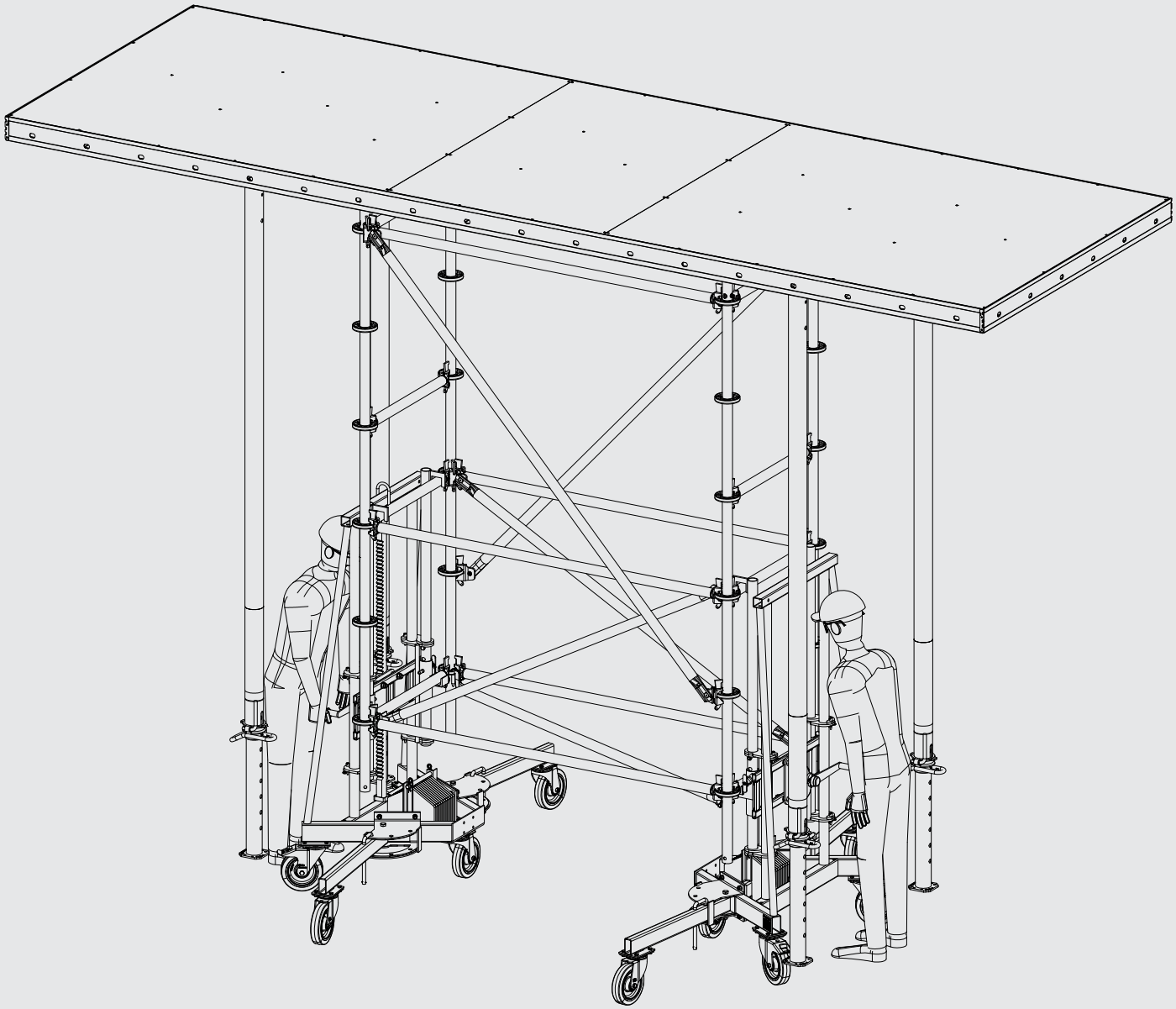
TOPMAX

Lifting Jack Carriage 750 and Positioning Unit

Operating Instructions



HÜNNEBECK
BY BRAND SAFWAY

Content

1 General information

1.1 About these instructions

These original operating instructions describe assembly and use of the TOPMAX Lifting Jack Carriage 750 and the Positioning Unit constructed with the Lifting Jack Carriage and other components.

1.2 Product description

TOPMAX Table Forms with attached tubular steel props or GASS props as well as MODEX, GASS and ST 60 Shoring Towers can be moved using the TOPMAX Lifting Jack Carriages 750. TOPMAX Table Forms can be moved with and without Extension Frames attached.

TOPMAX Lifting Jack Carriages 750 are weighted down and are equipped with cantilevers to increase the stability.

To transport TOPMAX Table Forms with tubular steel props attached, join two TOPMAX Lifting Jack Carriages 750 with the aid of a MODEX Assembly to form a sturdy Positioning Unit.

Use the built-in lifting jacks to raise the Table Forms a few centimetres and then move the structure. The maximum lifting height of the Lifting Jack Carriages is 1.08 m.

1.3 Intended use

When two TOPMAX Lifting Jack Carriages are joined to form a Positioning Unit, a single TOPMAX Table Form with tubular steel props attached, with a maximum total height of 7.50 m, can be transported. Transporting multiple Table Forms or Table Forms with components attached is prohibited, unless separate certification of structural stability is provided!

The following items (Refer to page 62 for maximum dimensions) can be transported using two Lifting Jack Carriages 750 that are not connected to one another:

- A single TOPMAX Table Form with GASS props attached, up to a maximum height of 7.50 m.
- A single MODEX Shoring Tower without any load, up to a maximum height of 7.50 m.
- A single GASS Shoring Tower without any load, up to a maximum height of 7.50 m.
- A single ST 60 Shoring Tower without any load, up to a maximum height of 7.50 m. The lowest frame level has to be made up of ST 60 Frames or Entry Frames, 1.00 m high and 1.50 m wide.

Lifting, lowering and moving loads are all tasks that should be performed by two persons.

The Positioning Unit and Lifting Jack Carriage 750 may be used only as described in these operating instructions.

No other use is permitted. Other uses are generally possible, such as transporting assembled Table Forms or Table Forms with components attached. But such applications and any use other than that described above as standard require separate proof of structural stability!

2 Safety instructions

2.1 General information

- The contractor may assign only persons properly trained and familiar with the required tasks as described in the risk assessment and the operating instructions to use the Lifting Jack Carriage. The operating instructions must be readily available at all times.
- The contractor must ensure that, before operation begins, the Lifting Jack Carriage has been inspected by a qualified person and that no deficiencies have been found.
- The contractor is responsible for having the Lifting Jack Carriages inspected by a qualified person at least once a year.
- The contractor has to ensure that a Lifting Jack Carriage or accessories with deficiencies that could affect safety are no longer used.
- When damage or other extraordinary circumstances that could affect the load-bearing capacity have occurred, the contractor is responsible for having the equipment inspected by a qualified person.
- The contractor is responsible for having repairs to Lifting Jack Carriages performed only by the manufacturer.
  Use only original spare parts. After any repairs, the Lifting Jack Carriage must be subjected to an extraordinary inspection by a qualified person.
- When working with the Lifting Jack Carriages, always wear protective gloves (EN 388, at least protection level 1), safety footwear S3 (EN ISO 20345), an industrial helmet (EN 397) and safety glasses (EN 166).
- The path must be free of obstacles! Do not roll over bumps! Do not roll over grooves or other openings in the ground!
- Visually inspect the Lifting Jack Carriages and attached components before each use and during operation, checking for faults such as deformation, cracks, breaks, incomplete labelling, etc.
- Store the Lifting Jack Carriages such that they are protected from weather conditions and aggressive substances.
- Do not subject the Lifting Jack Carriage to weight that exceeds the load-bearing capacity.
- Do not use the Lifting Jack Carriage on ground sloped more than 3°!

2.2 Operation

- Only the two persons operating the Lifting Jack Carriages may stand under the suspended load.
- When Lifting Jack Carriages are connected to form a Positioning Unit, always operate with two persons.
- Lift loads symmetrically to their centre of gravity.
- Position Lifting Jack Carriages only at the narrow side of a load!
- Lift, transport and set down loads in a manner that prevents them from falling over, falling apart or slipping.
- Lift, transport and set down loads such that the Lifting Jack Carriages are not damaged.
- When setting down a load and then lifting it again, check that the Lifting Jack Carriage is positioned correctly.
- Never lift or move loads on which there are loose parts.

- Never lift or move multiple formwork elements connected to one another.
- Always lift loads evenly with the two Lifting Jack Carriages! The difference in height between the brackets on two Lifting Jack Carriages may be no more than 15 cm (maximum permitted slope of load is 3°; refer to page 45).
- Always maintain at least 50 mm clearance between the props and the ground when transporting Table Forms.
- Never touch the toothed rack while operating the Lifting Jack! Risk of crushing!
- Always extend the cantilevers as far as possible.
- Restrict the longitudinal speed to 2.90 km/h (0.8 m/s).
- When the cantilevers are temporarily retracted, restrict the transverse and longitudinal speed to 1 km/h (0.28 m/s).
- Moving in a transverse direction with a load is permitted only for manoeuvring the Lifting Jack Carriage! Extend the cantilevers before any transverse motion. Never move in a transverse direction on an incline. Maximum speed 1.75 km/h (0.48 m/s)!
- Accelerate and brake slowly and smoothly!
- Walk backwards only when it is absolutely essential. Be especially careful when walking backwards. If necessary, have another person secure the path.
- When lifting 1.80 m wide Table Forms near walls, the cantilevers cannot be completely extended on the wall side. Immediately extend the cantilevers all the way as soon as the Lifting Jack Carriage moves away from the wall.
- Before setting down Table Forms, check that the Table Form props are extended to the same length. Check that the Quick Release Bolt Is properly seated in the props.
- Secure the TOPMAX Table Forms to prevent them from overturning when they are set down.

2.3 Lifting

- Extend the cantilevers before lifting TOPMAX Table Forms onto the Positioning Unit with the crane. Verify that the Table Forms are positioned correctly!
- Always use the proper load suspension equipment to move TOPMAX Table Forms by crane!
- Cease crane operation when the wind speed exceeds 64 km/h (0.2 kN/m^2)!
- Do not stand or walk under suspended loads!

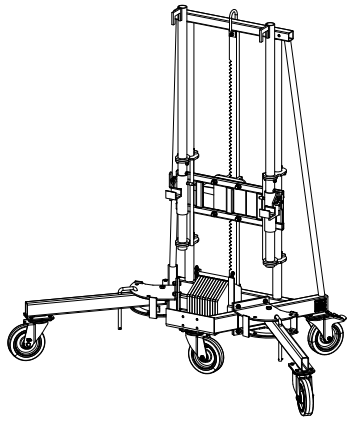
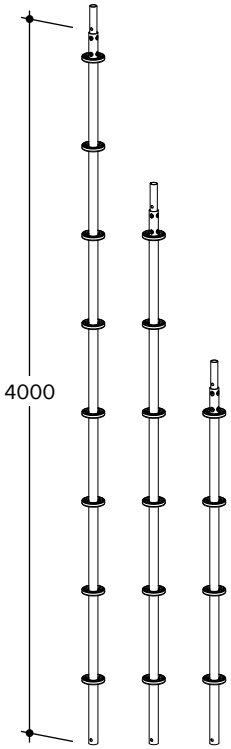
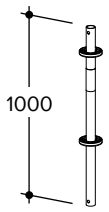
2.4 Warnings and notes

The individual safety messages, notes and the visual inspections must be followed.

DANGER	**DANGER!** DANGER indicates a hazardous situation that, if not avoided, will cause death or serious injury.
WARNING	**WARNING!** WARNING indicates a hazardous situation that, if not avoided, can cause death or serious injury.
CAUTION	**CAUTION!** CAUTION indicates a hazardous situation that, if not avoided, can cause minor or moderate injury.
NOTE	**NOTE!** NOTE indicates a hazard that can cause property damage.
	This note indicates that an additional inspection is required.
	This note shares practical experience with the user, e.g. how to perform a task more easily or quickly.
	This note indicates particularly important information, e.g. that a requirement has to be fulfilled.

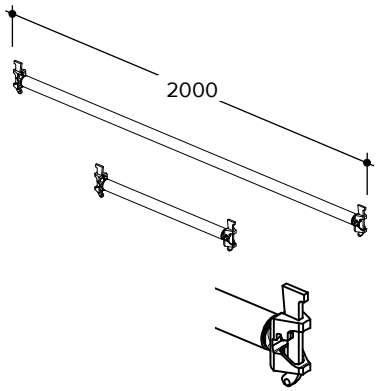
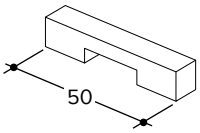
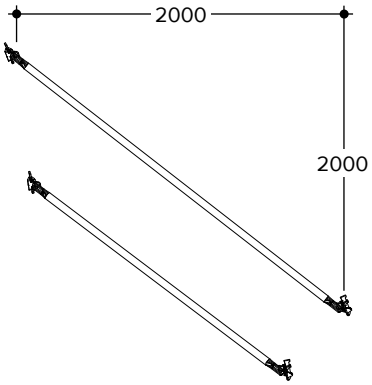
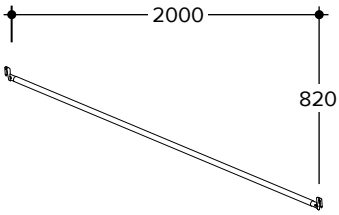
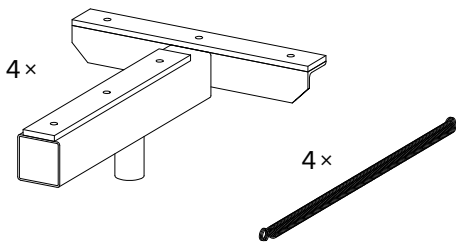
This symbol indicates that additional information from other documents is required. These documents could be user guides or operating instructions for other products.

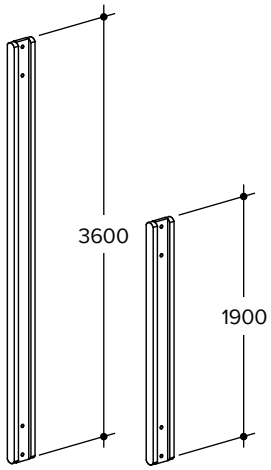
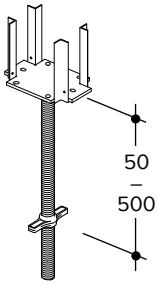
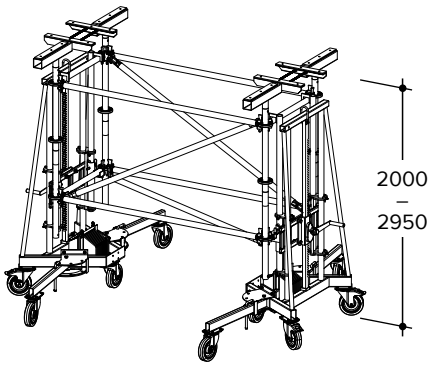
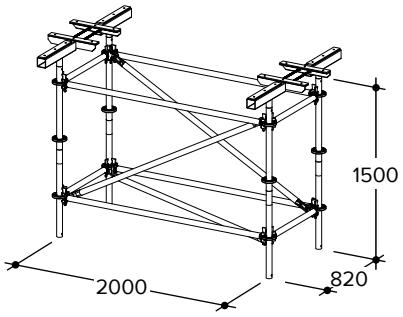
3 Components

	Component	Part code	Weight [kg]
	**TOPMAX Lifting Jack Carriage 750** With cantilevers and weights.	**607111**	**220.59**
	**Vertical Post 400**	**470918**	**20.21**
	Vertical Post 300	**470907**	**15.33**
	Vertical Post 200	**470892**	**10.45**
	Vertical Post 150	**470881**	**8.00**
	Vertical Post 100	**470870**	**5.60**
	Steel tube Ø 48.3 mm with a rosette every 50 cm. Built-in spigots connect the tubes to one another.		
	**Vertical Post 100 L**	**553645**	**4.88**

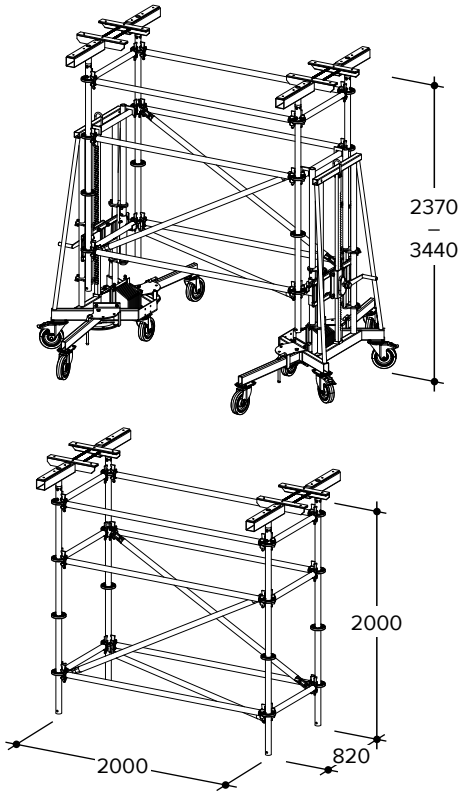
Unless stated otherwise, all dimensions in mm.

Components

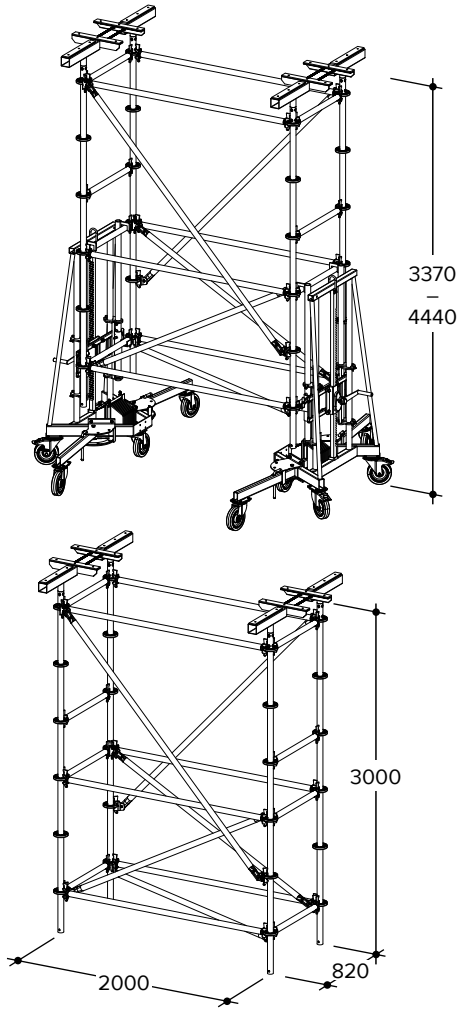
	Component	Part code	Weight [kg]
	**Tube Ledger 200**	**475781**	**8.27**
	Tube Ledger 82	**470930**	**3.84**
	**Shear Force Securing Device** Stabilises connections between tube ledgers and rosettes. Must be used at every tube ledger - rosette junction.	**577988**	**0.03**
	**V-diagonal 200/200**	**475910**	**12.10**
	V-diagonal 100/200	**651659**	**9.75**
	Used to vertically brace the MODEX Assembly.		
	**H Diagonal 200/82** Used to horizontally brace the MODEX Assembly.	**651623**	**8.52**
	**Set of Turning Heads** Consists of: 4no. TOPMAX Turning Head (code: 603237) 4no. TOPMAX Readjusting Spring (code: 603303)	**607160**	**28.72**

	Component	Part code	Weight [kg]
	**Components needed to transport TOPMAX Table Forms with Extension Frames**		
	H 20 K-beam 360 Used when moving the Positioning Unit longitudinally under the scaffold.	**603195**	**16.56**
	H 20 K-beam 190 Used when moving the Positioning Unit laterally under the scaffold.	**603190**	**8.74**
	**Crosshead Jack 70/3.8×6.3**	**652184**	**8.11**
	**TOPMAX Positioning Unit with MODEX Assembly type 1** Adjustable from 2.00 to 2.95 m		
	Consists of:		
	2no. TOPMAX Lifting Jack Carriage 750	**607111**	**220.59**
	4no. Vertical Post 150	**470881**	**8.00**
	4no. Tube Ledger 200	**475781**	**8.27**
	4no. Tube Ledger 82	**470930**	**3.84**
	2no. V-diagonal 100/200	**651659**	**9.75**
	1no. H-diagonal 200/82	**651623**	**8.52**
	16no. Shear Force Securing Device	**577988**	**0.03**
	1no. Set of Turning Heads	**607160**	**28.72**
	Total weight: 578.84 kg		

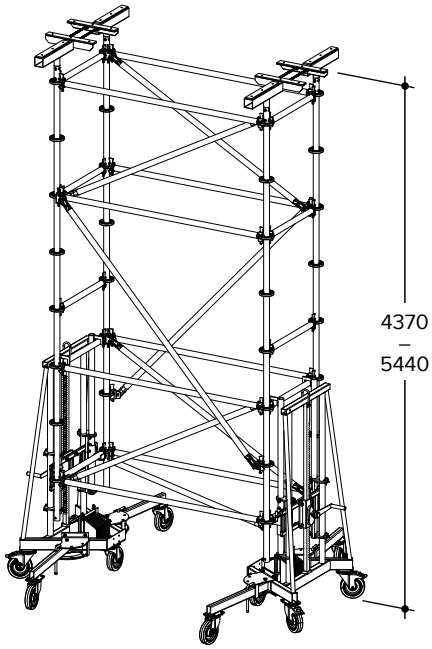
Components

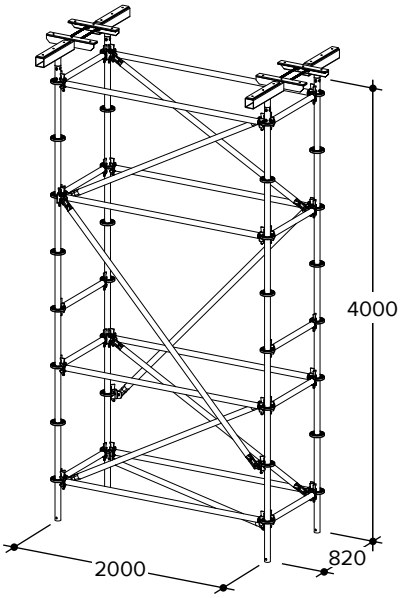


Component	Part code	Weight [kg]
TOPMAX Positioning Unit with MODEX Assembly type 2		
Adjustable from 2.37 to 3.44 m		
Consists of:		
2no. TOPMAX Lifting Jack Carriage 750	**607111**	**220.59**
4no. Vertical Post 200	**470892**	**10.45**
6no. Tube Ledger 200	**475781**	**8.27**
6no. Tube Ledger 82	**470930**	**3.84**
2no. V-diagonal 100/200	**651659**	**9.75**
1no. H-diagonal 200/82	**651623**	**8.52**
24no. Shear Force Securing Device	**577988**	**0.03**
1no. Set of Turning Heads	**607160**	**28.72**
Total weight: 613.10 kg		



Component	Part code	Weight [kg]
TOPMAX Positioning Unit with MODEX Assembly type 3		
Adjustable from 3.37 to 4.44 m		
Consists of:		
2no. TOPMAX Lifting Jack Carriage 750	**607111**	**220.59**
4no. Vertical Post 300	**470907**	**15.33**
6no. Tube Ledger 200	**475781**	**8.27**
8no. Tube Ledger 82	**470930**	**3.84**
2no. V-diagonal 200/200	**475910**	**12.10**
2no. V-diagonal 100/200	**651659**	**9.75**
1no. H-diagonal 200/82	**651623**	**8.52**
28no. Shear Force Securing Device	**577988**	**0.03**
1no. Set of Turning Heads	**607160**	**28.72**
Total weight: 664.62 kg		

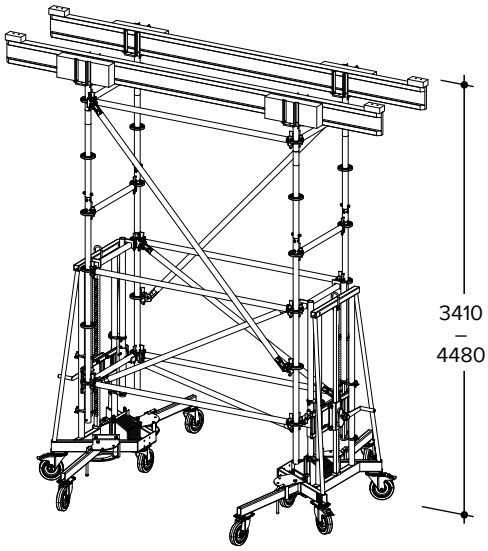


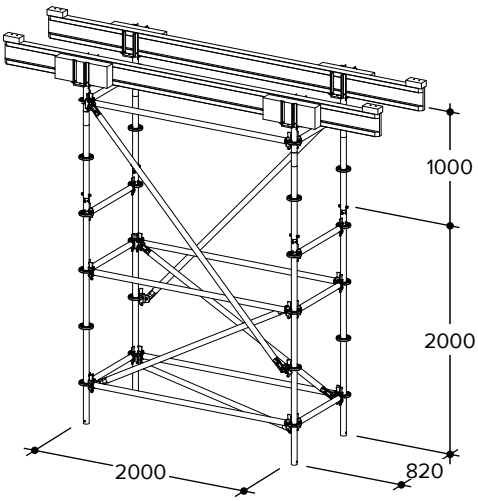


Component	Part code	Weight [kg]
TOPMAX Positioning Unit with MODEX Assembly type 4		
Adjustable from 4.37 to 5.44 m		
Consists of:		
2no. TOPMAX Lifting Jack Carriage 750	**607111**	**220.59**
4no. Vertical Post 400	**470918**	**20.21**
8no. Tube Ledger 200	**475781**	**8.27**
10no. Tube Ledger 82	**470930**	**3.84**
2no. V-diagonal 200/200	**475910**	**12.10**
4no. V-diagonal 100/200	**651659**	**9.75**
1no. H-diagonal 200/82	**651623**	**8.52**
36no. Shear Force Securing Device	**577988**	**0.03**
1no. Set of Turning Heads	**607160**	**28.72**
Total weight: 728.10 kg		

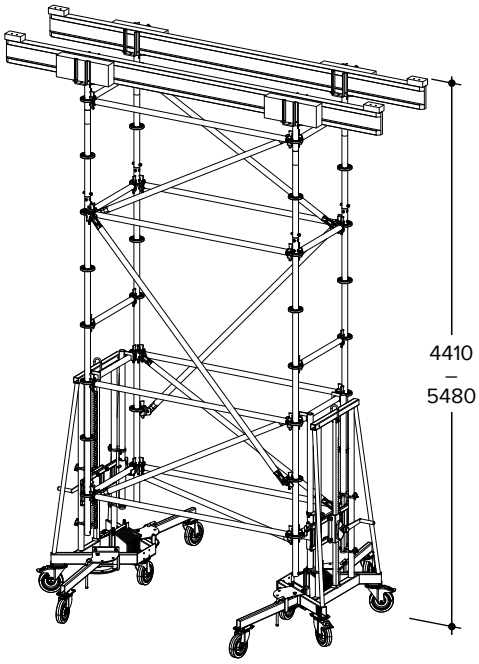
Unless stated otherwise, all dimensions in mm.

