



# Towers & LED screen structures

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Raise your loads

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Category brochure

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Flexibility Behind Your Show



Full range of our towers solutions



## About Us



MILOS was the brainchild of young Czech DJ, Franti Zykan, who started manufacturing truss in 1994 out of a small garage in the Czech Republic. He chose MILOS as the name of his company in honour of his grandfather, with whom he spent a large part of his childhood.

From the very start, Franti adhered to two defining principles in the manufacture of MILOS truss products: simplicity and affordability, without compromising on quality. MILOS customers appreciated and valued this philosophy, which led to the quick growth of MILOS. Within a few years, it established a second office in Germany and then further expanded into the UK, the United States and China.

Fast forward to today, more than a quarter of a century after first opening the doors of its garage, and MILOS has grown into an international brand with a presence in 40 countries on every continent of the globe.

MILOS is currently driven by incredibly enthusiastic professionals and operates two state-of-the-art factories in Europe and China. Both factories follow a unique production process that was developed in-house in the Czech Republic. It focuses on a flexible production process that was successfully transferred from the automotive industry. Designed to solve the problem of constantly changing priorities, its production line operates at high speed, manufactures products with flawless quality and reduces manufacturing costs. Never content to rest on its laurels, MILOS continues to streamline and refine its production process year after year.

Going forward, MILOS will continue its long tradition of offering the highest quality products that feature professional craftsmanship, cutting edge technology and market leading user-friendliness.



# Towers

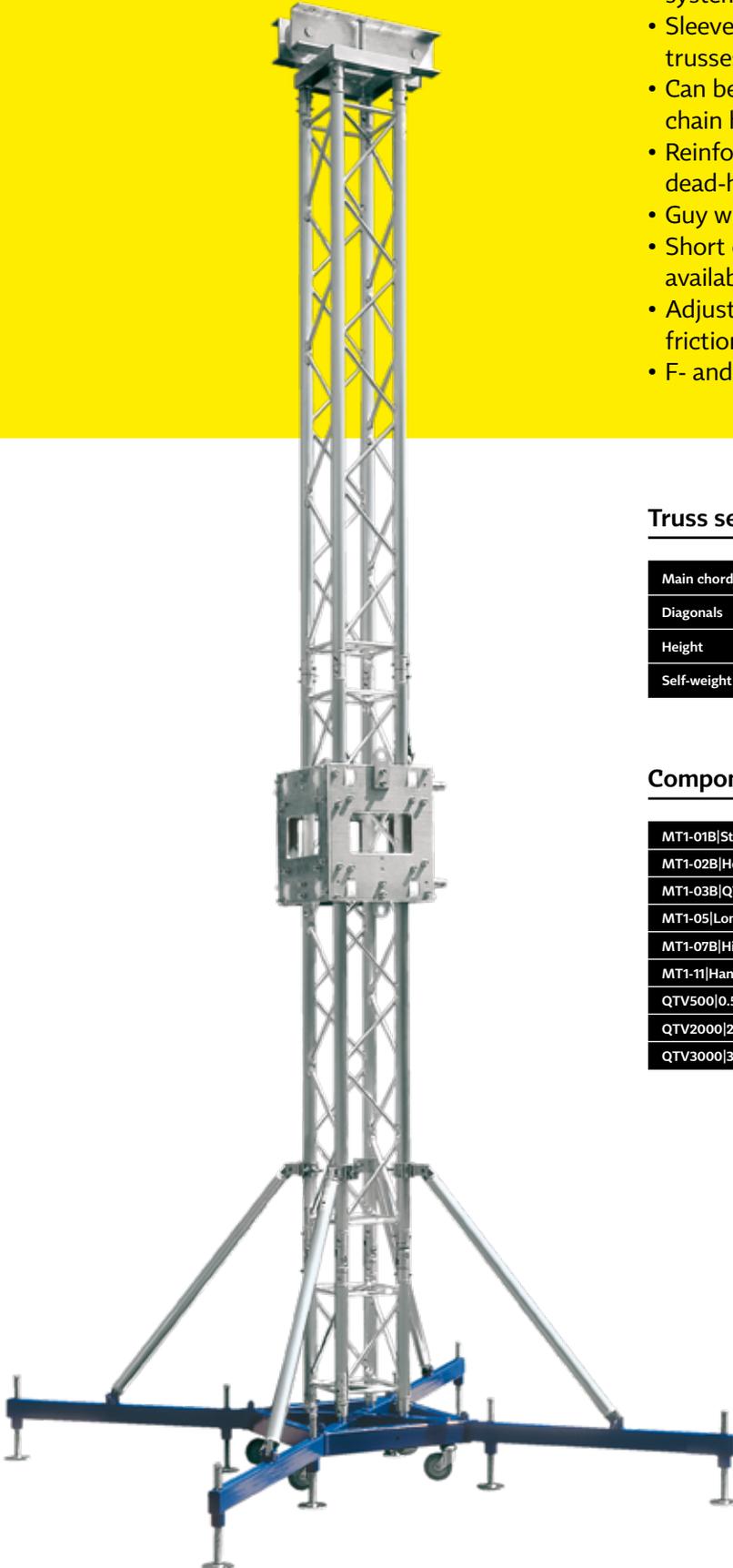
Raise your loads



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for full range

# MT1 tower

- Compact, heavy-duty M290 series tower system - standard height of 7.5 m (24.60 ft)
- For use independently or within MR1T and MR2 roof systems
- Sleeve block designed for use with M290 and M390 trusses
- Can be operated with manual chain hoist or electric chain hoist (bracket required)
- Reinforced head section with built-in feature for dead-hanging
- Guy wire connection points using bolt-on hangers
- Short or long outriggers (incl. stabilising brace) available
- Adjustable base feet with rubber pads for optimum friction
- F- and U-compatible versions available



## Truss series M290V

Main chords	mm	in	48×3 (1.89×0.12)
Diagonals	mm	in	16×2 (0.62×0.08)
Height	m	ft	7.5 (24.6)
Self-weight	kg	lbs	201 (443)

## Components for MT1 7.5 m (24.60 ft) tower

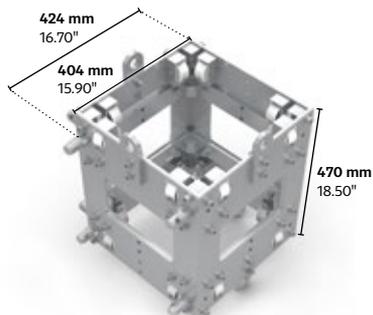
MT1-01B SteelBase	1 piece
MT1-02B HeadSection LTG	1 piece
MT1-03B QTB SleeveBlock Sh3.25t	1 piece
MT1-05 LongOutrigger	4 pieces
MT1-07B Hinges 4pcs	1 set
MT1-11 HandChainHoist+Bag	1 piece
QTV500 0.5m	1 piece
QTV2000 2m	2 pieces
QTV3000 3m	1 piece



### MT1-01B|SteelBase

**Weight**  
33.00 (72.66)

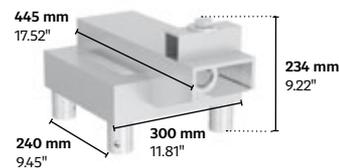
**Steel base**  
Robust steel base gives stability to the tower.  
Equipped with wheels for easy positioning during set-up.



### MT1-02B|HeadSection|forChain

**Weight**  
14.30 (31.53)

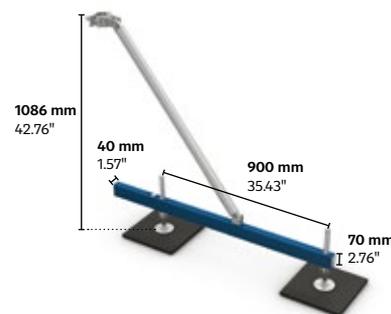
**Head section for chain**  
Fitted with steel pulleys for 7-8 mm (0.28-0.31") chain.  
Alternative dimensions available after consultation.



### MT1-02B|HeadSection|LTG

**Weight**  
8.00 (17.62)

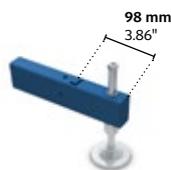
**Head section for steel wire**  
Fitted with dead hang hook.



### MT1-03B|QTB|SleeveBlock|Sh3.25t

**Weight**  
46.00 (101.29)

**Sleeve block**  
Consists of 10 mm (0.39") aluminium plates connected with steel components.  
Can be attached to M290 & 390 Quatro.



### MT1-04|ShortOutrigger

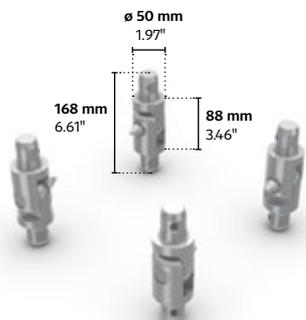
**Weight**  
5.00 (11.02)

**Short outrigger**  
Including adjustable spindles, rubber pads.

### MT1-05|LongOutrigger

**Weight**  
16.00 (35.23)

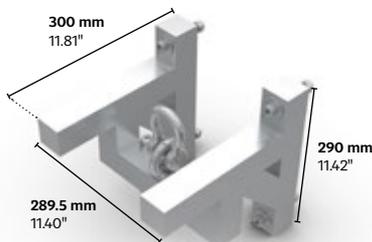
**Long outrigger**  
1.2 m (47.24") long, including adjustable spindles; rubber pads.



### MT1-07B|SetHinge|4pcs

**Weight**  
2.40 (5.28)

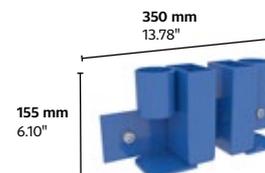
**Hinges**  
Used to connect the vertical tower elements and to allow for tilt-up assembly; set of 4pcs.



### MT1-09|BracketForMotor|Sleeve

**Weight**  
6.00 (13.21)

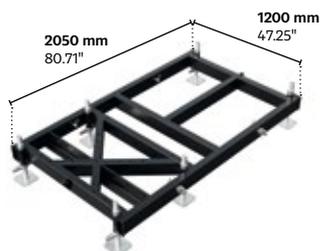
**Bracket for chain hoist**  
Used for electric chain hoist attachment to sleeve block to achieve max. loading.



### MT1-05|LongOutrigger

**Weight**  
4.60 (20.00)

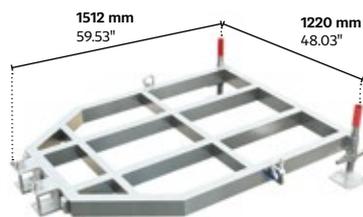
Designed to secure outriggers to the steel base for easy transport and storage.



### MT-IconBase-01|STEEL

**Weight**  
156.00 (343.00)

**Footprint extendable by outriggers**  
on front and/or rear side to up to 7980x1200 mm (314.17x47.25").



### MT1-01|BallastBase

**Weight**  
31.00 (68.34)

Designed to stack flat with smooth sides  
Integrated guy wire points.



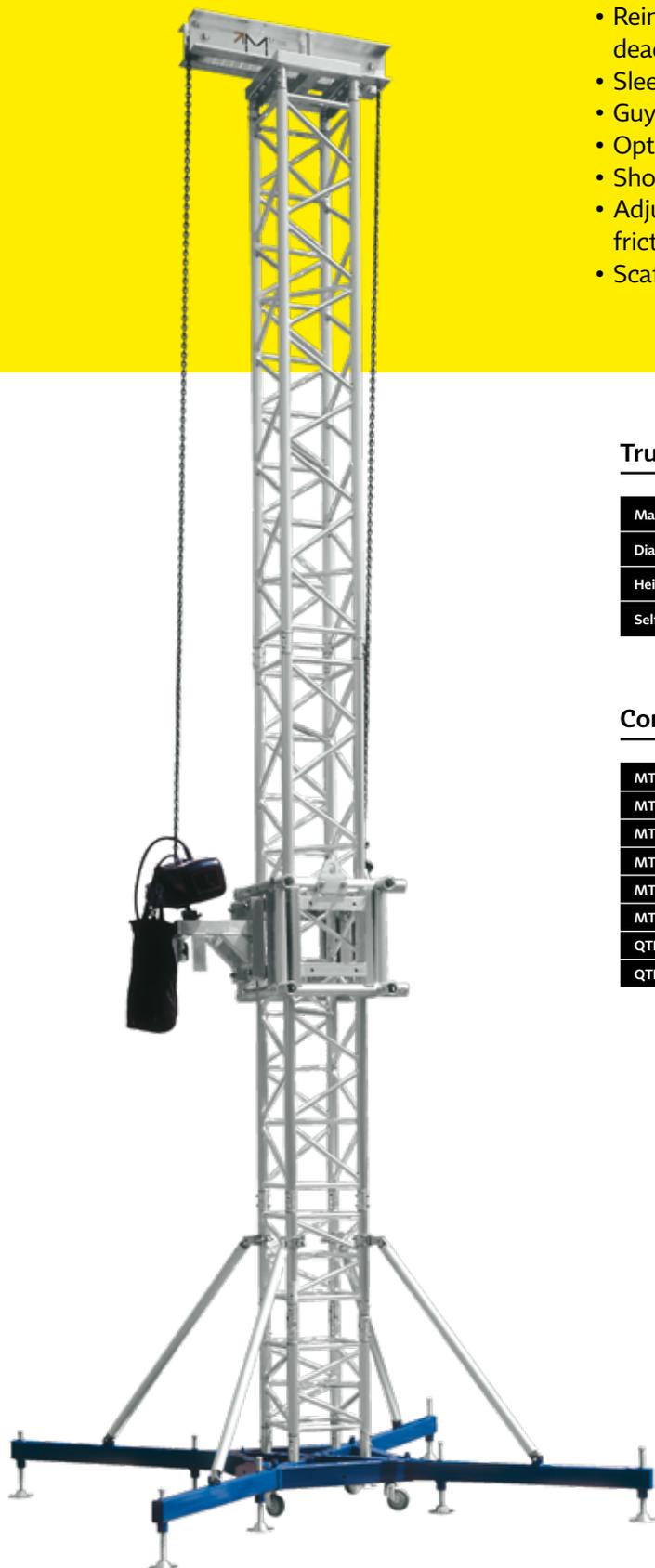
### Concrete Ballast Base MCBB

**Weight**  
500 (1102.31)

M290/M390 tower option  
MCBB 1250 kg also available

# MT2 tower

- Heavy-duty M390KT ladder truss series tower system - standard height of 12.5 m (41.0 ft)
- Sleeve block options for M400 & M520 & M950 ranges
- Reinforced head section with built-in feature for dead-hanging
- Sleeve block chain hoist connection bracket available
- Guy wire connection points using extra bolt-on hangers
- Optional tower erecting frame available
- Short or long outriggers (incl. stabilising brace) available
- Adjustable base feet with rubber pads for optimum friction
- Scaffold-type base feet available on request

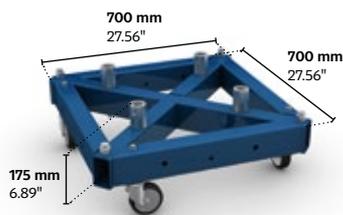


## Truss series M390KT

Main chords	mm	in	50×4 (2×0.16)
Diagonals	mm	in	25×3 (0.98×0.12)
Height	m	ft	12.5 (41)
Self-weight	kg	lbs	352 (776)

## Components for MT2 12.5 m (41.0 ft) tower

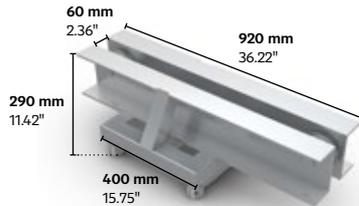
MT2-01B SteelBase	1 piece
MT2-02B HeadSection	1 piece
MT2-03 QTP/RTO SleeveBlock	1 piece
MT2-05 LongOutrigger	4 pieces
MT2-07B Hinges 4 pcs.	1 set
MT2-08 BracketForMotor Base	1 piece
QTKT500 0.5m	1 piece
QTKT3000 3m	4 pieces



### MT2-01B|SteelBase

Weight	
kg	42.00 (92.48)

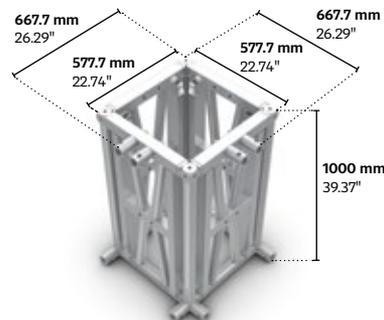
**Steel base**  
For use with M390KT QUATRO.  
Equipped with wheels for easy movement during set-up.



