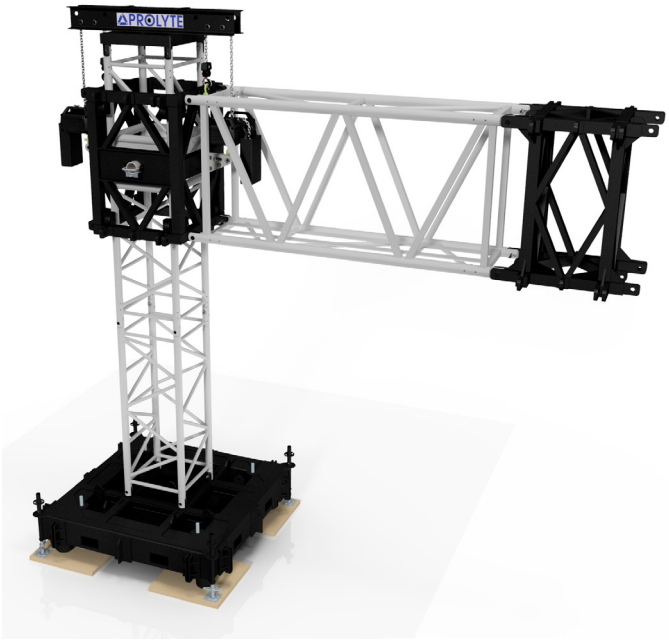
Photo: Neuro Tech Asia

The DT tower is based on D75T mast sections. These mast sections have a four side diagonal webbing with on one side en extra horizontal bracing to facilitate safe and easy climbing of the towers with an appropriate fall protection system. The tower modules are equipped with a pin/fork connection system for easy assembly.

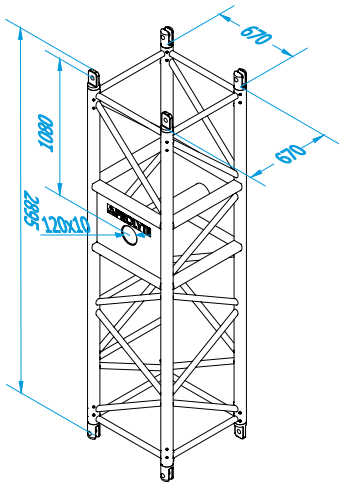
While the D75T towers can be loaded up to 30 tonnes at a height of 20m, building a complete grid or ground support system requires more elements, designed to absorb substantial loads. Using the M145RV Mammoth truss you can build spans up to 60 metres, still allowing a centre point load of 2000 kg. For use in ground support systems, Prolyte has designed a sleeve block for the D75 tower, the D75T-010-4-M145RV-0, which combines the D75T towers with the M145RV Mammoth truss.

The sleeve block can handle a cantilever point load of 2000 kg. at a 10m cantilever. Furthermore, the sleeve block is equipped with a pinned dead hang system, this facilitates a dedicated dead hang position within the tower and increases the tower loading capacity significantly. Sliding the dead hang pin into its integrated holder within the tower is easy, quick and safe.

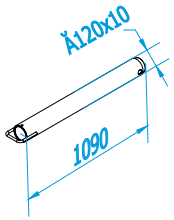
The base section can be integrated into a 2072 x 2072 scaffolding system and creates integral stability for the tower section, which results in an increase of the tower capacity. It features integrated dedicated attachments for guy wires and lifting points.



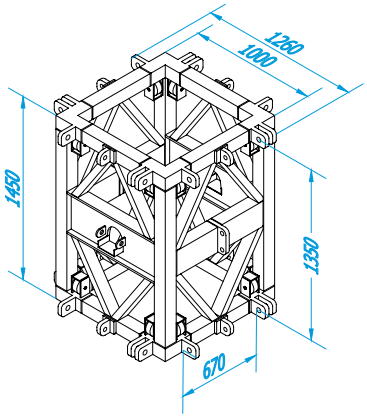
D75T-L280 DEAD HANG



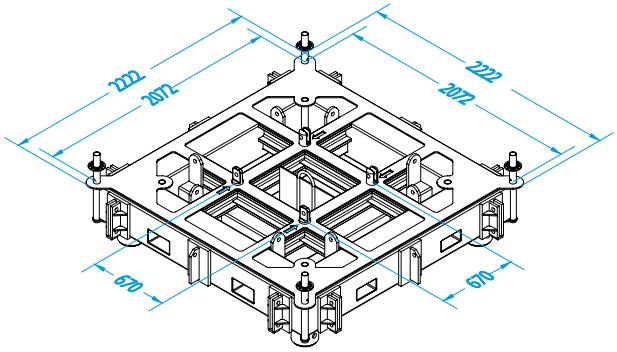
D75T-010-SAFE (1:30)

