Rack and Pinion Technology

Transport Platforms, Personnel and Material Hoists

Böcker
MY WAY TO THE TOP

Maximum performance makes the difference!

Rack and Pinion Hoists

For several decades Böcker rack and pinion hoists have been reliable machines on the most diverse construction sites around the world. Thanks to sophisticated components and first-class workmanship these machines prove their reliability under most challenging conditions and impress lifting specialists by their surpassing durability and maximum performance. Lifting heights up to 200 m and maximum capacities of 4,000 kg perfectly qualify Böcker hoists even for the most challenging projects. In addition to quality and performance safety plays a key role for Böcker: All transport platforms and personnel and material hoists comply with the current requirements for safe transport of personnel and material in conformity with MRL 2006/42/EG.

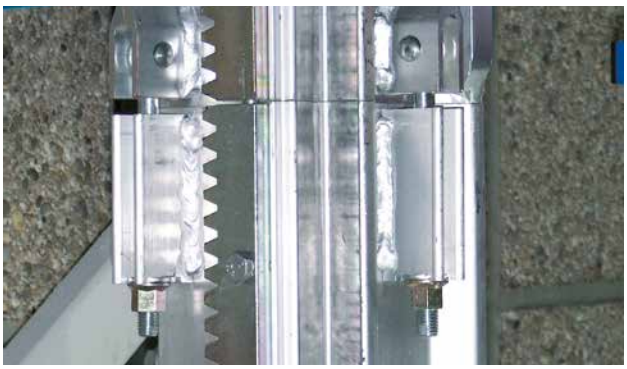
Three mast systems available

Aluminium mast
Mast system compatible to Super-Lift Z. With bolted rack and firmly-joined, captive connection bolts.
Length: 2 m
Weight: 25 kg

Triangular steel mast
Mast system compatible to Super-Lift MX models 624, 1024 and 2024. With bolted rack and firmly-joined, captive connection bolts.
Length: 1.5 m
Weight: 55 kg

Square steel mast
Mast system compatible Super-Lift LX and Super-Lift LX-PM. Solid four-tube mast ensures maximum tie distances.
Length: 1.5 m
Weight: 144 kg

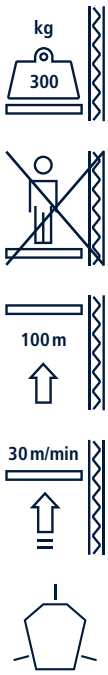
Anchoring to the scaffolding



Aluminium mast profile with captive screws

Super-Lift Z 320 / Z 330

The compact material hoist



The models Super-Lift Z 320 and Z 330 are extremely compact and at the same time very powerful hoists for material transport. Due to their minimum footprint these machines are perfectly suitable for narrow sites. The Super-Lift Z hoists are particularly popular for construction and renovation of buildings.

Benefits at a glance

- Optionally with 230 V or 400 V
- Big loading platform 1.40 x 0.85 m
- Minimum of space required due to a 90° pivoted platform
- Easy to assemble
- Aluminium mast profile with captive screws
- Simple connection to the scaffolding
- Overload protecion
- Speed-depending safety brake
- Maximum quality, long-lasting and safe to operate
- Applied standard EN 12158-1

Swivelling load platform

Technical specifications

Model	Super-Lift Z 320	Super-Lift Z 330
Capacity [kg]	300	300
Drive	Rack and pinion, single mast	Rack and pinion, single mast
Platform interior dimensions (L x W) [m]	1.40 x 0.85 x 1.10	1.40 x 0.85 x 1.10
Lifting height max. [m]	50	100
Lifting speed [m/min]	20	30
Tie distance [m]	4	4
Mast top [m]	3	3
Motor capacity [kW]	1.7	2.2
Fuse [A]	16	16
Operation voltage [V/Hz]	230/50	400/50

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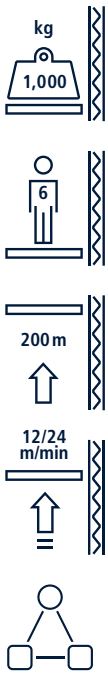
Super-Lift MX 1024

The most powerful transport platform of its kind



The Super-Lift MX 1024 is a high-performance transport platform for efficient material and personal transport. Running on a single-mast this well-proven hoist impresses by low required space on-site. Due to the minimum footprint there is enough space on virtually any construction site.