### MT2-02B|HeadSection

Weight	
kg	25.00 (55.05)

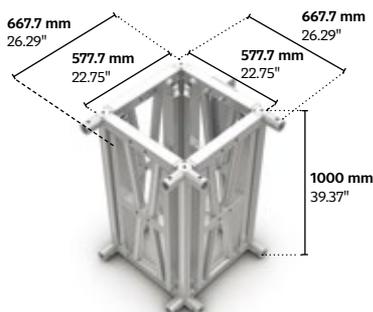
**Head section**  
Fitted with steel pulleys for 7-8 mm (0.28-0.31") chain.  
Alternative dimensions available after consultation.



### MT2-03|FTT|SleeveBlock

Weight	
kg	80.00 (176.37)

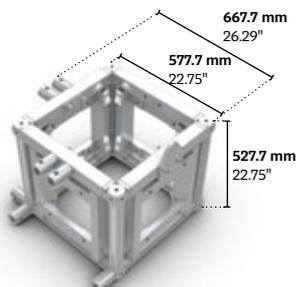
**Sleeve block FTT**  
Made with heavy-duty aluminium profiles connected with steel components.  
For use with M950 folding truss.



### MT2-03|RTTH|SleeveBlock

Weight	
kg	80.00 (176.37)

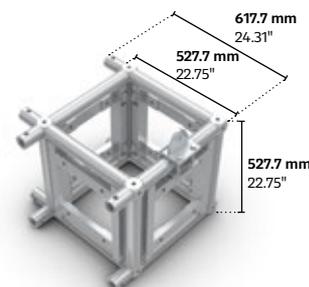
**Sleeve block RTT**  
Made with heavy-duty aluminium profiles connected with steel components.  
For use with rectangular M950.



### MT2-03|FTP|RTO|SleeveBlock

Weight	
kg	49.00 (107.90)

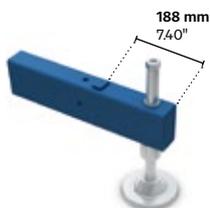
**Sleeve Block FTP**  
Made with heavy-duty aluminium profiles connected with steel components.  
For use with rectangular M400 and folding M520.



### MT2-03|QTP|RTO|SleeveBlock

Weight	
kg	49.00 (107.90)

**Sleeve block QTP**  
Made with heavy-duty aluminium profiles connected with steel components.  
For use with rectangular M400 and M520 QUATRO.



### MT2-04|ShortOutrigger

Weight	
kg	6.00 (13.21)

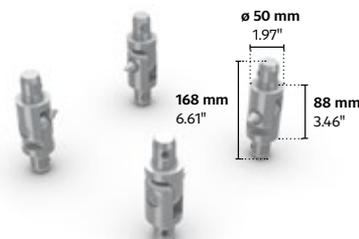
**Short outrigger**  
Adjustable spindles; rubber pads



### MT2-05|LongOutrigger

Weight	
kg	21.00 (46.24)

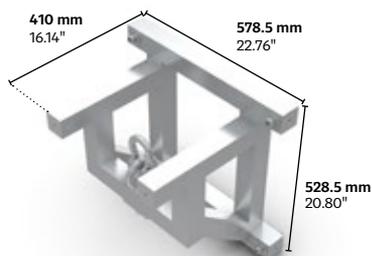
**Long outrigger**  
1.4 m (4.59') long, including adjustable spindles; rubber pads.



### MT2-07B|Hinges|4pcs

Weight	
kg	2.40 (5.25)

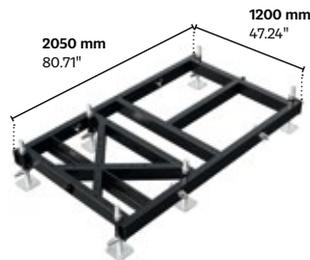
**Hinges**  
Used to connect the vertical tower elements and to allow for tilt-up assembly; set of 4 pcs



### MT2-09|BracketForMotor|Sleeve

Weight	
kg	16.00 (35.26)

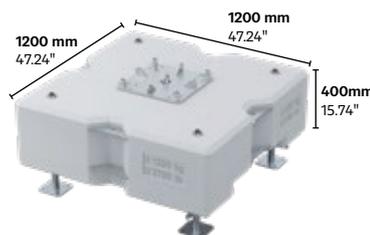
**Bracket for chain hoist**  
Used for electric chain hoist attachment to sleeve block to achieve max. loading.



### MT-IconBase-01|STEEL

Weight	
kg	156.00 (343.00)

**Footprint extendable by outriggers on front and/or rear side to up to 7980x1200 mm (314.17x47.25").**



### Concrete Ballast Base MCBB

Weight	
kg	1250 (2755)

**M290/M390 tower option**  
MCBB 500kg also available

# MT3 tower



- High-capacity M520PT ladder truss series tower system – standard height of 13.5 m (44.29 ft)
- Sleeve block options for M400, M520 and M950 ranges
- Reinforced head section with built-in feature for dead-hanging
- Sleeve block chain hoist connection bracket available
- Guy wire connection points using extra bolt-on hangers
- Optional tower erecting frame available
- Short or long outriggers (incl. stabilising braces) available
- Adjustable base feet with rubber pads for optimum friction
- Scaffold-type base feet available on request

### Truss series M520PT

Main chords	mm	in	60×6 (2.36×0.24)
Diagonals	mm	in	30×3 (1.18×0.12)
Height	m	ft	13.5 (44.3)
Self-weight	kg	lbs	576 (1270)

### Components for MT3 13.5 m (44.29 ft) tower

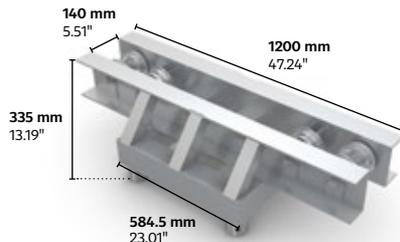
MT3-01 SteelBase	1 piece
MT3-02 HeadSection	1 piece
MT3-03 RTT SleeveBlock	1 piece
MT3-05 LongOutrigger	4 pieces
MT3-07 Hinges 4pcs	1 set
QTPT1000 1m	1 piece
QTPT3000 3m	4 pieces



### MT3-01|SteelBase

**Weight**  
 kg lbs **76.00 (167.35)**

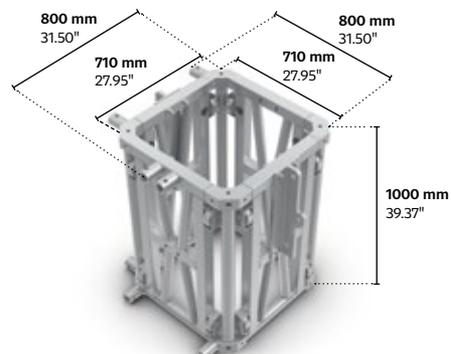
**Steel base**  
 For use with M520T QUATRO.  
 Equipped with wheels for easy movement during set-up.



### MT3-02|HeadSection

**Weight**  
 kg lbs **49.40 (108.78)**

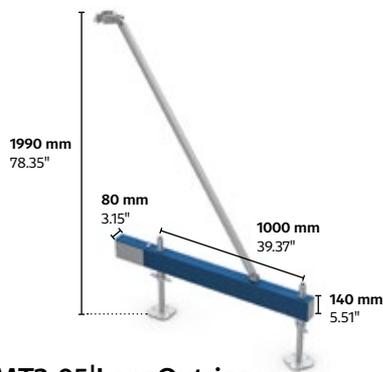
**Head section**  
 Fitted with steel pulleys for 7-8 mm (0.28-0.31\"/>
 Alternative dimensions available after consultation.



### MT3-03|RTT|SleeveBlock

**Weight**  
 kg lbs **112.00 (246.62)**

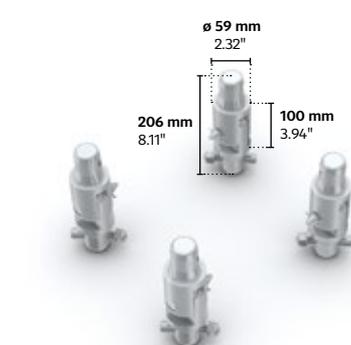
**Sleeve Block FTT**  
 Made with heavy-duty aluminium profiles connected with steel components.  
 For use with full M950 range.



### MT3-05|LongOutrigger

**Weight**  
 kg lbs **35.10 (77.29)**

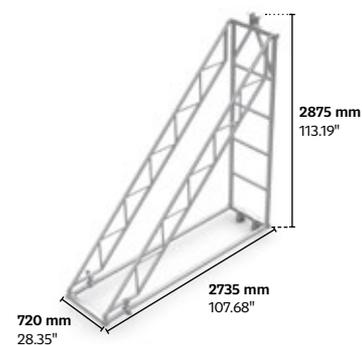
**Long outrigger**  
 1.4 m (4.59') long, including scaffold-type spindles.



### MT3-07|Hinges|4pcs

**Weight**  
 kg lbs **5.00 (11.02)**

**Hinges**  
 Used to connect the vertical tower pieces and to allow for tilt-up assembly; set of 4 pcs.



### MT3-11|Helper

**Weight**  
 kg lbs **81.00 (178.52)**

Used for assistance in elevating the tower.



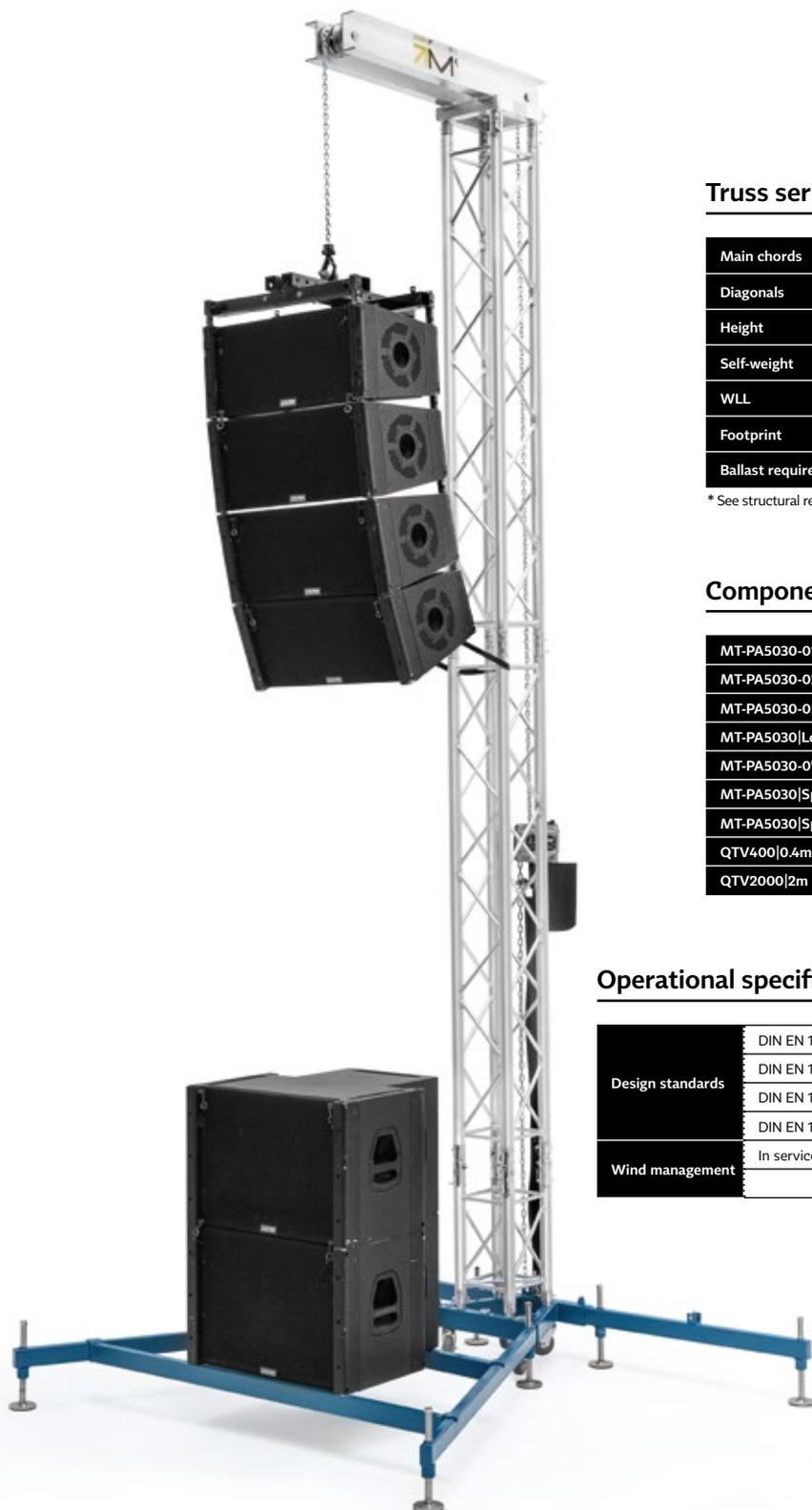
### MT3-10|FixSet

**Weight**  
 kg lbs **10.00 (22.20)**

Used over MT3 mast top to secure the sleeve block.

