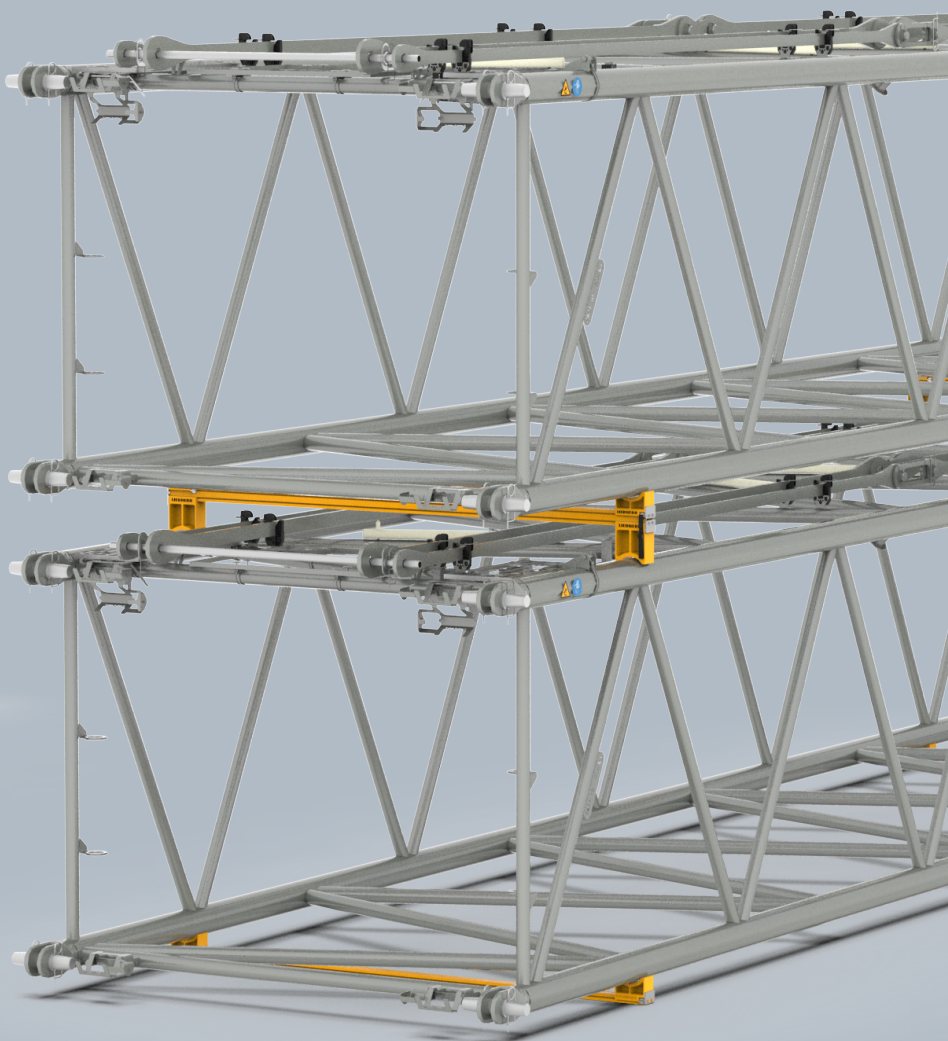

Liebherr Transform

Boom stacking device

Operator's manual

LIEBHERR

Crawler cranes



1 Stacking device* for boom sections

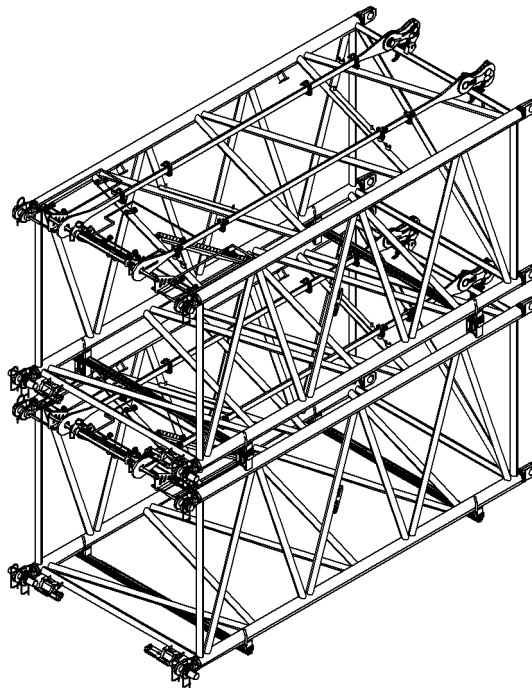


Fig. 1: Stacking device

The stacking device is for stacking boom sections during storage.