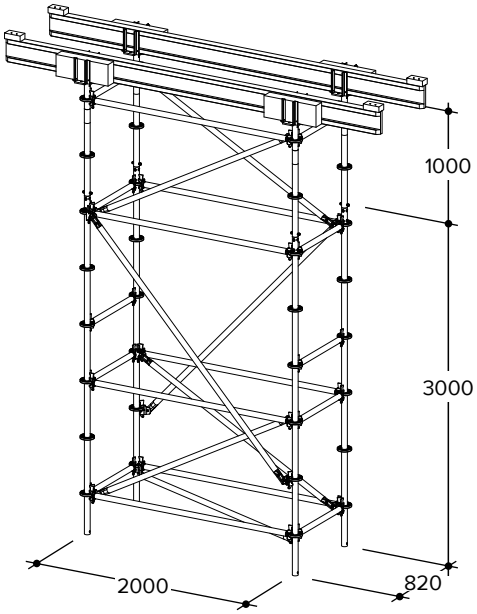
Components





Component	Part code	Weight [kg]
TOPMAX Positioning Unit with MODEX Assembly type 5 for Extension Frames		
Adjustable from 3.41 to 4.48 m (+ 2 m Extension Frames)		
Consists of:	**607111**	**220.59**
2no. TOPMAX Lifting Jack Carriage 750	**470892**	**10.45**
4no. Vertical Post 200	**553645**	**4.88**
4no. Vertical Post 100 L	**496506**	**0.06**
4no. Screw M12x75 with nut	**475781**	**8.27**
6no. Tube Ledger 200	**470930**	**3.84**
8no. Tube Ledger 82	**475910**	**12.10**
2no. V-diagonal 200/200	**651659**	**9.75**
2no. V-diagonal 100/200	**651623**	**8.52**
1no. H-diagonal 200/82	**577988**	**0.03**
28no. Shear Force Securing Device	**652184**	**8.11**
4no. Crosshead Jack 70/3.8×6.3	**603195**	**16.56**
2no. H 20 K-beam 360 Used when moving the Positioning Unit longitudinally under the scaffold (Refer to page 52)	**603190**	**8.74**
or		
2no. H 20 K-beam 190 Used when moving the Positioning Unit laterally under the scaffold (Refer to page 55).		
Total weight: 701.70 kg (with H 20 K-beams 360)		

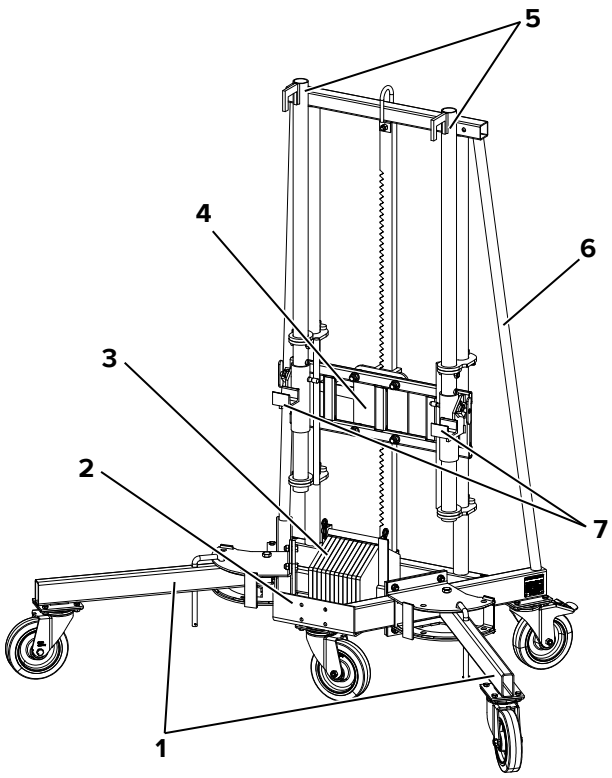


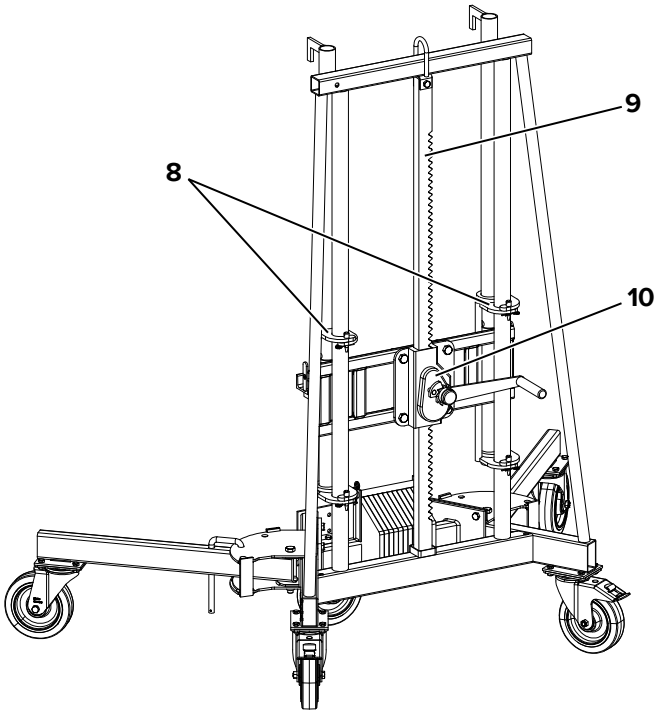


Component	Part code	Weight [kg]
TOPMAX Positioning Unit with MODEX Assembly type 6 for Extension Frames		
Adjustable from 4.41 to 5.48 m (+ 2 m Extension Frames)		
Consists of:	**607111**	**220.59**
2no. TOPMAX Lifting Jack Carriage 750	**470907**	**15.33**
4no. Vertical Post 300	**553645**	**4.88**
4no. Vertical Post 100 L	**554710**	**0.10**
4no. Screw M12x75 with nut	**475781**	**8.27**
8no. Tube Ledger 200	**470930**	**3.84**
10no. Tube Ledger 82	**475910**	**12.10**
2no. V-diagonal 200/200	**651659**	**9.75**
4no. V-diagonal 100/200	**651623**	**8.52**
1no. H-diagonal 200/82	**577988**	**0.03**
36no. Shear Force Securing Device	**652184**	**8.11**
4no. Crosshead Jack 70/3.8×6.3	**603195**	**16.56**
2no. H 20 K-beam 360 Used when moving the Positioning Unit longitudinally under the scaffold (Refer to page 52)	**603190**	**8.74**
or		
2no. H 20 K-beam 190 Used when moving the Positioning Unit laterally under the scaffold (Refer to page 55).		
Total weight: 765.34 kg (with H 20 K-beams 360)		

4 Preparing Lifting Jack Carriages 750

4.1 Overview

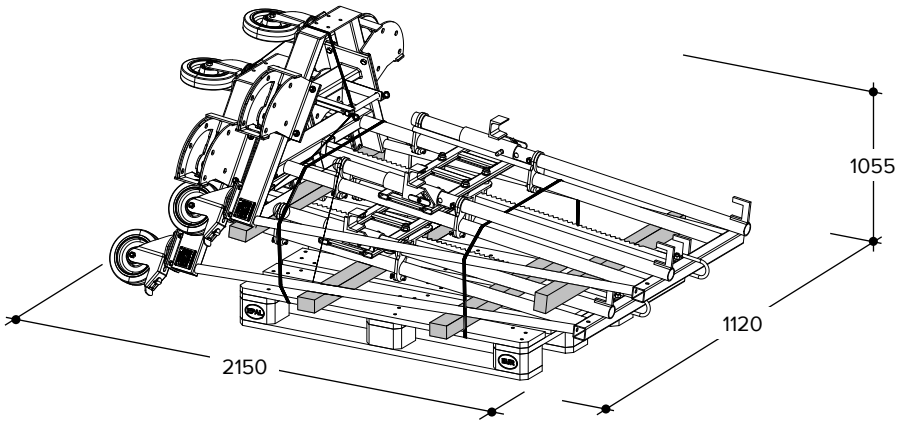




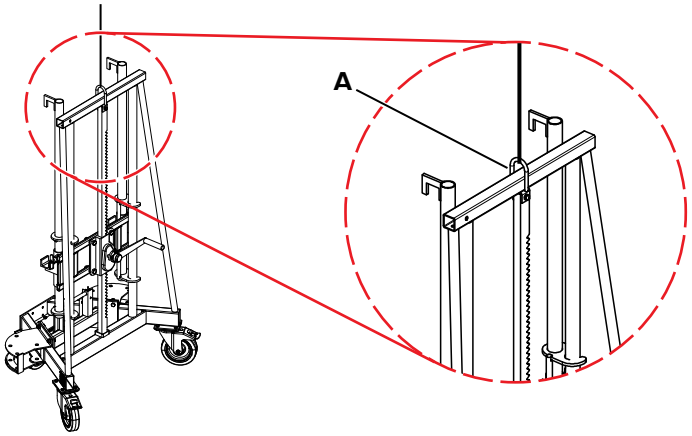
1 Cantilevers
2 Base frame
3 Weights
4 Lifting jack
5 Vertical tracks
6 Steering rod
7 Brackets
8 Guiding clip
9 Toothed rack
10 Lifting jack with crank

4.2 Unloading Lifting Jack Carriages

Two TOPMAX Lifting Jack Carriages 750 are shipped on one pallet. The Lifting Jack Carriages are strapped onto the pallet.



Use a crane to carefully lift the Lifting Jack Carriages off of the pallet. There is a lifting eye (**A**) on the top cross profile of each Lifting Jack Carriage.



Step 1 Use suitable lifting gear to attach the lifting eye to the crane hook.

Step 2 Remove the strap.

Step 3 With the aid of the crane, carefully turn the Lifting Jack Carriage upright, lift it, then lower it onto the swivel castors on even ground that can bear the weight.

Step 4 Fold out the handle on the lifting jack crank.

Step 5 Unload the second Lifting Jack Carriage in the same way.

4.3 Assembling TOPMAX Lifting Jack Carriage 750

The TOPMAX Lifting Jack Carriages 750 are already assembled. Before use, the operator only has to attach the included cantilevers and weights.

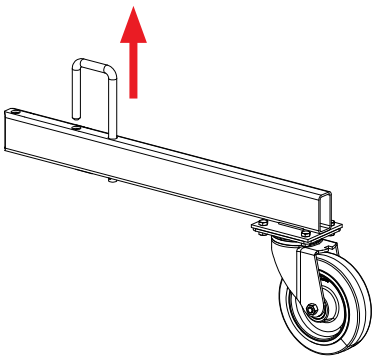
4.3.1 Attaching cantilevers

The cantilevers and the materials needed to attach them can be found in the included lattice box. The following tools are needed:

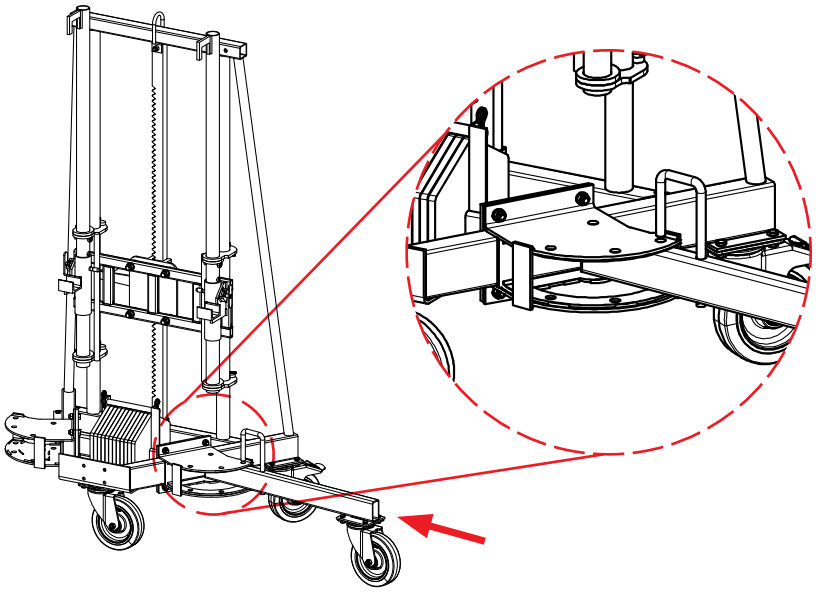
- 2no. screws M20x130 with Nylok nuts M20 (attached to the cantilevers)
- 2no. spanners M30

The cantilevers are identical to one another. Either one can be attached to either side.

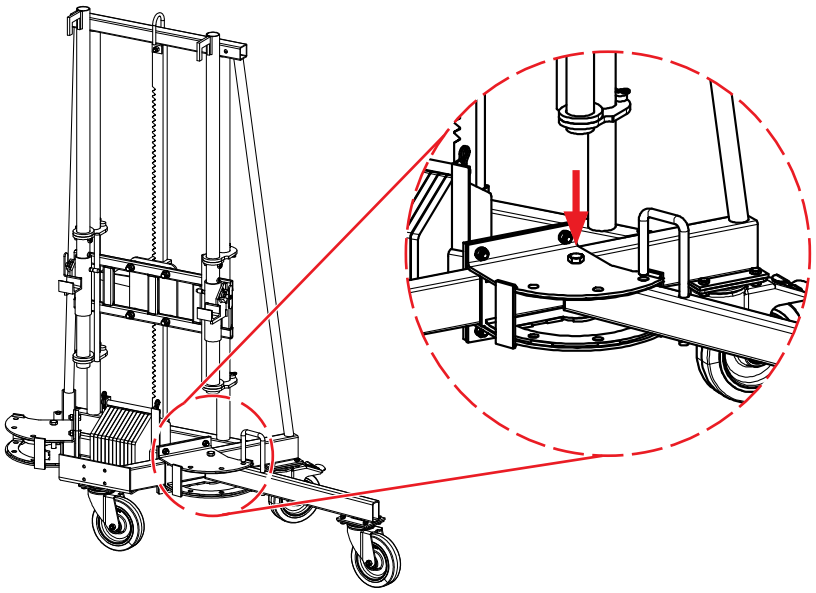
Step 1 Pull up the locking stirrup on the cantilever.



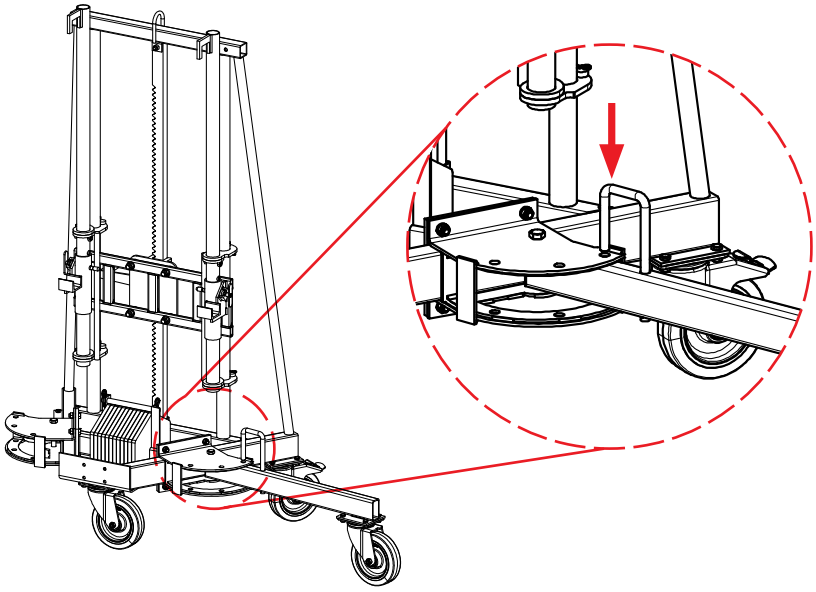
Step 2 Insert the cantilever into the seat on the Lifting Jack Carriage.



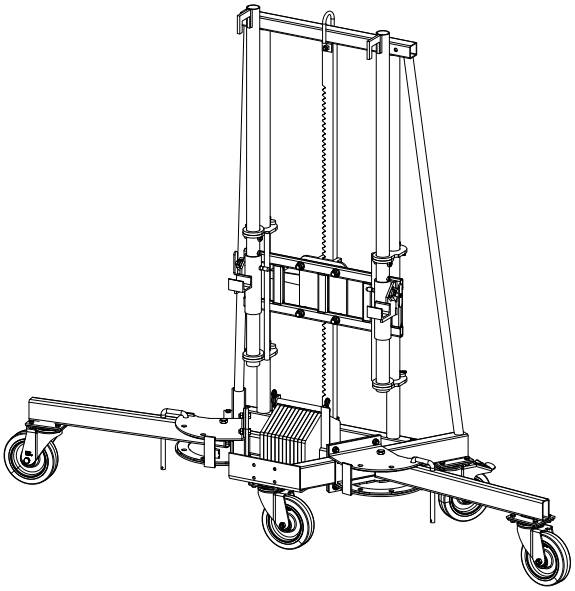
Step 3 Secure the cantilever with a screw M20x130 and a Nylok nut. Use a spanner SW 30 to do this.



Step 4 Insert the locking stirrup.



Step 5 Attach the other cantilever to the Lifting Jack Carriage in the same way.



4.3.2 Attaching weights

The TOPMAX Lifting Jack Carriages 750 usually have to be weighted down with additional weights. The weights increase the stability of the Lifting Jack Carriages.

The included lattice box contains 12no. weights for each Lifting Jack Carriage. Each one weighs 6 kg.

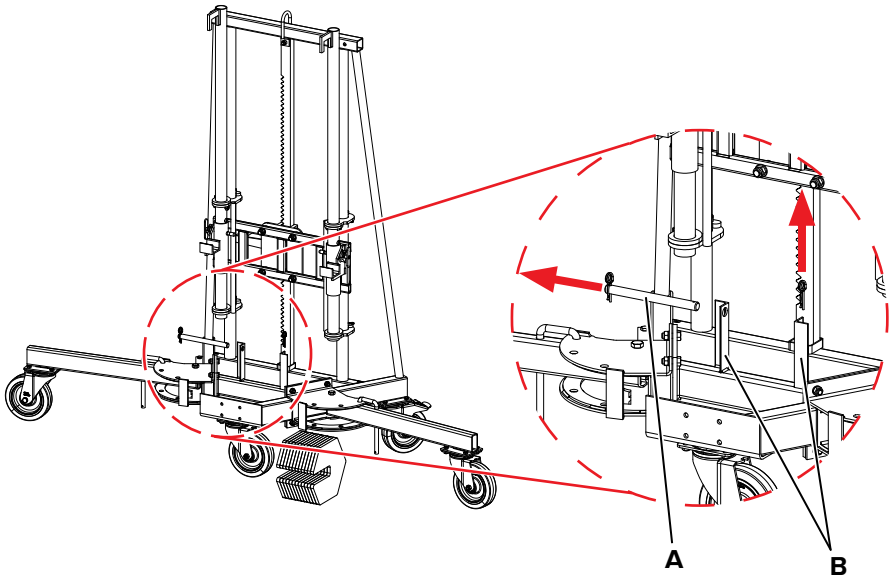
The bracket for the weights is in the middle of the Lifting Jack Carriage. Lock the weights into place with the securing rod.

CAUTION	**Risk of crushing!** Risk of crushing fingers when putting the weights into place! Wear gloves! Do not reach between the weights!

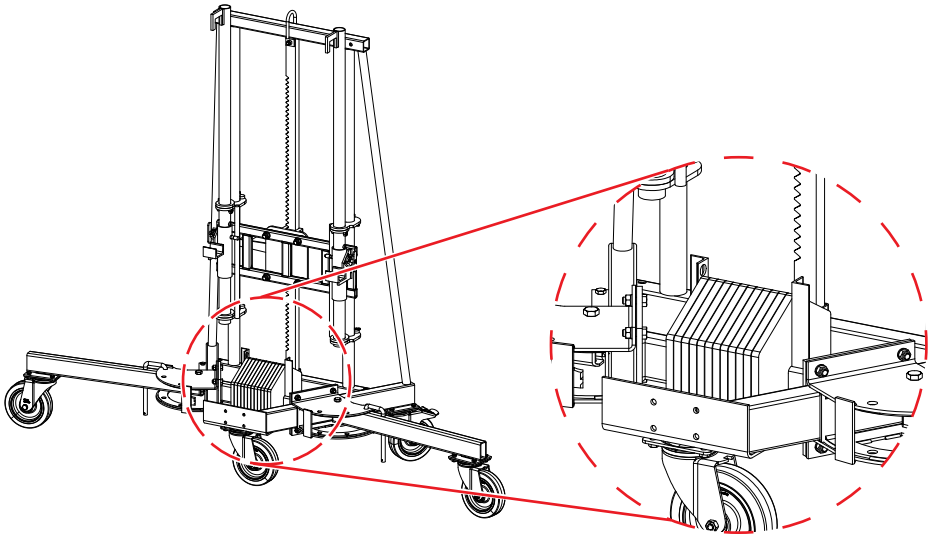
	TOPMAX Lifting Jack Carriages 750 can be used up to a height of 3.50 m without attaching weights.

Step 1 Pull out the spring pin from the end of the securing rod (**A**).

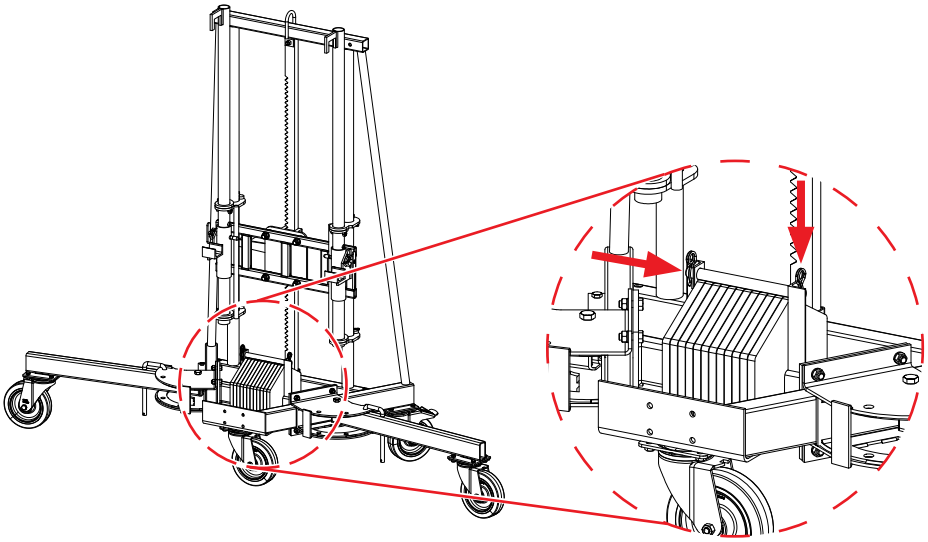
Step 2 Pull the securing rod out of the L-profiles (**B**).



Step 3 Place all 12no. weights in the bracket, with the slots on the underside.



Step 4 Slide the securing rod through the L-profiles and secure with the spring pin.



5 Before commissioning

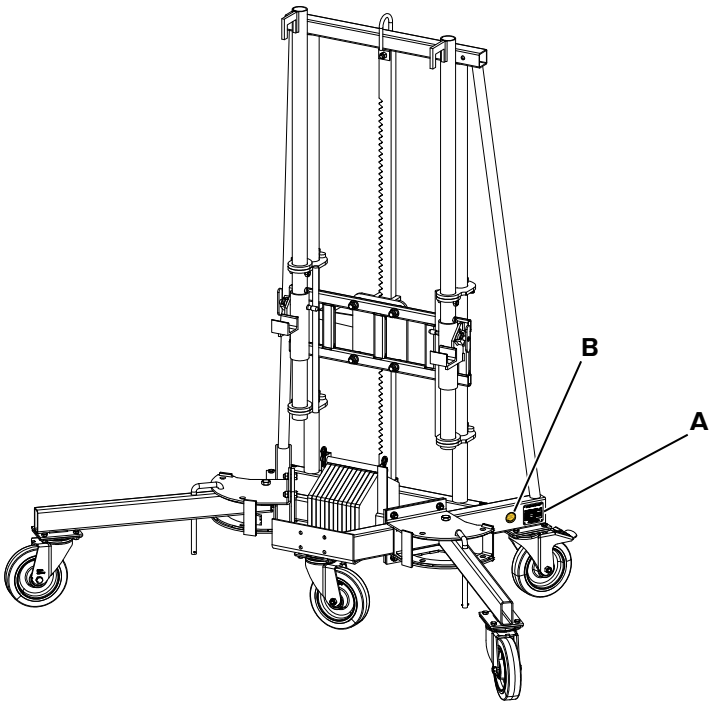
Before using the Lifting Jack Carriage 750 for the first time, verify that the ID plate (**A**) and the inspection tag (**B**) are in place and legible.

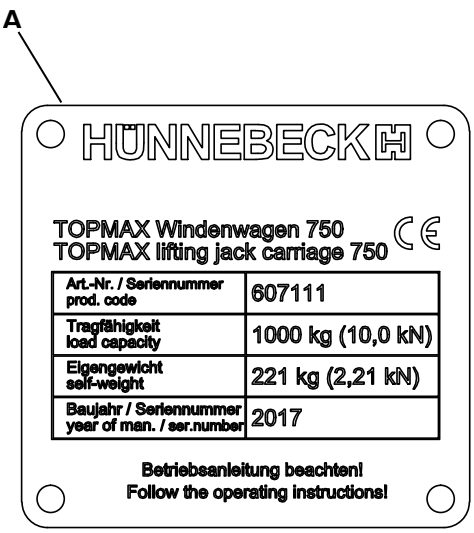
ID plate missing or illegible!

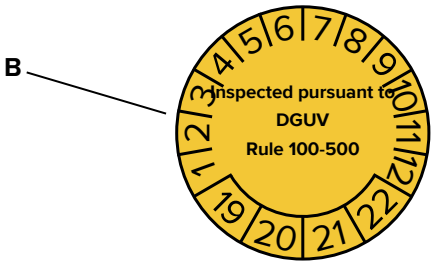
The TOPMAX Lifting Jack Carriage 750 may not be used if the ID plate is missing or illegible. The manufacturer or an authorised agent must then inspect the equipment and issue a new plate.

Inspection tag missing!

The TOPMAX Lifting Jack Carriage 750 may not be used if the inspection tag is missing or illegible. The manufacturer or an authorised agent must then inspect the equipment and issue a new tag. This applies only to HÜNNEBECK rental equipment pursuant to test certification as specified by DGUV (German statutory accident insurance regulations) 100-500.
The German ordinance on industrial safety and health (BetrSichV) applies to the use of equipment that is not rented.