# MT-PA5030 PA Fly Tower

- Compact, heavy-duty M290 truss series
- Safe working load of 300 kg (660 lbs) rated according to DGUV 17/BGV C1
- Lifting operations with either electrical or manual chain hoist
- Head section equipped with double pulley system for attaching of safety chain or safety wire parallel to lifting chain
- Multiple attachment points on base for connecting hoists and safeties



## Truss series M290V

Main chords	mm	in	48×3 (1.89×0.12)
Diagonals	mm	in	16×2 (0.62×0.08)
Height	m	ft	5 (16.4)
Self-weight	kg	lbs	150 (331)
WLL	kg	lbs	300 (660)
Footprint	m	ft	2.5×2 (8.2×6.6)
Ballast required	kg	lbs	64–153 (141,1–337,3)

\* See structural report

## Components for MT-PA5030 5 m (16.40 ft) tower

MT-PA5030-01 SteelBase	1 piece
MT-PA5030-02 HeadSection	1 piece
MT-PA5030-05 LongOutrigger	2 pieces
MT-PA5030 Leg	2 pieces
MT-PA5030-07B Hinges 4pcs	1 set
MT-PA5030 SpacerColor960	1 piece
MT-PA5030 SpacerColor1620	1 piece
QTV400 0.4m	1 piece
QTV2000 2m	2 pieces

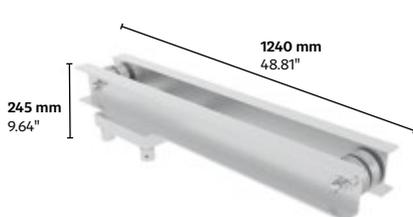
## Operational specifications

Design standards	DIN EN 13814	Fairground and amusement park machinery and structures
	DIN EN 1991 / Eurocode 1	Actions on structures
	DIN EN 1999 / Eurocode 9	Design of aluminium structures
	DIN EN 1993 / Eurocode 3	Design of steel structures
Wind management	In service	20 m/s – 72 km/h – 45 mph (max. gust wind speed)
		PA to be removed in above in-service wind speed



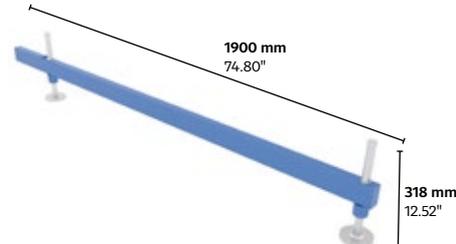
### MT-PA5030-01|SteelBase

**Weight**  
 kg lbs **16.9 (37.3)**  
 Steel base with wheels.



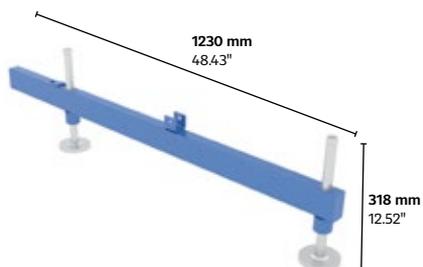
### MT-PA5030-02|HeadSection

**Weight**  
 kg lbs **23.5 (51.8)**  
 Fitted with steel pulleys for 7-8 mm (0.28-0.31") chain.



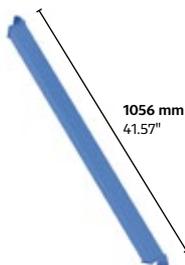
### MT-PA5030|Leg

**Weight**  
 kg lbs **18.4 (40.6)**  
 Including adjustable spindles.



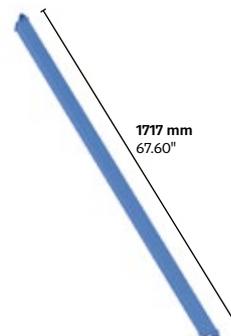
### MT-PA5030-05|LongOutrigger

**Weight**  
 kg lbs **12.3 (27.1)**  
 Including adjustable spindles.



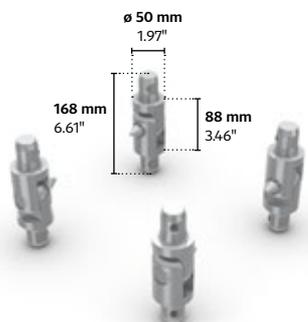
### MT-PA5030|SpacerColor960

**Weight**  
 kg lbs **6.3 (13.9)**  
 Spacer used as ballast base.



### MT-PA5030|SpacerColor1620

**Weight**  
 kg lbs **10.4 (22.9)**  
 Spacer used as ballast base.

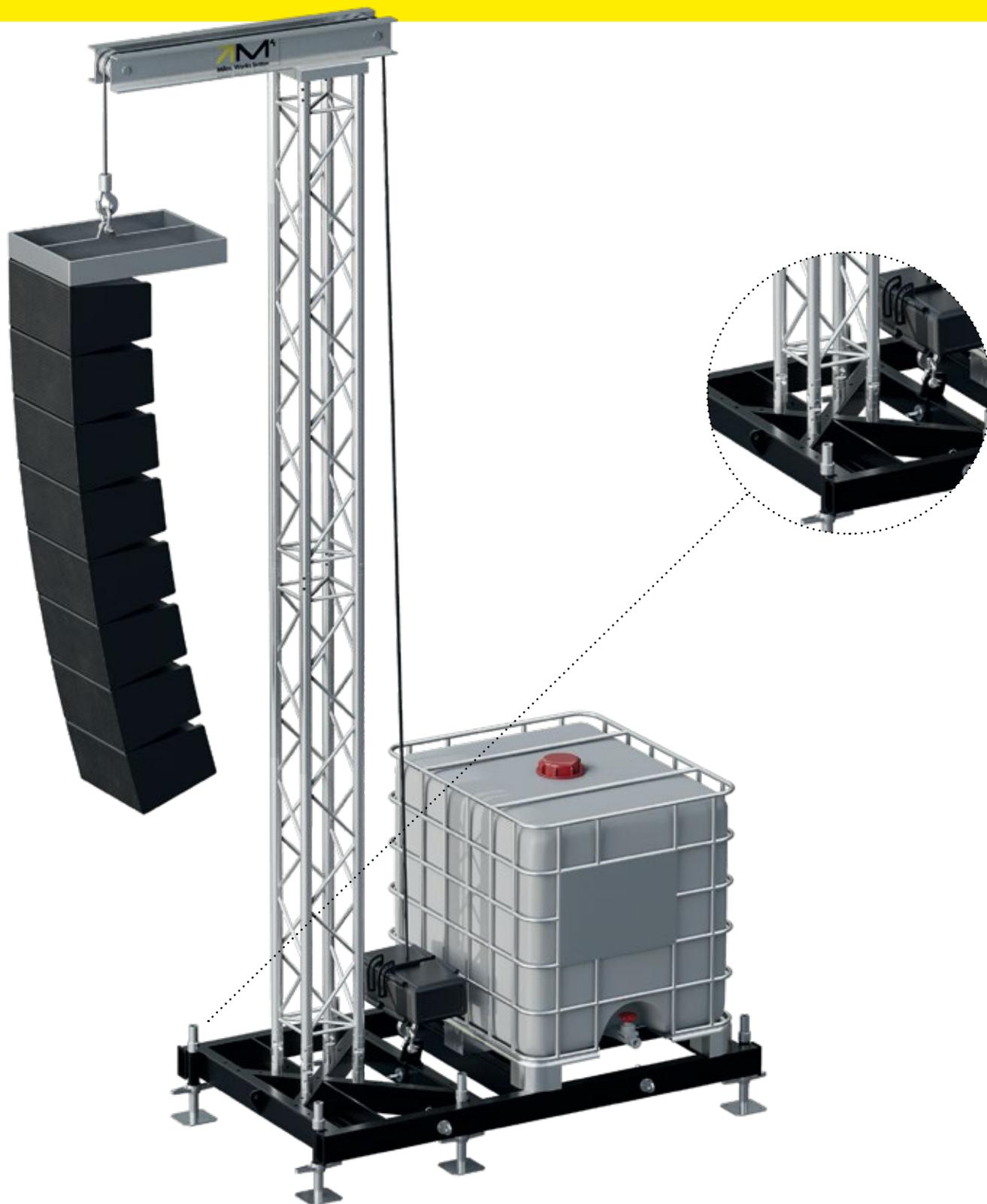


### MT1-07B|SetHinge|4pcs

**Weight**  
 kg lbs **2.40 (5.28)**  
**Hinges**  
 Used to connect the vertical tower pieces and to allow for tilt-up assembly; set of 4 pcs.

# MT-ICON-PA

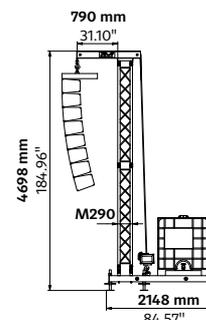
- Robust and stable thanks to steel MT-IconBase
- Ensures effective deployment of ballast
- Multiple attachment points on base
- Compact footprint
- Manual or electric hoist can be used on head section or icon base connection
- Erecting helper available
- Spindle feet with large contact surface
- Quick and easy assembly



## MT-ICON-PA5040

MT-IconBase-01 STEEL	1 piece
MT-IconBase-07B Hinges 4pcs	1 piece
MT-IconBase-08B FemaleCon 4pcs	1 piece
MT-IconBaseHanger	1 piece
MT-PA5030-02 HeadSection	1 piece
Truss M290	4 m (13.12 ft)

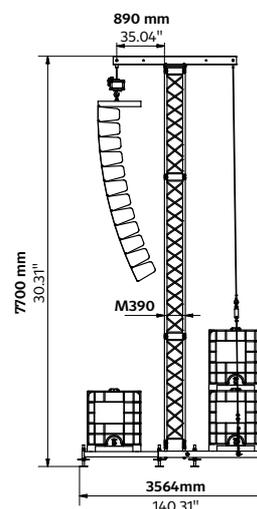
WLL	kg	lbs	400 (881.85)
Self weight	kg	lbs	220 (485.01)
Height	m	ft	5 (16.40)
Footprint	m	ft	2.15x1.2 (7.05x3.93)
Ballast required	kg	lbs	1000 (2204.62)



## MT-ICON-PA8080

MT-IconBase-01 STEEL	1 piece
MT-IconBaseLongOutrigger-05 STEEL	2 pieces
MT-IconBase-07B Hinges 4pcs	1 piece
MT-IconBase-08B FemaleCon 4pcs	1 piece
MT-Icon-PA8080-10 BallastFixSet	1 piece
MT-Icon-PA8080-02 Headsection	1 piece
Truss M390 Heavy-Duty	7 m (22.96 ft)

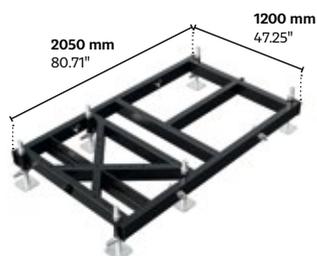
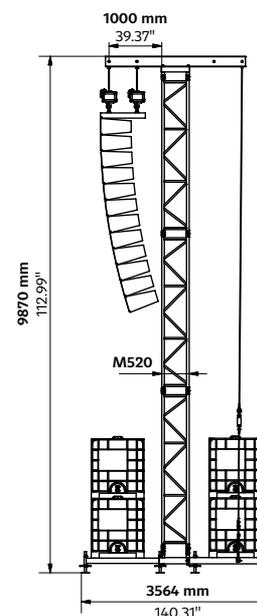
WLL	kg	lbs	800 (1763.69)
Self weight	kg	lbs	325 (716.50)
Height	m	ft	8 (26.24)
Footprint	m	ft	3.5x1.2 (10.33x3.93)
Ballast required	kg	lbs	3000 (6613.86)



## MT-ICON-PA100100

MT-IconBase-01 STEEL	1 piece
MT-IconBaseLongOutrigger-05 STEEL	2 pieces
MT-IconBase-07O Hinges 4pcs	1 piece
MT-IconBase-08O FemaleCon 4pcs	1 piece
MT-Icon-PA100100-10 BallastFixSet	1 piece
MT-Icon-PA100100-02 Headsection M520	1 piece
Truss M520	9 m (29.52 ft)

WLL	kg	lbs	1000 (2204.62)
Self weight	kg	lbs	425 (936.90)
Height	m	ft	10 (32.80)
Footprint	m	ft	3.5x1.2 (10.33x3.93)
Ballast required	kg	lbs	4800 (10582)



### MT-IconBase-01|STEEL

Weight	kg	lbs	156.00 (343.00)
Footprint extendable by outriggers on front and/or rear side to up to 7980x1200 mm (314.17x47.24").			