ID number	Name	Stackable boom systems
14102730	Base carrier 2200 mm (7.12 ft)	Main boom: 1311, 1512, 2017, 2018
14102728	Section carrier 2200 mm (7.22 ft)	Adjustable luffing jibs: 1008, 1309, 1713 Fixed jib: 0806, 1008

Tab. 1: Stacking device for boom width up to 2170 mm (7.12 ft)

ID number	Name	Stackable boom systems
13615207	Base carrier 3000 mm (9.84 ft)	Main boom: 2220, 2320, 2821, 2825
13612959	Section carrier 3000 mm (9.84 ft)	Luffing jib: 1311, 1713, 1916, 2316 Fixed jib: 0806, 0906, 1008, 1507, 1713

Tab. 2: Stacking device for boom width up to 2970 mm (9.74 ft)

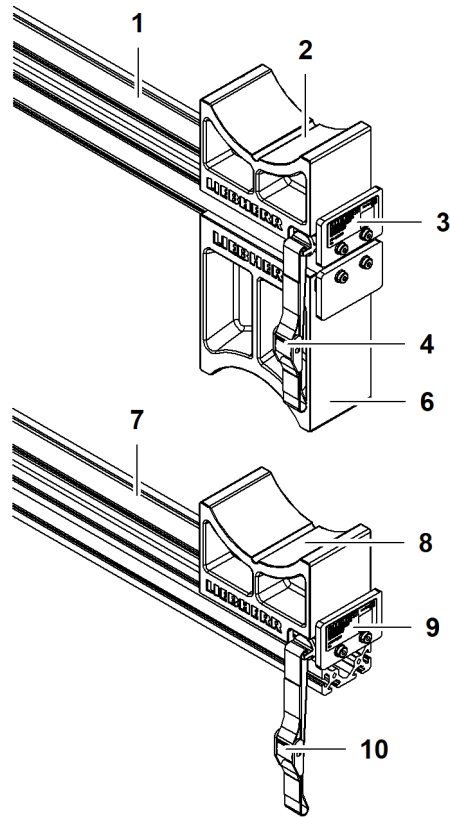


Fig. 2: Stacking device

- | | | | |
|----------|-----------------|-----------|---------------|
| 1 | Section carrier | 6 | Large support |
| 2 | Small support | 7 | Base carrier |
| 3 | Type plate | 8 | Small support |
| 4 | Lashing strap | 9 | Type plate |
| 5 | Large support | 10 | Lashing strap |

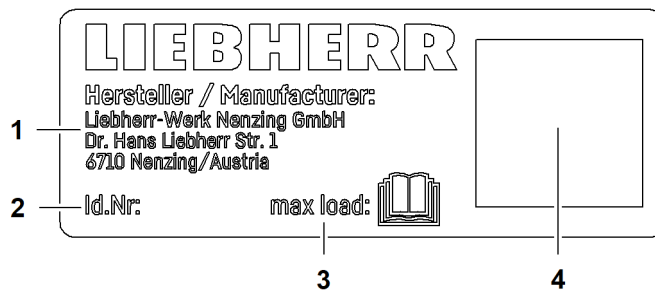


Fig. 3: Type plate

- | | | | |
|----------|--------------|----------|---|
| 1 | Manufacturer | 3 | Maximum load-bearing capacity (as per instructions for use) |
| 2 | ID number | 4 | QR code (reference to instructions for use) |

1.1 Stacking device 2200 mm (7.22 ft)



Fig. 4: Dimensions - stacking device 2200 mm (7.22 ft)

Name		Value
L	Length	2230 mm 7.32 ft
S	System width	Up to 2200 mm (7.22 ft)
H	Height of section carrier	385 mm 1.26 ft
H1	Height of base carrier	150 mm 0.49 ft
D	Diameter	180 mm 0.59 ft
Maximum base carrier load-bearing capacity (per unit)		14000 kg
Base carrier weight (per unit)		18 kg
Maximum section carrier load-bearing capacity (per unit)		14000 kg
Section carrier weight (per unit)		26 kg

Tab. 3: Technical data - stacking device 2200 mm (7.22 ft)

1.2 Stacking device 3000 mm (9.84 ft)

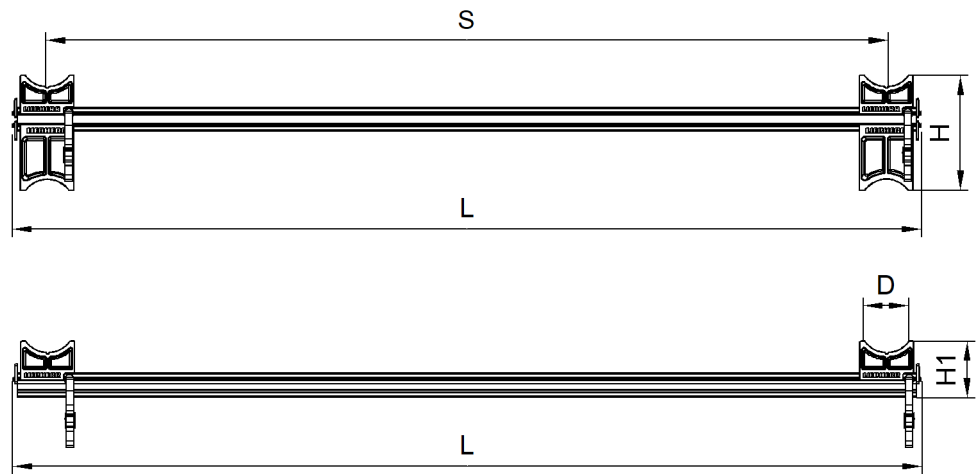


Fig. 5: Dimensions - stacking device 3000 mm (9.84 ft)

