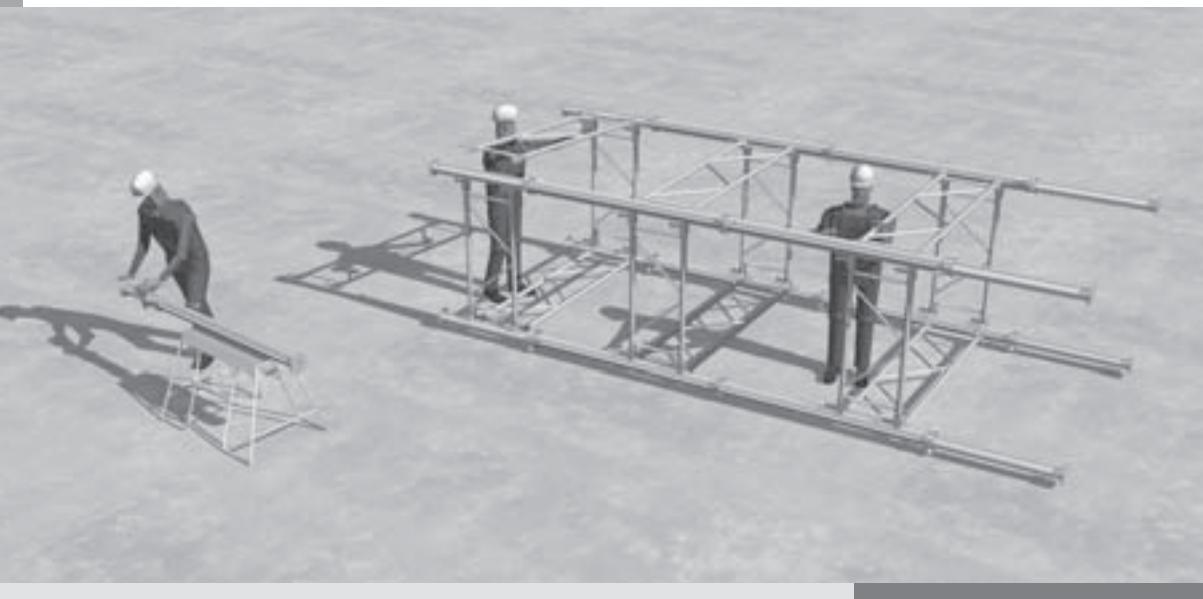


MULTIPROP

System

Assembly Instructions for Standard Configuration



Contents

Overview		
Overview	1	
Introduction		
Standard configuration	3	
Intended use	3	
Safety instructions	4	
Additional PERI product information	4	
A Assembly and dismantling		
A1 Storage and transportation	5	
A2 MULTIPROP accessories		
Frame MRK	6	
Tilting Base MKF	8	
Tilting Forkhead MKK	9	
MULTIPROP Strap U 100 - U 140	10	
Connection MULTIPROP with MPB 24	10	
Base MP 50	11	
Formwork support with and without self-locking coupling	12	
A3 MULTIPROP as individual prop		
Handling and use	13	
A4 MULTIPROP as system		
Prop connection	14	
Assembly horizontally with 4 legs	15	
Assembly horizontally with multiple number of legs	18	
A5 MULTIPROP as system		
Assembly vertically	20	
A6 Dismantling		
Dismantling vertically	22	
Dismantling horizontally	22	
B Application		
B1 Structural scaffold tube bracings	23	
B2 Frames	24	
B3 Tables and towers		
Lowering	25	
Moving with trolley and winch	25	
Moving along with pole	26	
Moving with the crane	27	
Tables		
MULTIPROP 250, 350, 480, 625	28	
MULTIPROP 250, 350, 480, 625 With Base MP 50	29	
Components		
Components	30	

Key


Important safety Instructions



Hints



Visual Check



Site Tips

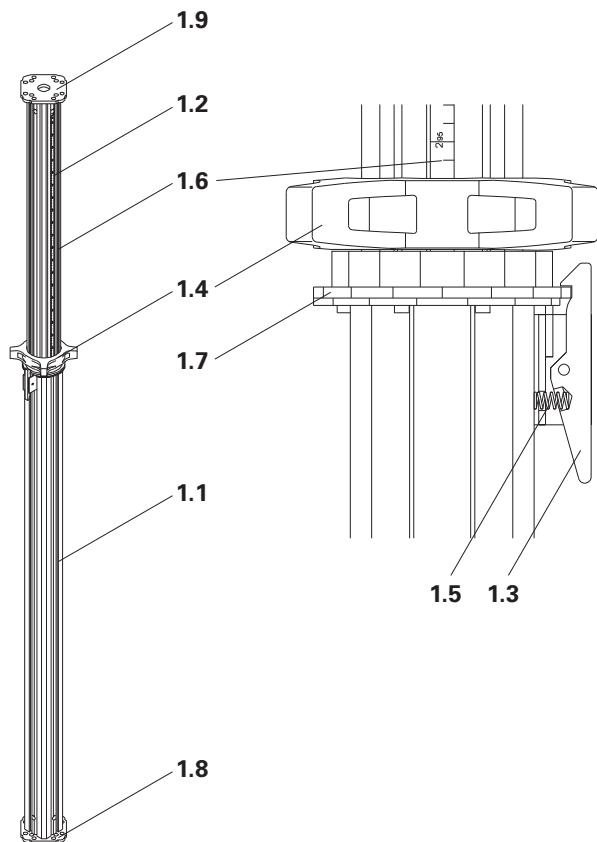
MULTIPROP System

Overview

Overview, Main Components

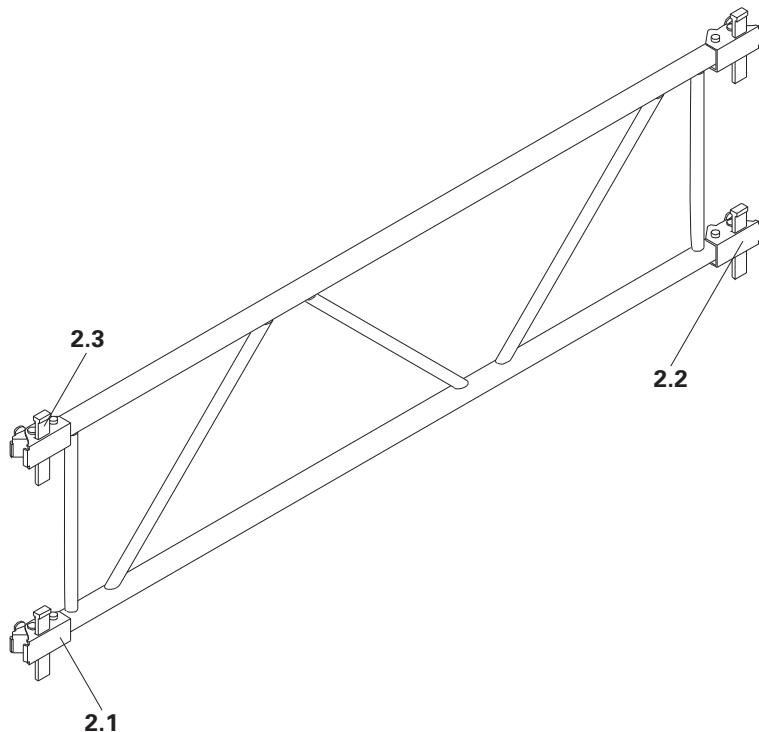
1 MULTIPROP MP

- 1.1 Outer tube
- 1.2 Inner tube
- 1.3 Securing Hook
- 1.4 Adjusting collar
- 1.5 Pressure spring
- 1.6 Measuring tape
- 1.7 Rubbing plate
- 1.8 Base plate
- 1.9 Head plate



2 Frame MRK

- 2.1 Wedge Coupling A
- 2.2 Wedge Coupling B
- 2.3 Wedge

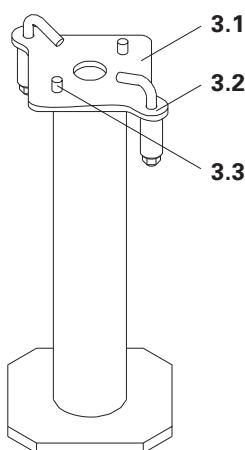


Overview

Overview, Accessories

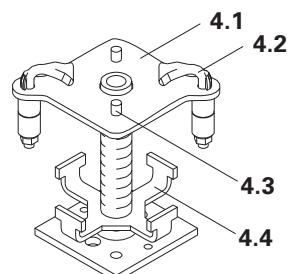
3 Base MP 50

- 3.1 Head plate
- 3.2 Clamping claw
- 3.3 Centring pin



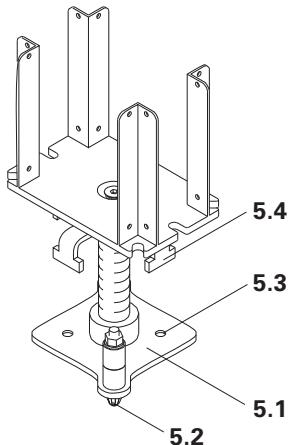
4 Tilting Base MKF

- 4.1 Head plate
- 4.2 Clamping claw
- 4.3 Centring pin
- 4.4 Rotary wing



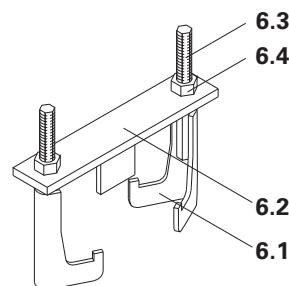
5 Tilting Forkhead MKK

- 5.1 Base plate
- 5.2 Clamping claw
- 5.3 Centring pin
- 5.4 Rotary wing



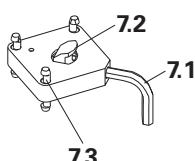
6 MULTIPROP Strap U 100 - U 140

- 6.1 Suspension fastening
- 6.2 Plate
- 6.3 Threaded hex. bolt M16
- 6.4 Hex. Nut M16, SW 24



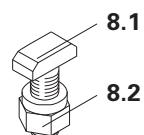
7 Connector MPV-2

- 7.1 Clamping lever
- 7.2 Clamping jaws
- 7.3 Centring pin



8 MP Bolt with Nut

- 8.1 Bolt M12
- 8.2 Nut M12



Introduction

Standard configuration

General

PERI MULTIPROP Props MP can be used as individual props and in combination with the Frame MRK as a table or tower. The outer tube of the MULTIPROP prop is powder coated. The Frame MRK can be mounted on both the outer and inner tube. The integrated measuring tape and free-running collar allow accurate and fast height adjustment. The MULTIPROP prop has a fail-safe feature which prevents the inner tube from unintentionally slipping out. Markings on the outer tube facilitate the exact assembly of the MRK Frame. For any assembly work, only a hammer is required.