### MT- Icon Base Long Outrigger

Weight	kg	lbs	21.00 (46.29)
Outrigger extension arm			



### MT- Icon Base Hanger

Weight	kg	lbs	3.2 (7.05)
Chain hoist bracket			

# MRT1 PA Fly Tower



- Compact, heavy-duty M290 truss series
- Lifting operations with either electrical or manual chain hoist
- Head section equipped with double pulley system for attaching safety chain or safety wire parallel to lifting chain
- Multiple attachment points on base for connecting hoists and safeties

## Truss series M290V

Main chords	mm	in	48×3 (1.89×0.12)
Diagonals	mm	in	16×2 (0.62×0.08)
Height	m	ft	8.00 (26.30)
Self-weight	kg	lbs	178 (392)
WLL	kg	lbs	750 (1653)

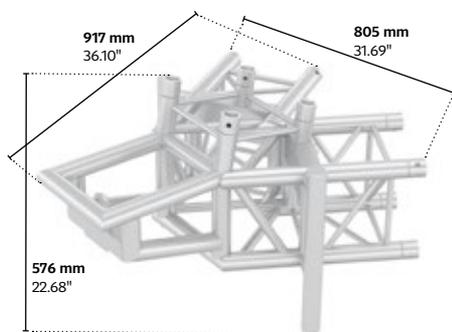
## Components for MRT1 8 m (26.25 ft) tower

MRT1-01B BaseCorner	1 piece
MRT1-02B HeadSection	1 piece
MRT1-03B ScrewjackAdapter	2 pieces
MRT1-04 StabilizerHorizontalR	1 piece
MRT1-04 StabilizerHorizontalL	1 piece
MRT1-05 StabilizerVertical	1 piece
MRT1-06 StabilizerTube	2 pieces
MRT1-07B Hinges 4pcs	1 set
ScrewjackTR38×1-590	6 pieces
QTV1000 1m	1 piece
QTV3000 3m	4 pieces

## Operational specifications

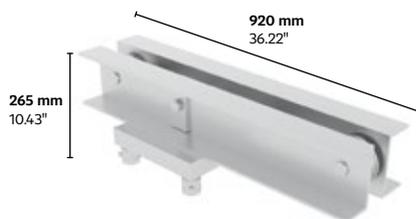
Design standards	DIN EN 13814	Fairground and amusement park machinery and structures
	DIN EN 1991 / Eurocode 1	Actions on structures
	DIN EN 1999 / Eurocode 9	Design of aluminium structures
	DIN EN 1993 / Eurocode 3	Design of steel structures
Wind management	In service	17.8 m/s – 64 km/h – 40 mph (max. gust wind speed)
	Out of service	28 m/s – 100 km/h – 62 mph (max. gust wind speed)

Ballast	750 kg payload with 3.0 m <sup>2</sup> front size and 2.5 m <sup>2</sup> side size → ballast 250 kg per end of long legs + 320 kg on back side
	750 kg payload with 3.0 m <sup>2</sup> front size and 2.5 m <sup>2</sup> side size → ballast 1000 kg centrally on a cross beam placed on top of the legs
	400 kg payload with 1.5 m <sup>2</sup> front size and 1.0 m <sup>2</sup> side size → ballast 500 kg centrally on a cross beam placed on top of the legs



### MRT1-01B|BaseCorner

<b>Weight</b>
kg lbs <b>10.8 (23.8)</b>
For use with M290 series. Equipped with bracket for chain hoist.



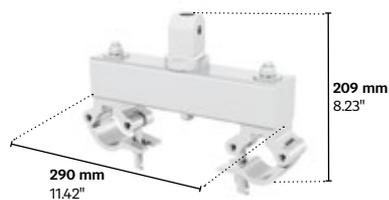
### MRT1-02B|HeadSection

<b>Weight</b>
kg lbs <b>14.5 (32)</b>
Fitted with steel pulleys for 7-8 mm (0.28-0.31\"/>



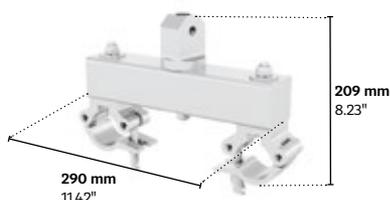
### MRT1-03B|ScrewjackAdapter

<b>Weight</b>
kg lbs <b>6.5 (14.3)</b>
Adapter stand for screw jacks.



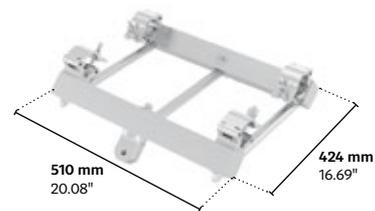
### MRT1-04|StabilizerHorizontalR

<b>Weight</b>
kg lbs <b>2.6 (5.7)</b>
Right horizontal stabiliser attachment.



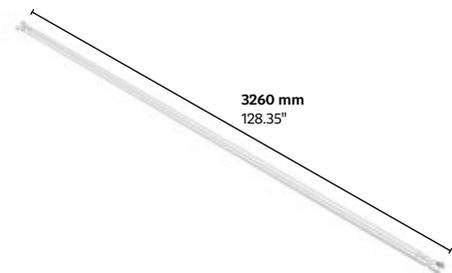
### MRT1-04|StabilizerHorizontalL

<b>Weight</b>
kg lbs <b>2.6 (5.7)</b>
Left horizontal stabiliser attachment.



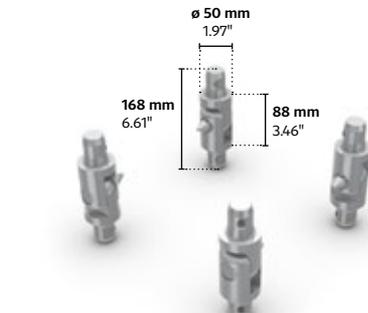
### MRT1-05|StabilizerVertical

<b>Weight</b>
kg lbs <b>7.5 (16.5)</b>
Vertical stabiliser attachment.



### MRT1-06|StabilizerTube

<b>Weight</b>
kg lbs <b>10.8 (23.8)</b>
Stabiliser tube 60x6 mm (2.36x0.24\"/>



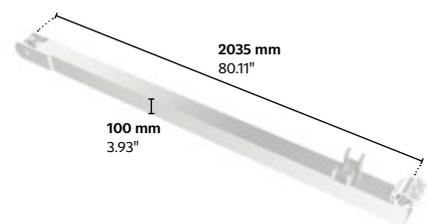
### MRT1-07B|Hinges|4pcs

<b>Weight</b>
kg lbs <b>2.40 (5.28)</b>
<b>Hinges</b> Used to connect the vertical tower elements and to allow for tilt-up assembly; set of 4 pcs.



### ScrewjackTR38x1-590

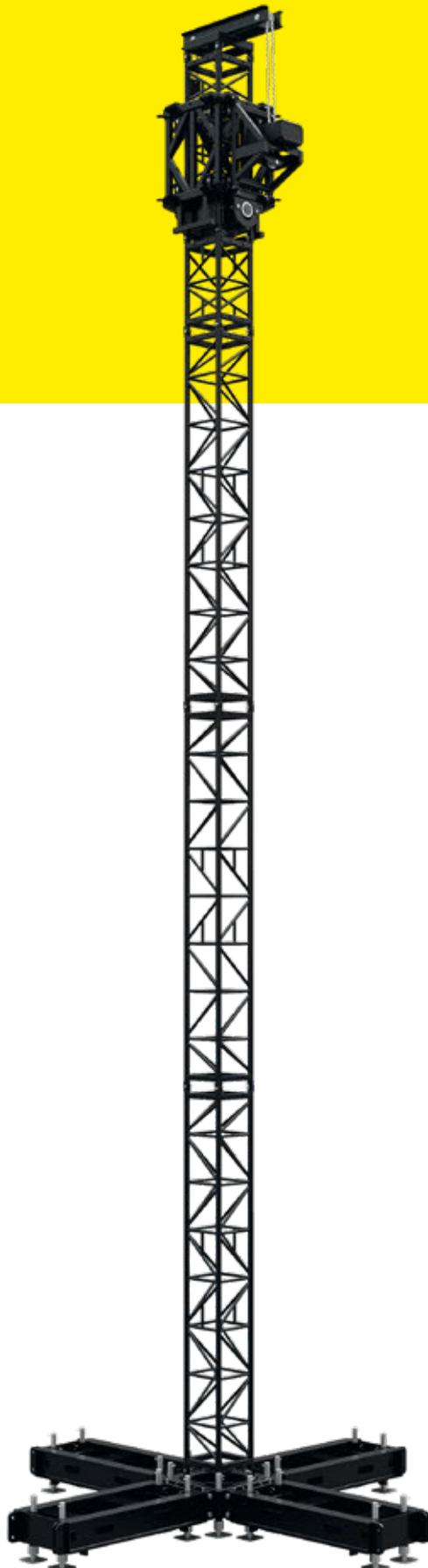
<b>Weight</b>
kg lbs <b>3.2 (7.00)</b>
Screw jack.



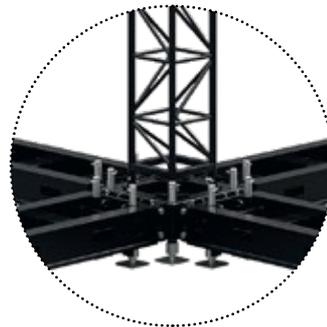
### MRT1 Helper

<b>Weight</b>
kg lbs <b>21.00 (46.29)</b>
Used for assistance in elevating the tower.

# S-MT-P Steel Tower



- Constructed with MILOS S-QTPT ultra-high-strength steel truss (530×530 mm: 35 m span with 69 kg/m UDL)
- Steel head section with aluminium wheels and heavy-duty bearings
- Integrated steel base with outriggers that interconnect towers in ground support systems or outriggers used by themselves for self-standing towers
- Optimised dimensions for packaging and/or nesting in trucks
- Pinned connectors for increased safety and strength
- End frames equipped with lateral connection options
- Locking unit with capacity a capacity of 45.3 t

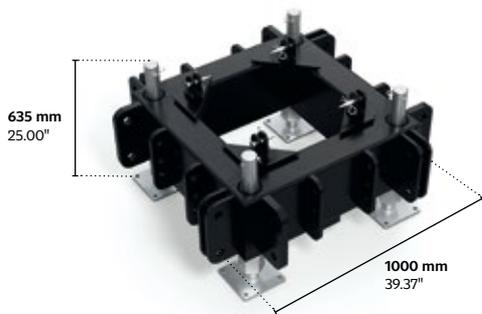


## S-MT-P-16 Steel Tower

Main chords	mm	in	60.3×4 (2.37×0.16)
Diagonals	mm	in	33.7×2.6 (1.33×0.10)
Height	m	ft	16.00 (50.49)
Self-weight	kg	lbs	3500 (7716.18)

## Components for Tower

S-MT-P-01-Base	1 piece
S-MT-P-02-Head	1 piece
S-MT-P-03-Sleeve	1 piece
S-MT-Q-05-Outrigger2000	4 pieces
S-MT-P-Bracket	1 piece
S-MT-P-10-Locking	1 piece
S-QTPT 4000	3 pieces
S-QTPT 1000	2 pieces

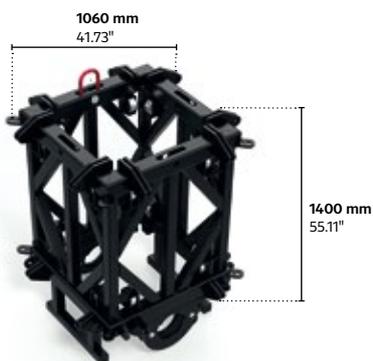


### S-MT-P-01|Base

**Weight**

kg lbs **390 (859.80)**

A robust steel base that is compatible with our steel S-QTPT truss. It includes large steel spindles and high-grade steel outrigger connections on all sides for providing extra strength and stability to the tower.

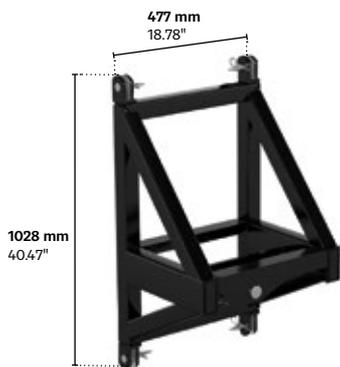


### S-MT-P-03|Sleeve

**Weight**

kg lbs **380 (837.75)**

A four-way, heavy-duty steel sleeve block for use with our S-QTPT Tower.

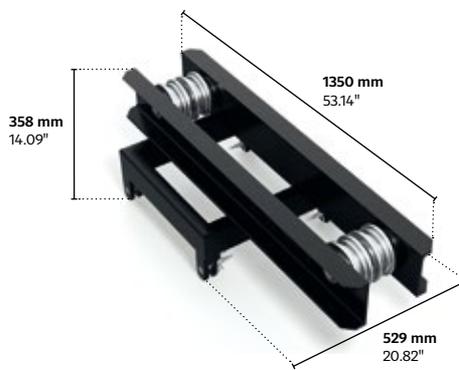


### S-MT-P-09|Bracket

**Weight**

kg lbs **70 (154.32)**

A universal chain hoist attachment point for safely and easily attaching up to 2.5 metric-tonne chain hoists to the sleeve block.

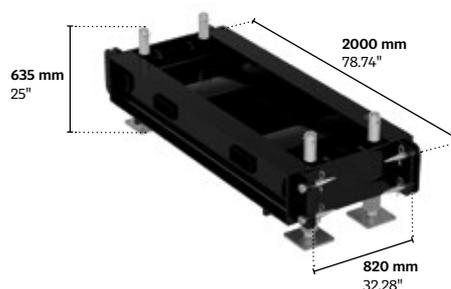


### S-MT-P-02|HeadSection

**Weight**

kg lbs **100 (220.46)**

A steel tower top section fitted with a double aluminium pulley system equipped with heavy-duty bearings.

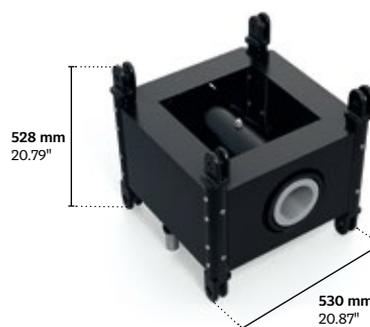


### S-MT-Q-05|Outrigger2000

**Weight**

kg lbs **440 (970.03)**

This heavy-duty steel outrigger provides extra stability for your steel towers. It comes with four large spindles and features a wide range of lengths for added flexibility for constructing stable grids.



### S-MT-P-10|LockingUnit

**Weight**

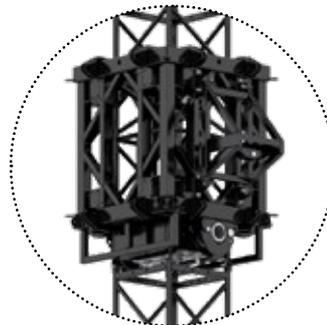
kg lbs **200 (440.92)**

A tower truss component that features a mechanical locking system for use with our sleeve block. Its telescopic tube and easily accessible lever system lock the sleeve block down tight to offer reliable protection against downward forces of up to 45 metric tonnes as well as protection against lift.

