Cell clamps & Frames

Holding on firmly

Category brochure

Flexibility Behind Your Sho

Full range of our cell clamps 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.

Cell clamps Holding on firmly



Use QR code for full range



- Designed to fit 32–35 mm (1.25–1.38") truss tubes
- Precision-extruded, high-tensile aluminium alloy
- Compatible with M222 truss series
- CE-certified
- Polished surface with micro-percussion markings
- Rated with SF 8:1 (kg) DGUV 17/BGV C1 (SWL1)
- Rated with SF 4:1 (kg) 2006/42/EC (SWL2)
- Interchangeable M10 bolt ensures flexible attachment points
- Black-anodised versions available on request
- Black-anodised versions of CELL131/134 available



SWL2

Basic clamp, can be used for most applications.

330 (728)

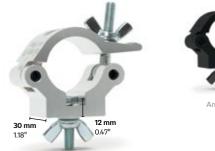
Weight

0.10 (0.20)



Tube Ø

32-35 (1.26-1.38)



Anodised

CELL131 / CELL131|Anodised

SWL1

160 (353)

kg (lbs)

Basic clamp

CELLI32 /	CELL132 Anodised

Clamp with bolt and wingnut

	SWL1	SWL2	Weight	Tube Ø
kg (lbs)	160 (353)	330 (728)	0.25 (0.33)	32–35 (1.26–1.38)
	Clamp supplied with	M10x30 bolt and w	ingput	

Clamp supplied with M10×30 bolt and wing nut.



CELL133 / CELL133 Anodised

Clamp with lifting eye

	SWL1	SWL2	Weight	Tube Ø	
kg (lbs)	160 (353)	330 (728)	0.70 (1.54)	32–35 (1.26–1.38)	
\bullet	Clamp with lifting eye.				

CELL134 / CELL134 Anodised

Swivel coupler

	SWL1	SWL2	Weight	Tube Ø
kg (lbs)	160 (353)	330 (728)	0.80 (1.76)	32–35 (1.26–1.38)

Set of two clamps free to rotate 360° for connecting of two tubes.



- Designed for 48–51 mm (1.89–2.00") diameter tubes
- Precision-extruded, high-tensile aluminium alloy
- Compatible with M290 / M390 / M400 / M520 / M760 / 4GS-35 / 4GS-50 / 4GS-62
- Supplied with M12 bolt and wingnut
- Mounting hole for up to 13-mm (0.51") bolts
- Polished surface with micro-percussion markings
- Powder-coated versions available on request
- Rated with SF 8:1 (kg) DGUV 17/BGV C1 (SWL1)
- Rated with SF 4:1 (kg) 2006/42/EC (SWL2)
- Black-anodised versions of CELL201/203/204/207 available

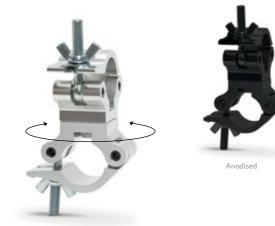


CELL201 / CELL201 Anodised



Basic clamp

Slim basic clamp



CELL204 / CELL204 Anodised

Swivel coupler

_	SWL1	SWL2	Weight	Tube Ø
kg (lbs)	650 (1433)	1300 (2865)	0.50 (1.10)	48-51 (1.89-2)
• •				

Basic clamp, can be used for most applications.



SWI 2

1120 (2469)

Slim basic clamp, can be used for most applications.

Weight

0.30 (0.66)



Tube Ø

48-51 (1.89-2)

	SWL1	SWL2	Weight	Tube Ø
kg (lbs)	540 (1190)	1080 (2381)	1.00 (2.20)	48-51 (1.89-2)
\bullet \bigcirc	-		•	

Set of two clamps free to rotate 360° for connecting of two tubes.





Swivel coupler

	• •	SWL1	SWL2	Weight	Tube Ø
kg (105) : 490 (1080) 980 (2160) 0.71 (1.57) 48–51 (1.89–2)	kg (lbs)	490 (1080)	980 (2160)	0.71 (1.57)	48–51 (1.89–2)

48-51 mm slim swivel coupler (CELL207 + CELL207 assembly).