Main Components

MULTIPROP 120, L = 0.80 - 1.20 m
 MULTIPROP 250, L = 1.45 - 2.50 m
 MULTIPROP 350, L = 1.95 - 3.50 m
 MULTIPROP 480, L = 2.60 - 4.80 m
 MULTIPROP 625, L = 4.30 - 6.25 m

Steel MRK frames available in the following sizes: 62.5, 75, 90, 120, 137.5 and 150 cm.

Aluminium MRK frames available in the following sizes: 201.5, 225, 230, 237, 266 and 296 cm.

System Dimensions

Assembly heights as individual props according to the permissible extension lengths 0.80 m - 6.25 m or 1.30 m - 6.75 m together with Base MP 50.

Assembly heights as system with Frame MRK up to a maximum 14.40 m, or 14.90 m with Base MP 50.

In the ground plan, square or rectangular depending on the Frame MRK used, from 0.625 m to 2.96 m.

Technical Data

For permissible load-bearing capacities, see type tests and PERI charts.

Intended use

1. PERI products are exclusively technical working materials which are intended for commercial use by technically competent users only.

2. This assembly instructions serve as the basis for the project-related risk assessment and the instructions for the provision and use of the system by the contractor (user). However, they do not replace these.

3. Only PERI original components may be used. The use of other products and spare parts represent a misapplication with associated safety risks.

4. The components are to be inspected before each use to ensure that they are in perfect condition and function correctly.

5. Changes to PERI components are not permitted and represent a misapplication with associated safety risks.

6. Safety instructions and permissible loads must be observed.

7. Components provided by the contractor must conform with the characteristics required in these assembly instructions as well as all valid construction guidelines and standards.

In particular, the following apply if nothing else is specified:

- timber components: Strength Class C24 for Solid Wood EN 338.
- scaffold tubes: galvanised steel tubing with minimum dimensions Ø 48.3 x 3.2 mm according to EN 12811-1:2003 4.2.1.2.
- scaffold tube couplings according to EN 74.

8. Deviations from the standard configuration may only be carried out after a separate risk assessment has been done by the contractor (user). On this basis, appropriate measures for the working safety and stability are to be implemented.

Introduction

Safety instructions

General

1. Deviations from the standard configuration and/or intended use present a potential safety risk.
2. All country-specific laws, standards and other safety regulations are to be taken into account when products are used.
3. During unfavorable weather conditions, suitable precautions and measures are to be taken to guarantee working safety and stability.
4. The contractor (user) must ensure the stability throughout all phases of construction. He must ensure and verify that all occurring loads are safely transferred.
5. The contractor (user) has to provide safe working areas for site personnel which are to be reached via safe access means. Areas of risk must be closed off and marked accordingly. Hatches and openings on accessible working areas must be kept closed during working operations.
6. In order to ensure better understandability, detailed descriptions are partly incomplete. The safety installations which have possibly not been shown in these detailed descriptions must nevertheless be available.

Storage and transportation

1. Do not drop the components.
2. Store and transport components so that no unintentional change in their position is possible. Detach lifting gear from the lowered units only if these are in a stable position and no unintentional change is possible.
3. When moving, components are to be picked up and set down so that any unintentional toppling over, falling apart, slipping or rolling are avoided.
4. Use only suitable load-carrying equipment to move the components as well as the designated load-bearing points.
5. During the lifting and moving procedure, ensure all loose parts are removed or secured.
6. During the moving procedure, always use a guide rope.
7. Move components only on clean, flat and sufficiently load-bearing surfaces.

System-specific

1. Retract components only when the concrete has sufficiently hardened and the person in charge has given the go-ahead for striking to take place.
2. Anchoring is to take place only if the anchorage has sufficient concrete strength.

General

Additional PERI product information

- type test for MULTIPROP individual props
- type test for the MULTIPROP system
- type test for the MULTIPROP individual props with Base MP 50
- type test for the MULTIPROP system with Base MP 50

- PERI design tables
- Instructions for Use for trolley and winch unit
- Instructions for Use for pallets and stacking devices

The structures presented in these assembly instructions are shown in the form of examples with only one component size. They are valid accordingly for all component sizes contained in the standard configuration.

A1 Storage and transportation



Consider Instructions for Use for PERI pallets and stacking devices!

Manually-created transport units must be correctly stacked and secured!

Example, MULTIPROP props with spacers and steel band.
(Fig. 2)



The safety hook (1.3) prevents the inner tube (1.2) from slipping out and must be engaged.

Transport

PERI pallets and stacking devices are suitable for lifting with a crane or forklift.

They can also be moved with the PERI pallet lifter.

All pallets and stacking devices can be lifted using both the longitudinal and front sides.

The following are just some examples.

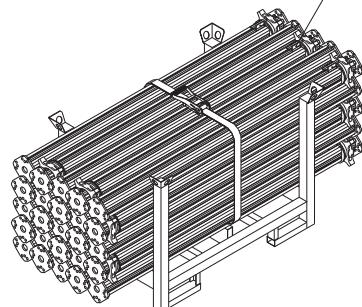
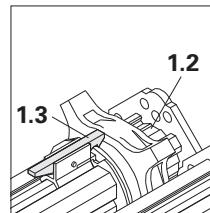


Fig. 1

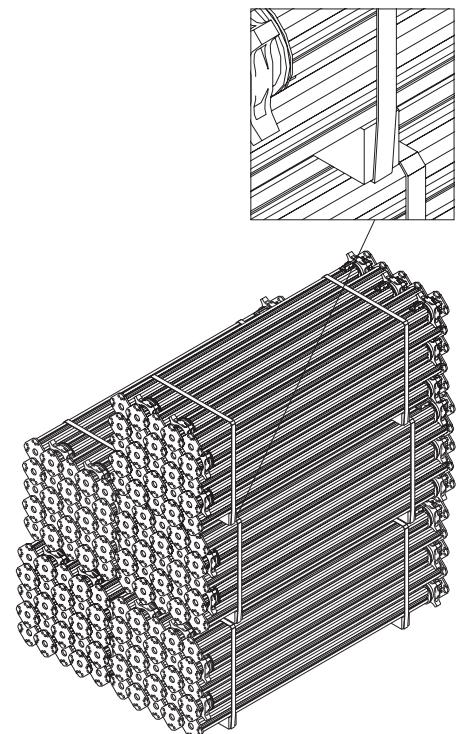


Fig. 2

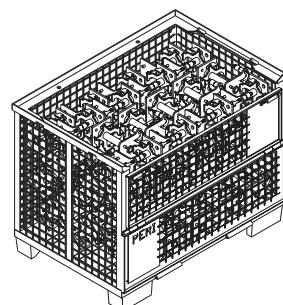


Fig. 3

A2 MULTIPROP accessories

Frame MRK



Set the MULTIPROP Frame MRK down in a secure position so that it cannot tip over! Do not damage the wedge connection!

Assembly

Always mount the Frame MRK (2) on the props (1) so that the wedge can be hit into position with the hammer from top to bottom.

(Fig. 4)

If required, use the tripod as an erection aid during assembly.

1. Open wedge connection A (silver) (2.1) or B (yellow) (2.2). The wedge (2.3) is at the top.

(Fig. 5)

2. Engage the wedge connection into the tread grooves of the MP tube.

(Fig. 6)

3. Keep the wedge connection closed.

4. Firmly strike the wedge with the hammer.

5. Close the other wedge connections in the same way.

The frame is mounted to the prop.

(Fig. 6)



If the wedge slips through, there is no clamping effect!

(Fig. 7)

- remove wedge connection and then re-connect

- for a tight connection to the outer or inner tube, two wedge courses (2.4) have been integrated in the wedge itself.

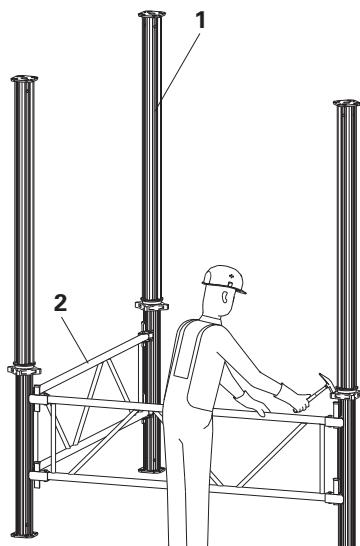


Fig. 4

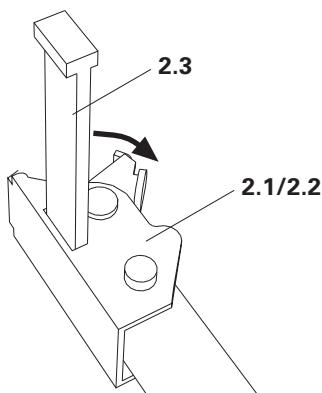


Fig. 5

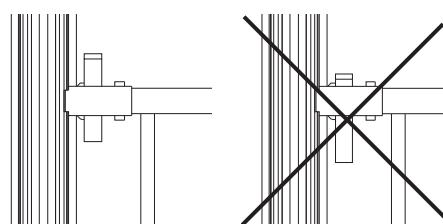
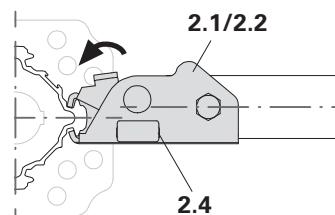