# S-MT-Q Steel Tower



- Constructed from MILOS S-QTQT ultra-high-strength steel truss (780×780 mm, 40 m span with 76 kg/m UDL)
- Steel sleeve block, a steel head section with aluminium wheels equipped with heavy-duty bearings, a unique locking unit protecting the sleeve block/mother grid against drop and lift
- When used as a 20 m high tower in a guy-wire-braced ground support, the load capacity is up to 70.1 t, or up to 45.3 t when used with a locking unit
- Integrated ladder for easy climbing
- End frames equipped with lateral connection options

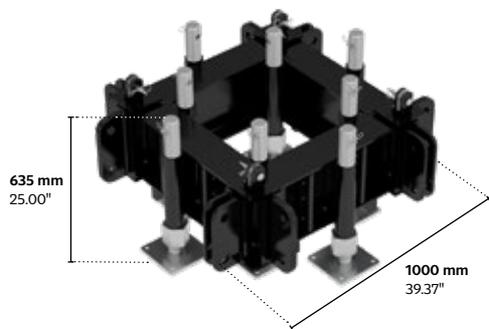


## S-MT-Q Steel Tower

Main chords	mm	in	60.3×4 (2.37×0.16)
Diagonals	mm	in	48.3×3.2 (1.9×0.1)
Height	m	ft	22.5 (73.82)
Self-weight	kg	lbs	6100 (13 448)

## Components for Tower

S-MT-Q-01-Base	1 piece
S-MT-Q-02-Head	1 piece
S-MT-Q-03-Sleeve	1 piece
S-MT-Q-05-Outrigger4000	4 pieces
S-MT-Q-09-Bracket	1 piece
S-MT-Q-10-Lock_450	1 piece
S-QTQT5000 5m	4 pieces
S-QTQT2000 2m	1 piece



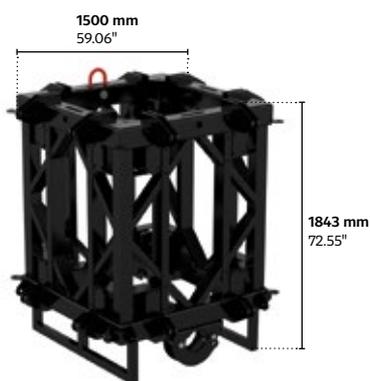
### S-MT-Q-01|Base

**Weight**

kg lbs

**495 (1091.28)**

A robust steel base that is compatible with our steel S-QTQT truss. It includes 8 large steel spindles and high-grade steel outrigger connections on all sides for providing extra strength and stability to the tower.



### S-MT-Q-03|Sleeve

**Weight**

kg lbs

**1050 (2314.85)**

A four-way, heavy-duty steel sleeve block for use with our S-QTQT Tower. Can be attached to an S-RTW truss or S-RTD truss using our S-MT-Q-03 Forks set.



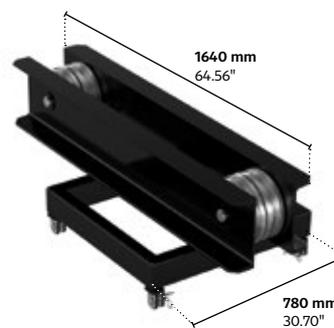
### S-MT-Q-09|Bracket

**Weight**

kg lbs

**85 (187.39)**

A universal chain hoist attachment point for safely and easily attaching up to 2.5 metric-tonne chain hoists to the sleeve block. It has the same axis dimensions as S-RTD steel truss, fits inside S-RTW steel truss and enables up to 10 metric tonnes to be lifted using a double-reeve set-up.



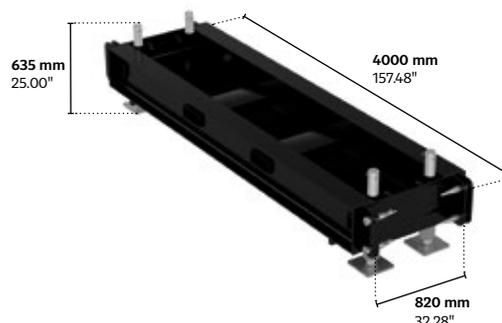
### S-MT-Q-02|HeadSection

**Weight**

kg lbs

**260 (573.20)**

A steel tower top section fitted with a double aluminium pulley system equipped with heavy-duty bearings.



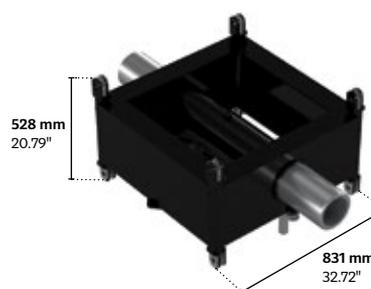
### S-MT-Q-05|Outrigger4000

**Weight**

kg lbs

**640 (1410)**

This heavy-duty steel outrigger provides extra stability for your steel towers. It comes with four large spindles and features a wide range of lengths for added flexibility for constructing stable grids.



### S-MT-Q-10|LockingUnit

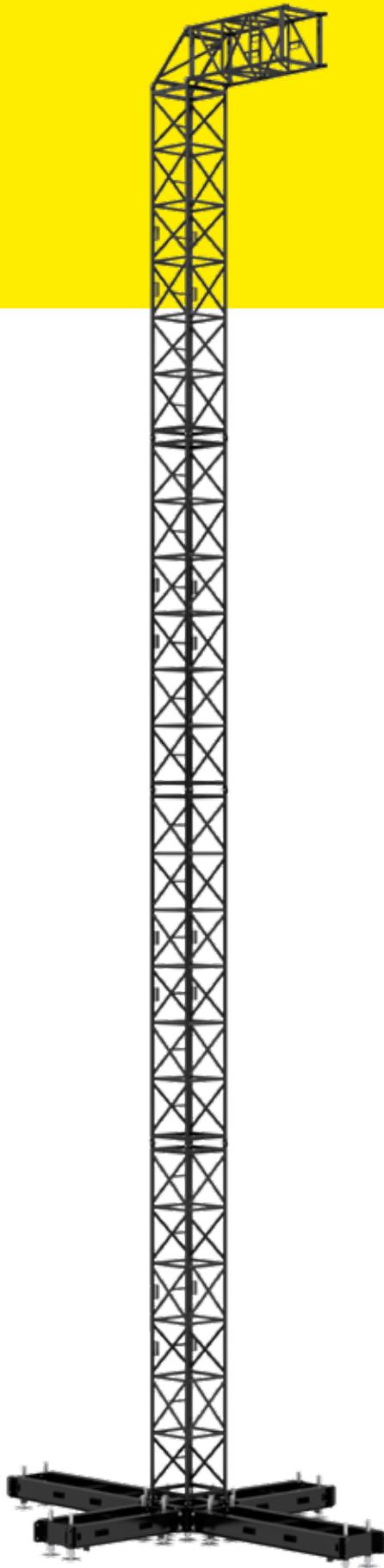
**Weight**

kg lbs

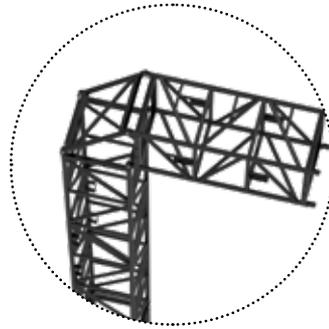
**279 (615.10)**

A tower truss component that features a mechanical locking system for use with our sleeve block. Its telescopic tube and easily accessible lever system lock the sleeve block down tight to offer reliable protection against downward forces of up to 45 metric tonnes as well as protection against lift.

# S-MT-PA-Steel PA Tower



- Constructed from MILOS S-QTQT ultra-high-strength steel truss (780×780 mm; 40 m spans with 76 kg/m UDL)
- Fly up to 2.5 t PA Systems up to 20 m high
- Integrated steel base with outriggers (3 m outriggers at front/back and 2 m on each side)
- Steel base lugs feature a variety of guy wire attachment points
- Multiple attachment points on base for connecting hoists and safeties



## Size and weight capacities:

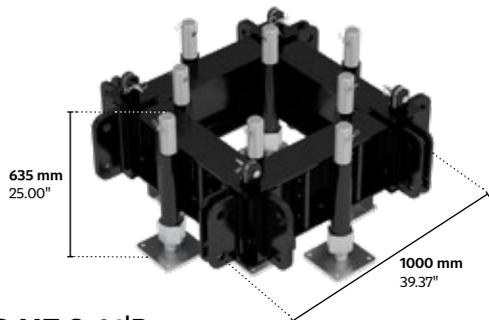
Front face of PA:	m	ft	10 m <sup>2</sup> (107.64 ft <sup>2</sup> )
Side face of PA:	m	ft	5 m <sup>2</sup> max. (53.82 ft <sup>2</sup> )
Loading capacity:	kg	lbs	2500 (5511)

## S-MT-PA

Main chords	mm	in	60.3×4 (2.37×0.16)
Diagonals	mm	in	48.3×3.2 (1.9×0.1)
Height	m	ft	21.3 (69.88)
Self-weight	kg	lbs	3850 (8487)

## Components for tower

S-MT-Q-01 Base	1 piece
S-MT-Q-05 Outrigger2000	2 pieces
S-MT-Q-05 Outrigger3000	2 pieces
S-QTQT5000 5m	4 pieces
S-BTQT1018sp	1 piece
S-QTQT2000 2m	1 piece



**S-MT-Q-01|Base**

**Weight**

kg lbs

**495 (1091.28)**

A robust steel base that is compatible with our steel S-QTQT truss. It includes 8 large steel spindles and high-grade steel outrigger connections on all sides for providing extra strength and stability to the tower.



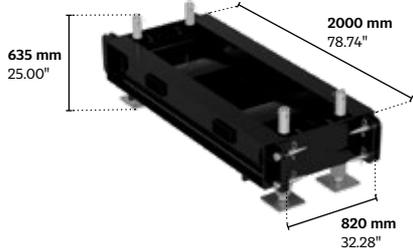
**S-BTQT1018**

**Weight**

kg lbs

**35 (77.16)**

The S-BTQT1018sp provides reliable support for the cantilever on the Steel PA Tower.



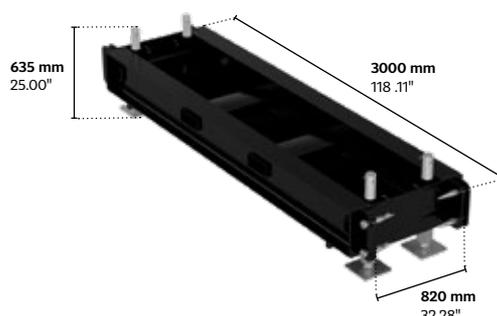
**S-MT-Q-05|Outrigger2000**

**Weight**

kg lbs

**440 (970.03)**

This heavy-duty steel outrigger provides extra stability for your steel towers. It comes with four large spindles and features a wide range of lengths for added flexibility for constructing stable grids.



**S-MT-Q-05|Outrigger3000**

**Weight**

kg lbs

**540 (1190.47)**

This heavy-duty steel outrigger provides extra stability for your steel towers. It comes with four large spindles and features a wide range of lengths for added flexibility for constructing stable grids.



# LED screen structures

Raise your loads

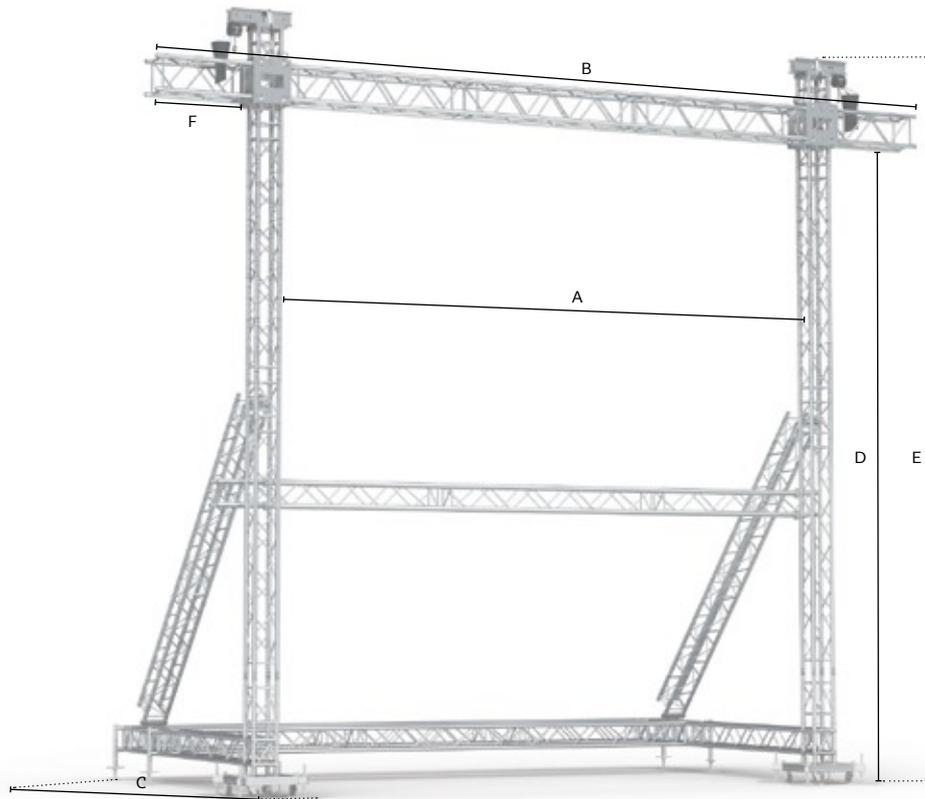




Use QR code  
for full range

# LSGO LED screen structure

- Compact, self-climbing LED tower with integrated ballast platform
- MT1 towers with central M390 bridge & M290 rear stabilising base frame
- Obstruction-free viewing for audience
- Can be operated with manual chain block or electric chain hoist
- Fast connection for quick, simple and secure assembly
- Full structural calculation report and build manual available
- Cantilever line array arms



## Technical specifications

		LED screen size >	6.5×7m (21.32×22.97 ft)
Dimensions	A	Internal width	6.65 m (21.82 ft)
	B	Overall external width	9.39 m (30.81 ft)
	C	Overall external depth	4.48 m (14.70 ft)
	D	Clearance	7.08 m (23.23 ft)
	E	Overall height	8.03 m (26.35 ft)
	F	PA wing – internal width	1.07 m (3.51 ft)

## Loading capacity

		LED screen size >	6.5×7m (21.32×22.97 ft)
Loading capacity	LED Screen	UDL	250 kg/m (168 lbs/ft)
		Max. total load	1500 kg (3306 lbs)
	PA wing	Point load	250 kg (551 lbs)
		* See structural report for exact load positioning	



