50 | 0.00 0.30 | 53.79 -2410.86 | 53.79 | 9.11 17.48 | 17.48 | -4.02 4.46 | -0.01 0.01 | 0.20 |
| VA1 - 4 | 772.50 | 0.00 0.05 | -2003.33 266.59 | 724.15 | 20.12 -18.42 | 20.12 | 2.05 0.84 | 0.01 -0.01 | 0.66 |
| VA1 - 5 | 772.50 | 0.00 0.05 | 268.11 -1543.96 | 268.11 | -18.42 19.65 | 19.65 | -3.33 3.72 | -0.07 0.07 | -2.41 |
| VA1 - 6 | 772.50 | -0.01 0.00 | -1200.19 -271.04 | 344.29 | 14.75 -7.12 | 14.75 | 1.55 0.98 | 0.01 -0.01 | -0.14 |
| VA2 | 772.50 | 0.00 0.00 | 0.00 0.00 | 376.65 | 0.00 0.00 | 0.00 | 0.77 0.77 | 0.00 0.00 | -2.52 |
| VA3 - 1 | 772.50 | 0.00 0.00 | 0.00 -1558.11 | 1110.30 | 0.00 -0.78 | 0.00 | 1.31 2.03 | 0.00 0.00 | 0.77 |
| VA3 - 2 | 772.50 | 0.00 | -1564.67 | 5.29 | 10.77 | 10.77 | 1.61 | 0.01 | 0.00 |


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|----------|--------|---------------|----------------------|---------|-----------------|-------|---------------|---------------|-------|
| | | 0.00 | 5.29 | | 0.00 | | -0.41 | -0.01 | |
| VA4 - 1 | 810.00 | 0.00 0.16 | -1373.12 -1815.40 | 972.82 | 41.15 -10.52 | 41.15 | 1.95 2.13 | 0.01 -0.01 | 1.01 |
| VA4 - 2 | 810.00 | 0.00 0.19 | -1881.96 1588.33 | 1588.33 | -22.97 1.33 | 1.33 | 2.56 -0.96 | -0.01 0.01 | -2.12 |
| VA4 - 3 | 810.00 | 0.00 0.19 | 1588.21 1296.75 | 1588.21 | 1.33 6.89 | 0.00 | -0.80 1.06 | -0.02 0.02 | -2.12 |
| VA4 - 4 | 810.00 | 0.00 0.19 | 1296.75 -226.13 | 1296.75 | 6.89 17.86 | 17.86 | -1.77 2.36 | -0.01 0.01 | -2.12 |
| VA4 - 5 | 810.00 | 0.00 0.18 | -227.00 -3089.27 | 0.00 | 17.86 20.06 | 20.06 | -4.91 5.36 | 0.00 0.00 | -5.54 |
| VA4 - 6 | 810.00 | 0.00 0.10 | -3125.08 -126.06 | 0.00 | 3.06 12.57 | 12.57 | 3.39 -2.58 | -0.01 0.01 | 1.96 |
| VA4 - 7 | 810.00 | 0.00 0.10 | -125.76 1412.54 | 1412.54 | 12.57 0.31 | 12.57 | 1.87 -0.99 | 0.01 -0.01 | 0.90 |
| VA4 - 8 | 810.00 | 0.00 0.10 | 1411.87 739.94 | 1459.82 | 0.31 8.57 | 0.00 | 0.28 1.08 | 0.00 0.00 | 0.90 |
| VA4 - 9 | 810.00 | 0.00 0.11 | 744.97 -2479.43 | 744.97 | 8.57 -33.99 | 8.57 | -5.24 5.72 | 0.07 -0.07 | 0.90 |
| VA4 - 10 | 810.00 | 0.00 0.00 | -2204.43 -192.10 | 0.00 | -9.66 0.77 | 0.77 | 2.47 -1.68 | -0.01 0.01 | 1.34 |
| VA4 - 11 | 810.00 | 0.00 0.00 | -186.81 392.61 | 392.61 | 0.77 2.88 | 2.88 | 1.28 -0.83 | 0.00 0.00 | 1.34 |
| VA4 - 12 | 810.00 | 0.00 0.00 | 392.97 -677.30 | 393.30 | 2.88 -6.30 | 2.88 | 0.09 1.32 | 0.01 -0.01 | 1.34 |
| VA4 - 13 | 810.00 | 0.00 0.05 | -707.28 -336.92 | 365.63 | 0.15 0.61 | 0.61 | 1.32 1.07 | 0.00 0.00 | -1.61 |
| VA5 - 1 | 772.50 | 0.00 0.04 | -401.79 549.77 | 686.87 | -10.96 2.96 | 2.96 | 1.30 0.46 | -0.01 0.01 | -1.48 |
| VA5 - 2 | 772.50 | 0.00 0.04 | 549.77 -1612.94 | 549.77 | 2.96 14.64 | 14.64 | -1.17 2.17 | -0.01 0.01 | -1.48 |
| VA5 - 3 | 772.50 | 0.00 0.07 | -2009.75 314.56 | 314.56 | 18.17 3.40 | 18.17 | 2.70 -1.92 | 0.01 -0.01 | 1.40 |
| VA5 - 4 | 772.50 | 0.00 0.07 | 314.25 1172.76 | 1172.76 | 3.40 9.13 | 0.00 | 1.21 -0.38 | -0.01 0.01 | 1.40 |
| VA5 - 5 | 772.50 | 0.00 0.07 | 1173.43 -1570.23 | 1173.43 | 9.13 -15.84 | 9.13 | -0.33 2.08 | 0.01 -0.01 | 1.40 |
| VA5 - 6 | 772.50 | 0.00 0.07 | -1462.93 680.99 | 680.99 | 11.37 -12.72 | 11.37 | 2.00 -0.82 | 0.02 -0.02 | -0.17 |
| VA5 - 7 | 772.50 | 0.00 0.07 | 680.63 -170.63 | 680.63 | -4.97 -15.62 | 0.00 | 0.07 1.15 | 0.01 -0.01 | -9.79 |
| VA6 - 1 | 772.50 | 0.00 0.03 | 7.07 599.99 | 637.58 | -1.75 -9.78 | 0.00 | 0.99 0.25 | 0.01 -0.01 | 1.27 |
| VA6 - 2 | 772.50 | 0.00 0.03 | 604.72 -2597.72 | 604.72 | -9.78 19.67 | 19.67 | -1.50 2.68 | -0.02 0.02 | 1.27 |
| VA7 - 1 | 772.50 | -0.06 0.00 | -755.02 1588.27 | 1588.27 | -30.65 3.75 | 3.75 | 2.10 -0.88 | -0.02 0.02 | -2.79 |
| VA7 - 2 | 772.50 | -0.06 0.00 | 1583.54 0.00 | 1583.54 | 3.75 0.00 | 3.75 | -0.36 1.61 | 0.00 0.00 | -2.79 |
| VA8 - 1 | 866.25 | 0.00 0.49 | -3692.66 -6623.39 | 2927.43 | -5.48 4.64 | 4.64 | 3.39 4.07 | 0.00 0.00 | -2.03 |
| VA8 - 2 | 866.25 | 0.00 0.72 | -8804.80 -5718.87 | 4866.15 | 16.61 -4.86 | 16.61 | 4.87 4.28 | 0.00 0.00 | 1.62 |
| VA9 - 1 | 810.00 | 0.00 0.11 | -1871.63 -2475.55 | 1250.56 | 45.45 -35.88 | 45.45 | 2.25 2.46 | 0.01 -0.01 | 2.94 |
| VA9 - 2 | 810.00 | 0.00 0.17 | -2810.47 -2531.05 | 1432.73 | -9.99 4.07 | 4.07 | 2.62 2.53 | 0.00 0.00 | -0.31 |
| VA10 - 1 | 810.00 | 0.00 0.09 | -2213.58 -1514.50 | 908.58 | 27.35 -33.04 | 27.35 | 2.25 1.98 | 0.01 -0.01 | 0.44 |
| VA10 - 2 | 810.00 | 0.00 0.05 | -1462.79 -550.39 | 641.97 | -30.33 3.91 | 3.91 | 1.85 1.39 | -0.01 0.01 | -3.34 |
| VA11 - 1 | 772.50 | 0.00 0.04 | -444.80 -455.76 | 0.00 | 12.55 -6.59 | 12.55 | 0.74 0.75 | 0.01 -0.01 | 1.61 |

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|----------|--------|---------------|----------------------|---------|-----------------|-------|---------------|---------------|-------|
| VA11 - 2 | 772.50 | 0.00 0.06 | -1268.52 901.94 | 1064.50 | 2.96 -1.64 | 2.96 | 1.90 0.50 | 0.00 0.00 | -1.06 |
| VA11 - 3 | 772.50 | 0.00 0.06 | 899.41 -783.90 | 899.41 | -1.64 -1.81 | 0.00 | -1.27 2.05 | 0.00 0.00 | -1.06 |
| VA12 - 1 | 772.50 | -0.01 0.00 | 0.00 1752.03 | 2025.86 | 0.00 0.97 | 0.97 | 1.77 0.65 | 0.00 0.00 | 0.11 |
| VA12 - 2 | 772.50 | -0.01 0.00 | 1754.55 0.00 | 1754.55 | 0.97 0.00 | 0.97 | -1.42 2.17 | 0.00 0.00 | 0.11 |
| VA13 | 735.00 | 0.00 0.00 | 0.00 0.00 | 338.60 | 0.00 0.00 | 0.00 | 0.71 0.71 | 0.00 0.00 | 0.00 |
| VA14 - 1 | 772.50 | 0.00 0.01 | 0.00 2242.86 | 2242.86 | 0.00 -2.80 | 0.00 | 2.54 -1.73 | 0.00 0.00 | 0.92 |
| VA14 - 2 | 772.50 | 0.00 0.01 | 2243.63 0.00 | 2356.86 | -2.80 0.00 | 0.00 | 0.42 1.91 | 0.00 0.00 | 0.92 |
| VA15 | 735.00 | -0.02 0.00 | 0.00 0.00 | 338.60 | 0.00 0.00 | 0.00 | 0.71 0.71 | 0.00 0.00 | 0.31 |
| VA16 | 735.00 | 0.00 0.02 | 0.00 0.00 | 338.60 | 0.00 0.00 | 0.00 | 0.71 0.71 | 0.00 0.00 | -0.67 |
| VA17 - 1 | 772.50 | 0.00 0.08 | 0.00 3941.72 | 3941.72 | 0.00 5.87 | 5.87 | 4.16 -3.35 | -0.01 0.01 | -5.03 |
| VA17 - 2 | 772.50 | 0.00 0.08 | 3940.96 0.00 | 3940.96 | -5.67 0.00 | 0.00 | -0.29 2.48 | 0.00 0.00 | 1.53 |
| VA18 | 772.50 | 0.00 0.06 | -501.29 382.67 | 435.35 | -23.95 29.72 | 29.72 | 1.20 0.29 | -0.03 0.03 | 1.06 |
| VA19 | 772.50 | 0.00 0.01 | 0.00 0.00 | 102.16 | 0.00 0.00 | 0.00 | 0.41 0.41 | 0.00 0.00 | -5.29 |
| VA20 | 772.50 | -0.01 0.00 | -9.63 0.00 | 351.59 | -7.75 0.00 | 0.00 | 0.75 0.74 | 0.00 0.00 | 0.36 |
| VA21 - 1 | 772.50 | 0.00 0.15 | -1701.63 2330.36 | 2330.36 | 19.96 -26.67 | 19.96 | 2.50 -0.02 | 0.01 -0.01 | 5.04 |
| VA21 - 2 | 772.50 | 0.00 0.15 | 2331.63 -1441.43 | 2331.63 | -24.93 -2.80 | 0.00 | -0.97 2.60 | -0.01 0.01 | -2.03 |
| VA22 | 772.50 | 0.00 0.08 | -719.00 -454.39 | 698.35 | -11.43 14.58 | 14.58 | 1.48 1.34 | -0.01 0.01 | 0.31 |
| VA23 | 772.50 | 0.00 0.02 | 0.00 0.00 | 1006.68 | 0.00 0.00 | 0.00 | 1.25 1.25 | 0.00 0.00 | 4.73 |
| VA24 - 1 | 810.00 | 0.00 0.10 | -1946.69 -2410.49 | 1243.15 | -60.70 37.68 | 37.68 | 2.27 2.43 | -0.02 0.02 | -4.30 |
| VA24 - 2 | 810.00 | 0.00 0.16 | -2735.62 -2731.20 | 1365.64 | 2.39 24.33 | 24.33 | 2.58 2.58 | 0.00 0.00 | -0.33 |
| VA25 - 1 | 810.00 | 0.00 0.19 | -3231.10 1668.06 | 1668.06 | 67.10 -31.52 | 67.10 | 3.33 -1.78 | 0.05 -0.05 | 3.30 |
| VA25 - 2 | 810.00 | 0.00 0.19 | 1670.85 -2172.19 | 1690.50 | -31.52 -5.07 | 0.00 | 0.18 2.50 | -0.01 0.01 | 3.30 |
| VA25 - 3 | 810.00 | 0.00 0.06 | -1829.87 -386.97 | 586.31 | -25.26 19.84 | 19.84 | 1.98 1.26 | -0.01 0.01 | -1.02 |

| CASO: G1+G2+1.4Q | | | | | | | | | |
|------------------|------------------|------------------|-----------------------|------------------|-----------------------|------------------|--------------------|--------------------|----------------|
| Elemento | Carga (kgf/m) | Rd Nd (tf) | Mxi Mxf (kgf.m) | MxMáx (kgf.m) | Myi Myf (kgf.m) | MyMáx (kgf.m) | Vxi Vxf (tf) | Vyi Vyf (tf) | Mtd (kgf/m) |
| VA1 - 1 | 772.50 | 0.00 0.28 | -1480.97 1920.90 | 1920.90 | -74.21 4.51 | 4.51 | 2.50 -1.00 | -0.04 0.04 | -2.52 |
| VA1 - 2 | 772.50 | 0.00 0.28 | 1920.83 257.87 | 1920.83 | 4.51 -98.70 | 0.00 | -1.18 1.99 | 0.10 -0.10 | -3.16 |
| VA1 - 3 | 772.50 | 0.00 0.26 | 258.82 -2137.04 | 258.82 | -98.70 175.10 | 175.10 | -3.90 4.35 | -0.47 0.47 | -2.95 |
| VA1 - 4 | 772.50 | -0.45 0.00 | -2160.76 317.58 | 717.25 | 147.15 -110.62 | 147.15 | 2.11 0.79 | 0.07 -0.07 | 0.49 |
| VA1 - 5 | 772.50 | -0.49 0.00 | 319.21 -1464.24 | 319.21 | -110.62 146.22 | 146.22 | -3.27 3.67 | -0.50 0.50 | -3.15 |
| VA1 - 6 | 772.50 | -0.42 | -905.00 | 228.08 | 115.40 | 115.40 | 1.32 | 0.05 | 2.07 |


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|----------|--------|---------------|----------------------|---------|-------------------|--------|---------------|---------------|--------|
| | | 0.00 | -694.85 | | -60.42 | | 1.20 | -0.05 | |
| VA2 | 772.50 | 0.00 0.00 | 0.00 0.00 | 376.65 | 0.00 0.00 | 0.00 | 0.77 0.77 | 0.00 0.00 | -3.18 |
| VA3 - 1 | 772.50 | 0.00 0.01 | 0.00 -1556.69 | 1110.84 | 0.00 20.93 | 20.93 | 1.31 2.03 | 0.00 0.00 | 0.63 |
| VA3 - 2 | 772.50 | 0.00 0.00 | -1563.40 6.56 | 6.56 | 69.33 0.00 | 69.33 | 1.61 -0.41 | 0.04 -0.04 | 0.00 |
| VA4 - 1 | 810.00 | 0.00 0.11 | -1539.27 -1715.14 | 934.55 | 66.08 -45.36 | 66.08 | 2.00 2.07 | 0.02 -0.02 | 0.69 |
| VA4 - 2 | 810.00 | 0.00 0.21 | -1825.02 1637.23 | 1637.23 | -84.22 -40.69 | 0.00 | 2.56 -0.96 | -0.02 0.02 | -1.47 |
| VA4 - 3 | 810.00 | 0.00 0.21 | 1637.30 1344.61 | 1637.30 | -40.69 9.67 | 0.00 | -0.81 1.06 | -0.16 0.16 | -1.47 |
| VA4 - 4 | 810.00 | 0.00 0.21 | 1344.72 -181.06 | 1344.72 | 9.67 184.37 | 184.37 | -1.77 2.37 | -0.24 0.24 | -1.47 |
| VA4 - 5 | 810.00 | 0.00 0.20 | -181.96 -3046.58 | 0.00 | 184.37 -5.77 | 184.37 | -4.91 5.36 | 0.34 -0.34 | -4.21 |
| VA4 - 6 | 810.00 | -0.07 0.00 | -3418.28 -283.43 | 0.00 | -43.91 -2.94 | 0.00 | 3.53 -2.71 | -0.04 0.04 | 3.20 |
| VA4 - 7 | 810.00 | -0.07 0.00 | -283.33 1400.30 | 1400.30 | -2.94 -0.56 | 0.00 | 2.00 -1.13 | 0.00 0.00 | 0.83 |
| VA4 - 8 | 810.00 | -0.07 0.00 | 1399.28 955.17 | 1504.19 | -0.56 122.34 | 0.00 | 0.42 0.95 | -0.07 0.07 | 0.83 |
| VA4 - 9 | 810.00 | -0.05 0.00 | 960.24 -2184.50 | 960.24 | 122.34 -143.85 | 122.34 | -5.11 5.58 | 0.45 -0.45 | 0.83 |
| VA4 - 10 | 810.00 | -0.19 0.00 | -1864.69 -44.41 | 0.00 | -38.78 10.99 | 10.99 | 2.27 -1.48 | -0.05 0.05 | 1.10 |
| VA4 - 11 | 810.00 | -0.19 0.00 | -37.85 432.66 | 432.66 | 10.99 14.74 | 14.74 | 1.08 -0.63 | -0.01 0.01 | 1.10 |
| VA4 - 12 | 810.00 | -0.21 0.00 | 433.65 -980.85 | 433.65 | 14.74 -62.59 | 14.74 | -0.11 1.52 | 0.04 -0.04 | 1.10 |
| VA4 - 13 | 810.00 | 0.00 0.03 | -698.20 -382.23 | 343.64 | -12.72 -19.73 | 0.00 | 1.30 1.09 | 0.00 0.00 | -1.84 |
| VA5 - 1 | 772.50 | -0.02 0.00 | -412.04 554.62 | 687.60 | -71.49 38.46 | 38.46 | 1.30 0.45 | -0.05 0.05 | -1.88 |
| VA5 - 2 | 772.50 | -0.02 0.00 | 554.51 -1599.61 | 554.51 | 38.46 2.46 | 38.46 | -1.16 2.16 | 0.03 -0.03 | -1.88 |
| VA5 - 3 | 772.50 | 0.00 0.00 | -1981.45 332.34 | 332.34 | -0.92 1.67 | 1.67 | 2.69 -1.91 | 0.00 0.00 | 1.38 |
| VA5 - 4 | 772.50 | 0.00 0.00 | 332.22 1179.48 | 1179.48 | 1.67 46.50 | 0.00 | 1.20 -0.37 | -0.04 0.04 | 1.38 |
| VA5 - 5 | 772.50 | 0.00 0.00 | 1180.50 -1586.97 | 1180.50 | 46.50 -19.45 | 46.50 | -0.34 2.10 | 0.03 -0.03 | 1.38 |
| VA5 - 6 | 772.50 | 0.00 0.07 | -1453.41 678.72 | 678.72 | 67.51 -50.31 | 67.51 | 1.99 -0.82 | 0.08 -0.08 | -0.31 |
| VA5 - 7 | 772.50 | 0.00 0.09 | 677.74 -186.05 | 677.74 | -5.57 -47.10 | 0.00 | 0.06 1.16 | 0.03 -0.03 | -10.26 |
| VA6 - 1 | 772.50 | 0.00 0.04 | 6.98 616.23 | 649.73 | -0.44 -10.56 | 0.00 | 1.00 0.24 | 0.01 -0.01 | 1.55 |
| VA6 - 2 | 772.50 | 0.00 0.04 | 620.97 -2565.83 | 620.97 | -10.56 24.50 | 24.50 | -1.49 2.67 | -0.02 0.02 | 1.55 |
| VA7 - 1 | 772.50 | -0.06 0.00 | -779.95 1575.67 | 1575.67 | -34.71 5.64 | 5.64 | 2.11 -0.89 | -0.03 0.03 | -3.13 |
| VA7 - 2 | 772.50 | -0.06 0.00 | 1570.92 0.00 | 1570.92 | 5.64 0.00 | 5.64 | -0.36 1.60 | 0.00 0.00 | -3.13 |
| VA8 - 1 | 866.25 | 0.00 0.49 | -3682.96 -6634.61 | 2927.40 | -4.94 1.66 | 1.66 | 3.39 4.07 | 0.00 0.00 | -1.37 |
| VA8 - 2 | 866.25 | 0.00 0.73 | -8807.90 -5718.81 | 4864.75 | 11.19 -2.90 | 11.19 | 4.87 4.28 | 0.00 0.00 | 1.17 |
| VA9 - 1 | 810.00 | 0.00 0.12 | -1745.59 -2585.18 | 1262.83 | 34.95 -28.46 | 34.95 | 2.21 2.50 | 0.01 -0.01 | 2.95 |
| VA9 - 2 | 810.00 | 0.00 0.18 | -2724.12 -2618.67 | 1429.29 | -14.10 8.86 | 8.86 | 2.59 2.56 | 0.00 0.00 | -0.26 |


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|----------|--------|---------------|----------------------|---------|------------------|--------|---------------|---------------|-------|
| VA10 - 1 | 810.00 | 0.00 0.10 | -2112.74 -1606.46 | 905.60 | 21.94 -30.66 | 21.94 | 2.21 2.02 | 0.01 -0.01 | 0.42 |
| VA10 - 2 | 810.00 | 0.00 0.05 | -1333.73 -704.73 | 609.68 | -40.05 27.14 | 27.14 | 1.78 1.46 | -0.02 0.02 | -3.34 |
| VA11 - 1 | 772.50 | -0.11 0.00 | -152.68 -13.18 | 280.69 | 69.90 -45.26 | 69.90 | 0.82 0.67 | 0.06 -0.06 | 1.52 |
| VA11 - 2 | 772.50 | -0.72 0.00 | -752.52 138.16 | 676.88 | 0.64 -4.74 | 0.64 | 1.49 0.91 | 0.00 0.00 | -1.12 |
| VA11 - 3 | 772.50 | -0.72 0.00 | 134.98 -1965.81 | 134.98 | -4.74 -8.91 | 0.00 | -1.68 2.46 | 0.00 0.00 | -1.12 |
| VA12 - 1 | 772.50 | -0.14 0.00 | 0.00 1751.53 | 2025.49 | 0.00 -1.77 | 0.00 | 1.77 0.65 | 0.00 0.00 | -0.07 |
| VA12 - 2 | 772.50 | -0.14 0.00 | 1754.71 0.00 | 1754.71 | -1.77 0.00 | 0.00 | -1.42 2.17 | 0.00 0.00 | -0.07 |
| VA13 | 735.00 | 0.00 0.08 | 0.00 0.00 | 338.60 | 0.00 0.00 | 0.00 | 0.71 0.71 | 0.00 0.00 | 0.11 |
| VA14 - 1 | 772.50 | 0.00 0.57 | 0.00 2243.15 | 2243.15 | 0.00 -10.63 | 0.00 | 2.54 -1.73 | 0.01 -0.01 | 0.95 |
| VA14 - 2 | 772.50 | 0.00 0.57 | 2243.78 0.00 | 2356.99 | -10.63 0.00 | 0.00 | 0.42 1.91 | 0.00 0.00 | 0.95 |
| VA15 | 735.00 | -0.04 0.00 | 0.00 0.00 | 338.60 | 0.00 0.00 | 0.00 | 0.71 0.71 | 0.00 0.00 | 0.12 |
| VA16 | 735.00 | 0.00 0.07 | 0.00 0.00 | 338.60 | 0.00 0.00 | 0.00 | 0.71 0.71 | 0.00 0.00 | -1.02 |
| VA17 - 1 | 772.50 | 0.00 0.53 | 0.00 3941.43 | 3941.43 | 0.00 23.52 | 23.52 | 4.16 -3.35 | -0.02 0.02 | -5.07 |
| VA17 - 2 | 772.50 | 0.00 0.57 | 3940.80 0.00 | 3940.80 | -24.88 0.00 | 0.00 | -0.29 2.48 | -0.01 0.01 | 1.64 |
| VA18 | 772.50 | 0.00 0.26 | -678.01 497.48 | 509.22 | -79.19 111.78 | 111.78 | 1.35 0.14 | -0.10 0.10 | 1.19 |
| VA19 | 772.50 | 0.00 0.04 | 0.00 0.00 | 102.16 | 0.00 0.00 | 0.00 | 0.41 0.41 | 0.00 0.00 | -6.56 |
| VA20 | 772.50 | -0.05 0.00 | -9.95 0.00 | 351.45 | -44.73 0.00 | 0.00 | 0.75 0.74 | -0.02 0.02 | 0.98 |
| VA21 - 1 | 772.50 | 0.00 0.16 | -1549.37 2306.84 | 2306.84 | 26.29 -34.30 | 26.29 | 2.44 0.04 | 0.02 -0.02 | 4.98 |
| VA21 - 2 | 772.50 | 0.00 0.16 | 2308.39 -1601.85 | 2308.39 | -33.85 16.23 | 16.23 | -1.04 2.67 | -0.02 0.02 | -2.00 |
| VA22 | 772.50 | 0.00 0.14 | -292.16 -887.52 | 712.42 | -55.91 80.73 | 80.73 | 1.25 1.57 | -0.04 0.04 | -0.17 |
| VA23 | 772.50 | 0.00 0.03 | 0.00 0.00 | 1006.68 | 0.00 0.00 | 0.00 | 1.25 1.25 | 0.00 0.00 | 4.75 |
| VA24 - 1 | 810.00 | 0.00 0.12 | -1677.19 -2646.59 | 1269.48 | -53.45 33.53 | 33.53 | 2.19 2.52 | -0.01 0.01 | -4.28 |
| VA24 - 2 | 810.00 | 0.00 0.17 | -2547.36 -2921.23 | 1370.72 | 4.07 22.52 | 22.52 | 2.52 2.64 | 0.00 0.00 | -0.28 |
| VA25 - 1 | 810.00 | 0.00 0.20 | -3009.03 1727.20 | 1727.20 | 68.55 -31.85 | 68.55 | 3.25 -1.70 | 0.05 -0.05 | 3.27 |
| VA25 - 2 | 810.00 | 0.00 0.20 | 1730.33 -2368.43 | 1733.99 | -31.85 -6.24 | 0.00 | 0.10 2.58 | -0.01 0.01 | 3.27 |
| VA25 - 3 | 810.00 | 0.00 0.07 | -1529.43 -741.40 | 503.33 | -2.21 -21.98 | 0.00 | 1.82 1.42 | 0.00 0.00 | -0.98 |

| CASO: G1+G2+1.4Q+0.84V1+0.84D1 | | | | | | | | | |
|--------------------------------|------------------|------------------|-----------------------|------------------|-----------------------|------------------|--------------------|--------------------|----------------|
| Elemento | Carga (kgf/m) | Rd Nd (tf) | Mxi Mxf (kgf.m) | MxMáx (kgf.m) | Myi Myf (kgf.m) | MyMáx (kgf.m) | Vxi Vxf (tf) | Vyi Vyf (tf) | Mtd (kgf/m) |
| VA1 - 1 | 772.50 | 0.00 0.31 | -814.10 1922.27 | 1922.27 | -76.72 4.52 | 4.52 | 2.16 -0.65 | -0.04 0.04 | -2.44 |
| VA1 - 2 | 772.50 | 0.00 0.32 | 1922.37 -99.94 | 1922.37 | 4.52 -97.80 | 4.52 | -1.52 2.33 | 0.10 -0.10 | -3.09 |
| VA1 - 3 | 772.50 | 0.00 | -98.66 | 0.00 | -97.80 | 173.74 | -4.24 | -0.47 | -3.23 |

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| | | 0.29 | -2693.32 | | 173.74 | | 4.69 | 0.47 | |
| VA1 - 4 | 772.50 | -0.44 0.00 | -1782.14 36.40 | 635.50 | 146.46 -109.28 | 146.46 | 1.93 0.96 | 0.07 -0.07 | 0.09 |
| VA1 - 5 | 772.50 | -0.48 0.00 | 37.96 -1835.98 | 37.96 | -109.28 144.18 | 144.18 | -3.45 3.84 | -0.49 0.49 | -0.40 |
| VA1 - 6 | 772.50 | -0.45 0.00 | -325.62 -1389.22 | 239.29 | 114.85 -59.23 | 114.85 | 0.93 1.59 | 0.05 -0.05 | 2.14 |
| VA2 | 772.50 | 0.00 0.00 | 0.00 0.00 | 376.65 | 0.00 0.00 | 0.00 | 0.77 0.77 | 0.00 0.00 | -2.91 |
| VA3 - 1 | 772.50 | 0.00 0.01 | 0.00 -1555.33 | 1111.36 | 0.00 21.74 | 21.74 | 1.31 2.03 | -0.01 0.01 | 0.54 |
| VA3 - 2 | 772.50 | 0.00 0.00 | -1562.77 7.19 | 7.19 | 66.89 0.00 | 66.89 | 1.61 -0.41 | 0.04 -0.04 | 0.00 |
| VA4 - 1 | 810.00 | 0.00 0.27 | -626.15 -2064.93 | 1266.22 | 46.01 -34.90 | 46.01 | 1.75 2.32 | 0.02 -0.02 | 0.68 |
| VA4 - 2 | 810.00 | 0.00 0.33 | -1570.75 1309.71 | 1309.71 | -84.05 -41.47 | 0.00 | 2.26 -0.67 | -0.02 0.02 | -0.04 |
| VA4 - 3 | 810.00 | 0.00 0.33 | 1309.61 924.42 | 1309.61 | -41.47 8.89 | 0.00 | -1.10 1.36 | -0.16 0.16 | -0.04 |
| VA4 - 4 | 810.00 | 0.00 0.33 | 924.30 -819.27 | 924.30 | 8.89 183.92 | 183.92 | -2.07 2.66 | -0.24 0.24 | -0.04 |
| VA4 - 5 | 810.00 | 0.00 0.32 | -820.45 -3850.00 | 0.00 | 183.92 -4.42 | 183.92 | -5.21 5.66 | 0.34 -0.34 | -12.40 |
| VA4 - 6 | 810.00 | 0.00 0.05 | -2681.63 202.39 | 202.39 | -44.00 -3.13 | 0.00 | 3.28 -2.46 | -0.04 0.04 | 0.11 |
| VA4 - 7 | 810.00 | 0.00 0.05 | 202.39 1617.65 | 1617.65 | -3.13 0.55 | 0.00 | 1.75 -0.88 | 0.00 0.00 | 1.80 |
| VA4 - 8 | 810.00 | 0.00 0.05 | 1616.60 751.78 | 1634.46 | 0.55 122.12 | 0.00 | 0.17 1.20 | -0.07 0.07 | 1.80 |
| VA4 - 9 | 810.00 | 0.00 0.07 | 757.67 -2533.72 | 757.67 | 122.12 -141.08 | 122.12 | -5.36 5.83 | 0.45 -0.45 | 1.80 |
| VA4 - 10 | 810.00 | -0.09 0.00 | -1659.60 -31.49 | 0.00 | -46.68 12.29 | 12.29 | 2.07 -1.29 | -0.06 0.06 | 1.13 |
| VA4 - 11 | 810.00 | -0.09 0.00 | -24.30 337.25 | 337.25 | 12.29 22.11 | 22.11 | 0.88 -0.43 | -0.02 0.02 | 1.13 |
| VA4 - 12 | 810.00 | -0.11 0.00 | 338.14 -1421.97 | 338.14 | 22.11 -68.52 | 22.11 | -0.31 1.72 | 0.05 -0.05 | 1.13 |
| VA4 - 13 | 810.00 | 0.00 0.00 | 345.67 -1789.75 | 480.21 | -22.68 4.03 | 4.03 | 0.47 1.92 | -0.01 0.01 | -1.80 |
| VA5 - 1 | 772.50 | -0.02 0.00 | 75.55 359.18 | 726.03 | -78.73 38.96 | 0.00 | 1.00 0.75 | -0.05 0.05 | -1.95 |
| VA5 - 2 | 772.50 | -0.02 0.00 | 359.30 -2183.45 | 359.30 | 38.96 6.77 | 38.96 | -1.46 2.46 | 0.02 -0.02 | -1.95 |
| VA5 - 3 | 772.50 | -0.01 0.00 | -1563.87 591.63 | 591.63 | -3.21 1.46 | 1.46 | 2.53 -1.76 | 0.00 0.00 | 1.42 |
| VA5 - 4 | 772.50 | -0.01 0.00 | 591.62 1269.54 | 1269.54 | 1.46 46.07 | 0.00 | 1.05 -0.21 | -0.04 0.04 | 1.42 |
| VA5 - 5 | 772.50 | -0.01 0.00 | 1270.59 -1855.04 | 1270.59 | 46.07 -15.81 | 46.07 | -0.50 2.25 | 0.03 -0.03 | 1.42 |
| VA5 - 6 | 772.50 | 0.00 0.03 | -1148.17 611.29 | 611.29 | 57.69 -45.76 | 57.69 | 1.74 -0.57 | 0.07 -0.07 | -0.32 |
| VA5 - 7 | 772.50 | 0.00 0.05 | 610.40 -640.43 | 610.40 | -10.69 -7.72 | 0.00 | -0.18 1.40 | 0.00 0.00 | -9.27 |
| VA6 - 1 | 772.50 | 0.00 0.01 | 11.06 89.60 | 298.09 | -34.12 -17.37 | 0.00 | 0.67 0.57 | -0.01 0.01 | 1.34 |
| VA6 - 2 | 772.50 | 0.00 0.01 | 94.26 -3600.70 | 94.26 | -17.37 46.56 | 46.56 | -1.82 3.00 | -0.04 0.04 | 1.34 |
| VA7 - 1 | 772.50 | -0.15 0.00 | -63.08 1938.25 | 1938.25 | -49.39 -0.16 | 0.00 | 1.88 -0.67 | -0.03 0.03 | -2.78 |
| VA7 - 2 | 772.50 | -0.15 0.00 | 1933.59 0.00 | 1933.59 | -0.16 0.00 | 0.00 | -0.58 1.82 | 0.00 0.00 | -2.78 |
| VA8 - 1 | 866.25 | 0.00 0.51 | -2842.68 -7331.57 | 3087.92 | 20.74 -3.94 | 20.74 | 3.21 4.25 | 0.00 0.00 | -1.38 |


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|----------|--------|---------------|----------------------|---------|------------------|--------|---------------|---------------|-------|
| VA8 - 2 | 866.25 | 0.00 0.68 | -8212.84 -6455.48 | 4762.54 | 17.44 -25.89 | 17.44 | 4.74 4.41 | 0.00 0.00 | 1.25 |
| VA9 - 1 | 810.00 | 0.00 0.13 | -1727.65 -2604.83 | 1262.62 | 9.23 -2.15 | 9.23 | 2.20 2.50 | 0.00 0.00 | -0.60 |
| VA9 - 2 | 810.00 | 0.00 0.19 | -2745.31 -2614.84 | 1421.02 | 6.86 13.53 | 13.53 | 2.60 2.56 | 0.00 0.00 | -0.32 |
| VA10 - 1 | 810.00 | 0.00 0.11 | -2128.93 -1596.73 | 903.37 | 28.03 -28.94 | 28.03 | 2.22 2.01 | 0.01 -0.01 | 2.25 |
| VA10 - 2 | 810.00 | 0.00 0.06 | -1354.50 -676.59 | 614.66 | -30.48 4.21 | 4.21 | 1.79 1.45 | -0.01 0.01 | -1.03 |
| VA11 - 1 | 772.50 | -0.12 0.00 | -163.86 5.11 | 285.88 | 70.97 -51.57 | 70.97 | 0.83 0.66 | 0.06 -0.06 | 2.55 |
| VA11 - 2 | 772.50 | -0.71 0.00 | -745.66 140.26 | 680.88 | 3.15 -5.54 | 3.15 | 1.49 0.92 | 0.00 0.00 | -1.93 |
| VA11 - 3 | 772.50 | -0.71 0.00 | 137.35 -1965.00 | 137.35 | -5.54 -10.43 | 0.00 | -1.68 2.47 | 0.00 0.00 | -1.93 |
| VA12 - 1 | 772.50 | -0.14 0.00 | 0.00 1751.73 | 2025.64 | 0.00 -1.51 | 0.00 | 1.77 0.65 | 0.00 0.00 | 0.10 |
| VA12 - 2 | 772.50 | -0.14 0.00 | 1754.64 0.00 | 1754.64 | -1.51 0.00 | 0.00 | -1.42 2.17 | 0.00 0.00 | 0.10 |
| VA13 | 735.00 | 0.00 0.08 | 0.00 0.00 | 338.60 | 0.00 0.00 | 0.00 | 0.71 0.71 | 0.00 0.00 | -0.13 |
| VA14 - 1 | 772.50 | 0.00 0.57 | 0.00 2243.42 | 2243.42 | 0.00 -10.26 | 0.00 | 2.54 -1.73 | 0.01 -0.01 | 1.27 |
| VA14 - 2 | 772.50 | 0.00 0.57 | 2243.96 0.00 | 2357.13 | -10.26 0.00 | 0.00 | 0.42 1.91 | 0.00 0.00 | 1.27 |
| VA15 | 735.00 | -0.04 0.00 | 0.00 0.00 | 338.60 | 0.00 0.00 | 0.00 | 0.71 0.71 | 0.00 0.00 | 0.01 |
| VA16 | 735.00 | 0.00 0.07 | 0.00 0.00 | 338.60 | 0.00 0.00 | 0.00 | 0.71 0.71 | 0.00 0.00 | -1.05 |
| VA17 - 1 | 772.50 | 0.00 0.52 | 0.00 3941.17 | 3941.17 | 0.00 22.28 | 22.28 | 4.16 -3.35 | -0.02 0.02 | -5.88 |
| VA17 - 2 | 772.50 | 0.00 0.57 | 3940.63 0.00 | 3940.63 | -22.87 0.00 | 0.00 | -0.29 2.48 | -0.01 0.01 | 1.56 |
| VA18 | 772.50 | 0.00 0.25 | -690.89 512.92 | 521.51 | -70.98 101.63 | 101.63 | 1.37 0.12 | -0.09 0.09 | 1.49 |
| VA19 | 772.50 | 0.00 0.04 | 0.00 0.00 | 102.16 | 0.00 0.00 | 0.00 | 0.41 0.41 | 0.00 0.00 | -7.19 |
| VA20 | 772.50 | -0.07 0.00 | -8.95 0.00 | 351.89 | -35.07 0.00 | 0.00 | 0.75 0.74 | -0.02 0.02 | 0.89 |
| VA21 - 1 | 772.50 | 0.00 0.12 | -1437.02 2012.05 | 2029.51 | 33.15 -34.55 | 33.15 | 2.31 0.16 | 0.02 -0.02 | 7.20 |
| VA21 - 2 | 772.50 | 0.00 0.11 | 2013.39 -1465.23 | 2013.39 | -0.43 -17.57 | 0.00 | -0.83 2.46 | 0.01 -0.01 | -3.86 |
| VA22 | 772.50 | 0.00 0.12 | -301.12 -885.82 | 708.20 | -54.65 79.71 | 79.71 | 1.25 1.57 | -0.04 0.04 | -0.55 |
| VA23 | 772.50 | 0.00 0.03 | 0.00 0.00 | 1006.68 | 0.00 0.00 | 0.00 | 1.25 1.25 | 0.00 0.00 | 4.67 |
| VA24 - 1 | 810.00 | 0.00 0.11 | -1648.76 -2666.31 | 1276.33 | -74.79 53.34 | 53.34 | 2.18 2.53 | -0.02 0.02 | -7.76 |
| VA24 - 2 | 810.00 | 0.00 0.14 | -2482.83 -2983.01 | 1374.13 | 14.57 57.74 | 57.74 | 2.50 2.66 | -0.01 0.01 | -0.28 |
| VA25 - 1 | 810.00 | 0.00 0.21 | -3092.37 1892.14 | 1892.14 | 131.21 -93.34 | 131.21 | 3.38 -1.83 | 0.12 -0.12 | 6.02 |
| VA25 - 2 | 810.00 | 0.00 0.21 | 1894.93 -2520.57 | 1894.93 | -93.34 6.04 | 6.04 | 0.01 2.67 | -0.03 0.03 | 6.02 |
| VA25 - 3 | 810.00 | 0.00 0.06 | -1511.91 -798.81 | 477.47 | 20.93 -37.50 | 20.93 | 1.80 1.44 | 0.01 -0.01 | 0.37 |

| CASO: G1+G2+1.4Q+0.84V2+0.84D2 | | | | | | | | | |
|--------------------------------|------------------|----------|------------|------------------|------------|------------------|------------|------------|----------------|
| Elemento | Carga (kgf/m) | Rd Nd | Mxi Mxf | MxMáx (kgf.m) | Myi Myf | MyMáx (kgf.m) | Vxi Vxf | Vyi Vyf | Mtd (kgf/m) |