Fig. 7

Inner Tube



Outer Tube

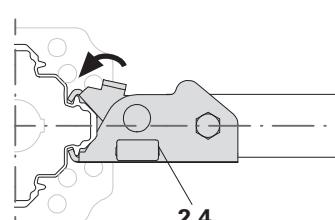


Fig. 6

A2 MULTIPROP accessories

Arrangement of the Frame MRK

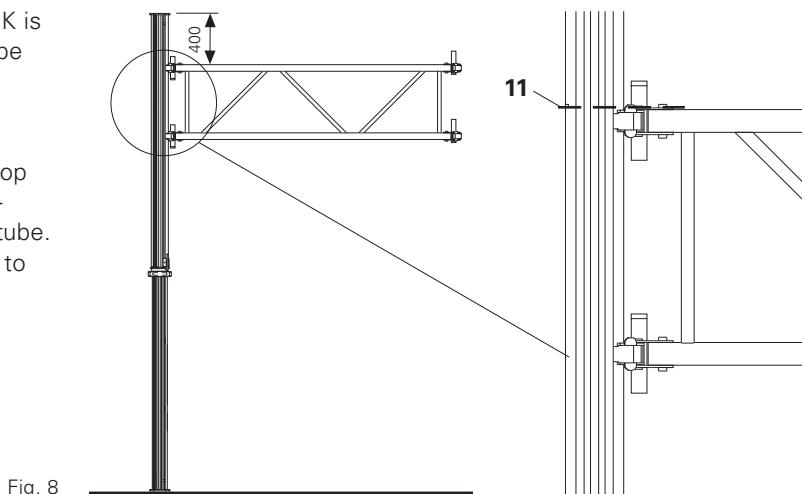
View A-A

Universally valid

The arrangement of the Frame MRK is to be taken from the respective type test.

Markings on the outer tube

Arrange the Frame MRK with the top wedge connections on the circular-shaped recesses (11) of the outer tube. This results in a distance of 40 cm to the base plate. (Fig. 8)



Only the same-coloured wedge connections are to be used at a connection point.

(Fig. 9)

When inserted, the wedges (2.3) of the wedge connections must always be pointing downwards so that any self-actuating is not possible!

Outer tube + inner tube

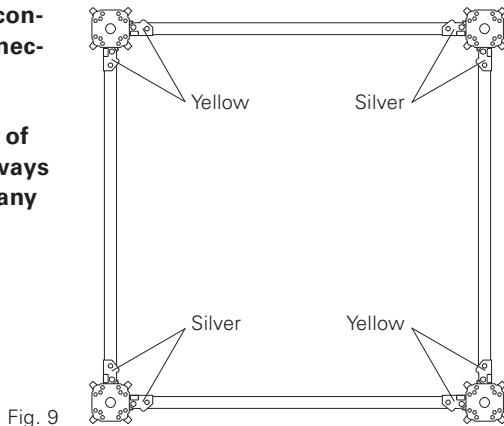


Fig. 9

- The Frame \leq MRK 90 must be in a counter position on the inner tube as mounted on the outer tube. Thus the colour of the wedge connections on the tube changes over the height of the tower.

(Fig. 10)

Outer Tube \leq MRK 90

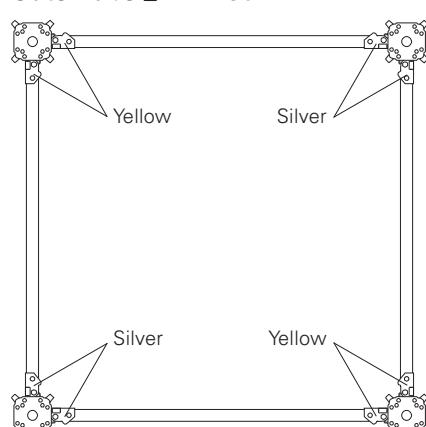
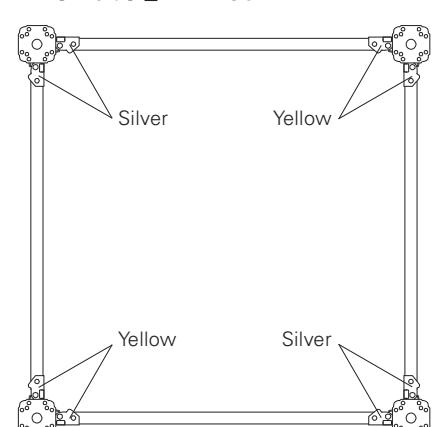


Fig. 10

Inner Tube \leq MRK 90



A2 MULTIPROP accessories

Tilting Base MKF

Max. permissible load-bearing capacity 60 kN

The Tilting Base MKF (4) with the quick-action clamp coupling can be pivoted on all sides up to 3°. This means that MULTIPROP props can be positioned on inclined surfaces.

(Fig. 11)

Assembly

1. Insert centring pins (4.3) of the head plate (4.1) into the drilled holes of the prop base plate (1.8) or head plate (1.9).
2. Hit clamping claws (4.2) with the hammer over the prop base or head plate.

3. Spindle Tilting Base MKF with rotary wings (4.4) to size.

Max. spindle extension: 100 mm.

Tilting Base MKF is connected to the prop.

(Fig. 12)



Use Tilting Base MKF only with braced props!

The first Frame MRK can be mounted a maximum of 40 cm above the upper edge of the base plate!



- When under load, the rotary wing can be turned by means of an assembly lever or hammer.
 - Never loosen the rotary wings with force e.g. hammer blow. Risk of breakage!
- (Fig. 13)

Releasing

1. Open clamping claws with the hammer.
2. Remove Tilting Base MKF.

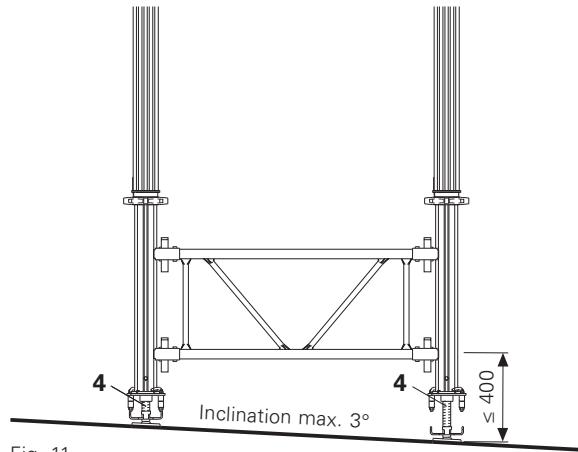


Fig. 11

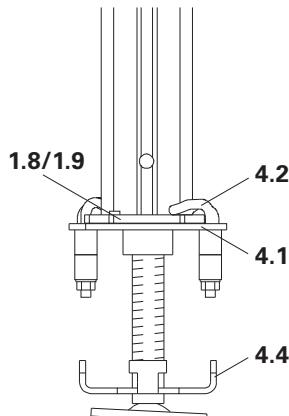


Fig. 12

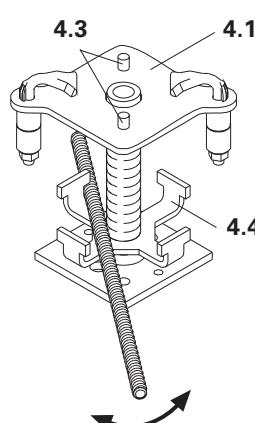


Fig. 13

A2 MULTIPROP accessories

Tilting Forkhead MKK

Permissible load-bearing capacity:
see MULTIPROP System type test.

The Tilting Forkhead MKK (5) with quick-action clamp coupling can be pivoted by 3° on all sides. It serves to securely accommodate one or two GT 24 or VT 20 girders for non-horizontal slab formwork.

(Fig. 14)

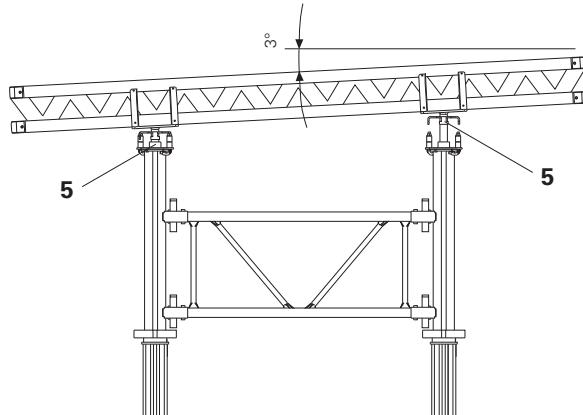


Fig. 14

Assembly

1. Insert centring pins (5.3) of the base plate (5.1) into the drilled holes of the prop base plate (1.8) or head plate (1.9).
 2. Hit clamping claws (5.2) with the hammer over the prop base or head plate.
 3. Spindle Tilting Forkhead MKK with rotary wings (5.4) to size.
Max. spindle extension: 100 mm.
- (Fig. 15)



- Horizontal forces can be safely transferred.
- When under load, the rotary wing can be turned by means of an assembly lever or hammer.
- Never loosen the rotary wings with force e.g. hammer blow. Risk of breakage!

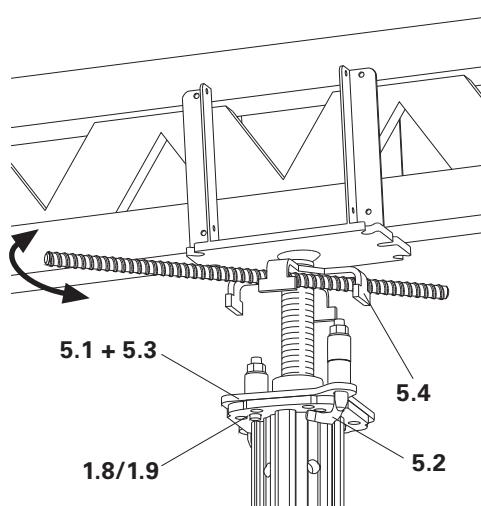


Fig. 15

Releasing

1. Open clamping claws with the hammer.
2. Remove Tilting Forkhead MKK.

A2 MULTIPROP accessories

MULTIPROP Strap U100-U140

For transferring high loads, steel walers as the main beam can be connected to the props during the assembly of a slab table instead of twin main beams consisting of GT 24 girders.