## Operational specifications

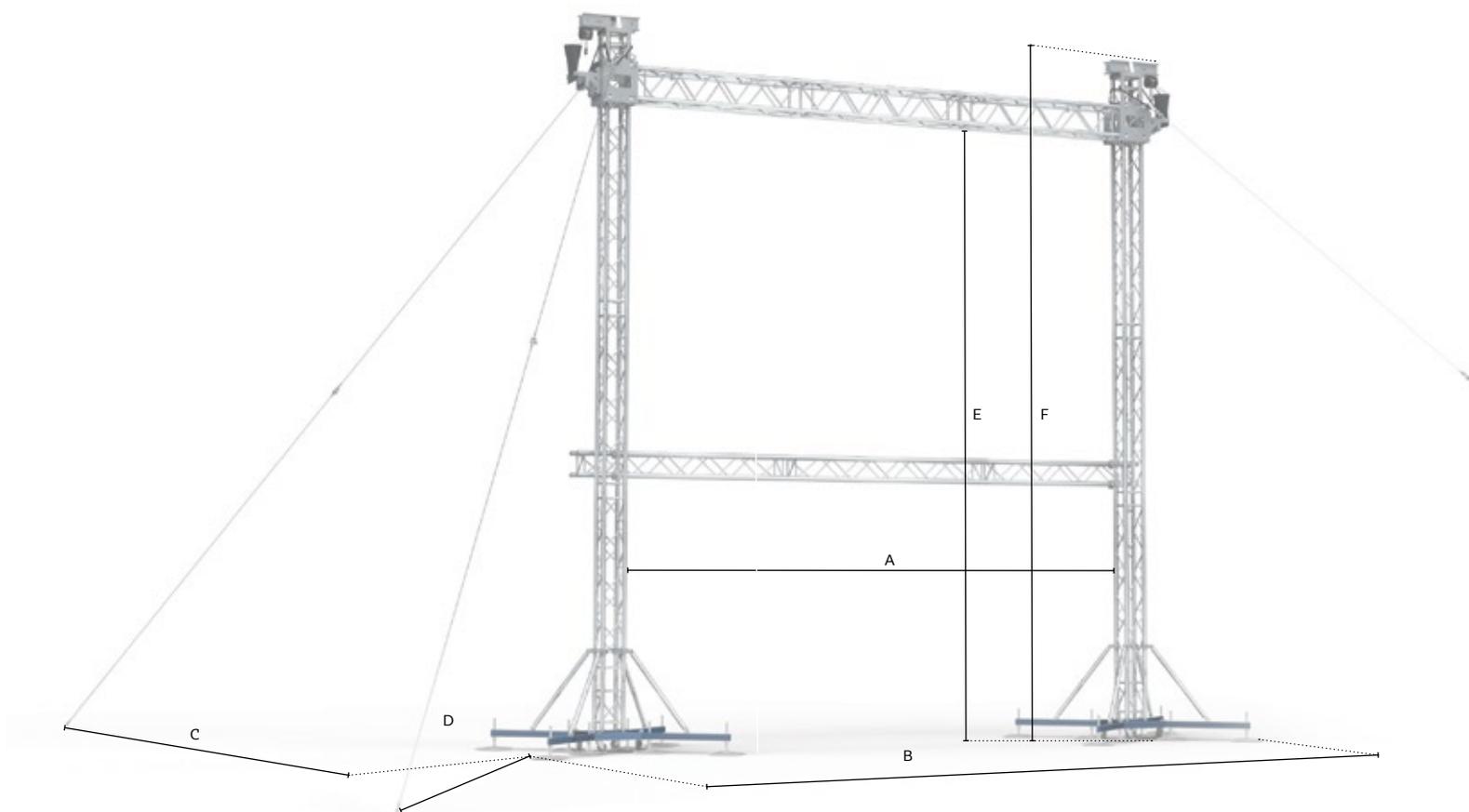
<b>Design standards</b>	DIN EN 13814 DIN EN 1991 / Eurocode 1 DIN EN 1999 / Eurocode 9 DIN EN 1993 / Eurocode 3 • All of our structures are produced under EN 1090 EXC2 as standard and include the necessary guy wires, instruction manual and engineering report	Fairground and amusement park machinery and structures Actions on structures / wind Design of aluminium structures Design of steel structures
<b>Wind management</b>	In service *Above in-service wind speed; equipment to be removed and screen lowered to ground and supported at top by horizontal truss connected to towers at height of stabiliser truss Out of service	17.8 m/s – 64 km/h – 40 mph (max. gust wind speed) 27.0 m/s – 100 km/h – 62 mph (max. gust wind speed)
<b>Ballast</b>	2× 900kg / 1982lbs placed at back side cross trusses, as close as possible to the sides If screen weight is lower than 1500kg / 3306lbs, 50% of the difference shall be placed on each front tower base	
<b>Customized</b>	• Customisation, i.e. truss configuration or alternative dimensions, on request • Always verify your screen dimensions, weight and rigging with MILOS	

## Transportation data

	<b>LED screen size &gt;</b>	<b>6.5×7 m (21.31×22.97 ft)</b>
<b>Self-weight</b>	* Exact self-weight depends on configuration	<b>652 kg (1436 lbs)</b>
<b>Transport volume</b>	* Packed in cardboard boxes and bubble foil	<b>8 m³ (282 ft³)</b>

# LSG1 LED screen structures

- MT Tower LED Screen Support solution
- Wind management plan does not require disassembling the LED screen
- Self-climbing towers with electric or manual hoists
- Fast connection for quick, simple and secure assembly
- Cheapest LSG concept available

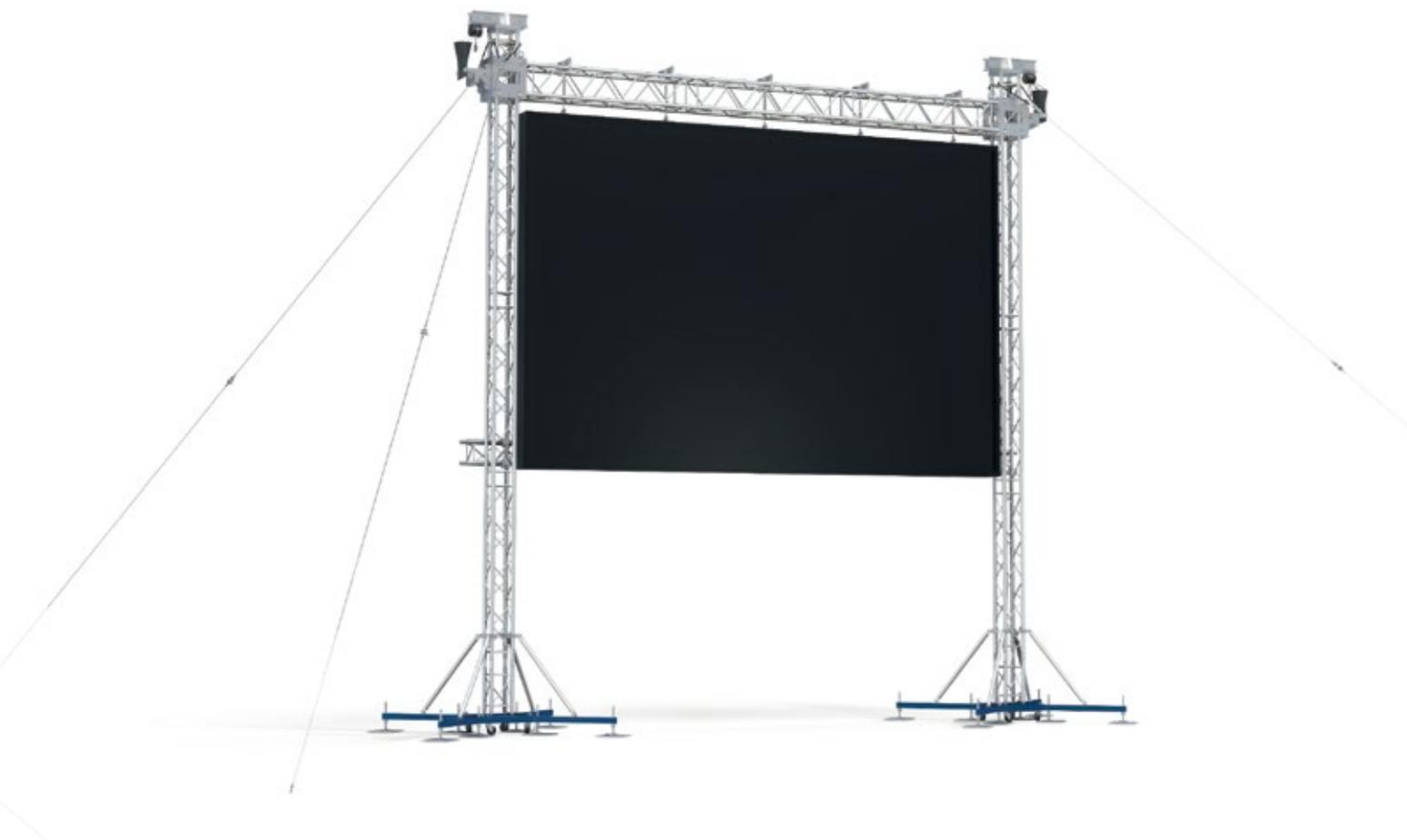


## Technical specifications

		LED screen size >	6.5×7.5m (21.32×24.60 ft)	7.5×7.5 m (24.60×24.60 ft)
Dimensions	A	Internal width	6.66 m (21.85 ft)	7.65 m (25.09 ft)
	B	External width	8.99 m (29.49 ft)	9.99 m (32.78 ft)
	C	Depth of set-up area incl. guy wires	19.75 m (64.80 ft)	19.75 m (64.80 ft)
	D	Depth of set-up area incl. guy wires	16.10 m (52.82 ft)	16.10 m (52.82 ft)
	E	Clearance	7.00 m (22.96 ft)	7.00 m (22.96 ft)
	F	Overall height	8.05 m (26.41 ft)	8.05 m (26.41 ft)

## Loading capacity

		LED screen size >	6.5×7.5m (21.32×24.60 ft)	7.5×7.5 m (24.60×24.60 ft)
Loading capacity	LED screen	4× point loads equally divided	625 kg (1377 lbs)	625 kg (1377 lbs)
		Max. total load	2500 kg (5511 lbs)	2500 kg (5511 lbs)
		* See structural report for exact load positioning		



## Operational specifications

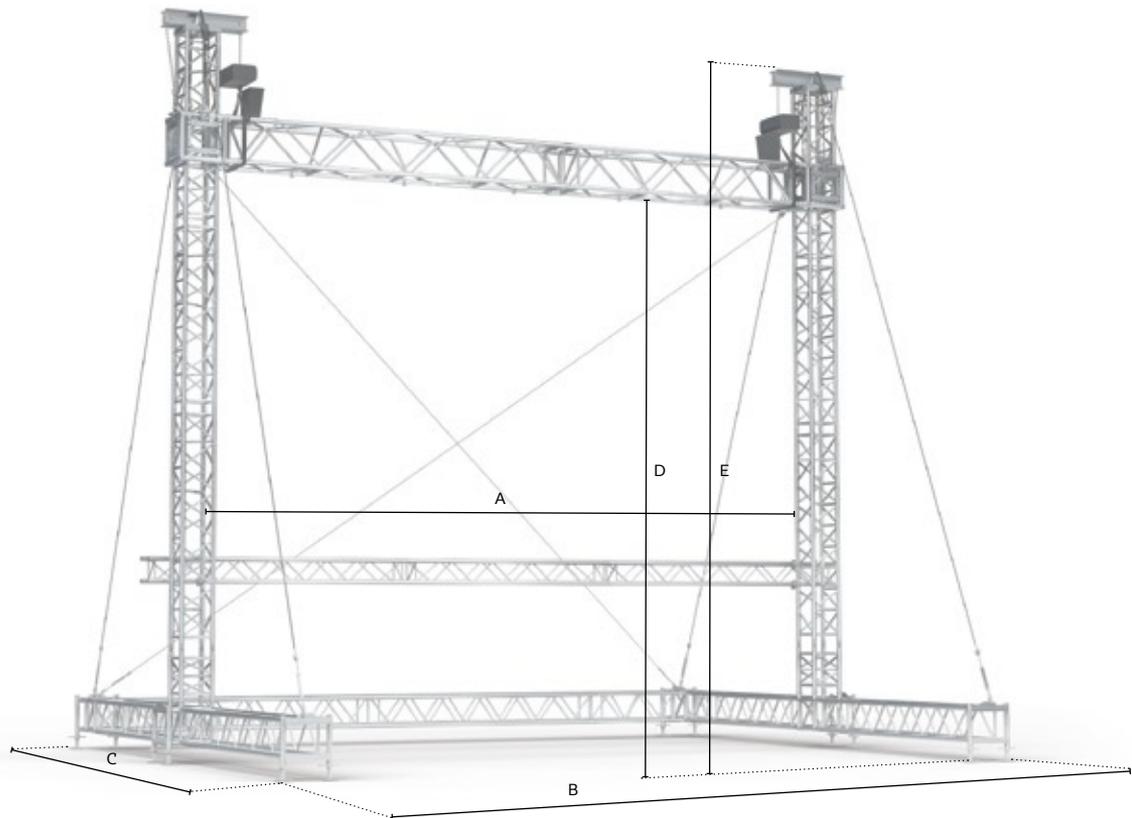
Design standards	DIN EN 13814 DIN 1055-4 DIN 4113 DIN 18800 • All of our structures are produced under EN 1090 EXC2 as standard and include the necessary guy wires, instruction manual and engineering report	Fairground and amusement park machinery and structures Actions on structures / wind Design of aluminium structures Design of steel structures
Wind management	Max. wind speed incl. screen * Screen to be stabilised against swinging by cross truss at bottom of screen	28 m/s – 100 km/h – 62 mph (max. basic wind speed)
Ballast	4x2160 kg / 4757 lbs at the end of each outrigger * Figure based on screw jack to timber spreader to rubber to concrete / asphalt	
Customized	• Customisation, i.e. truss configuration or alternative dimensions, on request • Always verify your screen dimensions, weight and rigging with MILOS	

## Transportation data

	LED screen size >	6.5x7.5m (21.32x24.60 ft)	7.5x7.5 m (24.60x24.60 ft)
Self-weight	* Exact self-weight depends on configuration	<b>850 kg</b> (1874 lbs)	<b>850 kg</b> (1874 lbs)
Transport volume	* Packed in cardboard boxes and bubble foil	<b>8 m³</b> (282 ft³)	<b>8 m³</b> (282 ft³)

# LSG2 LED screen structures

- Free-standing MT Tower LED Screen Support solution
- Wide range of system options available to suit specific screen size and weight
- Self-climbing towers with electric or manual hoists
- Screw jack feet for quick and easy levelling
- Fast connection for quick, simple and secure assembly
- Stabilisation using integrated cross tension wires integrated at the front and rear

