S-M530 Quatro

- 530 x 530 mm tower truss made from bespoke, high-strength steels
- Greatly increased load capacity compared to aluminium truss with similar dimensions for an optimised weight to strength ratio
- Orientation-free connectors for ease of use
- Pinned connectors for increased strength

- End frames with 22mm holes for lateral connections on all sides
- Double fork couplers, zinc coated pins and matt black, impact-resistant industrial paint finish
- Ladder tubes for ease of climbing when used as tower





Fork coupler

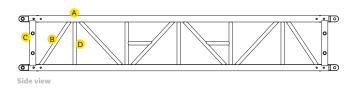
S-M530 Quatro Tower truss section

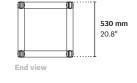
| | Main Chords A: | Diagonals B: | End braces C: | Intermediate cross braces D: | Pin type: |
|--------------|------------------------------|-----------------------|---------------------------------------|-------------------------------|-----------|
| S-QTPT mm in | 60.3 x 4 (2.4 x 0.16) | 33.7 x 2.6 (13 x 0.1) | 60 x 60 x 4 (2.4 x 2.4 x 0.16) | 33.7 x 2.6 (1.3 x 0.1) | PQ |

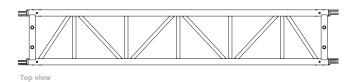
STANDARD LENGTHS AND WEIGHTS AVAILABLE

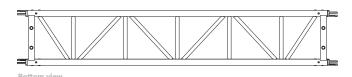
| (| m (ft | 1.00 (3.28) | 2.00 (6.56) | 2.50 (8.20) | 3.00 (9.84) | 4.00 (13.12) | 5.00 (16.41) | 6.00 (19.68) |
|--------|----------|-----------------------|------------------------|------------------------|------------------------|------------------------|------------------------|------------------------|
| S-QTPT | kg (lbs) | 80.70 (177.91) | 118.60 (261.47) | 181.60 (400.36) | 156.20 (344.36) | 204.60 (451.07) | 231.30 (509.93) | 258.00 (568.79) |

Connection material and packaging are not included in above weights









2 S-M530 Quatro



S-QTPT LOADING CHART

| Span | m (ft) | 5.00 | (16.40) | 6.00 | (19.70) | 7.00 | (23.00) | 8.00 | (26.20) | 9.00 | (29.50) | 10.00 | (32.80) | 11.00 | (36.10) |
|------------|---------------|-------|---------|-------|---------|-------|---------|------|---------|------|---------|-------|---------|-------|---------|
| CPL | kg (lbs) | 11655 | (25695) | 11606 | (25587) | 10210 | (22509) | 8887 | (19592) | 7853 | (17313) | 7021 | (15479) | 6335 | (13966) |
| Deflection | mm (in) | 9 | (0.35) | 16 | (0.63) | 23 | (0.91) | 30 | (1.18) | 38 | (1.50) | 47 | (1.85) | 57 | (2.24) |
| TPL | kg (lbs) | 5825 | (12842) | 5803 | (12793) | 5778 | (12738) | 5753 | (12683) | 5729 | (12630) | 5265 | (11607) | 4751 | (10474) |
| Deflection | mm (in) | 8 | (0.31) | 14 | (0.55) | 22 | (0.87) | 33 | (1.30) | 46 | (1.81) | 59 | (2.32) | 71 | (2.80) |
| QPL | kg (lbs) | 3885 | (8565) | 3869 | (8530) | 3852 | (8492) | 3836 | (8457) | 3819 | (8419) | 3510 | (7738) | 3168 | (6984) |
| Deflection | mm (in) | 7 | (0.28) | 13 | (0.51) | 20 | (0.79) | 30 | (1.18) | 43 | (1.69) | 55 | (2.17) | 67 | (2.64) |
| FPL | kg (lbs) | 2914 | (6424) | 2901 | (6396) | 2889 | (6369) | 2877 | (6343) | 2864 | (6314) | 2852 | (6288) | 2640 | (5820) |
| Deflection | mm (in) | 7 | (0.28) | 12 | (0.47) | 19 | (0.75) | 29 | (1.14) | 41 | (1.61) | 57 | (2.24) | 70 | (2.76) |
| UDL | kg/m (lbs/ft) | 2331 | (1566) | 1934 | (1300) | 1651 | (1109) | 1438 | (966) | 1273 | (855) | 1141 | (767) | 1033 | (694) |
| Deflection | mm (in) | 6 | (0.24) | 10 | (0.39) | 16 | (0.63) | 24 | (0.94) | 34 | (1.34) | 47 | (1.85) | 63 | (2.48) |