One MULTIPROP Strap U100-U140 is assembled to each prop.

Assembly

1. Loosen hex. nut M16 (6.4).
2. Insert plate (6.2) between the web of the U-profile.
3. Attach suspended plate (6.1) from below in the drilled holes of the base or head plate (1.8 or 1.9).
4. Tighten hex. nut M16.

The strap holds the steel waler in position on the prop.

(Fig. 16)

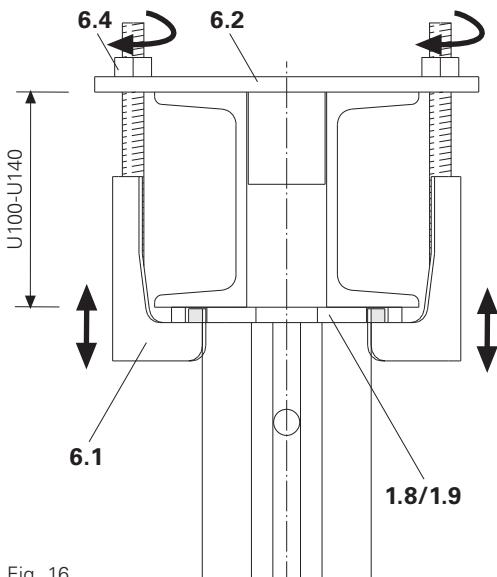
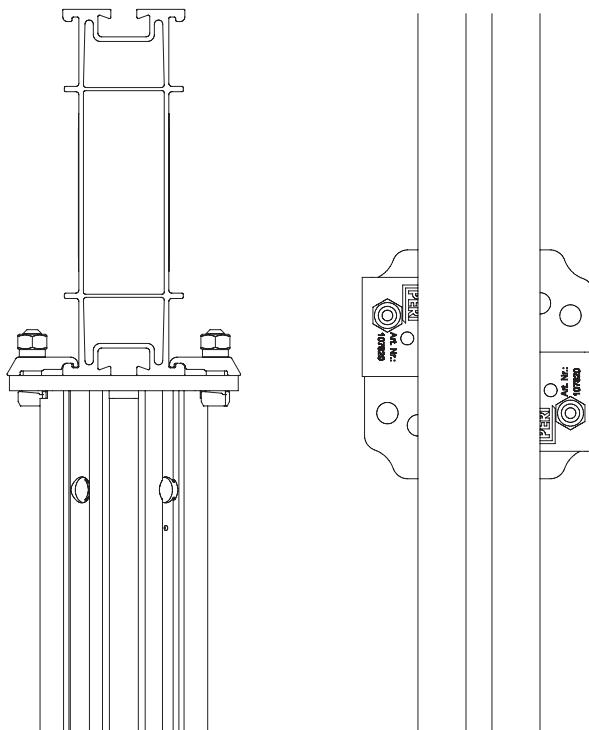


Fig. 16

Releasing

1. Loosen the hex. nut M16 (6.4).
2. Pull out suspended plate from the drilled holes of the base or head plate and remove strap.

Fig. 16a



Connection MULTIPROP with MPB 24

For transferring high loads, the MULTIPROP Aluminium Girder MPB 24 can be used as the main beam during the assembly of a slab table.

Assembly

Assembly takes place with two diagonally-arranged MULTIPROP Strap MPB 24 and MP bolts with nuts.

(Fig. 16a)

A2 MULTIPROP accessories

Base MP 50

For the permissible load-bearing capacity, see type test:

- MULTIPROP System with Base MP 50
- MULTIPROP slab props with Base MP 50



- The Base MP 50 (3) provides a prop extension of 50 cm.
- The MULTIPROP prop can be mounted on the Base MP 50 with the inner or outer tube.

Assembly

1. Place prop (1) on the Base MP 50 (3)
2. Centring pins (3.3) of the base engage in the drilled holes of the prop base plate (1.8) or head plate (1.9).
(Fig. 17)
3. Hit clamping claws (3.2) using a hammer over the prop base plate or head plate.
(Fig. 18)

Base MP 50 is connected to the prop.

Releasing

1. Loosen the clamping claws with the hammer.
2. Remove the Base MP 50.

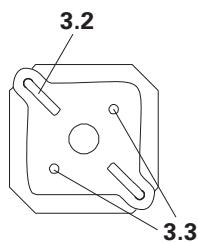


Fig. 17

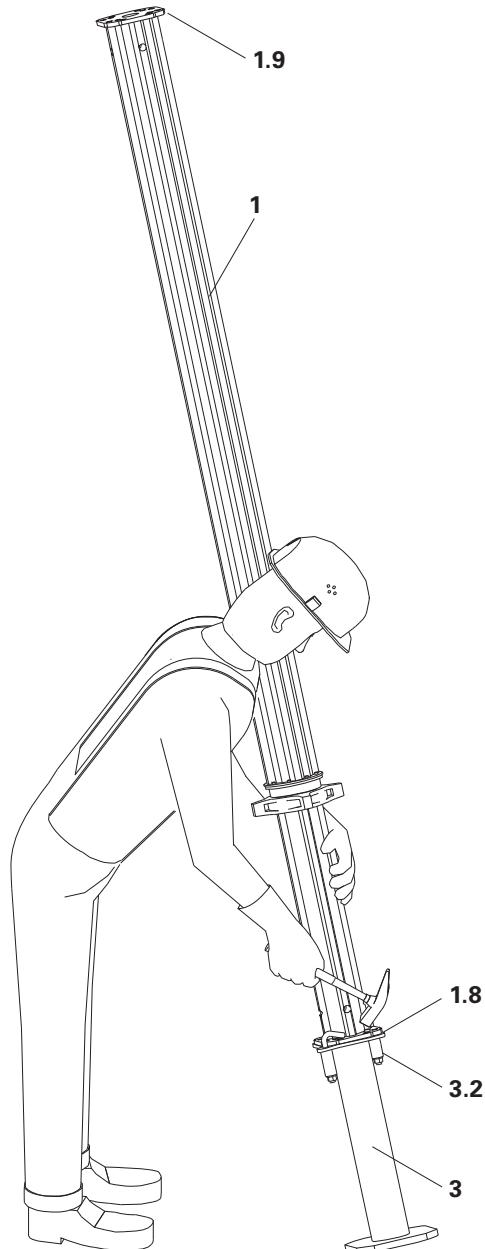


Fig. 18

A2 MULTIPROP accessories

PERI formwork support with and without self-locking coupling

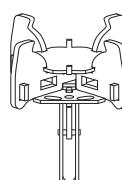
The PERI formwork support fits all common slab props with 40 mm hole diameters.

(Fig. 19)

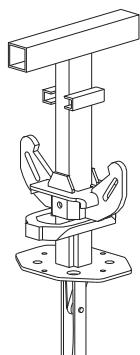
Assembly

1. Place head on the prop base plate (1.8) or head plate (1.9).
2. Engage self-locking coupling or secure head with pin and cotter pin.
3. Position prop.

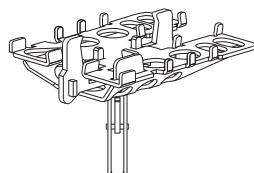
The formwork can now be supported.
(Fig. 20)



Prophead SSK



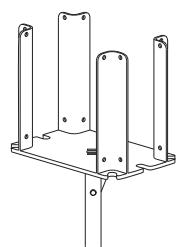
Drophead SFK



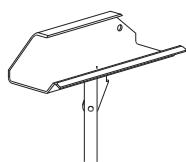
Combihead SCK

Releasing

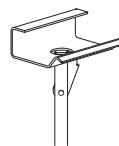
Release the self-locking coupling or loosen pin and remove head.



Crosshead 20/24



Clawhead 24



Clawhead 16/20

Fig. 19

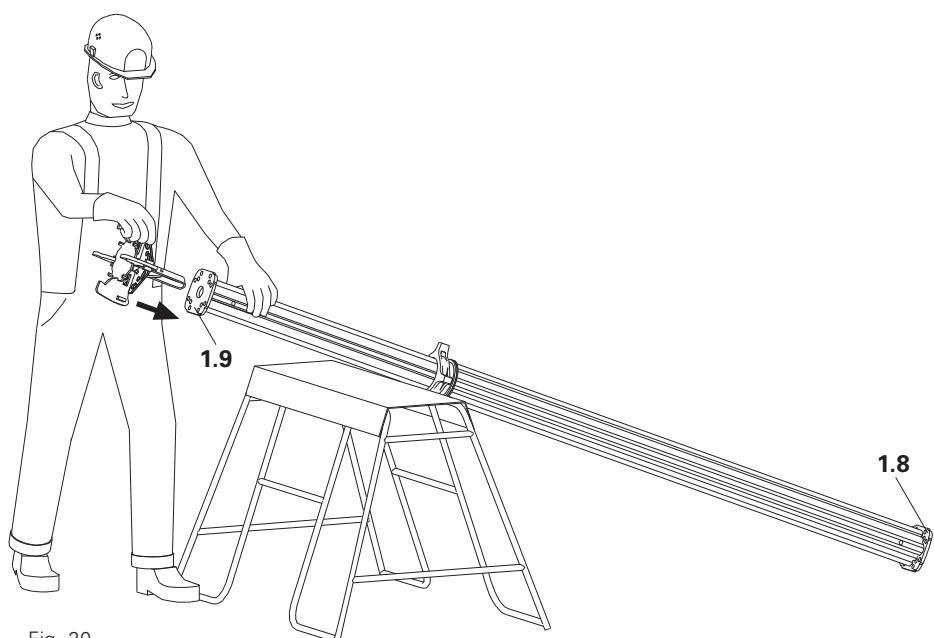


Fig. 20

A3 MULTIPROP as individual prop

Handling and use

Place MULTIPROP prop with retracted inner tube on appropriately-positioned trestles.
(Fig. 21)

Adjusting the prop

1. Press down safety hook (1.3). The adjusting collar (1.4) is disconnected.
2. Extend inner tube (1.2) over the required prop length.
3. Reach the exact prop length by means of the adjusting collar on the integrated measuring tape (1.6) (36 mm adjusting range per turn).
4. Push in the inner tube until the adjusting collar lies against the rubbing plate (1.7).
5. Engage the safety hook.
(Fig. 22)

The prop has now been adjusted.