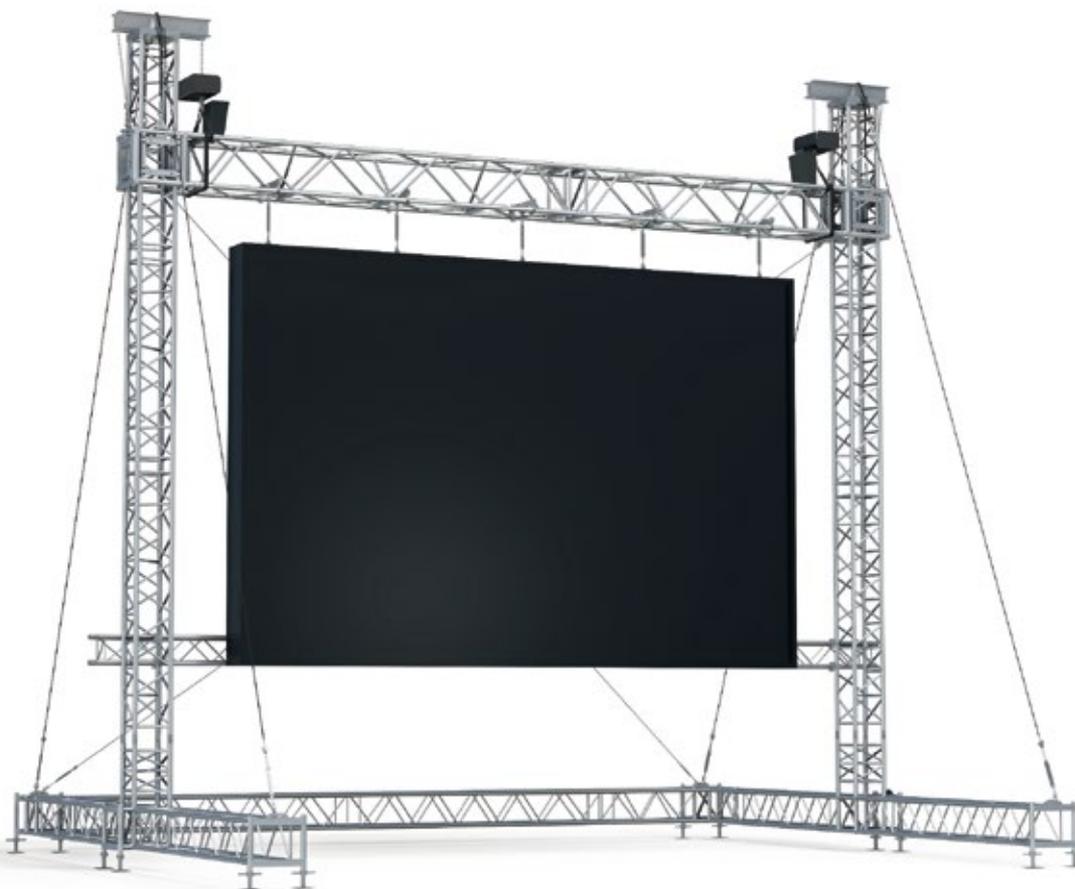


## Technical specifications

		LED screen size >	6.5×7 m (21.31×22.97 ft)	7.5×7 m (24.60×22.97 ft)
Dimensions	A	Internal width	6.82 m (22.37 ft)	7.81 m (25.62 ft)
	B	Overall external width	7.83 m (25.69 ft)	8.82 m (28.94 ft)
	C	Overall external depth	6.83 m (22.40 ft)	6.83 m (22.40 ft)
	D	Clearance	6.37 m (20.89 ft)	6.37 m (20.90 ft)
	E	Overall height	8.02 m (26.32 ft)	8.01 m (26.28 ft)

## Loading capacity

		LED screen size >	6.5×7 m (21.31×22.97 ft)	7.5×7 m (24.60×22.97 ft)
Loading capacity	LED screen	6× point loads equally divided	416 kg (916 lbs)	416 kg (916 lbs)
		3× point loads equally divided	833 kg (1835 lbs)	833 kg (1835 lbs)
		Max. total load	2500 kg (5511 lbs)	2500 kg (5511 lbs)
		* See structural report for exact load positioning		



## Operational specifications

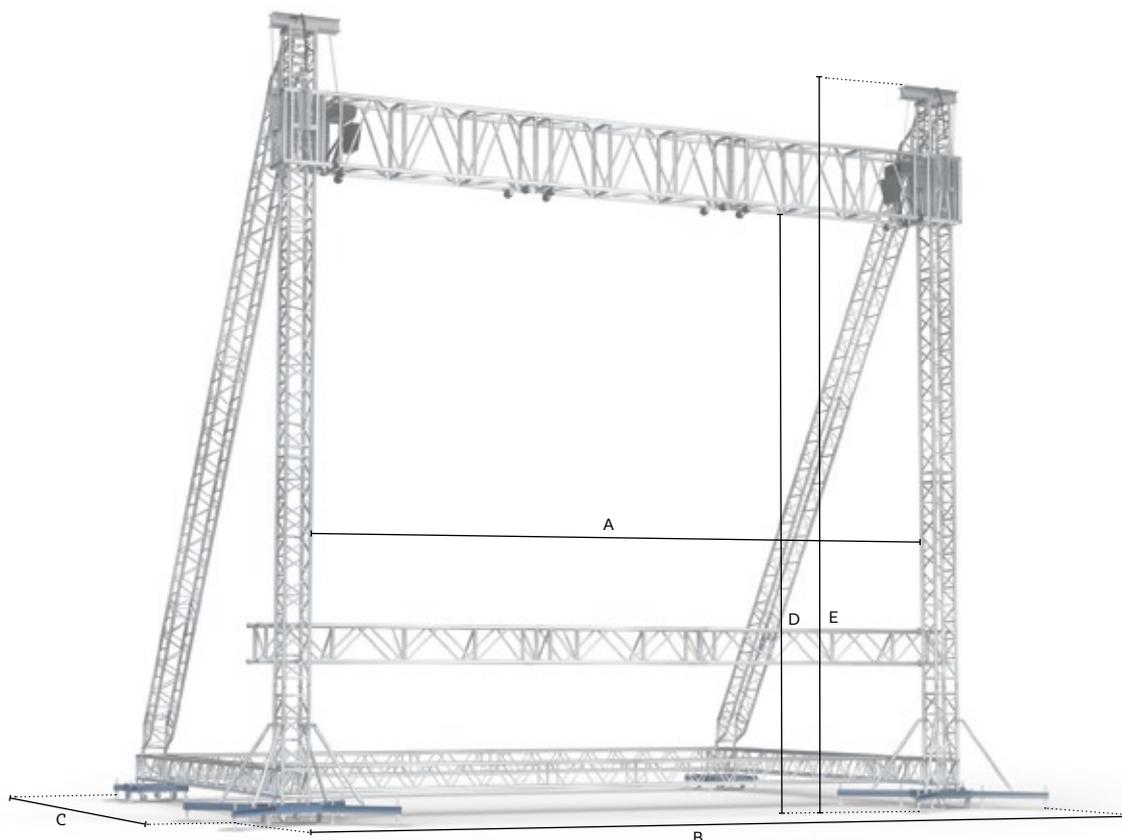
<b>Design standards</b>	DIN EN 13814 DIN 1055-4 DIN 4113 DIN 18800 • All of our structures are produced under EN 1090 EXC2 as standard and include the necessary guy wires, instruction manual and engineering report	Fairground and amusement park machinery and structures Actions on structures / wind Design of aluminium structures Design of steel structures
<b>Wind management</b>	Max. wind speed incl. screen * Screen to be stabilised against swinging by cross truss at bottom of screen	28 m/s – 100 km/h – 62 mph (max. basic wind speed)
<b>Ballast</b>	4x1400 kg (3087 lbs); fixed weight to prevent overturning * Figure based on screw jack to timber spreader to rubber to concrete / asphalt	
<b>Customized</b>	• Customisation, i.e. truss configuration or alternative dimensions, on request • Always verify your screen dimensions, weight and rigging with MILOS	

## Transportation data

	LED screen size >	6.5x7 m (21.31x22.97 ft)	7.5x7 m (24.60x22.97 ft)
<b>Self-weight</b>	* Exact self-weight depends on configuration	<b>750 kg</b> (1652 lbs)	<b>800 kg</b> (1763 lbs)
<b>Transport volume</b>	* Packed in cardboard boxes and bubble foil	<b>6.00 m³</b> (212 ft³)	<b>7.00 m³</b> (247 ft³)

# LSG3 LED screen structures

- Large-format MT Tower LED Screen Support solution
- Various system options available to suit specific screen size and weight
- Self-climbing towers with electric or manual hoists
- Rear base frame and diagonal stabiliser to provide obstruction-free viewing



## Technical specifications

		LED screen size >	10.5×9.5 m (34.45×31.17 ft)	8.5×9.5 m (27.89×31.17 ft)
Dimensions	A	Internal width	10.87 m (35.66 ft)	8.87 m (29.10 ft)
	B	Overall external width	13.49 m (44.26 ft)	10.21 m (33.49 ft)
	C	Overall external depth	8.37 m (27.46 ft)	8.37 m (27.46 ft)
	D	Clearance	8.41 m (27.59 ft)	8.41 m (27.59 ft)
	E	Overall height	10.56 m (34.64 ft)	10.56 m (34.65 ft)

## Loading capacity

		LED screen size >	10.5×9.5 m (34.45×31.17 ft)	8.5×9.5 m (27.89×31.17 ft)
Loading capacity	LED screen	6× point loads equally divided	500 kg (1101 lbs)	400 kg (882 lbs)
		4× point loads equally divided	1000 kg (2203 lbs)	840 kg (1852 lbs)
		Max. total load	4000 kg (8811 lbs)	3300 kg (7275 lbs)
		* See structural report for exact load positioning		



## Operational Specifications

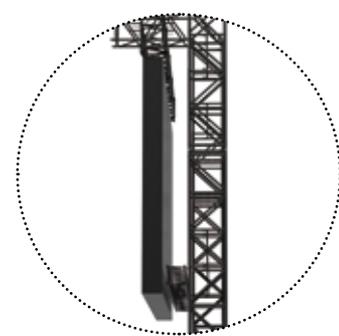
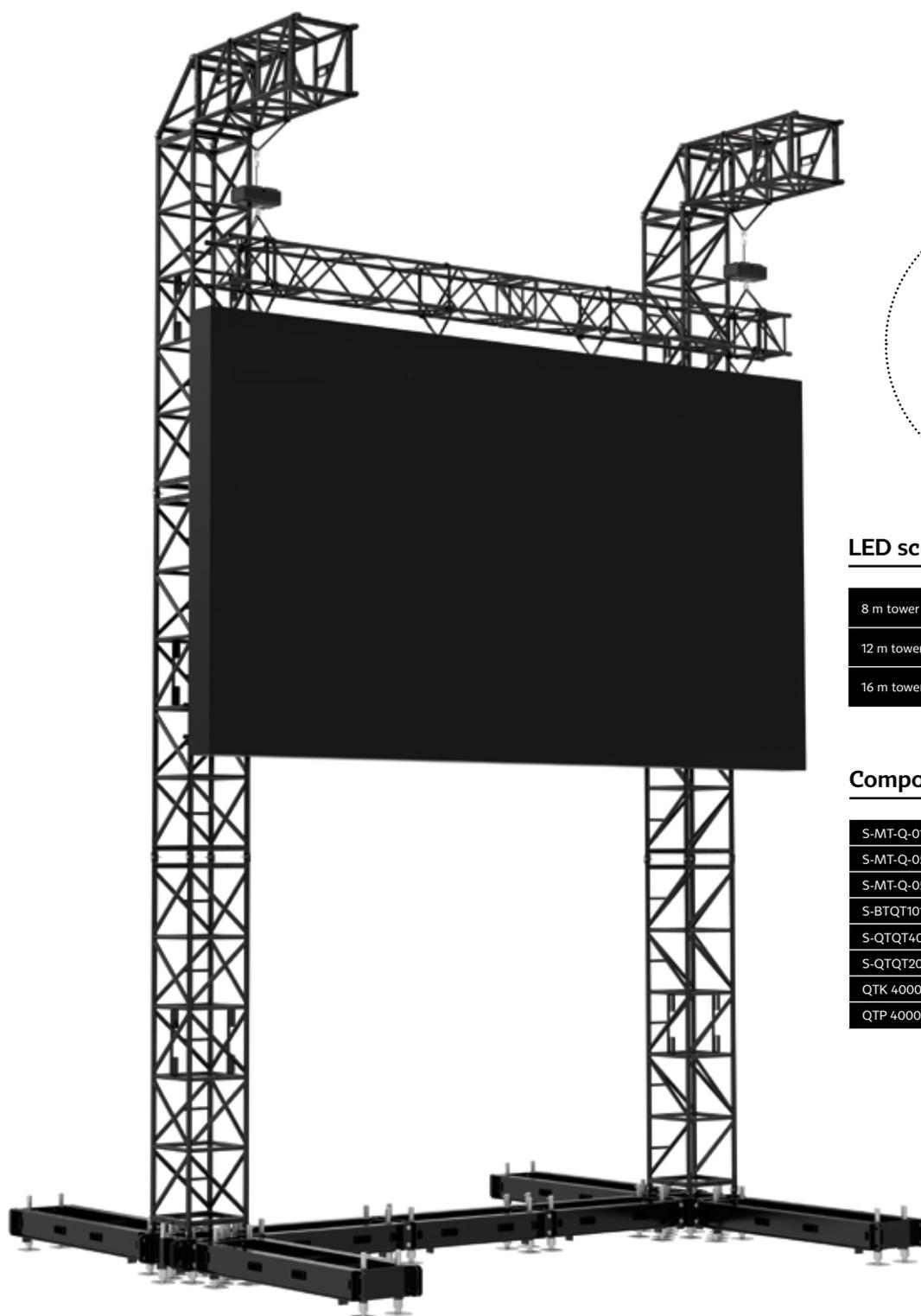
Design standards	DIN EN 13814 DIN 1055-4 DIN 4113 DIN 18800 • All of our structures are produced under EN 1090 EXC2 as standard and include the necessary guy wires, instruction manual and engineering report	Fairground and amusement park machinery and structures Actions on structures / wind Design of aluminium structures Design of steel structures
Wind management	Max. wind speed incl. screen * Screen to be stabilised against swinging by cross truss at bottom of screen	28 m/s – 100 km/h – 62 mph (max. basic wind speed)
Ballast	4×2000 kg / 4410 lbs at the end of each outrigger * Figure based on screw jack to timber spreader to rubber to concrete / asphalt	
Customized	• Customisation, i.e. truss configuration or alternative dimensions, on request • Always verify your screen dimensions, weight and rigging with MILOS	

## Transportation data

	LED screen size >	10.5×9.5 m (34.45×31.17 ft)	8.5×9.5 m (27.89×31.17 ft)
Self-weight	* Exact self-weight depends on configuration	2400 kg (5291 lbs)	1858 kg (4093 lbs)
Transport volume	* Packed in cardboard boxes and bubble foil	15 m³ (530 ft³)	12 m³ (424 ft³)