Benefits at a glance

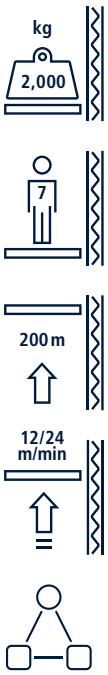
- Economical automatic control, manual switchover not applicable
- Versatile, modular gate and ramp system
- Flexible sliding gates as well as space-saving swivel gates for landings
- Superior quality / durability due to galvanized and particularly robust base unit
- Böcker Web-Key-Access-System by card operation optionally applicable
- Applied standard EN 16719 (transport platform) and EN 12158-1 (material hoist)

Technical specifications

Model	MX 1024
Capacity [pers/kg]	6/1,000
Drive	Rack and pinion, single mast
Platform interior dimensions (L x W) [m]	A17 1.70 x 0.84 A17 1.70 x 1.40 A34 3.40 x 0.84
Lifting height max. [m]	200
Lifting speed [m/min]	12/24
Tie distance [m]	6
Mast top [m]	3
Motor capacity [kW]	7.5
Fuse [A]	16
Operation voltage [V/Hz]	400/50

Super-Lift MX 2024

The modular extensible transport platform



In twin-mast design the Super-Lift MX 2024 provides maximum performance and is therefore the ideal transport platform for all challenging construction projects.

Benefits at a glance

- Economical automatic control, manual switchover not applicable
- Flexible, modular design with platform sizes up to 5.10 m in length and 4.50 m in width
- Flexible sliding gates as well as space-saving swivel gates for landings
- Superior quality / durability due to galvanized and particularly robust base unit
- Böcker Web-Key-Access-System by card operation optionally applicable
- Applied standard EN 16719 (transport platform) and EN 12158-1 (material hoist)

Technical specifications

Model	MX 2024
Capacity [pers/kg]	7/ 2,000
Drive	Rack and pinion, twin mast
Platform interior dimensions (L x W) [m]	A17 1.70 x 1.40 / A25 2.55 x 1.40 / A34 3.40 x 1.40 / A42 4.25 x 1.40 / A51 5.10 x 1.40 / B30 1.70 x 3.00 / B45 1.70 x 4.50
Lifting height max. [m]	200
Lifting speed [m/min]	12/24
Tie distance [m]	10
Mast top [m]	3
Motor capacity [kW]	2 x 7.5
Fuse [A]	35
Operation voltage [V/Hz]	400/50