Visual check of the safety hook.



- Lift the prop so that the adjusting collar runs downwards.
- Even if partially loaded up to 15 kN, the prop can be continuously readjusted with the adjusting collar.
- In order to allow the prop to spindle unencumbered with loads > 60 kN, use a Wing Nut Spanner HD.
- Occasionally grease the rubbing plate for easier handling.
(Fig. 23)

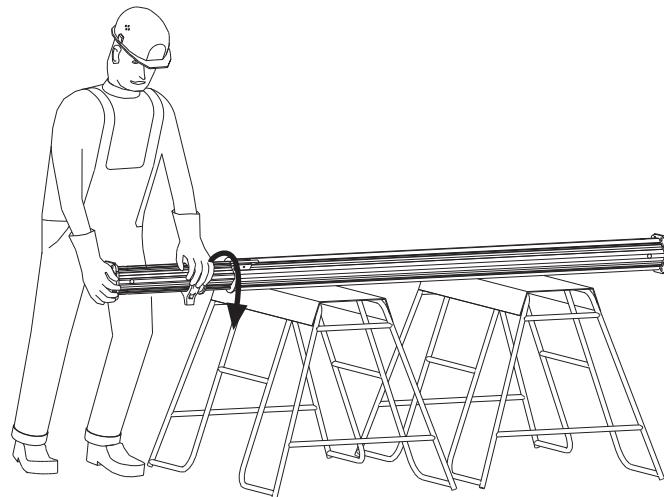


Fig. 21

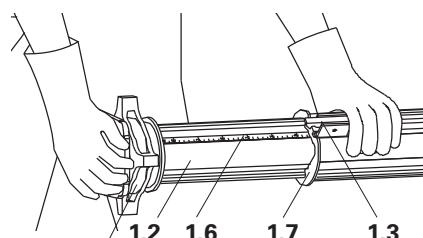


Fig. 22

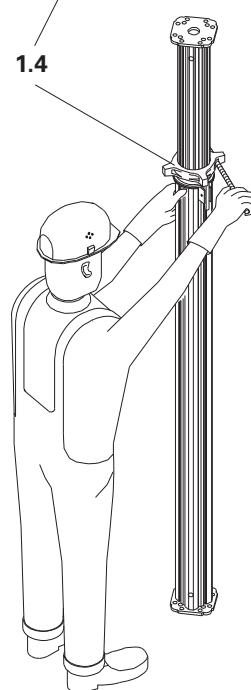


Fig. 23

A4 MULTIPROP as system

Prop connection

With Connector MPV-2

The Connector MPV-2 (7) connects two MULTIPROP props with end plate thicknesses of 10 mm.

Assembly

1. Insert centring pins (7.3) into the drilled holes of the prop base (1.8) or head plate (1.9).
2. Insert second prop on the centring pin of the Connector MPV.
3. Engage clamping jaws (7.2) in the centre drilled hole of the prop.
4. Turn clamping lever (7.1) to the right and firmly tighten.

(Fig. 24)

The props are connected.

The tower height can be adjusted by means of the integrated measuring tape. An extra 2.5 cm must be added for each Connector MPV.

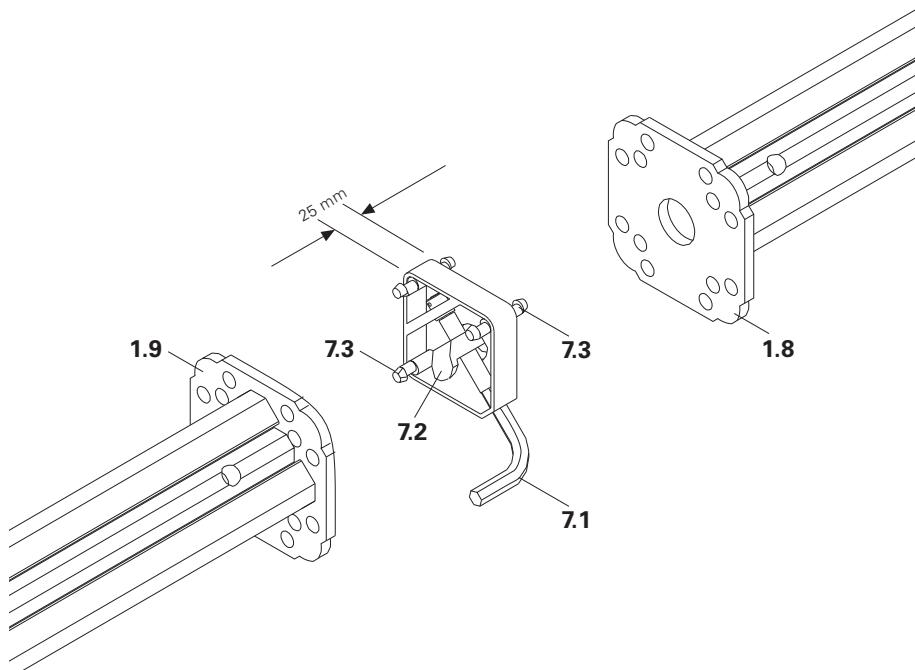


Fig. 24



Extended props may only be used for the erection of towers!

Brace towers with MRK frames!

Check connections to ensure fittings are tight!

MULTIPROP Connecting Bolt with Nut

As an alternative to the Connector MPV-2, the end plates of both props can be connected using two diagonally-arranged Connecting Bolts (8.1) with Nuts (8.2).

(Fig. 25)

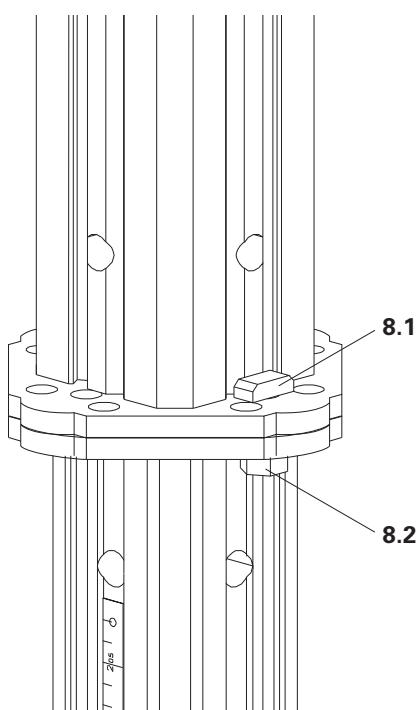


Fig. 25

A4 MULTIPROP as system

Horizontal assembly with 4 legs

For horizontal assembly, a flat and even assembly area is required.



- The prop splices are positioned on one level. The alignment of the prop axes is to be constantly monitored in order to avoid time-consuming corrections.
- With rectangular-shaped shoring towers, assembly begins from the broader side, i.e. the wider frame is positioned on the ground.
(Fig. 26)
- The arrangement of the Frame MRK must correspond to the respective type test.

- Preparation**
1. Adjust length of props accordingly as described in A3.
 2. Pre-position props (1) and Frame MRK (2) on the ground:
 - The inner tubes (1.2) of the top and bottom props are pointing outwards. This means any ground unevenness can be more easily compensated as well as allowing the formwork to be levelled.
 - The measuring tape points towards the centre of the tower.
(Fig. 26a)
 - The base plate (1.8) must lie with the edge area on the ground.
(Fig. 26b)

Fig. 26

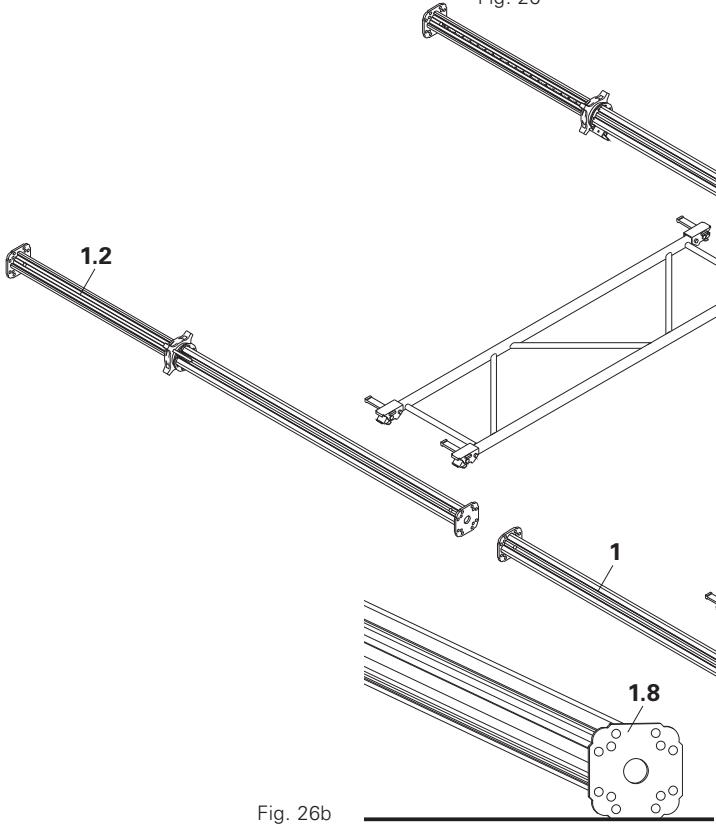
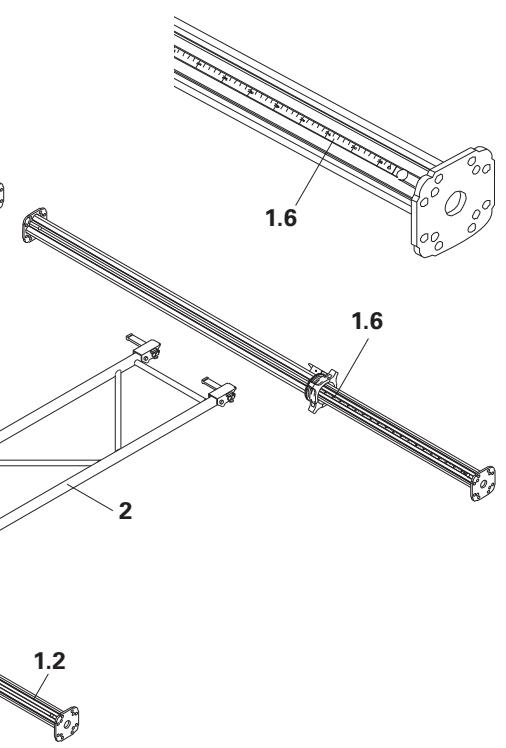