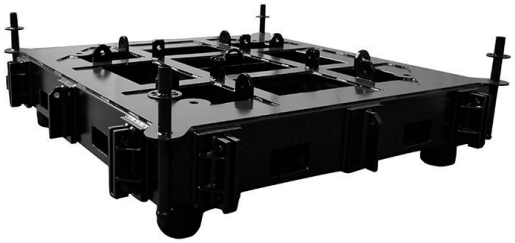


D75T-010-4-M145RV-0



SR-Base-Top-D75T





DT TOWER

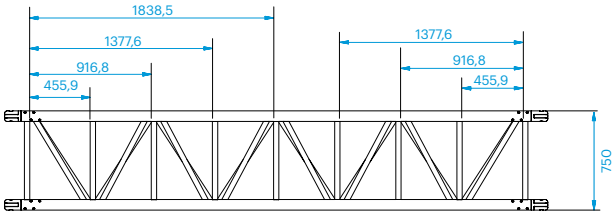
Code	Description
BOX-M145RV-0	Box corner for M145RV Truss, steel black coated, self-weight 750kg
SR-BASE-TOP-D75T	Base section for D75T tower, steel, black coated, self-weight 1850kg
D75T-010-4-M145RV-0	Sleeve block for D75T tower, M145RV, attachments, steel, black coated, self-weight 850kg
D75T-009-2T	Top section for D75 tower, suited for single reeved 2-tonne hoists, steel, black coated, self-weight 175kg
D75T-L280 DEAD HANG	Dead hang truss with integrated dead hang position
D75T-010-SAFE	Dead hang pin for the D75T tower, steel, self-weight 30kg
D75T-010-ATT	Lifting bracket for the D75T sleeve block, to accommodate single reeved 2-toone hoist

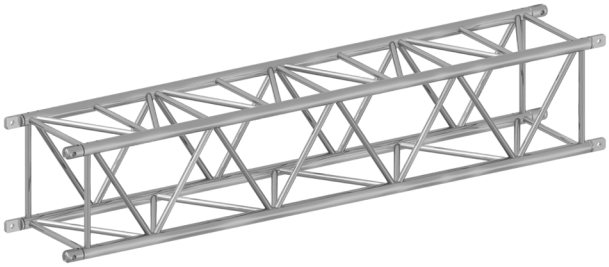
Photo: Neuro Tech Asia

The D75T truss is a continuation of the development of the very heavy-duty truss range. The D75T truss, with outside measurements of 75 x 75 mm and main chords of 80 mm is designed as a truss for special applications where extreme loads or circumstances require extreme strength. The D75T truss can be used for ultra heavy tower systems or in combination with the mammoth truss or Space Roof. The design is such that it can be used in configurations as a tower or as a span. Besides that, it has four-sided webbing with integrated ladder steps. The smart placing of the pin-fork connection makes it non-orientated and facilitates assembly.

