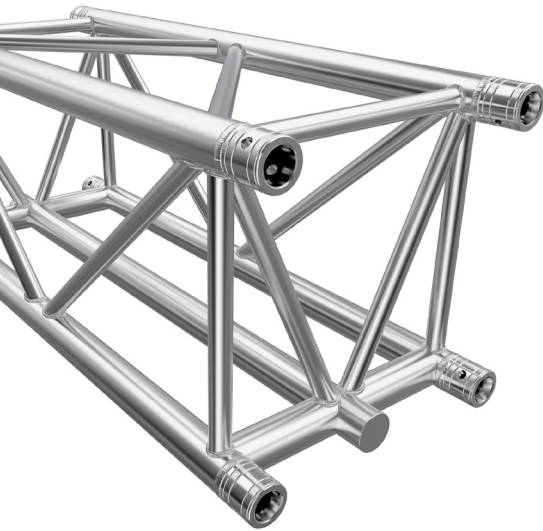


F45



This F45 Truss is based on the F44P 400mm x 400mm truss design and is used for applications such as LED screens where balanced centre rigging of the screen panels on the truss is essential. A central chord with ladder-style horizontal bracing on the bottom face of the truss allows LED panels to be clamped directly onto the centre chord. This negates the need to sling or brace across the two bottom chords to provide a central rigging points as would normally be necessary on a square format truss. Furthermore, the ladder-style horizontal braces creates more and more clear hanging space along the chord compared to the outside chords. Because it is based on the F44P Truss design, F45 Truss can connect to all standard F44/F44P junctions or sleeve blocks so you use your existing F44/F44P Truss to build the rest of the structure! Future development of truss accessories will mean that use of F45 Truss will not be limited to LED screen hanging applications.

TECHNICAL DATA

Pipe diameter:	50 mm
Wall thickness:	4,0 mm
Material:	EN AW-6082 T6
Brace diameter:	25 mm
Connectors	included

LOAD ON THE CENTRAL TUBE



Since the deflection of the truss plays an important role in the assembly of LED screens, the static with the lowest deflection ($L / 300$) was used for the central belt tube.

Span	Uniform distribution load	Deflection	Center point load	Deflection	Point load in third-point	Deflection	Point load in quarter-point	Deflection	Point load in fifth-point	Deflection
m	kg / m	cm	kg	cm	kg	cm	kg	cm	kg	cm
4,00	600	0,41	500	0,14	500	0,24	500	0,33	500	0,41
5,00	600	1,00	500	0,28	500	0,47	500	0,64	500	0,81
6,00	578	2,00	500	0,50	500	0,82	500	1,12	500	1,41
7,00	358	2,33	500	0,81	500	1,31	500	1,79	500	2,25
8,00	235	2,67	500	1,22	500	1,98	495	2,67	389	2,67
9,00	161	3,00	500	1,77	500	2,84	381	3,00	299	3,00
10,00	113	3,33	500	2,47	415	3,33	298	3,33	234	3,33
11,00	81	3,67	500	3,34	328	3,67	235	3,67	185	3,67
12,00	59	4,00	444	4,00	261	4,00	187	4,00	147	4,00
13,00	43	4,33	353	4,33	207	4,33	149	4,33	117	4,33
14,00	32	4,67	279	4,67	163	4,67	117	4,67	92	4,67
15,00	23	5,00	217	5,00	127	5,00	91	5,00	72	5,00
16,00	16	5,33	164	5,33	96	5,33	69	5,33	54	5,33

deflection > $L/300$

LOAD ON THE OUTER TUBES



Span	Uniform distribution load	Deflection	Center point load	Deflection	Point load in third-point	Deflection	Point load in quarter-point	Deflection	Point load in fifth-point	Deflection
m	kg / m	cm	kg	cm	kg	cm	kg	cm	kg	cm
4,00	953	0,65	2209	0,60	1358	0,63	1042	0,67	859	0,70
5,00	760	1,26	1879	1,00	1193	1,08	931	1,18	778	1,25
6,00	631	2,18	1629	1,52	1057	1,67	837	1,84	684	1,91
7,00	473	3,05	1434	2,14	945	2,39	757	2,66	601	2,69
8,00	365	4,05	1276	2,88	853	3,26	689	3,65	534	3,60
9,00	289	5,19	1146	3,73	774	4,26	614	4,68	480	4,66
10,00	234	6,47	1037	4,71	707	5,41	553	5,85	434	5,85
11,00	192	7,89	944	5,80	649	6,70	501	7,16	395	7,19
12,00	160	9,44	864	7,02	598	8,13	456	8,60	361	8,67
13,00	135	11,14	793	8,36	552	9,72	418	10,18	332	10,29
14,00	115	12,97	731	9,84	512	11,45	384	11,90	306	12,07
15,00	99	14,95	675	11,45	476	13,35	354	13,76	283	13,98
16,00	79	16,00	625	13,20	443	15,40	327	15,77	261	16,00
17,00	63	17,00	580	15,10	395	17,00	283	17,00	223	17,00
18,00	51	18,00	539	17,14	337	18,00	242	18,00	190	18,00
19,00	41	19,00	489	19,00	287	19,00	206	19,00	162	19,00
20,00	33	20,00	415	20,00	243	20,00	175	20,00	137	20,00

deflection > $L/100$