Fig. 26a



A4 MULTIPROP as system

Horizontal assembly with 4 legs

Assembling the tower

1. Connect the props to each other.
2. Mount frames.
(Fig. 27)

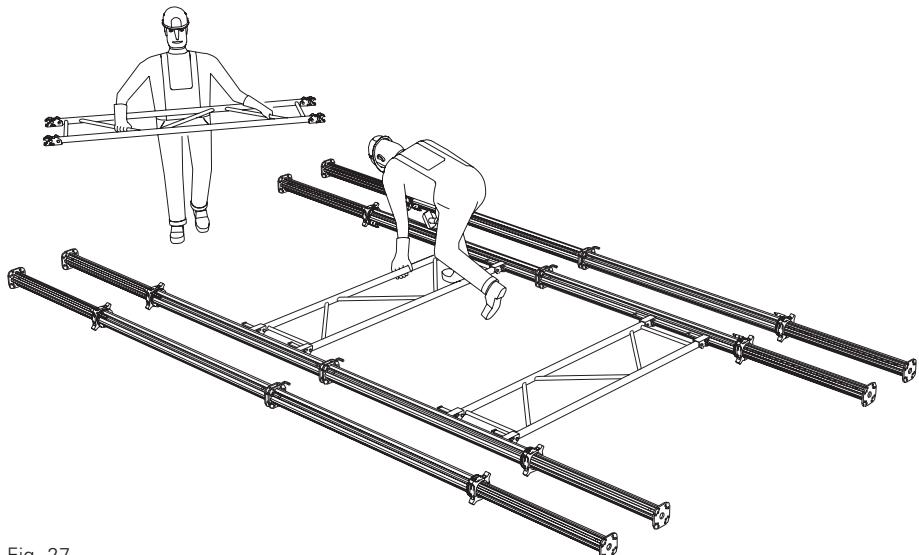


Fig. 27

3. Mount lateral frames.
(Fig. 28)



Check the colour of the wedge connections as well as the wedge direction.

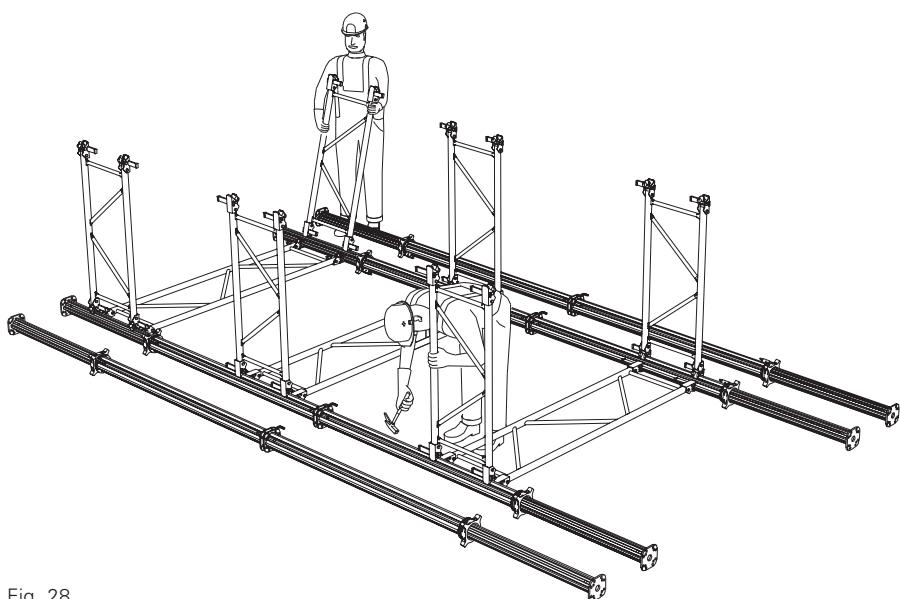


Fig. 28

A4 MULTIPROP as system

Horizontal assembly with 4 legs

Assembling the tower

4. Insert second pair of props into the opened wedge connections of the frame.
 5. Close wedge connections and hammer in wedges.
 6. Install top frame.
(Fig. 29)
- The tower has now been assembled.



- With larger units, the upper props can be inserted separately. Connect the props to each other before connecting to the frames.
- For towers with heights > 7.0 m, a horizontal diagonal is to be attached to the MRK frames by means of swivel couplings at around half the tower height to ensure safeguarding the cross-sectional form.
(Fig. 30)

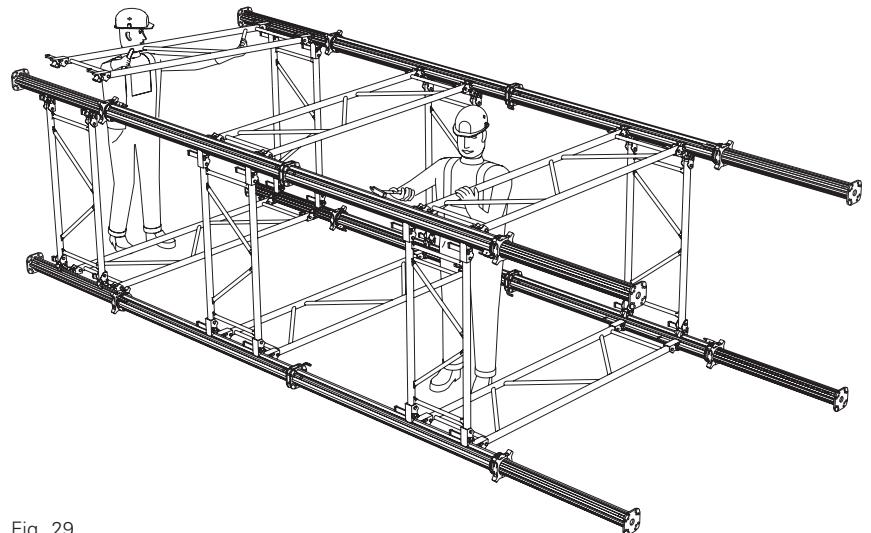


Fig. 29

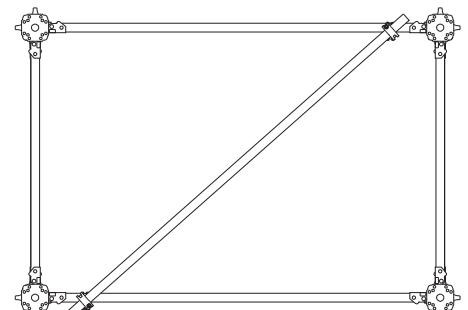


Fig. 30

Erecting the tower

1. Attach 4-sling lifting gear (12) to two frames facing each other of the top row of frames.
2. Erect tower.
3. Align tower.
4. Brace tower if necessary.
5. Check stability.
6. Detach lifting gear.
(Fig. 31)



Before erecting, ensure that all adjusting collars are resting against their respective rubbing plates.

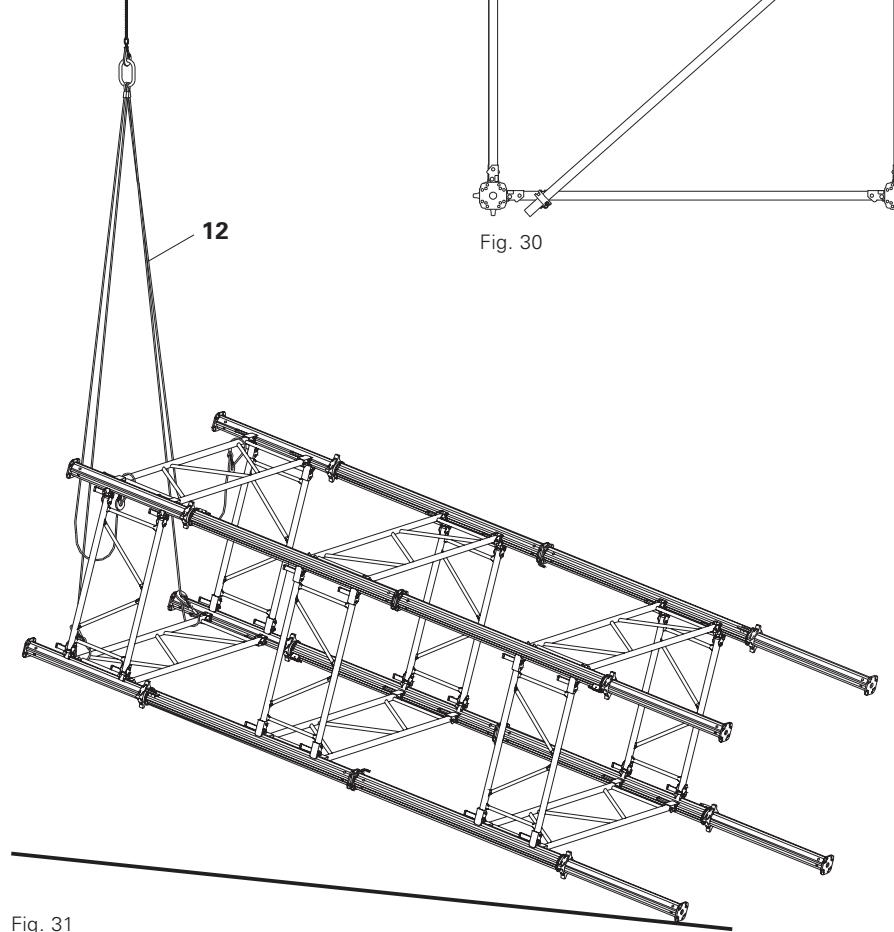


Fig. 31

A4 MULTIPROP as system

Horizontal assembly with multiple number of legs

The instructions provided on pages 6,7 are valid.