# S-LSG-QTQT

- Extreme loading capacity for safely flying large LED screens without the need for guy wires
- Constructed with MILOS S-QTQT ultra-high-strength steel truss (780×780 mm)
- Integrated steel base with outriggers (3 m outriggers at front/back and base-to-base connection based on length of screen)
- Integrated forklift pockets for convenient transport
- Special steel alloy that provides nearly 3× more strength compared to standard S235 steel
- Wind loading of secured structure is up to 28 m/second.
- 2 m cantilever arm at the top of the tower enables advertising elements to be attached
- Durable, industrial black paint finish as standard on all truss and tower modules

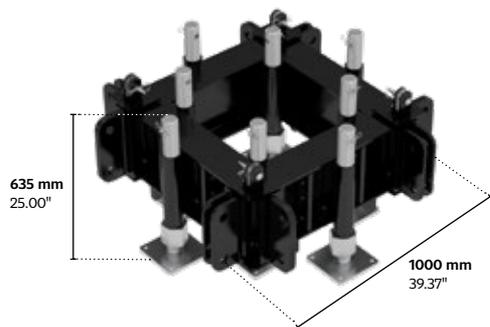


## LED screen capacities

8 m tower	60 m <sup>2</sup> screen frontal area 3000 kg max. loading capacity
12 m tower	40 m <sup>2</sup> screen frontal area 2000 kg max. loading capacity
16 m tower	20 m <sup>2</sup> screen frontal area 1000 kg max. loading capacity

## Components for LED screen gate

S-MT-Q-01 Base	2 pieces
S-MT-Q-05 Outrigger2000	3 pieces
S-MT-Q-05 Outrigger3000	4 pieces
S-BTQT1018sp	2 pieces
S-QTQT4000 4m	6 pieces
S-QTQT2000 2m	2 pieces
QTK 4000	2 pieces
QTP 4000	2 pieces



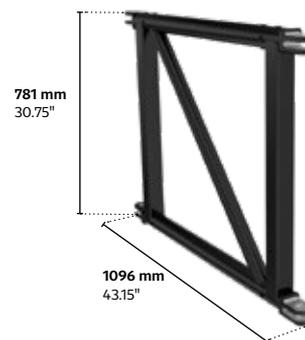
### S-MT-Q-01|Base

**Weight**

kg lbs

495 (1091.28)

A robust steel base that is compatible with our steel S-QTQT truss. It includes 8 large steel spindles and high-grade steel outrigger connections on all sides for providing extra strength and stability to the tower.



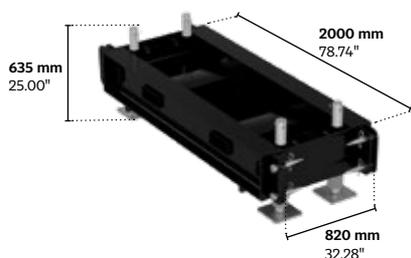
### S-BTQT1018

**Weight**

kg lbs

35 (77.16)

The S-BTQT1018sp provides reliable support for the cantilever on the Steel PA Tower.



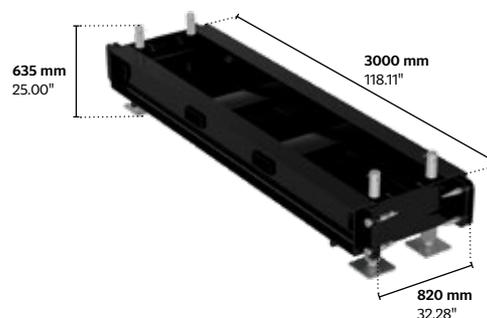
### S-MT-Q-05|Outrigger2000

**Weight**

kg lbs

440 (970.03)

This heavy-duty steel outrigger provides extra stability for your steel towers. It comes with 4 large spindles and features a wide range of lengths for added flexibility for constructing stable grids.



### S-MT-Q-05|Outrigger3000

**Weight**

kg lbs

540 (1190.47)

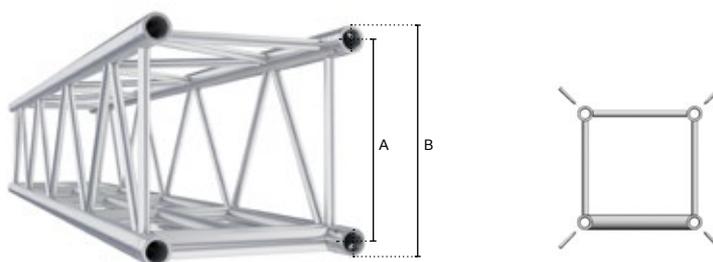
This heavy-duty steel outrigger provides extra stability for your steel towers. It comes with 4 large spindles and features a wide range of lengths for added flexibility for constructing stable grids.



# M390 LED

- Features a central tube for the safe, easy and balanced hanging of LED screens
- Available in lengths of 0.5 m, 1 m, 1.5 m, 2 m, 2.5 m, 3 m, 4 m and 5 m
- Quick, simple and secure assembly
- Powder-coated colour finish available on request
- Connection kit supplied with every truss length and junction
- Compatible with 200/400/500/600 series cell clamps

## QUATRO



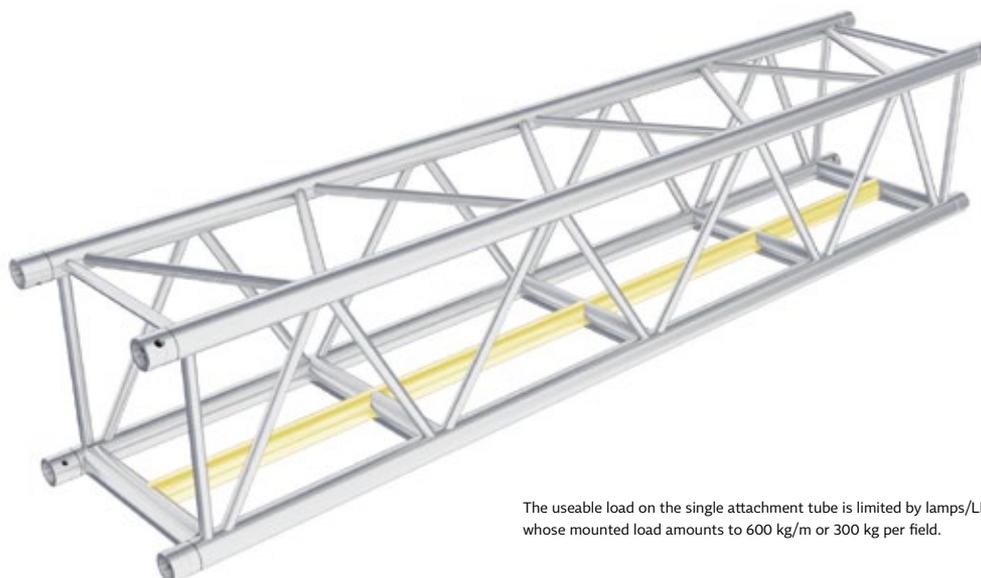
### M390 LED

	Main chords	Diagonals	Alloy	A	B	Connector
QTL-LED	48×3 (1.89×0.12)	20×2 (0.78×0.08)	EN - AW 6082 T6	340 (13.39)	388 (15.28)	CCB
QTLF-LED	48×3 (1.89×0.12)	20×2 (0.78×0.08)	EN - AW 6082 T6	340 (13.39)	388 (15.28)	CCF

### STANDARD LENGTHS AND WEIGHTS AVAILABLE

	m (ft)	0.50 (1.64)	1.00 (3.28)	1.50 (4.92)	2.00 (6.56)	2.50 (8.20)	3.00 (9.84)	4.00 (13.12)	5.00 (16.41)
QUATRO	kg (lbs)	5.60 (12.34)	9.20 (20.28)	13.10 (28.88)	17.00 (37.47)	20.80 (45.85)	24.70 (54.45)	32.50 (71.65)	40.10 (88.40)

Connection material (pins/clips/connectors) and packaging are not included in above weights



The useable load on the single attachment tube is limited by lamps/LEDs, whose mounted load amounts to 600 kg/m or 300 kg per field.

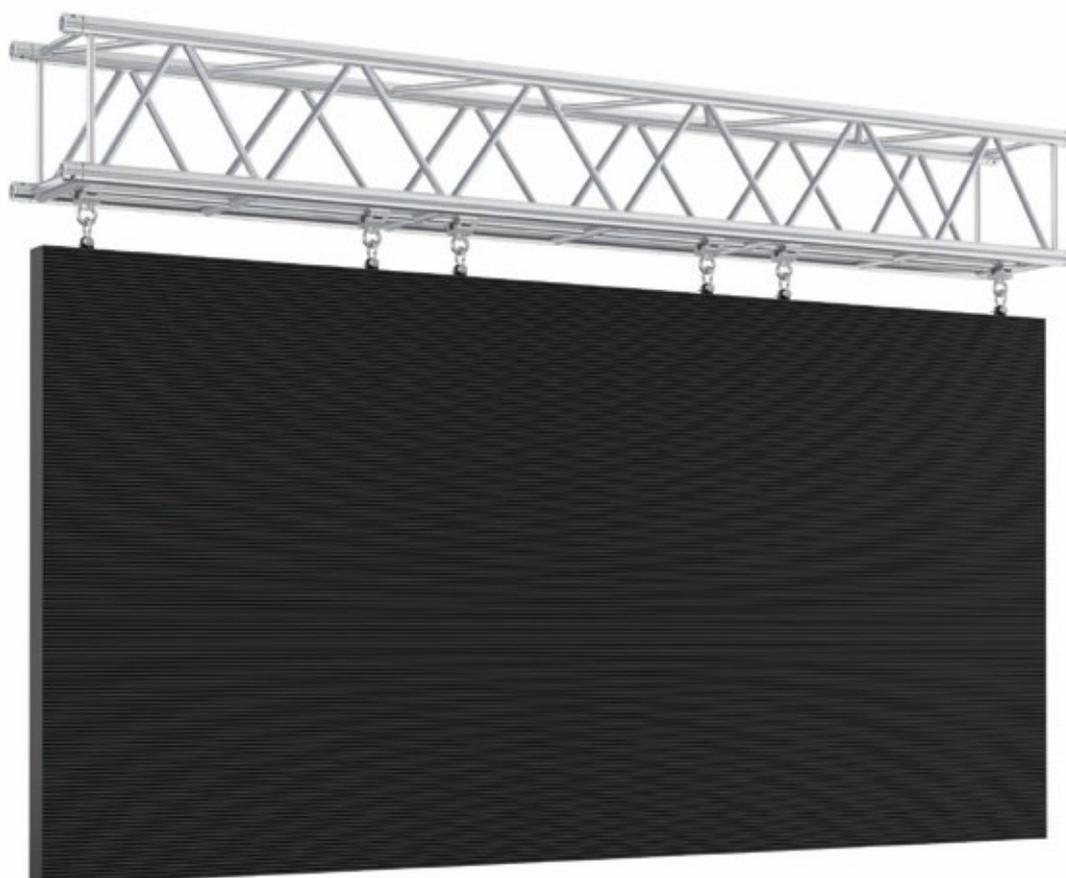
# M390 LED

LOADING CHART

Span	m (ft)	4.00 (13.12)	6.00 (19.68)	8.00 (26.25)	10.00 (32.81)	12.00 (39.37)	14.00 (45.93)	16.00 (52.49)
Centre Point Load (CPL)	kg (lbs)	2097.00 (4623.09)	1523.60 (3358.96)	1129.10 (2489.24)	889.20 (1960.35)	726.70 (1602.09)	608.40 (1340.41)	517.70 (1141.33)
Deflection	mm (in)	8.00 (0.31)	19.80 (0.78)	35.40 (1.39)	55.70 (2.12)	80.80 (3.18)	110.80 (4.36)	146.10 (5.75)
Third Point Load (TPL)	kg (lbs)	1333.00 (2938.76)	1051.00 (2317.05)	846.80 (1866.87)	666.90 (1470.26)	545.00 (1201.52)	456.30 (1005.97)	388.30 (856.05)
Deflection	mm (in)	8.70 (0.34)	23.30 (0.92)	44.90 (1.77)	70.30 (2.76)	101.40 (3.99)	138.20 (5.44)	180.90 (7.12)
Quarter Point Load (QPL)	kg (lbs)	925.60 (2040.59)	761.80 (1679.48)	564.50 (1244.51)	444.60 (980.17)	363.40 (801.15)	304.20 (670.64)	258.90 (570.77)
Deflection	mm (in)	8.40 (0.33)	23.50 (0.93)	41.80 (1.64)	65.50 (2.58)	94.70 (3.72)	129.30 (5.09)	169.60 (6.67)
Fifth Point Load (FPL)	kg (lbs)	694.20 (1530.00)	634.80 (1399.49)	470.40 (1037.05)	370.50 (816.81)	302.80 (667.56)	253.50 (558.87)	215.70 (475.53)
Deflection	mm (in)	8.00 (0.31)	24.90 (0.98)	44.30 (1.74)	69.30 (2.73)	100.00 (3.93)	136.50 (5.37)	178.70 (7.03)
Uniformly Distributed Load (UDL)	kg/m (lbs/ft)	694.20 (466.50)	460.20 (309.30)	282.30 (189.70)	177.80 (119.50)	121.10 (81.40)	86.90 (58.40)	64.70 (42.50)
Deflection	mm (in)	6.60 (0.26)	22.40 (0.88)	44.00 (1.73)	68.80 (2.70)	99.30 (3.90)	135.50 (5.33)	177.40 (6.98)

The useable load on the single attachment tube is limited by lamps/LEDs, whose mounted load amounts to 600 kg/m or 300 kg per field. This load should not exceed the upper loads in the table!

CPL ↓ (Centre Point Load)	TPL ↓ ↓ (Third Point Load)	QPL ↓ ↓ ↓ (Quarter Point Load)	FPL ↓ ↓ ↓ ↓ (Fifth Point Load)	UDL ↓ ↓ ↓ ↓ ↓ ↓ ↓ ↓ (Uniformly Distributed Load)
<p>All truss loading calculations are based on:            Truss supported or suspended at both ends • Static loading only • Loads applied at the node points • Self-weight of the truss is included in all listed load capacities • Spans consisting of different truss lengths • Interaction of bending moment and shear force at connector is considered • Structural analysis based on EN 1999 • All loading data should be multiplied by 0.85 to comply with BS 7905-2 and ANSI E1.2-2006 • For any other application, or in case of an assembled structure, contact MILOS or a structural engineer • Safety factors used: self-weight 1.35 / variable loads 1.5</p>				



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