6 Using Lifting Jack Carriages 750

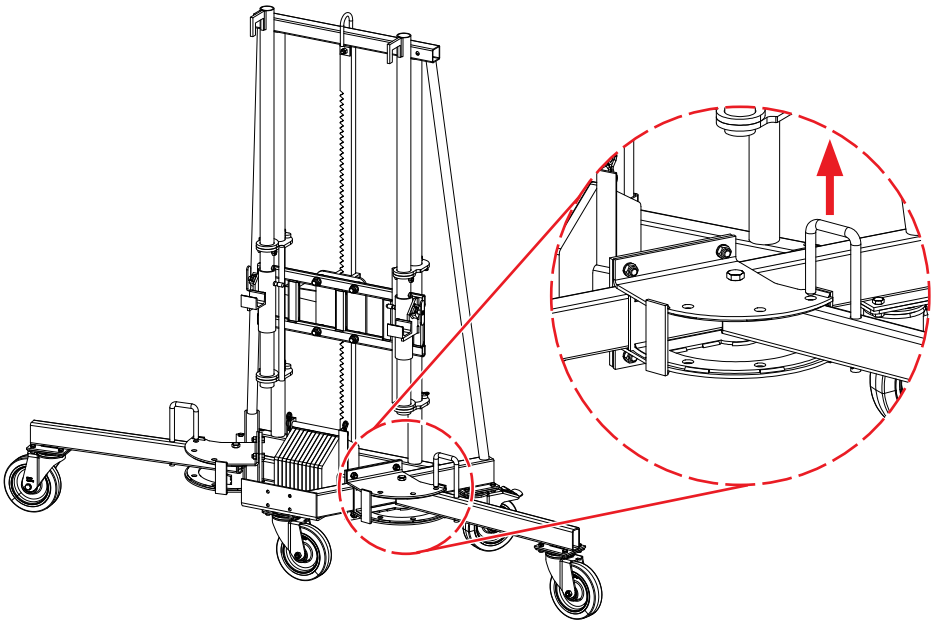
6.1 Retracting and extending cantilevers

The cantilevers can be set to three different positions. When the cantilevers are extended, they increase the stability of the Lifting Jack Carriage. Always extend the cantilevers when moving a load. Always choose the position that makes the Lifting Jack Carriage as wide as possible.

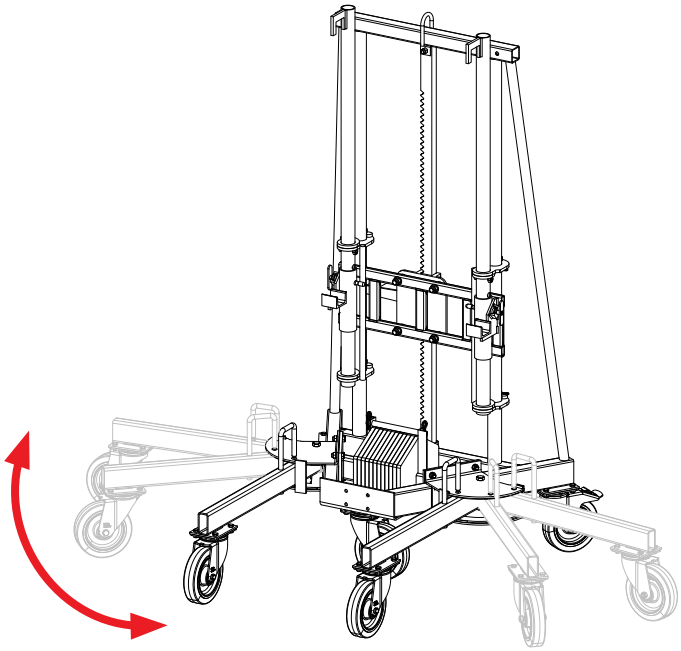
It may sometimes be necessary to retract the cantilevers, e.g. when the Lifting Jack Carriage is used against a wall or when it has to pass between two vertical posts of a scaffold.

When using the Lifting Jack Carriage with extended cantilevers to move a load, never exceed a speed of 1 km/h (0.28 m/s).

Step 1 Pull the locking stirrup out of the cantilever.



Step 2 Move the cantilever to the desired position.



Step 3 Insert the locking stirrup again.

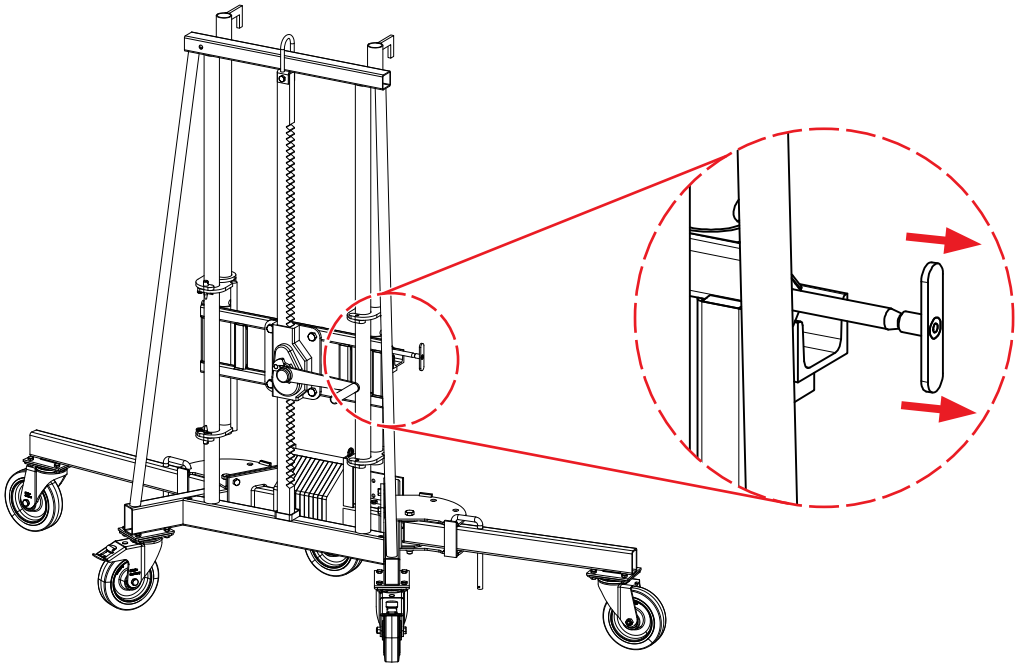
6.2 Lifting load with Lifting Jack Carriage

Before the load can be lifted, the vertical tracks have to be released. Then the load can be lifted.

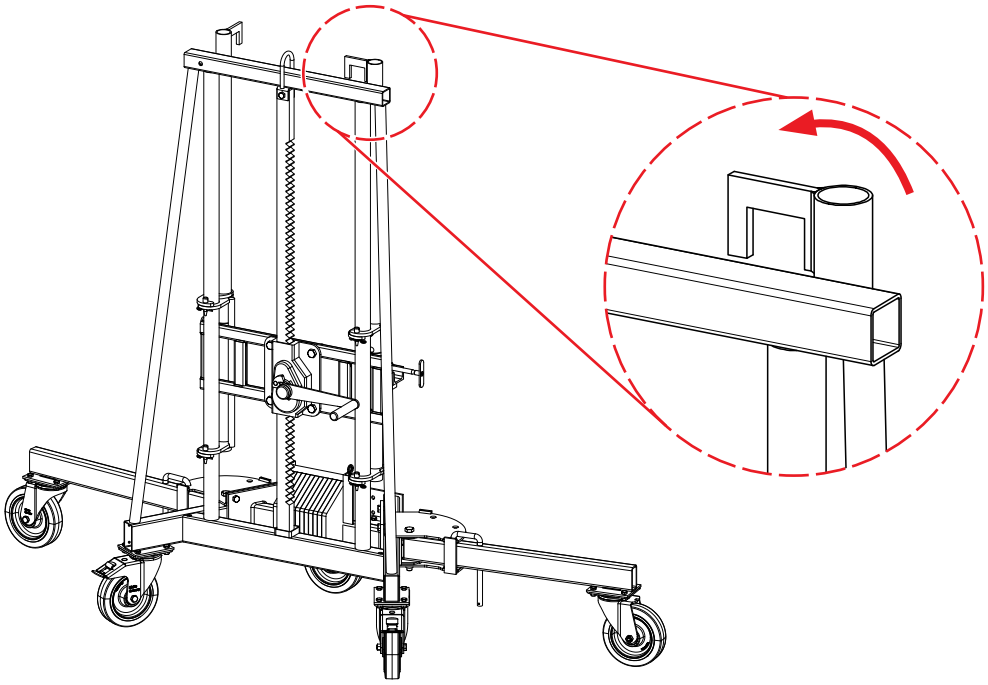
6.2.1 Unlocking vertical tracks

Before the load can be connected to the Lifting Jack Carriage, the vertical tracks have to be released. The load can then be attached to the Lifting Jack Carriage. Then lock the vertical tracks again.

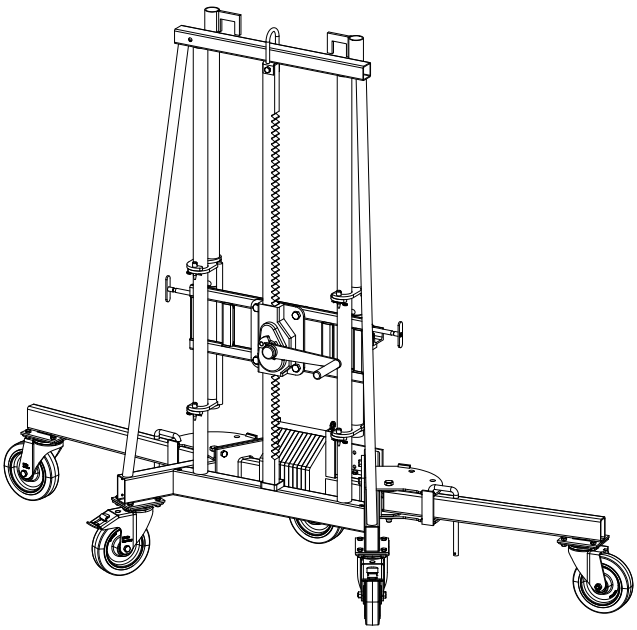
Step 1 Pull out the locking bolt until it clicks into place.



Step 2 Turn the vertical track such that the hook faces inward.



Step 3 Unlock and turn the second vertical track in the same way.



6.2.2 Lifting load

How the load is lifted is a factor of the specific load.

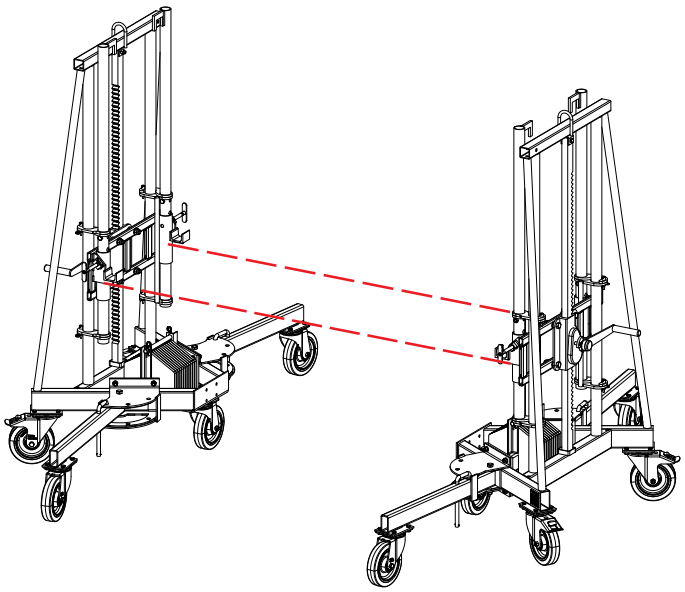
- Use a crane to lift a MODEX Assembly type 1 - 6 (Refer to section 7 on page 29) for moving TOPMAX Table Forms onto the Lifting Jack Carriages.
- The Lifting Jack Carriage can be rolled under a TOPMAX Table Form with GASS props.
- The Lifting Jack Carriage can be rolled under a MODEX Shoring Tower if the tube ledgers are at least 1.13 m long.
- The Lifting Jack Carriage can be rolled under the Starter Frames of an ST 60 Shoring Tower if the sides are 1.50 m long.

The following steps explain how to lift with the Lifting Jack Carriage, using a MODEX Assembly type 3 as an example. The principle is the same for other loads.

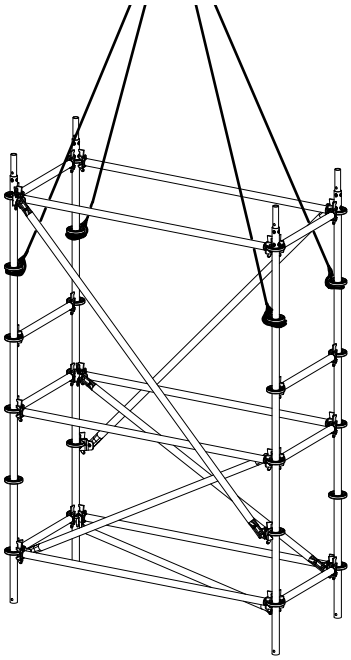
CAUTION	**Risk of crushing!**
	Touching the toothed rack while operating the lifting jack can lead to a crushed hand! Do not touch the toothed rack while the lifting jack is in operation!

Using Lifting Jack Carriages 750

Step 1 Crank the lifting jacks to move the brackets on the Lifting Jack Carriages to the same height.

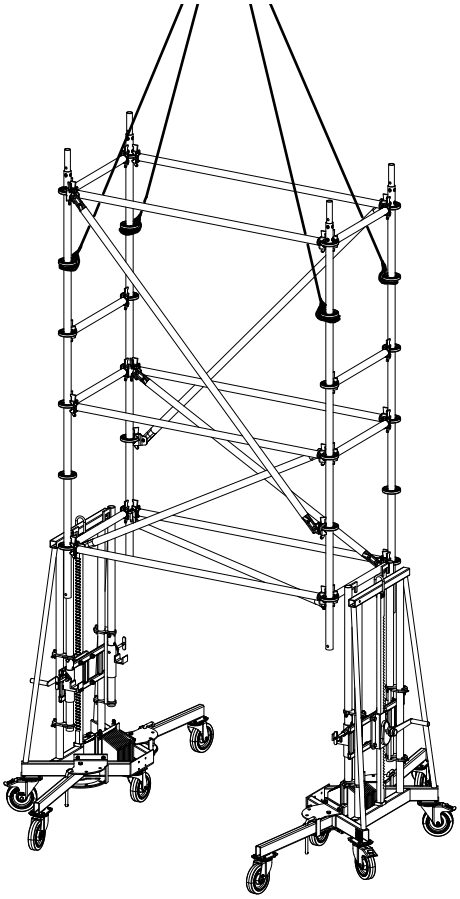


Step 2 Stand in a safe place and attach the MODEX Assembly to the crane. Attach suitable round slings in a choke hitch to the vertical posts below the MODEX Rosette, where no tube ledgers or diagonals are attached. This prevents the round slings from sliding up or connections from detaching unintentionally. Equip the round slings with edge protectors, if necessary.

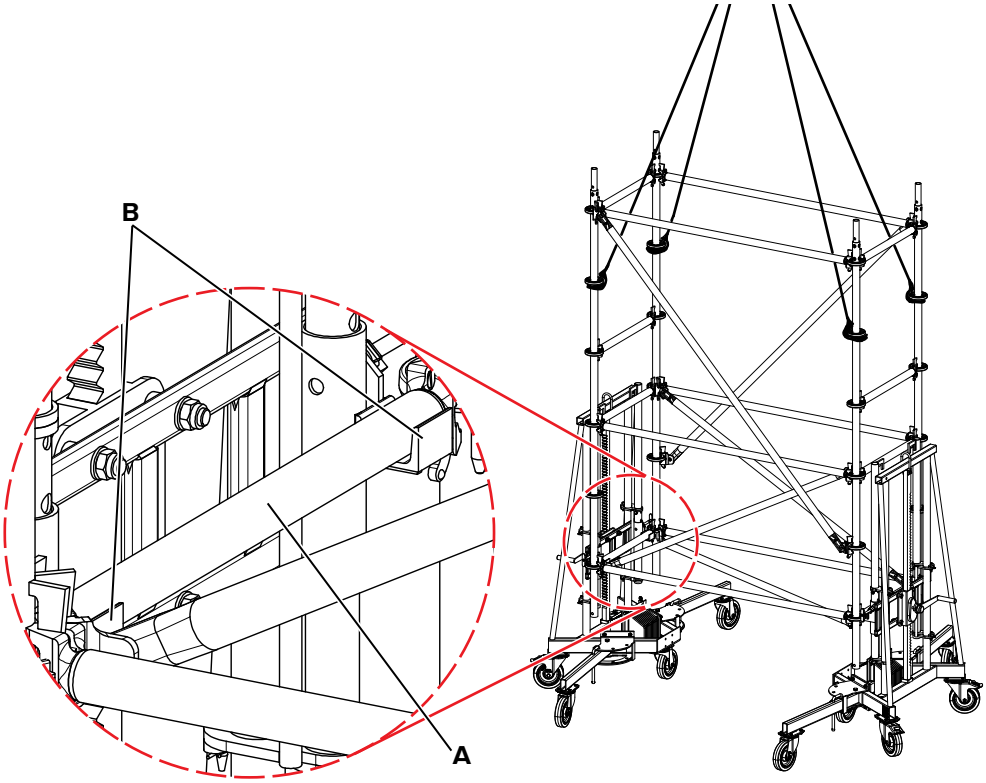


Step 3 Hang the round slings in a suitable crane sling.

Step 4 Use the crane to lift the MODEX Assembly and place it between the two Lifting Jack Carriages.

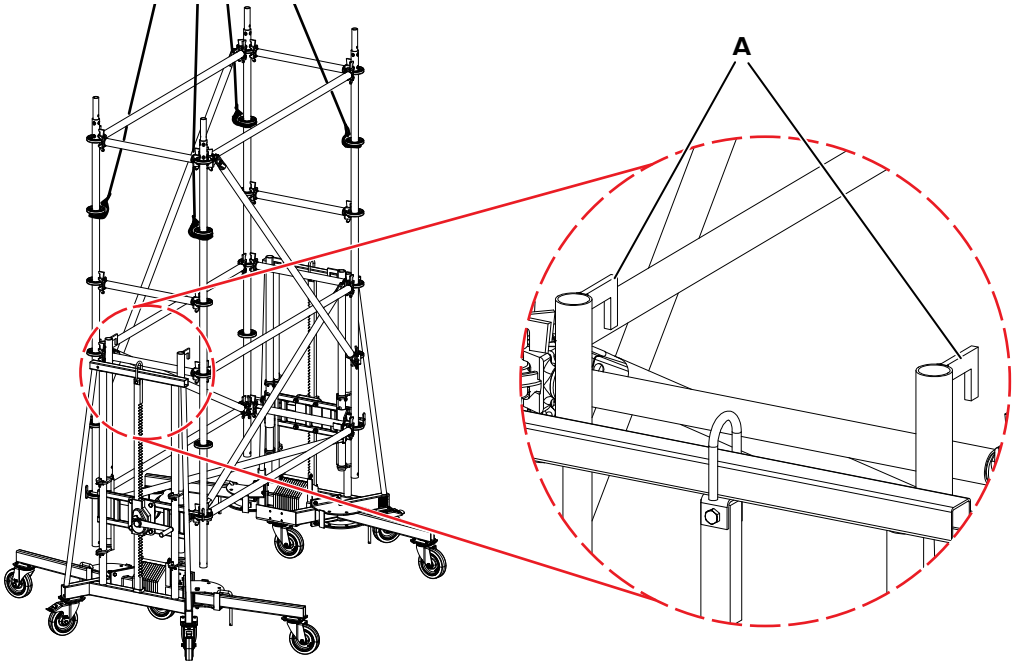


Step 5 Position the MODEX Assembly and the Lifting Jack Carriages such that the tube ledgers on the MODEX Assembly (**A**) rest in the **middle** of the brackets (**B**) on the Lifting Jack Carriages. Do not detach the MODEX Assembly from the crane yet!

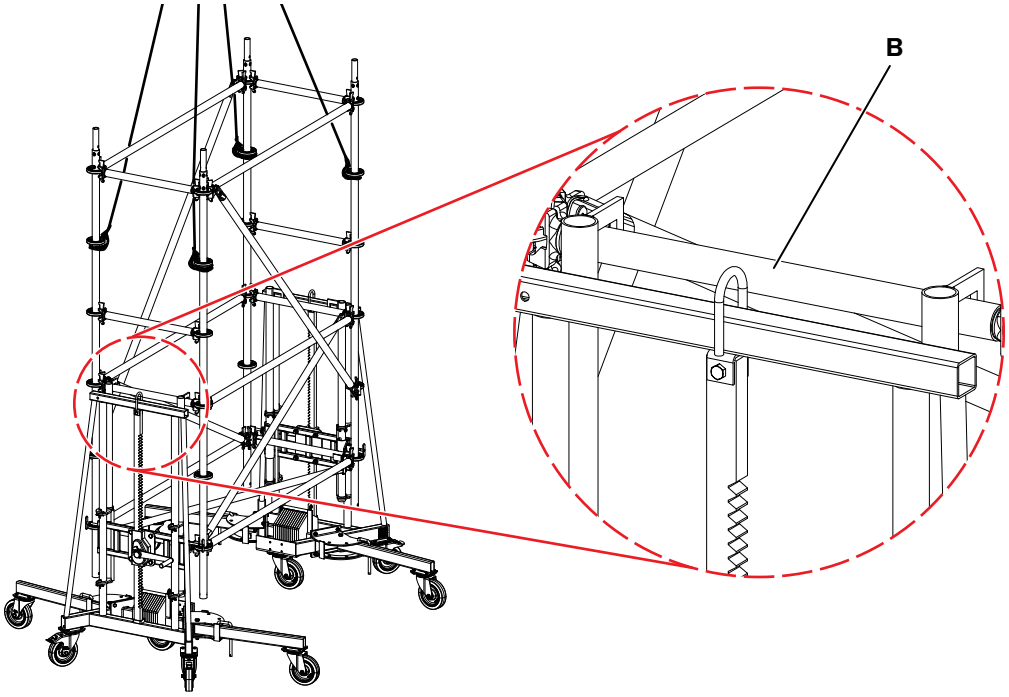


6.2.3 Locking vertical tracks

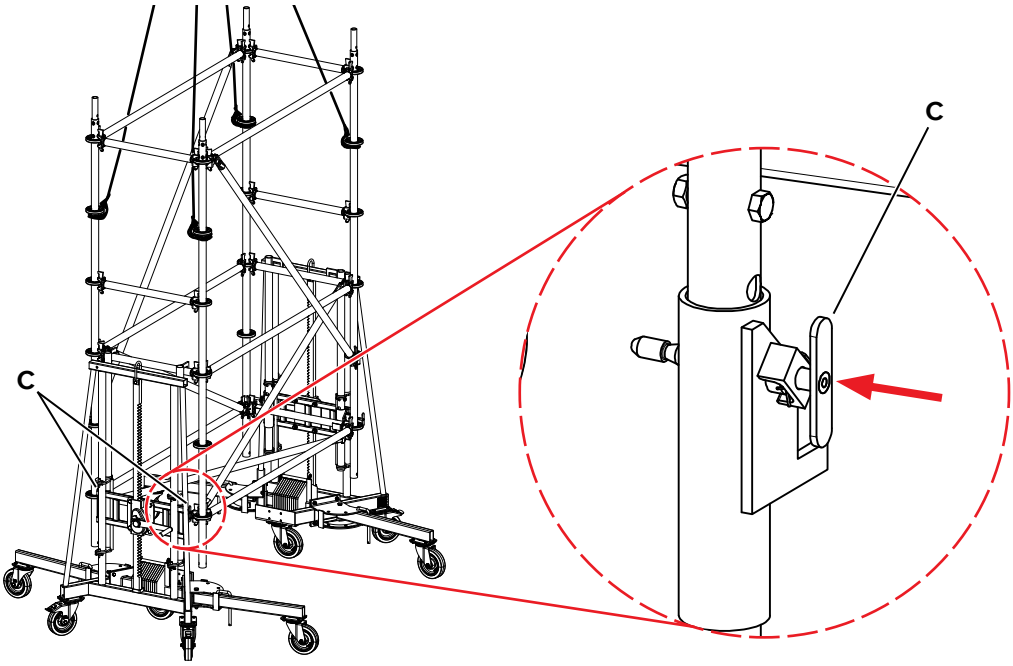
Step 1 Lift the vertical tracks and turn them such that the hooks (**A**) grasp the tube ledgers on the MODEX Assembly.



Step 2 Push the vertical tracks down until the hooks rest on the tube ledgers (**B**) on the MODEX Assembly.



Step 3 Press the locking bolts (**C**) on the two vertical tracks all the way in. The bolt fits into the upper or the lower hole, depending on the system of the load to be lifted (e.g. MODEX, GASS, ST 60).



Step 4 Repeat steps 1 - 5 for the second Lifting Jack Carriage 750.

Step 5 Stand in a safe place and detach the MODEX Assembly from the crane.

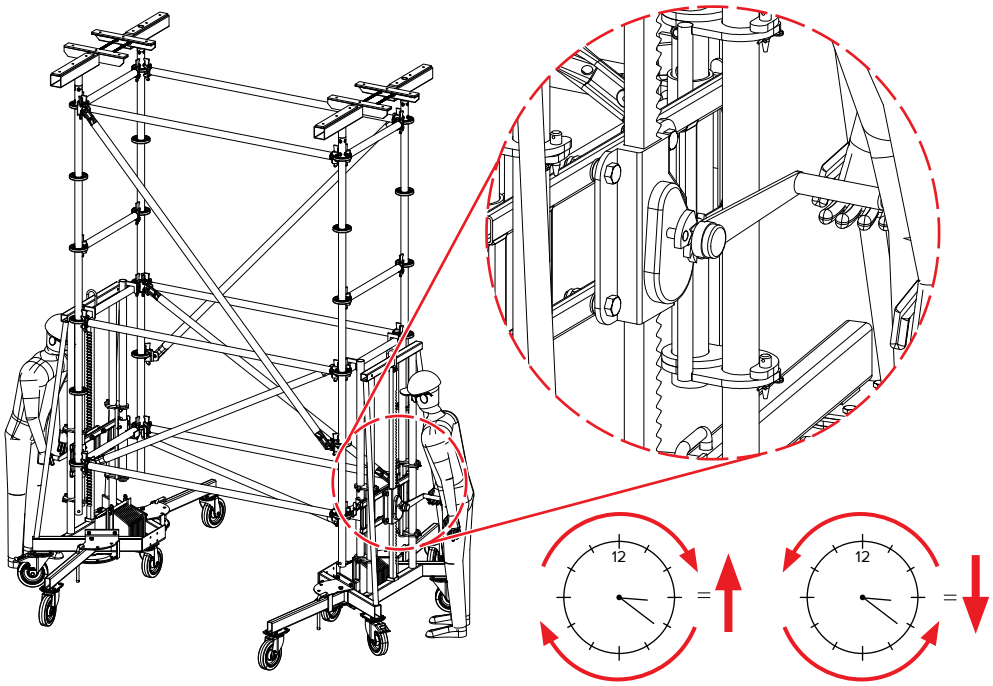
Step 6 Depending on the application, attach Turning Heads (Refer to section 7.2.3 on page 37) or Crosshead Jacks (Refer to section 7.2.4 on page 39). Always stand in a safe place to attach Turning Heads and Crosshead Jacks.