| Span | m (ft) | 12.00 | (39.40) | 13.00 | (42.70) | 14.00 | (45.90) | 15.00 | (49.20) | 16.00 | (52.50) | 17.00 | (55.80) | 18.00 | (59.10) |
|------------|---------------|-------|---------|-------|---------|-------|---------|-------|---------|-------|---------|-------|---------|-------|---------|
| CPL | kg (lbs) | 5760 | (12699) | 5269 | (11616) | 4845 | (10681) | 4474 | (9863) | 4147 | (9143) | 3855 | (8499) | 3592 | (7919) |
| Deflection | mm (in) | 68 | (2.68) | 79 | (3.11) | 93 | (3.66) | 107 | (4.21) | 122 | (4.80) | 138 | (5.43) | 155 | (6.10) |
| TPL | kg (lbs) | 4320 | (9524) | 3952 | (8713) | 3634 | (8012) | 3356 | (7399) | 3110 | (6856) | 2891 | (6374) | 2694 | (5939) |
| Deflection | mm (in) | 85 | (3.35) | 100 | (3.94) | 116 | (4.57) | 133 | (5.24) | 152 | (5.98) | 171 | (6.73) | 192 | (7.56) |
| QPL | kg (lbs) | 2880 | (6349) | 2635 | (5809) | 2422 | (5340) | 2237 | (4932) | 2073 | (4570) | 1927 | (4248) | 1796 | (3960) |
| Deflection | mm (in) | 79 | (3.11) | 93 | (3.66) | 108 | (4.25) | 125 | (4.92) | 142 | (5.59) | 161 | (6.34) | 180 | (7.09) |
| FPL | kg (lbs) | 2400 | (5291) | 2195 | (4839) | 2019 | (4451) | 1864 | (4109) | 1728 | (3810) | 1606 | (3541) | 1497 | (3300) |
| Deflection | mm (in) | 84 | (3.31) | 99 | (3.90) | 114 | (4.49) | 131 | (5.16) | 150 | (5.91) | 169 | (6.65) | 190 | (7.48) |
| UDL | kg/m (lbs/ft) | 942 | (633) | 811 | (545) | 692 | (465) | 597 | (401) | 518 | (348) | 453 | (304) | 399 | (268) |
| Deflection | mm (in) | 82 | (3.23) | 98 | (3.86) | 114 | (4.49) | 130 | (5.12) | 149 | (5.87) | 168 | (6.61) | 189 | (7.44) |

| Span | m (ft) | 19.00 | (62.30) | 20.00 | (65.60) | 21.00 | (68.90) | 22.00 | (72.20) | 23.00 | (75.50) | 24.00 | (78.70) | 25.00 | (82.00) |
|------------|---------------|-------|---------|-------|---------|-------|---------|-------|---------|-------|---------|-------|---------|-------|---------|
| CPL | kg (lbs) | 3355 | (7397) | 3139 | (6920) | 2941 | (6484) | 2759 | (6083) | 2591 | (5712) | 2434 | (5366) | 2288 | (5044) |
| Deflection | mm (in) | 174 | (6.85) | 194 | (7.64) | 215 | (8.46) | 237 | (9.33) | 260 | (10.24) | 285 | (11.22) | 311 | (12.24) |
| TPL | kg (lbs) | 2516 | (5547) | 2354 | (5190) | 2206 | (4863) | 2069 | (4561) | 1943 | (4284) | 1826 | (4026) | 1716 | (3783) |
| Deflection | mm (in) | 214 | (8.43) | 238 | (9.37) | 263 | (10.35) | 289 | (11.38) | 316 | (12.44) | 344 | (13.54) | 374 | (14.72) |
| QPL | kg (lbs) | 1678 | (3699) | 1570 | (3461) | 1471 | (3243) | 1380 | (3042) | 1295 | (2855) | 1217 | (2683) | 1144 | (2522) |
| Deflection | mm (in) | 201 | (7.91) | 224 | (8.82) | 247 | (9.72) | 272 | (10.71) | 298 | (11.73) | 325 | (12.80) | 354 | (13.94) |
| FPL | kg (lbs) | 1398 | (3082) | 1308 | (2884) | 1226 | (2703) | 1150 | (2535) | 1079 | (2379) | 1014 | (2235) | 954 | (2103) |
| Deflection | mm (in) | 212 | (8.35) | 235 | (9.25) | 260 | (10.24) | 285 | (11.22) | 312 | (12.28) | 341 | (13.43) | 370 | (14.57) |
| UDL | kg/m (lbs/ft) | 353 | (237) | 314 | (211) | 280 | (188) | 251 | (169) | 225 | (151) | 203 | (136) | 183 | (123) |
| Deflection | mm (in) | 210 | (8.27) | 233 | (9.17) | 258 | (10.16) | 283 | (11.14) | 310 | (12.20) | 338 | (13.31) | 368 | (14.49) |