CELL207 / CELL207 Anodised

SWL1

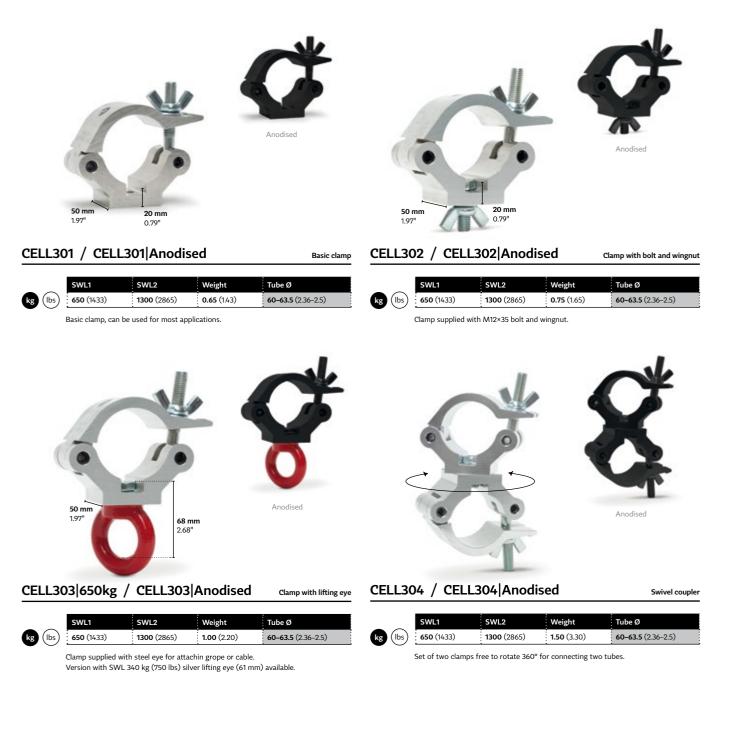
· 560 (1234)

kg (lbs)



- Designed for 60–63.5 mm (2.36–2.50") diameter tubes
- Precision-extruded, high-tensile aluminium alloy
- DGUV 17/BGV C1 rating
- Compatible with M950 / 4GS-91
- Supplied with M12 bolt and wingnut

- Mounting hole for up to 13 mm (0.50") bolts
- Polished surface with micro-percussion markings
- Powder-coated versions available on request
- Rated with SF 8:1 (kg) DGUV 17/BGV C1 (SWL1)
- Rated with SF 4:1 (kg) 2006/42/EC (SWL2)





- Quick hook clamp series designed for 38–51 mm (1.49-2.00") diameter tubes
- Quick and easy attachment solution for moving heads
- Precision-extruded, high-tensile aluminium alloy
- DGUV 17/BGV C1 rating
- Compatible with M290 / M390 / M400 / M520 / M760 / 4GS-35 / 4GS-50 / 4GS-62
- Supplied with M12 bolt and wingnut
- Mounting hole for up to 13 mm $(\frac{1}{2})$ bolts
- Polished surface with micro-percussion markings
- Powder-coated versions available on request
- Rated with SF 8:1 (kg) DGUV 17/BGV C1 (SWL1)
- Rated with SF 4:1 (kg) 2006/42/EC (SWL2)
- Black-anodized versions of CELL401/403 available





CELL402 / CELL402 Anodised

Quick clamp with bolt and wingnut

	_	SWL1	SWL2	Weight	Tube Ø
kg (lbs	360 (794)	720 (1587)	0.75 (1.65)	38–51 (1.5–2)
—	\sim				

Quick clamp supplied with M12×35 bolt and wingnut



CELL411 / CELL411 Anodised

Quick Clamp with Wing bolt

_	-	SWL1	SWL2	Weight	Tube Ø
kg	(lbs)	190 (419)	380 (838)	0.68 (1.50)	38-60 (1.5-2.36)
-	\sim			•	

38-60 mm quick clamp connection and locking mechanism.

kg (lbs)	360 (794)	720 (1587)	0.68 (1.50)	38-51 (1.5-2)
-	38–51 mm quick clar	np connection and I	ocking mechanism.	



Weight

0.75 (1.65)

CELL403 / CELL403 Anodised

SWL2

720 (1587)

Quick clamp supplied with steel eye for attaching of ropes or cables.

