

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

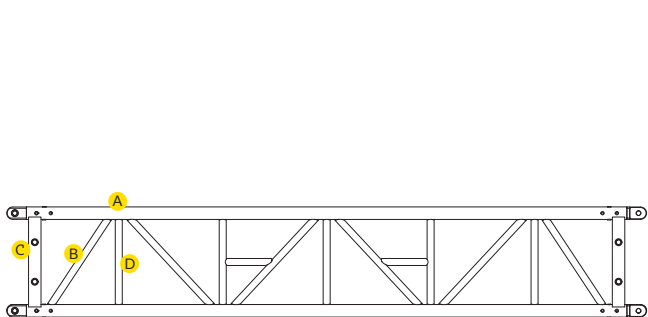
S-M530 Quatro Tower truss section

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

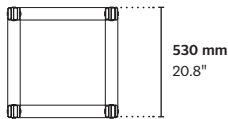
STANDARD LENGTHS AND WEIGHTS AVAILABLE

S-QTPT	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)
	kg	lbs	80.70 (177.91)	118.60 (261.47)	136.70 (301.37)	156.20 (344.36)	204.60 (451.07)	231.30 (509.93)	258.00 (568.79)

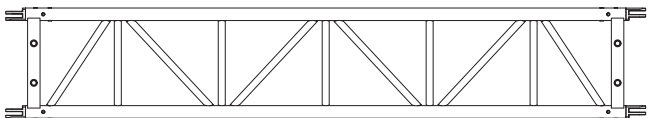
Connection material and packaging are not included in above weights