Name		Value
L	Length	3030 mm 9.94 ft
S	System width	Up to 3000 mm (9.84 ft)
H	Height of section carrier	385 mm 1.26 ft
H1	Height of base carrier	150 mm 0.49 ft
D	Diameter	180 mm 0.59 ft
Maximum base carrier load-bearing capacity (per unit)		14000 kg
Base carrier weight (per unit)		21 kg
Maximum section carrier load-bearing capacity (per unit)		14000 kg
Section carrier weight (per unit)		32 kg

Tab. 4: Technical data - stacking device 3000 mm (9.84 ft)

1.3 Stacking device operational limitations

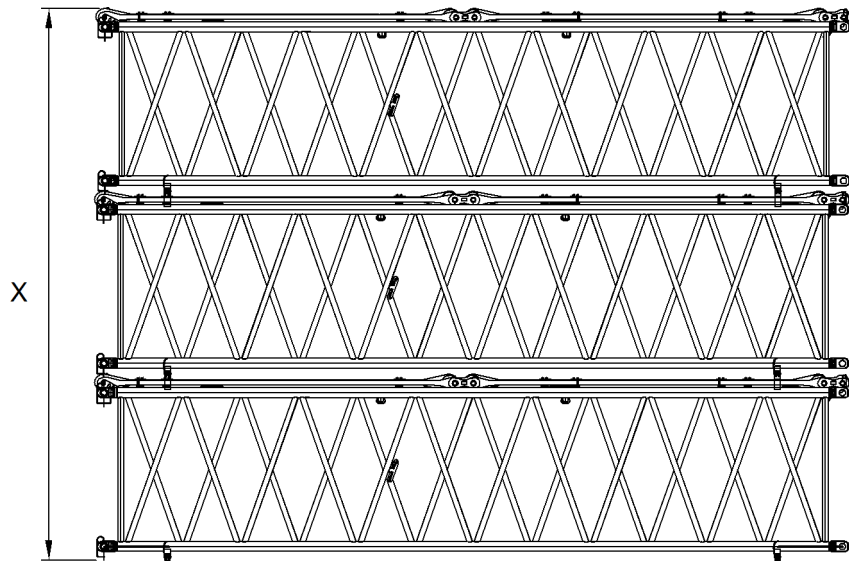


Fig. 6: Operational limitations

Name		Value
X	Maximum stacking device stacking height 3000 mm (9.84 ft)	8400 mm 27.55 ft
	Maximum stacking device stacking height 2200 mm (7.22 ft)	6200 mm 20.34 ft
Maximum admissible total weight		28000 kg

Tab. 5: Technical data - operational limitations

1.4 Checking stacking device before use

- ▶ Check bolted joints for tight fit.

If screws are loose:

- ▶ Tighten screws.

- ▶ Check lashing straps for damage.

If lashing straps are not in perfect state:

- ▶ Replace lashing straps.

- ▶ Check plastic supports for damage.

If plastic supports are not in perfect state:

- ▶ Do not use damaged supports.

1.5 Stacking boom sections



WARNING

Improper use of stacking device!
Fatal injury caused by falling boom sections, damage to boom sections.

- ▶ Exclusively use stacking device to store boom sections.
- ▶ Note safety instructions for use of stacking device.



WARNING

Inadmissible or improper procedure!
Severe injuries, damage to machine.

If information in the instructions is insufficient:
▶ Contact Liebherr customer service.



Note

Total weight of stacked boom sections only applies loads to ground across a small contact area!

- ▶ Make sure that ground of storage location offers adequate load-bearing capacity.