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| | | (tf) | (kgf.m) | | (kgf.m) | | (tf) | (tf) | |
|----------|--------|---------------|----------------------|---------|-------------------|--------|---------------|---------------|--------|
| VA1 - 1 | 772.50 | 0.00 0.25 | -2147.84 1919.53 | 1919.53 | -71.69 4.50 | 4.50 | 2.84 -1.34 | -0.04 0.04 | -2.60 |
| VA1 - 2 | 772.50 | 0.00 0.25 | 1919.29 615.68 | 1919.29 | 4.50 -99.61 | 0.00 | -0.83 1.65 | 0.10 -0.10 | -3.23 |
| VA1 - 3 | 772.50 | 0.00 0.22 | 616.31 -1580.76 | 616.31 | -99.61 176.45 | 176.45 | -3.56 4.00 | -0.47 0.47 | -2.66 |
| VA1 - 4 | 772.50 | -0.46 0.00 | -2539.38 598.76 | 838.84 | 147.84 -111.95 | 147.84 | 2.28 0.61 | 0.07 -0.07 | 0.89 |
| VA1 - 5 | 772.50 | -0.50 0.00 | 600.46 -1092.50 | 600.46 | -111.95 148.25 | 148.25 | -3.09 3.49 | -0.51 0.51 | -5.90 |
| VA1 - 6 | 772.50 | -0.40 0.00 | -1484.39 -0.49 | 419.24 | 115.94 -61.62 | 115.94 | 1.72 0.81 | 0.05 -0.05 | 2.01 |
| VA2 | 772.50 | 0.00 0.00 | 0.00 0.00 | 376.65 | 0.00 0.00 | 0.00 | 0.77 0.77 | 0.00 0.00 | -3.45 |
| VA3 - 1 | 772.50 | 0.00 0.01 | 0.00 -1558.05 | 1110.32 | 0.00 20.11 | 20.11 | 1.31 2.03 | 0.00 0.00 | 0.72 |
| VA3 - 2 | 772.50 | 0.00 0.00 | -1564.03 5.93 | 5.93 | 71.77 0.00 | 71.77 | 1.61 -0.41 | 0.05 -0.05 | 0.00 |
| VA4 - 1 | 810.00 | -0.06 0.00 | -2452.38 -1365.35 | 681.79 | 86.15 -55.81 | 86.15 | 2.25 1.82 | 0.03 -0.03 | 0.71 |
| VA4 - 2 | 810.00 | 0.00 0.10 | -2079.29 1964.76 | 1964.76 | -84.40 -39.92 | 0.00 | 2.85 -1.26 | -0.02 0.02 | -2.90 |
| VA4 - 3 | 810.00 | 0.00 0.10 | 1964.99 1764.80 | 1964.99 | -39.92 10.45 | 0.00 | -0.51 0.77 | -0.16 0.16 | -2.90 |
| VA4 - 4 | 810.00 | 0.00 0.10 | 1765.14 457.16 | 1765.14 | 10.45 184.81 | 0.00 | -1.48 2.07 | -0.24 0.24 | -2.90 |
| VA4 - 5 | 810.00 | 0.00 0.08 | 456.52 -2243.15 | 456.52 | 184.81 -7.12 | 184.81 | -4.62 5.07 | 0.34 -0.34 | 3.97 |
| VA4 - 6 | 810.00 | -0.19 0.00 | -4154.93 -769.24 | 0.00 | -43.82 -2.76 | 0.00 | 3.77 -2.96 | -0.04 0.04 | 6.29 |
| VA4 - 7 | 810.00 | -0.19 0.00 | -769.05 1182.95 | 1182.95 | -2.76 -1.67 | 0.00 | 2.25 -1.38 | 0.00 0.00 | -0.14 |
| VA4 - 8 | 810.00 | -0.19 0.00 | 1181.97 1158.56 | 1458.18 | -1.67 122.56 | 0.00 | 0.67 0.70 | -0.07 0.07 | -0.14 |
| VA4 - 9 | 810.00 | -0.16 0.00 | 1162.81 -1835.28 | 1162.81 | 122.56 -146.62 | 122.56 | -4.86 5.33 | 0.46 -0.46 | -0.14 |
| VA4 - 10 | 810.00 | -0.28 0.00 | -2069.78 -57.34 | 0.00 | -30.89 9.69 | 9.69 | 2.47 -1.68 | -0.04 0.04 | 1.08 |
| VA4 - 11 | 810.00 | -0.28 0.00 | -51.40 528.07 | 528.07 | 9.69 7.37 | 9.69 | 1.28 -0.83 | 0.00 0.00 | 1.08 |
| VA4 - 12 | 810.00 | -0.31 0.00 | 529.16 -539.74 | 529.66 | 7.37 -56.66 | 7.37 | 0.09 1.32 | 0.04 -0.04 | 1.08 |
| VA4 - 13 | 810.00 | 0.00 0.06 | -1742.08 1025.30 | 1060.89 | -2.76 -43.49 | 0.00 | 2.13 0.25 | 0.01 -0.01 | -1.89 |
| VA5 - 1 | 772.50 | -0.01 0.00 | -899.62 750.05 | 765.34 | -64.25 37.95 | 37.95 | 1.60 0.15 | -0.04 0.04 | -1.82 |
| VA5 - 2 | 772.50 | -0.01 0.00 | 749.72 -1015.78 | 749.72 | 37.95 -1.85 | 37.95 | -0.86 1.86 | 0.03 -0.03 | -1.82 |
| VA5 - 3 | 772.50 | 0.00 0.02 | -2399.02 73.05 | 73.05 | 1.38 1.87 | 1.87 | 2.85 -2.07 | 0.00 0.00 | 1.34 |
| VA5 - 4 | 772.50 | 0.00 0.02 | 72.83 1089.43 | 1089.43 | 1.87 46.93 | 0.00 | 1.36 -0.53 | -0.04 0.04 | 1.34 |
| VA5 - 5 | 772.50 | 0.00 0.02 | 1090.42 -1318.90 | 1090.42 | 46.93 -23.08 | 46.93 | -0.18 1.94 | 0.03 -0.03 | 1.34 |
| VA5 - 6 | 772.50 | 0.00 0.10 | -1758.65 746.16 | 746.16 | 77.33 -54.85 | 77.33 | 2.24 -1.06 | 0.09 -0.09 | -0.31 |
| VA5 - 7 | 772.50 | 0.00 0.13 | 745.08 268.33 | 806.04 | -0.46 -86.49 | 0.00 | 0.31 0.91 | 0.05 -0.05 | -11.25 |
| VA6 - 1 | 772.50 | 0.00 0.07 | 2.89 1142.86 | 1142.86 | 33.23 -3.75 | 33.23 | 1.33 -0.09 | 0.02 -0.02 | 1.77 |
| VA6 - 2 | 772.50 | 0.00 0.07 | 1147.68 -1530.97 | 1147.68 | -3.75 2.45 | 2.45 | -1.15 2.34 | 0.00 0.00 | 1.77 |


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|----------|--------|---------------|----------------------|---------|------------------|--------|---------------|---------------|-------|
| VA7 - 1 | 772.50 | 0.00 0.03 | -1496.82 1213.08 | 1213.08 | -20.04 11.43 | 11.43 | 2.33 -1.12 | -0.02 0.02 | -3.47 |
| VA7 - 2 | 772.50 | 0.00 0.03 | 1208.25 0.00 | 1208.25 | 11.43 0.00 | 11.43 | -0.13 1.37 | 0.01 -0.01 | -3.47 |
| VA8 - 1 | 866.25 | 0.00 0.47 | -4523.24 -5937.64 | 2803.94 | -30.61 7.26 | 7.26 | 3.56 3.89 | 0.00 0.00 | -1.36 |
| VA8 - 2 | 866.25 | 0.00 0.78 | -9402.96 -4982.13 | 4986.78 | 4.95 20.08 | 20.08 | 4.99 4.16 | 0.00 0.00 | 1.08 |
| VA9 - 1 | 810.00 | 0.00 0.11 | -1763.54 -2565.53 | 1263.03 | 60.67 -54.77 | 60.67 | 2.22 2.49 | 0.02 -0.02 | 6.50 |
| VA9 - 2 | 810.00 | 0.00 0.16 | -2702.93 -2622.50 | 1437.56 | -35.05 4.19 | 4.19 | 2.59 2.57 | -0.01 0.01 | -0.20 |
| VA10 - 1 | 810.00 | 0.00 0.09 | -2096.54 -1616.19 | 907.84 | 15.85 -32.37 | 15.85 | 2.21 2.02 | 0.01 -0.01 | -1.42 |
| VA10 - 2 | 810.00 | 0.00 0.05 | -1312.96 -732.88 | 604.71 | -49.62 50.08 | 50.08 | 1.76 1.47 | -0.02 0.02 | -5.66 |
| VA11 - 1 | 772.50 | -0.11 0.00 | -141.50 -31.47 | 275.50 | 68.83 -38.95 | 68.83 | 0.80 0.69 | 0.06 -0.06 | 0.50 |
| VA11 - 2 | 772.50 | -0.72 0.00 | -759.38 136.06 | 672.88 | -1.87 -3.95 | 0.00 | 1.49 0.91 | 0.00 0.00 | -0.31 |
| VA11 - 3 | 772.50 | -0.72 0.00 | 132.62 -1966.62 | 132.62 | -3.95 -7.40 | 0.00 | -1.68 2.46 | 0.00 0.00 | -0.31 |
| VA12 - 1 | 772.50 | -0.14 0.00 | 0.00 1751.33 | 2025.34 | 0.00 -2.04 | 0.00 | 1.77 0.65 | 0.00 0.00 | -0.24 |
| VA12 - 2 | 772.50 | -0.14 0.00 | 1754.77 0.00 | 1754.77 | -2.04 0.00 | 0.00 | -1.42 2.17 | 0.00 0.00 | -0.24 |
| VA13 | 735.00 | 0.00 0.08 | 0.00 0.00 | 338.60 | 0.00 0.00 | 0.00 | 0.71 0.71 | 0.00 0.00 | 0.34 |
| VA14 - 1 | 772.50 | 0.00 0.58 | 0.00 2242.88 | 2242.88 | 0.00 -10.99 | 0.00 | 2.54 -1.73 | 0.01 -0.01 | 0.62 |
| VA14 - 2 | 772.50 | 0.00 0.57 | 2243.61 0.00 | 2356.85 | -10.99 0.00 | 0.00 | 0.42 1.91 | 0.00 0.00 | 0.62 |
| VA15 | 735.00 | -0.04 0.00 | 0.00 0.00 | 338.60 | 0.00 0.00 | 0.00 | 0.71 0.71 | 0.00 0.00 | 0.22 |
| VA16 | 735.00 | 0.00 0.07 | 0.00 0.00 | 338.60 | 0.00 0.00 | 0.00 | 0.71 0.71 | 0.00 0.00 | -0.98 |
| VA17 - 1 | 772.50 | 0.00 0.53 | 0.00 3941.70 | 3941.70 | 0.00 24.76 | 24.76 | 4.16 -3.35 | -0.02 0.02 | -4.25 |
| VA17 - 2 | 772.50 | 0.00 0.58 | 3940.98 0.00 | 3940.98 | -26.90 0.00 | 0.00 | -0.29 2.48 | -0.01 0.01 | 1.73 |
| VA18 | 772.50 | 0.00 0.26 | -665.12 482.05 | 496.93 | -87.40 121.93 | 121.93 | 1.34 0.15 | -0.11 0.11 | 0.89 |
| VA19 | 772.50 | 0.00 0.05 | 0.00 0.00 | 102.16 | 0.00 0.00 | 0.00 | 0.41 0.41 | 0.00 0.00 | -5.93 |
| VA20 | 772.50 | -0.03 0.00 | -10.94 0.00 | 351.01 | -54.40 0.00 | 0.00 | 0.75 0.74 | -0.03 0.03 | 1.08 |
| VA21 - 1 | 772.50 | 0.00 0.20 | -1661.73 2601.62 | 2601.62 | 19.42 -34.05 | 19.42 | 2.57 -0.09 | 0.02 -0.02 | 2.76 |
| VA21 - 2 | 772.50 | 0.00 0.22 | 2603.39 -1738.47 | 2603.39 | -67.28 50.02 | 50.02 | -1.24 2.87 | -0.06 0.06 | -0.13 |
| VA22 | 772.50 | 0.00 0.15 | -283.20 -889.23 | 716.64 | -57.17 81.75 | 81.75 | 1.24 1.58 | -0.04 0.04 | 0.22 |
| VA23 | 772.50 | 0.00 0.03 | 0.00 0.00 | 1006.68 | 0.00 0.00 | 0.00 | 1.25 1.25 | 0.00 0.00 | 4.83 |
| VA24 - 1 | 810.00 | 0.00 0.13 | -1705.62 -2626.88 | 1263.37 | -32.10 13.72 | 13.72 | 2.19 2.51 | -0.01 0.01 | -0.81 |
| VA24 - 2 | 810.00 | 0.00 0.21 | -2611.90 -2859.45 | 1367.30 | -6.43 -12.69 | 0.00 | 2.54 2.62 | 0.00 0.00 | -0.28 |
| VA25 - 1 | 810.00 | 0.00 0.19 | -2925.69 1562.26 | 1562.26 | 5.89 29.64 | 29.64 | 3.12 -1.57 | -0.01 0.01 | 0.51 |
| VA25 - 2 | 810.00 | 0.00 0.19 | 1565.73 -2216.28 | 1589.19 | 29.64 -18.52 | 29.64 | 0.20 2.48 | 0.01 -0.01 | 0.51 |
| VA25 - 3 | 810.00 | 0.00 | -1546.95 | 529.19 | -25.35 | 0.00 | 1.83 | 0.00 | -2.33 |

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| | | 0.08 | -684.00 | | -6.46 | | 1.40 | 0.00 | |
|--|--|------|---------|--|-------|--|------|------|--|

| CASO: G1+G2+1.4Q+0.84V3+0.84D3 | | | | | | | | | |
|--------------------------------|------------------|------------------|-----------------------|------------------|-----------------------|------------------|--------------------|--------------------|----------------|
| Elemento | Carga (kgf/m) | Rd Nd (tf) | Mxi Mxf (kgf.m) | MxMáx (kgf.m) | Myi Myf (kgf.m) | MyMáx (kgf.m) | Vxi Vxf (tf) | Vyi Vyf (tf) | Mtd (kgf/m) |
| VA1 - 1 | 772.50 | 0.00 0.27 | -1412.65 1926.90 | 1926.90 | -39.02 0.79 | 0.79 | 2.47 -0.96 | -0.02 0.02 | -0.96 |
| VA1 - 2 | 772.50 | 0.00 0.28 | 1926.75 230.01 | 1926.75 | 0.79 -160.61 | 0.00 | -1.21 2.02 | 0.15 -0.15 | -1.60 |
| VA1 - 3 | 772.50 | 0.00 0.25 | 230.85 -2183.69 | 230.85 | -160.61 156.16 | 156.16 | -3.93 4.38 | -0.54 0.54 | -1.41 |
| VA1 - 4 | 772.50 | -0.46 0.00 | -2118.00 289.75 | 709.03 | 131.34 -91.10 | 131.34 | 2.09 0.80 | 0.06 -0.06 | -0.29 |
| VA1 - 5 | 772.50 | -0.49 0.00 | 291.25 -1501.88 | 291.25 | -91.10 133.10 | 133.10 | -3.29 3.69 | -0.44 0.44 | -3.62 |
| VA1 - 6 | 772.50 | -0.44 0.00 | -835.37 -793.45 | 213.60 | 109.26 -55.96 | 109.26 | 1.27 1.25 | 0.05 -0.05 | 0.68 |
| VA2 | 772.50 | 0.00 0.00 | 0.00 0.00 | 376.65 | 0.00 0.00 | 0.00 | 0.77 0.77 | 0.00 0.00 | -3.63 |
| VA3 - 1 | 772.50 | 0.00 0.01 | 0.00 -1556.71 | 1110.83 | 0.00 27.94 | 27.94 | 1.31 2.03 | -0.01 0.01 | 0.62 |
| VA3 - 2 | 772.50 | 0.00 0.00 | -1563.30 6.66 | 6.66 | 56.48 0.00 | 56.48 | 1.61 -0.41 | 0.04 -0.04 | 0.00 |
| VA4 - 1 | 810.00 | 0.00 0.08 | -1557.34 -1702.63 | 931.16 | 52.06 -50.17 | 52.06 | 2.01 2.07 | 0.02 -0.02 | 0.29 |
| VA4 - 2 | 810.00 | 0.00 0.16 | -1815.58 1631.95 | 1631.95 | -33.43 -57.65 | 0.00 | 2.55 -0.95 | 0.01 -0.01 | 2.83 |
| VA4 - 3 | 810.00 | 0.00 0.16 | 1632.11 1337.11 | 1632.11 | -57.65 -6.93 | 0.00 | -0.82 1.07 | -0.16 0.16 | 2.83 |
| VA4 - 4 | 810.00 | 0.00 0.16 | 1337.25 -193.95 | 1337.25 | -6.93 179.66 | 179.66 | -1.78 2.38 | -0.25 0.25 | 2.83 |
| VA4 - 5 | 810.00 | 0.00 0.15 | -194.81 -3063.53 | 0.00 | 179.66 -74.09 | 179.66 | -4.92 5.37 | 0.46 -0.46 | -0.11 |
| VA4 - 6 | 810.00 | -0.12 0.00 | -3439.60 -295.71 | 0.00 | -82.86 -37.51 | 0.00 | 3.53 -2.72 | -0.05 0.05 | 0.10 |
| VA4 - 7 | 810.00 | -0.12 0.00 | -295.62 1397.69 | 1397.69 | -37.51 -4.91 | 0.00 | 2.01 -1.14 | -0.03 0.03 | -2.37 |
| VA4 - 8 | 810.00 | -0.12 0.00 | 1396.64 967.70 | 1505.71 | -4.91 133.74 | 0.00 | 0.43 0.94 | -0.08 0.08 | -2.37 |
| VA4 - 9 | 810.00 | -0.11 0.00 | 972.76 -2166.69 | 972.76 | 133.74 -87.86 | 133.74 | -5.10 5.57 | 0.38 -0.38 | -2.37 |
| VA4 - 10 | 810.00 | -0.21 0.00 | -1828.18 -28.75 | 0.00 | -23.76 16.45 | 16.45 | 2.25 -1.46 | -0.04 0.04 | 1.38 |
| VA4 - 11 | 810.00 | -0.21 0.00 | -22.08 436.62 | 436.62 | 16.45 19.32 | 19.32 | 1.06 -0.61 | -0.01 0.01 | 1.38 |
| VA4 - 12 | 810.00 | -0.22 0.00 | 437.73 -1016.09 | 437.73 | 19.32 -67.10 | 19.32 | -0.13 1.54 | 0.05 -0.05 | 1.38 |
| VA4 - 13 | 810.00 | 0.00 0.00 | -715.34 -382.55 | 336.11 | -19.16 -37.50 | 0.00 | 1.31 1.08 | 0.01 -0.01 | -1.82 |
| VA5 - 1 | 772.50 | 0.00 0.02 | -422.46 565.82 | 692.91 | -36.28 32.55 | 32.55 | 1.31 0.44 | -0.03 0.03 | 1.13 |
| VA5 - 2 | 772.50 | 0.00 0.02 | 565.69 -1576.12 | 565.69 | 32.55 -46.27 | 32.55 | -1.15 2.15 | 0.06 -0.06 | 1.13 |
| VA5 - 3 | 772.50 | 0.00 0.04 | -1987.38 328.02 | 328.02 | -45.17 -15.35 | 0.00 | 2.69 -1.91 | -0.03 0.03 | -1.25 |
| VA5 - 4 | 772.50 | 0.00 0.04 | 327.94 1176.93 | 1176.93 | -15.35 33.56 | 0.00 | 1.20 -0.37 | -0.05 0.05 | -1.25 |
| VA5 - 5 | 772.50 | 0.00 0.04 | 1177.98 -1585.84 | 1177.98 | 33.56 18.91 | 33.56 | -0.34 2.09 | 0.01 -0.01 | -1.25 |
| VA5 - 6 | 772.50 | 0.00 0.06 | -1486.23 675.29 | 675.29 | 66.11 -45.06 | 66.11 | 2.01 -0.84 | 0.07 -0.07 | -1.17 |

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|----------|--------|---------------|----------------------|---------|------------------|-------|---------------|---------------|-------|
| VA5 - 7 | 772.50 | 0.00 0.08 | 674.18 -157.27 | 674.18 | -11.55 -40.45 | 0.00 | 0.09 1.14 | 0.02 -0.02 | -8.97 |
| VA6 - 1 | 772.50 | 0.00 0.04 | 6.69 656.42 | 683.59 | -16.56 -14.21 | 0.00 | 1.02 0.21 | 0.00 0.00 | 2.30 |
| VA6 - 2 | 772.50 | 0.00 0.04 | 661.21 -2486.85 | 661.21 | -14.21 32.56 | 32.56 | -1.46 2.64 | -0.03 0.03 | 2.30 |
| VA7 - 1 | 772.50 | -0.06 0.00 | -844.22 1543.18 | 1543.18 | -41.74 1.96 | 1.96 | 2.13 -0.91 | -0.03 0.03 | -4.02 |
| VA7 - 2 | 772.50 | -0.06 0.00 | 1538.39 0.00 | 1538.39 | 1.96 0.00 | 1.96 | -0.33 1.58 | 0.00 0.00 | -4.02 |
| VA8 - 1 | 866.25 | 0.00 0.51 | -3659.59 -6663.80 | 2926.77 | -2.37 -9.80 | 0.00 | 3.38 4.08 | 0.00 0.00 | 0.61 |
| VA8 - 2 | 866.25 | 0.00 0.75 | -8823.44 -5712.28 | 4861.09 | -4.07 1.88 | 1.88 | 4.87 4.28 | 0.00 0.00 | -0.40 |
| VA9 - 1 | 810.00 | 0.00 0.17 | -1179.41 -3079.71 | 1350.46 | 3.55 -6.89 | 3.55 | 2.03 2.68 | 0.00 0.00 | 2.99 |
| VA9 - 2 | 810.00 | 0.00 0.21 | -2331.61 -3017.09 | 1435.69 | -25.72 23.19 | 23.19 | 2.47 2.69 | -0.01 0.01 | -0.15 |
| VA10 - 1 | 810.00 | 0.00 0.12 | -1656.97 -2020.72 | 923.23 | 6.97 -27.17 | 6.97 | 2.05 2.18 | 0.01 -0.01 | 0.33 |
| VA10 - 2 | 810.00 | 0.00 0.04 | -741.40 -1408.92 | 554.77 | -64.05 84.43 | 84.43 | 1.45 1.79 | -0.04 0.04 | -3.47 |
| VA11 - 1 | 772.50 | -0.15 0.00 | 566.14 -409.69 | 600.06 | 40.01 -14.52 | 40.01 | 0.24 1.25 | 0.03 -0.03 | 1.56 |
| VA11 - 2 | 772.50 | -0.79 0.00 | -244.04 -459.73 | 583.44 | -18.24 4.60 | 4.60 | 1.13 1.27 | -0.01 0.01 | -1.28 |
| VA11 - 3 | 772.50 | -0.79 0.00 | -463.36 -2925.06 | 0.00 | 4.60 14.22 | 14.22 | -2.04 2.82 | -0.01 0.01 | -1.28 |
| VA12 - 1 | 772.50 | -0.17 0.00 | 0.00 1751.18 | 2025.24 | 0.00 1.59 | 1.59 | 1.77 0.65 | 0.00 0.00 | -0.15 |
| VA12 - 2 | 772.50 | -0.17 0.00 | 1754.82 0.00 | 1754.82 | 1.59 0.00 | 1.59 | -1.42 2.17 | 0.00 0.00 | -0.15 |
| VA13 | 735.00 | 0.00 0.09 | 0.00 0.00 | 338.60 | 0.00 0.00 | 0.00 | 0.71 0.71 | 0.00 0.00 | 0.14 |
| VA14 - 1 | 772.50 | 0.00 0.71 | 0.00 2243.15 | 2243.15 | 0.00 -6.52 | 0.00 | 2.54 -1.73 | 0.01 -0.01 | 0.83 |
| VA14 - 2 | 772.50 | 0.00 0.70 | 2243.77 0.00 | 2356.98 | -6.52 0.00 | 0.00 | 0.42 1.91 | 0.00 0.00 | 0.83 |
| VA15 | 735.00 | -0.02 0.00 | 0.00 0.00 | 338.60 | 0.00 0.00 | 0.00 | 0.71 0.71 | 0.00 0.00 | 0.08 |
| VA16 | 735.00 | 0.00 0.05 | 0.00 0.00 | 338.60 | 0.00 0.00 | 0.00 | 0.71 0.71 | 0.00 0.00 | -1.05 |
| VA17 - 1 | 772.50 | 0.00 0.46 | 0.00 3941.43 | 3941.43 | 0.00 14.12 | 14.12 | 4.16 -3.35 | -0.01 0.01 | -5.06 |
| VA17 - 2 | 772.50 | 0.00 0.50 | 3940.82 0.00 | 3940.82 | -14.42 0.00 | 0.00 | -0.29 2.48 | -0.01 0.01 | 1.53 |
| VA18 | 772.50 | 0.00 0.22 | -37.05 -145.63 | 270.56 | -41.57 67.91 | 67.91 | 0.69 0.80 | -0.06 0.06 | 1.18 |
| VA19 | 772.50 | 0.00 0.04 | 0.00 0.00 | 102.16 | 0.00 0.00 | 0.00 | 0.41 0.41 | 0.00 0.00 | -6.66 |
| VA20 | 772.50 | -0.05 0.00 | -7.80 0.00 | 352.40 | -33.51 0.00 | 0.00 | 0.75 0.74 | -0.02 0.02 | 1.11 |
| VA21 - 1 | 772.50 | 0.00 0.16 | -1136.64 2241.49 | 2263.38 | 39.94 -44.81 | 39.94 | 2.29 0.19 | 0.03 -0.03 | 4.83 |
| VA21 - 2 | 772.50 | 0.00 0.16 | 2243.78 -2034.35 | 2243.78 | -28.25 7.29 | 7.29 | -1.21 2.84 | -0.02 0.02 | -1.86 |
| VA22 | 772.50 | 0.00 0.12 | 416.18 -1726.68 | 852.15 | -47.77 70.62 | 70.62 | 0.82 2.00 | -0.03 0.03 | -0.31 |
| VA23 | 772.50 | 0.00 0.03 | 0.00 0.00 | 1006.68 | 0.00 0.00 | 0.00 | 1.25 1.25 | 0.00 0.00 | 4.79 |
| VA24 - 1 | 810.00 | 0.00 0.18 | -1013.26 -3227.24 | 1386.81 | -27.01 17.18 | 17.18 | 1.97 2.73 | -0.01 0.01 | -4.24 |
| VA24 - 2 | 810.00 | 0.00 | -2085.47 | 1391.53 | 12.10 | 14.02 | 2.37 | 0.00 | -0.14 |

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|----------|--------|--------------|---------------------|---------|------------------|-------|---------------|---------------|-------|
| | | 0.21 | -3387.08 | | 14.02 | | 2.78 | 0.00 | |
| VA25 - 1 | 810.00 | 0.00 0.22 | -2461.44 1870.70 | 1870.70 | 76.44 -28.58 | 76.44 | 3.04 -1.49 | 0.05 -0.05 | 3.16 |
| VA25 - 2 | 810.00 | 0.00 0.22 | 1874.72 -2855.74 | 1874.72 | -28.58 -25.22 | 0.00 | -0.09 2.77 | 0.00 0.00 | 3.16 |
| VA25 - 3 | 810.00 | 0.00 0.05 | -820.92 -1568.06 | 441.03 | 35.86 -71.87 | 35.86 | 1.43 1.81 | 0.03 -0.03 | -1.13 |

| CASO: G1+G2+1.4Q+0.84V4+0.84D4 | | | | | | | | | |
|--------------------------------|------------------|------------------|-----------------------|------------------|-----------------------|------------------|--------------------|--------------------|----------------|
| Elemento | Carga (kgf/m) | Rd Nd (tf) | Mxi Mxf (kgf.m) | MxMáx (kgf.m) | Myi Myf (kgf.m) | MyMáx (kgf.m) | Vxi Vxf (tf) | Vyi Vyf (tf) | Mtd (kgf/m) |
| VA1 - 1 | 772.50 | 0.00 0.29 | -1549.30 1914.89 | 1914.89 | -109.40 8.23 | 8.23 | 2.53 -1.03 | -0.06 0.06 | -4.08 |
| VA1 - 2 | 772.50 | 0.00 0.28 | 1914.91 285.73 | 1914.91 | 8.23 -36.80 | 0.00 | -1.14 1.96 | 0.04 -0.04 | -4.72 |
| VA1 - 3 | 772.50 | 0.00 0.26 | 286.80 -2090.39 | 286.80 | -36.80 194.03 | 194.03 | -3.86 4.31 | -0.40 0.40 | -4.48 |
| VA1 - 4 | 772.50 | -0.44 0.00 | -2203.52 345.42 | 725.48 | 162.95 -130.13 | 162.95 | 2.13 0.77 | 0.08 -0.08 | 1.27 |
| VA1 - 5 | 772.50 | -0.48 0.00 | 347.16 -1426.60 | 347.16 | -130.13 159.33 | 159.33 | -3.25 3.65 | -0.56 0.56 | -2.68 |
| VA1 - 6 | 772.50 | -0.41 0.00 | -974.64 -596.25 | 250.15 | 121.53 -64.88 | 121.53 | 1.38 1.14 | 0.06 -0.06 | 3.47 |
| VA2 | 772.50 | -0.01 0.00 | 0.00 0.00 | 376.65 | 0.00 0.00 | 0.00 | 0.77 0.77 | 0.00 0.00 | -2.72 |
| VA3 - 1 | 772.50 | 0.00 0.02 | 0.00 -1556.67 | 1110.85 | 0.00 13.92 | 13.92 | 1.31 2.03 | 0.00 0.00 | 0.65 |
| VA3 - 2 | 772.50 | 0.00 0.00 | -1563.50 6.46 | 6.46 | 82.18 0.00 | 82.18 | 1.61 -0.41 | 0.05 -0.05 | 0.00 |
| VA4 - 1 | 810.00 | 0.00 0.14 | -1521.20 -1727.66 | 937.93 | 80.10 -40.55 | 80.10 | 2.00 2.08 | 0.02 -0.02 | 1.09 |
| VA4 - 2 | 810.00 | 0.00 0.27 | -1834.46 1642.52 | 1642.52 | -135.02 -23.73 | 0.00 | 2.56 -0.97 | -0.06 0.06 | -5.77 |
| VA4 - 3 | 810.00 | 0.00 0.27 | 1642.49 1352.11 | 1642.49 | -23.73 26.28 | 0.00 | -0.80 1.05 | -0.16 0.16 | -5.77 |
| VA4 - 4 | 810.00 | 0.00 0.27 | 1352.19 -168.16 | 1352.19 | 26.28 189.07 | 189.07 | -1.76 2.36 | -0.22 0.22 | -5.77 |
| VA4 - 5 | 810.00 | 0.00 0.25 | -169.12 -3029.62 | 0.00 | 189.07 62.54 | 189.07 | -4.90 5.36 | 0.23 -0.23 | -8.32 |
| VA4 - 6 | 810.00 | -0.02 0.00 | -3396.95 -271.15 | 0.00 | -4.96 31.62 | 31.62 | 3.52 -2.70 | -0.04 0.04 | 6.30 |
| VA4 - 7 | 810.00 | -0.02 0.00 | -271.04 1402.91 | 1402.91 | 31.62 3.79 | 31.62 | 1.99 -1.12 | 0.03 -0.03 | 4.03 |
| VA4 - 8 | 810.00 | -0.02 0.00 | 1401.93 942.65 | 1503.04 | 3.79 110.94 | 0.00 | 0.41 0.96 | -0.06 0.06 | 4.03 |
| VA4 - 9 | 810.00 | 0.00 0.02 | 947.72 -2202.31 | 947.72 | 110.94 -199.84 | 110.94 | -5.12 5.59 | 0.53 -0.53 | 4.03 |
| VA4 - 10 | 810.00 | -0.16 0.00 | -1901.20 -60.08 | 0.00 | -53.81 5.53 | 5.53 | 2.29 -1.51 | -0.06 0.06 | 0.83 |
| VA4 - 11 | 810.00 | -0.16 0.00 | -53.62 428.71 | 428.71 | 5.53 10.17 | 10.17 | 1.10 -0.65 | -0.01 0.01 | 0.83 |
| VA4 - 12 | 810.00 | -0.19 0.00 | 429.57 -945.62 | 429.57 | 10.17 -58.08 | 10.17 | -0.09 1.50 | 0.04 -0.04 | 0.83 |
| VA4 - 13 | 810.00 | 0.00 0.05 | -681.06 -381.91 | 351.17 | -6.27 -1.96 | 0.00 | 1.29 1.09 | 0.00 0.00 | -1.87 |
| VA5 - 1 | 772.50 | -0.05 0.00 | -401.61 543.41 | 682.29 | -106.70 44.37 | 44.37 | 1.29 0.46 | -0.07 0.07 | -4.89 |
| VA5 - 2 | 772.50 | -0.05 0.00 | 543.33 -1623.10 | 543.33 | 44.37 51.19 | 51.19 | -1.17 2.17 | -0.01 0.01 | -4.89 |
| VA5 - 3 | 772.50 | -0.03 0.00 | -1975.51 336.66 | 336.66 | 43.34 18.69 | 43.34 | 2.69 -1.91 | 0.02 -0.02 | 4.00 |