SWL1

360 (794)

CELL401 / CELL401 Anodised

SWI 1

Quick clamp with lifting eye

38-51 (1.5-2)

Tube Ø

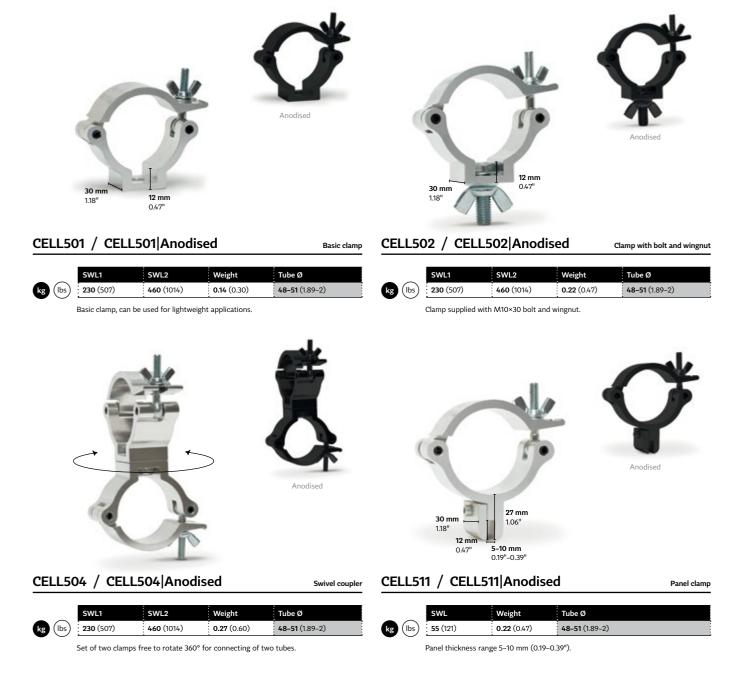
Quick clamp

kg (lbs)



- Low-profile series designed for 48–51 mm (1.89–2.00") diameter tubes
- Ideal for exhibitions, displays and light duty applications
- Precision-extruded, ultra-high-tensile aluminium alloy
- DGUV 17/BGV C1 rating
- Compatible with M290 / M390 / M400
- / M520 / M760 / 4GS-35 / 4GS-50 / 4GS-62

- Supplied with M6 bolt and wingnut
- Mounting hole for up to 10.5 mm (0.41") bolts
- Polished surface with micro-percussion markings
- Powder-coated versions available on request
- Rated with SF 8:1 (kg) DGUV 17/BGV C1 (SWL1)
- Rated with SF 4:1 (kg) 2006/42/EC (SWL2)





- Hook clamp series designed for 48–51 mm (1.89–2.00") diameter tubes
- Quick and easy attachment solution for moving heads and heavy fixtures
- Precision-extruded, high-tensile aluminium alloy
- DGUV 17/BGV C1 rating
- Supplied with M12 bolt and wingnut
- Mounting hole for up to 13 mm (0.51") bolts

- Compatible with M290 / M390 / M400 / M520 / M760 / 4GS-35 / 4GS-50 / 4GS-62
- Polished surface with micro-percussion markings
- Powder-coated versions available on request
- Rated with SF 8:1 (kg) DGUV 17/BGV C1 (SWL1)
- Rated with SF 4:1 (kg) 2006/42/EC (SWL2)
- Black-anodised versions of CELL601/603 available



CELL601 / CELL601|Anodised

Basic clamp

SWL1	s	SWL2	Weight	Tube Ø
350 (77	I) 7	'00 (1543)	0.50 (1.10)	48-51 (1.89-2)

Basic clamp, can be used for most applications.



CELL603 / CELL603 Anodised

Clamp with lifting eye

(hc) 350 (771) 700 (15/3) 0 75 (165) (48-51 (189-2)	_	SWL1	SWL2	Weight	Tube Ø
	kg (lbs)	350 (771)	700 (1543)	0.75 (1.65)	48–51 (1.89–2)

Clamp supplied with steel eye for attaching of ropes or cables.



CELL602 / CELL602 Anodised

Basic clamp with bolt and wingnut

	SWL1	SWL2	Weight	Tube Ø
kg (lbs)	350 (771)	700 (1543)	0.58 (1.28)	48-51 (1.89-2)
\bullet \bigcirc				

Clamp supplied with M12×35 bolt and wingnut.