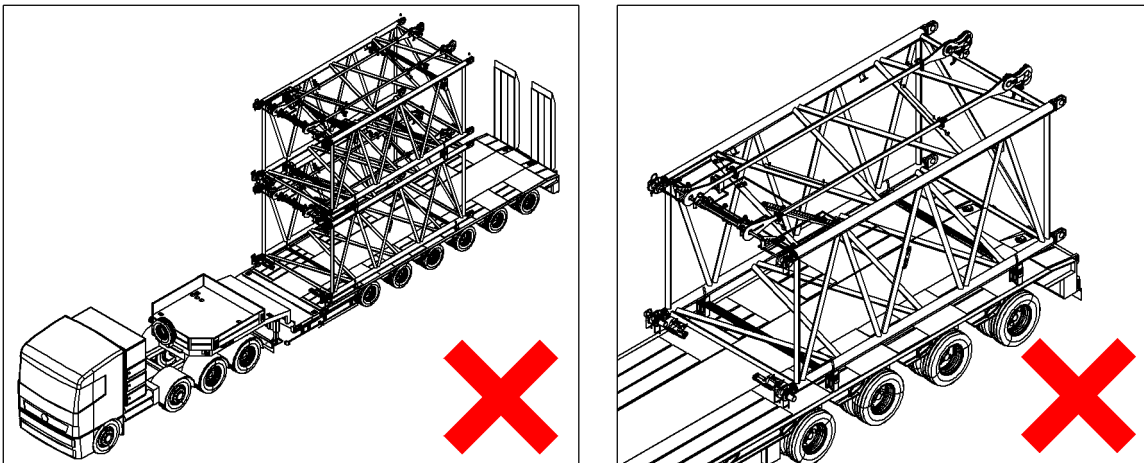


Fig. 7: No transporting

Do not transport boom sections stacked with stacking device. Base carriers or section carriers must not be used as transport support.

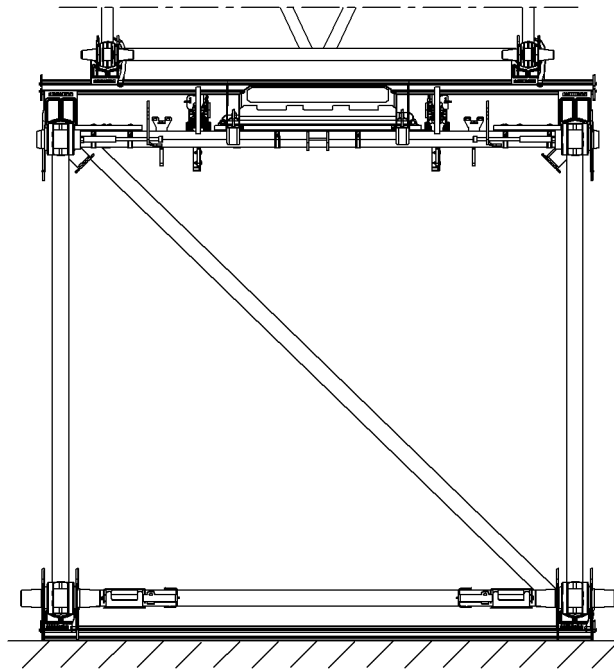


Fig. 8: Use base carriers

Always use base carriers (or equivalent, load-bearing wooden support).

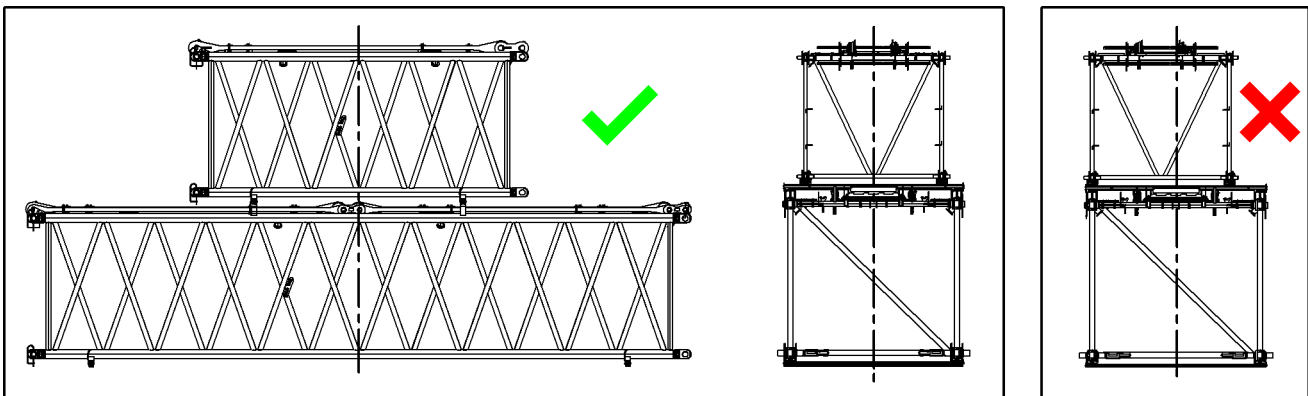


Fig. 9: Position boom sections centrally

Stack boom section centrally.