6.3 Lifting and lowering loads

Loads are lifted and lowered by turning the crank on the lifting jack. Turn the crank clockwise to lift the load. Turn the crank counter-clockwise to lower the load.

CAUTION	**Risk of crushing!** Touching the toothed rack while operating the lifting jack can lead to a crushed hand! Do not touch the toothed rack while the lifting jack is in operation!

Step 1 Lift or lower the load.



7 Attaching MODEX Assembly to move TOPMAX Table Forms

A MODEX Assembly has to be used to move TOPMAX Table Forms with tubular steel props attached. The Assembly has to be attached first. The configuration of the Assembly is a factor of the height at which the Table Forms to be moved will be used. The following Assemblies are permitted (indicated heights are without Table Form):

Type 1: 2.00 m - 2.95 m

Type 2: 2.37 m - 3.44 m

Type 3: 3.37 m - 4.44 m

Type 4: 4.37 m - 5.44 m

Type 5: 3.41 m - 4.48 m + 2 m Extension Frames

Type 6: 4.41 m - 5.48 m + 2 m Extension Frames

Use a crane to lift the Assembly onto two Lifting Jack Carriages 750 (Refer to section 6.2 on page 22).

The following section shows types 1 - 6 in detail. The next section describes assembly.

7.1 MODEX types in detail

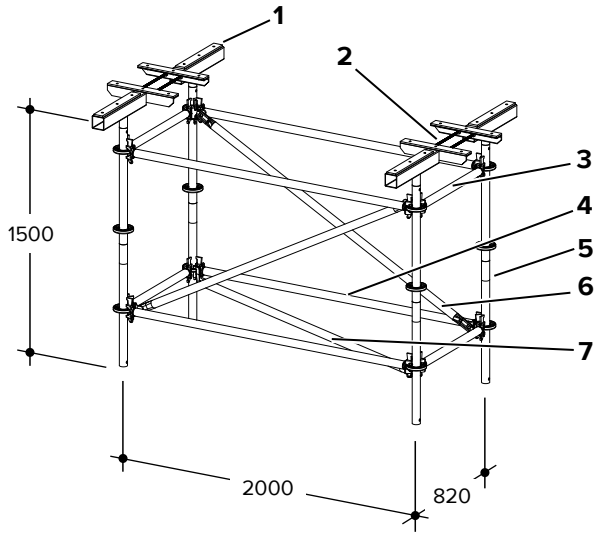
WARNING	**Danger of overturning!** If the maximum Table Form height and/or travelling height is exceeded, the Table Form can tip over! This can cause personal injury or death! Do not exceed the maximum lifting and transport height of 5.44 m, or 7.48 m with Extension Frames!

WARNING	**Hazard posed by falling components!** Turning Heads can lift out and fall during transport with a crane. This can cause personal injury or death! Do not attach the Turning Heads and Readjusting Springs until the MODEX Assembly has been properly secured to the Lifting Jack Carriage 750, e.g. after the MODEX Assembly is detached from the crane.

	Instead of long vertical posts, multiple shorter ones can be used. For example, instead of a Vertical Post 300, use one Vertical Post 200 and one Vertical Post 100. This may be helpful e.g. when lowering Table Forms so far that it is beneficial to temporarily decrease the height of the MODEX Assembly. Secure all joints with screws M12x75 with nuts!

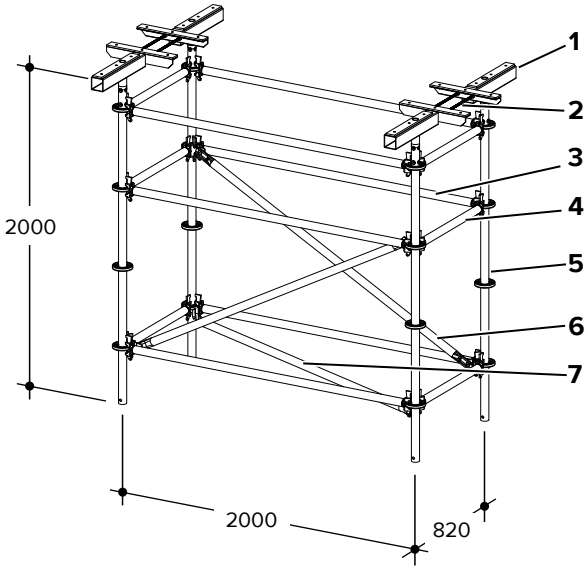
	TOPMAX Lifting Jack Carriages 750 can be used up to a height of 3.50 m without attaching weights.

7.1.1 Type 1 – 2.00 m to 2.95 m



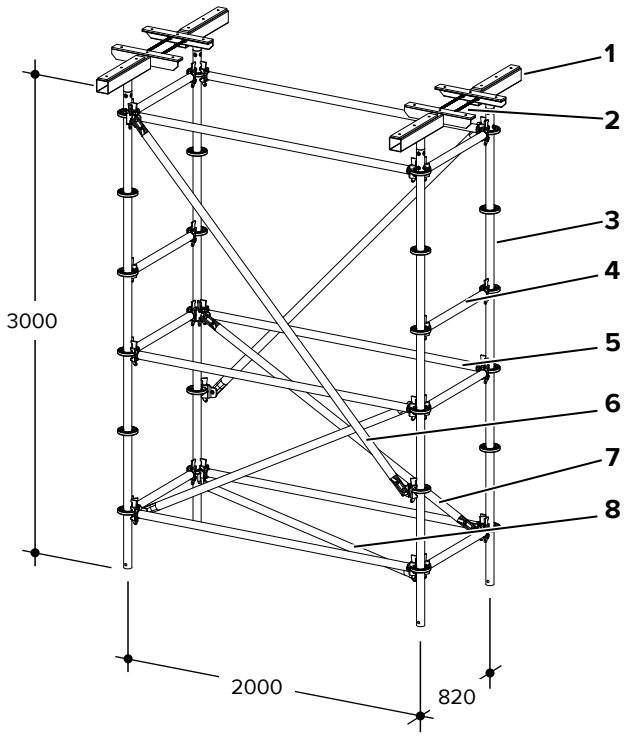
Position	Component	Quantity	Part code
1	TOPMAX Turning Head	4	603237
2	TOPMAX Readjusting Spring	4	603303
3	Tube Ledger 82	4	470930
4	Tube Ledger 200	4	475781
5	Vertical Post 150	4	470881
6	V-diagonal 100/200	2	651659
7	H Diagonal 200/82	2	651623
–	Shear Force Securing Device (Refer to page 36)	16	577988

7.1.2 Type 2 – 2.37 m to 3.44 m



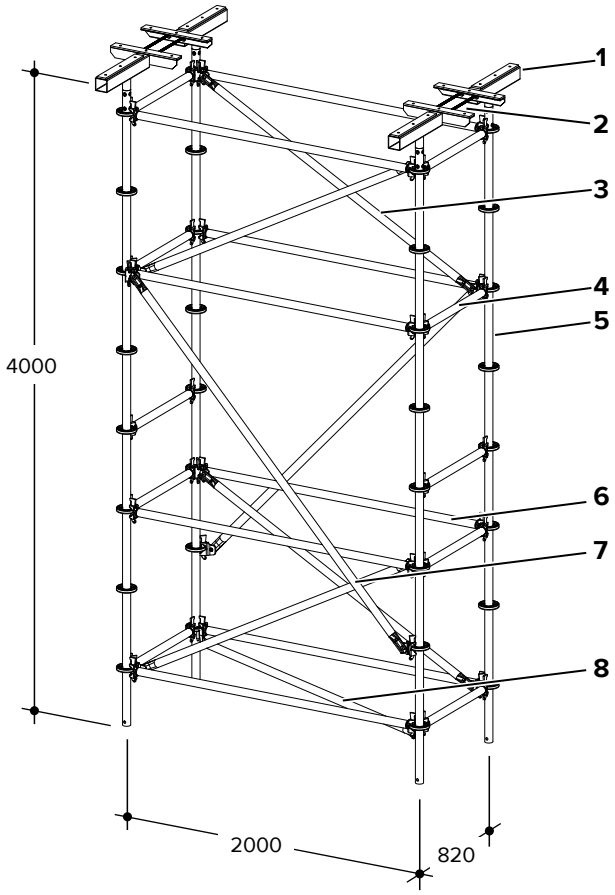
Position	Component	Quantity	Part code
1	TOPMAX Turning Head	4	603237
2	TOPMAX Readjusting Spring	4	603303
3	Tube Ledger 200	6	475781
4	Tube Ledger 82	6	470930
5	Vertical Post 200	4	470892
6	V-diagonal 100/200	2	651659
7	H Diagonal 200/82	1	651623
–	Shear Force Securing Device (Refer to page 36)	24	577988

7.1.3 Type 3 – 3.37 m to 4.44 m



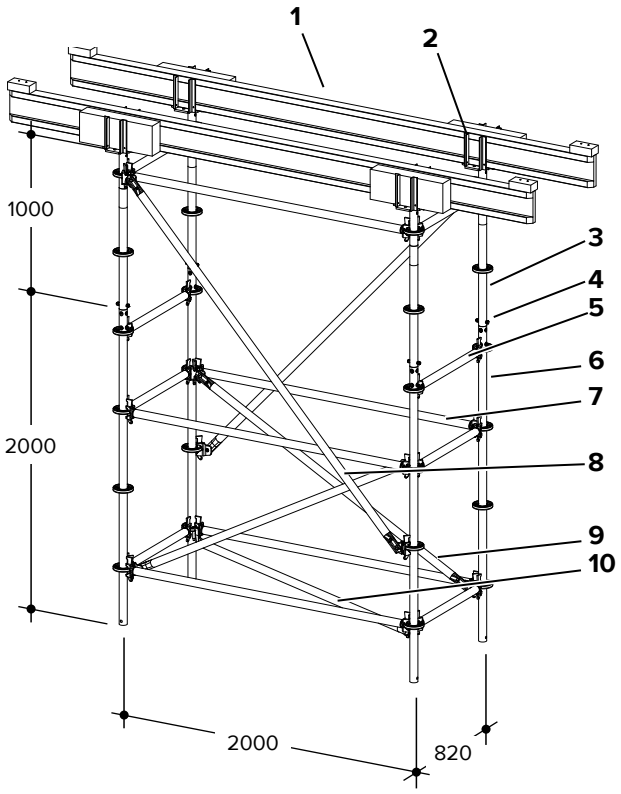
Position	Component	Quantity	Part code
1	TOPMAX Turning Head	4	603237
2	TOPMAX Readjusting Spring	4	603303
3	Vertical Post 300	4	470907
4	Tube Ledger 82	8	470930
5	Tube Ledger 200	6	475781
6	V-diagonal 200/200	2	475910
7	V-diagonal 100/200	2	651659
8	H Diagonal 200/82	1	651623
–	Shear Force Securing Device (Refer to page 36)	28	577988

7.1.4 Type 4 – 4.37 m to 5.44 m



Position	Component	Quantity	Part code
1	TOPMAX Turning Head	4	603237
2	TOPMAX Readjusting Spring	4	603303
3	V-diagonal 100/200	4	651659
4	Tube Ledger 82	10	470930
5	Vertical Post 400	4	470918
6	Tube Ledger 200	8	475781
7	V-diagonal 200/200	2	475910
8	H Diagonal 200/82	1	651623
–	Shear Force Securing Device (Refer to page 36)	36	577988

7.1.5 Type 5 – 3.41 m to m 4.48 m + 2 m Extension Frames



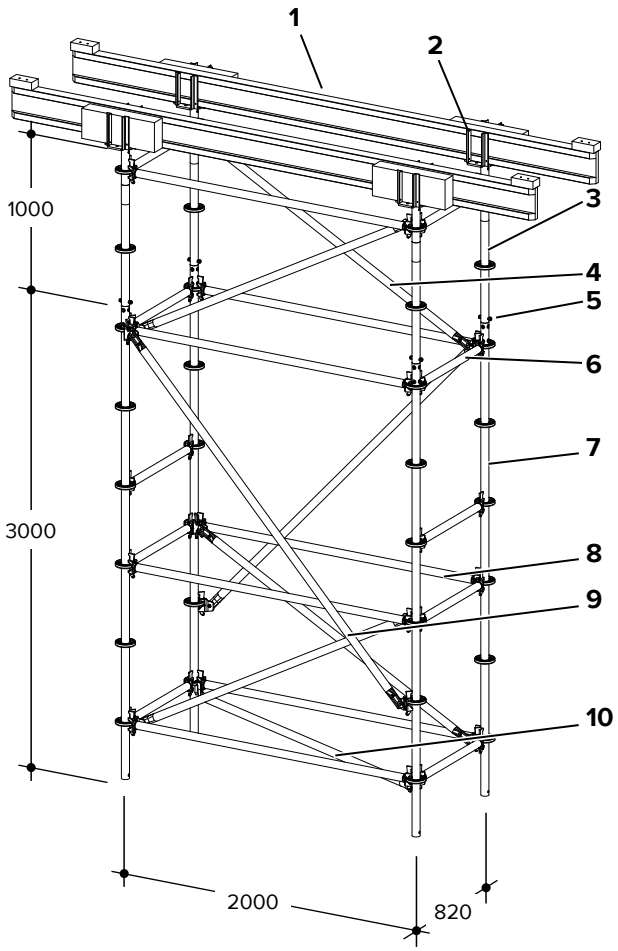
Position	Component	Quantity	Part code
1	H 20 K-Beam 360 to move longitudinally under scaffold or H 20 K-Beam 190 to move laterally under scaffold	2	603195 603190
2	Crosshead Jack 70/3.8×6.3	4	652184
3	Vertical Post 100 L	4	553645
4	Screw M12x75 with nut	4	554710
5	Tube Ledger 82	8	470930
6	Vertical Post 200	4	470892
7	Tube Ledger 200	6	475781
8	V-diagonal 200/200	2	475910
9	V-diagonal 100/200	2	651659
10	H Diagonal 200/82	1	651623
–	Shear Force Securing Device (Refer to page 36)	28	577988

Crosshead Jacks to hold the H 20 K-beams can only be used in Vertical Posts L. So always use Vertical Posts L for at least the uppermost level of the MODEX Assembly.

For information on how to attach the H 20 K-beams lengthwise, refer to page 52.

Unless stated otherwise, all dimensions in mm.

7.1.6 Type 6 – 4.41 m to m 5.48 m + 2 m Extension Frames



Position	Component	Quantity	Part code
1	H 20 K-Beam 360 to move longitudinally under scaffold or H 20 K-Beam 190 to move laterally under scaffold	2	603195 603190
2	Crosshead Jack 70/3.8×6.3	4	652184
3	Vertical Post 100 L	4	553645
4	V-diagonal 100/200	4	651659
5	Screw M12x75 with nut	4	554710
6	Tube Ledger 82	10	470930
7	Vertical Post 300	4	470907
8	Tube Ledger 200	8	475781
9	V-diagonal 200/200	2	475910
10	H Diagonal 200/82	1	651623
–	Shear Force Securing Device (Refer to page 36)	36	577988

Crosshead Jacks to hold the H 20 K-beams can only be used in Vertical Posts L. So always use Vertical Posts L for at least the uppermost level of the MODEX Assembly.

For information on how to attach the H 20 K-beams lengthwise, refer to page 52.

7.2 Assembling MODEX Assembly

Assemble the MODEX Assembly as shown for the Assemblies in the previous sections. Always assemble the MODEX Assembly in an upright position and from a safe place, e.g. standing on a suitable platform ladder. Secure the Assembly to prevent it from tipping over! The following sections describe the general assembly procedure for MODEX Assemblies.

7.2.1 Connecting Vertical Posts

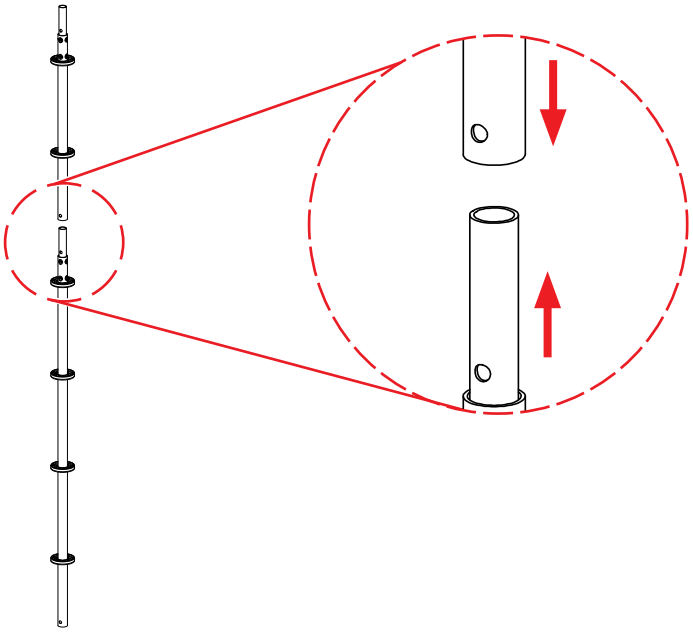
The Vertical Posts have to be connected to one another for some MODEX Assemblies. Conventional vertical posts have a crimped pin. A Vertical Post can be slid over the pin of the next one and secured.

WARNING

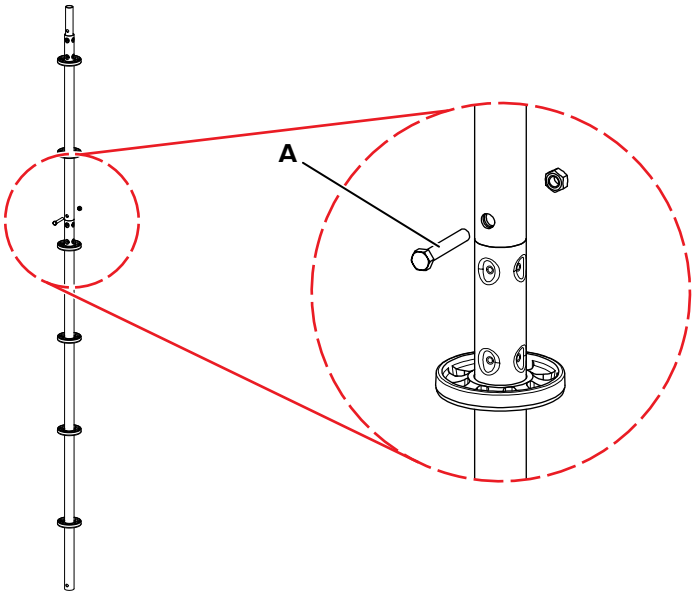
Hazard posed by falling parts!

Secure every vertical connection between two vertical posts with a screw M12x75 with nut! Tighten the nut against the shaft of the screw!

Step 1 Connect the vertical posts to one another.



Step 2 Secure the vertical posts with a screw M12×75 (**A**) and a nut. Tighten the nut against the shaft of the screw.

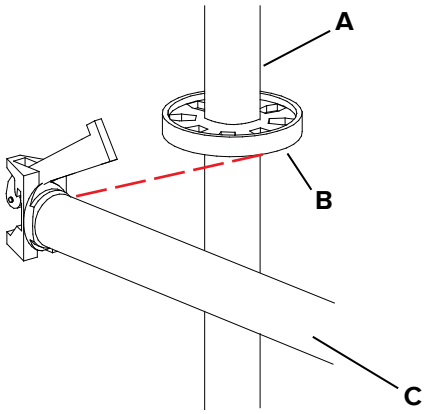


7.2.2 Attaching tube ledgers and diagonals

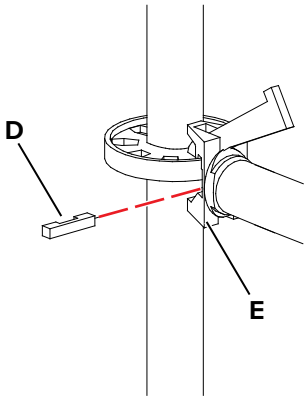
Attach the tube ledgers and diagonals to the rosettes on the MODEX Vertical Posts.

WARNING	**Hazard posed by falling parts!** Attach a Shear Force Securing Device at every tube ledger / rosette connection! Otherwise parts can fall off when being transported by crane!

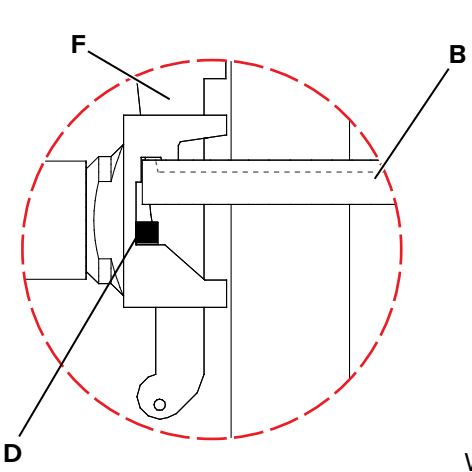
Step 1 Slide the tube ledger (**C**) or diagonal over the rosette (**B**) on the vertical post (**A**). Ensure that the flat side of the rosette faces down.

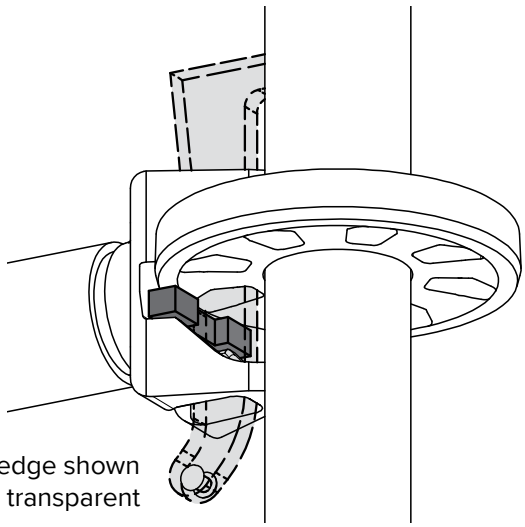


Step 2 On tube ledgers, insert a Shear Force Securing Device (**D**) between the rosette and the ledger claw (**E**). The Shear Force Securing Devices protect the MODEX Assembly from lift-off.



Step 3 Insert the wedge (**F**) into the rosette (**B**) and knock it with a hammer until rebound is felt. Verify that the Shear Force Securing Device (**D**) is in place (only with tube ledgers).





7.2.3 Attaching Turning Heads (only Assembly type 1 - type 4)

Turning Heads are needed on MODEX Assembly type 1 - type 4. During operation, the TOPMAX Table Form rests on the Turning Heads.

Do not attach the Turning Heads until after the MODEX Assembly is connected to the Positioning Unit. Stand in a safe place to attach the Turning Heads, e.g. on a platform ladder.

The Turning Heads are connected to one another with springs. The Turning Heads pivot when the Positioning Unit moves between the props and then spring back to their original position after passing the props. The Turning Heads may be used only directly below the Table Form!

WARNING

Risk of falling!

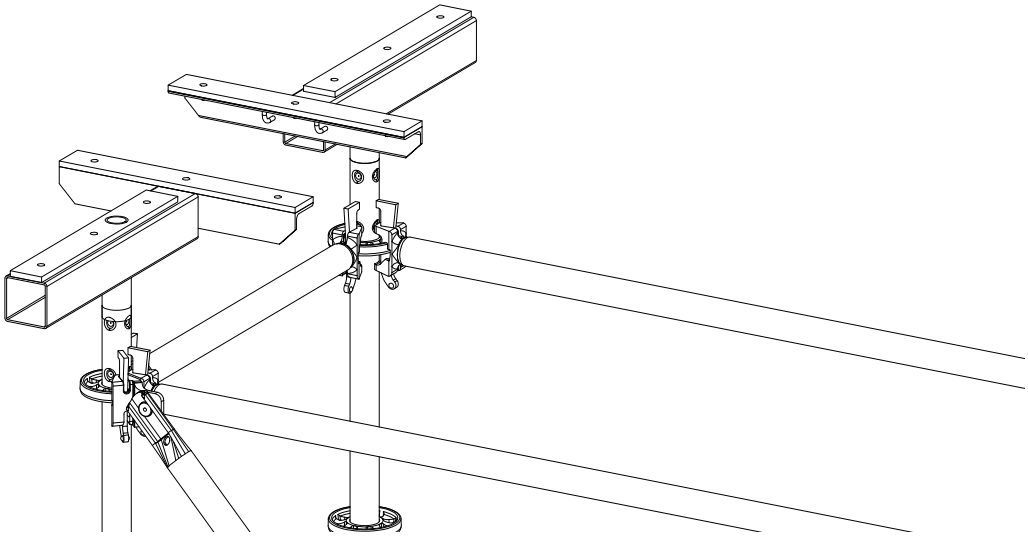
If you attempt to work from a position in which you are not properly protected, you can fall!
This can cause serious injury or death!
Always stand in a safe place to work!

NOTE

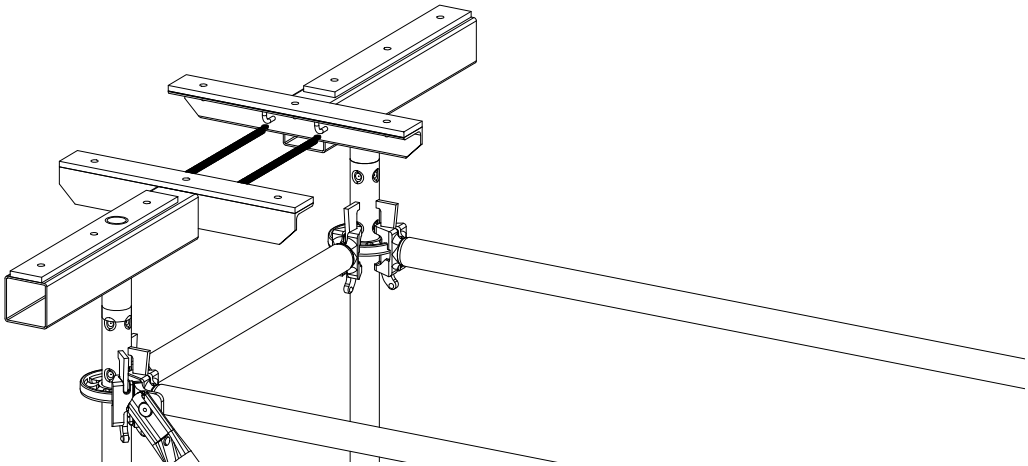
Readjusting Springs damaged!

If the Turning Heads are overtightened, the Readjusting Springs will become deformed.
Then the Turning Heads will no longer turn all the way back.
Do not overtighten the Turning Heads. If the Readjusting Springs lose their shape, they have to be replaced (code: 603303).