| Span | m (ft) | 26.00 | (85.30) | 27.00 | (88.60) | 28.00 | (91.90) | 29.00 | (95.10) | 31.00 | (101.70) | 33.00 | (108.30) | 35.00 | (114.80) |
|------------|---------------|-------|---------|-------|---------|-------|---------|-------|---------|-------|----------|-------|----------|-------|----------|
| CPL | kg (lbs) | 2152 | (4744) | 2024 | (4462) | 1903 | (4195) | 1788 | (3942) | 1577 | (3477) | 1386 | (3056) | 1210 | (2668) |
| Deflection | mm (in) | 339 | (13.35) | 368 | (14.49) | 398 | (15.67) | 430 | (16.93) | 498 | (19.61) | 573 | (22.56) | 655 | (25.79) |
| TPL | kg (lbs) | 1614 | (3558) | 1518 | (3347) | 1427 | (3146) | 1341 | (2956) | 1183 | (2608) | 1039 | (2291) | 908 | (2002) |
| Deflection | mm (in) | 405 | (15.94) | 438 | (17.24) | 472 | (18.58) | 507 | (19.96) | 581 | (22.87) | 661 | (26.02) | 746 | (29.37) |
| QPL | kg (lbs) | 1076 | (2372) | 1012 | (2231) | 951 | (2097) | 894 | (1971) | 789 | (1739) | 693 | (1528) | 605 | (1334) |
| Deflection | mm (in) | 384 | (15.12) | 415 | (16.34) | 448 | (17.64) | 482 | (18.98) | 554 | (21.81) | 632 | (24.88) | 716 | (28.19) |
| FPL | kg (lbs) | 897 | (1978) | 843 | (1858) | 793 | (1748) | 745 | (1642) | 657 | (1448) | 577 | (1272) | 504 | (1111) |
| Deflection | mm (in) | 401 | (15.79) | 433 | (17.05) | 467 | (18.39) | 502 | (19.76) | 576 | (22.68) | 655 | (25.79) | 740 | (29.13) |
| UDL | kg/m (lbs/ft) | 166 | (112) | 150 | (101) | 136 | (91) | 123 | (83) | 102 | (69) | 84 | (56) | 69 | (46) |
| Deflection | mm (in) | 399 | (15.71) | 431 | (16.97) | 464 | (18.27) | 499 | (19.65) | 573 | (22.56) | 652 | (25.67) | 737 | (29.02) |

| CPL ↓ ↓ (Centre Point Load) | TPL ↓ ↓ ↓ (Third Point Load) | QPL ↓ ↓ ↓ ↓ (Quarter Point Load) | FPL ↓ ↓ ↓ ↓ ↓ ↓ ↓ ↓ ↓ ↓ ↓ (Fifth Point Load) | UDL (Uniformly Distributed Load) |
|-----------------------------|------------------------------|----------------------------------|--|----------------------------------|

All truss loading calculations are based on:

Truss supported or suspended at both ends • Static loadings only • Loads applied in the node points • Self-weight of the truss is included • Spans made of different truss lengths • Interaction of bending moment and shear force at connector • Structural analysis based on EN 1993-1-1, EN 1993-1-8 and EN 1933-1-12 • To comply with BS 7905-2 / ANSI E1.2-2006 / EN 17115 all loading data should be multiplied by 0.85 • For any other application, or in case of an assembled structure, contact Milos or a structural engineer • Safety factors used – self-weight 1.35 / loading 1.5

Steel truss 3