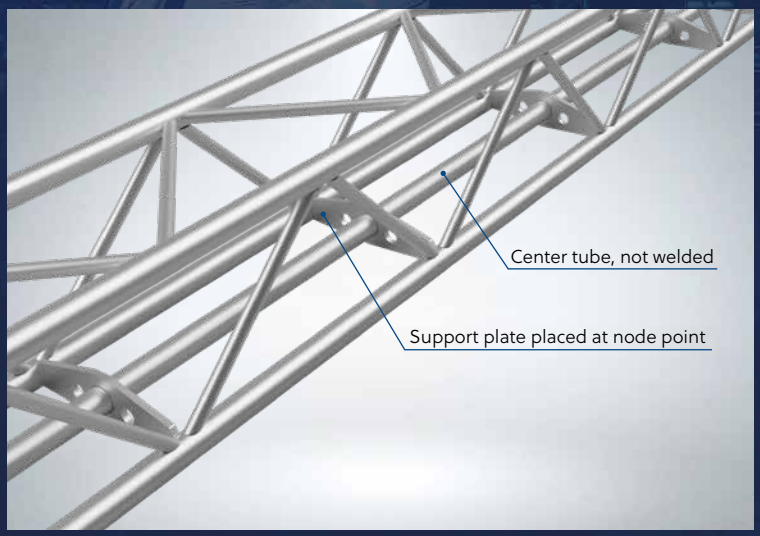
HDX Series Design Explained

Loads applied on the middle beam are equally divided over both sides of the truss. In combination with the support plates constructed in the node points, the perfect situation for loading the truss is achieved.

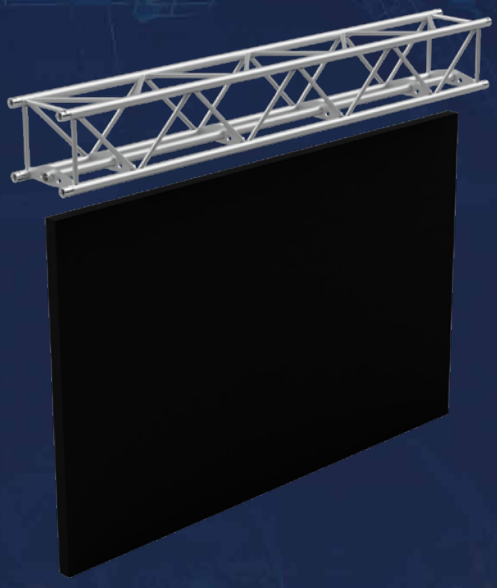
The design of the HDX series is based on the philosophy avoiding as much welding as possible in the center of the truss.

With the middle beam mounted instead of welded, there will be no bending in braces and main tubes, which ultimately results in a better load rating on the HDX series compared to fully welded middle beam LED truss as the forces in the main tube are not reduced by additional bending.



Smart thinking, better solutions!

HDX Series Loading Explained



Center tube load

Outer tube load

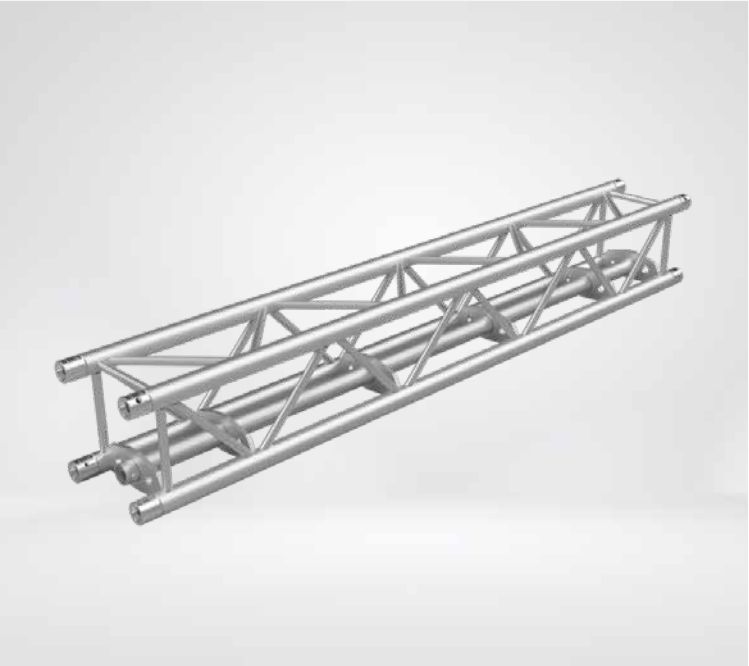
Loading charts of the HDX truss series need a little more explanation then regular loading charts. The HDX truss is a truss specifically designed for rigging LED screens or other central loads.

When rigging LED Screens, it is well known that minimal deflection is required to prevent damage to LED panels. The trusses can be loaded in different ways, like a normal truss or only on the tube that is centrally incorporated into the product.

This is also the reason why there are multiple loading tables, one when only the center tube is loaded and a standard table where both outer tubes are used for loading.

MAC Event - Sky Music Productions

HDX35 LED Truss



HDX35 is a square truss based on the 'Eurotruss original' HD34 Truss. Are you having issues with placing loads like LED screens, lighting fixtures, or decor on a central position of the truss? Then look no further. HDX35 is the best solution!