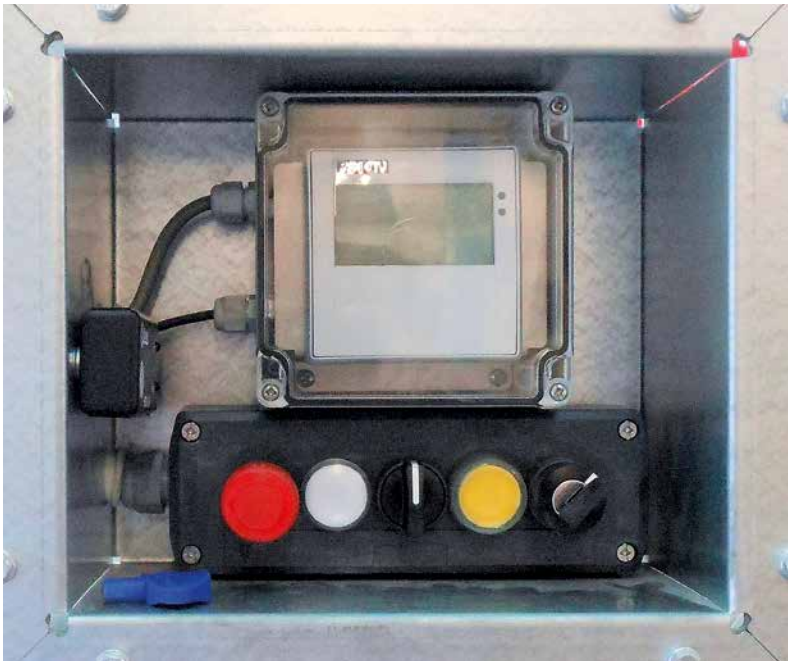
MX 2024 with roof

Super-Lift MX 2024 – A34 excentric platform

Special features Super-Lift MX

Control options

- Convenient passenger and material transport: the hoist can always be called from the landings. Upon request all operation modes (Automatic, Outside, OFF) can be chosen by key
- Sophisticated rotary switch enables precise operation and surpassing convenience particularly during long rides
- Diagnosis system clearly displays the operating states in any situation
- Böcker Web-Key-Access-System by card operation optionally applicable
- Access control including time recording possible via internet



Drive unit

- The MX reaches lifting speeds up to 24 m/min.

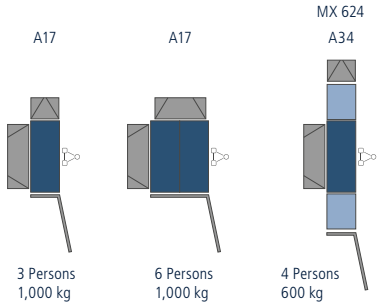
Door locking

- Mechanic door locking by fall support

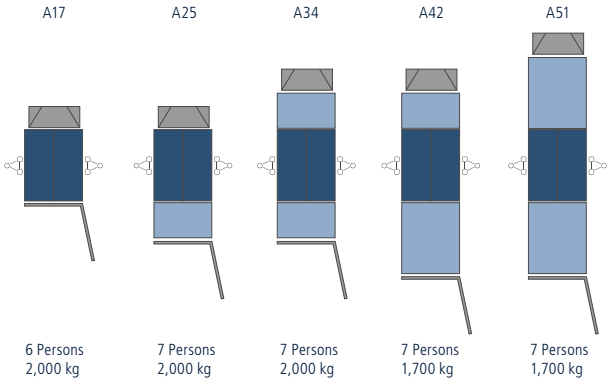
Central lubrication system

- Cost-efficient continuous lubrication ensures particularly low wear and tear on rack and pinion for all types of MX

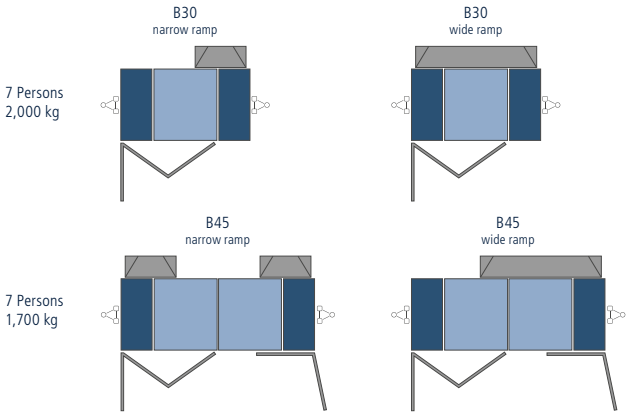
Examples of platform configurations



Single-mast platform as load-through platform MX 1024 (A-type)

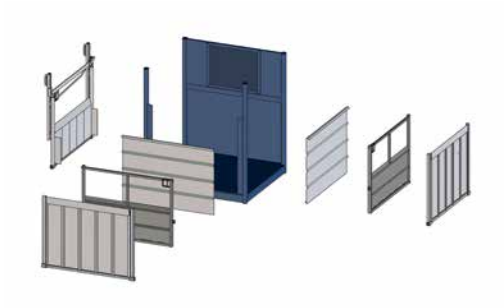


Extension of twin-mast models of MX 2024 as load-through platform (A-type)