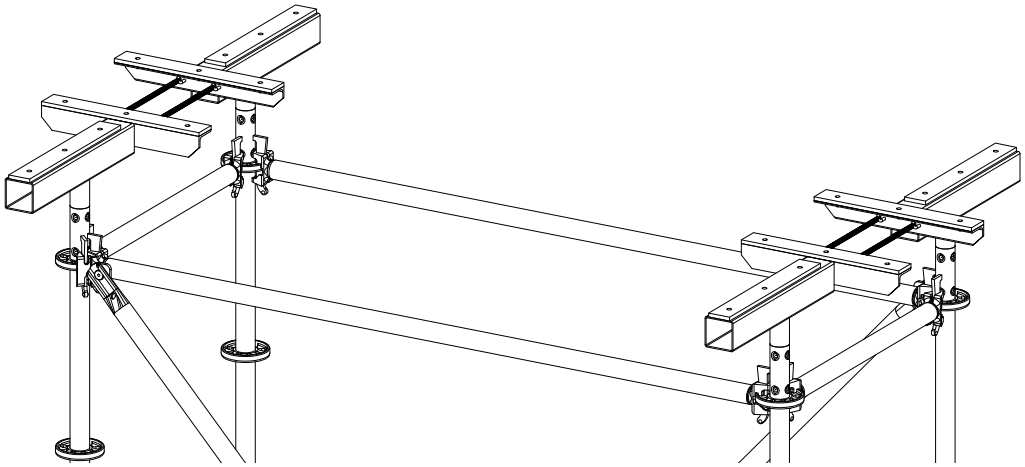
Step 1 Place one Turning Head on each of the two vertical posts on the short side of the MODEX Assembly.



Step 2 Connect the Turning Heads to one another with two Readjusting Springs.



Step 3 Install the Turning Heads on the opposite side of the MODEX Assembly in the same way.



7.2.4 Attaching Turning Heads (only Assembly type 5 - type 6)

To transport TOPMAX Table Forms with Extension Frames attached, either MODEX Assembly type 5 or type 6 (depending on the height) has to be used (Refer to page 33 and Page 34).

Crosshead Jacks have to be mounted on top of the Assemblies. Then H 20 K-Beams are placed in the Crosshead Jacks. The Extension Frame rests on top of the H 20 K-Beams during operation.

To move the Positioning Unit longitudinally under Table Forms, use H 20 K-Beams 360.

To move the Positioning Unit laterally under Table Forms, use H 20 K-Beams 190.

WARNING

Risk of falling!

If you attempt to work from a position in which you are not properly protected, you can fall!
This can cause serious injury or death!
Always stand in a safe place to work!

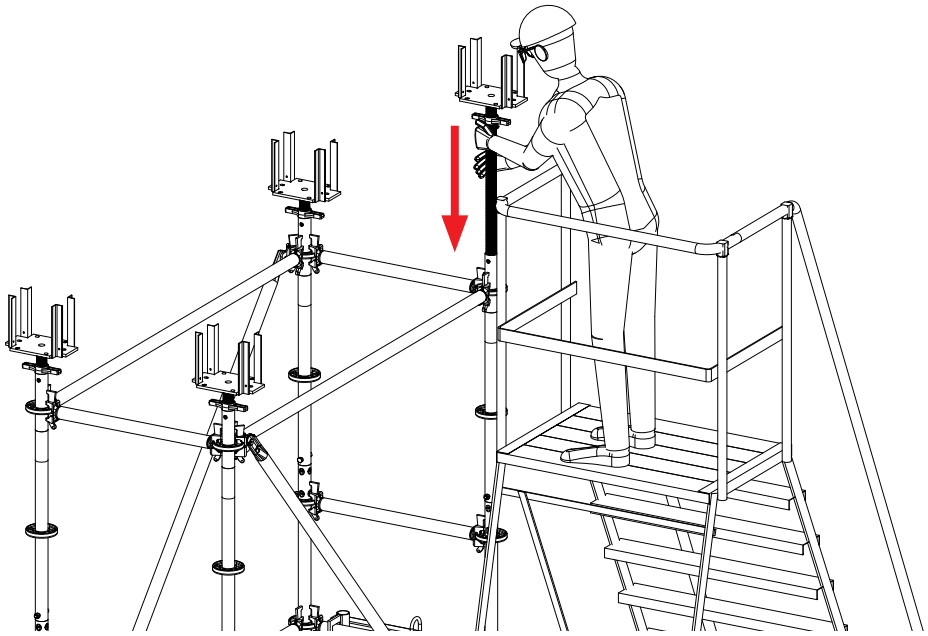
WARNING

Risk of tipping over if the Crosshead Jacks are set differently!

If the Crosshead Jacks do not all protrude the same distance from the MODEX Assembly, the Table Form may tip over!
This can cause personal injury or death!
Always turn the nuts on the Crosshead Jacks up as far as possible, such that the Crosshead Jacks are extended as little as possible.

Attaching Crosshead Jacks

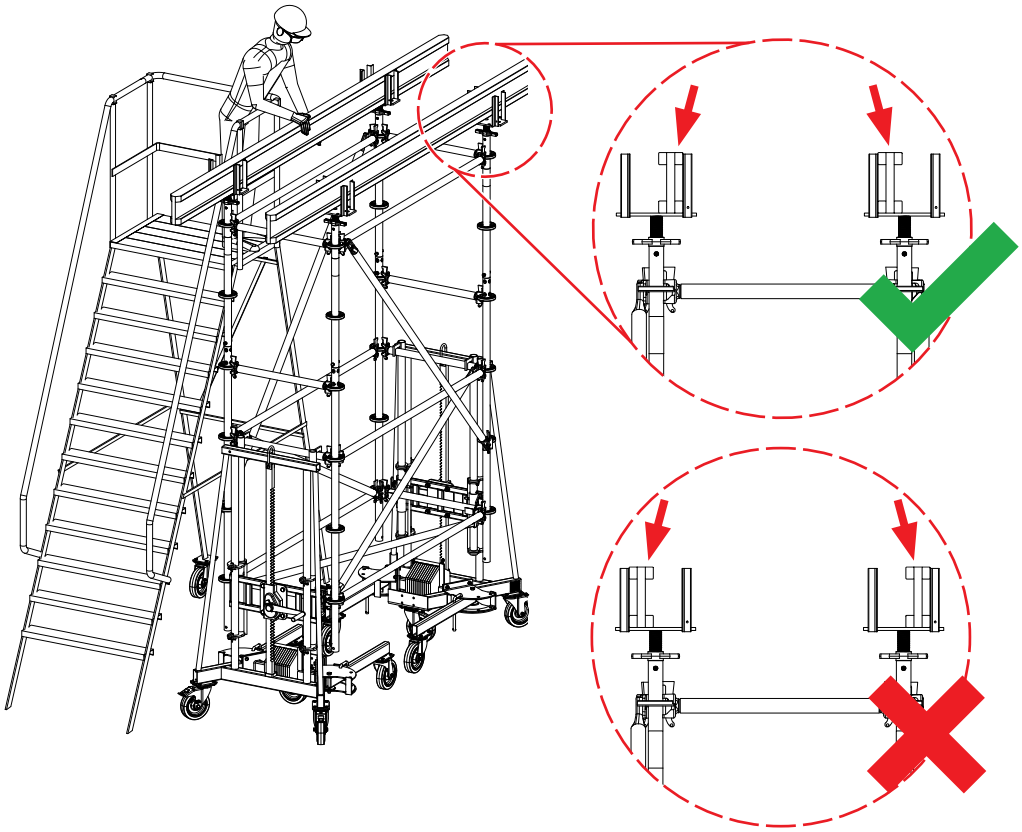
Step 1 Insert the Crosshead Jacks into the Vertical Posts L on the MODEX Assembly.



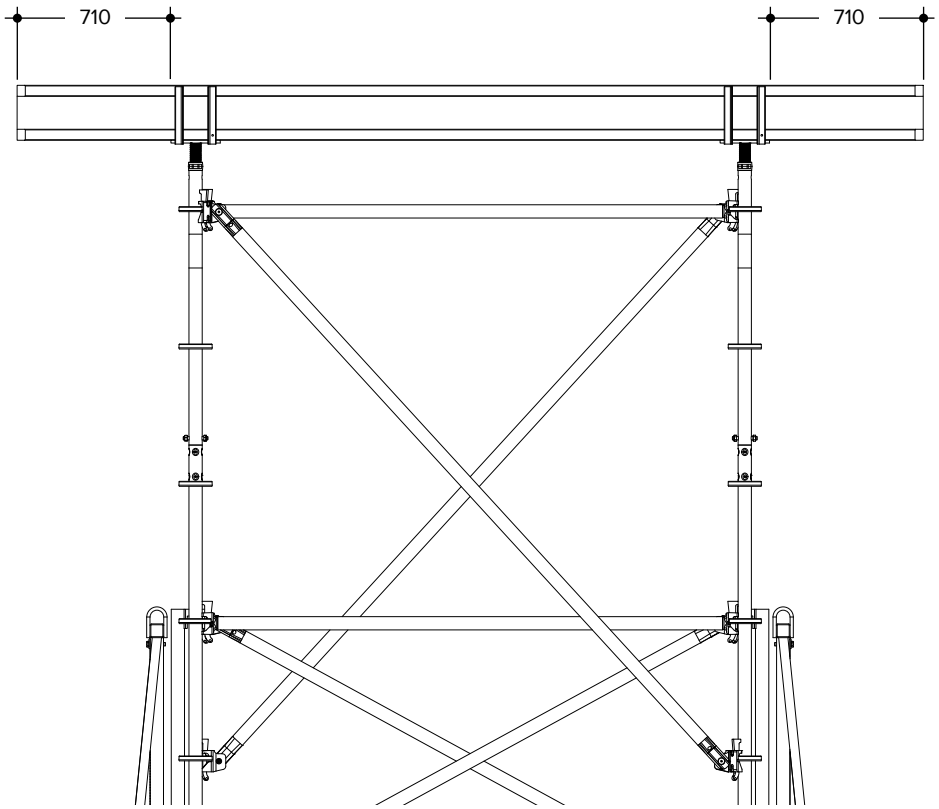
7.2.5 Fitting H 20 K-Beams for moving longitudinally under scaffold

Step 1 Turn the Crosshead Jacks such that they are perpendicular to the MODEX Assembly.

Step 2 Place the H 20 K-Beam 360 in the Crosshead Jack, resting against the inner profiles of the Crosshead Jacks. Otherwise the H 20 K-Beam will collide with the folding head on the Extension Frame during transport.

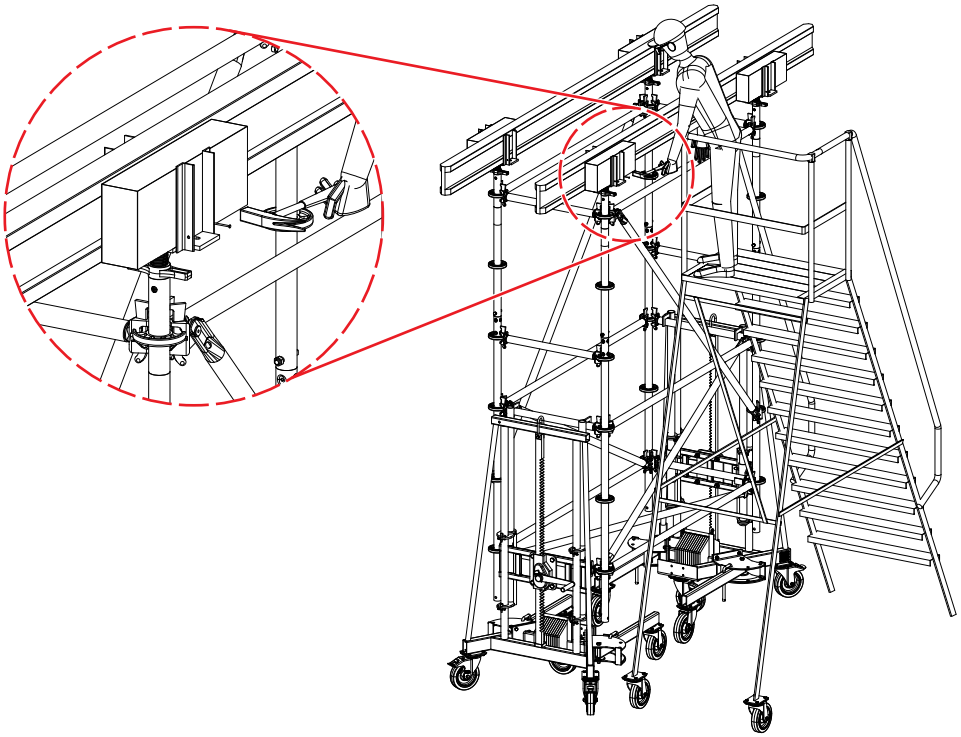


Step 3 Centre the H 20 K-Beam 360 along the length of the MODEX Assembly.

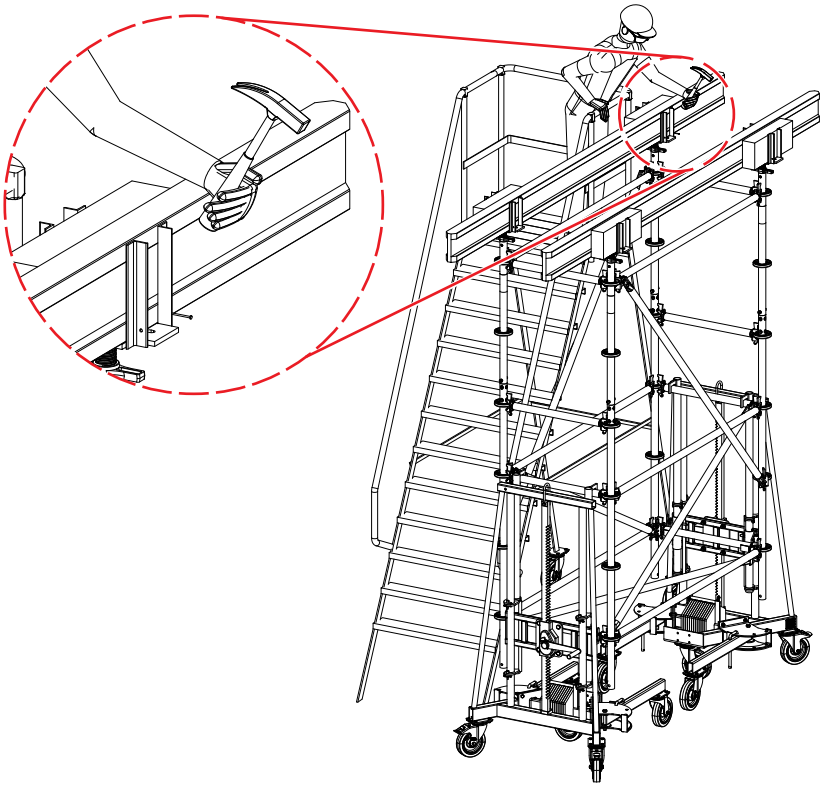


Step 4 Secure the H 20 K-Beam with boards or wedges to prevent it from tipping to the side.

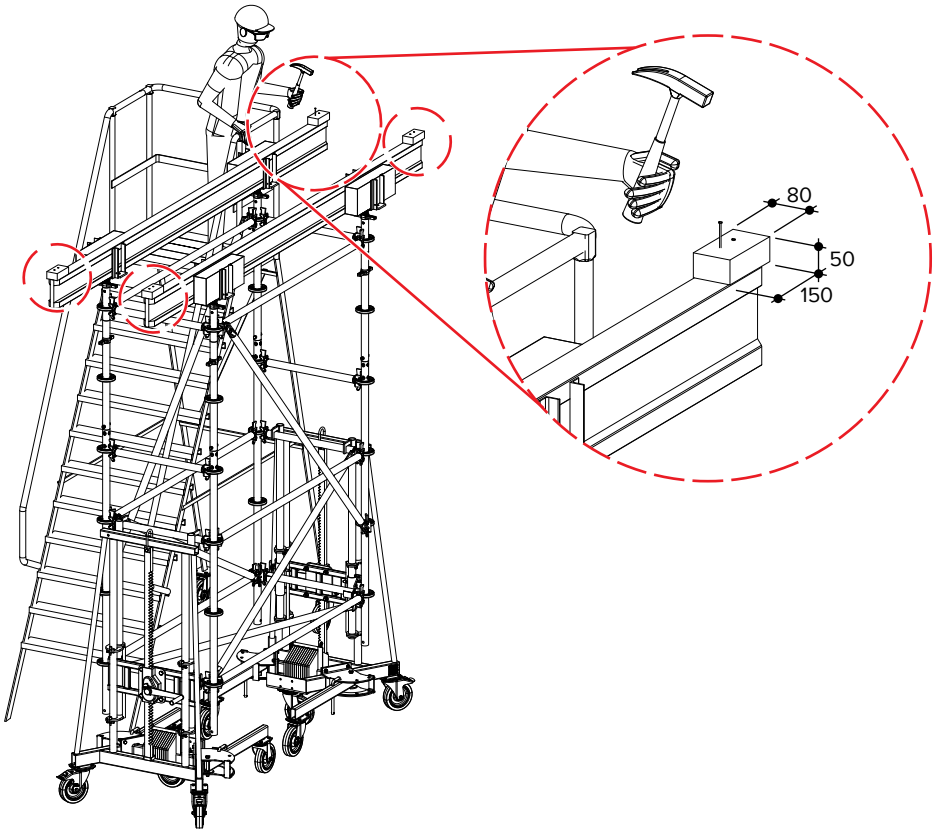
Step 5 Nail the boards or wedges to the Crosshead Jacks or secure them in some other way to prevent them from falling out.



Step 6 Nail the H 20 K-Beam to the Crosshead Jacks.



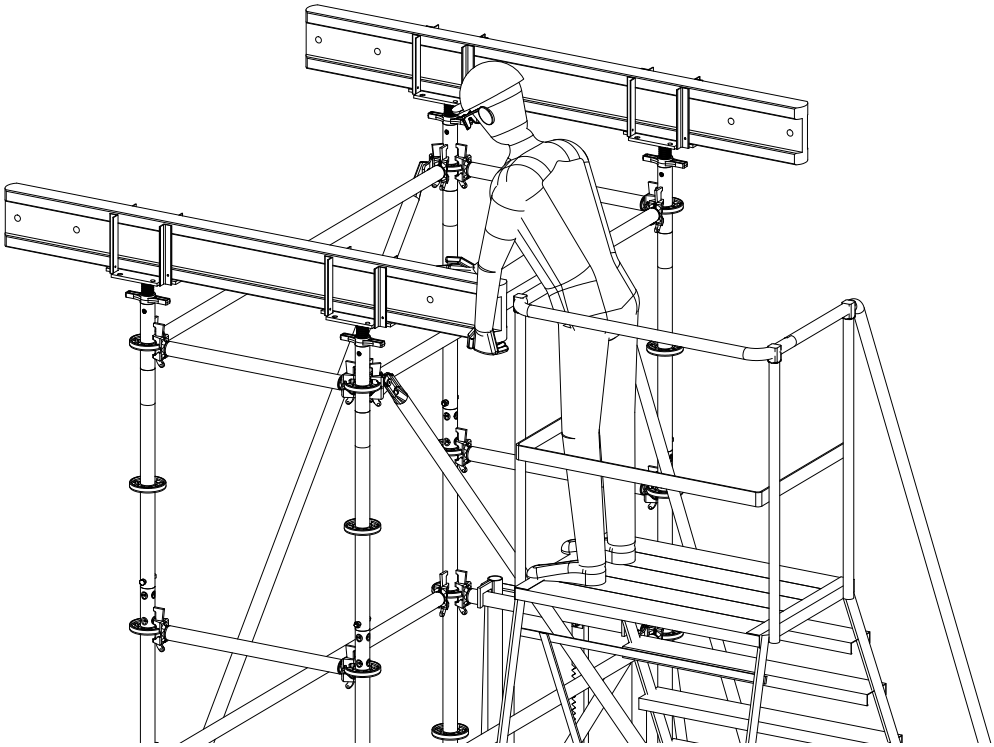
Step 7 Nail wooden blocks 150 x 50 x 80 mm to all four ends of the H 20 K-Beams. The blocks serve as stoppers for the Extension Frames added later.



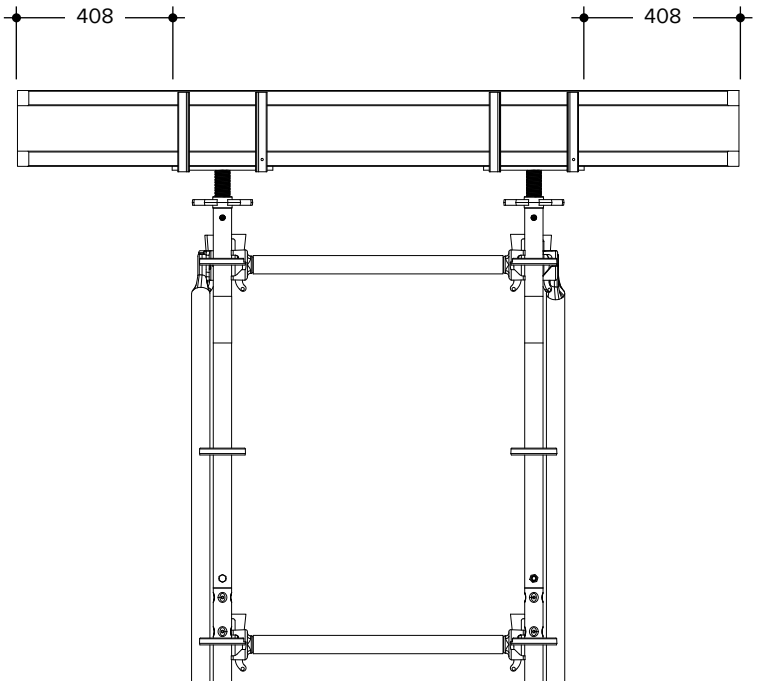
7.2.6 Fitting H 20 K-Beams for moving laterally under scaffold

Step 1 Turn the Crosshead Jacks such that they are perpendicular to the MODEX Assembly.

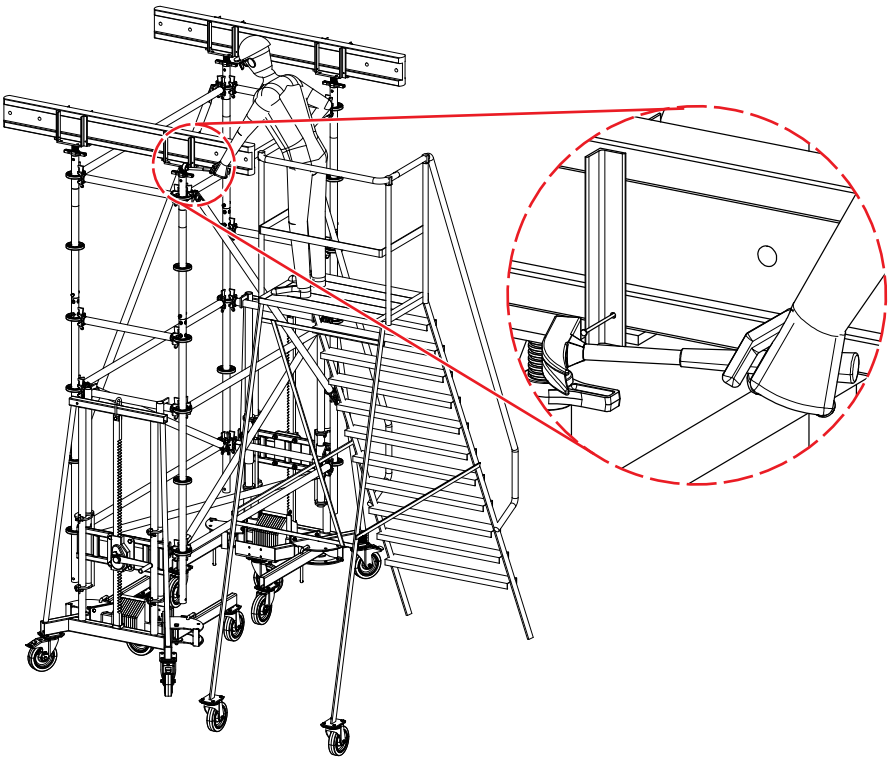
Step 2 Place the H 20 K-Beam 190 laterally in the Crosshead Jacks.



Step 3 Centre the H 20 K-Beam 190 along the width of the MODEX Assembly.



Step 4 Nail the H 20 K-Beam to the Crosshead Jacks.



8 Moving TOPMAX Table Form with MODEX Assembly

This section describes how to move Table Forms on the Positioning Unit with MODEX Assembly. The procedure differs by whether Table Forms with or without Extension Frames are lifted and moved.

8.1 Safety instructions for moving Table Forms

Always comply with these safety instructions when moving Table Forms!

Risk of tipping over if the Positioning Unit is not in the right place!

If the Positioning Unit is not centred under the Table Form in relation to the centre of gravity, the structure can tip over when lifting.

This can cause personal injury or death!

Centre the Positioning Unit as well as possible in relation to the centre of gravity in both directions under the Table Form! Position Lifting Jack Carriages only at the narrow side of a load!

High speed can cause the Positioning Unit to tip over!

If the Positioning Unit moves too quickly, it can tip over with the Table Form on it.

This can cause personal injury or death!

Longitudinal transport should be no faster than half of walking pace (2.90 km/h, 0.8 m/s)!

Incorrect operation can cause the Positioning Unit to tip over!

Pushing the Table Form by the props can cause it to tip over with the Positioning Unit.

This can cause personal injury or death!

Do not move the structure by pushing the props! Grasp only the steering rods on the TOPMAX Lifting Jack Carriage 750 to move the Positioning Unit.

Incorrect operation can cause overturning!

If the props are not extended the same distance or the Quick Release Bolts are not attached properly when the Table Form is set down, the Table Form can tip over!

This can cause personal injury or death!

Before setting down the Table Form, verify that all props are extended the same and that the prop Quick Release Bolts are attached properly!

Too high of a ground clearance can cause the Positioning Unit to tip over!

If the Table Form is lifted too high, it can easily tip over!

This can cause personal injury or death!

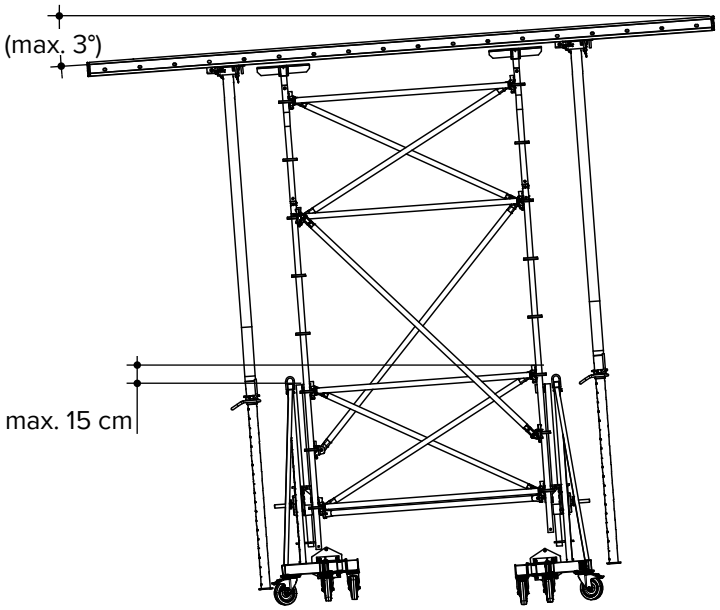
Tubular steel props, GASS props or shoring towers should not be transported with more than 50 mm ground clearance!

Incorrect operation can cause the Positioning Unit to tip over!

If the Table Form is at too much of a slant, it can tip over along with the Positioning Unit!