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|----------|--------|---------------|----------------------|---------|-------------------|--------|---------------|---------------|--------|
| VA5 - 4 | 772.50 | -0.03 0.00 | 336.51 1182.04 | 1182.04 | 18.69 59.44 | 0.00 | 1.20 -0.37 | -0.04 0.04 | 4.00 |
| VA5 - 5 | 772.50 | -0.03 0.00 | 1183.02 -1588.10 | 1183.02 | 59.44 -57.80 | 59.44 | -0.34 2.10 | 0.05 -0.05 | 4.00 |
| VA5 - 6 | 772.50 | 0.00 0.07 | -1420.59 682.16 | 682.16 | 68.90 -55.56 | 68.90 | 1.97 -0.80 | 0.08 -0.08 | 0.55 |
| VA5 - 7 | 772.50 | 0.00 0.10 | 681.30 -214.83 | 681.30 | 0.40 -53.75 | 0.40 | 0.04 1.18 | 0.03 -0.03 | -11.55 |
| VA6 - 1 | 772.50 | 0.00 0.04 | 7.26 576.04 | 619.66 | 15.67 -6.91 | 15.67 | 0.97 0.26 | 0.01 -0.01 | 0.81 |
| VA6 - 2 | 772.50 | 0.00 0.04 | 580.74 -2644.82 | 580.74 | -6.91 16.45 | 16.45 | -1.51 2.70 | -0.02 0.02 | 0.81 |
| VA7 - 1 | 772.50 | -0.06 0.00 | -715.69 1608.15 | 1608.15 | -27.68 9.32 | 9.32 | 2.09 -0.87 | -0.02 0.02 | -2.23 |
| VA7 - 2 | 772.50 | -0.06 0.00 | 1603.45 0.00 | 1603.45 | 9.32 0.00 | 9.32 | -0.38 1.62 | 0.01 -0.01 | -2.23 |
| VA8 - 1 | 866.25 | 0.00 0.47 | -3706.32 -6605.42 | 2928.48 | -7.50 13.11 | 13.11 | 3.39 4.06 | 0.00 0.00 | -3.36 |
| VA8 - 2 | 866.25 | 0.00 0.71 | -8792.37 -5725.33 | 4868.41 | 26.46 -7.69 | 26.46 | 4.87 4.28 | 0.00 0.00 | 2.73 |
| VA9 - 1 | 810.00 | 0.00 0.08 | -2311.78 -2090.65 | 1216.34 | 66.36 -50.02 | 66.36 | 2.39 2.31 | 0.02 -0.02 | 2.91 |
| VA9 - 2 | 810.00 | 0.00 0.14 | -3116.63 -2220.25 | 1445.00 | -2.47 -5.47 | 0.00 | 2.72 2.44 | 0.00 0.00 | -0.38 |
| VA10 - 1 | 810.00 | 0.00 0.08 | -2568.51 -1192.20 | 922.21 | 36.91 -34.15 | 36.91 | 2.38 1.85 | 0.01 -0.01 | 0.50 |
| VA10 - 2 | 810.00 | 0.00 0.07 | -1926.06 -0.55 | 794.93 | -16.05 -30.14 | 0.00 | 2.10 1.14 | 0.00 0.00 | -3.22 |
| VA11 - 1 | 772.50 | -0.08 0.00 | -871.50 383.33 | 386.25 | 99.79 -76.00 | 99.79 | 1.40 0.10 | 0.09 -0.09 | 1.49 |
| VA11 - 2 | 772.50 | -0.64 0.00 | -1261.00 736.05 | 933.30 | 19.53 -14.09 | 19.53 | 1.84 0.56 | 0.01 -0.01 | -0.97 |
| VA11 - 3 | 772.50 | -0.64 0.00 | 733.33 -1006.56 | 733.33 | -14.09 -32.04 | 0.00 | -1.33 2.11 | 0.02 -0.02 | -0.97 |
| VA12 - 1 | 772.50 | -0.10 0.00 | 0.00 1751.88 | 2025.74 | 0.00 -5.13 | 0.00 | 1.77 0.65 | 0.00 0.00 | 0.02 |
| VA12 - 2 | 772.50 | -0.10 0.00 | 1754.60 0.00 | 1754.60 | -5.13 0.00 | 0.00 | -1.42 2.17 | -0.01 0.01 | 0.02 |
| VA13 | 735.00 | 0.00 0.06 | 0.00 0.00 | 338.60 | 0.00 0.00 | 0.00 | 0.71 0.71 | 0.00 0.00 | 0.08 |
| VA14 - 1 | 772.50 | 0.00 0.44 | 0.00 2243.15 | 2243.15 | 0.00 -14.73 | 0.00 | 2.54 -1.73 | 0.01 -0.01 | 1.06 |
| VA14 - 2 | 772.50 | 0.00 0.44 | 2243.80 0.00 | 2357.00 | -14.73 0.00 | 0.00 | 0.42 1.91 | 0.00 0.00 | 1.06 |
| VA15 | 735.00 | -0.06 0.00 | 0.00 0.00 | 338.60 | 0.00 0.00 | 0.00 | 0.71 0.71 | 0.00 0.00 | 0.15 |
| VA16 | 735.00 | 0.00 0.09 | 0.00 0.00 | 338.60 | 0.00 0.00 | 0.00 | 0.71 0.71 | 0.00 0.00 | -0.98 |
| VA17 - 1 | 772.50 | 0.00 0.59 | 0.00 3941.43 | 3941.43 | 0.00 32.92 | 32.92 | 4.16 -3.35 | -0.03 0.03 | -5.07 |
| VA17 - 2 | 772.50 | 0.00 0.65 | 3940.79 0.00 | 3940.79 | -35.35 0.00 | 0.00 | -0.29 2.48 | -0.01 0.01 | 1.75 |
| VA18 | 772.50 | 0.00 0.29 | -1318.96 1140.60 | 1140.60 | -116.81 155.65 | 155.65 | 2.02 -0.53 | -0.14 0.14 | 1.20 |
| VA19 | 772.50 | 0.00 0.05 | 0.00 0.00 | 102.16 | 0.00 0.00 | 0.00 | 0.41 0.41 | 0.00 0.00 | -6.46 |
| VA20 | 772.50 | -0.05 0.00 | -12.09 0.00 | 350.50 | -55.96 0.00 | 0.00 | 0.75 0.74 | -0.03 0.03 | 0.86 |
| VA21 - 1 | 772.50 | 0.00 0.16 | -1962.10 2372.18 | 2372.18 | 12.64 -23.78 | 12.64 | 2.59 -0.11 | 0.01 -0.01 | 5.13 |
| VA21 - 2 | 772.50 | 0.00 0.17 | 2372.99 -1169.34 | 2372.99 | -39.45 25.17 | 25.17 | -0.86 2.49 | -0.03 0.03 | -2.13 |
| VA22 | 772.50 | 0.00 | -1000.49 | 802.95 | -64.05 | 90.84 | 1.67 | -0.04 | -0.02 |


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| | | 0.16 | -48.37 | | 90.84 | | 1.15 | 0.04 | |
| VA23 | 772.50 | 0.00 0.03 | 0.00 0.00 | 1006.68 | 0.00 0.00 | 0.00 | 1.25 1.25 | 0.00 0.00 | 4.70 |
| VA24 - 1 | 810.00 | 0.00 0.07 | -2341.12 -2065.95 | 1214.95 | -79.88 49.88 | 49.88 | 2.40 2.31 | -0.02 0.02 | -4.33 |
| VA24 - 2 | 810.00 | 0.00 0.14 | -3009.25 -2455.38 | 1375.60 | -3.96 31.03 | 31.03 | 2.67 2.49 | -0.01 0.01 | -0.42 |
| VA25 - 1 | 810.00 | 0.00 0.18 | -3556.62 1583.71 | 1583.71 | 60.66 -35.11 | 60.66 | 3.46 -1.91 | 0.05 -0.05 | 3.37 |
| VA25 - 2 | 810.00 | 0.00 0.18 | 1585.94 -1881.12 | 1637.59 | -35.11 12.74 | 12.74 | 0.29 2.39 | -0.01 0.01 | 3.37 |
| VA25 - 3 | 810.00 | 0.00 0.08 | -2237.93 85.25 | 749.00 | -40.28 27.91 | 27.91 | 2.20 1.04 | -0.02 0.02 | -0.83 |

| CASO: G1+G2+1.4Q+1.2D1 | | | | | | | | | |
|------------------------|------------------|------------------|-----------------------|------------------|-----------------------|------------------|--------------------|--------------------|----------------|
| Elemento | Carga (kgf/m) | Rd Nd (tf) | Mxi Mxf (kgf.m) | MxMáx (kgf.m) | Myi Myf (kgf.m) | MyMáx (kgf.m) | Vxi Vxf (tf) | Vyi Vyf (tf) | Mtd (kgf/m) |
| VA1 - 1 | 772.50 | 0.00 0.29 | -1295.06 1921.39 | 1921.39 | -74.37 4.82 | 4.82 | 2.40 -0.90 | -0.04 0.04 | -2.50 |
| VA1 - 2 | 772.50 | 0.00 0.29 | 1921.37 158.29 | 1921.37 | 4.82 -99.28 | 0.00 | -1.27 2.08 | 0.10 -0.10 | -3.14 |
| VA1 - 3 | 772.50 | 0.00 0.27 | 159.33 -2291.92 | 159.33 | -99.28 174.16 | 174.16 | -3.99 4.44 | -0.47 0.47 | -3.02 |
| VA1 - 4 | 772.50 | -0.44 0.00 | -2055.26 239.26 | 689.99 | 147.19 -110.73 | 147.19 | 2.06 0.84 | 0.07 -0.07 | 0.35 |
| VA1 - 5 | 772.50 | -0.48 0.00 | 240.86 -1567.80 | 240.86 | -110.73 145.71 | 145.71 | -3.32 3.72 | -0.50 0.50 | -2.41 |
| VA1 - 6 | 772.50 | -0.42 0.00 | -743.94 -887.68 | 212.19 | 116.03 -60.79 | 116.03 | 1.22 1.30 | 0.05 -0.05 | 2.07 |
| VA2 | 772.50 | 0.00 0.00 | 0.00 0.00 | 376.65 | 0.00 0.00 | 0.00 | 0.77 0.77 | 0.00 0.00 | -3.12 |
| VA3 - 1 | 772.50 | 0.00 0.01 | 0.00 -1556.34 | 1110.97 | 0.00 21.03 | 21.03 | 1.31 2.03 | 0.00 0.00 | 0.61 |
| VA3 - 2 | 772.50 | 0.00 0.00 | -1563.24 6.72 | 6.72 | 68.17 0.00 | 68.17 | 1.61 -0.41 | 0.04 -0.04 | 0.00 |
| VA4 - 1 | 810.00 | 0.00 0.14 | -1303.38 -1805.42 | 1013.88 | 62.73 -44.66 | 62.73 | 1.94 2.14 | 0.02 -0.02 | 0.69 |
| VA4 - 2 | 810.00 | 0.00 0.24 | -1759.00 1552.37 | 1552.37 | -83.01 -40.86 | 0.00 | 2.48 -0.88 | -0.02 0.02 | -1.06 |
| VA4 - 3 | 810.00 | 0.00 0.24 | 1552.39 1235.72 | 1552.39 | -40.86 9.62 | 0.00 | -0.88 1.14 | -0.16 0.16 | -1.06 |
| VA4 - 4 | 810.00 | 0.00 0.24 | 1235.77 -346.49 | 1235.77 | 9.62 183.76 | 183.76 | -1.85 2.45 | -0.24 0.24 | -1.06 |
| VA4 - 5 | 810.00 | 0.00 0.23 | -347.46 -3254.85 | 0.00 | 183.76 -7.18 | 183.76 | -4.99 5.44 | 0.34 -0.34 | -6.29 |
| VA4 - 6 | 810.00 | -0.03 0.00 | -3227.54 -157.67 | 0.00 | -43.57 -2.98 | 0.00 | 3.46 -2.65 | -0.04 0.04 | 2.36 |
| VA4 - 7 | 810.00 | -0.03 0.00 | -157.60 1456.51 | 1456.51 | -2.98 -0.68 | 0.00 | 1.94 -1.06 | 0.00 0.00 | 1.04 |
| VA4 - 8 | 810.00 | -0.03 0.00 | 1455.49 902.40 | 1533.16 | -0.68 121.97 | 0.00 | 0.35 1.01 | -0.07 0.07 | 1.04 |
| VA4 - 9 | 810.00 | -0.01 0.00 | 907.68 -2275.05 | 907.68 | 121.97 -144.25 | 121.97 | -5.17 5.65 | 0.45 -0.45 | 1.04 |
| VA4 - 10 | 810.00 | -0.14 0.00 | -1811.84 -41.12 | 0.00 | -38.97 11.67 | 11.67 | 2.22 -1.43 | -0.05 0.05 | 1.10 |
| VA4 - 11 | 810.00 | -0.14 0.00 | -34.40 408.02 | 408.02 | 11.67 16.33 | 16.33 | 1.03 -0.58 | -0.01 0.01 | 1.10 |
| VA4 - 12 | 810.00 | -0.17 0.00 | 408.99 -1094.61 | 408.99 | 16.33 -63.56 | 16.33 | -0.16 1.57 | 0.05 -0.05 | 1.10 |
| VA4 - 13 | 810.00 | 0.00 0.03 | -428.16 -745.77 | 297.00 | -13.91 -15.01 | 0.00 | 1.09 1.30 | 0.00 0.00 | -1.83 |


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|----------|--------|---------------|----------------------|---------|------------------|--------|---------------|---------------|--------|
| VA5 - 1 | 772.50 | -0.02 0.00 | -306.34 512.35 | 685.69 | -70.13 37.97 | 37.97 | 1.24 0.52 | -0.05 0.05 | -1.87 |
| VA5 - 2 | 772.50 | -0.02 0.00 | 512.29 -1726.02 | 512.29 | 37.97 2.39 | 37.97 | -1.23 2.23 | 0.03 -0.03 | -1.87 |
| VA5 - 3 | 772.50 | 0.00 0.00 | -1891.04 388.48 | 388.48 | -1.32 1.72 | 1.72 | 2.66 -1.88 | 0.00 0.00 | 1.36 |
| VA5 - 4 | 772.50 | 0.00 0.00 | 388.40 1199.00 | 1199.00 | 1.72 46.37 | 0.00 | 1.17 -0.34 | -0.04 0.04 | 1.36 |
| VA5 - 5 | 772.50 | 0.00 0.00 | 1200.01 -1645.00 | 1200.01 | 46.37 -19.77 | 46.37 | -0.37 2.13 | 0.03 -0.03 | 1.36 |
| VA5 - 6 | 772.50 | 0.00 0.06 | -1387.25 664.16 | 664.16 | 67.44 -49.58 | 67.44 | 1.94 -0.76 | 0.08 -0.08 | -0.32 |
| VA5 - 7 | 772.50 | 0.00 0.08 | 663.19 -284.43 | 663.19 | -4.22 -40.00 | 0.00 | 0.01 1.21 | 0.02 -0.02 | -10.04 |
| VA6 - 1 | 772.50 | 0.00 0.04 | 7.84 504.09 | 565.84 | -6.92 -11.95 | 0.00 | 0.93 0.31 | 0.00 0.00 | 1.50 |
| VA6 - 2 | 772.50 | 0.00 0.04 | 508.82 -2786.18 | 508.82 | -11.95 27.51 | 27.51 | -1.56 2.74 | -0.03 0.03 | 1.50 |
| VA7 - 1 | 772.50 | -0.08 0.00 | -633.00 1649.99 | 1649.99 | -37.31 4.08 | 4.08 | 2.06 -0.85 | -0.03 0.03 | -3.05 |
| VA7 - 2 | 772.50 | -0.08 0.00 | 1645.26 0.00 | 1645.26 | 4.08 0.00 | 4.08 | -0.40 1.64 | 0.00 0.00 | -3.05 |
| VA8 - 1 | 866.25 | 0.00 0.49 | -3507.66 -6779.96 | 2960.24 | 0.73 0.06 | 0.73 | 3.35 4.11 | 0.00 0.00 | -1.36 |
| VA8 - 2 | 866.25 | 0.00 0.72 | -8684.11 -5872.55 | 4839.10 | 12.59 -7.99 | 12.59 | 4.84 4.31 | 0.00 0.00 | 1.16 |
| VA9 - 1 | 810.00 | 0.00 0.13 | -1736.39 -2594.19 | 1263.24 | 28.81 -22.26 | 28.81 | 2.21 2.50 | 0.01 -0.01 | 2.18 |
| VA9 - 2 | 810.00 | 0.00 0.18 | -2725.35 -2621.36 | 1427.31 | -9.39 9.92 | 9.92 | 2.59 2.56 | 0.00 0.00 | -0.25 |
| VA10 - 1 | 810.00 | 0.00 0.10 | -2111.86 -1607.65 | 905.37 | 23.06 -31.46 | 23.06 | 2.21 2.02 | 0.01 -0.01 | 0.80 |
| VA10 - 2 | 810.00 | 0.00 0.05 | -1332.08 -706.25 | 609.67 | -38.90 24.56 | 24.56 | 1.78 1.46 | -0.02 0.02 | -2.92 |
| VA11 - 1 | 772.50 | -0.11 0.00 | -141.44 -16.57 | 283.80 | 68.67 -43.82 | 68.67 | 0.81 0.68 | 0.06 -0.06 | 1.76 |
| VA11 - 2 | 772.50 | -0.72 0.00 | -740.73 126.79 | 674.78 | 1.72 -5.08 | 1.72 | 1.48 0.92 | 0.00 0.00 | -1.35 |
| VA11 - 3 | 772.50 | -0.72 0.00 | 123.68 -1984.67 | 123.68 | -5.08 -9.65 | 0.00 | -1.69 2.47 | 0.00 0.00 | -1.35 |
| VA12 - 1 | 772.50 | -0.14 0.00 | 0.00 1751.58 | 2025.52 | 0.00 -1.73 | 0.00 | 1.77 0.65 | 0.00 0.00 | -0.02 |
| VA12 - 2 | 772.50 | -0.14 0.00 | 1754.69 0.00 | 1754.69 | -1.73 0.00 | 0.00 | -1.42 2.17 | 0.00 0.00 | -0.02 |
| VA13 | 735.00 | 0.00 0.07 | 0.00 0.00 | 338.60 | 0.00 0.00 | 0.00 | 0.71 0.71 | 0.00 0.00 | 0.06 |
| VA14 - 1 | 772.50 | 0.00 0.58 | 0.00 2243.22 | 2243.22 | 0.00 -10.45 | 0.00 | 2.54 -1.73 | 0.01 -0.01 | 1.03 |
| VA14 - 2 | 772.50 | 0.00 0.57 | 2243.83 0.00 | 2357.03 | -10.45 0.00 | 0.00 | 0.42 1.91 | 0.00 0.00 | 1.03 |
| VA15 | 735.00 | -0.04 0.00 | 0.00 0.00 | 338.60 | 0.00 0.00 | 0.00 | 0.71 0.71 | 0.00 0.00 | 0.08 |
| VA16 | 735.00 | 0.00 0.07 | 0.00 0.00 | 338.60 | 0.00 0.00 | 0.00 | 0.71 0.71 | 0.00 0.00 | -1.01 |
| VA17 - 1 | 772.50 | 0.00 0.53 | 0.00 3941.37 | 3941.37 | 0.00 23.01 | 23.01 | 4.16 -3.35 | -0.02 0.02 | -5.28 |
| VA17 - 2 | 772.50 | 0.00 0.57 | 3940.76 0.00 | 3940.76 | -24.13 0.00 | 0.00 | -0.29 2.48 | -0.01 0.01 | 1.62 |
| VA18 | 772.50 | 0.00 0.26 | -682.42 502.58 | 513.26 | -79.07 111.64 | 111.64 | 1.36 0.13 | -0.10 0.10 | 1.26 |
| VA19 | 772.50 | 0.00 0.04 | 0.00 0.00 | 102.16 | 0.00 0.00 | 0.00 | 0.41 0.41 | 0.00 0.00 | -6.72 |
| VA20 | 772.50 | -0.05 | -9.72 | 351.55 | -45.37 | 0.00 | 0.75 | -0.02 | 0.97 |

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| | | 0.00 | 0.00 | | 0.00 | | 0.74 | 0.02 | |
| VA21 - 1 | 772.50 | 0.00 0.15 | -1526.49 2244.12 | 2244.12 | 27.57 -34.29 | 27.57 | 2.41 0.06 | 0.02 -0.02 | 5.44 |
| VA21 - 2 | 772.50 | 0.00 0.15 | 2245.62 -1572.00 | 2245.62 | -27.37 10.58 | 10.58 | -0.99 2.62 | -0.02 0.02 | -2.40 |
| VA22 | 772.50 | 0.00 0.14 | -305.72 -874.29 | 710.76 | -55.57 80.10 | 80.10 | 1.25 1.56 | -0.04 0.04 | -0.28 |
| VA23 | 772.50 | 0.00 0.03 | 0.00 0.00 | 1006.68 | 0.00 0.00 | 0.00 | 1.25 1.25 | 0.00 0.00 | 4.73 |
| VA24 - 1 | 810.00 | 0.00 0.12 | -1680.48 -2642.41 | 1269.54 | -57.60 37.55 | 37.55 | 2.19 2.52 | -0.02 0.02 | -5.04 |
| VA24 - 2 | 810.00 | 0.00 0.16 | -2540.05 -2927.55 | 1371.43 | 6.90 29.70 | 29.70 | 2.52 2.64 | 0.00 0.00 | -0.25 |
| VA25 - 1 | 810.00 | 0.00 0.20 | -3033.72 1758.58 | 1758.58 | 80.40 -44.51 | 80.40 | 3.28 -1.73 | 0.07 -0.07 | 3.84 |
| VA25 - 2 | 810.00 | 0.00 0.20 | 1761.63 -2393.12 | 1761.79 | -44.51 -4.55 | 0.00 | 0.08 2.60 | -0.01 0.01 | 3.84 |
| VA25 - 3 | 810.00 | 0.00 0.07 | -1536.31 -740.66 | 500.86 | 1.64 -23.28 | 1.64 | 1.82 1.42 | 0.01 -0.01 | -0.73 |

| CASO: G1+G2+1.4Q+1.2D2 | | | | | | | | | |
|------------------------|------------------|------------------|-----------------------|------------------|-----------------------|------------------|--------------------|--------------------|----------------|
| Elemento | Carga (kgf/m) | Rd Nd (tf) | Mxi Mxf (kgf.m) | MxMáx (kgf.m) | Myi Myf (kgf.m) | MyMáx (kgf.m) | Vxi Vxf (tf) | Vyi Vyf (tf) | Mtd (kgf/m) |
| VA1 - 1 | 772.50 | 0.00 0.27 | -1666.88 1920.40 | 1920.40 | -74.05 4.20 | 4.20 | 2.60 -1.09 | -0.04 0.04 | -2.55 |
| VA1 - 2 | 772.50 | 0.00 0.27 | 1920.29 357.45 | 1920.29 | 4.20 -98.13 | 0.00 | -1.08 1.89 | 0.10 -0.10 | -3.18 |
| VA1 - 3 | 772.50 | 0.00 0.25 | 358.32 -1982.15 | 358.32 | -98.13 176.03 | 176.03 | -3.80 4.25 | -0.47 0.47 | -2.87 |
| VA1 - 4 | 772.50 | -0.46 0.00 | -2266.27 395.91 | 744.51 | 147.10 -110.50 | 147.10 | 2.16 0.74 | 0.07 -0.07 | 0.63 |
| VA1 - 5 | 772.50 | -0.49 0.00 | 397.56 -1360.68 | 397.56 | -110.50 146.72 | 146.72 | -3.22 3.62 | -0.50 0.50 | -3.89 |
| VA1 - 6 | 772.50 | -0.42 0.00 | -1066.06 -502.02 | 263.16 | 114.76 -60.05 | 114.76 | 1.43 1.09 | 0.05 -0.05 | 2.07 |
| VA2 | 772.50 | 0.00 0.00 | 0.00 0.00 | 376.65 | 0.00 0.00 | 0.00 | 0.77 0.77 | 0.00 0.00 | -3.24 |
| VA3 - 1 | 772.50 | 0.00 0.01 | 0.00 -1557.04 | 1110.71 | 0.00 20.83 | 20.83 | 1.31 2.03 | 0.00 0.00 | 0.66 |
| VA3 - 2 | 772.50 | 0.00 0.00 | -1563.56 6.40 | 6.40 | 70.49 0.00 | 70.49 | 1.61 -0.41 | 0.05 -0.05 | 0.00 |
| VA4 - 1 | 810.00 | 0.00 0.07 | -1775.16 -1624.86 | 861.23 | 69.43 -46.06 | 69.43 | 2.07 2.01 | 0.02 -0.02 | 0.70 |
| VA4 - 2 | 810.00 | 0.00 0.19 | -1891.04 1722.10 | 1722.10 | -85.44 -40.52 | 0.00 | 2.63 -1.04 | -0.02 0.02 | -1.89 |
| VA4 - 3 | 810.00 | 0.00 0.19 | 1722.21 1453.51 | 1722.21 | -40.52 9.73 | 0.00 | -0.73 0.99 | -0.16 0.16 | -1.89 |
| VA4 - 4 | 810.00 | 0.00 0.19 | 1453.67 -15.63 | 1453.67 | 9.73 184.97 | 184.97 | -1.70 2.29 | -0.24 0.24 | -1.89 |
| VA4 - 5 | 810.00 | 0.00 0.17 | -16.46 -2838.30 | 0.00 | 184.97 -4.37 | 184.97 | -4.83 5.29 | 0.34 -0.34 | -2.14 |
| VA4 - 6 | 810.00 | -0.11 0.00 | -3609.02 -409.19 | 0.00 | -44.25 -2.90 | 0.00 | 3.59 -2.78 | -0.04 0.04 | 4.04 |
| VA4 - 7 | 810.00 | -0.11 0.00 | -409.06 1344.09 | 1344.09 | -2.90 -0.44 | 0.00 | 2.07 -1.19 | 0.00 0.00 | 0.62 |
| VA4 - 8 | 810.00 | -0.11 0.00 | 1343.07 1007.94 | 1487.32 | -0.44 122.71 | 0.00 | 0.48 0.88 | -0.07 0.07 | 0.62 |
| VA4 - 9 | 810.00 | -0.08 0.00 | 1012.80 -2093.96 | 1012.80 | 122.71 -143.44 | 122.71 | -5.04 5.52 | 0.45 -0.45 | 0.62 |
| VA4 - 10 | 810.00 | -0.23 0.00 | -1917.54 -47.71 | 0.00 | -38.60 10.30 | 10.30 | 2.32 -1.53 | -0.05 0.05 | 1.11 |


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|----------|--------|---------------|----------------------|---------|------------------|-------|---------------|---------------|--------|
| VA4 - 11 | 810.00 | -0.23 0.00 | -41.31 457.31 | 457.31 | 10.30 13.15 | 13.15 | 1.13 -0.68 | -0.01 0.01 | 1.11 |
| VA4 - 12 | 810.00 | -0.25 0.00 | 458.31 -867.10 | 458.31 | 13.15 -61.63 | 13.15 | -0.06 1.47 | 0.04 -0.04 | 1.11 |
| VA4 - 13 | 810.00 | 0.00 0.03 | -968.25 -18.69 | 449.64 | -11.53 -24.46 | 0.00 | 1.52 0.87 | 0.00 0.00 | -1.85 |
| VA5 - 1 | 772.50 | -0.01 0.00 | -517.73 596.88 | 691.69 | -72.85 38.95 | 38.95 | 1.37 0.39 | -0.05 0.05 | -1.89 |
| VA5 - 2 | 772.50 | -0.01 0.00 | 596.73 -1473.21 | 596.73 | 38.95 2.53 | 38.95 | -1.10 2.10 | 0.03 -0.03 | -1.89 |
| VA5 - 3 | 772.50 | 0.00 0.01 | -2071.85 276.20 | 276.20 | -0.52 1.62 | 1.62 | 2.72 -1.95 | 0.00 0.00 | 1.40 |
| VA5 - 4 | 772.50 | 0.00 0.01 | 276.05 1159.97 | 1159.97 | 1.62 46.63 | 0.00 | 1.24 -0.41 | -0.04 0.04 | 1.40 |
| VA5 - 5 | 772.50 | 0.00 0.01 | 1160.99 -1528.94 | 1160.99 | 46.63 -19.13 | 46.63 | -0.30 2.06 | 0.03 -0.03 | 1.40 |
| VA5 - 6 | 772.50 | 0.00 0.07 | -1519.57 693.29 | 693.29 | 67.58 -51.03 | 67.58 | 2.04 -0.87 | 0.08 -0.08 | -0.31 |
| VA5 - 7 | 772.50 | 0.00 0.10 | 692.29 -87.67 | 699.18 | -6.93 -54.20 | 0.00 | 0.12 1.10 | 0.03 -0.03 | -10.48 |
| VA6 - 1 | 772.50 | 0.00 0.05 | 6.12 728.37 | 746.48 | 6.03 -9.18 | 0.00 | 1.07 0.17 | 0.01 -0.01 | 1.61 |
| VA6 - 2 | 772.50 | 0.00 0.05 | 733.13 -2345.48 | 733.13 | -9.18 21.49 | 21.49 | -1.41 2.60 | -0.02 0.02 | 1.61 |
| VA7 - 1 | 772.50 | -0.04 0.00 | -926.91 1501.34 | 1501.34 | -32.11 7.20 | 7.20 | 2.15 -0.94 | -0.03 0.03 | -3.21 |
| VA7 - 2 | 772.50 | -0.04 0.00 | 1496.57 0.00 | 1496.57 | 7.20 0.00 | 7.20 | -0.31 1.55 | 0.00 0.00 | -3.21 |
| VA8 - 1 | 866.25 | 0.00 0.49 | -3858.25 -6489.26 | 2901.25 | -10.60 3.26 | 3.26 | 3.42 4.03 | 0.00 0.00 | -1.39 |
| VA8 - 2 | 866.25 | 0.00 0.74 | -8931.69 -5565.06 | 4890.41 | 9.80 2.18 | 9.80 | 4.89 4.26 | 0.00 0.00 | 1.17 |
| VA9 - 1 | 810.00 | 0.00 0.12 | -1754.80 -2576.18 | 1262.42 | 41.09 -34.66 | 41.09 | 2.21 2.49 | 0.01 -0.01 | 3.73 |
| VA9 - 2 | 810.00 | 0.00 0.17 | -2722.89 -2615.98 | 1431.27 | -18.80 7.81 | 7.81 | 2.60 2.56 | 0.00 0.00 | -0.28 |
| VA10 - 1 | 810.00 | 0.00 0.10 | -2113.62 -1605.28 | 905.83 | 20.82 -29.85 | 20.82 | 2.21 2.02 | 0.01 -0.01 | 0.03 |
| VA10 - 2 | 810.00 | 0.00 0.05 | -1335.37 -703.22 | 609.70 | -41.21 29.73 | 29.73 | 1.78 1.46 | -0.02 0.02 | -3.76 |
| VA11 - 1 | 772.50 | -0.11 0.00 | -163.92 -9.79 | 277.58 | 71.14 -46.69 | 71.14 | 0.83 0.67 | 0.06 -0.06 | 1.29 |
| VA11 - 2 | 772.50 | -0.72 0.00 | -764.31 149.53 | 678.98 | -0.44 -4.41 | 0.00 | 1.49 0.91 | 0.00 0.00 | -0.90 |
| VA11 - 3 | 772.50 | -0.72 0.00 | 146.29 -1946.95 | 146.29 | -4.41 -8.17 | 0.00 | -1.67 2.46 | 0.00 0.00 | -0.90 |
| VA12 - 1 | 772.50 | -0.14 0.00 | 0.00 1751.48 | 2025.45 | 0.00 -1.82 | 0.00 | 1.77 0.65 | 0.00 0.00 | -0.11 |
| VA12 - 2 | 772.50 | -0.14 0.00 | 1754.72 0.00 | 1754.72 | -1.82 0.00 | 0.00 | -1.42 2.17 | 0.00 0.00 | -0.11 |
| VA13 | 735.00 | 0.00 0.08 | 0.00 0.00 | 338.60 | 0.00 0.00 | 0.00 | 0.71 0.71 | 0.00 0.00 | 0.16 |
| VA14 - 1 | 772.50 | 0.00 0.57 | 0.00 2243.08 | 2243.08 | 0.00 -10.80 | 0.00 | 2.54 -1.73 | 0.01 -0.01 | 0.87 |
| VA14 - 2 | 772.50 | 0.00 0.57 | 2243.74 0.00 | 2356.95 | -10.80 0.00 | 0.00 | 0.42 1.91 | 0.00 0.00 | 0.87 |
| VA15 | 735.00 | -0.04 0.00 | 0.00 0.00 | 338.60 | 0.00 0.00 | 0.00 | 0.71 0.71 | 0.00 0.00 | 0.15 |
| VA16 | 735.00 | 0.00 0.07 | 0.00 0.00 | 338.60 | 0.00 0.00 | 0.00 | 0.71 0.71 | 0.00 0.00 | -1.02 |
| VA17 - 1 | 772.50 | 0.00 0.53 | 0.00 3941.50 | 3941.50 | 0.00 24.03 | 24.03 | 4.16 -3.35 | -0.02 0.02 | -4.85 |
| VA17 - 2 | 772.50 | 0.00 | 3940.85 | 3940.85 | -25.63 | 0.00 | -0.29 | -0.01 | 1.67 |

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| | | 0.58 | 0.00 | | 0.00 | | 2.48 | 0.01 | |
| VA18 | 772.50 | 0.00 | -673.59 | 505.18 | -79.31 | 111.93 | 1.35 | -0.10 | 1.12 |
| | | 0.26 | 492.39 | | 111.93 | | 0.14 | 0.10 | |
| VA19 | 772.50 | 0.00 | 0.00 | 102.16 | 0.00 | 0.00 | 0.41 | 0.00 | -6.40 |
| | | 0.05 | 0.00 | | 0.00 | | 0.41 | 0.00 | |
| VA20 | 772.50 | -0.05 | -10.17 | 351.35 | -44.10 | 0.00 | 0.75 | -0.02 | 1.00 |
| | | 0.00 | 0.00 | | 0.00 | | 0.74 | 0.02 | |
| VA21 - 1 | 772.50 | 0.00 | -1572.25 | 2369.55 | 25.00 | 25.00 | 2.47 | 0.02 | 4.52 |
| | | 0.16 | 2369.55 | | -34.30 | | 0.01 | -0.02 | |
| VA21 - 2 | 772.50 | 0.00 | 2371.16 | 2371.16 | -40.34 | 21.87 | -1.08 | -0.03 | -1.60 |
| | | 0.17 | -1631.70 | | 21.87 | | 2.71 | 0.03 | |
| VA22 | 772.50 | 0.00 | -278.59 | 714.07 | -56.25 | 81.36 | 1.24 | -0.04 | -0.05 |
| | | 0.14 | -900.76 | | 81.36 | | 1.58 | 0.04 | |
| VA23 | 772.50 | 0.00 | 0.00 | 1006.68 | 0.00 | 0.00 | 1.25 | 0.00 | 4.77 |
| | | 0.03 | 0.00 | | 0.00 | | 1.25 | 0.00 | |
| VA24 - 1 | 810.00 | 0.00 | -1673.90 | 1269.42 | -49.29 | 29.51 | 2.18 | -0.01 | -3.53 |
| | | 0.13 | -2650.78 | | 29.51 | | 2.52 | 0.01 | |
| VA24 - 2 | 810.00 | 0.00 | -2554.67 | 1370.00 | 1.24 | 15.34 | 2.52 | 0.00 | -0.31 |
| | | 0.18 | -2914.91 | | 15.34 | | 2.63 | 0.00 | |
| VA25 - 1 | 810.00 | 0.00 | -2984.34 | 1695.82 | 56.70 | 56.70 | 3.22 | 0.04 | 2.70 |
| | | 0.20 | 1695.82 | | -19.19 | | -1.67 | -0.04 | |
| VA25 - 2 | 810.00 | 0.00 | 1699.03 | 1706.19 | -19.19 | 0.00 | 0.12 | 0.00 | 2.70 |
| | | 0.19 | -2343.74 | | -7.93 | | 2.56 | 0.00 | |
| VA25 - 3 | 810.00 | 0.00 | -1522.54 | 505.80 | -6.06 | 0.00 | 1.81 | 0.00 | -1.23 |
| | | 0.07 | -742.15 | | -20.68 | | 1.42 | 0.00 | |

| CASO: G1+G2+1.4Q+1.2D3 | | | | | | | | | |
|------------------------|------------------|------------------|-----------------------|------------------|-----------------------|------------------|--------------------|--------------------|----------------|
| Elemento | Carga (kgf/m) | Rd Nd (tf) | Mxi Mxf (kgf.m) | MxMáx (kgf.m) | Myi Myf (kgf.m) | MyMáx (kgf.m) | Vxi Vxf (tf) | Vyi Vyf (tf) | Mtd (kgf/m) |
| VA1 - 1 | 772.50 | 0.00 | -1456.95 | 1922.90 | -62.00 | 3.05 | 2.49 | -0.03 | -1.99 |
| | | 0.28 | 1922.90 | | 3.05 | | -0.99 | 0.03 | |
| VA1 - 2 | 772.50 | 0.00 | 1922.80 | 1922.80 | 3.05 | 0.00 | -1.19 | 0.12 | -2.62 |
| | | 0.28 | 247.91 | | -118.52 | | 2.00 | -0.12 | |
| VA1 - 3 | 772.50 | 0.00 | 248.82 | 248.82 | -118.52 | 168.18 | -3.91 | -0.49 | -2.42 |
| | | 0.25 | -2153.64 | | 168.18 | | 4.36 | 0.49 | |
| VA1 - 4 | 772.50 | -0.45 | -2145.71 | 714.39 | 141.73 | 141.73 | 2.10 | 0.07 | 0.22 |
| | | 0.00 | 307.84 | | -104.85 | | 0.79 | -0.07 | |
| VA1 - 5 | 772.50 | -0.49 | 309.42 | 309.42 | -104.85 | 142.03 | -3.28 | -0.48 | -3.30 |
| | | 0.00 | -1477.43 | | 142.03 | | 3.67 | 0.48 | |
| VA1 - 6 | 772.50 | -0.43 | -880.70 | 223.19 | 113.18 | 113.18 | 1.31 | 0.05 | 1.59 |
| | | 0.00 | -728.94 | | -58.28 | | 1.21 | -0.05 | |
| VA2 | 772.50 | 0.00 | 0.00 | 376.65 | 0.00 | 0.00 | 0.77 | 0.00 | -3.33 |
| | | 0.00 | 0.00 | | 0.00 | | 0.77 | 0.00 | |
| VA3 - 1 | 772.50 | 0.00 | 0.00 | 1110.84 | 0.00 | 22.98 | 1.31 | -0.01 | 0.63 |
| | | 0.01 | -1556.70 | | 22.98 | | 2.03 | 0.01 | |
| VA3 - 2 | 772.50 | 0.00 | -1563.37 | 6.59 | 64.30 | 64.30 | 1.61 | 0.04 | 0.00 |
| | | 0.00 | 6.59 | | 0.00 | | -0.41 | -0.04 | |
| VA4 - 1 | 810.00 | 0.00 | -1544.96 | 933.59 | 61.71 | 61.71 | 2.00 | 0.02 | 0.59 |
| | | 0.10 | -1710.97 | | -47.69 | | 2.07 | -0.02 | |
| VA4 - 2 | 810.00 | 0.00 | -1821.82 | 1635.42 | -67.29 | 0.00 | 2.55 | -0.01 | -0.03 |
| | | 0.19 | 1635.42 | | -46.11 | | -0.96 | 0.01 | |
| VA4 - 3 | 810.00 | 0.00 | 1635.51 | 1635.51 | -46.11 | 0.00 | -0.81 | -0.16 | -0.03 |
| | | 0.19 | 1342.04 | | 3.99 | | 1.06 | 0.16 | |
| VA4 - 4 | 810.00 | 0.00 | 1342.16 | 1342.16 | 3.99 | 181.89 | -1.77 | -0.24 | -0.03 |
| | | 0.19 | -185.47 | | 181.89 | | 2.37 | 0.24 | |
| VA4 - 5 | 810.00 | 0.00 | -186.36 | 0.00 | 181.89 | 181.89 | -4.91 | 0.38 | -2.84 |
| | | 0.18 | -3052.37 | | -28.07 | | 5.37 | -0.38 | |
| VA4 - 6 | 810.00 | -0.09 | -3425.34 | 0.00 | -56.14 | 0.00 | 3.53 | -0.04 | 2.16 |
| | | 0.00 | -287.50 | | -14.64 | | -2.71 | 0.04 | |
| VA4 - 7 | 810.00 | -0.09 | -287.41 | 1399.41 | -14.64 | 0.00 | 2.00 | -0.01 | -0.24 |
| | | 0.00 | 1399.41 | | -2.04 | | -1.13 | 0.01 | |