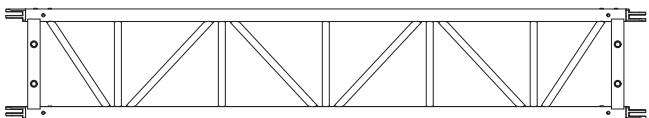
Side view



End view



Top view



Bottom view

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)
Centre Point Load (CPL)	kg (lbs)	11655.00 (25695.00)	11606.00 (25587.00)	10210.00 (22509.00)	8887.00 (19592.00)	7853.00 (17313.00)	7021.00 (15479.00)	6335.00 (13966.00)
Deflection	mm (in)	9.00 (0.35)	16.00 (0.63)	23.00 (0.91)	30.00 (1.18)	38.00 (1.50)	47.00 (1.85)	57.00 (2.24)
Third Point Load (TPL)	kg (lbs)	5825.00 (12842.00)	5803.00 (12793.00)	5778.00 (12738.00)	5753.00 (12683.00)	5729.00 (12630.00)	5265.00 (11607.00)	4751.00 (10474.00)
Deflection	mm (in)	8.00 (0.31)	14.00 (0.55)	22.00 (0.87)	33.00 (1.30)	46.00 (1.81)	59.00 (2.32)	71.00 (2.80)
Quarter Point Load (QPL)	kg (lbs)	3885.00 (8565.00)	3869.00 (8530.00)	3852.00 (8492.00)	3836.00 (8457.00)	3819.00 (8419.00)	3510.00 (7738.00)	3168.00 (6984.00)
Deflection	mm (in)	7.00 (0.28)	13.00 (0.51)	20.00 (0.79)	30.00 (1.18)	43.00 (1.69)	55.00 (2.17)	67.00 (2.64)
Fifth Point Load (FPL)	kg (lbs)	2914.00 (6424.00)	2901.00 (6396.00)	2889.00 (6369.00)	2877.00 (6343.00)	2864.00 (6314.00)	2852.00 (6288.00)	2640.00 (5820.00)
Deflection	mm (in)	7.00 (0.28)	12.00 (0.47)	19.00 (0.75)	29.00 (1.14)	41.00 (1.61)	57.00 (2.24)	70.00 (2.76)
Uniformly Distributed Load (UDL)	kg/m (lbs/ft)	2331.00 (1566.00)	1934.00 (1300.00)	1651.00 (1109.00)	1438.00 (966.00)	1273.00 (855.00)	1141.00 (767.00)	1033.00 (694.00)
Deflection	mm (in)	6.00 (0.24)	10.00 (0.39)	16.00 (0.63)	24.00 (0.94)	34.00 (1.34)	47.00 (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)
Centre Point Load (CPL)	kg (lbs)	5760.00 (12699.00)	5269.00 (11616.00)	4845.00 (10681.00)	4474.00 (9863.00)	4147.00 (9143.00)	3855.00 (8499.00)	3592.00 (7919.00)
Deflection	mm (in)	68.00 (2.68)	79.00 (3.11)	93.00 (3.66)	107.00 (4.21)	122.00 (4.80)	138.00 (5.43)	155.00 (6.10)
Third Point Load (TPL)	kg (lbs)	4320.00 (9524.00)	3952.00 (8713.00)	3634.00 (8012.00)	3356.00 (7399.00)	3110.00 (6856.00)	2891.00 (6374.00)	2694.00 (5939.00)
Deflection	mm (in)	85.00 (3.35)	100.00 (3.94)	116.00 (4.57)	133.00 (5.24)	152.00 (5.98)	171.00 (6.73)	192.00 (7.56)
Quarter Point Load (QPL)	kg (lbs)	2880.00 (6349.00)	2635.00 (5809.00)	2422.00 (5340.00)	2237.00 (4932.00)	2073.00 (4570.00)	1927.00 (4248.00)	1796.00 (3960.00)
Deflection	mm (in)	79.00 (3.11)	93.00 (3.66)	108.00 (4.25)	125.00 (4.92)	142.00 (5.59)	161.00 (6.34)	180.00 (7.09)
Fifth Point Load (FPL)	kg (lbs)	2400.00 (5291.00)	2195.00 (4839.00)	2019.00 (4451.00)	1864.00 (4109.00)	1728.00 (3810.00)	1606.00 (3541.00)	1497.00 (3300.00)
Deflection	mm (in)	84.00 (3.31)	99.00 (3.90)	114.00 (4.49)	131.00 (5.16)	150.00 (5.91)	169.00 (6.65)	190.00 (7.48)
Uniformly Distributed Load (UDL)	kg/m (lbs/ft)	942.00 (633.00)	811.00 (545.00)	692.00 (465.00)	597.00 (401.00)	518.00 (348.00)	453.00 (304.00)	399.00 (268.00)
Deflection	mm (in)	82.00 (3.23)	98.00 (3.86)	114.00 (4.49)	130.00 (5.12)	149.00 (5.87)	168.00 (6.61)	189.00 (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)
Centre Point Load (CPL)	kg (lbs)	3355.00 (7397.00)	3139.00 (6920.00)	2941.00 (6484.00)	2759.00 (6083.00)	2591.00 (5712.00)	2434.00 (5366.00)	2288.00 (5044.00)
Deflection	mm (in)	174.00 (6.85)	194.00 (7.64)	215.00 (8.46)	237.00 (9.33)	260.00 (10.24)	285.00 (11.22)	311.00 (12.24)
Third Point Load (TPL)	kg (lbs)	2516.00 (5547.00)	2354.00 (5190.00)	2206.00 (4863.00)	2069.00 (4561.00)	1943.00 (4284.00)	1826.00 (4026.00)	1716.00 (3783.00)
Deflection	mm (in)	214.00 (8.43)	238.00 (9.37)	263.00 (10.35)	289.00 (11.38)	316.00 (12.44)	344.00 (13.54)	374.00 (14.72)
Quarter Point Load (QPL)	kg (lbs)	1678.00 (3699.00)	1570.00 (3461.00)	1471.00 (3243.00)	1380.00 (3042.00)	1295.00 (2855.00)	1217.00 (2683.00)	1144.00 (2522.00)
Deflection	mm (in)	201.00 (7.91)	224.00 (8.82)	247.00 (9.72)	272.00 (10.71)	298.00 (11.73)	325.00 (12.80)	354.00 (13.94)
Fifth Point Load (FPL)	kg (lbs)	1398.00 (3082.00)	1308.00 (2884.00)	1226.00 (2703.00)	1150.00 (2535.00)	1079.00 (2379.00)	1014.00 (2235.00)	954.00 (2103.00)
Deflection	mm (in)	212.00 (8.35)	235.00 (9.25)	260.00 (10.24)	285.00 (11.22)	312.00 (12.28)	341.00 (13.43)	370.00 (14.57)
Uniformly Distributed Load (UDL)	kg/m (lbs/ft)	353.00 (237.00)	314.00 (211.00)	280.00 (188.00)	251.00 (169.00)	225.00 (151.00)	203.00 (136.00)	183.00 (123.00)
Deflection	mm (in)	210.00 (8.27)	233.00 (9.17)	258.00 (10.16)	283.00 (11.14)	310.00 (12.20)	338.00 (13.31)	368.00 (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)
Centre Point Load (CPL)	kg (lbs)	2152.00 (4744.00)	2024.00 (4462.00)	1903.00 (4195.00)	1788.00 (3942.00)	1577.00 (3477.00)	1386.00 (3056.00)	1210.00 (2668.00)
Deflection	mm (in)	339.00 (13.35)	368.00 (14.49)	398.00 (15.67)	430.00 (16.93)	498.00 (19.61)	573.00 (22.56)	655.00 (25.79)
Third Point Load (TPL)	kg (lbs)	1614.00 (3558.00)	1518.00 (3347.00)	1427.00 (3146.00)	1341.00 (2956.00)	1183.00 (2608.00)	1039.00 (2291.00)	908.00 (2002.00)
Deflection	mm (in)	405.00 (15.94)	438.00 (17.24)	472.00 (18.58)	507.00 (19.96)	581.00 (22.87)	661.00 (26.02)	746.00 (29.37)
Quarter Point Load (QPL)	kg (lbs)	1076.00 (2372.00)	1012.00 (2231.00)	951.00 (2097.00)	894.00 (1971.00)	789.00 (1739.00)	693.00 (1528.00)	605.00 (1334.00)
Deflection	mm (in)	384.00 (15.12)	415.00 (16.34)	448.00 (17.64)	482.00 (18.98)	554.00 (21.81)	632.00 (24.88)	716.00 (28.19)
Fifth Point Load (FPL)	kg (lbs)	897.00 (1978.00)	843.00 (1858.00)	793.00 (1748.00)	745.00 (1642.00)	657.00 (1448.00)	577.00 (1272.00)	504.00 (1111.00)
Deflection	mm (in)	401.00 (15.79)	433.00 (17.05)	467.00 (18.39)	502.00 (19.76)	576.00 (22.68)	655.00 (25.79)	740.00 (29.13)
Uniformly Distributed Load (UDL)	kg/m (lbs/ft)	166.00 (112.00)	150.00 (101.00)	136.00 (91.00)	123.00 (83.00)	102.00 (69.00)	84.00 (56.00)	69.00 (46.00)
Deflection	mm (in)	399.00 (15.71)	431.00 (16.97)	464.00 (18.27)	499.00 (19.65)	573.00 (22.56)	652.00 (25.67)	737.00 (29.02)

CPL	TPL	QPL	FPL	UDL
(Centre Point Load)	(Third Point Load)	(Quarter Point Load)	(Fifth Point Load)	(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 1993-1-12 • 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