The HDX35 truss has a 50x4 mm main tube which ensures strength and maximum durability, the truss is designed for high-frequency usage or fixed installations. It is available in standard lengths up to 4 meters. An additional 50x4 mm tube is placed in the center of the truss at the bottom and allows rigging bars of LED screens to be mounted directly under it.

This center chord has a slightly higher trim height than other LED Screen Truss solutions, while the use of narrow aluminum plates instead of tubes allows for more space for the positioning of clamps or slings.

HDX35 can be combined with HD34 truss lengths because it has the same geometry size*. The truss is equipped with the CS1 coupling system.

Powder coating finish in various colors is available upon request.

Facts

- Additional tube for centered loading (not welded)
- Creates a low trim height
- 4 mm wall thickness 50 mm main tube
- Can be combined with HD34
- Tolerance free conical connector system
- High stability aluminium alloy

Productcode	Description
HDX35-050	HDX35 LED Truss Length 50cm
HDX35-100	HDX35 LED Truss Length 100cm
HDX35-150	HDX35 LED Truss Length 150cm
HDX35-200	HDX35 LED Truss Length 200cm
HDX35-250	HDX35 LED Truss Length 250cm
HDX35-300	HDX35 LED Truss Length 300cm
HDX35-350	HDX35 LED Truss Length 350cm
HDX35-400	HDX35 LED Truss Length 400cm

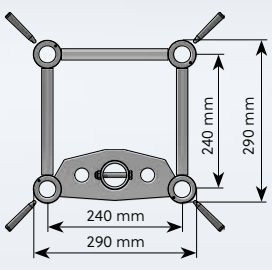
Custom lengths are available upon request

Specifications HDX35

Height:	290 mm	Weight:	~11 kg/m
Width:	290 mm	Pin Position:	Diagonal
Main Tube:	50 x 4 mm	Material:	EN AW-6082 T6
Braces:	20 x 2 mm	Connection:	CS1 - CON

*Please consider higher selfweight of the system in combination with the loadability of the HD34

Diagram



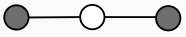
HDX35 LED Truss Loading Charts

Central Tube - Loading Charts

Span	UDL		CPL		1/3 Point load		1/4Point load		1/5 Point load	
m	kg/m	mm	kg	mm	kg (2x)	mm	kg (3x)	mm	kg (4x)	mm
4	563,0	8,0	650,0		650,0		650,0		562,6	9,6
5	448,0	15,6	650,0		650,0		633**	16,7	497**	16,7
6	273**	20,0	650,0		602**	20,0	432**	20,0	339**	20,0
7	168**	23,3	650,0		431**	23,3	309**	23,3	243**	23,3
8	109**	26,7	545**	26,7	320**	26,7	229**	26,7	180**	26,7
9	73**	30,0	411**	30,0	241**	30,0	173**	30,0	136**	30,0
10	50**	33,3	314**	33,3	184**	33,3	132**	33,3	104**	33,3
11	35**	36,7	241**	36,7	141**	36,7	101**	36,7	80**	36,7
12	24**	40,0	182**	40,0	107**	40,0	77**	40,0	60**	40,0
13	17**	43,3	136**	43,3	80**	43,3	57**	43,3	45**	43,3
14	11**	46,7	98**	46,7	58**	46,7	41**	46,7	32**	46,7
15	7**	50,0	66**	50,0	38**	50,0	28**	50,0	22**	50,0
16	4**	53,3	38**	53,3	22**	53,3	16**	53,3	13**	53,3

Load on center tube limited, the center tube may be loaded with point load 650 kg or uniform distributed load 1500 kg / m.
**Load is limited by allowable maximum deflection, the deflection of the truss has an important role when rigging a LED screen to the truss. The number with the lowest deflection on (L/300) was used for the center tube.

Outer Tube - Loading Charts



Span	UDL		CPL		1/3 Point load		1/4Point load		1/5 Point load	
m	kg/m	mm	kg	mm	kg (2x)	mm	kg (3x)	mm	kg (4x)	mm
4	563,0	8,0	1961*	11,0	1125,2	10,8	750,1	10,1	562,6	9,6
5	448,0	15,6	1648*	18,3	1109*	20,9	746,8	19,6	560,1	18,8
6	372,0	26,9	1408*	27,2	969*	31,7	725,9	33,1	557,5	32,4
7	317,0	42,8	1235,1	38,2	861*	45,2	617,6	45,1	514,6	47,8
8	268,0	62,0	1071,3	50,1	771*	60,9	535,6	59,0	446,4	62,5
9	209,0	78,6	942,7	63,6	700*	79,5	471,3	74,8	392,8	79,2
10	168,0	97,1	838,8	78,9	629,1	99,1	419,4	92,5	349,5	97,8
11	137,0	117,6	752,9	95,9	564,7	120,1	376,5	112,2	313,7	118,5
12	113,0	140,2	680,5	114,7	510,4	143,0	340,3	133,8	283,6	141,2
13	95,0	164,8	618,5	135,3	463,9	168,1	309,2	157,4	257,7	166,0
14	81,0	191,5	564,6	157,8	423,4	195,2	282,3	183,1	235,2	192,8
15	69,0	220,2	517,2	182,3	387,9	224,4	258,6	210,7	215,5	221,7
16	59,0	251,0	475,1	208,8	356,3	255,7	237,5	240,5	197,9	252,7

Load on center tube limited, the center tube may be loaded with point load 650 kg or uniform distributed load 1500 kg / m.