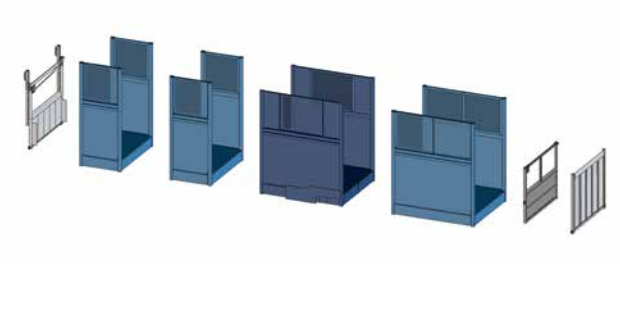


Extension of twin-mast models of MX 2024 as perpendicular platform (B-type)

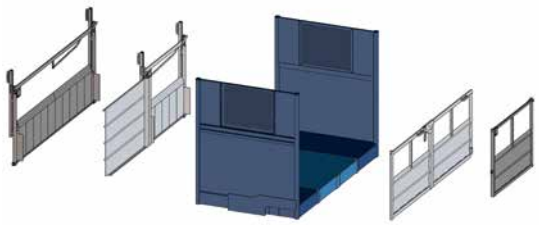
Options of extension



Extension components of MX 1024



Extension components of Super-Lift MX 2024 as load-through platform (A-type)



Extension components of Super-Lift MX 2024 as perpendicular platform (B-type)

Tailor-made for your requirements

- Changeover of the MX 2024 from load-through platform (A-type) to perpendicular platform (B-type) is possible
- Base unit can be complemented by exit ramps, swivelling and folding gates or closure walls with almost no restriction
- Base-unit dimensions optimized for transport on trucks

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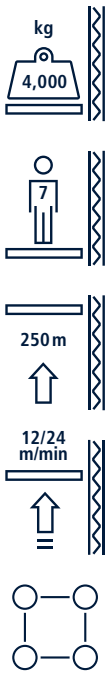
Super-Lift LX 2024 – safe and quick access to each floor

Super-Lift LX 2024 – A34 in single-cage operation

Super-Lift LX 2024 / 2040 – 4024

Versatile transport platform for heavy loads



Super-Lift LX 4024

The Böcker Super-Lift LX is a sophisticated transport system which can be used on the most diverse construction sites due to its surpassing versatility. Having a maximum lifting height of 200 m (LX 4024 up to 250 m) it is perfectly suitable even for large construction projects. Depending on the type of cabin this hoist provides sufficient space for up to 7 passengers or 4,000 kg load respectively. Upon request the Super-Lift LX can be operated in single mode or twin mode with two cabins on one mast.

Benefits at a glance

- Economical automatic control, manual switchover not applicable
- Maximum efficiency due to flexible, modular design with platform sizes up to 5.10 m
- Flexible loading through A, B and C-Side of cabin
- Single- or twin-cage operation
- Combination of LX as material hoist and LX-PM as passenger hoist
- Maximum tie distance of 15 m (LX 4024 up to 25 m)
- Böcker Web-Key-Access-System by card operation optionally applicable
- Superior quality and durability thanks to galvanized and particularly robust base unit
- Applied standard EN 16719 (transport platform) and EN 12158-1 (material hoist)

Technical specifications

Model	**LX 2024 / 2040**	**LX 4024**
Capacity [pers/kg]	7/2,000 resp. A17 2,300	7/4,000
Drive	Rack and pinion, single mast	Rack and pinion, twin mast
Platform interior dimensions (L x W) [m]	A17 1.70 x 1.40 A25 2.55 x 1.40 A34 3.40 x 1.40 A42 4.25 x 1.40 A51 5.10 x 1.40	A17 1.70 x 2.90 A25 2.55 x 2.90 A34 3.40 x 2.90 A42 4.25 x 2.90 A51 5.10 x 2.90
Lifting height max. [m]	200	250
Lifting speed [m/min]	12/24	12/24
Tie distance [m]	15	25
Mast top [m]	9	15
Motor capacity [kW]	2 x 7.5	4 x 7.5
Fuse [A]	32/63	80
Operation voltage [V/Hz]	400/50	400/50