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|----------|--------|---------------|----------------------|---------|-------------------|--------|---------------|---------------|-------|
| VA4 - 8 | 810.00 | -0.09 0.00 | 1398.38 959.27 | 1504.54 | -2.04 126.07 | 0.00 | 0.42 0.94 | -0.08 0.08 | -0.24 |
| VA4 - 9 | 810.00 | -0.07 0.00 | 964.33 -2178.67 | 964.33 | 126.07 -126.73 | 126.07 | -5.10 5.58 | 0.43 -0.43 | -0.24 |
| VA4 - 10 | 810.00 | -0.19 0.00 | -1852.53 -39.17 | 0.00 | -36.20 12.17 | 12.17 | 2.26 -1.48 | -0.05 0.05 | 1.19 |
| VA4 - 11 | 810.00 | -0.19 0.00 | -32.58 434.01 | 434.01 | 12.17 16.91 | 16.91 | 1.07 -0.63 | -0.01 0.01 | 1.19 |
| VA4 - 12 | 810.00 | -0.21 0.00 | 435.04 -992.47 | 435.04 | 16.91 -63.17 | 16.91 | -0.12 1.53 | 0.05 -0.05 | 1.19 |
| VA4 - 13 | 810.00 | 0.00 0.02 | -703.52 -382.45 | 341.23 | -14.61 -27.56 | 0.00 | 1.30 1.08 | 0.00 0.00 | -1.88 |
| VA5 - 1 | 772.50 | -0.01 0.00 | -414.74 558.05 | 689.36 | -59.39 36.45 | 36.45 | 1.31 0.45 | -0.04 0.04 | -0.87 |
| VA5 - 2 | 772.50 | -0.01 0.00 | 557.93 -1592.70 | 557.93 | 36.45 -14.29 | 36.45 | -1.16 2.16 | 0.04 -0.04 | -0.87 |
| VA5 - 3 | 772.50 | 0.00 0.02 | -1982.71 331.36 | 331.36 | -16.05 -3.66 | 0.00 | 2.69 -1.91 | -0.01 0.01 | 0.50 |
| VA5 - 4 | 772.50 | 0.00 0.02 | 331.26 1178.82 | 1178.82 | -3.66 42.17 | 0.00 | 1.20 -0.37 | -0.04 0.04 | 0.50 |
| VA5 - 5 | 772.50 | 0.00 0.02 | 1179.85 -1586.98 | 1179.85 | 42.17 -7.06 | 42.17 | -0.34 2.09 | 0.02 -0.02 | 0.50 |
| VA5 - 6 | 772.50 | 0.00 0.06 | -1463.73 677.52 | 677.52 | 65.22 -48.91 | 65.22 | 2.00 -0.82 | 0.08 -0.08 | -0.60 |
| VA5 - 7 | 772.50 | 0.00 0.08 | 676.50 -177.28 | 676.50 | -10.89 -43.28 | 0.00 | 0.07 1.15 | 0.02 -0.02 | -9.90 |
| VA6 - 1 | 772.50 | 0.00 0.04 | 6.87 632.86 | 663.01 | -6.33 -11.90 | 0.00 | 1.01 0.23 | 0.00 0.00 | 1.77 |
| VA6 - 2 | 772.50 | 0.00 0.04 | 637.62 -2533.16 | 637.62 | -11.90 28.63 | 28.63 | -1.48 2.66 | -0.03 0.03 | 1.77 |
| VA7 - 1 | 772.50 | -0.06 0.00 | -800.50 1565.28 | 1565.28 | -37.69 4.70 | 4.70 | 2.11 -0.90 | -0.03 0.03 | -3.39 |
| VA7 - 2 | 772.50 | -0.06 0.00 | 1560.52 0.00 | 1560.52 | 4.70 0.00 | 4.70 | -0.35 1.59 | 0.00 0.00 | -3.39 |
| VA8 - 1 | 866.25 | 0.00 0.50 | -3675.08 -6644.76 | 2926.89 | -4.13 -2.34 | 0.00 | 3.38 4.07 | 0.00 0.00 | -0.68 |
| VA8 - 2 | 866.25 | 0.00 0.74 | -8812.99 -5717.16 | 4863.29 | 5.74 -1.27 | 5.74 | 4.87 4.28 | 0.00 0.00 | 0.62 |
| VA9 - 1 | 810.00 | 0.00 0.14 | -1598.96 -2712.80 | 1282.96 | 23.49 -20.46 | 23.49 | 2.16 2.54 | 0.01 -0.01 | 2.96 |
| VA9 - 2 | 810.00 | 0.00 0.19 | -2623.26 -2721.25 | 1428.31 | -18.60 14.35 | 14.35 | 2.56 2.59 | -0.01 0.01 | -0.22 |
| VA10 - 1 | 810.00 | 0.00 0.11 | -1995.67 -1712.18 | 908.15 | 16.47 -29.28 | 16.47 | 2.17 2.06 | 0.01 -0.01 | 0.40 |
| VA10 - 2 | 810.00 | 0.00 0.05 | -1180.96 -887.63 | 585.79 | -49.67 48.44 | 48.44 | 1.69 1.55 | -0.02 0.02 | -3.41 |
| VA11 - 1 | 772.50 | -0.13 0.00 | 87.23 -145.39 | 339.71 | 59.71 -34.61 | 59.71 | 0.63 0.87 | 0.05 -0.05 | 1.54 |
| VA11 - 2 | 772.50 | -0.74 0.00 | -582.71 -61.60 | 624.95 | -6.02 -1.50 | 0.00 | 1.37 1.03 | 0.00 0.00 | -1.18 |
| VA11 - 3 | 772.50 | -0.74 0.00 | -64.93 -2286.28 | 0.00 | -1.50 -0.92 | 0.00 | -1.80 2.58 | 0.00 0.00 | -1.18 |
| VA12 - 1 | 772.50 | -0.15 0.00 | 0.00 1751.42 | 2025.40 | 0.00 -0.65 | 0.00 | 1.77 0.65 | 0.00 0.00 | -0.10 |
| VA12 - 2 | 772.50 | -0.15 0.00 | 1754.74 0.00 | 1754.74 | -0.65 0.00 | 0.00 | -1.42 2.17 | 0.00 0.00 | -0.10 |
| VA13 | 735.00 | 0.00 0.08 | 0.00 0.00 | 338.60 | 0.00 0.00 | 0.00 | 0.71 0.71 | 0.00 0.00 | 0.12 |
| VA14 - 1 | 772.50 | 0.00 0.62 | 0.00 2243.15 | 2243.15 | 0.00 -9.14 | 0.00 | 2.54 -1.73 | 0.01 -0.01 | 0.91 |
| VA14 - 2 | 772.50 | 0.00 0.61 | 2243.78 0.00 | 2356.99 | -9.14 0.00 | 0.00 | 0.42 1.91 | 0.00 0.00 | 0.91 |
| VA15 | 735.00 | -0.03 | 0.00 | 338.60 | 0.00 | 0.00 | 0.71 | 0.00 | 0.10 |

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|----------|--------|---------------|----------------------|---------|------------------|-------|---------------|---------------|-------|
| | | 0.00 | 0.00 | | 0.00 | | 0.71 | 0.00 | |
| VA16 | 735.00 | 0.00 0.06 | 0.00 0.00 | 338.60 | 0.00 0.00 | 0.00 | 0.71 0.71 | 0.00 0.00 | -1.03 |
| VA17 - 1 | 772.50 | 0.00 0.51 | 0.00 3941.43 | 3941.43 | 0.00 20.15 | 20.15 | 4.16 -3.35 | -0.02 0.02 | -5.06 |
| VA17 - 2 | 772.50 | 0.00 0.55 | 3940.81 0.00 | 3940.81 | -21.17 0.00 | 0.00 | -0.29 2.48 | -0.01 0.01 | 1.60 |
| VA18 | 772.50 | 0.00 0.24 | -461.95 280.68 | 364.76 | -65.77 96.20 | 96.20 | 1.13 0.36 | -0.08 0.08 | 1.19 |
| VA19 | 772.50 | 0.00 0.04 | 0.00 0.00 | 102.16 | 0.00 0.00 | 0.00 | 0.41 0.41 | 0.00 0.00 | -6.59 |
| VA20 | 772.50 | -0.05 0.00 | -9.30 0.00 | 351.74 | -38.02 0.00 | 0.00 | 0.75 0.74 | -0.02 0.02 | 1.02 |
| VA21 - 1 | 772.50 | 0.00 0.16 | -1430.96 2290.82 | 2291.24 | 31.15 -38.09 | 31.15 | 2.40 0.08 | 0.02 -0.02 | 4.92 |
| VA21 - 2 | 772.50 | 0.00 0.16 | 2292.59 -1728.15 | 2292.59 | -31.76 9.66 | 9.66 | -1.09 2.72 | -0.02 0.02 | -1.95 |
| VA22 | 772.50 | 0.00 0.14 | -61.13 -1161.33 | 732.60 | -52.65 76.86 | 76.86 | 1.11 1.71 | -0.04 0.04 | -0.21 |
| VA23 | 772.50 | 0.00 0.03 | 0.00 0.00 | 1006.68 | 0.00 0.00 | 0.00 | 1.25 1.25 | 0.00 0.00 | 4.76 |
| VA24 - 1 | 810.00 | 0.00 0.14 | -1492.94 -2807.28 | 1299.10 | -43.81 27.51 | 27.51 | 2.13 2.58 | -0.01 0.01 | -4.27 |
| VA24 - 2 | 810.00 | 0.00 0.18 | -2419.86 -3049.89 | 1374.27 | 7.20 19.08 | 19.08 | 2.48 2.68 | 0.00 0.00 | -0.23 |
| VA25 - 1 | 810.00 | 0.00 0.21 | -2857.28 1766.33 | 1766.33 | 71.82 -30.49 | 71.82 | 3.19 -1.64 | 0.05 -0.05 | 3.24 |
| VA25 - 2 | 810.00 | 0.00 0.21 | 1769.71 -2502.38 | 1769.71 | -30.49 -12.30 | 0.00 | 0.05 2.63 | -0.01 0.01 | 3.24 |
| VA25 - 3 | 810.00 | 0.00 0.07 | -1333.67 -971.08 | 469.53 | 10.17 -40.25 | 10.17 | 1.71 1.53 | 0.01 -0.01 | -1.05 |

| CASO: G1+G2+1.4Q+1.2D4 | | | | | | | | | |
|------------------------|------------------|------------------|-----------------------|------------------|-----------------------|------------------|--------------------|--------------------|----------------|
| Elemento | Carga (kgf/m) | Rd Nd (tf) | Mxi Mxf (kgf.m) | MxMáx (kgf.m) | Myi Myf (kgf.m) | MyMáx (kgf.m) | Vxi Vxf (tf) | Vyi Vyf (tf) | Mtd (kgf/m) |
| VA1 - 1 | 772.50 | 0.00 0.28 | -1504.99 1918.90 | 1918.90 | -86.42 5.96 | 5.96 | 2.51 -1.01 | -0.05 0.05 | -3.06 |
| VA1 - 2 | 772.50 | 0.00 0.28 | 1918.86 267.84 | 1918.86 | 5.96 -78.88 | 0.00 | -1.17 1.98 | 0.08 -0.08 | -3.69 |
| VA1 - 3 | 772.50 | 0.00 0.26 | 268.83 -2120.44 | 268.83 | -78.88 182.01 | 182.01 | -3.89 4.33 | -0.45 0.45 | -3.47 |
| VA1 - 4 | 772.50 | -0.44 0.00 | -2175.82 327.33 | 720.11 | 152.57 -116.38 | 152.57 | 2.12 0.78 | 0.07 -0.07 | 0.75 |
| VA1 - 5 | 772.50 | -0.48 0.00 | 329.00 -1451.05 | 329.00 | -116.38 150.40 | 150.40 | -3.26 3.66 | -0.52 0.52 | -3.00 |
| VA1 - 6 | 772.50 | -0.42 0.00 | -929.31 -660.76 | 233.70 | 117.62 -62.57 | 117.62 | 1.34 1.18 | 0.06 -0.06 | 2.56 |
| VA2 | 772.50 | 0.00 0.00 | 0.00 0.00 | 376.65 | 0.00 0.00 | 0.00 | 0.77 0.77 | 0.00 0.00 | -3.03 |
| VA3 - 1 | 772.50 | 0.00 0.02 | 0.00 -1556.68 | 1110.84 | 0.00 18.88 | 18.88 | 1.31 2.03 | 0.00 0.00 | 0.64 |
| VA3 - 2 | 772.50 | 0.00 0.00 | -1563.43 6.53 | 6.53 | 74.37 0.00 | 74.37 | 1.61 -0.41 | 0.05 -0.05 | 0.00 |
| VA4 - 1 | 810.00 | 0.00 0.12 | -1533.57 -1719.31 | 935.51 | 70.45 -43.03 | 70.45 | 2.00 2.07 | 0.02 -0.02 | 0.79 |
| VA4 - 2 | 810.00 | 0.00 0.23 | -1828.22 1639.05 | 1639.05 | -101.16 -35.27 | 0.00 | 2.56 -0.96 | -0.03 0.03 | -2.92 |
| VA4 - 3 | 810.00 | 0.00 0.23 | 1639.09 1347.19 | 1639.09 | -35.27 15.36 | 0.00 | -0.81 1.06 | -0.16 0.16 | -2.92 |
| VA4 - 4 | 810.00 | 0.00 0.23 | 1347.28 -176.64 | 1347.28 | 15.36 186.85 | 186.85 | -1.77 2.37 | -0.23 0.23 | -2.92 |

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|----------|--------|---------------|----------------------|---------|-------------------|--------|---------------|---------------|--------|
| VA4 - 5 | 810.00 | 0.00 0.22 | -177.57 -3040.78 | 0.00 | 186.85 16.53 | 186.85 | -4.91 5.36 | 0.31 -0.31 | -5.59 |
| VA4 - 6 | 810.00 | -0.05 0.00 | -3411.22 -279.35 | 0.00 | -31.68 8.75 | 8.75 | 3.52 -2.71 | -0.04 0.04 | 4.24 |
| VA4 - 7 | 810.00 | -0.05 0.00 | -279.25 1401.19 | 1401.19 | 8.75 0.92 | 8.75 | 2.00 -1.13 | 0.01 -0.01 | 1.91 |
| VA4 - 8 | 810.00 | -0.05 0.00 | 1400.19 951.08 | 1503.85 | 0.92 118.61 | 0.00 | 0.42 0.95 | -0.07 0.07 | 1.91 |
| VA4 - 9 | 810.00 | -0.02 0.00 | 956.15 -2190.34 | 956.15 | 118.61 -160.96 | 118.61 | -5.11 5.59 | 0.48 -0.48 | 1.91 |
| VA4 - 10 | 810.00 | -0.18 0.00 | -1876.85 -49.66 | 0.00 | -41.37 9.81 | 9.81 | 2.28 -1.49 | -0.05 0.05 | 1.02 |
| VA4 - 11 | 810.00 | -0.18 0.00 | -43.13 431.31 | 431.31 | 9.81 12.58 | 12.58 | 1.09 -0.64 | -0.01 0.01 | 1.02 |
| VA4 - 12 | 810.00 | -0.20 0.00 | 432.26 -969.24 | 432.26 | 12.58 -62.01 | 12.58 | -0.10 1.51 | 0.04 -0.04 | 1.02 |
| VA4 - 13 | 810.00 | 0.00 0.04 | -692.89 -382.01 | 346.04 | -10.83 -11.90 | 0.00 | 1.30 1.09 | 0.00 0.00 | -1.81 |
| VA5 - 1 | 772.50 | -0.03 0.00 | -409.33 551.18 | 685.84 | -83.59 40.46 | 40.46 | 1.30 0.46 | -0.05 0.05 | -2.89 |
| VA5 - 2 | 772.50 | -0.03 0.00 | 551.09 -1606.53 | 551.09 | 40.46 19.21 | 40.46 | -1.17 2.17 | 0.02 -0.02 | -2.89 |
| VA5 - 3 | 772.50 | -0.01 0.00 | -1980.18 333.32 | 333.32 | 14.22 7.00 | 14.22 | 2.69 -1.91 | 0.01 -0.01 | 2.26 |
| VA5 - 4 | 772.50 | -0.01 0.00 | 333.19 1180.15 | 1180.15 | 7.00 50.83 | 0.00 | 1.20 -0.37 | -0.04 0.04 | 2.26 |
| VA5 - 5 | 772.50 | -0.01 0.00 | 1181.16 -1586.96 | 1181.16 | 50.83 -31.83 | 50.83 | -0.34 2.10 | 0.04 -0.04 | 2.26 |
| VA5 - 6 | 772.50 | 0.00 0.07 | -1443.10 679.92 | 679.92 | 69.80 -51.70 | 69.80 | 1.98 -0.81 | 0.08 -0.08 | -0.03 |
| VA5 - 7 | 772.50 | 0.00 0.09 | 678.98 -194.82 | 678.98 | -0.26 -50.93 | 0.00 | 0.06 1.16 | 0.03 -0.03 | -10.62 |
| VA6 - 1 | 772.50 | 0.00 0.04 | 7.08 599.59 | 637.28 | 5.44 -9.23 | 0.00 | 0.99 0.25 | 0.01 -0.01 | 1.34 |
| VA6 - 2 | 772.50 | 0.00 0.04 | 604.33 -2598.51 | 604.33 | -9.23 20.37 | 20.37 | -1.50 2.68 | -0.02 0.02 | 1.34 |
| VA7 - 1 | 772.50 | -0.06 0.00 | -759.41 1586.05 | 1586.05 | -31.73 6.57 | 6.57 | 2.10 -0.89 | -0.02 0.02 | -2.87 |
| VA7 - 2 | 772.50 | -0.06 0.00 | 1581.32 0.00 | 1581.32 | 6.57 0.00 | 6.57 | -0.36 1.60 | 0.00 0.00 | -2.87 |
| VA8 - 1 | 866.25 | 0.00 0.49 | -3690.83 -6624.45 | 2927.91 | -5.74 5.66 | 5.66 | 3.39 4.07 | 0.00 0.00 | -2.07 |
| VA8 - 2 | 866.25 | 0.00 0.72 | -8802.82 -5720.45 | 4866.21 | 16.65 -4.54 | 16.65 | 4.87 4.28 | 0.00 0.00 | 1.71 |
| VA9 - 1 | 810.00 | 0.00 0.11 | -1892.22 -2457.56 | 1248.60 | 46.41 -36.46 | 46.41 | 2.26 2.45 | 0.01 -0.01 | 2.94 |
| VA9 - 2 | 810.00 | 0.00 0.16 | -2824.98 -2516.09 | 1433.43 | -9.60 3.37 | 3.37 | 2.63 2.53 | 0.00 0.00 | -0.31 |
| VA10 - 1 | 810.00 | 0.00 0.09 | -2229.81 -1500.74 | 908.50 | 27.41 -32.03 | 27.41 | 2.25 1.98 | 0.01 -0.01 | 0.43 |
| VA10 - 2 | 810.00 | 0.00 0.05 | -1486.50 -521.84 | 648.52 | -30.43 5.84 | 5.84 | 1.86 1.38 | -0.01 0.01 | -3.28 |
| VA11 - 1 | 772.50 | -0.10 0.00 | -392.59 119.03 | 268.77 | 80.09 -55.90 | 80.09 | 1.01 0.48 | 0.07 -0.07 | 1.51 |
| VA11 - 2 | 772.50 | -0.69 0.00 | -922.34 337.92 | 746.53 | 7.30 -7.98 | 7.30 | 1.61 0.79 | 0.00 0.00 | -1.07 |
| VA11 - 3 | 772.50 | -0.69 0.00 | 334.89 -1645.34 | 334.89 | -7.98 -16.90 | 0.00 | -1.56 2.35 | 0.01 -0.01 | -1.07 |
| VA12 - 1 | 772.50 | -0.13 0.00 | 0.00 1751.65 | 2025.57 | 0.00 -2.89 | 0.00 | 1.77 0.65 | 0.00 0.00 | -0.04 |
| VA12 - 2 | 772.50 | -0.13 0.00 | 1754.67 0.00 | 1754.67 | -2.89 0.00 | 0.00 | -1.42 2.17 | 0.00 0.00 | -0.04 |
| VA13 | 735.00 | 0.00 | 0.00 | 338.60 | 0.00 | 0.00 | 0.71 | 0.00 | 0.10 |

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|----------|--------|---------------|----------------------|---------|------------------|--------|---------------|---------------|-------|
| | | 0.07 | 0.00 | | 0.00 | | 0.71 | 0.00 | |
| VA14 - 1 | 772.50 | 0.00 0.53 | 0.00 2243.15 | 2243.15 | 0.00 -12.11 | 0.00 | 2.54 -1.73 | 0.01 -0.01 | 0.99 |
| VA14 - 2 | 772.50 | 0.00 0.53 | 2243.79 0.00 | 2356.99 | -12.11 0.00 | 0.00 | 0.42 1.91 | 0.00 0.00 | 0.99 |
| VA15 | 735.00 | -0.05 0.00 | 0.00 0.00 | 338.60 | 0.00 0.00 | 0.00 | 0.71 0.71 | 0.00 0.00 | 0.13 |
| VA16 | 735.00 | 0.00 0.08 | 0.00 0.00 | 338.60 | 0.00 0.00 | 0.00 | 0.71 0.71 | 0.00 0.00 | -1.00 |
| VA17 - 1 | 772.50 | 0.00 0.54 | 0.00 3941.43 | 3941.43 | 0.00 26.89 | 26.89 | 4.16 -3.35 | -0.03 0.03 | -5.07 |
| VA17 - 2 | 772.50 | 0.00 0.60 | 3940.80 0.00 | 3940.80 | -28.60 0.00 | 0.00 | -0.29 2.48 | -0.01 0.01 | 1.68 |
| VA18 | 772.50 | 0.00 0.27 | -894.06 714.29 | 714.29 | -92.61 127.36 | 127.36 | 1.58 -0.09 | -0.11 0.11 | 1.20 |
| VA19 | 772.50 | 0.00 0.05 | 0.00 0.00 | 102.16 | 0.00 0.00 | 0.00 | 0.41 0.41 | 0.00 0.00 | -6.53 |
| VA20 | 772.50 | -0.05 0.00 | -10.59 0.00 | 351.16 | -51.45 0.00 | 0.00 | 0.75 0.74 | -0.03 0.03 | 0.94 |
| VA21 - 1 | 772.50 | 0.00 0.16 | -1667.78 2322.85 | 2322.85 | 21.42 -30.51 | 21.42 | 2.48 0.00 | 0.02 -0.02 | 5.04 |
| VA21 - 2 | 772.50 | 0.00 0.17 | 2324.19 -1475.54 | 2324.19 | -35.95 22.79 | 22.79 | -0.98 2.62 | -0.03 0.03 | -2.04 |
| VA22 | 772.50 | 0.00 0.14 | -523.18 -613.71 | 716.60 | -59.17 84.61 | 84.61 | 1.38 1.43 | -0.04 0.04 | -0.12 |
| VA23 | 772.50 | 0.00 0.03 | 0.00 0.00 | 1006.68 | 0.00 0.00 | 0.00 | 1.25 1.25 | 0.00 0.00 | 4.73 |
| VA24 - 1 | 810.00 | 0.00 0.11 | -1861.44 -2485.91 | 1250.83 | -63.08 39.55 | 39.55 | 2.25 2.46 | -0.02 0.02 | -4.30 |
| VA24 - 2 | 810.00 | 0.00 0.16 | -2674.86 -2792.57 | 1367.17 | 0.94 25.96 | 25.96 | 2.56 2.60 | 0.00 0.00 | -0.33 |
| VA25 - 1 | 810.00 | 0.00 0.19 | -3160.78 1688.08 | 1688.08 | 65.28 -33.21 | 65.28 | 3.31 -1.76 | 0.05 -0.05 | 3.29 |
| VA25 - 2 | 810.00 | 0.00 0.19 | 1690.95 -2234.48 | 1705.44 | -33.21 -0.18 | 0.00 | 0.15 2.53 | -0.01 0.01 | 3.29 |
| VA25 - 3 | 810.00 | 0.00 0.06 | -1725.19 -511.73 | 553.88 | -14.59 -3.71 | 0.00 | 1.92 1.31 | 0.00 0.00 | -0.91 |

| CASO: G1+G2+1.4Q+D1 | | | | | | | | | |
|---------------------|------------------|------------------|-----------------------|------------------|-----------------------|------------------|--------------------|--------------------|----------------|
| Elemento | Carga (kgf/m) | Rd Nd (tf) | Mxi Mxf (kgf.m) | MxMáx (kgf.m) | Myi Myf (kgf.m) | MyMáx (kgf.m) | Vxi Vxf (tf) | Vyi Vyf (tf) | Mtd (kgf/m) |
| VA1 - 1 | 772.50 | 0.00 0.29 | -1326.05 1921.31 | 1921.31 | -74.34 4.76 | 4.76 | 2.42 -0.92 | -0.04 0.04 | -2.50 |
| VA1 - 2 | 772.50 | 0.00 0.29 | 1921.28 174.89 | 1921.28 | 4.76 -99.18 | 0.00 | -1.26 2.07 | 0.10 -0.10 | -3.14 |
| VA1 - 3 | 772.50 | 0.00 0.26 | 175.91 -2266.11 | 175.91 | -99.18 174.32 | 174.32 | -3.98 4.43 | -0.47 0.47 | -3.01 |
| VA1 - 4 | 772.50 | -0.44 0.00 | -2072.84 252.31 | 694.53 | 147.19 -110.71 | 147.19 | 2.07 0.83 | 0.07 -0.07 | 0.37 |
| VA1 - 5 | 772.50 | -0.48 0.00 | 253.92 -1550.54 | 253.92 | -110.71 145.80 | 145.80 | -3.31 3.71 | -0.50 0.50 | -2.54 |
| VA1 - 6 | 772.50 | -0.42 0.00 | -770.79 -855.55 | 214.84 | 115.92 -60.73 | 115.92 | 1.23 1.29 | 0.05 -0.05 | 2.07 |
| VA2 | 772.50 | 0.00 0.00 | 0.00 0.00 | 376.65 | 0.00 0.00 | 0.00 | 0.77 0.77 | 0.00 0.00 | -3.13 |
| VA3 - 1 | 772.50 | 0.00 0.01 | 0.00 -1556.40 | 1110.95 | 0.00 21.01 | 21.01 | 1.31 2.03 | 0.00 0.00 | 0.61 |
| VA3 - 2 | 772.50 | 0.00 0.00 | -1563.26 6.70 | 6.70 | 68.37 0.00 | 68.37 | 1.61 -0.41 | 0.04 -0.04 | 0.00 |
| VA4 - 1 | 810.00 | 0.00 0.14 | -1342.69 -1790.38 | 1000.65 | 63.29 -44.78 | 63.29 | 1.95 2.13 | 0.02 -0.02 | 0.69 |


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|----------|--------|---------------|----------------------|---------|-------------------|--------|---------------|---------------|--------|
| VA4 - 2 | 810.00 | 0.00 0.24 | -1770.00 1566.51 | 1566.51 | -83.21 -40.84 | 0.00 | 2.49 -0.90 | -0.02 0.02 | -1.13 |
| VA4 - 3 | 810.00 | 0.00 0.24 | 1566.54 1253.87 | 1566.54 | -40.84 9.63 | 0.00 | -0.87 1.13 | -0.16 0.16 | -1.13 |
| VA4 - 4 | 810.00 | 0.00 0.24 | 1253.93 -318.91 | 1253.93 | 9.63 183.86 | 183.86 | -1.84 2.43 | -0.24 0.24 | -1.13 |
| VA4 - 5 | 810.00 | 0.00 0.22 | -319.88 -3220.14 | 0.00 | 183.86 -6.95 | 183.86 | -4.97 5.43 | 0.34 -0.34 | -5.95 |
| VA4 - 6 | 810.00 | -0.04 0.00 | -3259.33 -178.63 | 0.00 | -43.63 -2.98 | 0.00 | 3.47 -2.66 | -0.04 0.04 | 2.50 |
| VA4 - 7 | 810.00 | -0.04 0.00 | -178.55 1447.14 | 1447.14 | -2.98 -0.66 | 0.00 | 1.95 -1.08 | 0.00 0.00 | 1.01 |
| VA4 - 8 | 810.00 | -0.04 0.00 | 1446.13 911.20 | 1528.33 | -0.66 122.03 | 0.00 | 0.37 1.00 | -0.07 0.07 | 1.01 |
| VA4 - 9 | 810.00 | -0.02 0.00 | 916.44 -2259.96 | 916.44 | 122.03 -144.19 | 122.03 | -5.16 5.64 | 0.45 -0.45 | 1.01 |
| VA4 - 10 | 810.00 | -0.15 0.00 | -1820.65 -41.67 | 0.00 | -38.94 11.56 | 11.56 | 2.23 -1.44 | -0.05 0.05 | 1.10 |
| VA4 - 11 | 810.00 | -0.15 0.00 | -34.97 412.13 | 412.13 | 11.56 16.07 | 16.07 | 1.04 -0.59 | -0.01 0.01 | 1.10 |
| VA4 - 12 | 810.00 | -0.18 0.00 | 413.10 -1075.65 | 413.10 | 16.07 -63.39 | 16.07 | -0.15 1.56 | 0.05 -0.05 | 1.10 |
| VA4 - 13 | 810.00 | 0.00 0.03 | -473.17 -685.18 | 300.05 | -13.71 -15.79 | 0.00 | 1.12 1.27 | 0.00 0.00 | -1.83 |
| VA5 - 1 | 772.50 | -0.02 0.00 | -323.95 519.39 | 686.01 | -70.36 38.05 | 38.05 | 1.25 0.51 | -0.05 0.05 | -1.87 |
| VA5 - 2 | 772.50 | -0.02 0.00 | 519.33 -1704.95 | 519.33 | 38.05 2.40 | 38.05 | -1.22 2.22 | 0.03 -0.03 | -1.87 |
| VA5 - 3 | 772.50 | 0.00 0.00 | -1906.11 379.12 | 379.12 | -1.25 1.71 | 1.71 | 2.66 -1.88 | 0.00 0.00 | 1.36 |
| VA5 - 4 | 772.50 | 0.00 0.00 | 379.04 1195.74 | 1195.74 | 1.71 46.39 | 0.00 | 1.17 -0.34 | -0.04 0.04 | 1.36 |
| VA5 - 5 | 772.50 | 0.00 0.00 | 1196.76 -1635.33 | 1196.76 | 46.39 -19.71 | 46.39 | -0.37 2.12 | 0.03 -0.03 | 1.36 |
| VA5 - 6 | 772.50 | 0.00 0.06 | -1398.28 666.58 | 666.58 | 67.45 -49.71 | 67.45 | 1.95 -0.77 | 0.08 -0.08 | -0.32 |
| VA5 - 7 | 772.50 | 0.00 0.08 | 665.61 -268.03 | 665.61 | -4.44 -41.19 | 0.00 | 0.02 1.20 | 0.02 -0.02 | -10.08 |
| VA6 - 1 | 772.50 | 0.00 0.04 | 7.69 522.78 | 579.83 | -5.84 -11.72 | 0.00 | 0.94 0.30 | 0.00 0.00 | 1.51 |
| VA6 - 2 | 772.50 | 0.00 0.04 | 527.51 -2749.46 | 527.51 | -11.72 27.01 | 27.01 | -1.54 2.73 | -0.03 0.03 | 1.51 |
| VA7 - 1 | 772.50 | -0.07 0.00 | -657.49 1637.60 | 1637.60 | -36.88 4.34 | 4.34 | 2.07 -0.85 | -0.03 0.03 | -3.06 |
| VA7 - 2 | 772.50 | -0.07 0.00 | 1632.87 0.00 | 1632.87 | 4.34 0.00 | 4.34 | -0.39 1.64 | 0.00 0.00 | -3.06 |
| VA8 - 1 | 866.25 | 0.00 0.49 | -3536.88 -6755.73 | 2954.64 | -0.22 0.33 | 0.33 | 3.35 4.10 | 0.00 0.00 | -1.36 |
| VA8 - 2 | 866.25 | 0.00 0.72 | -8704.75 -5846.93 | 4843.37 | 12.35 -7.14 | 12.35 | 4.85 4.30 | 0.00 0.00 | 1.16 |
| VA9 - 1 | 810.00 | 0.00 0.13 | -1737.92 -2592.69 | 1263.17 | 29.83 -23.29 | 29.83 | 2.21 2.50 | 0.01 -0.01 | 2.31 |
| VA9 - 2 | 810.00 | 0.00 0.18 | -2725.14 -2620.91 | 1427.64 | -10.18 9.74 | 9.74 | 2.59 2.56 | 0.00 0.00 | -0.25 |
| VA10 - 1 | 810.00 | 0.00 0.10 | -2112.00 -1607.45 | 905.41 | 22.88 -31.33 | 22.88 | 2.21 2.02 | 0.01 -0.01 | 0.73 |
| VA10 - 2 | 810.00 | 0.00 0.05 | -1332.36 -705.99 | 609.67 | -39.09 24.99 | 24.99 | 1.78 1.46 | -0.02 0.02 | -2.99 |
| VA11 - 1 | 772.50 | -0.11 0.00 | -143.32 -16.01 | 283.28 | 68.87 -44.06 | 68.87 | 0.81 0.68 | 0.06 -0.06 | 1.72 |
| VA11 - 2 | 772.50 | -0.72 0.00 | -742.69 128.69 | 675.13 | 1.54 -5.02 | 1.54 | 1.48 0.92 | 0.00 0.00 | -1.31 |
| VA11 - 3 | 772.50 | -0.72 | 125.56 | 125.56 | -5.02 | 0.00 | -1.69 | 0.00 | -1.31 |

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|----------|--------|---------------|----------------------|---------|------------------|--------|---------------|---------------|-------|
| | | 0.00 | -1981.52 | | -9.53 | | 2.47 | 0.00 | |
| VA12 - 1 | 772.50 | -0.14 0.00 | 0.00 1751.57 | 2025.52 | 0.00 -1.74 | 0.00 | 1.77 0.65 | 0.00 0.00 | -0.03 |
| VA12 - 2 | 772.50 | -0.14 0.00 | 1754.70 0.00 | 1754.70 | -1.74 0.00 | 0.00 | -1.42 2.17 | 0.00 0.00 | -0.03 |
| VA13 | 735.00 | 0.00 0.08 | 0.00 0.00 | 338.60 | 0.00 0.00 | 0.00 | 0.71 0.71 | 0.00 0.00 | 0.06 |
| VA14 - 1 | 772.50 | 0.00 0.58 | 0.00 2243.21 | 2243.21 | 0.00 -10.48 | 0.00 | 2.54 -1.73 | 0.01 -0.01 | 1.02 |
| VA14 - 2 | 772.50 | 0.00 0.57 | 2243.82 0.00 | 2357.02 | -10.48 0.00 | 0.00 | 0.42 1.91 | 0.00 0.00 | 1.02 |
| VA15 | 735.00 | -0.04 0.00 | 0.00 0.00 | 338.60 | 0.00 0.00 | 0.00 | 0.71 0.71 | 0.00 0.00 | 0.09 |
| VA16 | 735.00 | 0.00 0.07 | 0.00 0.00 | 338.60 | 0.00 0.00 | 0.00 | 0.71 0.71 | 0.00 0.00 | -1.01 |
| VA17 - 1 | 772.50 | 0.00 0.53 | 0.00 3941.38 | 3941.38 | 0.00 23.10 | 23.10 | 4.16 -3.35 | -0.02 0.02 | -5.24 |
| VA17 - 2 | 772.50 | 0.00 0.57 | 3940.77 0.00 | 3940.77 | -24.26 0.00 | 0.00 | -0.29 2.48 | -0.01 0.01 | 1.62 |
| VA18 | 772.50 | 0.00 0.26 | -681.68 501.73 | 512.59 | -79.09 111.66 | 111.66 | 1.36 0.13 | -0.10 0.10 | 1.25 |
| VA19 | 772.50 | 0.00 0.04 | 0.00 0.00 | 102.16 | 0.00 0.00 | 0.00 | 0.41 0.41 | 0.00 0.00 | -6.70 |
| VA20 | 772.50 | -0.05 0.00 | -9.76 0.00 | 351.53 | -45.26 0.00 | 0.00 | 0.75 0.74 | -0.02 0.02 | 0.97 |
| VA21 - 1 | 772.50 | 0.00 0.15 | -1530.31 2254.57 | 2254.57 | 27.36 -34.29 | 27.36 | 2.42 0.06 | 0.02 -0.02 | 5.36 |
| VA21 - 2 | 772.50 | 0.00 0.15 | 2256.08 -1576.97 | 2256.08 | -28.45 11.52 | 11.52 | -1.00 2.63 | -0.02 0.02 | -2.33 |
| VA22 | 772.50 | 0.00 0.14 | -303.46 -876.49 | 711.04 | -55.63 80.21 | 80.21 | 1.25 1.57 | -0.04 0.04 | -0.26 |
| VA23 | 772.50 | 0.00 0.03 | 0.00 0.00 | 1006.68 | 0.00 0.00 | 0.00 | 1.25 1.25 | 0.00 0.00 | 4.73 |
| VA24 - 1 | 810.00 | 0.00 0.12 | -1679.93 -2643.11 | 1269.53 | -56.91 36.88 | 36.88 | 2.19 2.52 | -0.02 0.02 | -4.92 |
| VA24 - 2 | 810.00 | 0.00 0.17 | -2541.27 -2926.50 | 1371.31 | 6.43 28.50 | 28.50 | 2.52 2.64 | 0.00 0.00 | -0.26 |
| VA25 - 1 | 810.00 | 0.00 0.20 | -3029.60 1753.35 | 1753.35 | 78.42 -42.40 | 78.42 | 3.27 -1.72 | 0.06 -0.06 | 3.74 |
| VA25 - 2 | 810.00 | 0.00 0.20 | 1756.41 -2389.00 | 1757.16 | -42.40 -4.83 | 0.00 | 0.09 2.59 | -0.01 0.01 | 3.74 |
| VA25 - 3 | 810.00 | 0.00 0.07 | -1535.16 -740.79 | 501.27 | 1.00 -23.07 | 1.00 | 1.82 1.42 | 0.01 -0.01 | -0.77 |

| CASO: G1+G2+1.4Q+D2 | | | | | | | | | |
|---------------------|------------------|------------------|-----------------------|------------------|-----------------------|------------------|--------------------|--------------------|----------------|
| Elemento | Carga (kgf/m) | Rd Nd (tf) | Mxi Mxf (kgf.m) | MxMáx (kgf.m) | Myi Myf (kgf.m) | MyMáx (kgf.m) | Vxi Vxf (tf) | Vyi Vyf (tf) | Mtd (kgf/m) |
| VA1 - 1 | 772.50 | 0.00 0.27 | -1635.90 1920.48 | 1920.48 | -74.07 4.25 | 4.25 | 2.58 -1.08 | -0.04 0.04 | -2.54 |
| VA1 - 2 | 772.50 | 0.00 0.27 | 1920.38 340.85 | 1920.38 | 4.25 -98.22 | 0.00 | -1.10 1.91 | 0.10 -0.10 | -3.18 |
| VA1 - 3 | 772.50 | 0.00 0.25 | 341.74 -2007.97 | 341.74 | -98.22 175.87 | 175.87 | -3.82 4.27 | -0.47 0.47 | -2.88 |
| VA1 - 4 | 772.50 | -0.45 0.00 | -2248.68 382.85 | 739.97 | 147.11 -110.52 | 147.11 | 2.15 0.75 | 0.07 -0.07 | 0.61 |
| VA1 - 5 | 772.50 | -0.49 0.00 | 384.50 -1377.94 | 384.50 | -110.52 146.64 | 146.64 | -3.23 3.63 | -0.50 0.50 | -3.77 |
| VA1 - 6 | 772.50 | -0.42 0.00 | -1039.22 -534.16 | 256.82 | 114.87 -60.11 | 114.87 | 1.42 1.11 | 0.05 -0.05 | 2.07 |
| VA2 | 772.50 | 0.00 0.00 | 0.00 0.00 | 376.65 | 0.00 0.00 | 0.00 | 0.77 0.77 | 0.00 0.00 | -3.23 |