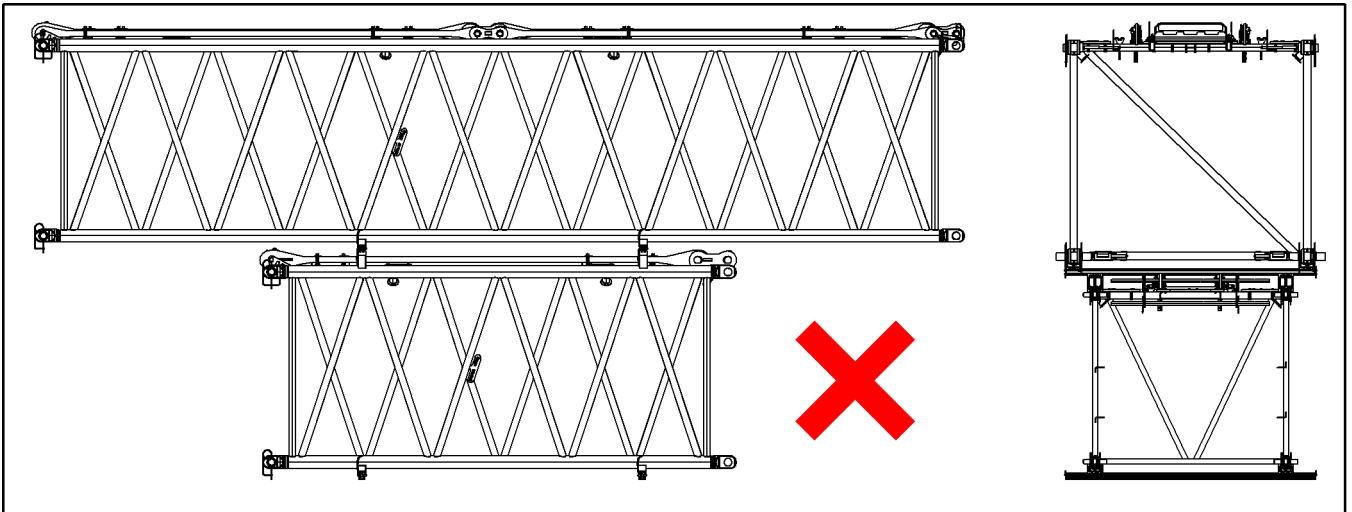


Fig. 10: Position longer and wider section at the bottom

Position shorter and narrower boom section at the top.

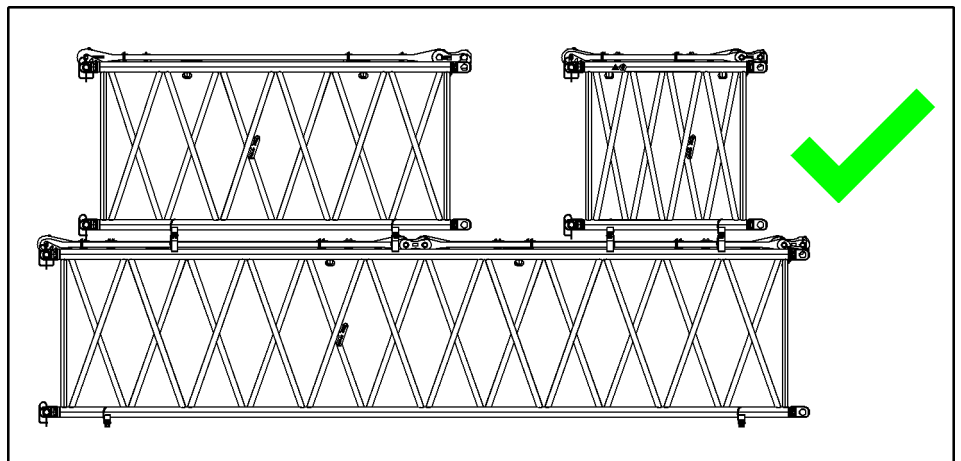


Fig. 11: Disassemble smaller boom section

Unpin boom sections 6 m/20 ft and boom sections 3 m/10 ft and support on two section carriers each per boom section.

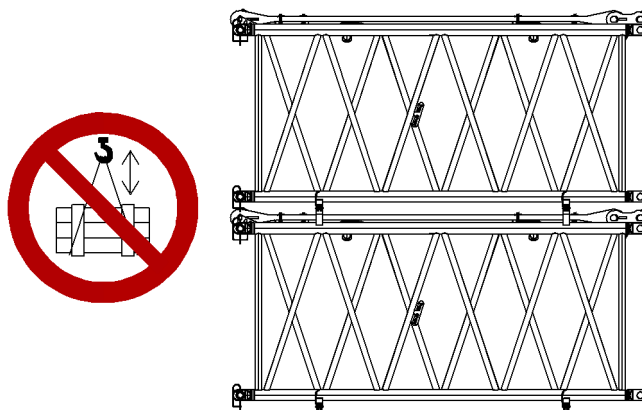


Fig. 12: Do not lift stacked boom sections together

Exclusively lift boom sections individually.