Special features Super-Lift LX

Web-Key-Access-System by card operation

- Operating hours of a machine can be recorded exactly per day. Precise accounting per minute on a daily basis is therefore possible
- Full data available through internet on permanent basis
- Full data can be downloaded and used for further analysis as well as link-up
- Recorded data are transmittable to disposition and accounting software
- Full machinery monitoring at any time and any place with internet access

Transport cage

- Super-Lift LX available in different cage sizes
- Different gate positions possible on A, B and C side of the cabin

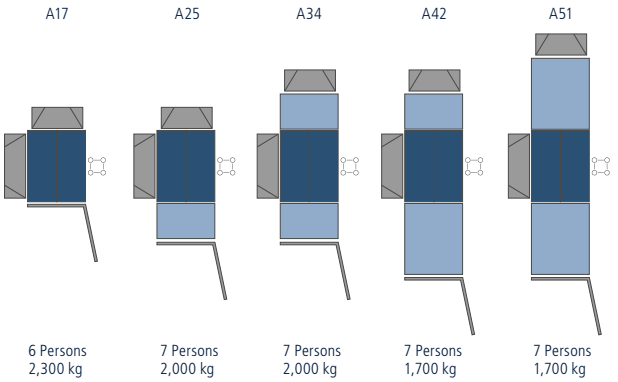
Gate and ramp system

- Electric locking ensured by means of proximity switches
- Stable exit ramps designed for permanent load at maximum level
- Lightweight and easily installable sliding gates
- Landing-control units available upon request

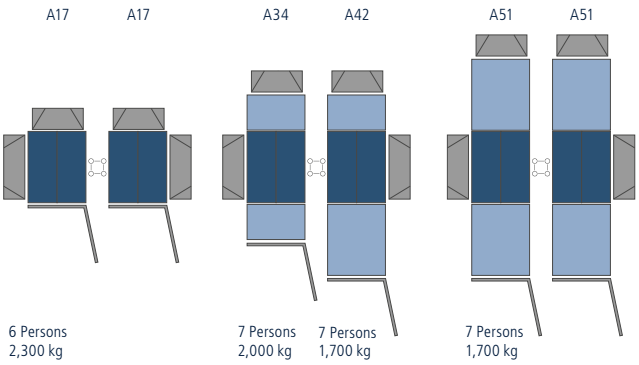
Diagnosis system

- Display of information in plaintext for fast diagnosis of all operation states
- Diagnosis system enables easy and fast service support and therefore avoids time-consuming and costly operations

Examples of platform configurations

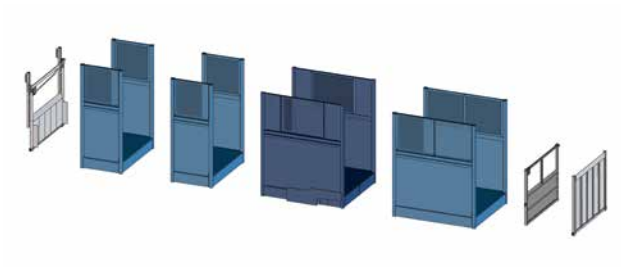


Single-cage operation

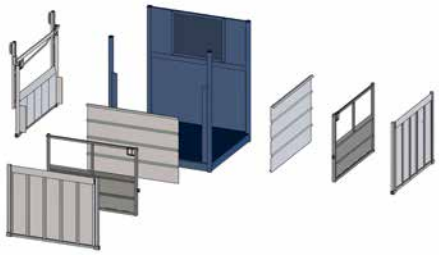


Twin-cage operation: In twin-cage operation the various cabin sizes shown above can be combined freely with each other