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|----------|--------|---------------|----------------------|---------|-------------------|--------|---------------|---------------|--------|
| VA3 - 1 | 772.50 | 0.00 0.01 | 0.00 -1556.98 | 1110.73 | 0.00 20.85 | 20.85 | 1.31 2.03 | 0.00 0.00 | 0.65 |
| VA3 - 2 | 772.50 | 0.00 0.00 | -1563.53 6.43 | 6.43 | 70.30 0.00 | 70.30 | 1.61 -0.41 | 0.05 -0.05 | 0.00 |
| VA4 - 1 | 810.00 | 0.00 0.08 | -1735.84 -1639.91 | 872.28 | 68.87 -45.94 | 68.87 | 2.06 2.02 | 0.02 -0.02 | 0.70 |
| VA4 - 2 | 810.00 | 0.00 0.19 | -1880.04 1707.95 | 1707.95 | -85.24 -40.55 | 0.00 | 2.62 -1.02 | -0.02 0.02 | -1.82 |
| VA4 - 3 | 810.00 | 0.00 0.19 | 1708.06 1435.36 | 1708.06 | -40.55 9.72 | 0.00 | -0.74 1.00 | -0.16 0.16 | -1.82 |
| VA4 - 4 | 810.00 | 0.00 0.19 | 1435.51 -43.20 | 1435.51 | 9.72 184.87 | 184.87 | -1.71 2.30 | -0.24 0.24 | -1.82 |
| VA4 - 5 | 810.00 | 0.00 0.17 | -44.04 -2873.01 | 0.00 | 184.87 -4.60 | 184.87 | -4.85 5.30 | 0.34 -0.34 | -2.48 |
| VA4 - 6 | 810.00 | -0.10 0.00 | -3577.23 -388.23 | 0.00 | -44.19 -2.91 | 0.00 | 3.58 -2.76 | -0.04 0.04 | 3.90 |
| VA4 - 7 | 810.00 | -0.10 0.00 | -388.10 1353.46 | 1353.46 | -2.91 -0.46 | 0.00 | 2.05 -1.18 | 0.00 0.00 | 0.65 |
| VA4 - 8 | 810.00 | -0.10 0.00 | 1352.44 999.15 | 1489.88 | -0.46 122.65 | 0.00 | 0.47 0.89 | -0.07 0.07 | 0.65 |
| VA4 - 9 | 810.00 | -0.08 0.00 | 1004.04 -2109.05 | 1004.04 | 122.65 -143.51 | 122.65 | -5.05 5.53 | 0.45 -0.45 | 0.65 |
| VA4 - 10 | 810.00 | -0.22 0.00 | -1908.73 -47.16 | 0.00 | -38.63 10.42 | 10.42 | 2.31 -1.53 | -0.05 0.05 | 1.11 |
| VA4 - 11 | 810.00 | -0.22 0.00 | -40.73 453.20 | 453.20 | 10.42 13.42 | 13.42 | 1.12 -0.68 | -0.01 0.01 | 1.11 |
| VA4 - 12 | 810.00 | -0.24 0.00 | 454.20 -886.06 | 454.20 | 13.42 -61.79 | 13.42 | -0.07 1.47 | 0.04 -0.04 | 1.11 |
| VA4 - 13 | 810.00 | 0.00 0.03 | -923.24 -79.28 | 426.76 | -11.73 -23.67 | 0.00 | 1.48 0.91 | 0.00 0.00 | -1.85 |
| VA5 - 1 | 772.50 | -0.01 0.00 | -500.12 589.84 | 689.19 | -72.62 38.86 | 38.86 | 1.36 0.40 | -0.05 0.05 | -1.89 |
| VA5 - 2 | 772.50 | -0.01 0.00 | 589.69 -1494.27 | 589.69 | 38.86 2.52 | 38.86 | -1.11 2.11 | 0.03 -0.03 | -1.89 |
| VA5 - 3 | 772.50 | 0.00 0.01 | -2056.79 285.56 | 285.56 | -0.58 1.63 | 1.63 | 2.72 -1.94 | 0.00 0.00 | 1.40 |
| VA5 - 4 | 772.50 | 0.00 0.01 | 285.41 1163.23 | 1163.23 | 1.63 46.61 | 0.00 | 1.23 -0.40 | -0.04 0.04 | 1.40 |
| VA5 - 5 | 772.50 | 0.00 0.01 | 1164.24 -1538.61 | 1164.24 | 46.61 -19.18 | 46.61 | -0.31 2.07 | 0.03 -0.03 | 1.40 |
| VA5 - 6 | 772.50 | 0.00 0.07 | -1508.54 690.86 | 690.86 | 67.57 -50.91 | 67.57 | 2.03 -0.86 | 0.08 -0.08 | -0.31 |
| VA5 - 7 | 772.50 | 0.00 0.10 | 689.86 -104.07 | 694.75 | -6.70 -53.02 | 0.00 | 0.11 1.11 | 0.03 -0.03 | -10.44 |
| VA6 - 1 | 772.50 | 0.00 0.05 | 6.26 709.68 | 730.14 | 4.95 -9.41 | 0.00 | 1.06 0.18 | 0.01 -0.01 | 1.60 |
| VA6 - 2 | 772.50 | 0.00 0.05 | 714.44 -2382.21 | 714.44 | -9.41 21.99 | 21.99 | -1.43 2.61 | -0.02 0.02 | 1.60 |
| VA7 - 1 | 772.50 | -0.05 0.00 | -902.41 1513.73 | 1513.73 | -32.55 6.94 | 6.94 | 2.14 -0.93 | -0.03 0.03 | -3.19 |
| VA7 - 2 | 772.50 | -0.05 0.00 | 1508.96 0.00 | 1508.96 | 6.94 0.00 | 6.94 | -0.32 1.56 | 0.00 0.00 | -3.19 |
| VA8 - 1 | 866.25 | 0.00 0.49 | -3829.03 -6513.48 | 2905.61 | -9.66 2.99 | 2.99 | 3.42 4.04 | 0.00 0.00 | -1.39 |
| VA8 - 2 | 866.25 | 0.00 0.74 | -8911.06 -5590.68 | 4886.13 | 10.03 1.34 | 10.03 | 4.89 4.26 | 0.00 0.00 | 1.17 |
| VA9 - 1 | 810.00 | 0.00 0.12 | -1753.27 -2577.68 | 1262.48 | 40.07 -33.62 | 40.07 | 2.21 2.49 | 0.01 -0.01 | 3.60 |
| VA9 - 2 | 810.00 | 0.00 0.17 | -2723.10 -2616.43 | 1430.94 | -18.02 7.98 | 7.98 | 2.59 2.56 | 0.00 0.00 | -0.28 |
| VA10 - 1 | 810.00 | 0.00 0.10 | -2113.47 -1605.47 | 905.80 | 21.01 -29.98 | 21.01 | 2.21 2.02 | 0.01 -0.01 | 0.10 |
| VA10 - 2 | 810.00 | 0.00 | -1335.10 | 609.70 | -41.01 | 29.30 | 1.78 | -0.02 | -3.69 |

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|----------|--------|---------------|----------------------|---------|------------------|--------|---------------|---------------|-------|
| | | 0.05 | -703.47 | | 29.30 | | 1.46 | 0.02 | |
| VA11 - 1 | 772.50 | -0.11 0.00 | -162.05 -10.36 | 278.10 | 70.93 -46.46 | 70.93 | 0.82 0.67 | 0.06 -0.06 | 1.33 |
| VA11 - 2 | 772.50 | -0.72 0.00 | -762.35 147.63 | 678.63 | -0.26 -4.46 | 0.00 | 1.49 0.91 | 0.00 0.00 | -0.94 |
| VA11 - 3 | 772.50 | -0.72 0.00 | 144.40 -1950.09 | 144.40 | -4.46 -8.29 | 0.00 | -1.67 2.46 | 0.00 0.00 | -0.94 |
| VA12 - 1 | 772.50 | -0.14 0.00 | 0.00 1751.49 | 2025.46 | 0.00 -1.81 | 0.00 | 1.77 0.65 | 0.00 0.00 | -0.11 |
| VA12 - 2 | 772.50 | -0.14 0.00 | 1754.72 0.00 | 1754.72 | -1.81 0.00 | 0.00 | -1.42 2.17 | 0.00 0.00 | -0.11 |
| VA13 | 735.00 | 0.00 0.08 | 0.00 0.00 | 338.60 | 0.00 0.00 | 0.00 | 0.71 0.71 | 0.00 0.00 | 0.15 |
| VA14 - 1 | 772.50 | 0.00 0.57 | 0.00 2243.09 | 2243.09 | 0.00 -10.77 | 0.00 | 2.54 -1.73 | 0.01 -0.01 | 0.88 |
| VA14 - 2 | 772.50 | 0.00 0.57 | 2243.75 0.00 | 2356.96 | -10.77 0.00 | 0.00 | 0.42 1.91 | 0.00 0.00 | 0.88 |
| VA15 | 735.00 | -0.04 0.00 | 0.00 0.00 | 338.60 | 0.00 0.00 | 0.00 | 0.71 0.71 | 0.00 0.00 | 0.14 |
| VA16 | 735.00 | 0.00 0.07 | 0.00 0.00 | 338.60 | 0.00 0.00 | 0.00 | 0.71 0.71 | 0.00 0.00 | -1.02 |
| VA17 - 1 | 772.50 | 0.00 0.53 | 0.00 3941.49 | 3941.49 | 0.00 23.95 | 23.95 | 4.16 -3.35 | -0.02 0.02 | -4.89 |
| VA17 - 2 | 772.50 | 0.00 0.58 | 3940.84 0.00 | 3940.84 | -25.51 0.00 | 0.00 | -0.29 2.48 | -0.01 0.01 | 1.66 |
| VA18 | 772.50 | 0.00 0.26 | -674.33 493.24 | 505.86 | -79.29 111.90 | 111.90 | 1.35 0.14 | -0.10 0.10 | 1.13 |
| VA19 | 772.50 | 0.00 0.05 | 0.00 0.00 | 102.16 | 0.00 0.00 | 0.00 | 0.41 0.41 | 0.00 0.00 | -6.43 |
| VA20 | 772.50 | -0.05 0.00 | -10.13 0.00 | 351.37 | -44.21 0.00 | 0.00 | 0.75 0.74 | -0.02 0.02 | 1.00 |
| VA21 - 1 | 772.50 | 0.00 0.16 | -1568.44 2359.10 | 2359.10 | 25.22 -34.30 | 25.22 | 2.46 0.02 | 0.02 -0.02 | 4.60 |
| VA21 - 2 | 772.50 | 0.00 0.17 | 2360.69 -1626.72 | 2360.69 | -39.26 20.93 | 20.93 | -1.07 2.70 | -0.03 0.03 | -1.66 |
| VA22 | 772.50 | 0.00 0.14 | -280.85 -898.55 | 713.79 | -56.19 81.26 | 81.26 | 1.24 1.58 | -0.04 0.04 | -0.07 |
| VA23 | 772.50 | 0.00 0.03 | 0.00 0.00 | 1006.68 | 0.00 0.00 | 0.00 | 1.25 1.25 | 0.00 0.00 | 4.76 |
| VA24 - 1 | 810.00 | 0.00 0.13 | -1674.45 -2650.08 | 1269.43 | -49.99 30.18 | 30.18 | 2.19 2.52 | -0.01 0.01 | -3.65 |
| VA24 - 2 | 810.00 | 0.00 0.18 | -2553.45 -2915.96 | 1370.12 | 1.71 16.54 | 16.54 | 2.52 2.64 | 0.00 0.00 | -0.30 |
| VA25 - 1 | 810.00 | 0.00 0.20 | -2988.46 1701.05 | 1701.05 | 58.68 -21.30 | 58.68 | 3.23 -1.67 | 0.04 -0.04 | 2.79 |
| VA25 - 2 | 810.00 | 0.00 0.19 | 1704.24 -2347.85 | 1710.82 | -21.30 -7.65 | 0.00 | 0.12 2.56 | 0.00 0.00 | 2.79 |
| VA25 - 3 | 810.00 | 0.00 0.07 | -1523.69 -742.02 | 505.39 | -5.42 -20.90 | 0.00 | 1.81 1.42 | 0.00 0.00 | -1.18 |

| CASO: G1+G2+1.4Q+D3 | | | | | | | | | |
|---------------------|------------------|------------------|-----------------------|------------------|-----------------------|------------------|--------------------|--------------------|----------------|
| Elemento | Carga (kgf/m) | Rd Nd (tf) | Mxi Mxf (kgf.m) | MxMáx (kgf.m) | Myi Myf (kgf.m) | MyMáx (kgf.m) | Vxi Vxf (tf) | Vyi Vyf (tf) | Mtd (kgf/m) |
| VA1 - 1 | 772.50 | 0.00 0.28 | -1460.96 1922.56 | 1922.56 | -64.03 3.30 | 3.30 | 2.49 -0.99 | -0.03 0.03 | -2.08 |
| VA1 - 2 | 772.50 | 0.00 0.28 | 1922.47 249.57 | 1922.47 | 3.30 -115.22 | 0.00 | -1.19 2.00 | 0.11 -0.11 | -2.71 |
| VA1 - 3 | 772.50 | 0.00 0.25 | 250.49 -2150.87 | 250.49 | -115.22 169.33 | 169.33 | -3.91 4.36 | -0.49 0.49 | -2.51 |
| VA1 - 4 | 772.50 | -0.45 0.00 | -2148.22 309.46 | 714.87 | 142.63 -105.81 | 142.63 | 2.10 0.79 | 0.07 -0.07 | 0.27 |


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|----------|--------|---------------|----------------------|---------|-------------------|--------|---------------|---------------|-------|
| VA1 - 5 | 772.50 | -0.49 0.00 | 311.05 -1475.23 | 311.05 | -105.81 142.73 | 142.73 | -3.28 3.67 | -0.48 0.48 | -3.28 |
| VA1 - 6 | 772.50 | -0.43 0.00 | -884.75 -723.26 | 224.00 | 113.55 -58.64 | 113.55 | 1.31 1.21 | 0.05 -0.05 | 1.67 |
| VA2 | 772.50 | 0.00 0.00 | 0.00 0.00 | 376.65 | 0.00 0.00 | 0.00 | 0.77 0.77 | 0.00 0.00 | -3.30 |
| VA3 - 1 | 772.50 | 0.00 0.01 | 0.00 -1556.70 | 1110.84 | 0.00 22.64 | 22.64 | 1.31 2.03 | -0.01 0.01 | 0.63 |
| VA3 - 2 | 772.50 | 0.00 0.00 | -1563.37 6.59 | 6.59 | 65.14 0.00 | 65.14 | 1.61 -0.41 | 0.04 -0.04 | 0.00 |
| VA4 - 1 | 810.00 | 0.00 0.10 | -1544.01 -1711.67 | 933.75 | 62.43 -47.30 | 62.43 | 2.00 2.07 | 0.02 -0.02 | 0.61 |
| VA4 - 2 | 810.00 | 0.00 0.20 | -1822.35 1635.72 | 1635.72 | -70.11 -45.21 | 0.00 | 2.55 -0.96 | -0.01 0.01 | -0.27 |
| VA4 - 3 | 810.00 | 0.00 0.20 | 1635.81 1342.47 | 1635.81 | -45.21 4.93 | 0.00 | -0.81 1.06 | -0.16 0.16 | -0.27 |
| VA4 - 4 | 810.00 | 0.00 0.20 | 1342.58 -184.73 | 1342.58 | 4.93 182.30 | 182.30 | -1.77 2.37 | -0.24 0.24 | -0.27 |
| VA4 - 5 | 810.00 | 0.00 0.18 | -185.63 -3051.41 | 0.00 | 182.30 -24.36 | 182.30 | -4.91 5.36 | 0.37 -0.37 | -3.07 |
| VA4 - 6 | 810.00 | -0.09 0.00 | -3424.16 -286.82 | 0.00 | -54.10 -12.69 | 0.00 | 3.53 -2.71 | -0.04 0.04 | 2.33 |
| VA4 - 7 | 810.00 | -0.08 0.00 | -286.73 1399.56 | 1399.56 | -12.69 -1.79 | 0.00 | 2.00 -1.13 | -0.01 0.01 | -0.06 |
| VA4 - 8 | 810.00 | -0.08 0.00 | 1398.53 958.59 | 1504.48 | -1.79 125.45 | 0.00 | 0.42 0.94 | -0.08 0.08 | -0.06 |
| VA4 - 9 | 810.00 | -0.07 0.00 | 963.65 -2179.64 | 963.65 | 125.45 -129.59 | 125.45 | -5.10 5.58 | 0.43 -0.43 | -0.06 |
| VA4 - 10 | 810.00 | -0.19 0.00 | -1854.55 -40.05 | 0.00 | -36.63 11.97 | 11.97 | 2.26 -1.48 | -0.05 0.05 | 1.17 |
| VA4 - 11 | 810.00 | -0.19 0.00 | -33.46 433.79 | 433.79 | 11.97 16.55 | 16.55 | 1.07 -0.63 | -0.01 0.01 | 1.17 |
| VA4 - 12 | 810.00 | -0.21 0.00 | 434.81 -990.53 | 434.81 | 16.55 -63.07 | 16.55 | -0.11 1.52 | 0.05 -0.05 | 1.17 |
| VA4 - 13 | 810.00 | 0.00 0.02 | -702.63 -382.41 | 341.63 | -14.29 -26.25 | 0.00 | 1.30 1.08 | 0.00 0.00 | -1.87 |
| VA5 - 1 | 772.50 | -0.01 0.00 | -414.29 557.48 | 689.07 | -61.41 36.79 | 36.79 | 1.31 0.45 | -0.04 0.04 | -1.04 |
| VA5 - 2 | 772.50 | -0.01 0.00 | 557.36 -1593.85 | 557.36 | 36.79 -11.50 | 36.79 | -1.16 2.16 | 0.04 -0.04 | -1.04 |
| VA5 - 3 | 772.50 | 0.00 0.01 | -1982.50 331.52 | 331.52 | -13.53 -2.78 | 0.00 | 2.69 -1.91 | -0.01 0.01 | 0.64 |
| VA5 - 4 | 772.50 | 0.00 0.01 | 331.42 1178.93 | 1178.93 | -2.78 42.89 | 0.00 | 1.20 -0.37 | -0.04 0.04 | 0.64 |
| VA5 - 5 | 772.50 | 0.00 0.01 | 1179.96 -1586.98 | 1179.96 | 42.89 -9.13 | 42.89 | -0.34 2.09 | 0.02 -0.02 | 0.64 |
| VA5 - 6 | 772.50 | 0.00 0.07 | -1462.01 677.72 | 677.72 | 65.60 -49.15 | 65.60 | 1.99 -0.82 | 0.08 -0.08 | -0.55 |
| VA5 - 7 | 772.50 | 0.00 0.09 | 676.70 -178.74 | 676.70 | -10.01 -43.91 | 0.00 | 0.07 1.15 | 0.02 -0.02 | -9.96 |
| VA6 - 1 | 772.50 | 0.00 0.04 | 6.89 630.09 | 660.58 | -5.35 -11.67 | 0.00 | 1.01 0.23 | 0.00 0.00 | 1.73 |
| VA6 - 2 | 772.50 | 0.00 0.04 | 634.85 -2538.61 | 634.85 | -11.67 27.94 | 27.94 | -1.48 2.66 | -0.03 0.03 | 1.73 |
| VA7 - 1 | 772.50 | -0.06 0.00 | -797.07 1567.01 | 1567.01 | -37.19 4.86 | 4.86 | 2.11 -0.90 | -0.03 0.03 | -3.34 |
| VA7 - 2 | 772.50 | -0.06 0.00 | 1562.25 0.00 | 1562.25 | 4.86 0.00 | 4.86 | -0.35 1.59 | 0.00 0.00 | -3.34 |
| VA8 - 1 | 866.25 | 0.00 0.50 | -3676.39 -6643.07 | 2926.98 | -4.26 -1.67 | 0.00 | 3.38 4.07 | 0.00 0.00 | -0.79 |
| VA8 - 2 | 866.25 | 0.00 0.73 | -8812.14 -5717.44 | 4863.53 | 6.65 -1.54 | 6.65 | 4.87 4.28 | 0.00 0.00 | 0.71 |
| VA9 - 1 | 810.00 | 0.00 | -1623.40 | 1279.01 | 25.40 | 25.40 | 2.17 | 0.01 | 2.96 |

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|----------|--------|---------------|----------------------|---------|------------------|-------|---------------|---------------|-------|
| | | 0.14 | -2691.53 | | -21.79 | | 2.54 | -0.01 | |
| VA9 - 2 | 810.00 | 0.00 0.19 | -2640.07 -2704.16 | 1427.91 | -17.85 13.44 | 13.44 | 2.57 2.59 | 0.00 0.00 | -0.23 |
| VA10 - 1 | 810.00 | 0.00 0.11 | -2015.18 -1694.56 | 907.20 | 17.39 -29.51 | 17.39 | 2.18 2.05 | 0.01 -0.01 | 0.40 |
| VA10 - 2 | 810.00 | 0.00 0.05 | -1206.42 -857.15 | 589.77 | -48.07 44.89 | 44.89 | 1.71 1.53 | -0.02 0.02 | -3.40 |
| VA11 - 1 | 772.50 | -0.13 0.00 | 47.24 -123.36 | 327.29 | 61.41 -36.39 | 61.41 | 0.66 0.83 | 0.05 -0.05 | 1.54 |
| VA11 - 2 | 772.50 | -0.74 0.00 | -611.01 -28.31 | 633.60 | -4.91 -2.04 | 0.00 | 1.39 1.01 | 0.00 0.00 | -1.17 |
| VA11 - 3 | 772.50 | -0.74 0.00 | -31.61 -2232.86 | 0.00 | -2.04 -2.25 | 0.00 | -1.78 2.56 | 0.00 0.00 | -1.17 |
| VA12 - 1 | 772.50 | -0.15 0.00 | 0.00 1751.43 | 2025.42 | 0.00 -0.84 | 0.00 | 1.77 0.65 | 0.00 0.00 | -0.09 |
| VA12 - 2 | 772.50 | -0.15 0.00 | 1754.74 0.00 | 1754.74 | -0.84 0.00 | 0.00 | -1.42 2.17 | 0.00 0.00 | -0.09 |
| VA13 | 735.00 | 0.00 0.08 | 0.00 0.00 | 338.60 | 0.00 0.00 | 0.00 | 0.71 0.71 | 0.00 0.00 | 0.11 |
| VA14 - 1 | 772.50 | 0.00 0.61 | 0.00 2243.15 | 2243.15 | 0.00 -9.39 | 0.00 | 2.54 -1.73 | 0.01 -0.01 | 0.92 |
| VA14 - 2 | 772.50 | 0.00 0.60 | 2243.78 0.00 | 2356.99 | -9.39 0.00 | 0.00 | 0.42 1.91 | 0.00 0.00 | 0.92 |
| VA15 | 735.00 | -0.03 0.00 | 0.00 0.00 | 338.60 | 0.00 0.00 | 0.00 | 0.71 0.71 | 0.00 0.00 | 0.11 |
| VA16 | 735.00 | 0.00 0.07 | 0.00 0.00 | 338.60 | 0.00 0.00 | 0.00 | 0.71 0.71 | 0.00 0.00 | -1.03 |
| VA17 - 1 | 772.50 | 0.00 0.51 | 0.00 3941.43 | 3941.43 | 0.00 20.71 | 20.71 | 4.16 -3.35 | -0.02 0.02 | -5.06 |
| VA17 - 2 | 772.50 | 0.00 0.56 | 3940.81 0.00 | 3940.81 | -21.79 0.00 | 0.00 | -0.29 2.48 | -0.01 0.01 | 1.61 |
| VA18 | 772.50 | 0.00 0.24 | -497.96 316.81 | 384.86 | -68.01 98.80 | 98.80 | 1.17 0.32 | -0.09 0.09 | 1.19 |
| VA19 | 772.50 | 0.00 0.04 | 0.00 0.00 | 102.16 | 0.00 0.00 | 0.00 | 0.41 0.41 | 0.00 0.00 | -6.59 |
| VA20 | 772.50 | -0.05 0.00 | -9.41 0.00 | 351.69 | -39.14 0.00 | 0.00 | 0.75 0.74 | -0.02 0.02 | 1.02 |
| VA21 - 1 | 772.50 | 0.00 0.16 | -1450.70 2293.49 | 2293.49 | 30.34 -37.46 | 30.34 | 2.41 0.07 | 0.02 -0.02 | 4.93 |
| VA21 - 2 | 772.50 | 0.00 0.16 | 2295.22 -1707.10 | 2295.22 | -32.11 10.76 | 10.76 | -1.08 2.71 | -0.02 0.02 | -1.96 |
| VA22 | 772.50 | 0.00 0.14 | -99.64 -1115.70 | 726.81 | -53.19 77.50 | 77.50 | 1.13 1.69 | -0.04 0.04 | -0.21 |
| VA23 | 772.50 | 0.00 0.03 | 0.00 0.00 | 1006.68 | 0.00 0.00 | 0.00 | 1.25 1.25 | 0.00 0.00 | 4.76 |
| VA24 - 1 | 810.00 | 0.00 0.14 | -1523.65 -2780.50 | 1294.17 | -45.42 28.52 | 28.52 | 2.14 2.57 | -0.01 0.01 | -4.27 |
| VA24 - 2 | 810.00 | 0.00 0.18 | -2441.11 -3028.45 | 1373.68 | 6.68 19.65 | 19.65 | 2.49 2.67 | 0.00 0.00 | -0.24 |
| VA25 - 1 | 810.00 | 0.00 0.21 | -2882.57 1759.80 | 1759.80 | 71.27 -30.71 | 71.27 | 3.20 -1.65 | 0.05 -0.05 | 3.24 |
| VA25 - 2 | 810.00 | 0.00 0.20 | 1763.15 -2480.05 | 1763.15 | -30.71 -11.29 | 0.00 | 0.06 2.62 | -0.01 0.01 | 3.24 |
| VA25 - 3 | 810.00 | 0.00 0.07 | -1366.29 -932.80 | 474.22 | 8.11 -37.21 | 8.11 | 1.73 1.51 | 0.01 -0.01 | -1.04 |


| CASO: G1+G2+1.4Q+D4 | | | | | | | | | |
|---------------------|------------------|------------------|-----------------------|------------------|-----------------------|------------------|--------------------|--------------------|----------------|
| Elemento | Carga (kgf/m) | Rd Nd (tf) | Mxi Mxf (kgf.m) | MxMáx (kgf.m) | Myi Myf (kgf.m) | MyMáx (kgf.m) | Vxi Vxf (tf) | Vyi Vyf (tf) | Mtd (kgf/m) |
| VA1 - 1 | 772.50 | 0.00 0.28 | -1500.99 1919.23 | 1919.23 | -84.38 5.72 | 5.72 | 2.51 -1.01 | -0.05 0.05 | -2.97 |

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|----------|--------|---------------|----------------------|---------|-------------------|--------|---------------|---------------|--------|
| VA1 - 2 | 772.50 | 0.00 0.28 | 1919.19 266.18 | 1919.19 | 5.72 -82.19 | 0.00 | -1.17 1.98 | 0.08 -0.08 | -3.60 |
| VA1 - 3 | 772.50 | 0.00 0.26 | 267.16 -2123.20 | 267.16 | -82.19 180.86 | 180.86 | -3.89 4.34 | -0.45 0.45 | -3.39 |
| VA1 - 4 | 772.50 | -0.44 0.00 | -2173.31 325.70 | 719.63 | 151.67 -115.42 | 151.67 | 2.11 0.78 | 0.07 -0.07 | 0.71 |
| VA1 - 5 | 772.50 | -0.48 0.00 | 327.36 -1453.25 | 327.36 | -115.42 149.70 | 149.70 | -3.27 3.66 | -0.52 0.52 | -3.02 |
| VA1 - 6 | 772.50 | -0.42 0.00 | -925.26 -666.45 | 232.27 | 117.25 -62.21 | 117.25 | 1.34 1.18 | 0.05 -0.05 | 2.48 |
| VA2 | 772.50 | 0.00 0.00 | 0.00 0.00 | 376.65 | 0.00 0.00 | 0.00 | 0.77 0.77 | 0.00 0.00 | -3.05 |
| VA3 - 1 | 772.50 | 0.00 0.02 | 0.00 -1556.68 | 1110.84 | 0.00 19.22 | 19.22 | 1.31 2.03 | 0.00 0.00 | 0.64 |
| VA3 - 2 | 772.50 | 0.00 0.00 | -1563.43 6.53 | 6.53 | 73.53 0.00 | 73.53 | 1.61 -0.41 | 0.05 -0.05 | 0.00 |
| VA4 - 1 | 810.00 | 0.00 0.12 | -1534.52 -1718.62 | 935.35 | 69.73 -43.42 | 69.73 | 2.00 2.07 | 0.02 -0.02 | 0.78 |
| VA4 - 2 | 810.00 | 0.00 0.23 | -1827.69 1638.75 | 1638.75 | -98.34 -36.17 | 0.00 | 2.56 -0.96 | -0.03 0.03 | -2.68 |
| VA4 - 3 | 810.00 | 0.00 0.23 | 1638.79 1346.76 | 1638.79 | -36.17 14.41 | 0.00 | -0.81 1.06 | -0.16 0.16 | -2.68 |
| VA4 - 4 | 810.00 | 0.00 0.23 | 1346.86 -177.38 | 1346.86 | 14.41 186.43 | 186.43 | -1.77 2.37 | -0.23 0.23 | -2.68 |
| VA4 - 5 | 810.00 | 0.00 0.21 | -178.30 -3041.75 | 0.00 | 186.43 12.81 | 186.43 | -4.91 5.36 | 0.31 -0.31 | -5.36 |
| VA4 - 6 | 810.00 | -0.05 0.00 | -3412.40 -280.03 | 0.00 | -33.72 6.80 | 6.80 | 3.52 -2.71 | -0.04 0.04 | 4.07 |
| VA4 - 7 | 810.00 | -0.05 0.00 | -279.93 1401.04 | 1401.04 | 6.80 0.67 | 6.80 | 2.00 -1.13 | 0.01 -0.01 | 1.73 |
| VA4 - 8 | 810.00 | -0.05 0.00 | 1400.04 951.76 | 1503.90 | 0.67 119.23 | 0.00 | 0.42 0.95 | -0.07 0.07 | 1.73 |
| VA4 - 9 | 810.00 | -0.03 0.00 | 956.83 -2189.37 | 956.83 | 119.23 -158.11 | 119.23 | -5.11 5.59 | 0.47 -0.47 | 1.73 |
| VA4 - 10 | 810.00 | -0.18 0.00 | -1874.83 -48.78 | 0.00 | -40.94 10.01 | 10.01 | 2.28 -1.49 | -0.05 0.05 | 1.03 |
| VA4 - 11 | 810.00 | -0.18 0.00 | -42.25 431.54 | 431.54 | 10.01 12.94 | 12.94 | 1.08 -0.64 | -0.01 0.01 | 1.03 |
| VA4 - 12 | 810.00 | -0.20 0.00 | 432.49 -971.18 | 432.49 | 12.94 -62.11 | 12.94 | -0.10 1.51 | 0.04 -0.04 | 1.03 |
| VA4 - 13 | 810.00 | 0.00 0.03 | -693.77 -382.04 | 345.64 | -11.14 -13.21 | 0.00 | 1.30 1.09 | 0.00 0.00 | -1.81 |
| VA5 - 1 | 772.50 | -0.03 0.00 | -409.78 551.75 | 686.13 | -81.57 40.13 | 40.13 | 1.30 0.46 | -0.05 0.05 | -2.73 |
| VA5 - 2 | 772.50 | -0.03 0.00 | 551.66 -1605.38 | 551.66 | 40.13 16.42 | 40.13 | -1.17 2.17 | 0.02 -0.02 | -2.73 |
| VA5 - 3 | 772.50 | -0.01 0.00 | -1980.40 333.16 | 333.16 | 11.70 6.11 | 11.70 | 2.69 -1.91 | 0.01 -0.01 | 2.11 |
| VA5 - 4 | 772.50 | -0.01 0.00 | 333.03 1180.04 | 1180.04 | 6.11 50.10 | 0.00 | 1.20 -0.37 | -0.04 0.04 | 2.11 |
| VA5 - 5 | 772.50 | -0.01 0.00 | 1181.05 -1586.96 | 1181.05 | 50.10 -29.77 | 50.10 | -0.34 2.10 | 0.04 -0.04 | 2.11 |
| VA5 - 6 | 772.50 | 0.00 0.07 | -1444.82 679.72 | 679.72 | 69.41 -51.47 | 69.41 | 1.98 -0.81 | 0.08 -0.08 | -0.07 |
| VA5 - 7 | 772.50 | 0.00 0.09 | 678.77 -193.36 | 678.77 | -1.14 -50.29 | 0.00 | 0.06 1.16 | 0.03 -0.03 | -10.56 |
| VA6 - 1 | 772.50 | 0.00 0.04 | 7.06 602.36 | 639.36 | 4.46 -9.45 | 0.00 | 0.99 0.25 | 0.01 -0.01 | 1.38 |
| VA6 - 2 | 772.50 | 0.00 0.04 | 607.10 -2593.06 | 607.10 | -9.45 21.06 | 21.06 | -1.49 2.68 | -0.02 0.02 | 1.38 |
| VA7 - 1 | 772.50 | -0.06 0.00 | -762.83 1584.32 | 1584.32 | -32.23 6.41 | 6.41 | 2.10 -0.89 | -0.02 0.02 | -2.91 |
| VA7 - 2 | 772.50 | -0.06 | 1579.58 | 1579.58 | 6.41 | 6.41 | -0.36 | 0.00 | -2.91 |