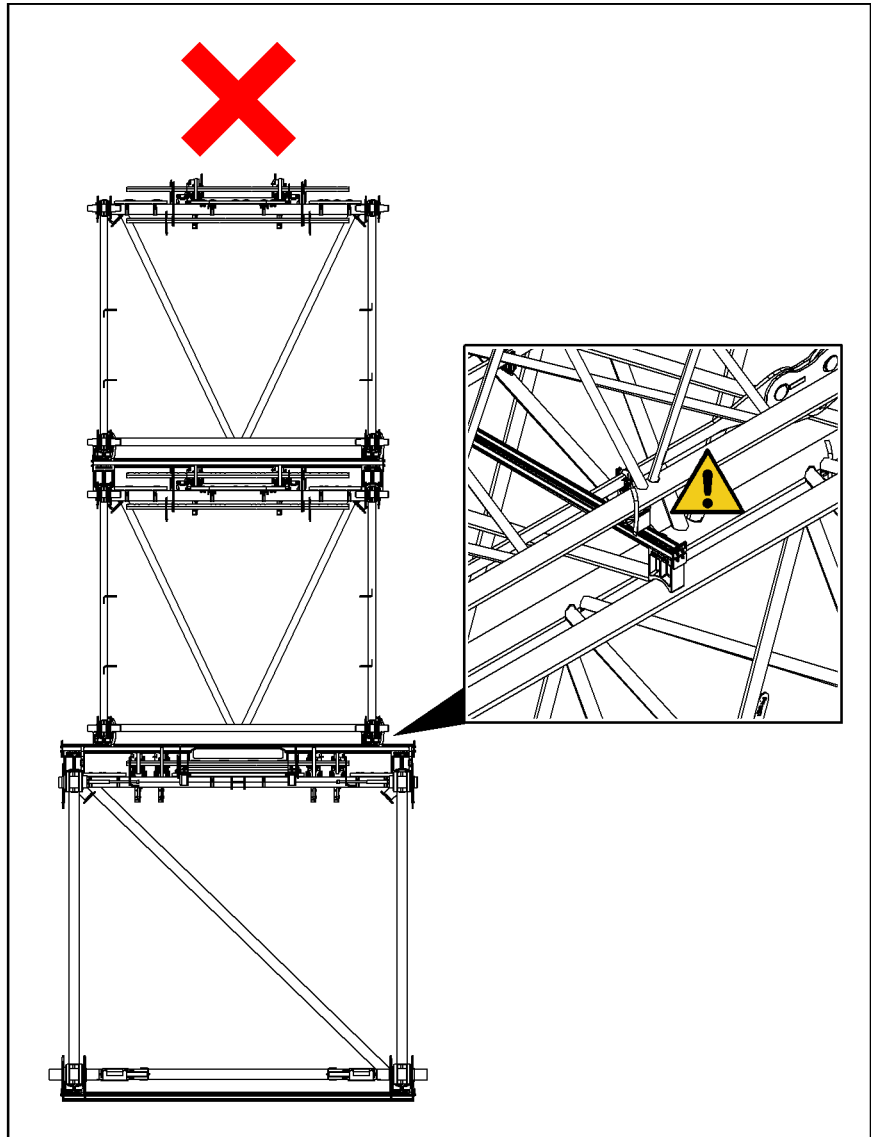
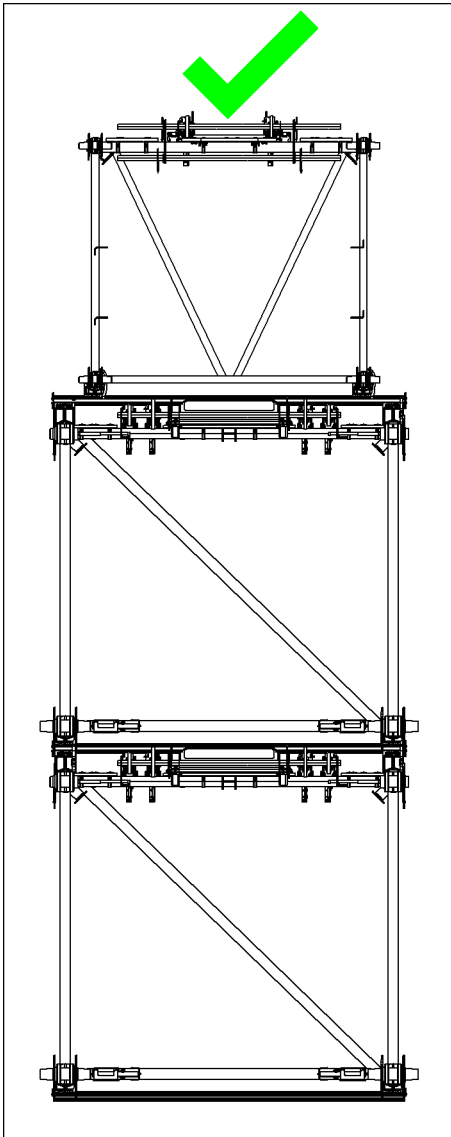


Fig. 13: Avoid section carrier deflection

At maximum stack one layer of boom sections with narrower dimensions to prevent section carrier from deflecting.