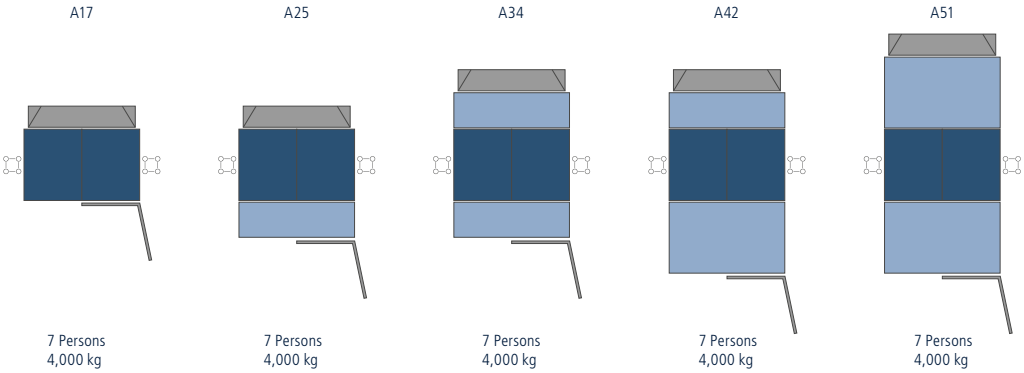
Options of extension



Extension with additional platform elements



Extension with gates, ramps and closing walls



Extensions LX 4024

Tailor-made for your requirements

- Base unit can be complemented by exit ramps, swivelling and folding gates or closure walls with almost no restriction
- Base-unit dimensions optimized for transport on trucks
- Stable mast system enables single- and twin-cage operation
- Operation of different cage sizes on one mast possible

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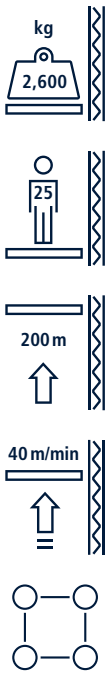
Super-Lift LX-PM

The powerful personnel and material hoist



The builders hoist for persons and materials Super-Lift LX-PM transports loads of up to 2,600 kg and offers space for up to 25 passengers. At the same time, it reaches a hoisting height of up to 200 m. The frequency-controlled drive ensures conveying speeds of up to 40 m/min and a gentle start and stop for minimal wear and tear of all components.

As the Super-Lift LX-PM complies with the highest safety standards for passenger lifts thanks to the enclosed lift cabin and comfortable emergency lowering, it can also be operated without a lift attendant, in accordance with EN 12159. In addition, it is equipped with an intelligent control, so that it automatically stops at the individual landings thanks for a landing pre-selection. Due to its modular system, the cabin size of the new rack-and-pinion hoist is variably extendable and the hoist can be used at the most different types of construction sites.

Benefits at a glance

- Enclosed cabine
- Modular cabin system with up to 5.10 m platform length
- Flexible gate and ramp system, C-Gate with 2.70 m opening width optionally available
- Flexible loading through A, B and C side of cabin
- Intelligent control with landing pre-selection
- Single or twin cabin operation
- Accessible cabin roof for mast and mast ties mounting
- Mast system is compatible to Super-Lift LX
- Compatible with LX model accessories
- Böcker Web-Key-Access-System via card control applicable as an option
- Maximum quality and longevity because of the galvanized and robust base unit
- Applied standard EN 12159

Technical specifications

Model	**LX-PM**
Capacity max. [pers/kg]	25/2,600
Platform interior dimensions (L x W) [m]	A17 1.70 x 1.40 A25 2.55 x 1.40 A34 3.40 x 1.40 A42 4.25 x 1.40 A51 5.10 x 1.40
Lifting height max. [m]	200
Lifting speed [m/min]	40
Tie distance [m]	15
Mast top [m]	9
Motor capacity [kW]	32
Fuse [A]	63
Operation voltage [V/Hz]	400/50