In addition, the following is to be taken into consideration:

- The Frame MRK (2) must be consistently installed in a "windmill" design. (Fig. 32)
- The assemblies are to be mounted with diagonally-positioned scaffold tubes Ø 48.3.
- All adjusting collars are to be turned until they are touching the rubbing plates (1.7).
- For the lifting unit, scaffold tubes (13) are to be mounted under the frame tubes of the topmost frame. (Fig. 33)

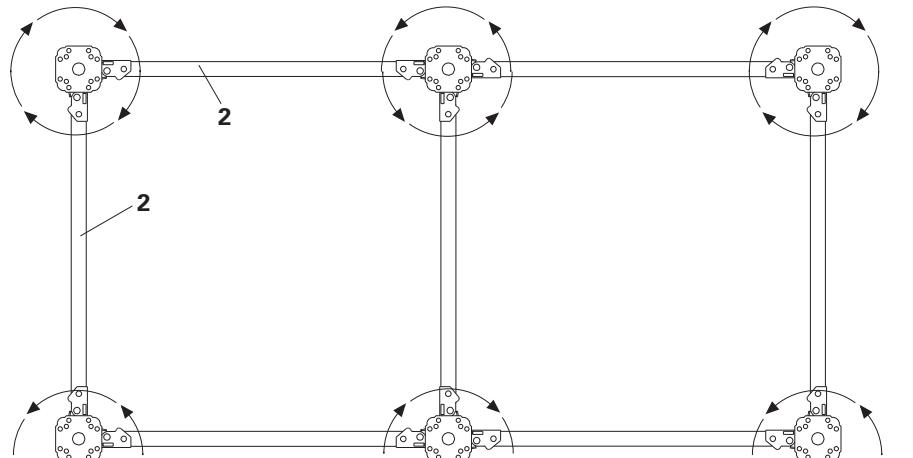


Fig. 32

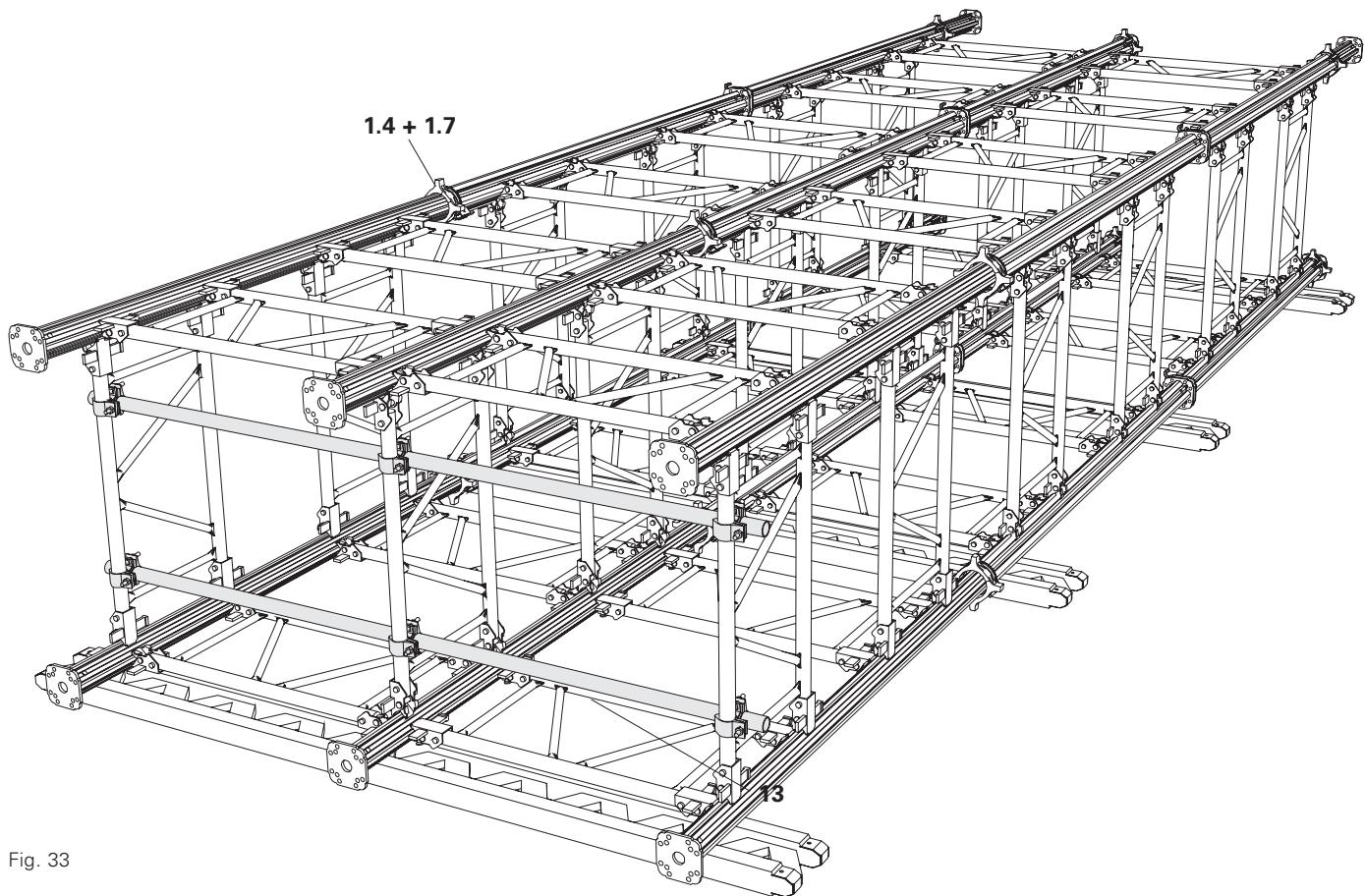


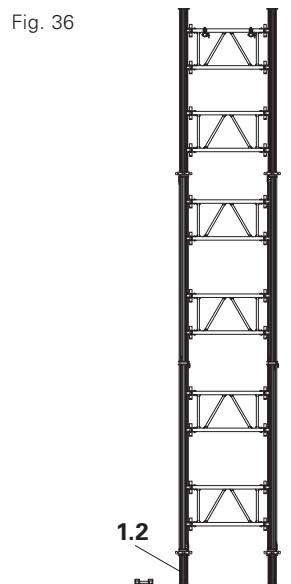
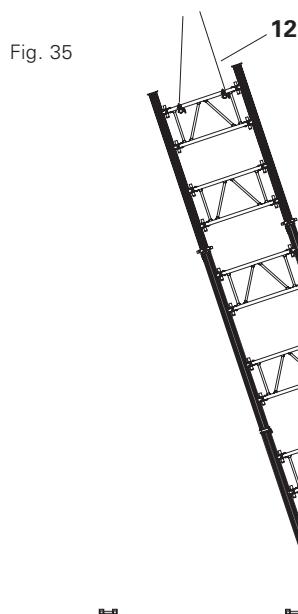
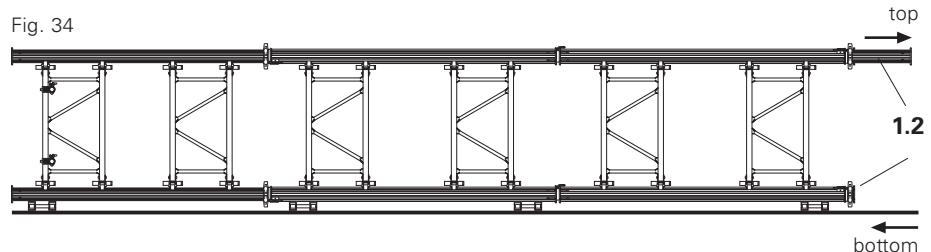
Fig. 33

A4 MULTIPROP as system

Horizontal assembly with multiple number of legs

Erecting the tower

1. Push in inner tube (1.2) of the lowest prop.
 2. Pull out the inner tube (1.2) of the topmost prop. This prevents any large bending moments developing which impact on the tower on the base plate with full force.
 3. Attach lifting gear (12).
 4. Erect tower.
 5. Extend corner spindles at bottom (1.2) and adjust accordingly so that the tower stands plumb vertical.
 6. Extend remaining spindles in contact positions.
 7. Install missing frame.
 8. Secure tower against tipping over.
 9. Detach lifting gear.
- (Fig. 34 - 36)



A5 MULTIPROP as system

Vertical assembly

If horizontal assembly is not possible due to reasons of space or other circumstances, erection can take place vertically.