This can cause personal injury or death!

The Table Form may not be slanted more than 3° (15 cm difference in height at the Lifting Jack Carriages)!



8.2 MODEX Assembly directly underneath the Table Form

To transport TOPMAX Table Forms without Extension Frames attached, a MODEX Assembly type 1 to type 4 (depending on the height) has to be used.

Two persons are always required to operate a Positioning Unit (two Lifting Jack Carriages).

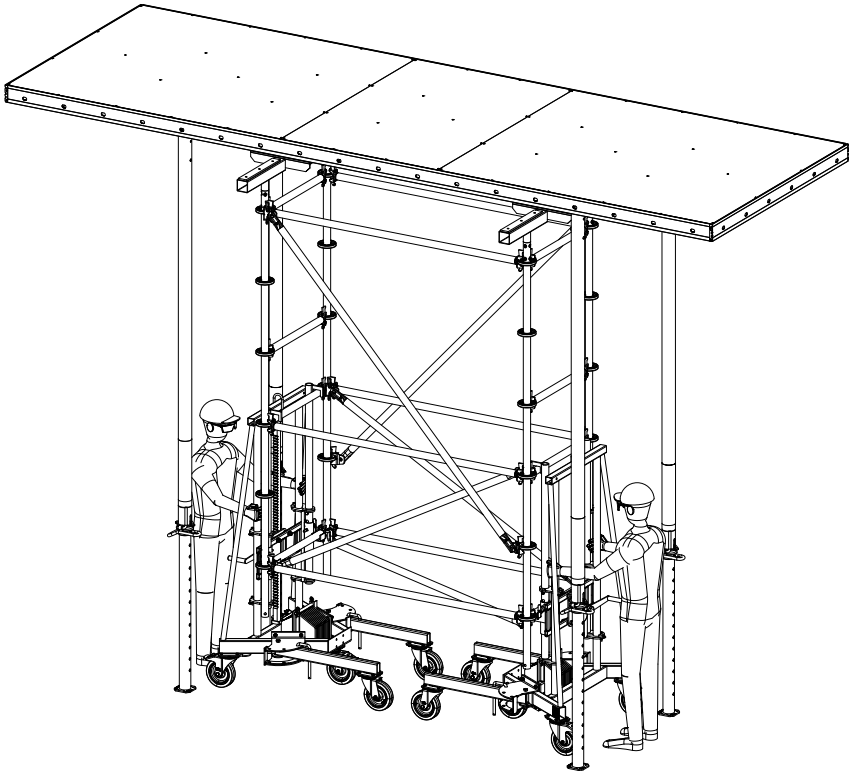
CAUTION	**Risk of crushing!** Touching the toothed rack while operating the lifting jack can lead to a crushed hand! Do not touch the toothed rack while the lifting jack is in operation!

	After moving the Positioning Unit under the Table Form, turn the swivel castors in the direction in which the Table Form is to be transported. Do this e.g. by rolling 1 m farther under the Table Form. Then pull the Positioning Unit back under the Table Form. This way the swivel castors are turned to the direction in which the Positioning Unit will be moved out, making it easier to then transport the Table Form.

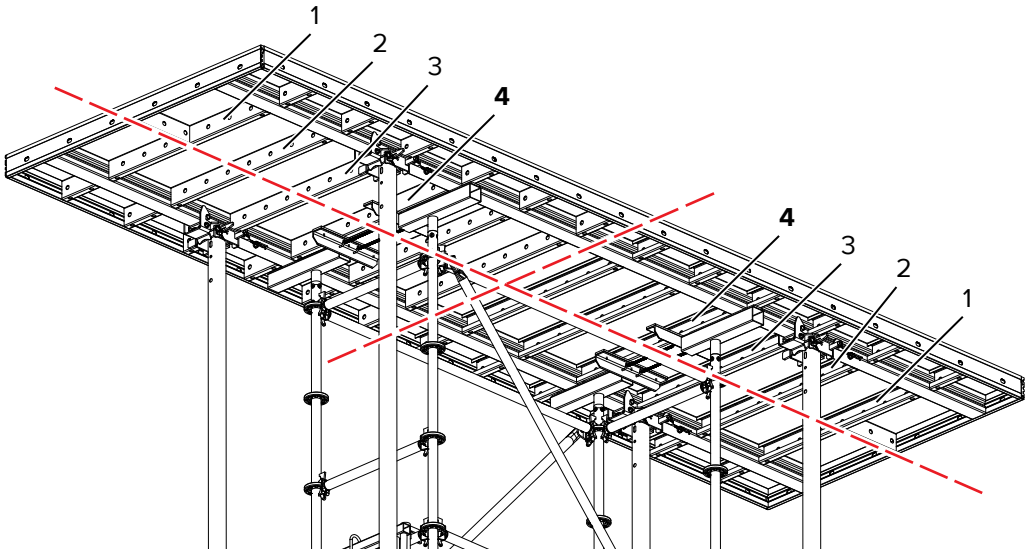
8.2.1 Forming

Step 1 Extend the cantilevers on both Lifting Jack Carriages (needed only when moving longitudinally under the scaffold).

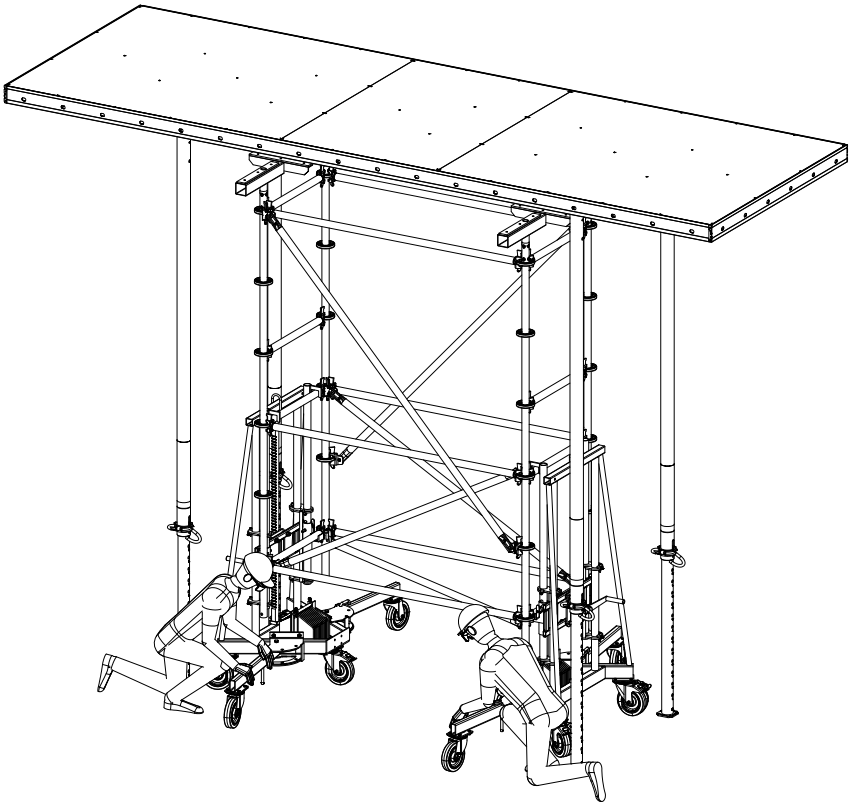
Step 2 Move the Positioning Unit such that it is under the Table Form. The pivoting Turning Heads allow the Positioning Unit to move between the props on the shorter side as well.



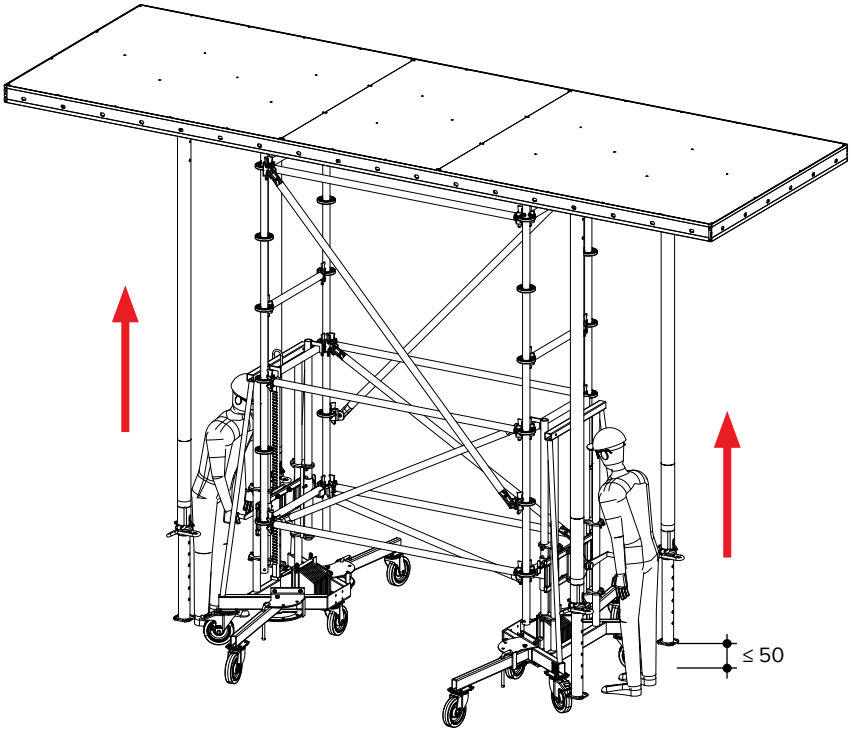
Step 3 Centre the Positioning Unit under the Table Form. Align the Turning Heads under the fourth transom from each end of the Table Form and centred under the Table Form.



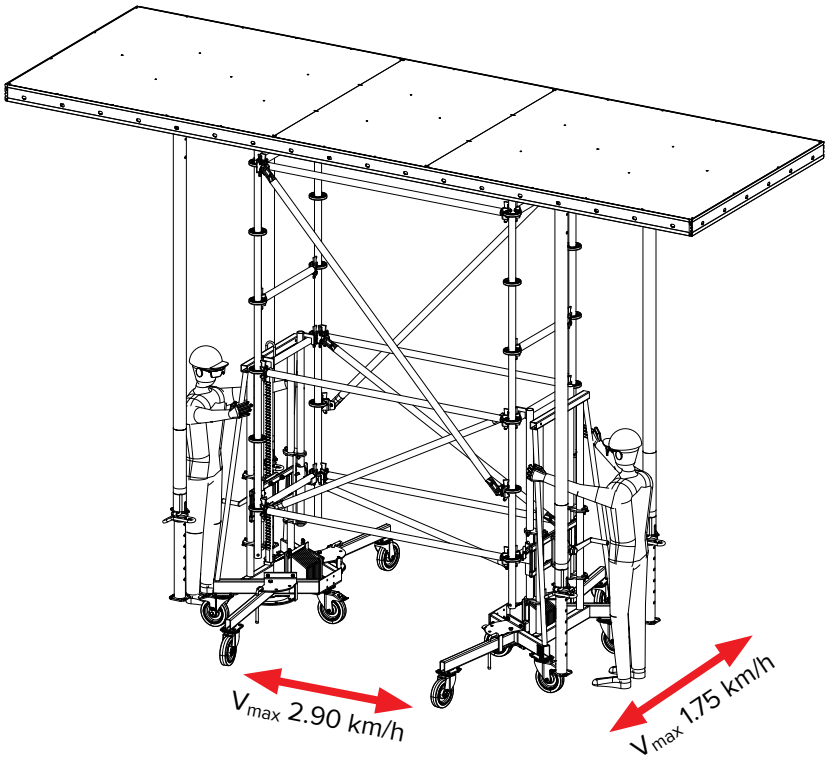
Step 4 Extend the cantilevers. Do this by pulling out the locking stirrups, extending the cantilevers, and then inserting the bolts again.



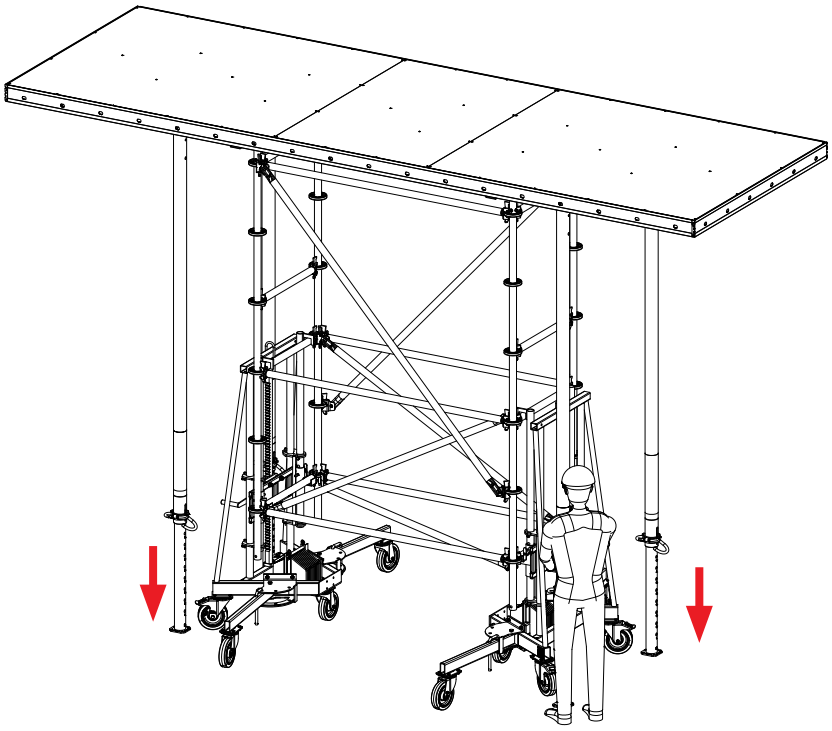
Step 5 Turn the lifting jacks on both Lifting Jack Carriages clockwise at the same time to lift the Table Form. The props may be no more than 50 mm off the ground when moving! Ensure than all props are extended the same distance.



Step 6 Move the Table Form to the desired position. Do not exceed the maximum speed of 2.90 km/h (0.8 m/s) for longitudinal transport! Grasp only the steering rods to move the Lifting Jack Carriages!



Step 7 Crank both lifting jacks to move the Table Form to the desired height (Refer to page 28). Lower the Table Form props to the ground and secure them. Before setting down, verify that all props are extended the same and that the prop Quick Release Bolts are attached properly!



Step 8 Remove the Positioning Unit from under the Table Form.

When the Table Form is resting on the Positioning Unit, it can be precisely aligned in height by cranking the lifting jacks. Use e.g. a laser distance meter to measure the height. This allows the Table Form to be easily connected to other Table Forms.

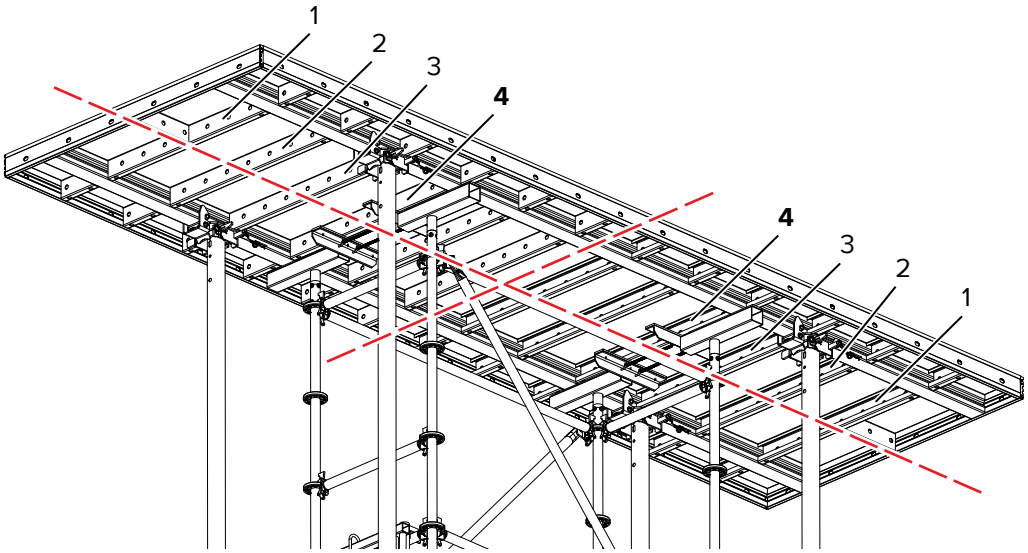
8.2.2 Striking

The following illustrations do not show the poured ceiling.

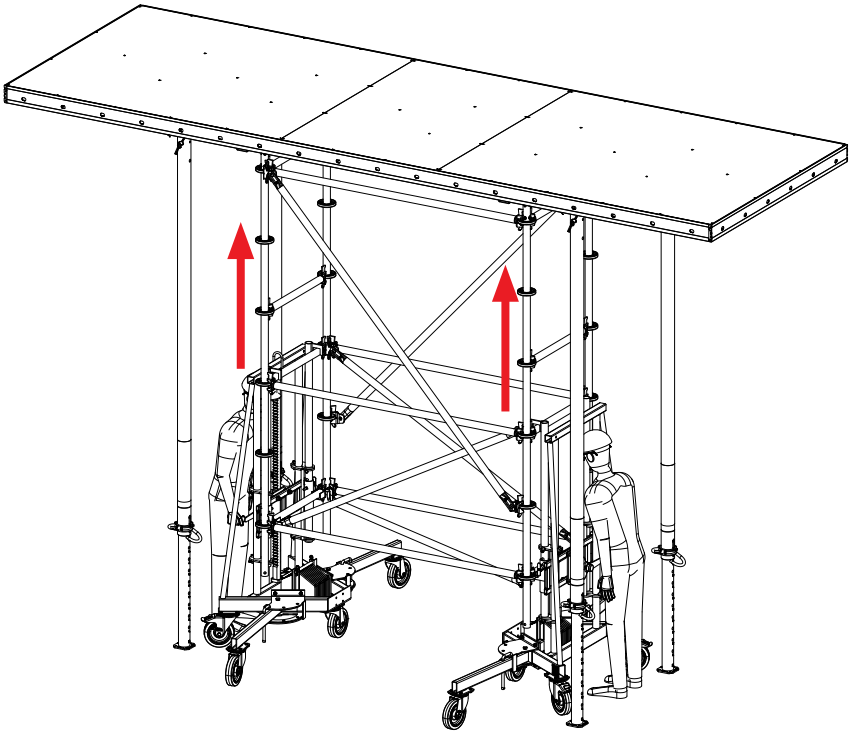
Step 1 Lower the Table Form props with the aid of the quick-release mechanism on the bolts.

Step 2 Remove the formwork from the concrete.

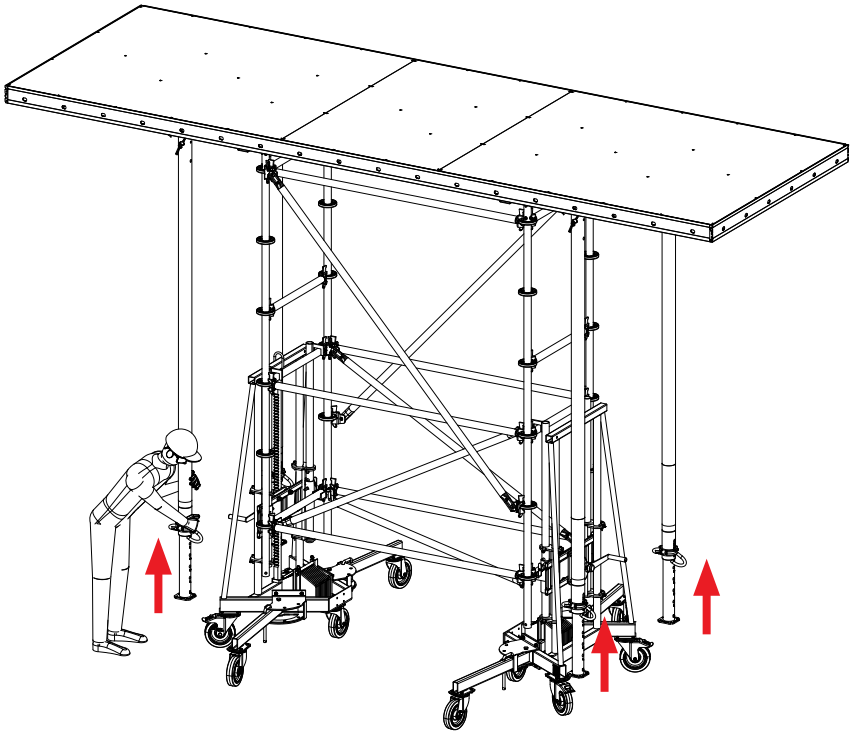
Step 3 Centre the Positioning Unit under the Table Form. Align the Turning Heads under the fourth transom and centred under the Table.



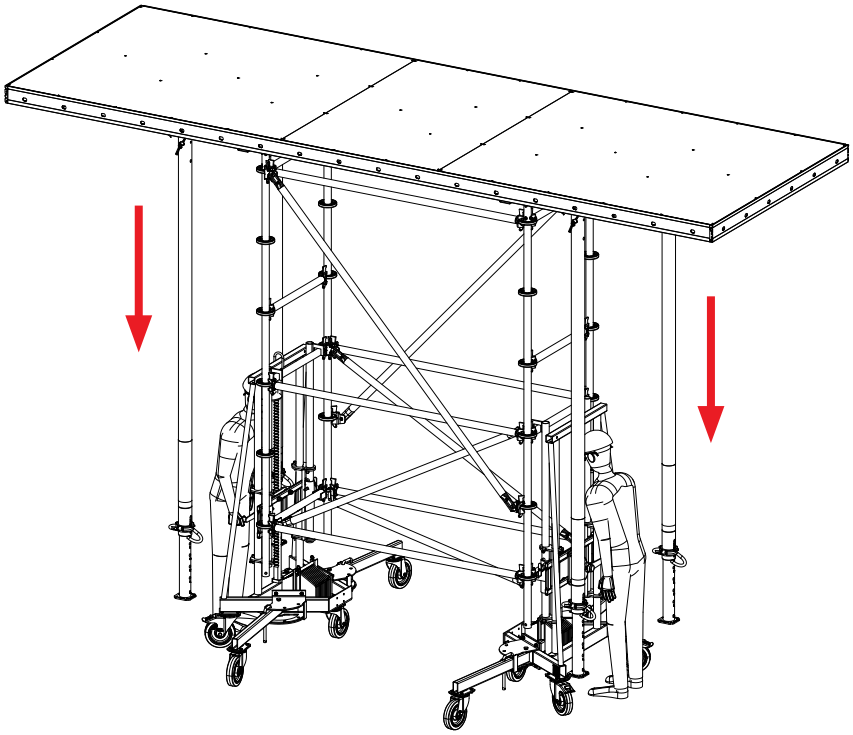
Step 4 Turn the lifting jacks on both Lifting Jack Carriages clockwise at the same time until the Turning Heads touch the Table Form.



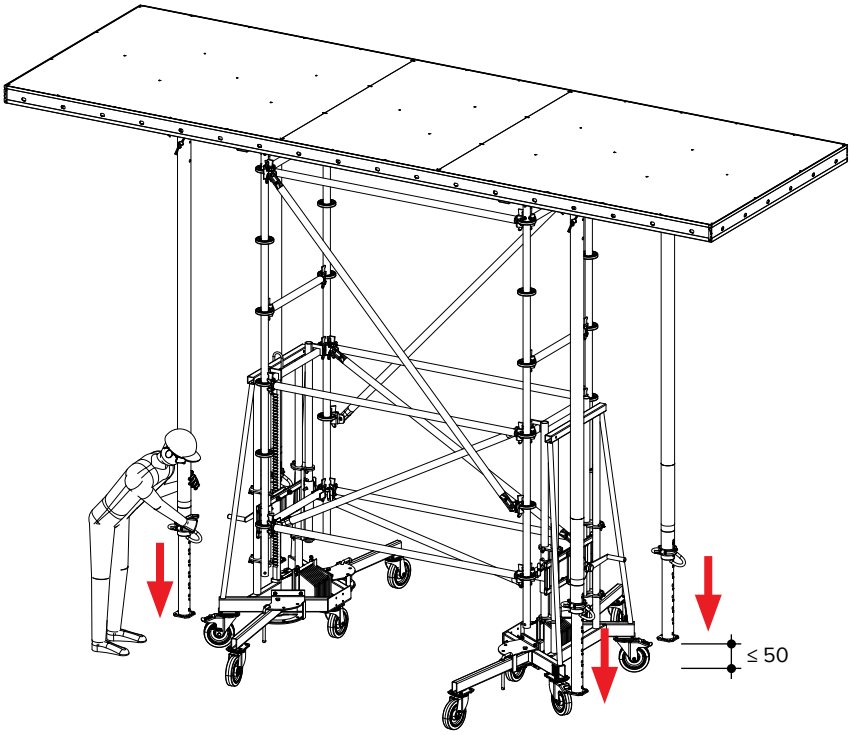
Step 5 Slide in the inner tubes on the Table Form props and pin them.



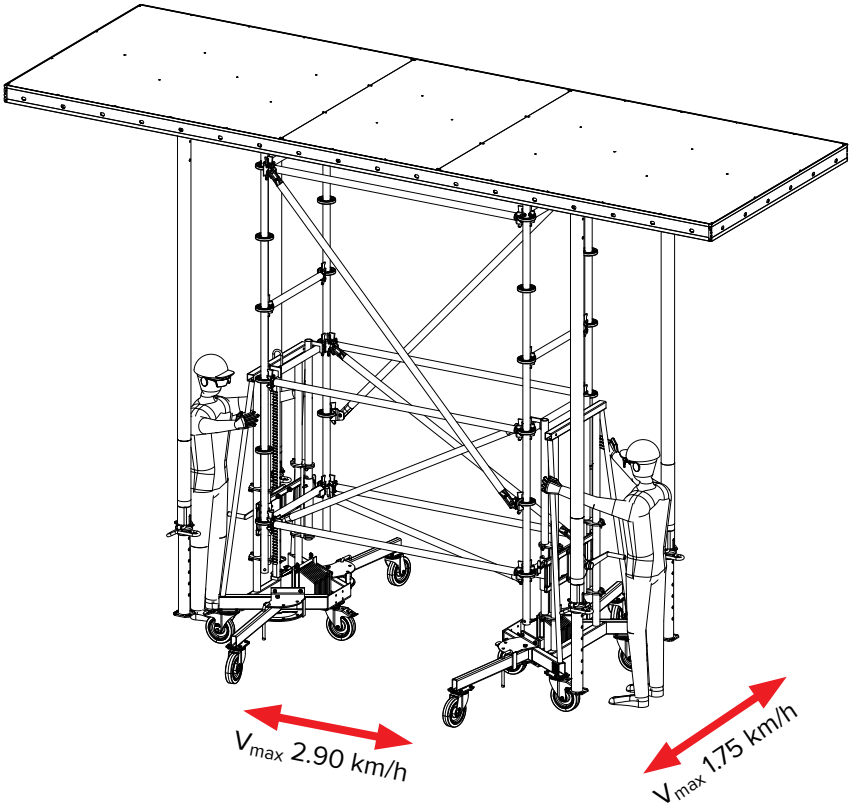
Step 6 Crank both lifting jacks to evenly lower the Table Form such that collisions with downstand beams or similar parts are avoided. Before setting down, verify that all props are extended the same and that the prop Quick Release Bolts are attached properly!