Special features Super-Lift LX-PM

Drive

- Reduced wear and tear on rack and pinion due to operation with 2 motors
- Particularly cost- and energy-efficient but with full performance
- Sophisticated and well-proven components ensure long product life and maximum operational safety
- Efficient drives for smooth acceleration and stop, therefore minimum wear and tear of drive components
- Automatic lubrication
- Economical operation thanks to low maintenance costs

Types of controls

- Basic control for approach to landings, Basic-Plus control with rotary operating switch for approach to landings via stop-next-floor function and key-board for landing preselection or Comfort control with keyboard preselection
- Innovative microprocessor control in outdoor tech-nology ensures low waiting times and maximum operational safety
- Landing preselection and group control
- Self-explaining, multi-language menu navigation in plaintext
- Böcker Web-Key-Access-System by card operation
- Emergency lowering at the push of a button to the next level

Landing gates

- Different designs of landings available
- Double-wing door 2 m high, sliding or swiveling door (1.10 m high) with ramp system to ensure economic solutions for any requirement
- Unlocking is activated upon approach of hoist cabin on landing
- Partial system or with landing gate framework
- Mechanical locking
- Door locking and door position electrically monitored

Landing control

- Landing control available in cable or radio-remote design

C-Gate

- Particularly designed for loading of long goods
- C-Gate can be retrofitted on-site upon request
- Length of C-Gate 2.70 m

Easy-to-assemble

- Assembly crane for mast assembly without further equipment from customers
- Installation on the accessible roof with roof control and 230 V connectors for hand tools
- Assembly bridge to reach anchoring points on the building
- Assembly by crane of bolted mast elements possible up to maximum length of 15 m