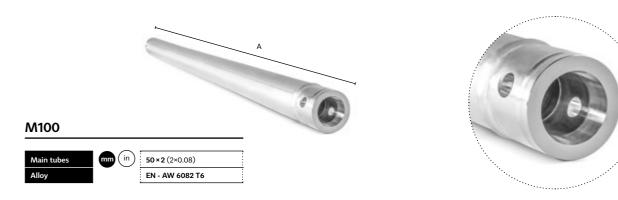




LOADING CHART

M100

- Stylish, modular pipe & drape solution
- Single tube, quick-connection construction
- Versatile "node cube" with pre-set location positions
- Stand-alone or integrated within truss structures
- Connection kit supplied with every welded tube
- Compatible with 200/400/500/600 series cell clamps
- Compatible with Xtruss accessories
- Powder-coated colour finish available on request



STANDARD LENGTHS AND WEIGHTS AVAILABLE

	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)
M100	lbs	0.70 (1.67)	1.10 (2.58)	1.60 (3.52)	2.00 (4.40)	2.40 (5.29)	2.80 (6.20)

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

M100

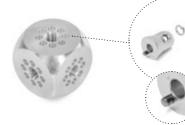
M100 Beam on two supports (Continous tube without any modifications) Span **m** (ft) 0.50 (1.64) 1.00 (3.28) 1.50 (4.92) 2.00 (6.56) 2.50 (8.20) 3.00 (9.84) Centre Point Load (CPL) kg (lbs) 429.00 (945.78) 214.00 (471.79) 142.00 (313.05) 106.00 (233.69) 85.00 (187.39) 70.00 (154.32) Deflection mm (in) 2.00 (0.08) 7.00 (0.28) 16.00 (0.63) 29.00 (1.14) 45.00 (1.78) 65.00 (2.56) Third Point Load (TPL) kg (lbs) 322.00 (709.88) 160.00 (352.73) 107.00 (235.89) 80.00 (176.36) 63.00 (138.89) 52.00 (114.64) mm (in) 2.00 (0.08) 9.00 (0.35) 21.00 (0.82) 37.00 (1.46) 58.00 (2.28) 83.00 (3.27) Deflection Uniformly Distribute Load (UDL) kg/m (lbs/ft) 1719.00 (1155.00) 429.00 (288.00) 190.00 (127.50) 106.00 (71.00) 68.00 (45.50) 47.00 (31.50) 2.00 (0.08) 9.00 (0.35) 20.00 (0.79) (1.42) 56.00 (2.20) 81.00 (3.19) Deflectior mm (in) 36.00

	Cantilever												
Point load at the end	kg (lbs)	107.00	(235.89)	53.00	(116.84)	35.00	(77.16)	26.00	(57.32)	21.00	(46.29)	17.00	(37.47)
Deflection	mm (in)	7.00	(0.28)	29.00	(1.14)	66.00	(2.60)	117.00	(4.60)	185.00	(7.28)	269.00	(10.59)

M100					Bean	n on two sup	ports			(Tube wi	th one connect	or at any poin	t of the length)
Span	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)
Centre Point Load (CPL)	kg (lbs)	224.00	(493.85)	112.00	(246.92)	74.00	(163.14)	55.00	(121.25)	44.00	(97.00)	36.00	(79.37)
Deflection	mm (in)	1.00	(0.04)	4.00	(0.16)	9.00	(0.35)	15.00	(0.59)	24.00	(0.94)	34.00	(1.34)
Third Point Load (TPL)	kg (lbs)	168.00	(370.38)	84.00	(185.19)	55.00	(121.25)	41.00	(90.39)	33.00	(72.75)	27.00	(61.73)
Deflection	mm (in)	1.00	(0.04)	5.00	(0.19)	11.00	(0.43)	19.00	(0.75)	30.00	(1.18)	43.00	(1.69)
Uniformly Distributed Load (UDL)	kg/m (lbs/ft)	898.00	(603.00)	224.00	(150.50)	99.00	(66.50)	55.00	(37.00)	35.00	(23.50)	24.00	(16.00)
Deflection	mm (in)	2.00	(0.08)	5.00	(0.19)	7.00	(0.28)	10.00	(0.39)	12.00	(0.47)	15.00	(0.59)
								·		·		·	
						Cantilever							
Point load at the end	kg (lbs)	56.00	(123.46)	28.00	(61.73)	18.00	(39.68)	13.00	(28.66)	11.00	(24.25)	9.00	(19.84)
Deflection	mm (in)	4.00	(0.16)	15.00	(0.59)	35.00	(1.38)	62.00	(2.44)	99.00	(3.90)	145.00	(5.70)

CPL ▲ ▲ (Centre Point Load)	TPL (Third Point Load)	UDL (Uniformly Distributed Load)	(Point load at the end)
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kg (lbs)

0.27 (0.60)

Universal multiconnection cube that is 360° adjustable

CUBEB-UNI

Series M100





HINGEQB-UNI

Series	kg (bs)	
M100	0.49 (1.08)	

Universal hinge



CON63B|MalePin

Series	kg (bs)
M100	0.17 (0.37)

Male fitting for CUBEB-UNI, HINGEQB-UNI, equipped with locating pin Supplied with washer and M12×25 bolt. F- and U-compatible versions available







PB|Pin

Series	kg (lbs)	
M100	0.02 (0.04)	

PBM8Set

Series M100

kg (bs)	
0.02 (0.04)	

Pin B with thread M8 Supplied with washer and nyloc nut.