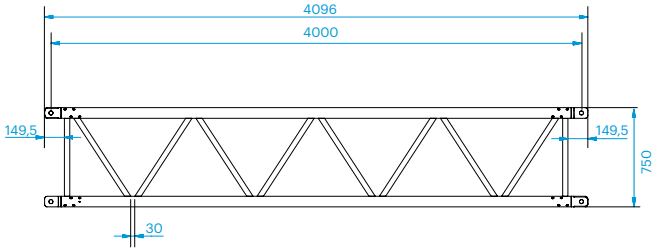
D75T

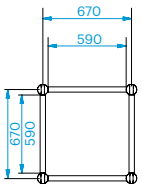
Top View





Side View





D75T - Allowable Loading

		Uniformly Distributed Load				Centre Point Load				Single Load Third Points Load per Point		Single Load Fourth Points Load per Point		Single Load Fifth Points Load per Point		
						MAXIMUM ALLOWABLE POINT LOADS										
SPAN		UDL		DEFLECTION		CPL		DEFLECTION		TPL		QPL		FPL		SPAN
m	ft	kg/m	lbs/ft	mm	inch	kgs	lbs	mm	inch	kgs	lbs	kgs	lbs	kgs	lbs	total weight
16	52,5	541,1	364,1	95	3,7	4960,3	10947	75,9	3,0	3720,3	8210,6	2480,2	5473,7	2066,8	4561,4	640.0
17	55,8	507,2	341,3	107	4,2	4633,6	10226	85,6	3,4	3475,2	7669,8	2316,8	5113,2	1930,7	4261,0	680.0
18	59,0	477,0	321,0	120	4,7	4341,2	9581	96,0	3,8	3255,9	7185,7	2170,6	4790,5	1808,8	3992,1	720.0
19	62,3	429,2	288,8	134	5,3	4077,6	8999	107,0	4,2	3058,2	6749,5	2038,8	4499,7	1699,0	3749,7	760.0
20	65,6	383,9	258,3	148	5,8	3838,7	8472	118,5	4,7	2879,0	6354,0	1919,3	4236,0	1599,4	3530,0	800.0
21	68,9	344,8	232,0	163	6,4	3620,7	7991	130,7	5,1	2715,5	5993,2	1810,4	3995,5	1508,6	3329,6	840.0
22	72,2	311,0	209,3	179	7,1	3421,0	7550	143,4	5,6	2565,7	5662,6	1710,5	3775,0	1425,4	3145,9	880.0
23	75,4	281,5	189,4	196	7,7	3237,0	7144	156,8	6,2	2427,8	5358,1	1618,5	3572,0	1348,8	2976,7	920.0
24	78,7	255,6	172,0	213	8,4	3066,9	6769	170,7	6,7	2300,2	5076,5	1533,4	3384,3	1277,9	2820,3	960.0
25	82,0	232,7	156,6	231	9,1	2908,9	6420	185,2	7,3	2181,7	4815,0	1454,5	3210,0	1212,1	2675,0	1000.0
26	85,3	212,4	142,9	250	9,9	2761,7	6095	200,3	7,9	2071,3	4571,4	1380,9	3047,6	1150,7	2539,7	1040.0
27	88,6	194,4	130,8	270	10,6	2624,1	5791	216,0	8,5	1968,1	4343,6	1312,1	2895,7	1093,4	2413,1	1080.0
28	91,8	178,2	119,9	290	11,4	2495,0	5507	232,3	9,1	1871,3	4129,9	1247,5	2753,3	1039,6	2294,4	1120.0
29	95,1	163,7	110,1	311	12,3	2373,6	5239	249,2	9,8	1780,2	3929,0	1186,8	2619,3	989,0	2182,8	1160.0
30	98,4	150,6	101,3	333	13,1	2259,1	4986	266,7	10,5	1694,3	3739,4	1129,6	2492,9	941,3	2077,4	1200.0
31	101,7	138,8	93,4	356	14,0	2150,8	4747	284,8	11,2	1613,1	3560,1	1075,4	2373,4	896,2	1977,9	1240.0
32	105,0	128,0	86,1	379	14,9	2048,2	4520	303,4	11,9	1536,1	3390,2	1024,1	2260,2	853,4	1883,5	1280.0
33	108,2	118,2	79,5	403	15,9	1950,6	4305	322,7	12,7	1463,0	3228,8	975,3	2152,5	812,8	1793,8	1320.0
34	111,5	109,3	73,5	428	16,8	1857,8	4100	342,5	13,5	1393,4	3075,1	928,9	2050,1	774,1	1708,4	1360.0
35	114,8	101,1	68,0	454	17,9	1769,2	3905	363,0	14,3	1326,9	2928,5	884,6	1952,4	737,2	1627,0	1400.0
36	118,1	93,6	63,0	480	18,9	1684,6	3718	384,0	15,1	1263,4	2788,4	842,3	1858,9	701,9	1549,1	1440.0
37	121,4	86,7	58,3	507	20,0	1603,5	3539	405,7	16,0	1202,7	2654,3	801,8	1769,5	668,1	1474,6	1480.0
38	124,6	80,3	54,0	535	21,0	1525,8	3367	427,9	16,8	1144,4	2525,6	762,9	1683,7	635,8	1403,1	1520.0
39	127,9	74,4	50,1	563	22,2	1451,2	3203	450,7	17,7	1088,4	2402,0	725,6	1601,4	604,7	1334,5	1560.0
40	131,2	69,0	46,4	592	23,3	1379,3	3044	474,1	18,7	1034,5	2283,1	689,7	1522,1	574,7	1268,4	1600.0

1 inch = 25,4 mm | 1m = 3.28 ft | 1 lbs = 0,453 kg

- Tüv certification only valid for loading table above.
- Loading figures are only valid for static loads.
- Loading figures are only valid for single spans with supports at both ends.
- All static systems, other than single spans, need an individual structural calculation. Please contact a structural engineer or Prolyte for assistance.
- Loading figures are calculated according to and in full compliance with European standards (Eurocode).
- The self-weight of the trusses is already taken into account.
- Loading figures are only valid for the cross sectional orientation of the truss as shown by the icon in the loading table.
- The interaction between bending moment and shear force at the connection point is already taken into account.
- Truss spans can be assembled from different truss lengths.
- Read the manual before assembling, using and loading the truss.

Technical Specifications - D75T

Types	Tower truss
Alloy	EN AW 6082 T6
Main Chords	80 x 10 mm
Diagonal Members	40 x 3 mm
Coupling System	Pin / Fork connection

Structural data can be found at www.prolyte.com

D75T - Standard available Lengths and Codes

Metres	Feet	Code
0.50/1.00 m in 5 mm steps	0.82'/3.28', in 0.2' steps	
1,00	3.28	D75T-L100
2,00	6.56	D75T-L200
3,00	9.84	D75T-L300
3,85	12.62	D75T-L385
4,00	13.11	D75T-L400

Other Lengths on request