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| | | 0.00 | 0.00 | | 0.00 | | 1.60 | 0.00 | |
| VA8 - 1 | 866.25 | 0.00 0.49 | -3689.52 -6626.15 | 2927.83 | -5.61 4.99 | 4.99 | 3.39 4.07 | 0.00 0.00 | -1.95 |
| VA8 - 2 | 866.25 | 0.00 0.72 | -8803.67 -5720.18 | 4865.97 | 15.74 -4.27 | 15.74 | 4.87 4.28 | 0.00 0.00 | 1.62 |
| VA9 - 1 | 810.00 | 0.00 0.11 | -1867.79 -2478.83 | 1250.97 | 44.50 -35.13 | 44.50 | 2.25 2.46 | 0.01 -0.01 | 2.94 |
| VA9 - 2 | 810.00 | 0.00 0.17 | -2808.17 -2533.19 | 1432.74 | -10.35 4.29 | 4.29 | 2.62 2.54 | 0.00 0.00 | -0.30 |
| VA10 - 1 | 810.00 | 0.00 0.09 | -2210.29 -1518.36 | 908.02 | 26.50 -31.80 | 26.50 | 2.25 1.98 | 0.01 -0.01 | 0.43 |
| VA10 - 2 | 810.00 | 0.00 0.05 | -1461.04 -552.32 | 641.60 | -32.04 9.39 | 9.39 | 1.85 1.39 | -0.01 0.01 | -3.29 |
| VA11 - 1 | 772.50 | -0.10 0.00 | -352.60 96.99 | 267.41 | 78.39 -54.13 | 78.39 | 0.98 0.51 | 0.07 -0.07 | 1.51 |
| VA11 - 2 | 772.50 | -0.70 0.00 | -894.03 304.63 | 733.77 | 6.19 -7.44 | 6.19 | 1.59 0.81 | 0.00 0.00 | -1.08 |
| VA11 - 3 | 772.50 | -0.70 0.00 | 301.58 -1698.75 | 301.58 | -7.44 -15.57 | 0.00 | -1.58 2.36 | 0.01 -0.01 | -1.08 |
| VA12 - 1 | 772.50 | -0.13 0.00 | 0.00 1751.63 | 2025.56 | 0.00 -2.71 | 0.00 | 1.77 0.65 | 0.00 0.00 | -0.04 |
| VA12 - 2 | 772.50 | -0.13 0.00 | 1754.68 0.00 | 1754.68 | -2.71 0.00 | 0.00 | -1.42 2.17 | 0.00 0.00 | -0.04 |
| VA13 | 735.00 | 0.00 0.07 | 0.00 0.00 | 338.60 | 0.00 0.00 | 0.00 | 0.71 0.71 | 0.00 0.00 | 0.10 |
| VA14 - 1 | 772.50 | 0.00 0.54 | 0.00 2243.15 | 2243.15 | 0.00 -11.86 | 0.00 | 2.54 -1.73 | 0.01 -0.01 | 0.98 |
| VA14 - 2 | 772.50 | 0.00 0.54 | 2243.79 0.00 | 2356.99 | -11.86 0.00 | 0.00 | 0.42 1.91 | 0.00 0.00 | 0.98 |
| VA15 | 735.00 | -0.05 0.00 | 0.00 0.00 | 338.60 | 0.00 0.00 | 0.00 | 0.71 0.71 | 0.00 0.00 | 0.12 |
| VA16 | 735.00 | 0.00 0.08 | 0.00 0.00 | 338.60 | 0.00 0.00 | 0.00 | 0.71 0.71 | 0.00 0.00 | -1.01 |
| VA17 - 1 | 772.50 | 0.00 0.54 | 0.00 3941.43 | 3941.43 | 0.00 26.33 | 26.33 | 4.16 -3.35 | -0.03 0.03 | -5.07 |
| VA17 - 2 | 772.50 | 0.00 0.59 | 3940.80 0.00 | 3940.80 | -27.98 0.00 | 0.00 | -0.29 2.48 | -0.01 0.01 | 1.67 |
| VA18 | 772.50 | 0.00 0.27 | -858.05 678.16 | 678.16 | -90.37 124.77 | 124.77 | 1.54 -0.05 | -0.11 0.11 | 1.19 |
| VA19 | 772.50 | 0.00 0.05 | 0.00 0.00 | 102.16 | 0.00 0.00 | 0.00 | 0.41 0.41 | 0.00 0.00 | -6.53 |
| VA20 | 772.50 | -0.05 0.00 | -10.49 0.00 | 351.21 | -50.33 0.00 | 0.00 | 0.75 0.74 | -0.03 0.03 | 0.95 |
| VA21 - 1 | 772.50 | 0.00 0.16 | -1648.04 2320.18 | 2320.18 | 22.23 -31.14 | 22.23 | 2.48 0.00 | 0.02 -0.02 | 5.03 |
| VA21 - 2 | 772.50 | 0.00 0.17 | 2321.56 -1496.60 | 2321.56 | -35.60 21.70 | 21.70 | -0.99 2.62 | -0.03 0.03 | -2.04 |
| VA22 | 772.50 | 0.00 0.14 | -484.68 -659.35 | 713.03 | -58.63 83.96 | 83.96 | 1.36 1.46 | -0.04 0.04 | -0.13 |
| VA23 | 772.50 | 0.00 0.03 | 0.00 0.00 | 1006.68 | 0.00 0.00 | 0.00 | 1.25 1.25 | 0.00 0.00 | 4.74 |
| VA24 - 1 | 810.00 | 0.00 0.11 | -1830.73 -2512.69 | 1253.79 | -61.47 38.55 | 38.55 | 2.24 2.47 | -0.02 0.02 | -4.30 |
| VA24 - 2 | 810.00 | 0.00 0.16 | -2653.61 -2814.01 | 1367.76 | 1.46 25.39 | 25.39 | 2.55 2.60 | 0.00 0.00 | -0.32 |
| VA25 - 1 | 810.00 | 0.00 0.19 | -3135.49 1694.60 | 1694.60 | 65.83 -32.98 | 65.83 | 3.30 -1.75 | 0.05 -0.05 | 3.29 |
| VA25 - 2 | 810.00 | 0.00 0.19 | 1697.51 -2256.81 | 1710.20 | -32.98 -1.19 | 0.00 | 0.15 2.54 | -0.01 0.01 | 3.29 |
| VA25 - 3 | 810.00 | 0.00 0.07 | -1692.56 -550.01 | 545.45 | -12.53 -6.76 | 0.00 | 1.90 1.33 | 0.00 0.00 | -0.92 |

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| CASO: G1+G2+1.4V1+0.84D1 | | | | | | | | | |
|--------------------------|------------------|------------------|-----------------------|------------------|-----------------------|------------------|--------------------|--------------------|----------------|
| Elemento | Carga (kgf/m) | Rd Nd (tf) | Mxi Mxf (kgf.m) | MxMáx (kgf.m) | Myi Myf (kgf.m) | MyMáx (kgf.m) | Vxi Vxf (tf) | Vyi Vyf (tf) | Mtd (kgf/m) |
| VA1 - 1 | 772.50 | 0.00 0.35 | -282.35 1844.18 | 1844.18 | -12.25 0.82 | 0.82 | 1.84 -0.34 | -0.01 0.01 | 1.46 |
| VA1 - 2 | 772.50 | 0.00 0.35 | 1844.53 -506.97 | 1844.53 | 0.82 -8.93 | 0.82 | -1.83 2.64 | 0.01 -0.01 | 0.83 |
| VA1 - 3 | 772.50 | 0.00 0.35 | -505.59 -3282.32 | 0.00 | -8.93 8.74 | 8.74 | -4.55 5.00 | -0.03 0.03 | 0.28 |
| VA1 - 4 | 772.50 | 0.00 0.06 | -1406.48 -175.24 | 634.92 | 13.53 -10.37 | 13.53 | 1.78 1.12 | 0.01 -0.01 | -0.21 |
| VA1 - 5 | 772.50 | 0.00 0.06 | -173.87 -2128.38 | 0.00 | -10.37 12.30 | 12.30 | -3.60 4.00 | -0.04 0.04 | 1.68 |
| VA1 - 6 | 772.50 | -0.06 0.00 | -285.40 -1372.41 | 270.73 | 11.33 -2.81 | 11.33 | 0.93 1.59 | 0.00 0.00 | -0.52 |
| VA2 | 772.50 | 0.00 0.00 | 0.00 0.00 | 376.65 | 0.00 0.00 | 0.00 | 0.77 0.77 | 0.00 0.00 | -2.26 |
| VA3 - 1 | 772.50 | 0.00 0.00 | 0.00 -1556.01 | 1111.10 | 0.00 2.58 | 2.58 | 1.31 2.03 | 0.00 0.00 | 0.62 |
| VA3 - 2 | 772.50 | 0.00 0.00 | -1563.66 6.30 | 6.30 | 2.21 0.00 | 2.21 | 1.61 -0.41 | 0.00 0.00 | 0.00 |
| VA4 - 1 | 810.00 | 0.00 0.40 | 32.96 -2352.08 | 1538.79 | 4.89 4.25 | 4.89 | 1.56 2.51 | 0.00 0.00 | 0.90 |
| VA4 - 2 | 810.00 | 0.00 0.35 | -1485.79 1080.24 | 1080.24 | -6.31 -5.31 | 0.00 | 2.10 -0.51 | 0.00 0.00 | 1.52 |
| VA4 - 3 | 810.00 | 0.00 0.35 | 1079.89 644.68 | 1079.89 | -5.31 -0.07 | 0.00 | -1.26 1.52 | -0.02 0.02 | 1.52 |
| VA4 - 4 | 810.00 | 0.00 0.35 | 644.33 -1217.03 | 644.33 | -0.07 14.93 | 14.93 | -2.23 2.82 | -0.02 0.02 | 1.52 |
| VA4 - 5 | 810.00 | 0.00 0.35 | -1218.30 -4336.91 | 0.00 | 14.93 0.66 | 14.93 | -5.37 5.82 | 0.03 -0.03 | -16.83 |
| VA4 - 6 | 810.00 | 0.00 0.26 | -1993.39 620.87 | 620.87 | -9.48 0.58 | 0.58 | 3.01 -2.19 | -0.01 0.01 | -3.84 |
| VA4 - 7 | 810.00 | 0.00 0.26 | 621.02 1747.67 | 1747.67 | 0.58 0.73 | 0.00 | 1.48 -0.61 | 0.00 0.00 | 1.35 |
| VA4 - 8 | 810.00 | 0.00 0.26 | 1746.93 429.68 | 1746.93 | 0.73 12.12 | 0.00 | -0.10 1.46 | -0.01 0.01 | 1.35 |
| VA4 - 9 | 810.00 | 0.00 0.26 | 435.97 -3013.37 | 435.97 | 12.12 -12.06 | 12.12 | -5.62 6.10 | 0.04 -0.04 | 1.35 |
| VA4 - 10 | 810.00 | 0.00 0.13 | -1875.11 -166.85 | 0.00 | -20.15 3.79 | 3.79 | 2.15 -1.37 | -0.02 0.02 | 1.47 |
| VA4 - 11 | 810.00 | 0.00 0.13 | -160.56 246.45 | 246.45 | 3.79 16.58 | 16.58 | 0.96 -0.52 | -0.02 0.02 | 1.47 |
| VA4 - 12 | 810.00 | 0.00 0.14 | 246.69 -1371.02 | 246.69 | 16.58 -16.31 | 16.58 | -0.23 1.63 | 0.02 -0.02 | 1.47 |
| VA4 - 13 | 810.00 | -0.01 0.00 | 901.18 -2513.37 | 901.18 | -17.78 30.19 | 30.19 | 0.03 2.35 | -0.02 0.02 | -1.57 |
| VA5 - 1 | 772.50 | 0.00 0.05 | 358.82 247.19 | 803.85 | -11.56 2.03 | 0.00 | 0.83 0.93 | -0.01 0.01 | -0.58 |
| VA5 - 2 | 772.50 | 0.00 0.05 | 247.55 -2520.09 | 247.55 | 2.03 5.09 | 5.09 | -1.64 2.64 | 0.00 0.00 | -0.58 |
| VA5 - 3 | 772.50 | 0.00 0.07 | -1357.25 719.54 | 719.54 | -0.60 -2.30 | 0.00 | 2.45 -1.68 | 0.00 0.00 | 0.60 |
| VA5 - 4 | 772.50 | 0.00 0.07 | 719.39 1313.08 | 1313.08 | -2.30 4.15 | 0.00 | 0.97 -0.14 | -0.01 0.01 | 0.60 |
| VA5 - 5 | 772.50 | 0.00 0.07 | 1313.82 -1989.94 | 1313.82 | 4.15 2.75 | 4.15 | -0.57 2.33 | 0.00 0.00 | 0.60 |
| VA5 - 6 | 772.50 | 0.00 0.01 | -995.39 574.20 | 574.20 | -7.25 -4.09 | 0.00 | 1.62 -0.45 | 0.00 0.00 | -0.46 |
| VA5 - 7 | 772.50 | 0.00 0.00 | 573.95 -873.24 | 573.95 | -19.45 50.53 | 50.53 | -0.30 1.53 | -0.04 0.04 | -7.89 |
| VA6 - 1 | 772.50 | -0.02 | 13.38 | 162.35 | -60.74 | 0.00 | 0.48 | -0.02 | 1.14 |


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| | | 0.00 | -208.75 | | -21.82 | | 0.76 | 0.02 | |
| VA6 - 2 | 772.50 | -0.02 0.00 | -204.14 -4186.99 | 0.00 | -21.82 59.15 | 59.15 | -2.00 3.19 | -0.05 0.05 | 1.14 |
| VA7 - 1 | 772.50 | -0.20 0.00 | 350.65 2147.51 | 2147.51 | -56.88 -6.11 | 0.00 | 1.75 -0.54 | -0.03 0.03 | -2.51 |
| VA7 - 2 | 772.50 | -0.20 0.00 | 2142.90 0.00 | 2142.90 | -6.11 0.00 | 0.00 | -0.71 1.95 | 0.00 0.00 | -2.51 |
| VA8 - 1 | 866.25 | 0.00 0.53 | -2366.12 -7727.33 | 3199.33 | 35.49 -7.94 | 35.49 | 3.11 4.35 | 0.01 -0.01 | -1.36 |
| VA8 - 2 | 866.25 | 0.00 0.66 | -7875.89 -6873.27 | 4707.61 | 20.92 -39.17 | 20.92 | 4.67 4.48 | 0.01 -0.01 | 1.22 |
| VA9 - 1 | 810.00 | 0.00 0.14 | -1699.39 -2631.72 | 1264.26 | -6.01 13.08 | 13.08 | 2.19 2.51 | 0.00 0.00 | -2.61 |
| VA9 - 2 | 810.00 | 0.00 0.21 | -2744.35 -2625.99 | 1415.73 | 18.24 16.85 | 18.24 | 2.60 2.56 | 0.00 0.00 | -0.37 |
| VA10 - 1 | 810.00 | 0.00 0.12 | -2123.91 -1603.45 | 902.07 | 31.51 -28.43 | 31.51 | 2.21 2.02 | 0.01 -0.01 | 3.30 |
| VA10 - 2 | 810.00 | 0.00 0.06 | -1345.40 -685.67 | 614.19 | -24.53 -11.81 | 0.00 | 1.78 1.45 | 0.00 0.00 | 0.25 |
| VA11 - 1 | 772.50 | 0.00 0.02 | -228.77 -555.91 | 0.00 | 4.72 -7.13 | 4.72 | 0.58 0.92 | 0.01 -0.01 | 3.23 |
| VA11 - 2 | 772.50 | 0.00 0.04 | -1092.77 710.97 | 959.23 | -0.03 0.43 | 0.43 | 1.78 0.62 | 0.00 0.00 | -2.35 |
| VA11 - 3 | 772.50 | 0.00 0.04 | 708.72 -1094.22 | 708.72 | 0.43 4.00 | 4.00 | -1.39 2.17 | 0.00 0.00 | -2.35 |
| VA12 - 1 | 772.50 | -0.02 0.00 | 0.00 1752.23 | 2026.00 | 0.00 2.52 | 2.52 | 1.77 0.65 | 0.00 0.00 | 0.35 |
| VA12 - 2 | 772.50 | -0.02 0.00 | 1754.49 0.00 | 1754.49 | 2.52 0.00 | 2.52 | -1.42 2.17 | 0.00 0.00 | 0.35 |
| VA13 | 735.00 | 0.00 0.00 | 0.00 0.00 | 338.60 | 0.00 0.00 | 0.00 | 0.71 0.71 | 0.00 0.00 | -0.35 |
| VA14 - 1 | 772.50 | 0.00 0.04 | 0.00 2243.28 | 2243.28 | 0.00 -0.79 | 0.00 | 2.54 -1.73 | 0.00 0.00 | 1.38 |
| VA14 - 2 | 772.50 | 0.00 0.04 | 2243.90 0.00 | 2357.08 | -0.79 0.00 | 0.00 | 0.42 1.91 | 0.00 0.00 | 1.38 |
| VA15 | 735.00 | -0.01 0.00 | 0.00 0.00 | 338.60 | 0.00 0.00 | 0.00 | 0.71 0.71 | 0.00 0.00 | 0.14 |
| VA16 | 735.00 | 0.00 0.01 | 0.00 0.00 | 338.60 | 0.00 0.00 | 0.00 | 0.71 0.71 | 0.00 0.00 | -0.74 |
| VA17 - 1 | 772.50 | 0.00 0.05 | 0.00 3941.31 | 3941.31 | 0.00 0.68 | 0.68 | 4.16 -3.35 | 0.00 0.00 | -6.29 |
| VA17 - 2 | 772.50 | 0.00 0.05 | 3940.69 0.00 | 3940.69 | 1.05 0.00 | 1.05 | -0.29 2.48 | 0.00 0.00 | 1.36 |
| VA18 | 772.50 | 0.00 0.05 | -304.64 189.21 | 344.88 | 3.09 -2.71 | 3.09 | 1.00 0.49 | 0.00 0.00 | 1.52 |
| VA19 | 772.50 | 0.00 0.00 | 0.00 0.00 | 102.16 | 0.00 0.00 | 0.00 | 0.41 0.41 | 0.00 0.00 | -6.30 |
| VA20 | 772.50 | -0.04 0.00 | -7.42 0.00 | 352.57 | 15.36 0.00 | 15.36 | 0.75 0.74 | 0.01 -0.01 | 0.25 |
| VA21 - 1 | 772.50 | 0.00 0.08 | -1406.64 1852.31 | 1881.66 | 35.66 -30.89 | 35.66 | 2.26 0.22 | 0.02 -0.02 | 8.47 |
| VA21 - 2 | 772.50 | 0.00 0.06 | 1853.45 -1353.97 | 1853.45 | 29.85 -63.06 | 29.85 | -0.70 2.33 | 0.04 -0.04 | -4.91 |
| VA22 | 772.50 | 0.00 0.06 | -496.58 -731.54 | 670.98 | -6.22 9.30 | 9.30 | 1.34 1.47 | 0.00 0.00 | -0.33 |
| VA23 | 772.50 | 0.00 0.03 | 0.00 0.00 | 1006.68 | 0.00 0.00 | 0.00 | 1.25 1.25 | 0.00 0.00 | 4.61 |
| VA24 - 1 | 810.00 | 0.00 0.10 | -1713.51 -2605.99 | 1269.38 | -84.70 62.81 | 62.81 | 2.20 2.51 | -0.03 0.03 | -9.73 |
| VA24 - 2 | 810.00 | 0.00 0.11 | -2503.97 -2959.88 | 1374.41 | 21.70 76.23 | 76.23 | 2.51 2.65 | -0.01 0.01 | -0.30 |
| VA25 - 1 | 810.00 | 0.00 0.21 | -3206.73 1967.45 | 1967.45 | 169.28 -126.73 | 169.28 | 3.48 -1.93 | 0.15 -0.15 | 7.60 |


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|----------|--------|--------------|---------------------|---------|-----------------|-------|---------------|---------------|------|
| VA25 - 2 | 810.00 | 0.00 0.21 | 1969.96 -2548.19 | 1969.96 | -126.73 8.54 | 8.54 | -0.03 2.71 | -0.04 0.04 | 7.60 |
| VA25 - 3 | 810.00 | 0.00 0.05 | -1601.70 -712.67 | 489.54 | 23.88 -23.68 | 23.88 | 1.84 1.40 | 0.01 -0.01 | 1.06 |

| CASO: G1+G2+1.4V2+0.84D2 | | | | | | | | | |
|--------------------------|------------------|------------------|-----------------------|------------------|-----------------------|------------------|--------------------|--------------------|----------------|
| Elemento | Carga (kgf/m) | Rd Nd (tf) | Mxi Mxf (kgf.m) | MxMáx (kgf.m) | Myi Myf (kgf.m) | MyMáx (kgf.m) | Vxi Vxf (tf) | Vyi Vyf (tf) | Mtd (kgf/m) |
| VA1 - 1 | 772.50 | 0.00 0.24 | -2331.73 1840.07 | 1840.07 | -4.03 1.07 | 1.07 | 2.90 -1.39 | 0.00 0.00 | 1.21 |
| VA1 - 2 | 772.50 | 0.00 0.24 | 1839.89 592.78 | 1839.89 | 1.07 -12.49 | 0.00 | -0.78 1.59 | 0.01 -0.01 | 0.61 |
| VA1 - 3 | 772.50 | 0.00 0.24 | 593.16 -1572.61 | 593.16 | -12.49 12.39 | 12.39 | -3.50 3.95 | -0.04 0.04 | 1.17 |
| VA1 - 4 | 772.50 | 0.00 0.04 | -2570.07 688.93 | 902.14 | 15.87 -14.92 | 15.87 | 2.32 0.58 | 0.01 -0.01 | 0.99 |
| VA1 - 5 | 772.50 | 0.00 0.03 | 690.52 -985.91 | 690.52 | -14.92 18.62 | 18.62 | -3.06 3.46 | -0.07 0.07 | -6.80 |
| VA1 - 6 | 772.50 | 0.00 0.02 | -2066.36 762.16 | 858.35 | 13.72 -7.14 | 13.72 | 2.13 0.39 | 0.01 -0.01 | -0.74 |
| VA2 | 772.50 | 0.00 0.00 | 0.00 0.00 | 376.65 | 0.00 0.00 | 0.00 | 0.77 0.77 | 0.00 0.00 | -3.09 |
| VA3 - 1 | 772.50 | 0.00 0.00 | 0.00 -1560.22 | 1109.50 | 0.00 -0.03 | 0.00 | 1.31 2.03 | 0.00 0.00 | 0.90 |
| VA3 - 2 | 772.50 | 0.00 0.00 | -1565.61 4.35 | 4.35 | 9.27 0.00 | 9.27 | 1.61 -0.41 | 0.01 -0.01 | 0.00 |
| VA4 - 1 | 810.00 | -0.12 0.00 | -2790.58 -1270.37 | 586.17 | 68.66 -29.94 | 68.66 | 2.34 1.74 | 0.02 -0.02 | 0.93 |
| VA4 - 2 | 810.00 | -0.01 0.00 | -2271.73 2092.78 | 2092.78 | -5.75 -2.89 | 0.00 | 3.01 -1.42 | 0.00 0.00 | -2.86 |
| VA4 - 3 | 810.00 | -0.01 0.00 | 2092.96 1943.68 | 2092.96 | -2.89 2.48 | 0.00 | -0.35 0.60 | -0.02 0.02 | -2.86 |
| VA4 - 4 | 810.00 | -0.01 0.00 | 1944.05 755.94 | 1944.05 | 2.48 15.84 | 0.00 | -1.31 1.91 | -0.02 0.02 | -2.86 |
| VA4 - 5 | 810.00 | -0.02 0.00 | 755.52 -1853.22 | 755.52 | 15.84 -5.15 | 15.84 | -4.45 4.90 | 0.04 -0.04 | 8.52 |
| VA4 - 6 | 810.00 | -0.10 0.00 | -4270.87 -881.14 | 0.00 | -8.87 1.16 | 1.16 | 3.78 -2.96 | -0.01 0.01 | 5.67 |
| VA4 - 7 | 810.00 | -0.10 0.00 | -880.69 1075.63 | 1075.63 | 1.16 -3.08 | 1.16 | 2.25 -1.38 | 0.00 0.00 | -1.69 |
| VA4 - 8 | 810.00 | -0.10 0.00 | 1075.01 1058.39 | 1354.62 | -3.08 12.49 | 0.00 | 0.67 0.69 | -0.01 0.01 | -1.69 |
| VA4 - 9 | 810.00 | -0.09 0.00 | 1062.15 -1933.82 | 1062.15 | 12.49 -21.68 | 12.49 | -4.85 5.33 | 0.06 -0.06 | -1.69 |
| VA4 - 10 | 810.00 | -0.15 0.00 | -2509.41 -206.85 | 0.00 | 5.98 0.11 | 5.98 | 2.77 -1.98 | 0.01 -0.01 | 1.39 |
| VA4 - 11 | 810.00 | -0.15 0.00 | -202.50 541.48 | 541.48 | 0.11 -6.50 | 0.11 | 1.58 -1.13 | 0.01 -0.01 | 1.39 |
| VA4 - 12 | 810.00 | -0.16 0.00 | 542.04 -6.81 | 634.73 | -6.50 2.55 | 2.55 | 0.39 1.02 | -0.01 0.01 | 1.39 |
| VA4 - 13 | 810.00 | 0.00 0.10 | -2326.36 1839.08 | 1839.08 | 14.31 -44.61 | 14.31 | 2.61 -0.22 | 0.02 -0.02 | -1.72 |
| VA5 - 1 | 772.50 | 0.00 0.06 | -1167.82 859.21 | 859.21 | 13.83 -0.12 | 13.83 | 1.77 -0.01 | 0.01 -0.01 | -0.35 |
| VA5 - 2 | 772.50 | 0.00 0.06 | 858.84 -691.95 | 858.84 | -0.12 -9.33 | 0.00 | -0.70 1.70 | 0.01 -0.01 | -0.35 |
| VA5 - 3 | 772.50 | 0.00 0.10 | -2664.78 -92.38 | 0.00 | 6.68 -1.57 | 6.68 | 2.95 -2.17 | 0.01 -0.01 | 0.44 |
| VA5 - 4 | 772.50 | 0.00 0.10 | -92.84 1031.12 | 1031.12 | -1.57 5.45 | 5.45 | 1.46 -0.63 | -0.01 0.01 | 0.44 |
| VA5 - 5 | 772.50 | 0.00 | 1031.74 | 1031.74 | 5.45 | 5.45 | -0.08 | 0.01 | 0.44 |


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|----------|--------|---------------|----------------------|---------|-----------------|-------|---------------|---------------|--------|
| | | 0.10 | -1150.54 | | -9.66 | | 1.84 | -0.01 | |
| VA5 - 6 | 772.50 | 0.00 0.12 | -1951.10 785.39 | 785.39 | 25.42 -18.57 | 25.42 | 2.39 -1.21 | 0.03 -0.03 | -0.45 |
| VA5 - 7 | 772.50 | 0.00 0.13 | 784.83 549.53 | 920.60 | -1.13 -74.12 | 0.00 | 0.46 0.76 | 0.05 -0.05 | -10.98 |
| VA6 - 1 | 772.50 | 0.00 0.07 | 0.55 1442.01 | 1442.01 | 45.47 -0.41 | 45.47 | 1.52 -0.28 | 0.03 -0.03 | 1.82 |
| VA6 - 2 | 772.50 | 0.00 0.07 | 1446.88 -943.10 | 1446.88 | -0.41 -11.55 | 0.00 | -0.97 2.15 | 0.01 -0.01 | 1.82 |
| VA7 - 1 | 772.50 | 0.00 0.08 | -1901.77 1008.26 | 1008.26 | -10.38 11.74 | 11.74 | 2.46 -1.24 | -0.01 0.01 | -3.59 |
| VA7 - 2 | 772.50 | 0.00 0.08 | 1003.39 0.00 | 1003.39 | 11.74 0.00 | 11.74 | 0.00 1.25 | 0.01 -0.01 | -3.59 |
| VA8 - 1 | 866.25 | 0.00 0.46 | -5003.44 -5539.77 | 2752.56 | -44.82 9.23 | 9.23 | 3.67 3.79 | -0.01 0.01 | -1.30 |
| VA8 - 2 | 866.25 | 0.00 0.80 | -9743.89 -4561.19 | 5066.40 | 1.40 32.71 | 32.71 | 5.07 4.08 | 0.00 0.00 | 0.93 |
| VA9 - 1 | 810.00 | 0.00 0.11 | -1750.61 -2574.62 | 1265.33 | 73.99 -68.84 | 73.99 | 2.21 2.49 | 0.02 -0.02 | 8.51 |
| VA9 - 2 | 810.00 | 0.00 0.15 | -2674.86 -2641.27 | 1441.46 | -47.22 2.27 | 2.27 | 2.58 2.57 | -0.01 0.01 | -0.16 |
| VA10 - 1 | 810.00 | 0.00 0.09 | -2069.11 -1637.00 | 909.30 | 12.25 -34.91 | 12.25 | 2.20 2.03 | 0.01 -0.01 | -2.46 |
| VA10 - 2 | 810.00 | 0.00 0.04 | -1274.64 -780.91 | 597.58 | -55.36 62.22 | 62.22 | 1.74 1.49 | -0.03 0.03 | -7.07 |
| VA11 - 1 | 772.50 | 0.00 0.03 | -181.01 -620.03 | 0.00 | 0.00 15.25 | 15.25 | 0.52 0.97 | -0.01 0.01 | 0.02 |
| VA11 - 2 | 772.50 | 0.00 0.03 | -1104.64 693.38 | 943.16 | -7.38 2.77 | 2.77 | 1.78 0.62 | 0.00 0.00 | 0.13 |
| VA11 - 3 | 772.50 | 0.00 0.03 | 690.28 -1114.52 | 690.28 | 2.77 8.36 | 8.36 | -1.39 2.17 | -0.01 0.01 | 0.13 |
| VA12 - 1 | 772.50 | -0.02 0.00 | 0.00 1751.60 | 2025.54 | 0.00 1.67 | 1.67 | 1.77 0.65 | 0.00 0.00 | -0.18 |
| VA12 - 2 | 772.50 | -0.02 0.00 | 1754.69 0.00 | 1754.69 | 1.67 0.00 | 1.67 | -1.42 2.17 | 0.00 0.00 | -0.18 |
| VA13 | 735.00 | 0.00 0.00 | 0.00 0.00 | 338.60 | 0.00 0.00 | 0.00 | 0.71 0.71 | 0.00 0.00 | 0.37 |
| VA14 - 1 | 772.50 | 0.00 0.06 | 0.00 2242.45 | 2242.45 | 0.00 -1.85 | 0.00 | 2.54 -1.73 | 0.00 0.00 | 0.38 |
| VA14 - 2 | 772.50 | 0.00 0.06 | 2243.35 0.00 | 2356.64 | -1.85 0.00 | 0.00 | 0.42 1.91 | 0.00 0.00 | 0.38 |
| VA15 | 735.00 | -0.01 0.00 | 0.00 0.00 | 338.60 | 0.00 0.00 | 0.00 | 0.71 0.71 | 0.00 0.00 | 0.46 |
| VA16 | 735.00 | 0.00 0.01 | 0.00 0.00 | 338.60 | 0.00 0.00 | 0.00 | 0.71 0.71 | 0.00 0.00 | -0.62 |
| VA17 - 1 | 772.50 | 0.00 0.07 | 0.00 3942.13 | 3942.13 | 0.00 4.33 | 4.33 | 4.16 -3.35 | 0.00 0.00 | -3.76 |
| VA17 - 2 | 772.50 | 0.00 0.07 | 3941.23 0.00 | 3941.23 | -4.97 0.00 | 0.00 | -0.29 2.48 | 0.00 0.00 | 1.62 |
| VA18 | 772.50 | 0.00 0.05 | -265.82 142.52 | 326.69 | -24.15 30.99 | 30.99 | 0.96 0.53 | -0.03 0.03 | 0.58 |
| VA19 | 772.50 | 0.00 0.01 | 0.00 0.00 | 102.16 | 0.00 0.00 | 0.00 | 0.41 0.41 | 0.00 0.00 | -4.35 |
| VA20 | 772.50 | 0.00 0.02 | -10.53 0.00 | 351.19 | -17.44 0.00 | 0.00 | 0.75 0.74 | -0.01 0.01 | 0.56 |
| VA21 - 1 | 772.50 | 0.00 0.21 | -1759.80 2776.39 | 2776.39 | 13.98 -30.04 | 13.98 | 2.65 -0.17 | 0.01 -0.01 | 1.49 |
| VA21 - 2 | 772.50 | 0.00 0.24 | 2778.21 -1781.50 | 2778.21 | -75.51 44.32 | 44.32 | -1.34 2.98 | -0.06 0.06 | 0.94 |
| VA22 | 772.50 | 0.00 0.10 | -479.38 -724.87 | 682.92 | -10.11 12.12 | 12.12 | 1.34 1.48 | -0.01 0.01 | 0.86 |
| VA23 | 772.50 | 0.00 0.02 | 0.00 0.00 | 1006.68 | 0.00 0.00 | 0.00 | 1.25 1.25 | 0.00 0.00 | 4.87 |


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|----------|--------|--------------|----------------------|---------|------------------|-------|---------------|---------------|-------|
| VA24 - 1 | 810.00 | 0.00 0.13 | -1811.35 -2536.38 | 1252.38 | -17.43 0.52 | 0.52 | 2.23 2.48 | 0.00 0.00 | 1.16 |
| VA24 - 2 | 810.00 | 0.00 0.22 | -2712.27 -2759.85 | 1363.69 | -10.65 -34.46 | 0.00 | 2.57 2.59 | 0.00 0.00 | -0.27 |
| VA25 - 1 | 810.00 | 0.00 0.19 | -2951.97 1446.92 | 1446.92 | -28.54 66.42 | 66.42 | 3.07 -1.52 | -0.05 0.05 | -1.05 |
| VA25 - 2 | 810.00 | 0.00 0.18 | 1450.51 -2064.09 | 1496.21 | 66.42 -30.81 | 66.42 | 0.28 2.40 | 0.03 -0.03 | -1.05 |
| VA25 - 3 | 810.00 | 0.00 0.09 | -1666.52 -520.62 | 573.43 | -49.65 26.83 | 26.83 | 1.91 1.33 | -0.02 0.02 | -3.22 |

| CASO: G1+G2+1.4V3+0.84D3 | | | | | | | | | |
|--------------------------|------------------|------------------|-----------------------|------------------|-----------------------|------------------|--------------------|--------------------|----------------|
| Elemento | Carga (kgf/m) | Rd Nd (tf) | Mxi Mxf (kgf.m) | MxMáx (kgf.m) | Myi Myf (kgf.m) | MyMáx (kgf.m) | Vxi Vxf (tf) | Vyi Vyf (tf) | Mtd (kgf/m) |
| VA1 - 1 | 772.50 | 0.00 0.28 | -1204.38 1851.20 | 1851.20 | 44.81 -4.58 | 44.81 | 2.32 -0.82 | 0.03 -0.03 | 3.68 |
| VA1 - 2 | 772.50 | 0.00 0.29 | 1851.15 1.12 | 1851.15 | -4.58 -104.64 | 0.00 | -1.35 2.17 | 0.10 -0.10 | 3.07 |
| VA1 - 3 | 772.50 | 0.00 0.29 | 1.83 -2497.47 | 1.83 | -104.64 -17.77 | 0.00 | -4.08 4.52 | -0.15 0.15 | 3.04 |
| VA1 - 4 | 772.50 | 0.00 0.03 | -1924.03 215.00 | 708.92 | -9.11 17.19 | 17.19 | 2.02 0.88 | -0.01 0.01 | -0.79 |
| VA1 - 5 | 772.50 | 0.00 0.04 | 216.30 -1613.73 | 216.30 | 17.19 -4.44 | 17.19 | -3.36 3.76 | 0.04 -0.04 | -3.27 |
| VA1 - 6 | 772.50 | -0.04 0.00 | -1071.16 -453.55 | 288.19 | 3.33 1.46 | 3.33 | 1.45 1.07 | 0.00 0.00 | -2.73 |
| VA2 | 772.50 | 0.00 0.01 | 0.00 0.00 | 376.65 | 0.00 0.00 | 0.00 | 0.77 0.77 | 0.00 0.00 | -3.36 |
| VA3 - 1 | 772.50 | -0.01 0.00 | 0.00 -1558.15 | 1110.29 | 0.00 12.00 | 12.00 | 1.31 2.03 | 0.00 0.00 | 0.74 |
| VA3 - 2 | 772.50 | 0.00 0.00 | -1564.48 5.47 | 5.47 | -13.33 0.00 | 0.00 | 1.61 -0.41 | -0.01 0.01 | 0.00 |
| VA4 - 1 | 810.00 | 0.00 0.10 | -1406.27 -1792.31 | 966.67 | 15.45 -19.78 | 15.45 | 1.96 2.11 | 0.01 -0.01 | 0.29 |
| VA4 - 2 | 810.00 | 0.00 0.09 | -1864.52 1578.56 | 1578.56 | 70.72 -29.83 | 70.72 | 2.55 -0.95 | 0.05 -0.05 | 5.82 |
| VA4 - 3 | 810.00 | 0.00 0.09 | 1578.60 1282.88 | 1578.60 | -29.83 -23.81 | 0.00 | -0.82 1.07 | -0.02 0.02 | 5.82 |
| VA4 - 4 | 810.00 | 0.00 0.09 | 1282.94 -249.98 | 1282.94 | -23.81 8.70 | 8.70 | -1.78 2.38 | -0.04 0.04 | 5.82 |
| VA4 - 5 | 810.00 | 0.00 0.09 | -250.75 -3120.62 | 0.00 | 8.70 -105.70 | 8.70 | -4.92 5.37 | 0.21 -0.21 | 2.04 |
| VA4 - 6 | 810.00 | 0.00 0.00 | -3164.38 -148.70 | 0.00 | -68.38 -51.28 | 0.00 | 3.41 -2.59 | -0.02 0.02 | -3.77 |
| VA4 - 7 | 810.00 | 0.00 0.00 | -148.41 1407.72 | 1407.72 | -51.28 -7.73 | 0.00 | 1.88 -1.01 | -0.04 0.04 | -5.01 |
| VA4 - 8 | 810.00 | 0.00 0.00 | 1406.98 763.00 | 1461.92 | -7.73 29.56 | 0.00 | 0.30 1.06 | -0.02 0.02 | -5.01 |
| VA4 - 9 | 810.00 | -0.01 0.00 | 768.01 -2446.63 | 768.01 | 29.56 68.46 | 68.46 | -5.23 5.70 | -0.07 0.07 | -5.01 |
| VA4 - 10 | 810.00 | -0.04 0.00 | -2137.09 -163.18 | 0.00 | 16.76 10.50 | 16.76 | 2.43 -1.64 | 0.01 -0.01 | 1.85 |
| VA4 - 11 | 810.00 | -0.04 0.00 | -157.71 399.92 | 399.92 | 10.50 11.66 | 11.66 | 1.24 -0.79 | 0.00 0.00 | 1.85 |
| VA4 - 12 | 810.00 | -0.03 0.00 | 400.51 -742.23 | 400.51 | 11.66 -14.13 | 11.66 | 0.05 1.36 | 0.01 -0.01 | 1.85 |
| VA4 - 13 | 810.00 | 0.00 0.01 | -738.68 -337.58 | 351.80 | -11.59 -33.18 | 0.00 | 1.33 1.06 | 0.01 -0.01 | -1.59 |
| VA5 - 1 | 772.50 | 0.00 0.11 | -420.62 570.28 | 696.65 | 54.17 -7.96 | 54.17 | 1.31 0.44 | 0.03 -0.03 | 4.08 |
| VA5 - 2 | 772.50 | 0.00 | 570.22 | 570.22 | -7.96 | 0.00 | -1.15 | 0.05 | 4.08 |