Step 7 Extend the props such that they are no more than 50 mm off the ground and secure them.



Step 8 Move the Table Form. Do not exceed the maximum speed of 2.90 km/h (0.8 m/s) for longitudinal transport! Grasp only the steering rods to move the Lifting Jack Carriages!



8.3 MODEX Assembly under the Extension Frame

If there are Extension Frames attached to the underside of the TOPMAX Table Forms, a Positioning Unit type 5 or type 6 has to be used to move the Table Forms.

To move laterally under the Table Forms, H 20 K-Beams 190 have to be placed in the Crosshead Jacks on the MODEX Assemblies.

To move longitudinally under the Table Forms, H 20 K-Beams 360 have to be placed in the Crosshead Jacks on the MODEX Assemblies.

This section describes how to position the Positioning Unit under the Table Form.
The Table Form is lifted, transported and lowered in the same as Table Forms without Extension Frames; refer to section 8.2 on page 45.

WARNING

Risk of tipping over if the Crosshead Jacks are set differently!

If the Crosshead Jacks do not all protrude the same distance from the MODEX Assembly, the Table Form may tip over!
This can cause personal injury or death!
Always turn the nuts on the Crosshead Jacks up as far as possible, such that the Crosshead Jacks are extended the least possible.

CAUTION

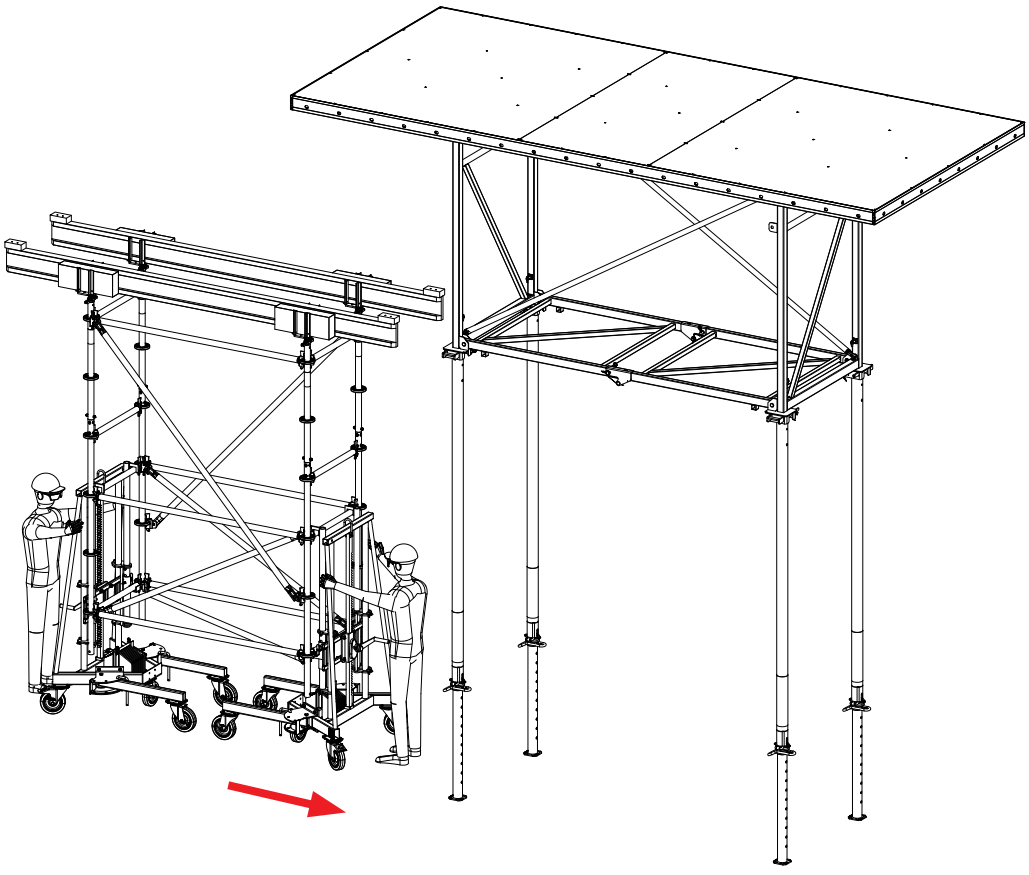
Risk of crushing!

Touching the toothed rack while operating the lifting jack can lead to a crushed hand!
Do not touch the toothed rack while the lifting jack is in operation!

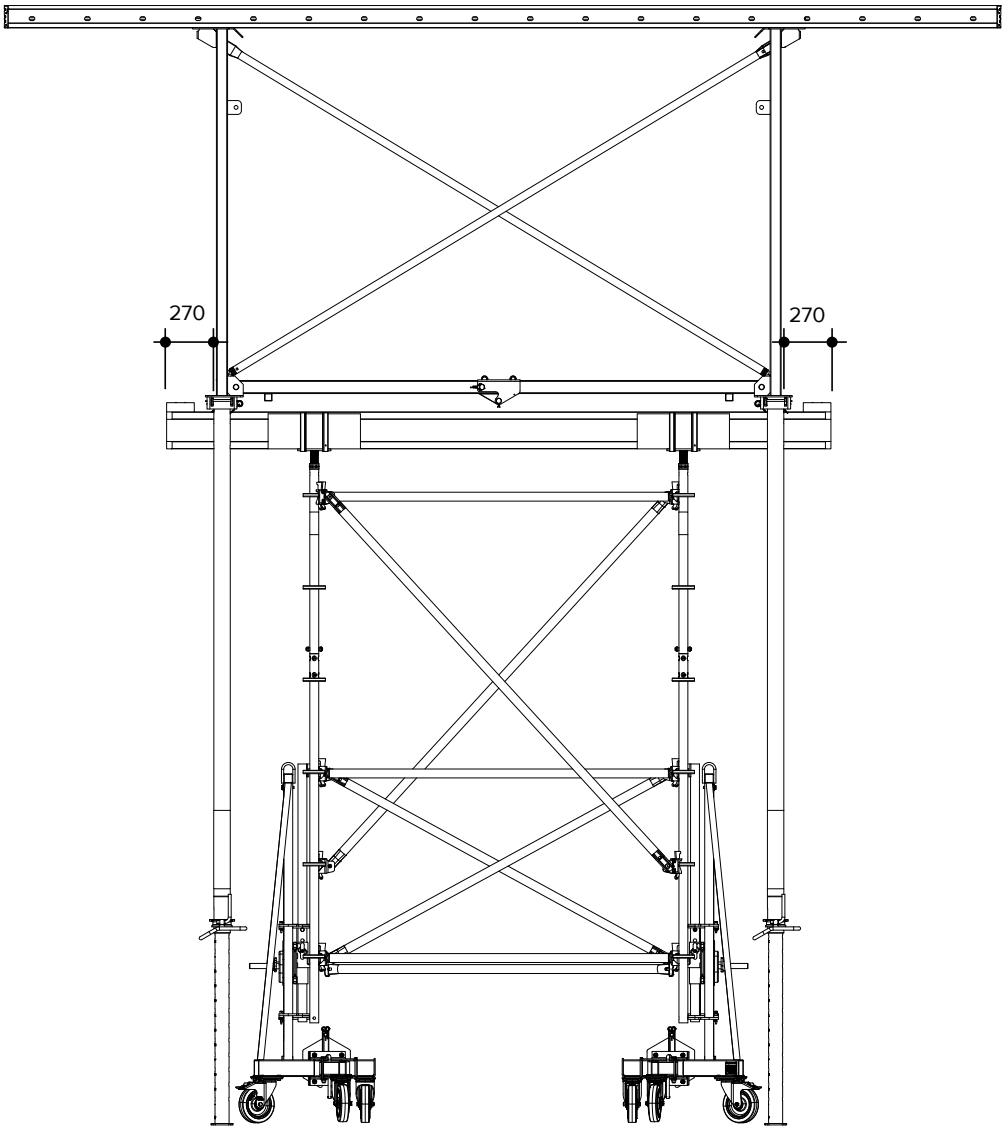
8.3.1 Moving longitudinally under the scaffold

H 20 K-Beams or Crosshead Jacks that are installed incorrectly can collide with the wedges in the folding heads when lifting. Always position the H 20 K-Beams such that they rest against the inner profiles of the Crosshead Jacks.

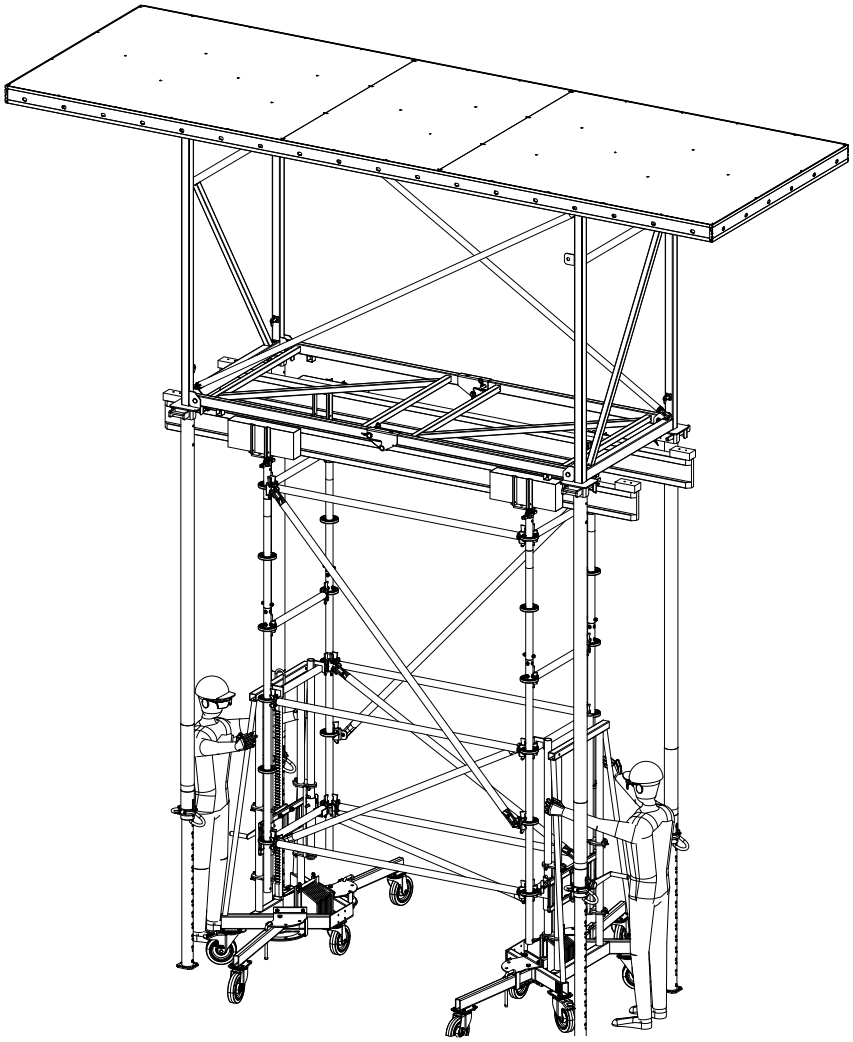
Step 1 Move the Positioning Unit under the Extension Frame, with the cantilevers retracted.



Step 2 Centre the Positioning Unit under the Extension Frame.



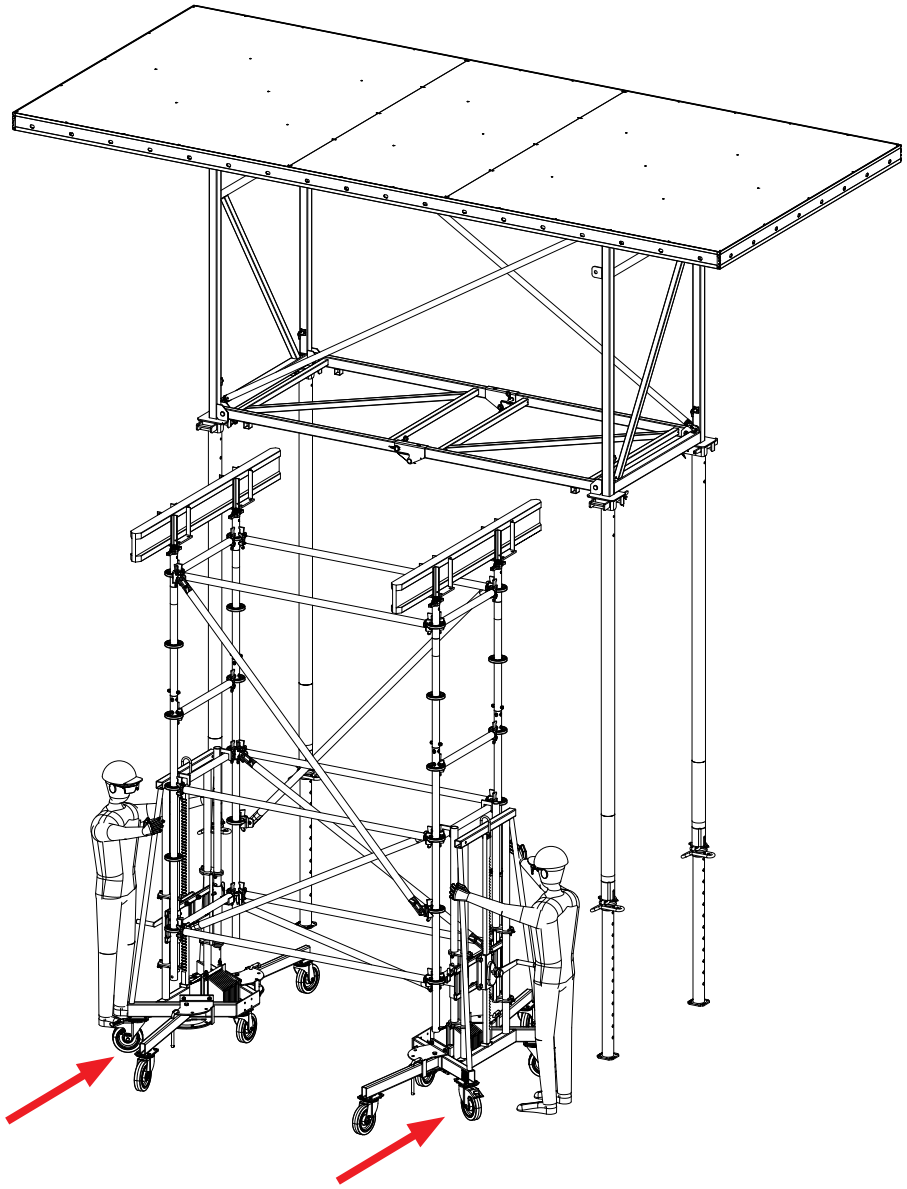
Step 3 Extend the cantilevers.



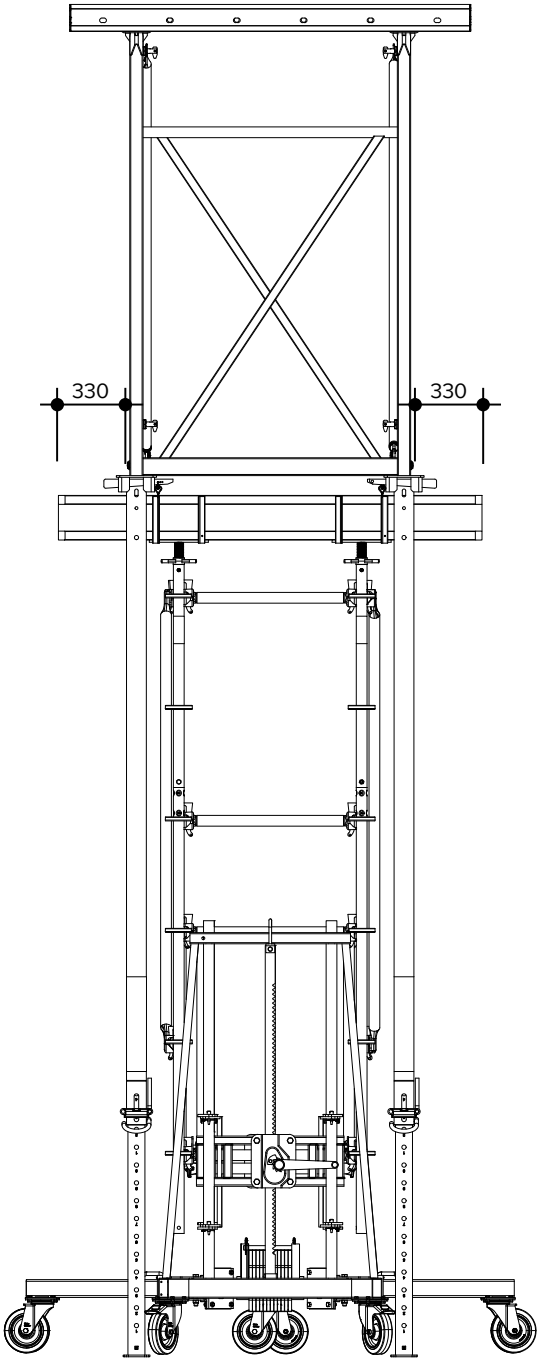
Step 4 Load the Table Form onto the Positioning Unit and move it as described in section 8.2 on page 45. Grasp only the steering rods to move the Lifting Jack Carriages!

8.3.2 Moving laterally under the scaffold

Step 1 Move the Positioning Unit under the Extension Frame, with the cantilevers extended.



Step 2 Centre the Positioning Unit under the Extension Frame.



Step 3 Load the Table Form onto the Positioning Unit and move it as described in section 8.2 on page 45. Grasp only the steering rods to move the Lifting Jack Carriages!

9 Lifting and moving TOPMAX Table Form with GASS shoring system

TOPMAX Table Forms with GASS shoring systems up to 7.50 m high can be moved with two TOPMAX Lifting Jack Carriages. Two persons are needed to operated the two Lifting Jack Carriages, one person for each Lifting Jack Carriage.

WARNING

Risk of tipping over when GASS frames are loose!

The Table Form can tip over as it is lifted if the GASS frames are not properly secured! This can cause personal injury or death!

Before lifting, check that all wedge connections at the lower level of the GASS frames are properly locked!

Always follow the safety instructions in section 8.1 on page 44 regarding moving Table Forms.

To be able to move the Lifting Jack Carriage 750 under the GASS frames, the GASS aluminium frames (lower edge) have to be 0.59 m - 1.50 m off the ground. Once the GASS frames have been connected to the Lifting Jack Carriage, the GASS assembly can be lowered to 55 cm from the ground.

9.1 Assembling

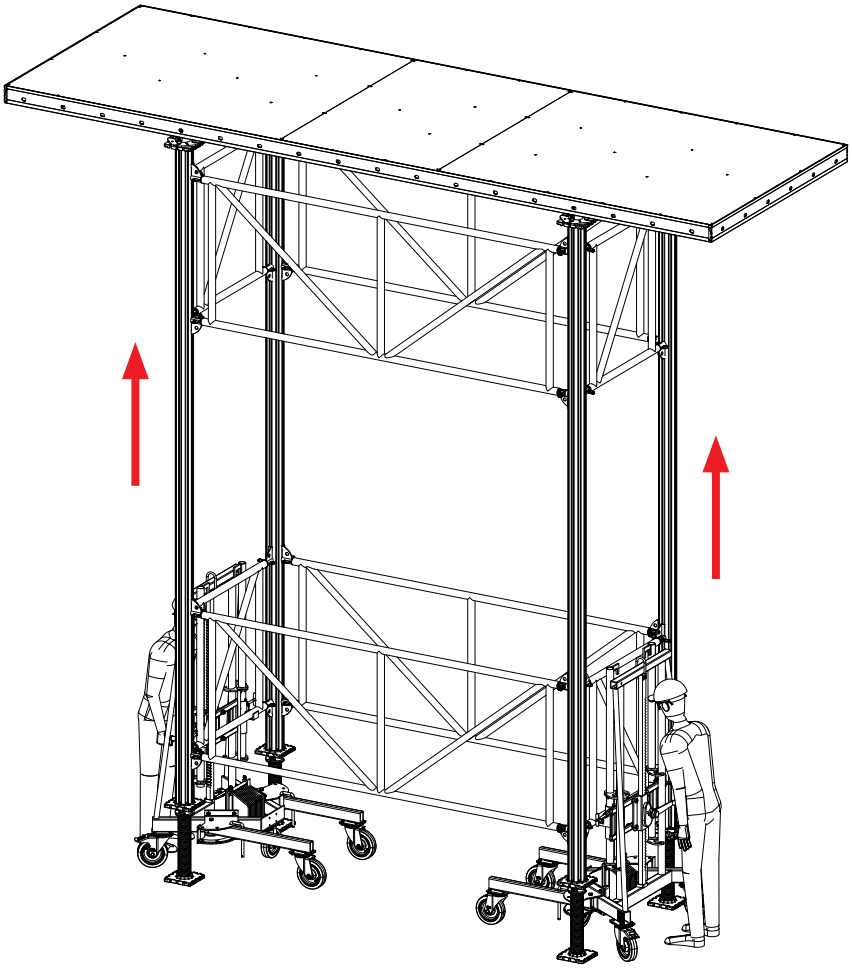
Step 1 Retract the Lifting Jack Carriage cantilevers.

Step 2 Unlock the vertical tracks on the Lifting Jack Carriage (Refer to Page 22).

Step 3 Use the lifting jacks to position the bracket on the Lifting Jack Carriages such that the bracket is under the GASS frame.

Step 4 Push the two Lifting Jack Carriages up to the short sides of the Table Form.

Step 5 Crank up the brackets on the Lifting Jack Carriages until the brackets touch the GASS frame.

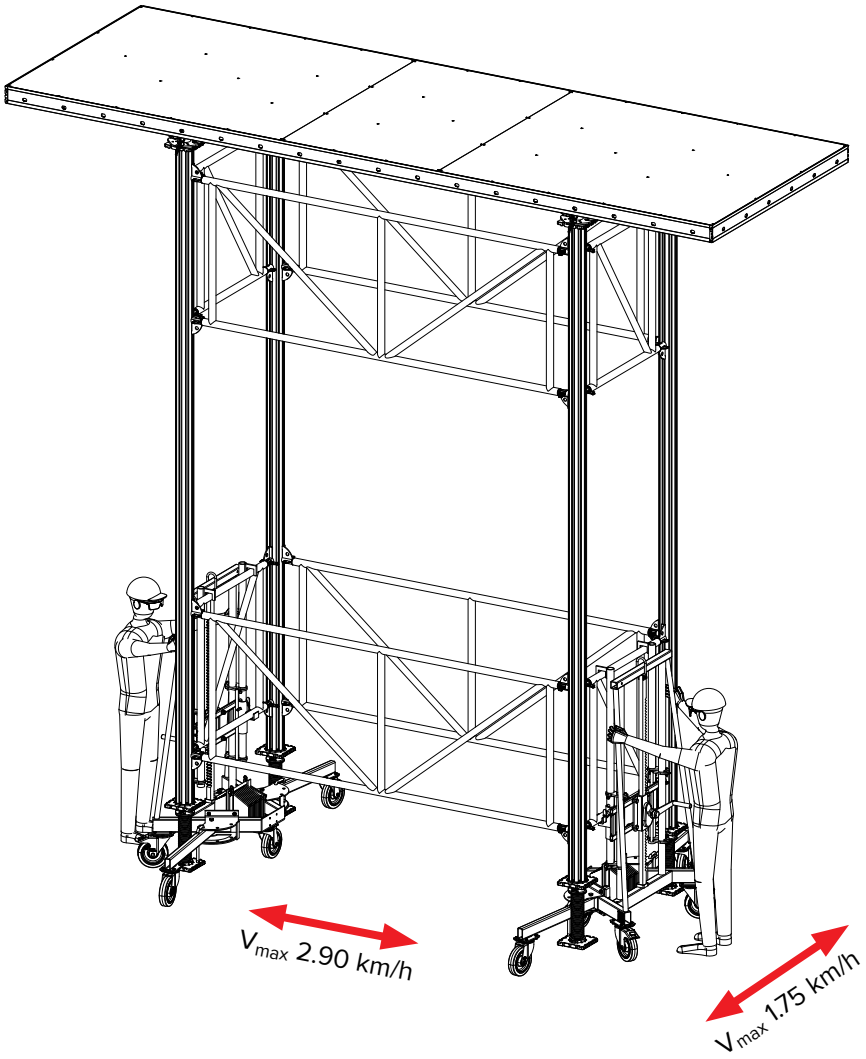


Step 6 Unlock the vertical tracks (Refer to Page 26).

Step 7 Extend the cantilevers.

Step 8 Do not lift the Table Form more than 50 mm.

Step 9 Transport the Table Form. Grasp only the steering rods to move the Lifting Jack Carriages!



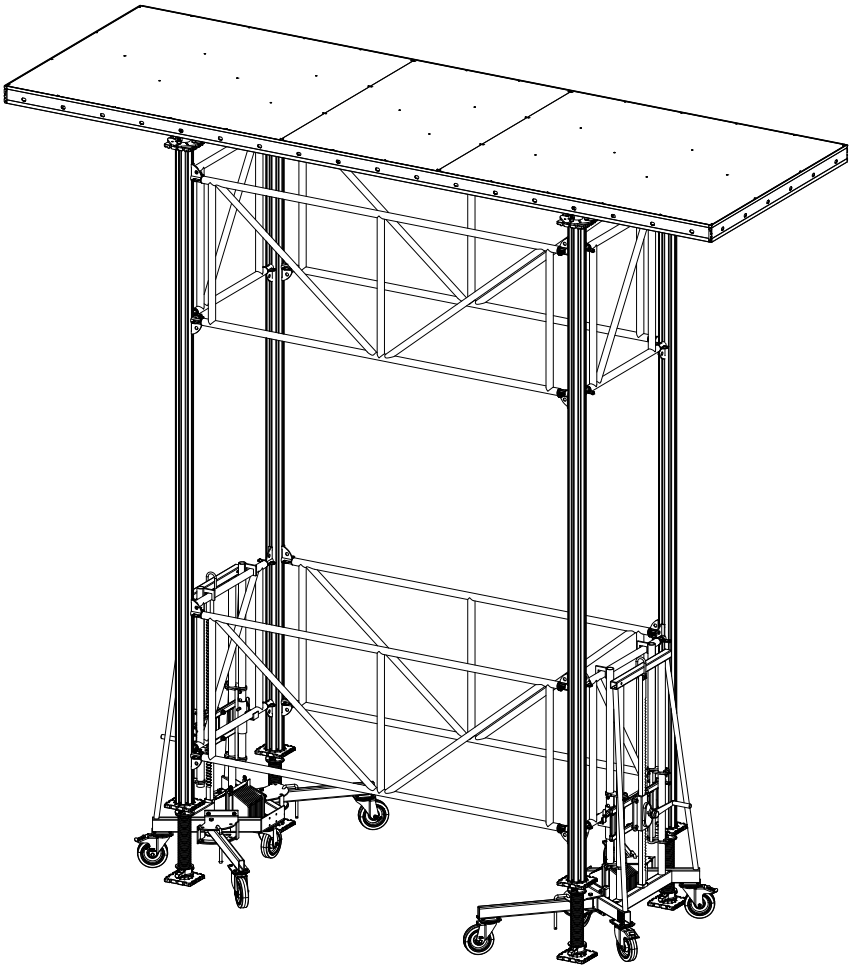
Step 10 Crank both lifting jacks to move the Table Form to the desired height (Refer to page 28). Lower the Table Form props to the ground and secure them.