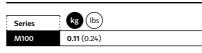
SRPB

Series	kg (bs)
M100	0.002 (0.004)

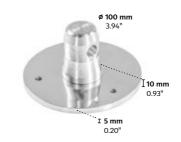
Safety R-clip B M222/M290/M390 truss series



CCB



M290B conical connector F- and U-compatible versions available.



BBPSC|Male



M100 single base plate with half connector F- and U-compatible versions available.



CL50|CLEAR

Series	kg (bs)	
M100	0.003 (0.007)	

Clip 50

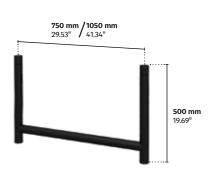
Banner attachment for tube d = 50 mm (2"). Color: clear. Not compatible with 48 mm (1.89") tubes.

Aluminium trusses



Frames

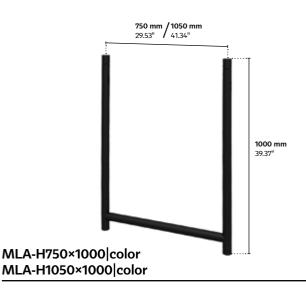
- Connect fixtures quickly and securely using cell clamps or any other lifting accessories
- Maximum flexibility for mounting lighting fixtures
- Quick and easy assembly using standard conical connections
- Slotted tube profile to enable secondary safety attachment
- Durable 48×3 mm extruded aluminium tube (EN AW-6082 T6)
- Based on MILOS M100 series truss
- Horizontal forces are not taken into consideration in the load information. Specific load figures can be approved on request.
- As horizontal forces are not taken into consideration, tipping over must be analysed on a case-by-case basis.



MLA-H750×500|color MLA-H1050×500|color

Code	Tube Ø	kg (bs)
MLA-H750×500 color	48×3 (1.89×0.12)	2.30 (5.07)
MLA-H1050×500 color	48×3 (1.89×0.12)	2.60 (5.73)

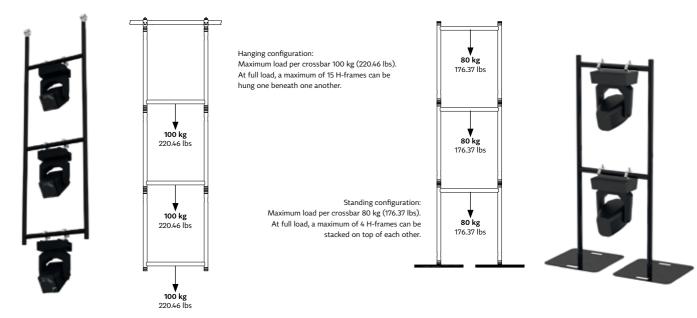
Modular Grid Frame for hanging lights from truss structures - 750×500 mm (29.53×19.69") or 1050×500 mm (41.34×19.69")



Code	Tube Ø	kg (bs)
MLA-H750×1000 color	48×3 (1.89×0.12)	3.40 (7.49)
MLA-H1050×1000 color	48×3 (1.89×0.12)	3.80 (8.37)

Modular Grid Frame for hanging lights from truss structures – 750×1000 mm (29.53×39.37") or 1050×1000mm (41.34×39.37")





Frames

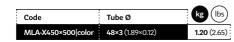




500 mm / 1000 mm 19.68" / 39.37"



MLA-X450×500 color



Modular light bar for attaching lights to hanging modular grid frames – 450×500mm (17.72×19.68").

MLA-I-750|color MLA-I-1050 color

	Code	Tube Ø	kg (bs)
	MLA-I-750 color	48×3 (1.89×0.12)	2.20 (4.85)
	MLA-I-1050 color	48×3 (1.89×0.12)	2.40 (5.29)

Modular light bar for attaching lights to hanging modular grid frames - 1050 mm (41.34") or 750 mm (29.53").