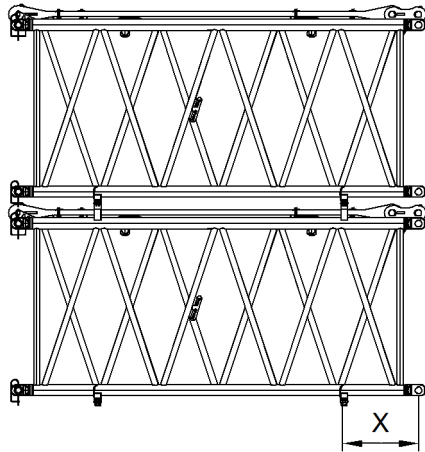


Fig. 14: Distance from base carriers to pin connection points

x Distance between support point and pin connection point

Adhere to specified distances between base carriers and fork prongs/fork arms as per following table:

Name		Value
x	Boom section 3 m (10 ft)	≤ 600 mm (1.97 ft)
	Boom section 6 m (20 ft)	≤ 1000 mm (3.28 ft)
	Boom section 12 m (40 ft)	≤ 1000 mm (3.28 ft)

Tab. 6: Technical data - distance from base carriers to pin connection points

Make sure the following preconditions are met:

- Ground is even and adequately load-bearing.
- Ground is free from snow and ice.
- Boom sections' centers of gravity are known.

1.5.1 Positioning base section

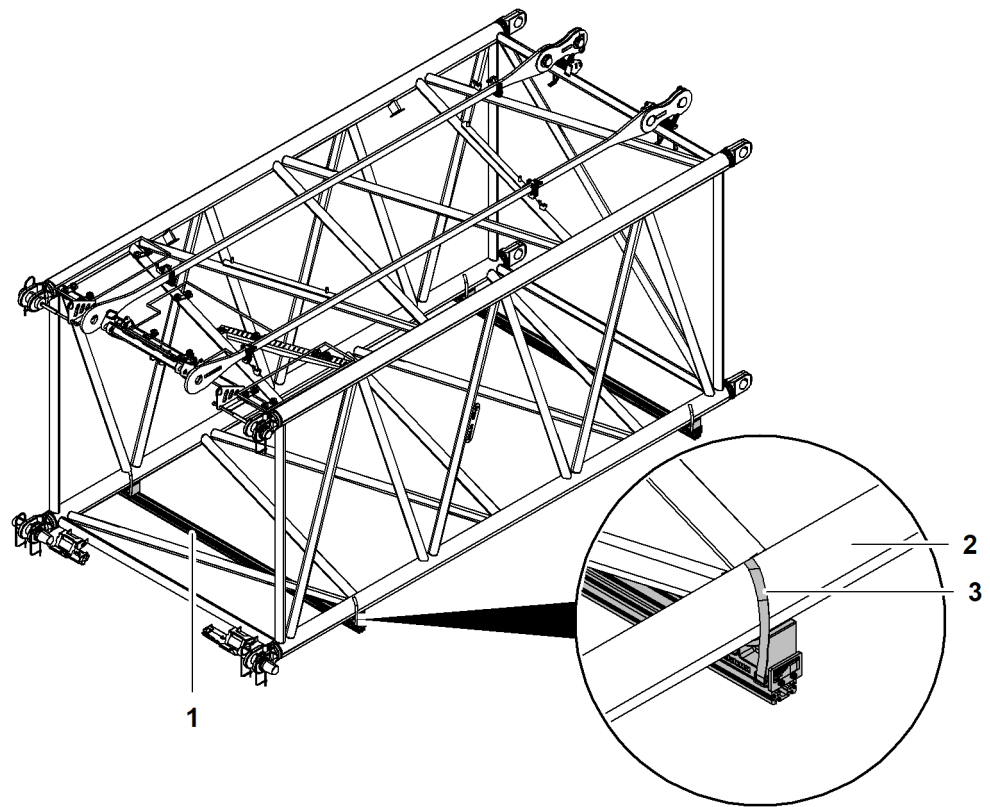


Fig. 15: Position boom section on base carrier

- | | | | |
|----------|-------------------|----------|--------------------|
| 1 | Base carrier (2x) | 3 | Lashing strap (4x) |
| 2 | Boom section | | |

Note distances between support points and pin connection points (see: [fig. 14, page 11](#)).

- ▶ Position base carrier **1** on ground.
- ▶ Position boom section **2** on base carrier **1**.
- ▶ Secure boom section **2** with lashing straps **3**.