9.2 Striking

Step 1 Relieve the base jacks on all of the GASS props uniformly.

Step 2 Remove the formwork from the concrete.

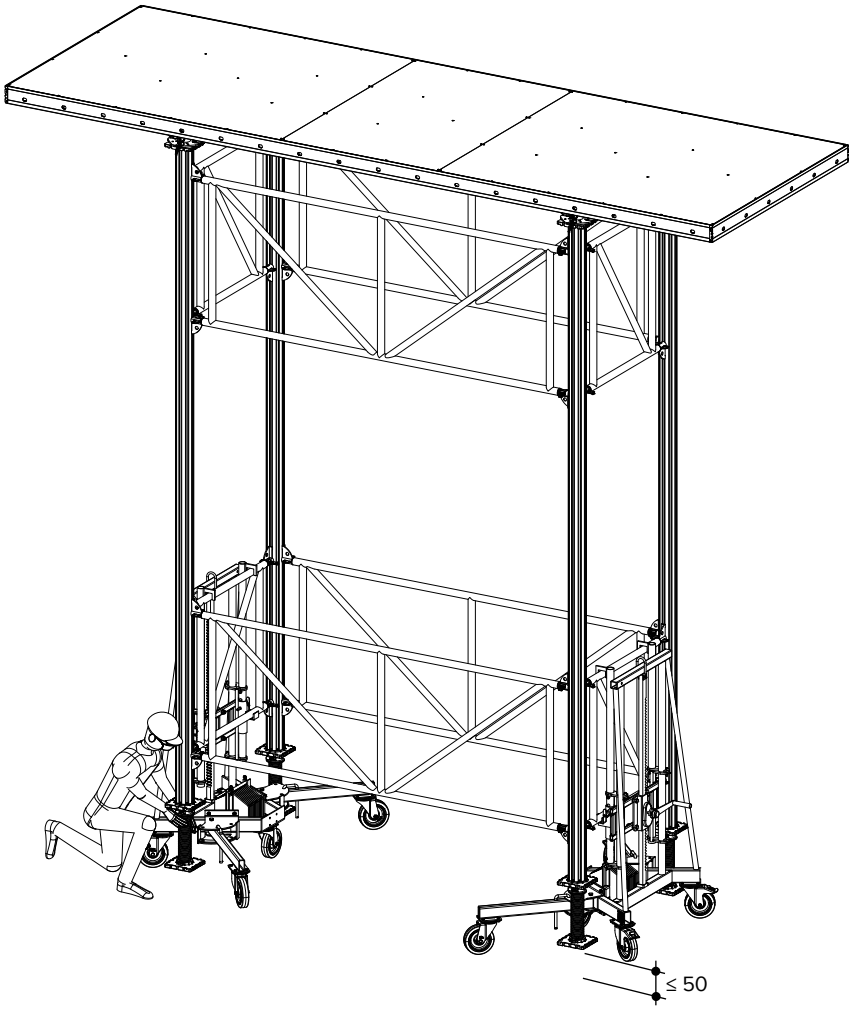
Step 3 Load the Table Form onto the Lifting Jack Carriages and extend the cantilevers (steps 1 - 7 in the previous section).



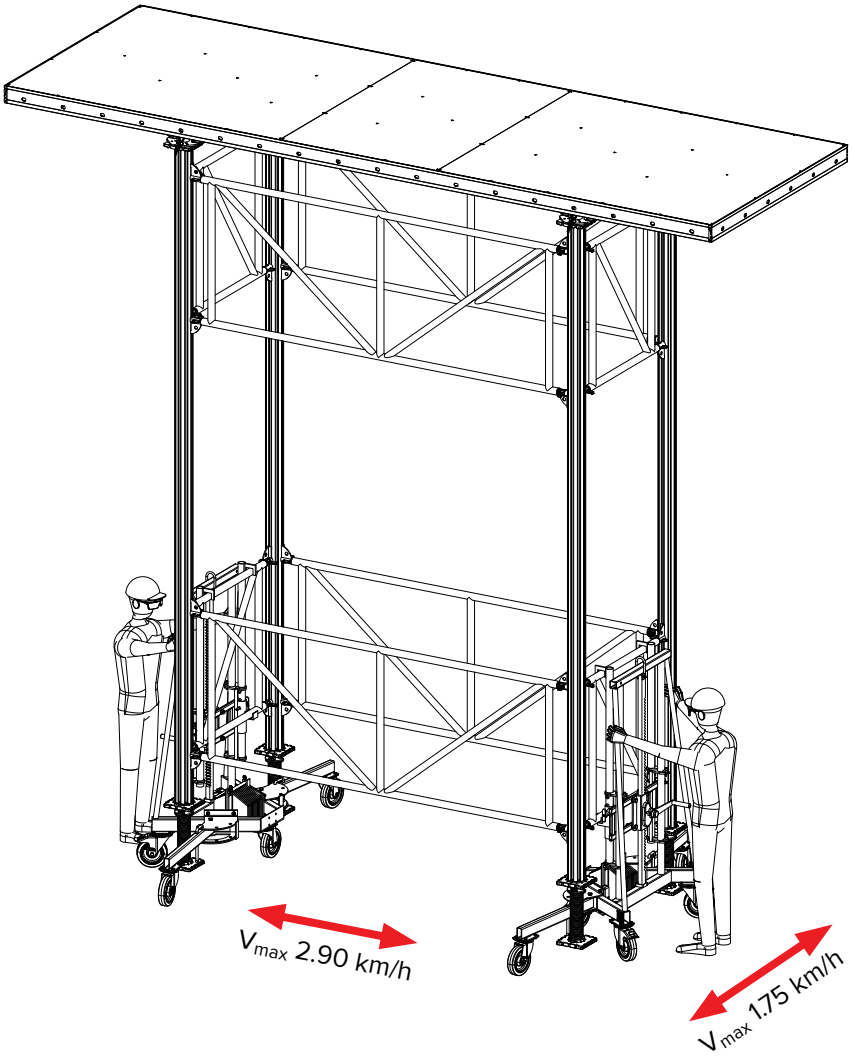
Step 4 Push in the GASS base jacks.

Step 5 Crank both lifting jacks to evenly lower the Table Form, preventing collisions with downstand beams or similar parts.

Step 6 Extend the GASS base jacks again until ground clearance is no more than 50 mm.



Step 7 Move the Table Form. Do not exceed the maximum speed of 2.90 km/h (0.8 m/s) for longitudinal transport! Grasp only the steering rods to move the Lifting Jack Carriages!



10 Moving shoring towers without Table Form

Shoring towers can be lifted and moved using two Lifting Jack Carriages 750. Place the Lifting Jack Carriages across from one another on the short sides of the shoring tower. Section 6.2 on page 22 describes how to raise loads. The illustrations in this section show examples of how to transport different types of shoring towers.

Two persons are required for vertical lifting and lowering as well as for horizontal transport.

WARNING

Hazard posed by falling parts!

Attach a Shear Force Securing Device at every tube ledger / rosette connection! Otherwise parts can fall off when being transported by crane!

WARNING

The shoring tower can tip over!

When shoring towers are moved with the cantilevers retracted, the shoring towers can tip over!
This can cause personal injury or death!
Always extend cantilevers all the way before moving!

The Lifting Jack Carriages 750 can be moved under MODEX Shoring Towers only when Tube Ledgers 113 and 125 are used.
The Lifting Jack Carriages 750 can lift ST 60 Shoring Towers only when ST 60 Frames 150/100 are used. If there are planks in the lowest level, the Lifting Jack Carriages 750 can be used only along the longer side of the planks.

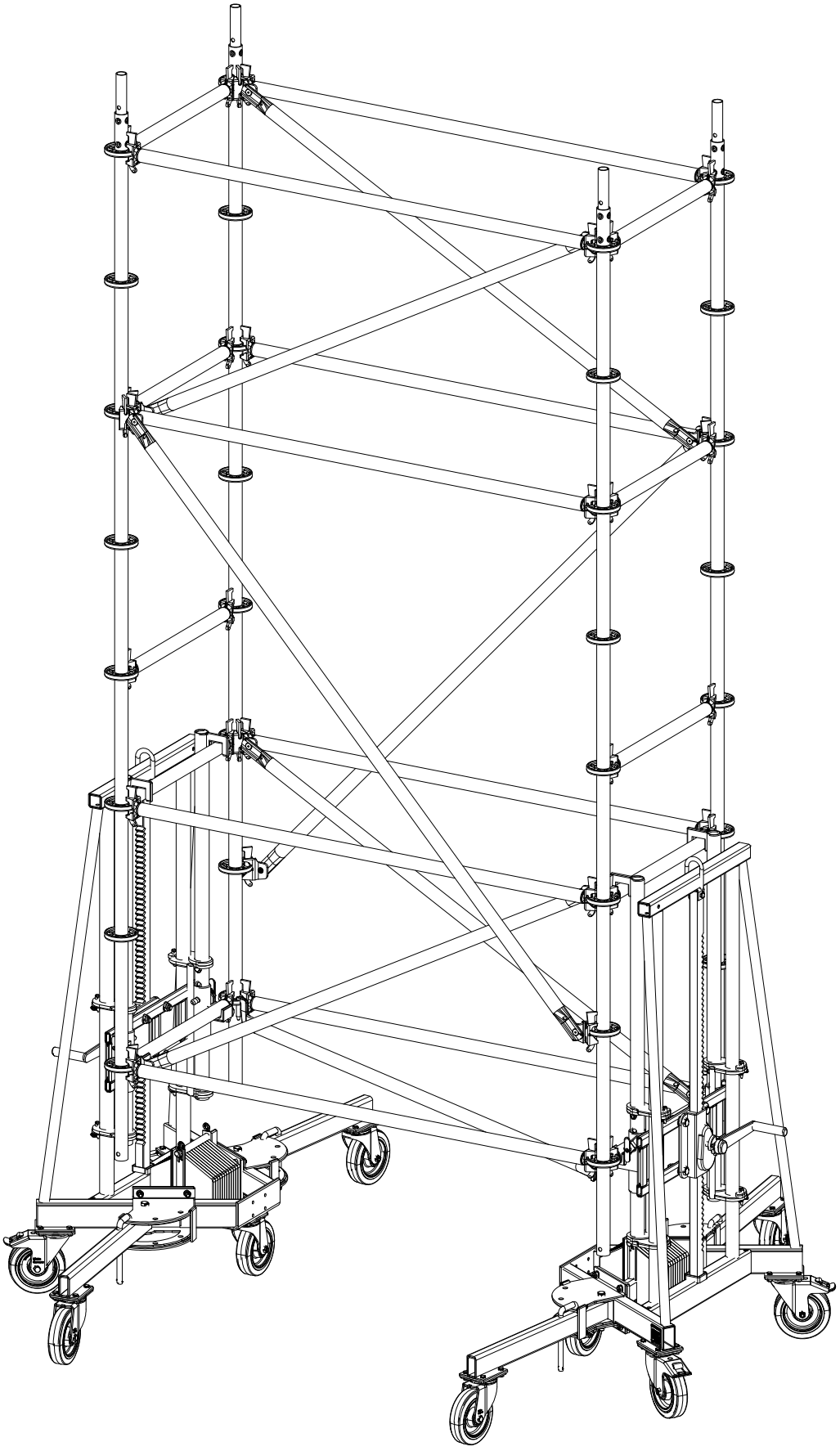
To be able to move the Lifting Jack Carriage 750 under MODEX, GASS or ST 60 frames, the frames (lower edge) have to be 0.59 m - 1.50 m off the ground. Once the frames have been connected to the Lifting Jack Carriages, the assembly can be lowered to 55 cm from the ground.

Towers with other dimensions can be lifted and transported as well. However, they require separate proof of structural stability in each case.

The following Shoring Towers without Table Forms can be lifted and transported if they comply with these dimensions:

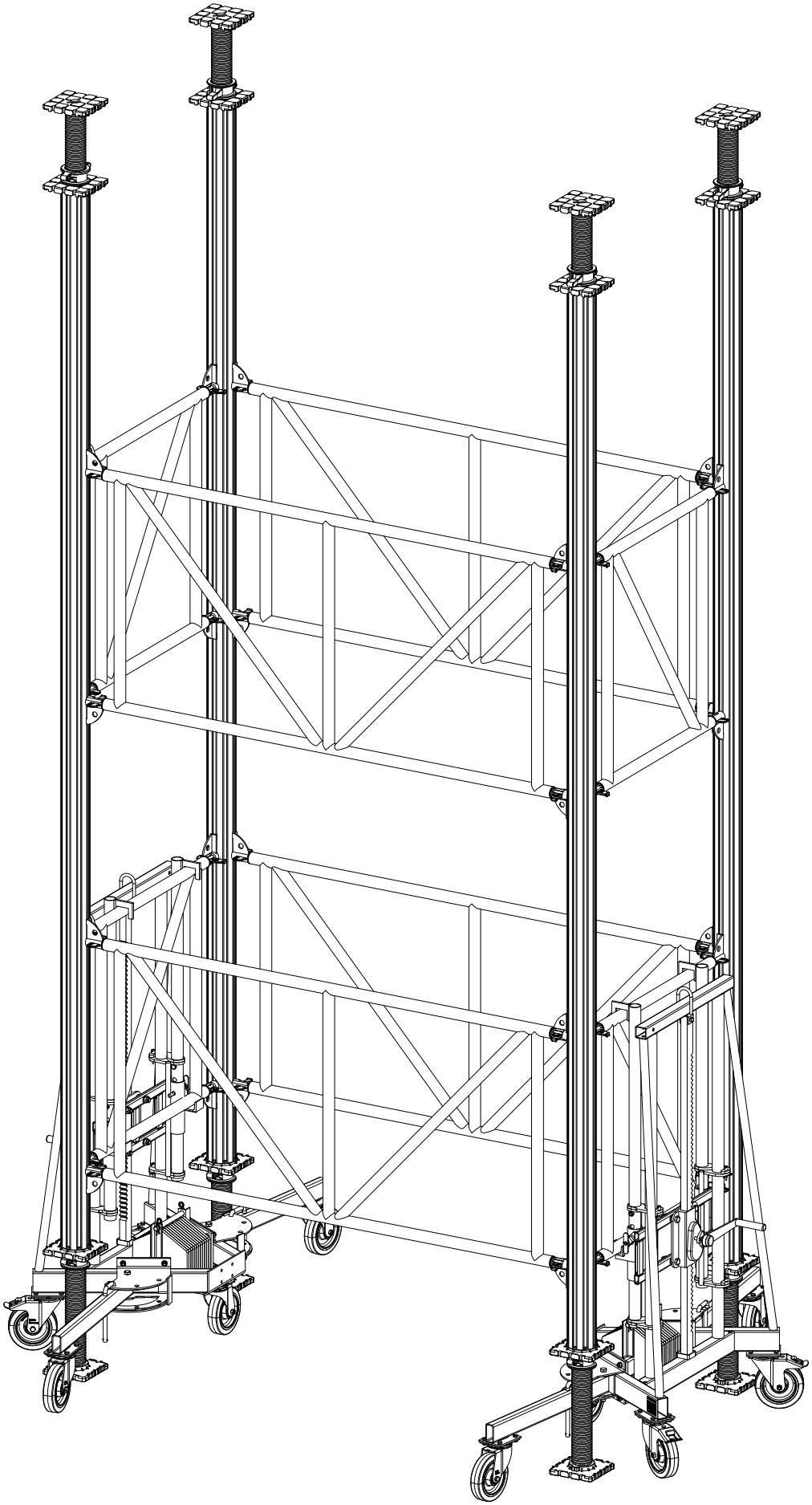
Shoring Tower	Max. tower height [m]	Max. tower dimensions W x D [m]
GASS	7.50	1.20 x 3.00
MODEX	7.50	1.25 x 3.00
ST 60	7.50	1.50 x 3.00

Example with MODEX Shoring Tower

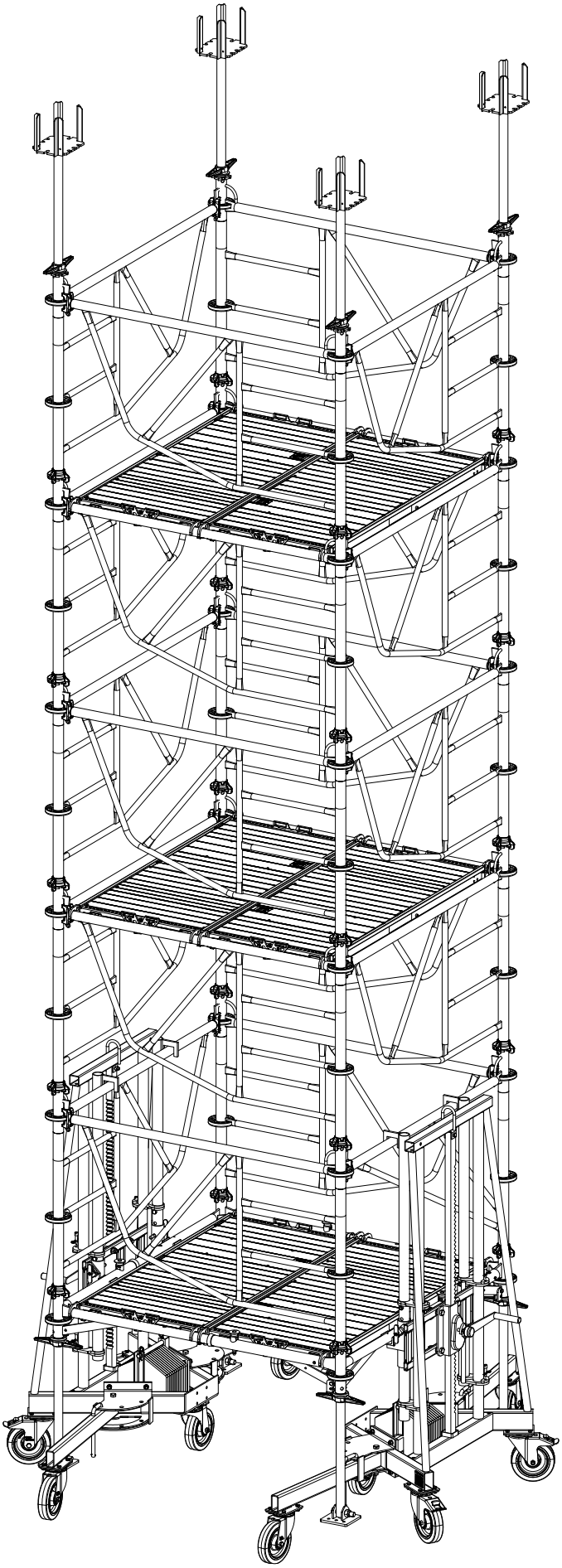


Moving shoring towers without Table Form

Example with GASS Shoring Tower



Example with ST 60 Shoring Tower



Unless stated otherwise, all dimensions in mm.

11 Transporting Lifting Jack Carriage 750 by crane

A single Lifting Jack Carriage 750 can be transported by crane with the aid of the lifting eye and suitable slings.

A complete Positioning Unit, consisting of two Lifting Jack Carriages and MODEX Assembly, can be transported only with proper certification of the structural stability.

12 Parking Lifting Jack Carriages 750

Park the Lifting Jack Carriage 750 only on flat ground. Always lock the parking brakes.

13 Lifting Jack Carriages 750 maintenance

The following maintenance tasks must be performed regularly or as needed to ensure proper functioning of the Lifting Jack Carriages.

Step 1 Use a cloth to clean the toothed rack of the lifting jack weekly or as needed.

Step 2 Always grease the toothed rack after cleaning it.

14 Placing the Lifting Jack Carriages 750 onto a pallet

The cantilevers and weights have to be detached from the Lifting Jack Carriages 750 before removing it from the construction site. Then the Lifting Jack Carriages can be loaded onto a Europallet using a crane.

14.1 Detaching weights

Step 1 Pull out the spring pin on one side of the securing rod (Refer to section 4.3.2 on page 18).

Step 2 Pull the securing rod out of the L-profiles.

Step 3 Take all twelve weights out of the seat.

Step 4 Slide the securing rod through the L-profiles and secure with the spring pin.

Step 5 Place the weights in the lattice box.

14.2 Detaching cantilevers

Step 1 Release the nut from the screw M20x130 in the cantilever seat (Refer to section 4.3.1 on page 16). Use spanner SW 30 to do this.

Step 2 Remove the nut and screw.

Step 3 Lift the locking stirrup out of the cantilever and pull the cantilever out of the seat on the Lifting Jack Carriage.

Step 4 Attach the nut and screw to the cantilever again.

Step 5 Place the cantilever in the lattice box.

14.3 Placing the Lifting Jack Carriage onto a pallet

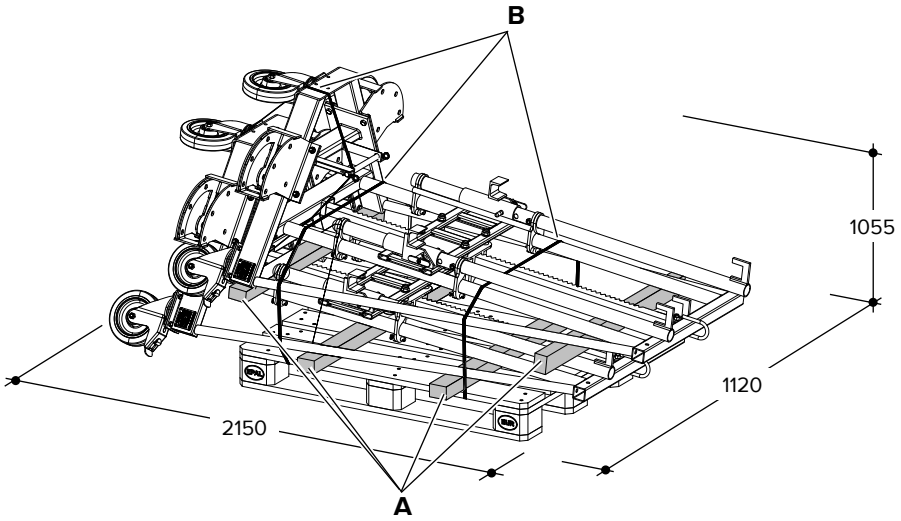
NOTE	**Components can bend!**
	Components can bend if they are not properly strapped to the pallet! Retract crank handles before strapping! Verify that the crank is not resting on the pallet or on the other Lifting Jack Carriage. The crank must always move freely! Ensure that the straps do not run over the vertical tracks!

Step 1 Retract the Lifting Jack crank.

Step 2 Use a crane to place the Lifting Jack Carriage onto a pallet as shown in the following illustration.

Step 3 Secure with boards (**A**) as shown in the illustration.

Step 4 Secure the Lifting Jack Carriages to the pallet with straps (**B**) as shown.



15 Technical data

15.1 Dimensions

Width (cantilever retracted):	1058 mm
Width (cantilever extended):	2189 mm
Height (lifting jack retracted):	1953 mm
Length (cantilever retracted):	1174 mm
Length (cantilever extended):	675 mm
Lifting height:	1080 mm

15.2 Load-bearing capacity

Safe working load:	700 kg
Maximum total weight:	921 kg

16 Inspection instructions

16.1 Area of application

The German ordinance on industrial safety and health (BetrSichV), §3 sec. 3 and §10 applies to the type, scope and intervals of inspections as well as to the requirements pertaining to the persons tasked with performing the inspections.

The test certificate items stated here serve as a guideline for inspecting equipment before it is used for the first time and for regular inspections of the TOPMAX Lifting Jack Carriage 750.

16.2 Purpose

Inspecting the Lifting Jack Carriage is intended to ensure operating and functional safety of the equipment. The inspections and tests are performed to systematically detect and remedy faults relevant to safety.

Inspections should be performed at regular intervals, occurring at least once a year. If the operating conditions require otherwise, inspections can be performed more frequently. This applies e.g. when the equipment is used very frequently, when there is excessive wear or under special operating conditions such as in a corrosive environment.

Responsibility

The user is responsible for scheduling regular safety inspections of the Lifting Jack Carriage.

Safety inspections of this equipment should be performed only by qualified persons (qualified person as specified by DGUV (German statutory accident insurance regulations) regulation 54, §23).

17 Test certificate for TOPMAX Lifting Jack Carriage 750

Part code:	607111
Serial number:	☐☐☐☐
Year of manufacture:	☐☐☐☐
Weld seams visible, no external cracks or damage detectable:	☐
No deformation:	☐
Vertical tracks properly locked with bolts:	☐
Locks guiding clip properly:	☐
Wheels turn, roll and, when applicable, lock properly:	☐
Performance check of lifting jack; lifting jack lubricated with grease nipple; lifting jack runs smoothly; adjustment range from 53 cm to 161 cm; lifting jack brake works properly; toothed rack lightly greased:	☐
Cantilever wheel no more than 2.0 cm off the ground. To check the Lifting Jack Carriage, park on even ground, manually lift the cantilever and measure the distance:	☐
No corrosion damage that could affect functioning or safety:	☐
ID plate in place and legible:	☐
Test documented by inspection tag with month/year according to year of test:	☐
Data bag containing operating instructions	☐
Lifting Jack Carriage free of concrete residue:	☐

Repairs may be made only by the manufacturer, and only original spare parts may be used.

The German trade association dictates only visual inspection.

....

Date Inspector

EU Declaration of conformity

HÜNNEBECK
A BRANDSAFWAY COMPANY

Manufacturer

HÜNNEBECK GmbH
Rehhecke 80
D-40885 Ratingen
Tel: +49 (0) 2102 937-1
Fax: +49 (0) 2102 37651

hereby declares that the following product based on its method of construction and its design introduced by HÜNNEBECK fully complies with the relevant regulations of this directive, as well as the standards and technical specifications listed hereafter. Any modifications introduced to the product without our explicit approval shall make this declaration null and void.

Product name

TOPMAX lifting jack carriage 750

Prod. code

607111

Function

Positioning unit for the horizontal transport of single TOPMAX floor tables with supports but without accessories.

Guidelines

- 2006/42/EG

Harmonized standards

- DIN EN ISO 12100:2010
- DIN EN 1993-1-1:2010 und 1993-1-8:2010
- DIN EN 1090-1:2012

National standards

- DIN 7355:1970
- DIN 15429:1978
- DGUV 100-500

Ratingen, 20.08.2019
HÜNNEBECK GmbH

Signed by:

p.p. Mario Ariyoshi
Technical Director

p.p. Boris Annecke
Head of R&D Scaffolding

Person in charge for documentation as defined by attachment II No.1. A. No. 2, 2006/42/EC
Name: Jörg Gaudian - QA-Manager, International Supply Chain

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The illustrations contained in this document reflect normal operation at a construction site and are not always correct in regard to safety issues.

Last modified December 2019

Keep for later use!