Special features Super-Lift LX-PM

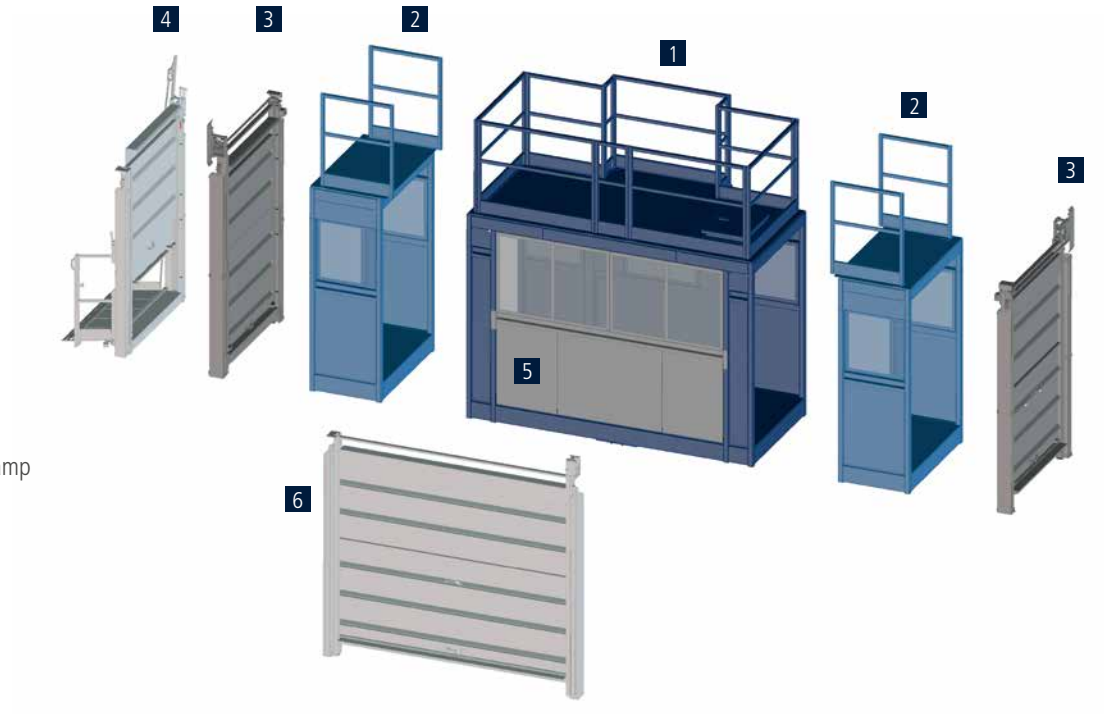
Transport cage

- Flexible, modular cage lengths from 1.70 to 5.10 m
- Numerous areas of application with single- and twin cage operation
- Equipment with ramp system upon request
- Particularly robust and therefore suitable for any site conditions
- Maintenance-free tandem rollers
- Lightening for the roof
- Installation on the accessible cabin roof
- Reduction of assembly-time on-site thanks to compact transport dimensions
- Reduced entry-level of only 60 cm

Flexible mast layout

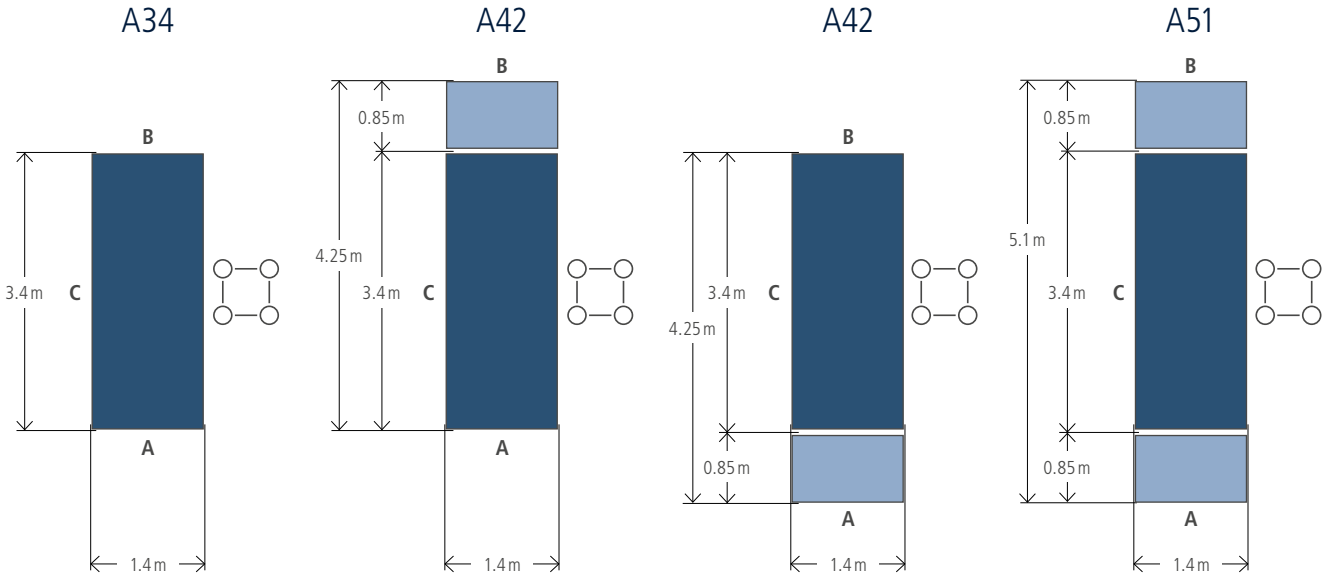
- Lying e.g. for installation on inclined building fronts
- Concave e.g. for installation on cooling towers

Options of extension



1 Base Platform
2 Semi-Platform
3 Vertical Gate
4 Vertical Gate - Ramp
5 C-Side Closure
6 C-Gate

Examples of platform configurations



A34	A42	A42	A51
23 Persons 2,200 kg	25 Persons 2,000 kg	25 Persons 2,000 kg	22 Persons 1,800 kg

Gates selectable as option

A-Side	Vertical Gate
B-Side	Vertical Gate **or** Vertical Gate - Ramp
C-Side	C-Side Closure **or** C-Gate

All weights are in kg. Measurements can fluctuate slightly.

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