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|----------|--------|---------------|----------------------|---------|------------------|--------|---------------|---------------|-------|
| | | 0.11 | -1570.10 | | -75.52 | | 2.15 | -0.05 | |
| VA5 - 3 | 772.50 | 0.00 0.14 | -2020.32 306.83 | 306.83 | -63.65 -27.81 | 0.00 | 2.70 -1.93 | -0.04 0.04 | -3.45 |
| VA5 - 4 | 772.50 | 0.00 0.14 | 306.59 1168.14 | 1168.14 | -27.81 -14.74 | 0.00 | 1.22 -0.39 | -0.01 0.01 | -3.45 |
| VA5 - 5 | 772.50 | 0.00 0.14 | 1168.88 -1568.35 | 1168.88 | -14.74 54.69 | 54.69 | -0.32 2.08 | -0.03 0.03 | -3.45 |
| VA5 - 6 | 772.50 | 0.00 0.06 | -1523.13 674.63 | 674.63 | 7.83 -3.23 | 7.83 | 2.03 -0.86 | 0.01 -0.01 | -1.75 |
| VA5 - 7 | 772.50 | 0.00 0.05 | 674.04 -117.99 | 679.20 | -17.77 -2.50 | 0.00 | 0.11 1.11 | -0.01 0.01 | -7.46 |
| VA6 - 1 | 772.50 | 0.00 0.03 | 6.54 675.85 | 700.58 | -31.75 -16.58 | 0.00 | 1.04 0.20 | -0.01 0.01 | 2.62 |
| VA6 - 2 | 772.50 | 0.00 0.03 | 680.65 -2448.65 | 680.65 | -16.58 35.30 | 35.30 | -1.45 2.63 | -0.03 0.03 | 2.62 |
| VA7 - 1 | 772.50 | -0.05 0.00 | -873.09 1528.58 | 1528.58 | -43.96 -2.88 | 0.00 | 2.14 -0.92 | -0.03 0.03 | -4.42 |
| VA7 - 2 | 772.50 | -0.05 0.00 | 1523.78 0.00 | 1523.78 | -2.88 0.00 | 0.00 | -0.33 1.57 | 0.00 0.00 | -4.42 |
| VA8 - 1 | 866.25 | 0.00 0.52 | -3649.52 -6677.46 | 2926.36 | -0.77 -16.58 | 0.00 | 3.38 4.08 | 0.00 0.00 | 1.65 |
| VA8 - 2 | 866.25 | 0.00 0.76 | -8833.40 -5707.12 | 4859.27 | -11.74 3.98 | 3.98 | 4.87 4.28 | 0.00 0.00 | -1.28 |
| VA9 - 1 | 810.00 | 0.00 0.20 | -849.79 -3367.83 | 1424.47 | -13.01 4.33 | 4.33 | 1.92 2.79 | 0.00 0.00 | 3.01 |
| VA9 - 2 | 810.00 | 0.00 0.23 | -2102.49 -3249.79 | 1444.20 | -31.76 30.88 | 30.88 | 2.40 2.76 | -0.01 0.01 | -0.09 |
| VA10 - 1 | 810.00 | 0.00 0.14 | -1391.52 -2261.32 | 952.76 | -0.52 -26.49 | 0.00 | 1.95 2.28 | 0.00 0.00 | 0.28 |
| VA10 - 2 | 810.00 | 0.00 0.03 | -394.10 -1821.58 | 584.86 | -75.45 110.74 | 110.74 | 1.26 1.98 | -0.05 0.05 | -3.59 |
| VA11 - 1 | 772.50 | -0.03 0.00 | 881.18 -1187.12 | 881.18 | -42.71 50.33 | 50.33 | -0.32 1.82 | -0.05 0.05 | 1.69 |
| VA11 - 2 | 772.50 | -0.08 0.00 | -330.48 -201.08 | 666.67 | -32.07 15.66 | 15.66 | 1.24 1.16 | -0.02 0.02 | -1.35 |
| VA11 - 3 | 772.50 | -0.08 0.00 | -204.44 -2553.57 | 0.00 | 15.66 40.99 | 40.99 | -1.93 2.71 | -0.02 0.02 | -1.35 |
| VA12 - 1 | 772.50 | -0.07 0.00 | 0.00 1751.39 | 2025.39 | 0.00 7.17 | 7.17 | 1.77 0.65 | 0.00 0.00 | -0.05 |
| VA12 - 2 | 772.50 | -0.07 0.00 | 1754.75 0.00 | 1754.75 | 7.17 0.00 | 7.17 | -1.42 2.17 | 0.01 -0.01 | -0.05 |
| VA13 | 735.00 | 0.00 0.02 | 0.00 0.00 | 338.60 | 0.00 0.00 | 0.00 | 0.71 0.71 | 0.00 0.00 | 0.06 |
| VA14 - 1 | 772.50 | 0.00 0.25 | 0.00 2242.86 | 2242.86 | 0.00 4.83 | 4.83 | 2.54 -1.73 | 0.00 0.00 | 0.71 |
| VA14 - 2 | 772.50 | 0.00 0.25 | 2243.60 0.00 | 2356.84 | 4.83 0.00 | 4.83 | 0.42 1.91 | 0.00 0.00 | 0.71 |
| VA15 | 735.00 | 0.00 0.02 | 0.00 0.00 | 338.60 | 0.00 0.00 | 0.00 | 0.71 0.71 | 0.00 0.00 | 0.25 |
| VA16 | 735.00 | -0.02 0.00 | 0.00 0.00 | 338.60 | 0.00 0.00 | 0.00 | 0.71 0.71 | 0.00 0.00 | -0.74 |
| VA17 - 1 | 772.50 | -0.04 0.00 | 0.00 3941.72 | 3941.72 | 0.00 -11.59 | 0.00 | 4.16 -3.35 | 0.01 -0.01 | -5.01 |
| VA17 - 2 | 772.50 | -0.05 0.00 | 3940.98 0.00 | 3940.98 | 13.75 0.00 | 13.75 | -0.29 2.48 | 0.00 0.00 | 1.33 |
| VA18 | 772.50 | -0.01 0.00 | 682.20 -804.82 | 682.20 | 45.91 -51.71 | 45.91 | -0.02 1.52 | 0.05 -0.05 | 1.03 |
| VA19 | 772.50 | -0.01 0.00 | 0.00 0.00 | 102.16 | 0.00 0.00 | 0.00 | 0.41 0.41 | 0.00 0.00 | -5.47 |
| VA20 | 772.50 | -0.02 0.00 | -5.70 0.00 | 353.34 | 14.54 0.00 | 14.54 | 0.75 0.74 | 0.01 -0.01 | 0.59 |
| VA21 - 1 | 772.50 | 0.00 0.15 | -950.59 2212.91 | 2252.46 | 45.30 -46.22 | 45.30 | 2.23 0.25 | 0.03 -0.03 | 4.75 |


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|----------|--------|--------------|----------------------|---------|------------------|-------|---------------|---------------|-------|
| VA21 - 2 | 772.50 | 0.00 0.14 | 2215.53 -2229.63 | 2215.53 | -14.47 -21.20 | 0.00 | -1.29 2.92 | 0.00 0.00 | -1.79 |
| VA22 | 772.50 | 0.00 0.05 | 584.77 -1999.02 | 899.02 | 3.87 -4.34 | 3.87 | 0.70 2.12 | 0.00 0.00 | 0.05 |
| VA23 | 772.50 | 0.00 0.02 | 0.00 0.00 | 1006.68 | 0.00 0.00 | 0.00 | 1.25 1.25 | 0.00 0.00 | 4.80 |
| VA24 - 1 | 810.00 | 0.00 0.20 | -741.87 -3463.93 | 1447.96 | -11.50 7.22 | 7.22 | 1.88 2.82 | 0.00 0.00 | -4.21 |
| VA24 - 2 | 810.00 | 0.00 0.22 | -1897.80 -3576.24 | 1409.02 | 17.45 8.32 | 17.45 | 2.31 2.84 | 0.00 0.00 | -0.07 |
| VA25 - 1 | 810.00 | 0.00 0.23 | -2237.51 1928.09 | 1928.09 | 81.99 -25.35 | 81.99 | 2.95 -1.40 | 0.06 -0.06 | 3.11 |
| VA25 - 2 | 810.00 | 0.00 0.23 | 1932.50 -3055.82 | 1932.50 | -25.35 -39.94 | 0.00 | -0.17 2.85 | 0.00 0.00 | 3.11 |
| VA25 - 3 | 810.00 | 0.00 0.04 | -544.62 -1887.23 | 466.61 | 44.79 -73.05 | 44.79 | 1.28 1.95 | 0.03 -0.03 | -1.31 |

| CASO: G1+G2+1.4V4+0.84D4 | | | | | | | | | |
|--------------------------|------------------|------------------|-----------------------|------------------|-----------------------|------------------|--------------------|--------------------|----------------|
| Elemento | Carga (kgf/m) | Rd Nd (tf) | Mxi Mxf (kgf.m) | MxMáx (kgf.m) | Myi Myf (kgf.m) | MyMáx (kgf.m) | Vxi Vxf (tf) | Vyi Vyf (tf) | Mtd (kgf/m) |
| VA1 - 1 | 772.50 | 0.00 0.30 | -1409.70 1833.05 | 1833.05 | -61.09 6.46 | 6.46 | 2.42 -0.91 | -0.03 0.03 | -1.01 |
| VA1 - 2 | 772.50 | 0.00 0.30 | 1833.27 84.68 | 1833.27 | 6.46 83.22 | 0.00 | -1.26 2.07 | -0.07 0.07 | -1.63 |
| VA1 - 3 | 772.50 | 0.00 0.30 | 85.74 -2357.46 | 85.74 | 83.22 38.90 | 83.22 | -3.98 4.43 | 0.08 -0.08 | -1.59 |
| VA1 - 4 | 772.50 | 0.00 0.06 | -2052.51 298.69 | 733.68 | 38.51 -42.48 | 38.51 | 2.07 0.82 | 0.02 -0.02 | 1.57 |
| VA1 - 5 | 772.50 | 0.00 0.05 | 300.35 -1500.56 | 300.35 | -42.48 35.36 | 35.36 | -3.30 3.70 | -0.15 0.15 | -1.86 |
| VA1 - 6 | 772.50 | 0.00 0.00 | -1280.60 -156.70 | 385.59 | 21.72 -11.41 | 21.72 | 1.60 0.92 | 0.01 -0.01 | 1.47 |
| VA2 | 772.50 | 0.00 0.00 | 0.00 0.00 | 376.65 | 0.00 0.00 | 0.00 | 0.77 0.77 | 0.00 0.00 | -1.99 |
| VA3 - 1 | 772.50 | 0.00 0.01 | 0.00 -1558.09 | 1110.31 | 0.00 -9.45 | 0.00 | 1.31 2.03 | 0.00 0.00 | 0.78 |
| VA3 - 2 | 772.50 | 0.00 0.00 | -1564.79 5.17 | 5.17 | 24.81 0.00 | 24.81 | 1.61 -0.41 | 0.02 -0.02 | 0.00 |
| VA4 - 1 | 810.00 | 0.00 0.19 | -1351.35 -1830.14 | 977.06 | 58.11 -5.92 | 58.11 | 1.94 2.13 | 0.01 -0.01 | 1.53 |
| VA4 - 2 | 810.00 | 0.00 0.25 | -1893.00 1594.47 | 1594.47 | -82.78 21.64 | 21.64 | 2.57 -0.97 | -0.05 0.05 | -7.17 |
| VA4 - 3 | 810.00 | 0.00 0.25 | 1594.25 1305.48 | 1594.25 | 21.64 26.22 | 0.00 | -0.80 1.05 | -0.01 0.01 | -7.17 |
| VA4 - 4 | 810.00 | 0.00 0.25 | 1305.44 -211.11 | 1305.44 | 26.22 22.07 | 26.22 | -1.76 2.36 | 0.01 -0.01 | -7.17 |
| VA4 - 5 | 810.00 | 0.00 0.24 | -212.03 -3069.52 | 0.00 | 22.07 101.21 | 101.21 | -4.90 5.35 | -0.14 0.14 | -10.36 |
| VA4 - 6 | 810.00 | 0.00 0.16 | -3099.88 -111.57 | 0.00 | 50.03 53.02 | 53.02 | 3.38 -2.56 | 0.00 0.00 | 5.60 |
| VA4 - 7 | 810.00 | 0.00 0.16 | -111.26 1415.58 | 1415.58 | 53.02 5.39 | 53.02 | 1.86 -0.98 | 0.04 -0.04 | 4.67 |
| VA4 - 8 | 810.00 | 0.00 0.16 | 1414.96 725.07 | 1458.42 | 5.39 -4.95 | 0.00 | 0.27 1.09 | 0.01 -0.01 | 4.67 |
| VA4 - 9 | 810.00 | 0.00 0.18 | 730.11 -2500.55 | 730.11 | -4.95 -102.20 | 0.00 | -5.25 5.73 | 0.17 -0.17 | 4.67 |
| VA4 - 10 | 810.00 | 0.00 0.02 | -2247.44 -210.52 | 0.00 | -30.92 -6.61 | 0.00 | 2.49 -1.71 | -0.03 0.03 | 1.01 |
| VA4 - 11 | 810.00 | 0.00 0.02 | -205.35 388.00 | 388.00 | -6.61 -1.57 | 0.00 | 1.30 -0.86 | -0.01 0.01 | 1.01 |
| VA4 - 12 | 810.00 | 0.00 | 388.22 | 394.35 | -1.57 | 0.37 | 0.12 | 0.00 | 1.01 |

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|----------|--------|---------------|----------------------|---------|------------------|-------|---------------|---------------|--------|
| | | 0.01 | -635.60 | | 0.37 | | 1.29 | 0.00 | |
| VA4 - 13 | 810.00 | 0.00 0.08 | -686.51 -336.71 | 374.66 | 8.12 18.76 | 18.76 | 1.31 1.07 | 0.00 0.00 | -1.70 |
| VA5 - 1 | 772.50 | 0.00 0.00 | -388.38 536.13 | 680.61 | -51.90 9.87 | 9.87 | 1.29 0.47 | -0.03 0.03 | -5.01 |
| VA5 - 2 | 772.50 | 0.00 0.00 | 536.16 -1641.94 | 536.16 | 9.87 71.28 | 71.28 | -1.18 2.18 | -0.05 0.05 | -5.01 |
| VA5 - 3 | 772.50 | 0.00 0.03 | -2001.71 320.32 | 320.32 | 69.73 23.95 | 69.73 | 2.70 -1.92 | 0.05 -0.05 | 4.48 |
| VA5 - 4 | 772.50 | 0.00 0.03 | 319.97 1176.05 | 1176.05 | 23.95 24.34 | 0.00 | 1.21 -0.38 | 0.00 0.00 | 4.48 |
| VA5 - 5 | 772.50 | 0.00 0.03 | 1176.68 -1572.13 | 1176.68 | 24.34 -61.60 | 24.34 | -0.33 2.09 | 0.04 -0.04 | 4.48 |
| VA5 - 6 | 772.50 | 0.00 0.07 | -1423.35 684.96 | 684.96 | 10.34 -19.43 | 10.34 | 1.97 -0.80 | 0.02 -0.02 | 0.84 |
| VA5 - 7 | 772.50 | 0.00 0.08 | 684.74 -205.73 | 684.74 | -2.81 -21.09 | 0.00 | 0.05 1.17 | 0.01 -0.01 | -11.41 |
| VA6 - 1 | 772.50 | 0.00 0.02 | 7.40 557.41 | 605.72 | 16.48 -5.66 | 16.48 | 0.96 0.28 | 0.01 -0.01 | 0.34 |
| VA6 - 2 | 772.50 | 0.00 0.02 | 562.09 -2681.44 | 562.09 | -5.66 12.30 | 12.30 | -1.52 2.71 | -0.01 0.01 | 0.34 |
| VA7 - 1 | 772.50 | -0.06 0.00 | -678.03 1627.19 | 1627.19 | -23.30 8.51 | 8.51 | 2.07 -0.86 | -0.02 0.02 | -1.68 |
| VA7 - 2 | 772.50 | -0.06 0.00 | 1622.51 0.00 | 1622.51 | 8.51 0.00 | 8.51 | -0.39 1.63 | 0.01 -0.01 | -1.68 |
| VA8 - 1 | 866.25 | 0.00 0.47 | -3720.04 -6589.64 | 2928.48 | -8.56 17.87 | 17.87 | 3.39 4.06 | 0.00 0.00 | -4.32 |
| VA8 - 2 | 866.25 | 0.00 0.71 | -8786.37 -5727.34 | 4870.10 | 34.06 -10.44 | 34.06 | 4.86 4.29 | 0.00 0.00 | 3.43 |
| VA9 - 1 | 810.00 | 0.00 0.06 | -2600.21 -1838.52 | 1207.51 | 80.99 -60.09 | 80.99 | 2.48 2.22 | 0.02 -0.02 | 2.89 |
| VA9 - 2 | 810.00 | 0.00 0.13 | -3316.72 -2017.47 | 1460.60 | 2.78 -11.76 | 2.78 | 2.78 2.37 | 0.00 0.00 | -0.44 |
| VA10 - 1 | 810.00 | 0.00 0.07 | -2801.50 -979.13 | 946.57 | 44.28 -36.85 | 44.28 | 2.46 1.77 | 0.02 -0.02 | 0.55 |
| VA10 - 2 | 810.00 | 0.00 0.08 | -2225.94 355.00 | 937.35 | -4.43 -60.33 | 0.00 | 2.26 0.97 | 0.01 -0.01 | -3.23 |
| VA11 - 1 | 772.50 | 0.00 0.07 | -1290.96 11.18 | 11.18 | 47.42 -42.21 | 47.42 | 1.42 0.07 | 0.05 -0.05 | 1.57 |
| VA11 - 2 | 772.50 | 0.00 0.15 | -1866.93 1605.44 | 1605.98 | 24.66 -12.46 | 24.66 | 2.32 0.08 | 0.01 -0.01 | -0.88 |
| VA11 - 3 | 772.50 | 0.00 0.15 | 1603.45 344.83 | 1603.45 | -12.46 -28.64 | 0.00 | -0.85 1.63 | 0.02 -0.02 | -0.88 |
| VA12 - 1 | 772.50 | 0.00 0.04 | 0.00 1752.44 | 2026.15 | 0.00 -2.98 | 0.00 | 1.77 0.65 | 0.00 0.00 | 0.22 |
| VA12 - 2 | 772.50 | 0.00 0.04 | 1754.43 0.00 | 1754.43 | -2.98 0.00 | 0.00 | -1.42 2.17 | 0.00 0.00 | 0.22 |
| VA13 | 735.00 | -0.02 0.00 | 0.00 0.00 | 338.60 | 0.00 0.00 | 0.00 | 0.71 0.71 | 0.00 0.00 | -0.03 |
| VA14 - 1 | 772.50 | -0.15 0.00 | 0.00 2242.86 | 2242.86 | 0.00 -7.47 | 0.00 | 2.54 -1.73 | 0.01 -0.01 | 1.05 |
| VA14 - 2 | 772.50 | -0.15 0.00 | 2243.64 0.00 | 2356.88 | -7.47 0.00 | 0.00 | 0.42 1.91 | 0.00 0.00 | 1.05 |
| VA15 | 735.00 | -0.05 0.00 | 0.00 0.00 | 338.60 | 0.00 0.00 | 0.00 | 0.71 0.71 | 0.00 0.00 | 0.35 |
| VA16 | 735.00 | 0.00 0.04 | 0.00 0.00 | 338.60 | 0.00 0.00 | 0.00 | 0.71 0.71 | 0.00 0.00 | -0.63 |
| VA17 - 1 | 772.50 | 0.00 0.16 | 0.00 3941.72 | 3941.72 | 0.00 16.60 | 16.60 | 4.16 -3.35 | -0.02 0.02 | -5.04 |
| VA17 - 2 | 772.50 | 0.00 0.17 | 3940.94 0.00 | 3940.94 | -17.67 0.00 | 0.00 | -0.29 2.48 | -0.01 0.01 | 1.66 |
| VA18 | 772.50 | 0.00 0.10 | -1252.66 1136.55 | 1136.55 | -66.97 79.99 | 79.99 | 1.98 -0.49 | -0.08 0.08 | 1.07 |

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|----------|--------|---------------|----------------------|---------|-----------------|-------|---------------|---------------|-------|
| VA19 | 772.50 | 0.00 0.02 | 0.00 0.00 | 102.16 | 0.00 0.00 | 0.00 | 0.41 0.41 | 0.00 0.00 | -5.17 |
| VA20 | 772.50 | -0.01 0.00 | -12.25 0.00 | 350.43 | -16.62 0.00 | 0.00 | 0.75 0.74 | -0.01 0.01 | 0.21 |
| VA21 - 1 | 772.50 | 0.00 0.15 | -2215.85 2415.80 | 2415.80 | 4.34 -14.71 | 4.34 | 2.68 -0.20 | 0.01 -0.01 | 5.21 |
| VA21 - 2 | 772.50 | 0.00 0.16 | 2416.13 -905.84 | 2416.13 | -31.19 2.47 | 2.47 | -0.76 2.39 | -0.02 0.02 | -2.18 |
| VA22 | 772.50 | 0.00 0.11 | -1560.72 542.60 | 989.55 | -20.21 25.75 | 25.75 | 1.99 0.83 | -0.01 0.01 | 0.48 |
| VA23 | 772.50 | 0.00 0.03 | 0.00 0.00 | 1006.68 | 0.00 0.00 | 0.00 | 1.25 1.25 | 0.00 0.00 | 4.67 |
| VA24 - 1 | 810.00 | 0.00 0.04 | -2782.99 -1678.43 | 1207.65 | -90.63 56.10 | 56.10 | 2.54 2.16 | -0.03 0.03 | -4.36 |
| VA24 - 2 | 810.00 | 0.00 0.12 | -3318.44 -2143.49 | 1390.71 | -6.40 33.45 | 33.45 | 2.76 2.39 | -0.01 0.01 | -0.49 |
| VA25 - 1 | 810.00 | 0.00 0.17 | -3921.18 1486.28 | 1486.28 | 58.75 -34.96 | 58.75 | 3.60 -2.05 | 0.05 -0.05 | 3.43 |
| VA25 - 2 | 810.00 | 0.00 0.16 | 1487.97 -1556.46 | 1592.71 | -34.96 17.67 | 17.67 | 0.42 2.26 | -0.02 0.02 | 3.43 |
| VA25 - 3 | 810.00 | 0.00 0.10 | -2723.60 653.94 | 1019.17 | -70.56 76.20 | 76.20 | 2.46 0.77 | -0.04 0.04 | -0.86 |

| CASO: G1+G2+D1 | | | | | | | | | |
|----------------|------------------|------------------|-----------------------|------------------|-----------------------|------------------|--------------------|--------------------|----------------|
| Elemento | Carga (kgf/m) | Rd Nd (tf) | Mxi Mxf (kgf.m) | MxMáx (kgf.m) | Myi Myf (kgf.m) | MyMáx (kgf.m) | Vxi Vxf (tf) | Vyi Vyf (tf) | Mtd (kgf/m) |
| VA1 - 1 | 772.50 | 0.00 0.30 | -1152.12 1842.54 | 1842.54 | -8.27 1.20 | 1.20 | 2.29 -0.79 | 0.00 0.00 | 1.36 |
| VA1 - 2 | 772.50 | 0.00 0.31 | 1842.66 -40.08 | 1842.66 | 1.20 -11.19 | 1.20 | -1.39 2.20 | 0.01 -0.01 | 0.74 |
| VA1 - 3 | 772.50 | 0.00 0.30 | -39.13 -2556.53 | 0.00 | -11.19 9.79 | 9.79 | -4.11 4.56 | -0.04 0.04 | 0.66 |
| VA1 - 4 | 772.50 | 0.00 0.05 | -1900.35 191.57 | 699.54 | 14.74 -12.74 | 14.74 | 2.01 0.89 | 0.01 -0.01 | 0.27 |
| VA1 - 5 | 772.50 | 0.00 0.05 | 193.04 -1643.45 | 193.04 | -12.74 15.04 | 15.04 | -3.37 3.77 | -0.05 0.05 | -1.95 |
| VA1 - 6 | 772.50 | -0.02 0.00 | -1041.67 -465.82 | 294.19 | 13.05 -5.29 | 13.05 | 1.44 1.08 | 0.01 -0.01 | -0.63 |
| VA2 | 772.50 | 0.00 0.00 | 0.00 0.00 | 376.65 | 0.00 0.00 | 0.00 | 0.77 0.77 | 0.00 0.00 | -2.62 |
| VA3 - 1 | 772.50 | 0.00 0.00 | 0.00 -1557.83 | 1110.41 | 0.00 1.36 | 1.36 | 1.31 2.03 | 0.00 0.00 | 0.74 |
| VA3 - 2 | 772.50 | 0.00 0.00 | -1564.50 5.46 | 5.46 | 4.77 0.00 | 4.77 | 1.61 -0.41 | 0.00 0.00 | 0.00 |
| VA4 - 1 | 810.00 | 0.00 0.17 | -1182.23 -1886.46 | 1037.97 | 33.99 -12.27 | 33.99 | 1.90 2.18 | 0.01 -0.01 | 0.91 |
| VA4 - 2 | 810.00 | 0.00 0.19 | -1823.74 1515.79 | 1515.79 | -5.02 -4.24 | 0.00 | 2.49 -0.90 | 0.00 0.00 | -0.33 |
| VA4 - 3 | 810.00 | 0.00 0.19 | 1515.67 1203.43 | 1515.67 | -4.24 1.16 | 0.00 | -0.87 1.12 | -0.02 0.02 | -0.33 |
| VA4 - 4 | 810.00 | 0.00 0.19 | 1203.40 -368.40 | 1203.40 | 1.16 14.88 | 14.88 | -1.83 2.43 | -0.02 0.02 | -0.33 |
| VA4 - 5 | 810.00 | 0.00 0.19 | -369.31 -3268.63 | 0.00 | 14.88 -3.42 | 14.88 | -4.97 5.42 | 0.03 -0.03 | -5.89 |
| VA4 - 6 | 810.00 | 0.00 0.11 | -2973.18 -25.34 | 0.00 | -8.89 0.84 | 0.84 | 3.34 -2.52 | -0.01 0.01 | 0.22 |
| VA4 - 7 | 810.00 | 0.00 0.11 | -25.06 1458.49 | 1458.49 | 0.84 -1.27 | 0.84 | 1.81 -0.94 | 0.00 0.00 | 0.01 |
| VA4 - 8 | 810.00 | 0.00 0.11 | 1457.81 700.06 | 1489.06 | -1.27 11.99 | 0.00 | 0.23 1.13 | -0.01 0.01 | 0.01 |
| VA4 - 9 | 810.00 | 0.00 | 705.26 | 705.26 | 11.99 | 11.99 | -5.29 | 0.05 | 0.01 |

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| | | 0.11 | -2549.05 | | -17.21 | | 5.77 | -0.05 | |
| VA4 - 10 | 810.00 | 0.00 0.03 | -2148.22 -184.11 | 0.00 | -7.24 2.52 | 2.52 | 2.42 -1.63 | -0.01 0.01 | 1.42 |
| VA4 - 11 | 810.00 | 0.00 0.03 | -178.65 373.42 | 373.42 | 2.52 6.37 | 6.37 | 1.23 -0.78 | -0.01 0.01 | 1.42 |
| VA4 - 12 | 810.00 | 0.00 0.02 | 373.81 -783.72 | 373.81 | 6.37 -7.69 | 6.37 | 0.04 1.37 | 0.01 -0.01 | 1.42 |
| VA4 - 13 | 810.00 | 0.00 0.05 | -487.56 -640.10 | 315.40 | -2.73 -3.28 | 0.00 | 1.14 1.25 | 0.00 0.00 | -1.64 |
| VA5 - 1 | 772.50 | 0.00 0.05 | -316.42 517.98 | 687.03 | 2.27 0.55 | 2.27 | 1.25 0.51 | 0.00 0.00 | -0.46 |
| VA5 - 2 | 772.50 | 0.00 0.05 | 518.01 -1711.36 | 518.01 | 0.55 -2.18 | 0.55 | -1.22 2.22 | 0.00 0.00 | -0.46 |
| VA5 - 3 | 772.50 | 0.00 0.08 | -1935.68 360.36 | 360.36 | 2.71 -1.89 | 2.71 | 2.67 -1.90 | 0.00 0.00 | 0.50 |
| VA5 - 4 | 772.50 | 0.00 0.08 | 360.09 1188.36 | 1188.36 | -1.89 4.69 | 0.00 | 1.19 -0.35 | -0.01 0.01 | 0.50 |
| VA5 - 5 | 772.50 | 0.00 0.08 | 1189.04 -1618.60 | 1189.04 | 4.69 -3.72 | 4.69 | -0.36 2.11 | 0.00 0.00 | 0.50 |
| VA5 - 6 | 772.50 | 0.00 0.06 | -1418.11 667.65 | 667.65 | 9.03 -10.73 | 9.03 | 1.96 -0.79 | 0.01 -0.01 | -0.46 |
| VA5 - 7 | 772.50 | 0.00 0.06 | 667.26 -243.84 | 667.26 | -9.16 -5.88 | 0.00 | 0.03 1.19 | 0.00 0.00 | -9.25 |
| VA6 - 1 | 772.50 | 0.00 0.02 | 7.68 523.18 | 580.12 | -13.03 -12.27 | 0.00 | 0.94 0.30 | 0.00 0.00 | 1.43 |
| VA6 - 2 | 772.50 | 0.00 0.02 | 527.91 -2748.67 | 527.91 | -12.27 26.31 | 26.31 | -1.54 2.73 | -0.03 0.03 | 1.43 |
| VA7 - 1 | 772.50 | -0.07 0.00 | -653.10 1639.82 | 1639.82 | -35.80 1.51 | 1.51 | 2.07 -0.85 | -0.02 0.02 | -2.99 |
| VA7 - 2 | 772.50 | -0.07 0.00 | 1635.10 0.00 | 1635.10 | 1.51 0.00 | 1.51 | -0.40 1.64 | 0.00 0.00 | -2.99 |
| VA8 - 1 | 866.25 | 0.00 0.49 | -3538.70 -6754.67 | 2954.09 | 0.05 -0.68 | 0.05 | 3.35 4.10 | 0.00 0.00 | -1.32 |
| VA8 - 2 | 866.25 | 0.00 0.72 | -8706.73 -5845.35 | 4843.31 | 12.32 -7.47 | 12.32 | 4.85 4.30 | 0.00 0.00 | 1.07 |
| VA9 - 1 | 810.00 | 0.00 0.13 | -1717.33 -2610.68 | 1265.14 | 28.87 -22.71 | 28.87 | 2.20 2.51 | 0.01 -0.01 | 2.30 |
| VA9 - 2 | 810.00 | 0.00 0.18 | -2710.63 -2635.87 | 1426.94 | -10.57 10.44 | 10.44 | 2.59 2.57 | 0.00 0.00 | -0.25 |
| VA10 - 1 | 810.00 | 0.00 0.11 | -2095.78 -1621.21 | 905.49 | 22.81 -32.34 | 22.81 | 2.21 2.02 | 0.01 -0.01 | 0.74 |
| VA10 - 2 | 810.00 | 0.00 0.05 | -1308.65 -734.55 | 605.87 | -38.98 23.05 | 23.05 | 1.76 1.47 | -0.02 0.02 | -3.06 |
| VA11 - 1 | 772.50 | 0.00 0.02 | -195.53 -590.80 | 0.00 | 1.33 5.26 | 5.26 | 0.54 0.95 | 0.00 0.00 | 1.83 |
| VA11 - 2 | 772.50 | 0.00 0.04 | -1088.88 692.70 | 946.87 | -2.80 1.32 | 1.32 | 1.77 0.63 | 0.00 0.00 | -1.30 |
| VA11 - 3 | 772.50 | 0.00 0.04 | 690.08 -1120.09 | 690.08 | 1.32 5.56 | 5.56 | -1.39 2.18 | 0.00 0.00 | -1.30 |
| VA12 - 1 | 772.50 | -0.02 0.00 | 0.00 1751.95 | 2025.80 | 0.00 2.13 | 2.13 | 1.77 0.65 | 0.00 0.00 | 0.13 |
| VA12 - 2 | 772.50 | -0.02 0.00 | 1754.58 0.00 | 1754.58 | 2.13 0.00 | 2.13 | -1.42 2.17 | 0.00 0.00 | 0.13 |
| VA13 | 735.00 | 0.00 0.00 | 0.00 0.00 | 338.60 | 0.00 0.00 | 0.00 | 0.71 0.71 | 0.00 0.00 | -0.03 |
| VA14 - 1 | 772.50 | 0.00 0.05 | 0.00 2242.92 | 2242.92 | 0.00 -1.18 | 0.00 | 2.54 -1.73 | 0.00 0.00 | 0.95 |
| VA14 - 2 | 772.50 | 0.00 0.05 | 2243.66 0.00 | 2356.89 | -1.18 0.00 | 0.00 | 0.42 1.91 | 0.00 0.00 | 0.95 |
| VA15 | 735.00 | -0.01 0.00 | 0.00 0.00 | 338.60 | 0.00 0.00 | 0.00 | 0.71 0.71 | 0.00 0.00 | 0.27 |
| VA16 | 735.00 | 0.00 0.01 | 0.00 0.00 | 338.60 | 0.00 0.00 | 0.00 | 0.71 0.71 | 0.00 0.00 | -0.68 |

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|----------|--------|---------------|----------------------|---------|------------------|-------|---------------|---------------|-------|
| VA17 - 1 | 772.50 | 0.00 0.06 | 0.00 3941.67 | 3941.67 | 0.00 2.08 | 2.08 | 4.16 -3.35 | 0.00 0.00 | -5.20 |
| VA17 - 2 | 772.50 | 0.00 0.06 | 3940.92 0.00 | 3940.92 | -1.33 0.00 | 0.00 | -0.29 2.48 | 0.00 0.00 | 1.47 |
| VA18 | 772.50 | 0.00 0.05 | -288.91 170.11 | 337.39 | -10.43 14.02 | 14.02 | 0.98 0.51 | -0.01 0.01 | 1.11 |
| VA19 | 772.50 | 0.00 0.00 | 0.00 0.00 | 102.16 | 0.00 0.00 | 0.00 | 0.41 0.41 | 0.00 0.00 | -5.46 |
| VA20 | 772.50 | -0.02 0.00 | -8.79 0.00 | 351.96 | -1.57 0.00 | 0.00 | 0.75 0.74 | 0.00 0.00 | 0.39 |
| VA21 - 1 | 772.50 | 0.00 0.14 | -1564.16 2262.09 | 2262.09 | 25.89 -30.46 | 25.89 | 2.43 0.05 | 0.02 -0.02 | 5.36 |
| VA21 - 2 | 772.50 | 0.00 0.14 | 2263.53 -1542.86 | 2263.53 | -17.43 -14.07 | 0.00 | -0.99 2.62 | 0.00 0.00 | -2.32 |
| VA22 | 772.50 | 0.00 0.08 | -499.29 -717.18 | 676.81 | -7.88 10.18 | 10.18 | 1.35 1.47 | 0.00 0.00 | 0.17 |
| VA23 | 772.50 | 0.00 0.02 | 0.00 0.00 | 1006.68 | 0.00 0.00 | 0.00 | 1.25 1.25 | 0.00 0.00 | 4.72 |
| VA24 - 1 | 810.00 | 0.00 0.11 | -1765.17 -2567.69 | 1261.14 | -54.53 35.02 | 35.02 | 2.21 2.49 | -0.02 0.02 | -4.92 |
| VA24 - 2 | 810.00 | 0.00 0.16 | -2602.03 -2865.13 | 1369.65 | 7.88 26.87 | 26.87 | 2.54 2.62 | 0.00 0.00 | -0.26 |
| VA25 - 1 | 810.00 | 0.00 0.20 | -3099.92 1733.33 | 1733.33 | 80.24 -40.71 | 80.24 | 3.30 -1.75 | 0.06 -0.06 | 3.75 |
| VA25 - 2 | 810.00 | 0.00 0.20 | 1736.32 -2326.72 | 1742.22 | -40.71 -9.73 | 0.00 | 0.11 2.57 | -0.01 0.01 | 3.75 |
| VA25 - 3 | 810.00 | 0.00 0.07 | -1639.84 -616.03 | 529.43 | -9.68 0.49 | 0.49 | 1.87 1.36 | 0.00 0.00 | -0.88 |

| CASO: G1+G2+D2 | | | | | | | | | |
|----------------|------------------|------------------|-----------------------|------------------|-----------------------|------------------|--------------------|--------------------|----------------|
| Elemento | Carga (kgf/m) | Rd Nd (tf) | Mxi Mxf (kgf.m) | MxMáx (kgf.m) | Myi Myf (kgf.m) | MyMáx (kgf.m) | Vxi Vxf (tf) | Vyi Vyf (tf) | Mtd (kgf/m) |
| VA1 - 1 | 772.50 | 0.00 0.29 | -1461.97 1841.71 | 1841.71 | -8.00 0.69 | 0.69 | 2.45 -0.95 | 0.00 0.00 | 1.32 |
| VA1 - 2 | 772.50 | 0.00 0.29 | 1841.76 125.89 | 1841.76 | 0.69 -10.23 | 0.00 | -1.23 2.04 | 0.01 -0.01 | 0.70 |
| VA1 - 3 | 772.50 | 0.00 0.29 | 126.70 -2298.39 | 126.70 | -10.23 11.34 | 11.34 | -3.95 4.40 | -0.04 0.04 | 0.79 |
| VA1 - 4 | 772.50 | 0.00 0.04 | -2076.19 322.12 | 744.02 | 14.66 -12.55 | 14.66 | 2.09 0.81 | 0.01 -0.01 | 0.51 |
| VA1 - 5 | 772.50 | 0.00 0.04 | 323.61 -1470.85 | 323.61 | -12.55 15.88 | 15.88 | -3.29 3.69 | -0.06 0.06 | -3.18 |
| VA1 - 6 | 772.50 | -0.02 0.00 | -1310.10 -144.44 | 382.20 | 12.00 -4.67 | 12.00 | 1.62 0.90 | 0.01 -0.01 | -0.63 |
| VA2 | 772.50 | 0.00 0.00 | 0.00 0.00 | 376.65 | 0.00 0.00 | 0.00 | 0.77 0.77 | 0.00 0.00 | -2.72 |
| VA3 - 1 | 772.50 | 0.00 0.00 | 0.00 -1558.41 | 1110.19 | 0.00 1.19 | 1.19 | 1.31 2.03 | 0.00 0.00 | 0.78 |
| VA3 - 2 | 772.50 | 0.00 0.00 | -1564.77 5.19 | 5.19 | 6.71 0.00 | 6.71 | 1.61 -0.41 | 0.00 0.00 | 0.00 |
| VA4 - 1 | 810.00 | 0.00 0.12 | -1575.38 -1735.99 | 905.76 | 39.57 -13.43 | 39.57 | 2.01 2.07 | 0.01 -0.01 | 0.92 |
| VA4 - 2 | 810.00 | 0.00 0.14 | -1933.78 1657.23 | 1657.23 | -7.04 -3.95 | 0.00 | 2.62 -1.03 | 0.00 0.00 | -1.02 |
| VA4 - 3 | 810.00 | 0.00 0.15 | 1657.18 1384.93 | 1657.18 | -3.95 1.25 | 0.00 | -0.74 1.00 | -0.02 0.02 | -1.02 |
| VA4 - 4 | 810.00 | 0.00 0.15 | 1384.98 -92.69 | 1384.98 | 1.25 15.89 | 15.89 | -1.71 2.30 | -0.02 0.02 | -1.02 |
| VA4 - 5 | 810.00 | 0.00 0.14 | -93.47 -2921.50 | 0.00 | 15.89 -1.07 | 15.89 | -4.85 5.30 | 0.03 -0.03 | -2.43 |
| VA4 - 6 | 810.00 | 0.00 | -3291.08 | 0.00 | -9.46 | 0.91 | 3.45 | -0.01 | 1.61 |