MLA-L500 color MLA-L1000 color

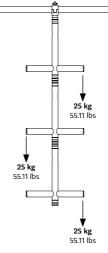
Code	Tube Ø	kg (lbs)
MLA-L500 color	48×3 (1.89×0.12)	0.70 (1.54)
MLA-L1000 color	48×3 (1.89×0.12)	1.30 (2.87)

Modular light bar for attaching lights to hanging modular grid frames - 1000 mm (39.37") or 500 mm (19.68").

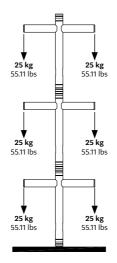
can be hung beneath one another. **▼** 40 kg 40 kg 88.18 lbs 88.18 lbs **40 kg** 88.18 lbs **40 kg** 88.18 lbs **♥** 40 kg 40 kg 88.18 lbs 88.18 lbs

Hanging configuration: With symmetrical load of 40 kg (88.18 lbs) on every cantilever, a maximum of 14 T-frames

Load assumptions







Load assumptions

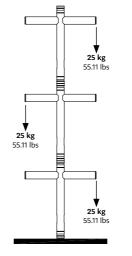
With asymmetrical load of 25 kg (55.11 lbs) on every cantilever, a maximum of 22 T-frames

can be hung beneath one another.

Hanging configuration:

Standing configuration: With symmetrical load of 25 kg (55.11 lbs) on each cantilever, a maximum of 5 T-frames can be stacked on top of each other.

> Standing configuration: With asymmetrical load of 25 kg (55.11 lbs) on one cantilever per element, a maximum of 6 T-frames can be stacked on top of each other.

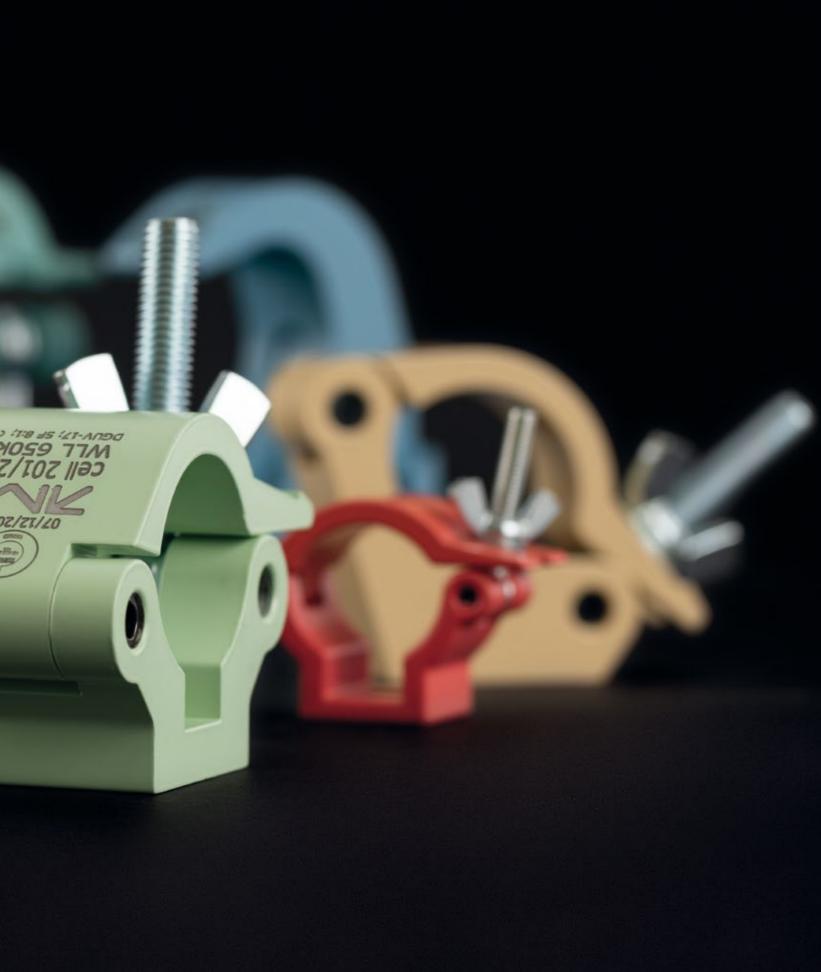




WARNING

The load specifications given here only give consideration to the frames and the connections between them, but do not include the top connection to the suspending truss. The total load capacity can be reduced depending on the lifting accessories selected.





MILOS

Area Four Industries Česko s.r.o. Spindlerova 286 413 01 Roudnice nad Labem Czech Republic

Tel +420 416 810 800 info@milos.cz www.milossystems.com