1.5.2 Positioning section

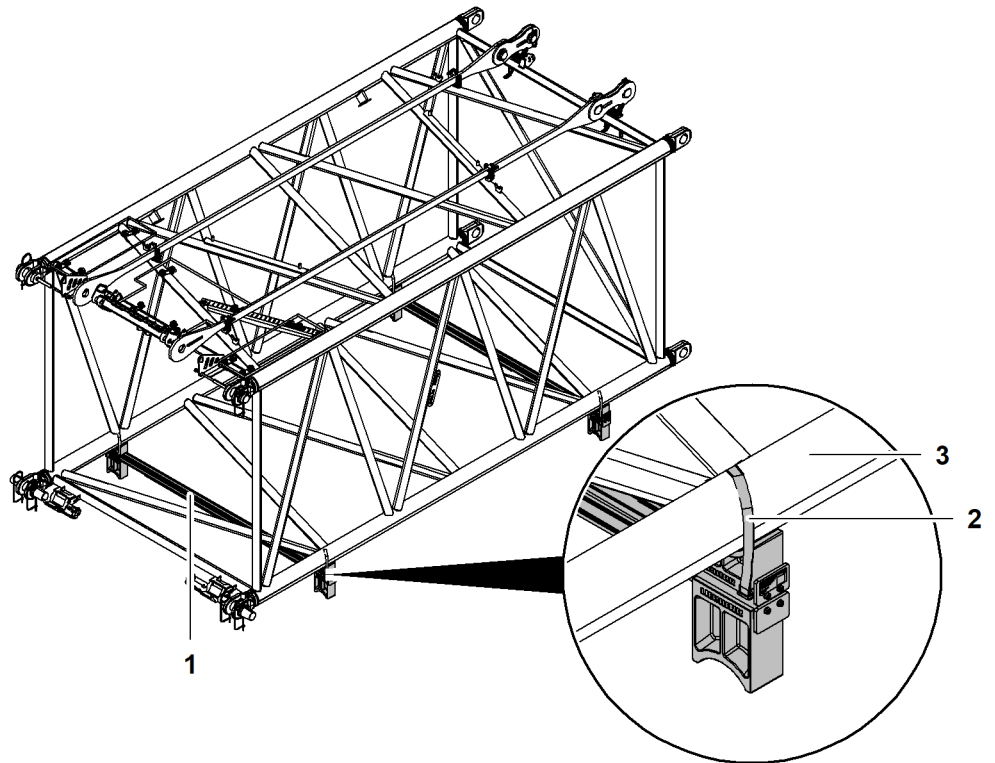


Fig. 16: Position boom section on section

- | | | | |
|----------|----------------------|----------|--------------------|
| 1 | Section carrier (2x) | 3 | Lashing strap (4x) |
| 2 | Boom section | | |

Note distances between support points and pin connection points ([see: fig. 14, page 11](#)).

- ▶ Position section carrier **1** on ground.
- ▶ Position boom section **2** on section carriers **1**.
- ▶ Secure boom section **2** with lashing straps **3**.

1.5.3 Stacking boom sections

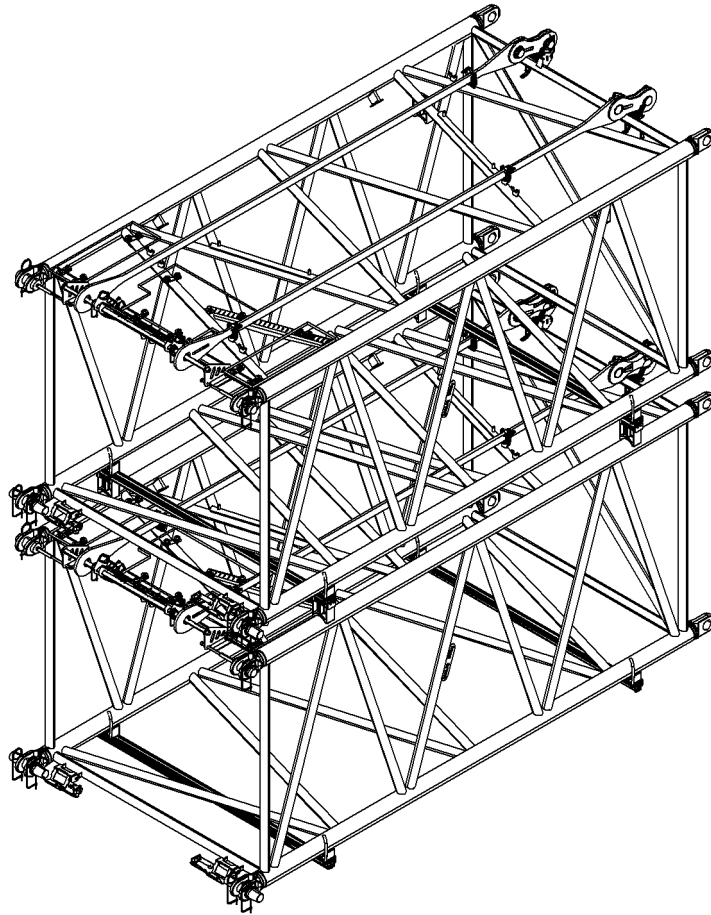


Fig. 17: Stacked boom sections

- ▶ Stack boom sections.

When stacking more than two boom sections:

- ▶ Note operational limitations. ([For more information see: 1.3 Stacking device operational limitations, page 5.](#))

1.6 Removing stacking device before using boom sections



DANGER

Additional loads when erecting or laying down boom!
Machine toppling over.

- ▶ Remove stacking device before using boom sections.
-



WARNING

Dropping stacking device!
Death, grave injuries.

- ▶ Remove stacking device before using boom sections.
-

If boom sections are loaded for transport or if they are positioned for installing the main boom:

- ▶ Remove base carrier and section carrier.
- ▶ Lay down boom sections on suitable wooden support.