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| | | 0.05 | -234.93 | | 0.91 | | -2.63 | 0.01 | |
| VA4 - 7 | 810.00 | 0.00 0.05 | -234.61 1364.81 | 1364.81 | 0.91 -1.07 | 0.91 | 1.92 -1.05 | 0.00 0.00 | -0.35 |
| VA4 - 8 | 810.00 | 0.00 0.05 | 1364.13 788.01 | 1436.03 | -1.07 12.61 | 0.00 | 0.34 1.02 | -0.01 0.01 | -0.35 |
| VA4 - 9 | 810.00 | 0.00 0.05 | 792.86 -2398.14 | 792.86 | 12.61 -16.53 | 12.61 | -5.18 5.66 | 0.05 -0.05 | -0.35 |
| VA4 - 10 | 810.00 | -0.04 0.00 | -2236.31 -189.60 | 0.00 | -6.93 1.38 | 1.38 | 2.50 -1.72 | -0.01 0.01 | 1.43 |
| VA4 - 11 | 810.00 | -0.04 0.00 | -184.41 414.50 | 414.50 | 1.38 3.72 | 3.72 | 1.31 -0.87 | 0.00 0.00 | 1.43 |
| VA4 - 12 | 810.00 | -0.04 0.00 | 414.91 -594.12 | 422.90 | 3.72 -6.08 | 3.72 | 0.12 1.28 | 0.01 -0.01 | 1.43 |
| VA4 - 13 | 810.00 | 0.00 0.04 | -937.63 -34.20 | 450.60 | -0.75 -11.15 | 0.00 | 1.50 0.89 | 0.00 0.00 | -1.65 |
| VA5 - 1 | 772.50 | 0.00 0.06 | -492.58 588.43 | 690.22 | 0.01 1.36 | 1.36 | 1.35 0.40 | 0.00 0.00 | -0.48 |
| VA5 - 2 | 772.50 | 0.00 0.06 | 588.37 -1500.68 | 588.37 | 1.36 -2.06 | 1.36 | -1.11 2.11 | 0.00 0.00 | -0.48 |
| VA5 - 3 | 772.50 | 0.00 0.09 | -2086.35 266.80 | 266.80 | 3.37 -1.97 | 3.37 | 2.73 -1.95 | 0.01 -0.01 | 0.54 |
| VA5 - 4 | 772.50 | 0.00 0.09 | 266.47 1155.84 | 1155.84 | -1.97 4.91 | 0.00 | 1.24 -0.41 | -0.01 0.01 | 0.54 |
| VA5 - 5 | 772.50 | 0.00 0.09 | 1156.52 -1521.89 | 1156.52 | 4.91 -3.19 | 4.91 | -0.30 2.06 | 0.00 0.00 | 0.54 |
| VA5 - 6 | 772.50 | 0.00 0.07 | -1528.37 691.93 | 691.93 | 9.14 -11.93 | 9.14 | 2.05 -0.87 | 0.01 -0.01 | -0.45 |
| VA5 - 7 | 772.50 | 0.00 0.07 | 691.52 -79.87 | 699.63 | -11.42 -17.71 | 0.00 | 0.12 1.10 | 0.00 0.00 | -9.61 |
| VA6 - 1 | 772.50 | 0.00 0.03 | 6.25 710.08 | 730.49 | -2.24 -9.96 | 0.00 | 1.06 0.18 | 0.00 0.00 | 1.52 |
| VA6 - 2 | 772.50 | 0.00 0.03 | 714.83 -2381.42 | 714.83 | -9.96 21.29 | 21.29 | -1.43 2.61 | -0.02 0.02 | 1.52 |
| VA7 - 1 | 772.50 | -0.04 0.00 | -898.02 1515.94 | 1515.94 | -31.47 4.12 | 4.12 | 2.14 -0.93 | -0.02 0.02 | -3.12 |
| VA7 - 2 | 772.50 | -0.04 0.00 | 1511.19 0.00 | 1511.19 | 4.12 0.00 | 4.12 | -0.32 1.56 | 0.00 0.00 | -3.12 |
| VA8 - 1 | 866.25 | 0.00 0.49 | -3830.86 -6512.43 | 2905.12 | -9.39 1.98 | 1.98 | 3.42 4.04 | 0.00 0.00 | -1.35 |
| VA8 - 2 | 866.25 | 0.00 0.74 | -8913.04 -5589.11 | 4886.06 | 10.00 1.01 | 10.00 | 4.89 4.26 | 0.00 0.00 | 1.08 |
| VA9 - 1 | 810.00 | 0.00 0.12 | -1732.67 -2595.67 | 1264.45 | 39.11 -33.04 | 39.11 | 2.20 2.50 | 0.01 -0.01 | 3.59 |
| VA9 - 2 | 810.00 | 0.00 0.17 | -2708.58 -2631.39 | 1430.24 | -18.41 8.68 | 8.68 | 2.59 2.57 | 0.00 0.00 | -0.28 |
| VA10 - 1 | 810.00 | 0.00 0.10 | -2097.24 -1619.24 | 905.87 | 20.95 -31.00 | 20.95 | 2.21 2.02 | 0.01 -0.01 | 0.10 |
| VA10 - 2 | 810.00 | 0.00 0.05 | -1311.39 -732.03 | 605.90 | -40.91 27.36 | 27.36 | 1.76 1.47 | -0.02 0.02 | -3.76 |
| VA11 - 1 | 772.50 | 0.00 0.02 | -214.26 -585.15 | 0.00 | 3.39 2.86 | 3.39 | 0.55 0.94 | 0.00 0.00 | 1.43 |
| VA11 - 2 | 772.50 | 0.00 0.04 | -1108.53 711.65 | 955.52 | -4.61 1.88 | 1.88 | 1.79 0.61 | 0.00 0.00 | -0.92 |
| VA11 - 3 | 772.50 | 0.00 0.04 | 708.92 -1088.66 | 708.92 | 1.88 6.80 | 6.80 | -1.38 2.16 | 0.00 0.00 | -0.92 |
| VA12 - 1 | 772.50 | -0.02 0.00 | 0.00 1751.88 | 2025.74 | 0.00 2.06 | 2.06 | 1.77 0.65 | 0.00 0.00 | 0.05 |
| VA12 - 2 | 772.50 | -0.02 0.00 | 1754.60 0.00 | 1754.60 | 2.06 0.00 | 2.06 | -1.42 2.17 | 0.00 0.00 | 0.05 |
| VA13 | 735.00 | 0.00 0.00 | 0.00 0.00 | 338.60 | 0.00 0.00 | 0.00 | 0.71 0.71 | 0.00 0.00 | 0.05 |
| VA14 - 1 | 772.50 | 0.00 0.05 | 0.00 2242.80 | 2242.80 | 0.00 -1.46 | 0.00 | 2.54 -1.73 | 0.00 0.00 | 0.81 |


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|----------|--------|---------------|----------------------|---------|------------------|-------|---------------|---------------|-------|
| VA14 - 2 | 772.50 | 0.00 0.05 | 2243.58 0.00 | 2356.83 | -1.46 0.00 | 0.00 | 0.42 1.91 | 0.00 0.00 | 0.81 |
| VA15 | 735.00 | -0.01 0.00 | 0.00 0.00 | 338.60 | 0.00 0.00 | 0.00 | 0.71 0.71 | 0.00 0.00 | 0.33 |
| VA16 | 735.00 | 0.00 0.01 | 0.00 0.00 | 338.60 | 0.00 0.00 | 0.00 | 0.71 0.71 | 0.00 0.00 | -0.68 |
| VA17 - 1 | 772.50 | 0.00 0.06 | 0.00 3941.78 | 3941.78 | 0.00 2.93 | 2.93 | 4.16 -3.35 | 0.00 0.00 | -4.85 |
| VA17 - 2 | 772.50 | 0.00 0.06 | 3941.00 0.00 | 3941.00 | -2.58 0.00 | 0.00 | -0.29 2.48 | 0.00 0.00 | 1.52 |
| VA18 | 772.50 | 0.00 0.05 | -281.55 161.62 | 334.18 | -10.62 14.26 | 14.26 | 0.98 0.52 | -0.01 0.01 | 1.00 |
| VA19 | 772.50 | 0.00 0.00 | 0.00 0.00 | 102.16 | 0.00 0.00 | 0.00 | 0.41 0.41 | 0.00 0.00 | -5.19 |
| VA20 | 772.50 | -0.01 0.00 | -9.16 0.00 | 351.80 | -0.51 0.00 | 0.00 | 0.75 0.74 | 0.00 0.00 | 0.41 |
| VA21 - 1 | 772.50 | 0.00 0.15 | -1602.29 2366.61 | 2366.61 | 23.75 -30.47 | 23.75 | 2.48 0.00 | 0.02 -0.02 | 4.60 |
| VA21 - 2 | 772.50 | 0.00 0.16 | 2368.14 -1592.61 | 2368.14 | -28.23 -4.66 | 0.00 | -1.06 2.69 | -0.01 0.01 | -1.65 |
| VA22 | 772.50 | 0.00 0.08 | -476.67 -739.24 | 677.09 | -8.45 11.23 | 11.23 | 1.34 1.48 | -0.01 0.01 | 0.36 |
| VA23 | 772.50 | 0.00 0.03 | 0.00 0.00 | 1006.68 | 0.00 0.00 | 0.00 | 1.25 1.25 | 0.00 0.00 | 4.75 |
| VA24 - 1 | 810.00 | 0.00 0.12 | -1759.69 -2574.67 | 1260.61 | -47.61 28.31 | 28.31 | 2.21 2.49 | -0.01 0.01 | -3.65 |
| VA24 - 2 | 810.00 | 0.00 0.17 | -2614.21 -2854.60 | 1368.46 | 3.17 14.90 | 14.90 | 2.54 2.62 | 0.00 0.00 | -0.30 |
| VA25 - 1 | 810.00 | 0.00 0.20 | -3058.77 1681.03 | 1681.03 | 60.50 -19.61 | 60.50 | 3.25 -1.70 | 0.04 -0.04 | 2.80 |
| VA25 - 2 | 810.00 | 0.00 0.19 | 1684.15 -2285.57 | 1695.88 | -19.61 -12.54 | 0.00 | 0.14 2.54 | 0.00 0.00 | 2.80 |
| VA25 - 3 | 810.00 | 0.00 0.07 | -1628.37 -617.27 | 533.54 | -16.09 2.66 | 2.66 | 1.87 1.37 | 0.00 0.00 | -1.29 |

| CASO: G1+G2+D3 | | | | | | | | | |
|----------------|------------------|------------------|-----------------------|------------------|-----------------------|------------------|--------------------|--------------------|----------------|
| Elemento | Carga (kgf/m) | Rd Nd (tf) | Mxi Mxf (kgf.m) | MxMáx (kgf.m) | Myi Myf (kgf.m) | MyMáx (kgf.m) | Vxi Vxf (tf) | Vyi Vyf (tf) | Mtd (kgf/m) |
| VA1 - 1 | 772.50 | 0.00 0.29 | -1287.02 1843.79 | 1843.79 | 2.04 -0.27 | 2.04 | 2.36 -0.86 | 0.00 0.00 | 1.78 |
| VA1 - 2 | 772.50 | 0.00 0.30 | 1843.85 34.60 | 1843.85 | -0.27 -27.23 | 0.00 | -1.32 2.13 | 0.03 -0.03 | 1.17 |
| VA1 - 3 | 772.50 | 0.00 0.29 | 35.45 -2441.30 | 35.45 | -27.23 4.80 | 4.80 | -4.04 4.49 | -0.06 0.06 | 1.17 |
| VA1 - 4 | 772.50 | 0.00 0.05 | -1975.73 248.72 | 718.92 | 10.18 -7.84 | 10.18 | 2.04 0.85 | 0.00 0.00 | 0.17 |
| VA1 - 5 | 772.50 | 0.00 0.04 | 250.17 -1568.14 | 250.17 | -7.84 11.97 | 11.97 | -3.34 3.74 | -0.04 0.04 | -2.69 |
| VA1 - 6 | 772.50 | -0.02 0.00 | -1155.63 -333.54 | 321.94 | 10.68 -3.19 | 10.68 | 1.51 1.01 | 0.00 0.00 | -1.03 |
| VA2 | 772.50 | 0.00 0.00 | 0.00 0.00 | 376.65 | 0.00 0.00 | 0.00 | 0.77 0.77 | 0.00 0.00 | -2.80 |
| VA3 - 1 | 772.50 | 0.00 0.00 | 0.00 -1558.12 | 1110.30 | 0.00 2.98 | 2.98 | 1.31 2.03 | 0.00 0.00 | 0.76 |
| VA3 - 2 | 772.50 | 0.00 0.00 | -1564.61 5.35 | 5.35 | 1.55 0.00 | 1.55 | 1.61 -0.41 | 0.00 0.00 | 0.00 |
| VA4 - 1 | 810.00 | 0.00 0.13 | -1383.55 -1807.75 | 971.07 | 33.13 -14.79 | 33.13 | 1.95 2.12 | 0.01 -0.01 | 0.83 |
| VA4 - 2 | 810.00 | 0.00 0.15 | -1876.09 1585.00 | 1585.00 | 8.09 -8.62 | 8.09 | 2.56 -0.96 | 0.01 -0.01 | 0.53 |
| VA4 - 3 | 810.00 | 0.00 | 1584.94 | 1584.94 | -8.62 | 0.00 | -0.81 | -0.02 | 0.53 |


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|----------|--------|---------------|----------------------|---------|------------------|-------|---------------|---------------|-------|
| | | 0.15 | 1292.04 | | -3.53 | | 1.06 | 0.02 | |
| VA4 - 4 | 810.00 | 0.00 0.15 | 1292.06 -234.22 | 1292.06 | -3.53 13.32 | 13.32 | -1.77 2.37 | -0.02 0.02 | 0.53 |
| VA4 - 5 | 810.00 | 0.00 0.15 | -235.06 -3099.90 | 0.00 | 13.32 -20.83 | 13.32 | -4.91 5.36 | 0.06 -0.06 | -3.01 |
| VA4 - 6 | 810.00 | 0.00 0.07 | -3138.01 -133.53 | 0.00 | -19.36 -8.88 | 0.00 | 3.40 -2.58 | -0.01 0.01 | 0.05 |
| VA4 - 7 | 810.00 | 0.00 0.07 | -133.24 1410.91 | 1410.91 | -8.88 -2.40 | 0.00 | 1.87 -1.00 | -0.01 0.01 | -1.07 |
| VA4 - 8 | 810.00 | 0.00 0.07 | 1410.22 747.45 | 1460.46 | -2.40 15.42 | 0.00 | 0.29 1.08 | -0.01 0.01 | -1.07 |
| VA4 - 9 | 810.00 | 0.00 0.07 | 752.47 -2468.73 | 752.47 | 15.42 -2.61 | 15.42 | -5.24 5.71 | 0.03 -0.03 | -1.07 |
| VA4 - 10 | 810.00 | -0.01 0.00 | -2182.12 -182.48 | 0.00 | -4.93 2.93 | 2.93 | 2.45 -1.67 | -0.01 0.01 | 1.50 |
| VA4 - 11 | 810.00 | -0.01 0.00 | -177.13 395.09 | 395.09 | 2.93 6.85 | 6.85 | 1.26 -0.82 | -0.01 0.01 | 1.50 |
| VA4 - 12 | 810.00 | -0.01 0.00 | 395.52 -698.59 | 395.52 | 6.85 -7.36 | 6.85 | 0.08 1.33 | 0.01 -0.01 | 1.50 |
| VA4 - 13 | 810.00 | 0.00 0.04 | -717.02 -337.33 | 361.22 | -3.31 -13.74 | 0.00 | 1.32 1.06 | 0.00 0.00 | -1.67 |
| VA5 - 1 | 772.50 | 0.00 0.06 | -406.75 556.06 | 690.10 | 11.22 -0.71 | 11.22 | 1.30 0.46 | 0.01 -0.01 | 0.37 |
| VA5 - 2 | 772.50 | 0.00 0.06 | 556.05 -1600.26 | 556.05 | -0.71 -16.08 | 0.00 | -1.17 2.17 | 0.01 -0.01 | 0.37 |
| VA5 - 3 | 772.50 | 0.00 0.09 | -2012.07 312.76 | 312.76 | -9.57 -6.38 | 0.00 | 2.70 -1.92 | 0.00 0.00 | -0.21 |
| VA5 - 4 | 772.50 | 0.00 0.09 | 312.47 1171.54 | 1171.54 | -6.38 1.20 | 0.00 | 1.21 -0.38 | -0.01 0.01 | -0.21 |
| VA5 - 5 | 772.50 | 0.00 0.09 | 1172.24 -1570.25 | 1172.24 | 1.20 6.87 | 6.87 | -0.33 2.08 | 0.00 0.00 | -0.21 |
| VA5 - 6 | 772.50 | 0.00 0.06 | -1481.84 678.79 | 678.79 | 7.18 -10.17 | 7.18 | 2.01 -0.83 | 0.01 -0.01 | -0.70 |
| VA5 - 7 | 772.50 | 0.00 0.06 | 678.35 -154.55 | 678.35 | -14.72 -8.60 | 0.00 | 0.08 1.14 | 0.00 0.00 | -9.13 |
| VA6 - 1 | 772.50 | 0.00 0.02 | 6.88 630.49 | 660.93 | -12.54 -12.23 | 0.00 | 1.01 0.23 | 0.00 0.00 | 1.65 |
| VA6 - 2 | 772.50 | 0.00 0.02 | 635.24 -2537.82 | 635.24 | -12.23 27.24 | 27.24 | -1.48 2.66 | -0.03 0.03 | 1.65 |
| VA7 - 1 | 772.50 | -0.06 0.00 | -792.68 1569.23 | 1569.23 | -36.12 2.04 | 2.04 | 2.11 -0.90 | -0.02 0.02 | -3.27 |
| VA7 - 2 | 772.50 | -0.06 0.00 | 1564.48 0.00 | 1564.48 | 2.04 0.00 | 2.04 | -0.35 1.59 | 0.00 0.00 | -3.27 |
| VA8 - 1 | 866.25 | 0.00 0.50 | -3678.21 -6642.01 | 2926.50 | -3.99 -2.69 | 0.00 | 3.38 4.07 | 0.00 0.00 | -0.75 |
| VA8 - 2 | 866.25 | 0.00 0.74 | -8814.12 -5715.86 | 4863.47 | 6.62 -1.86 | 6.62 | 4.87 4.28 | 0.00 0.00 | 0.62 |
| VA9 - 1 | 810.00 | 0.00 0.14 | -1602.81 -2709.52 | 1282.31 | 24.44 -21.21 | 24.44 | 2.16 2.54 | 0.01 -0.01 | 2.96 |
| VA9 - 2 | 810.00 | 0.00 0.19 | -2625.55 -2719.12 | 1428.16 | -18.24 14.14 | 14.14 | 2.56 2.59 | -0.01 0.01 | -0.23 |
| VA10 - 1 | 810.00 | 0.00 0.11 | -1998.95 -1708.33 | 908.43 | 17.32 -30.53 | 17.32 | 2.17 2.06 | 0.01 -0.01 | 0.41 |
| VA10 - 2 | 810.00 | 0.00 0.05 | -1182.71 -885.71 | 585.97 | -47.96 42.96 | 42.96 | 1.69 1.54 | -0.02 0.02 | -3.46 |
| VA11 - 1 | 772.50 | 0.00 0.01 | -4.97 -698.14 | 90.10 | -6.13 12.93 | 12.93 | 0.39 1.10 | -0.01 0.01 | 1.64 |
| VA11 - 2 | 772.50 | 0.00 0.02 | -957.19 535.71 | 866.85 | -9.26 4.30 | 4.30 | 1.68 0.72 | 0.00 0.00 | -1.16 |
| VA11 - 3 | 772.50 | 0.00 0.02 | 532.91 -1371.43 | 532.91 | 4.30 12.84 | 12.84 | -1.49 2.27 | -0.01 0.01 | -1.16 |
| VA12 - 1 | 772.50 | -0.02 0.00 | 0.00 1751.82 | 2025.70 | 0.00 3.03 | 3.03 | 1.77 0.65 | 0.00 0.00 | 0.06 |

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|----------|--------|---------------|----------------------|---------|------------------|-------|---------------|---------------|-------|
| VA12 - 2 | 772.50 | -0.02 0.00 | 1754.62 0.00 | 1754.62 | 3.03 0.00 | 3.03 | -1.42 2.17 | 0.00 0.00 | 0.06 |
| VA13 | 735.00 | 0.00 0.01 | 0.00 0.00 | 338.60 | 0.00 0.00 | 0.00 | 0.71 0.71 | 0.00 0.00 | 0.02 |
| VA14 - 1 | 772.50 | 0.00 0.08 | 0.00 2242.86 | 2242.86 | 0.00 -0.09 | 0.00 | 2.54 -1.73 | 0.00 0.00 | 0.85 |
| VA14 - 2 | 772.50 | 0.00 0.08 | 2243.62 0.00 | 2356.86 | -0.09 0.00 | 0.00 | 0.42 1.91 | 0.00 0.00 | 0.85 |
| VA15 | 735.00 | 0.00 0.00 | 0.00 0.00 | 338.60 | 0.00 0.00 | 0.00 | 0.71 0.71 | 0.00 0.00 | 0.29 |
| VA16 | 735.00 | 0.00 0.00 | 0.00 0.00 | 338.60 | 0.00 0.00 | 0.00 | 0.71 0.71 | 0.00 0.00 | -0.69 |
| VA17 - 1 | 772.50 | 0.00 0.04 | 0.00 3941.72 | 3941.72 | 0.00 -0.30 | 0.00 | 4.16 -3.35 | 0.00 0.00 | -5.02 |
| VA17 - 2 | 772.50 | 0.00 0.04 | 3940.97 0.00 | 3940.97 | 1.14 0.00 | 1.14 | -0.29 2.48 | 0.00 0.00 | 1.46 |
| VA18 | 772.50 | 0.00 0.04 | -105.18 -14.80 | 300.90 | 0.65 1.16 | 1.16 | 0.79 0.70 | 0.00 0.00 | 1.05 |
| VA19 | 772.50 | 0.00 0.00 | 0.00 0.00 | 102.16 | 0.00 0.00 | 0.00 | 0.41 0.41 | 0.00 0.00 | -5.35 |
| VA20 | 772.50 | -0.02 0.00 | -8.44 0.00 | 352.12 | 4.55 0.00 | 4.55 | 0.75 0.74 | 0.00 0.00 | 0.44 |
| VA21 - 1 | 772.50 | 0.00 0.15 | -1484.55 2301.01 | 2301.01 | 28.87 -33.62 | 28.87 | 2.42 0.06 | 0.02 -0.02 | 4.93 |
| VA21 - 2 | 772.50 | 0.00 0.15 | 2302.66 -1672.98 | 2302.66 | -21.08 -14.84 | 0.00 | -1.07 2.70 | 0.00 0.00 | -1.95 |
| VA22 | 772.50 | 0.00 0.08 | -295.46 -956.38 | 679.98 | -5.45 7.48 | 7.48 | 1.23 1.59 | 0.00 0.00 | 0.22 |
| VA23 | 772.50 | 0.00 0.03 | 0.00 0.00 | 1006.68 | 0.00 0.00 | 0.00 | 1.25 1.25 | 0.00 0.00 | 4.75 |
| VA24 - 1 | 810.00 | 0.00 0.13 | -1608.89 -2705.09 | 1280.94 | -43.04 26.65 | 26.65 | 2.16 2.54 | -0.01 0.01 | -4.27 |
| VA24 - 2 | 810.00 | 0.00 0.18 | -2501.87 -2967.08 | 1372.01 | 8.13 18.02 | 18.02 | 2.51 2.65 | 0.00 0.00 | -0.24 |
| VA25 - 1 | 810.00 | 0.00 0.20 | -2952.89 1739.79 | 1739.79 | 73.09 -29.02 | 73.09 | 3.23 -1.68 | 0.05 -0.05 | 3.25 |
| VA25 - 2 | 810.00 | 0.00 0.20 | 1743.05 -2417.76 | 1743.05 | -29.02 -16.18 | 0.00 | 0.08 2.60 | 0.00 0.00 | 3.25 |
| VA25 - 3 | 810.00 | 0.00 0.07 | -1470.97 -808.04 | 490.30 | -2.57 -13.65 | 0.00 | 1.78 1.45 | 0.00 0.00 | -1.14 |

| CASO: G1+G2+D4 | | | | | | | | | |
|----------------|------------------|------------------|-----------------------|------------------|-----------------------|------------------|--------------------|--------------------|----------------|
| Elemento | Carga (kgf/m) | Rd Nd (tf) | Mxi Mxf (kgf.m) | MxMáx (kgf.m) | Myi Myf (kgf.m) | MyMáx (kgf.m) | Vxi Vxf (tf) | Vyi Vyf (tf) | Mtd (kgf/m) |
| VA1 - 1 | 772.50 | 0.00 0.30 | -1327.06 1840.46 | 1840.46 | -18.31 2.16 | 2.16 | 2.38 -0.88 | -0.01 0.01 | 0.89 |
| VA1 - 2 | 772.50 | 0.00 0.30 | 1840.57 51.21 | 1840.57 | 2.16 5.81 | 0.00 | -1.30 2.11 | 0.00 0.00 | 0.28 |
| VA1 - 3 | 772.50 | 0.00 0.30 | 52.12 -2413.63 | 52.12 | 5.81 16.33 | 16.33 | -4.02 4.47 | -0.02 0.02 | 0.29 |
| VA1 - 4 | 772.50 | 0.00 0.05 | -2000.82 264.97 | 723.68 | 19.22 -17.45 | 19.22 | 2.05 0.84 | 0.01 -0.01 | 0.61 |
| VA1 - 5 | 772.50 | 0.00 0.05 | 266.48 -1546.16 | 266.48 | -17.45 18.95 | 18.95 | -3.33 3.72 | -0.07 0.07 | -2.43 |
| VA1 - 6 | 772.50 | -0.01 0.00 | -1196.14 -276.72 | 342.26 | 14.38 -6.76 | 14.38 | 1.54 0.98 | 0.01 -0.01 | -0.22 |
| VA2 | 772.50 | 0.00 0.00 | 0.00 0.00 | 376.65 | 0.00 0.00 | 0.00 | 0.77 0.77 | 0.00 0.00 | -2.55 |
| VA3 - 1 | 772.50 | 0.00 0.00 | 0.00 -1558.11 | 1110.30 | 0.00 -0.43 | 0.00 | 1.31 2.03 | 0.00 0.00 | 0.76 |
| VA3 - 2 | 772.50 | 0.00 | -1564.66 | 5.30 | 9.93 | 9.93 | 1.61 | 0.01 | 0.00 |

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|----------|--------|---------------|----------------------|---------|-----------------|-------|---------------|---------------|-------|
| | | 0.00 | 5.30 | | 0.00 | | -0.41 | -0.01 | |
| VA4 - 1 | 810.00 | 0.00 0.15 | -1374.07 -1814.70 | 972.66 | 40.42 -10.91 | 40.42 | 1.95 2.12 | 0.01 -0.01 | 1.00 |
| VA4 - 2 | 810.00 | 0.00 0.18 | -1881.43 1588.02 | 1588.02 | -20.14 0.42 | 0.42 | 2.56 -0.96 | -0.01 0.01 | -1.88 |
| VA4 - 3 | 810.00 | 0.00 0.18 | 1587.91 1296.32 | 1587.91 | 0.42 5.94 | 0.00 | -0.80 1.06 | -0.02 0.02 | -1.88 |
| VA4 - 4 | 810.00 | 0.00 0.18 | 1296.33 -226.87 | 1296.33 | 5.94 17.45 | 17.45 | -1.77 2.37 | -0.02 0.02 | -1.88 |
| VA4 - 5 | 810.00 | 0.00 0.18 | -227.73 -3090.24 | 0.00 | 17.45 16.34 | 17.45 | -4.91 5.36 | 0.00 0.00 | -5.31 |
| VA4 - 6 | 810.00 | 0.00 0.10 | -3126.25 -126.74 | 0.00 | 1.02 10.62 | 10.62 | 3.39 -2.58 | -0.01 0.01 | 1.78 |
| VA4 - 7 | 810.00 | 0.00 0.10 | -126.44 1412.39 | 1412.39 | 10.62 0.06 | 10.62 | 1.87 -0.99 | 0.01 -0.01 | 0.72 |
| VA4 - 8 | 810.00 | 0.00 0.10 | 1411.72 740.62 | 1459.88 | 0.06 9.19 | 0.00 | 0.28 1.08 | -0.01 0.01 | 0.72 |
| VA4 - 9 | 810.00 | 0.00 0.10 | 745.65 -2478.45 | 745.65 | 9.19 -31.13 | 9.19 | -5.24 5.72 | 0.07 -0.07 | 0.72 |
| VA4 - 10 | 810.00 | 0.00 0.00 | -2202.40 -191.22 | 0.00 | -9.23 0.97 | 0.97 | 2.47 -1.68 | -0.01 0.01 | 1.36 |
| VA4 - 11 | 810.00 | 0.00 0.00 | -185.93 392.84 | 392.84 | 0.97 3.24 | 3.24 | 1.28 -0.83 | 0.00 0.00 | 1.36 |
| VA4 - 12 | 810.00 | 0.00 0.00 | 393.20 -679.24 | 393.26 | 3.24 -6.40 | 3.24 | 0.09 1.32 | 0.01 -0.01 | 1.36 |
| VA4 - 13 | 810.00 | 0.00 0.05 | -708.16 -336.96 | 365.23 | -0.16 -0.69 | 0.00 | 1.32 1.07 | 0.00 0.00 | -1.62 |
| VA5 - 1 | 772.50 | 0.00 0.04 | -402.24 550.34 | 687.16 | -8.95 2.63 | 2.63 | 1.30 0.46 | -0.01 0.01 | -1.31 |
| VA5 - 2 | 772.50 | 0.00 0.04 | 550.34 -1611.78 | 550.34 | 2.63 11.84 | 11.84 | -1.17 2.17 | -0.01 0.01 | -1.31 |
| VA5 - 3 | 772.50 | 0.00 0.07 | -2009.96 314.39 | 314.39 | 15.65 2.51 | 15.65 | 2.70 -1.92 | 0.01 -0.01 | 1.25 |
| VA5 - 4 | 772.50 | 0.00 0.07 | 314.08 1172.65 | 1172.65 | 2.51 8.41 | 0.00 | 1.21 -0.38 | -0.01 0.01 | 1.25 |
| VA5 - 5 | 772.50 | 0.00 0.07 | 1173.33 -1570.23 | 1173.33 | 8.41 -13.78 | 8.41 | -0.33 2.08 | 0.01 -0.01 | 1.25 |
| VA5 - 6 | 772.50 | 0.00 0.07 | -1464.65 680.79 | 680.79 | 10.99 -12.49 | 10.99 | 2.00 -0.82 | 0.02 -0.02 | -0.21 |
| VA5 - 7 | 772.50 | 0.00 0.07 | 680.42 -169.16 | 680.42 | -5.86 -14.98 | 0.00 | 0.07 1.15 | 0.01 -0.01 | -9.73 |
| VA6 - 1 | 772.50 | 0.00 0.02 | 7.05 602.77 | 639.66 | -2.73 -10.01 | 0.00 | 0.99 0.25 | 0.00 0.00 | 1.30 |
| VA6 - 2 | 772.50 | 0.00 0.02 | 607.50 -2592.27 | 607.50 | -10.01 20.36 | 20.36 | -1.49 2.68 | -0.02 0.02 | 1.30 |
| VA7 - 1 | 772.50 | -0.06 0.00 | -758.44 1586.54 | 1586.54 | -31.15 3.59 | 3.59 | 2.10 -0.89 | -0.02 0.02 | -2.83 |
| VA7 - 2 | 772.50 | -0.06 0.00 | 1581.81 0.00 | 1581.81 | 3.59 0.00 | 3.59 | -0.36 1.60 | 0.00 0.00 | -2.83 |
| VA8 - 1 | 866.25 | 0.00 0.49 | -3691.35 -6625.09 | 2927.34 | -5.34 3.98 | 3.98 | 3.39 4.07 | 0.00 0.00 | -1.91 |
| VA8 - 2 | 866.25 | 0.00 0.73 | -8805.65 -5718.60 | 4865.90 | 15.70 -4.59 | 15.70 | 4.87 4.28 | 0.00 0.00 | 1.53 |
| VA9 - 1 | 810.00 | 0.00 0.11 | -1847.19 -2496.82 | 1252.93 | 43.54 -34.55 | 43.54 | 2.24 2.46 | 0.01 -0.01 | 2.94 |
| VA9 - 2 | 810.00 | 0.00 0.17 | -2793.66 -2548.14 | 1432.04 | -10.74 4.99 | 4.99 | 2.62 2.54 | 0.00 0.00 | -0.30 |
| VA10 - 1 | 810.00 | 0.00 0.10 | -2194.07 -1532.12 | 908.09 | 26.44 -32.81 | 26.44 | 2.24 1.99 | 0.01 -0.01 | 0.43 |
| VA10 - 2 | 810.00 | 0.00 0.05 | -1437.33 -580.88 | 635.05 | -31.93 7.46 | 7.46 | 1.83 1.40 | -0.01 0.01 | -3.35 |
| VA11 - 1 | 772.50 | 0.00 0.04 | -404.82 -477.80 | 0.00 | 10.85 -4.81 | 10.85 | 0.71 0.78 | 0.01 -0.01 | 1.62 |

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|----------|--------|---------------|----------------------|---------|-----------------|-------|---------------|---------------|-------|
| VA11 - 2 | 772.50 | 0.00 0.06 | -1240.22 868.64 | 1043.53 | 1.84 -1.10 | 1.84 | 1.88 0.52 | 0.00 0.00 | -1.07 |
| VA11 - 3 | 772.50 | 0.00 0.06 | 866.09 -837.31 | 866.09 | -1.10 -0.48 | 0.00 | -1.29 2.07 | 0.00 0.00 | -1.07 |
| VA12 - 1 | 772.50 | -0.01 0.00 | 0.00 1752.01 | 2025.84 | 0.00 1.16 | 1.16 | 1.77 0.65 | 0.00 0.00 | 0.11 |
| VA12 - 2 | 772.50 | -0.01 0.00 | 1754.56 0.00 | 1754.56 | 1.16 0.00 | 1.16 | -1.42 2.17 | 0.00 0.00 | 0.11 |
| VA13 | 735.00 | 0.00 0.00 | 0.00 0.00 | 338.60 | 0.00 0.00 | 0.00 | 0.71 0.71 | 0.00 0.00 | 0.00 |
| VA14 - 1 | 772.50 | 0.00 0.01 | 0.00 2242.86 | 2242.86 | 0.00 -2.56 | 0.00 | 2.54 -1.73 | 0.00 0.00 | 0.91 |
| VA14 - 2 | 772.50 | 0.00 0.01 | 2243.63 0.00 | 2356.86 | -2.56 0.00 | 0.00 | 0.42 1.91 | 0.00 0.00 | 0.91 |
| VA15 | 735.00 | -0.02 0.00 | 0.00 0.00 | 338.60 | 0.00 0.00 | 0.00 | 0.71 0.71 | 0.00 0.00 | 0.31 |
| VA16 | 735.00 | 0.00 0.02 | 0.00 0.00 | 338.60 | 0.00 0.00 | 0.00 | 0.71 0.71 | 0.00 0.00 | -0.67 |
| VA17 - 1 | 772.50 | 0.00 0.07 | 0.00 3941.72 | 3941.72 | 0.00 5.31 | 5.31 | 4.16 -3.35 | -0.01 0.01 | -5.03 |
| VA17 - 2 | 772.50 | 0.00 0.08 | 3940.96 0.00 | 3940.96 | -5.05 0.00 | 0.00 | -0.29 2.48 | 0.00 0.00 | 1.53 |
| VA18 | 772.50 | 0.00 0.06 | -465.28 346.54 | 415.24 | -21.71 27.12 | 27.12 | 1.17 0.33 | -0.03 0.03 | 1.06 |
| VA19 | 772.50 | 0.00 0.01 | 0.00 0.00 | 102.16 | 0.00 0.00 | 0.00 | 0.41 0.41 | 0.00 0.00 | -5.30 |
| VA20 | 772.50 | -0.01 0.00 | -9.52 0.00 | 351.64 | -6.63 0.00 | 0.00 | 0.75 0.74 | 0.00 0.00 | 0.37 |
| VA21 - 1 | 772.50 | 0.00 0.15 | -1681.90 2327.70 | 2327.70 | 20.77 -27.31 | 20.77 | 2.49 -0.01 | 0.01 -0.01 | 5.03 |
| VA21 - 2 | 772.50 | 0.00 0.15 | 2329.00 -1462.48 | 2329.00 | -24.58 -3.90 | 0.00 | -0.98 2.61 | -0.01 0.01 | -2.02 |
| VA22 | 772.50 | 0.00 0.08 | -680.50 -500.03 | 694.78 | -10.88 13.94 | 13.94 | 1.46 1.36 | -0.01 0.01 | 0.30 |
| VA23 | 772.50 | 0.00 0.02 | 0.00 0.00 | 1006.68 | 0.00 0.00 | 0.00 | 1.25 1.25 | 0.00 0.00 | 4.73 |
| VA24 - 1 | 810.00 | 0.00 0.10 | -1915.98 -2437.28 | 1246.10 | -59.09 36.68 | 36.68 | 2.26 2.44 | -0.02 0.02 | -4.30 |
| VA24 - 2 | 810.00 | 0.00 0.16 | -2714.37 -2752.64 | 1366.09 | 2.92 23.75 | 23.75 | 2.57 2.58 | 0.00 0.00 | -0.32 |
| VA25 - 1 | 810.00 | 0.00 0.19 | -3205.81 1674.58 | 1674.58 | 67.65 -31.29 | 67.65 | 3.33 -1.77 | 0.05 -0.05 | 3.29 |
| VA25 - 2 | 810.00 | 0.00 0.19 | 1677.41 -2194.52 | 1695.26 | -31.29 -6.08 | 0.00 | 0.17 2.51 | -0.01 0.01 | 3.29 |
| VA25 - 3 | 810.00 | 0.00 0.07 | -1797.24 -425.25 | 574.15 | -23.20 16.80 | 16.80 | 1.96 1.28 | -0.01 0.01 | -1.03 |