**Check the stability at all times!
Use load-bearing surfaces with
anti-slip protection as working areas!**

Preparation

1. Adjust lengths of MULTIPROP props accordingly, see A3.
2. Ensure the required number of frames are available.

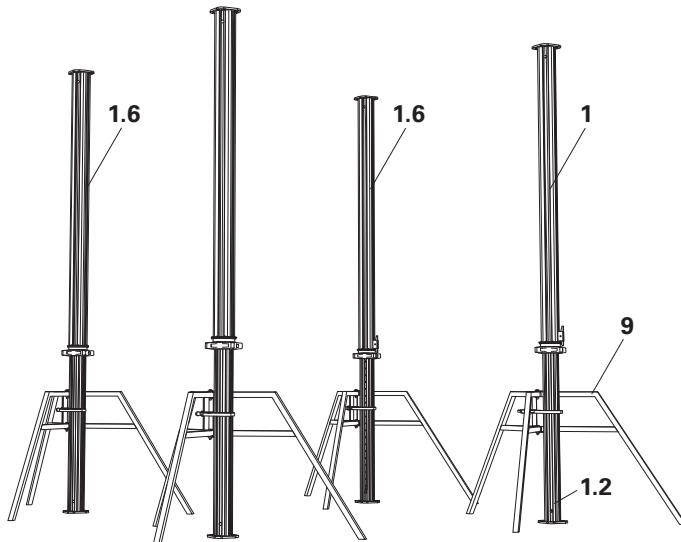


Fig. 37

Assembly of the first level

1. Position MULTIPROP props (1):
 - Use tripod (9) as an assembly aid.
 - Position props in the dimension between axes of the frames to be assembled.
 - The inner tubes (1.2) are below.
 - The measuring tape (1.6) is pointing inwards.
(Fig. 37)
2. Install Frame MRK, see A2:
 - Use trestles.
 - Place frame (2) from the outside on the designated positions, see plan or type test.
 - Securely fix the wedge (2.3) with a hammer blow in a downwards direction.
(Fig. 38)

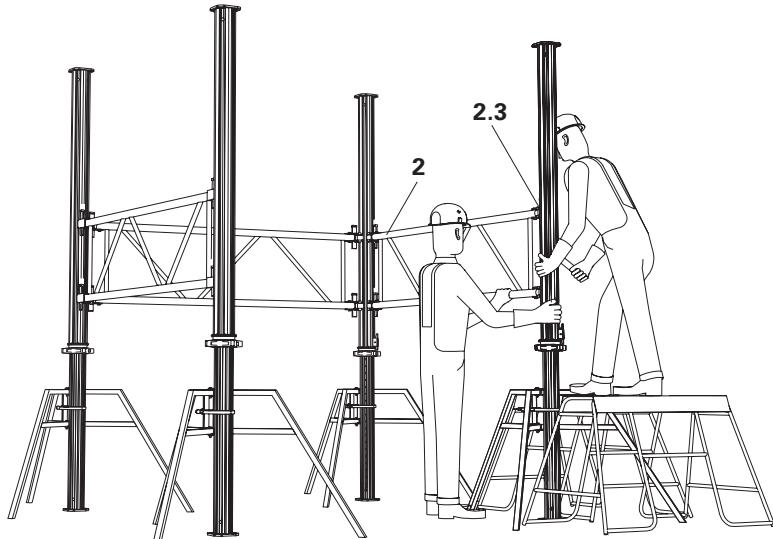


Fig. 38

A5 MULTIPROP as system

Vertical assembly

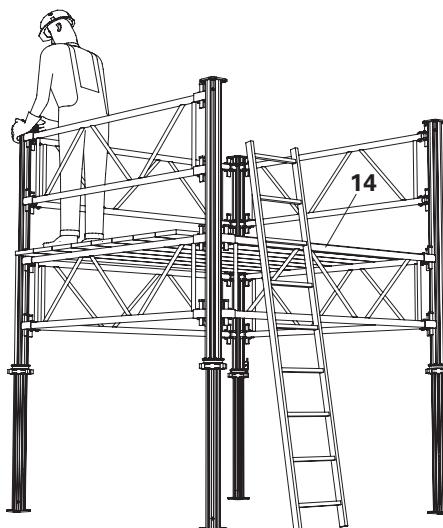
Assembly of the next level

In order to be able to install the next prop and frame level, a stable covering (14) must be fitted on the first frame level.

(Fig. 39, 39a)

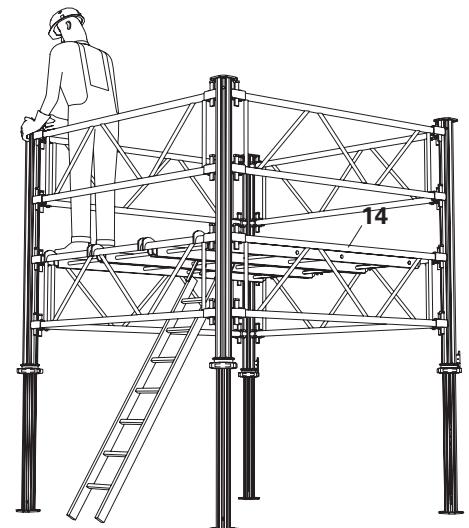
Working platform with planks provided by the contractor

Fig. 39



Working platform with MULTIPROP boarding

Fig. 39a



Assembly of additional levels

Other levels are installed in the same way.

- Distance between the individual frames which are used as girders is a maximum 2.0 m.
- Mount props with retracted inner tubes. After bracing has taken place with the frames, spindle out to the required length.
(Fig. 40, 40a)
- Connect props: with Connector MPV-2 or MULTIPROP bolt with nut, see A4.
- The frames can also be used as guardrails and are to be additionally mounted if required.

Fig. 40

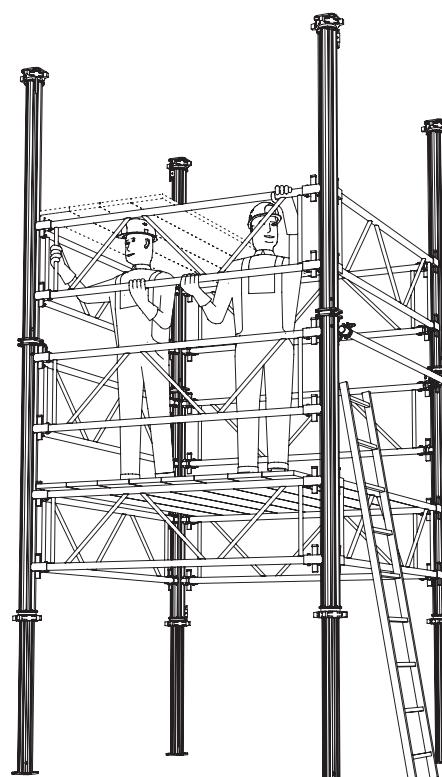
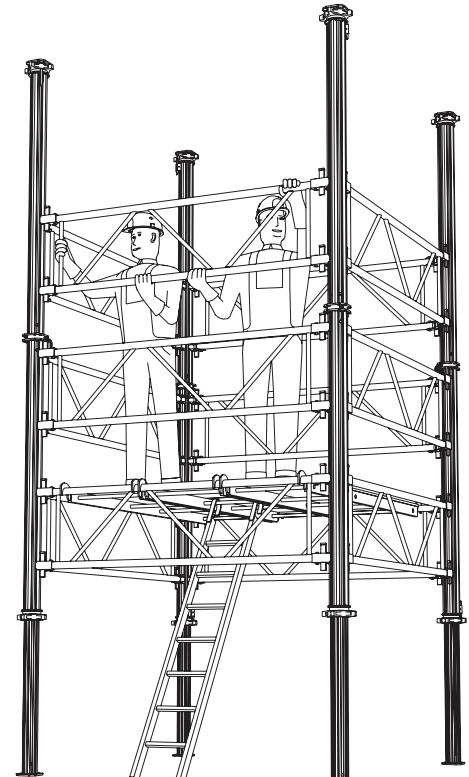


Fig. 40a



A6 Dismantling



Ensure stability during dismantling!



If structural bracing has been installed, it is sensible to lower the MP towers on the uppermost props.

Dismantling takes place on the vertically-positioned tower from top to bottom or, if possible, in a horizontal position.

Dismantling vertically

1. Lower the MULTIPROP tower.
2. Remove formwork assembly.
3. Dismantle tower from top to bottom. Remove horizontal bracing only when the stability has been ensured.
(Fig. 41 a)

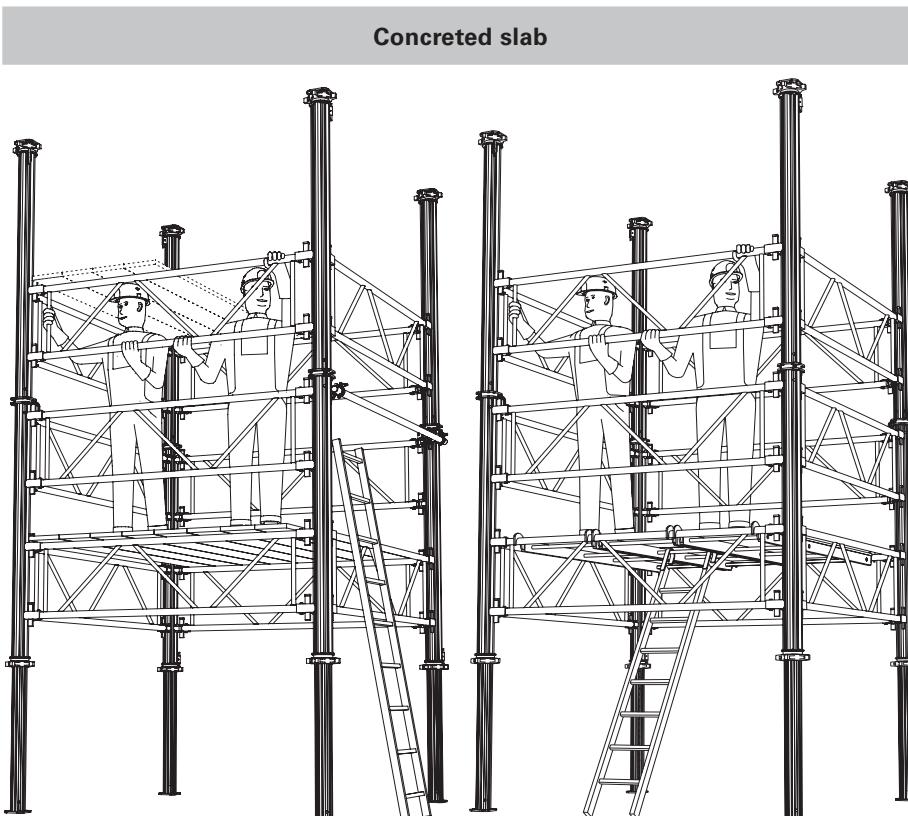


Fig. 41a

Dismantling horizontally

1. Move out MULTIPROP tower from under the slab.
2. Attach lifting chains and move MULTIPROP tower onto a flat and even surface.
3. Dismantle the MULTIPROP tower.
(Fig. 41b)

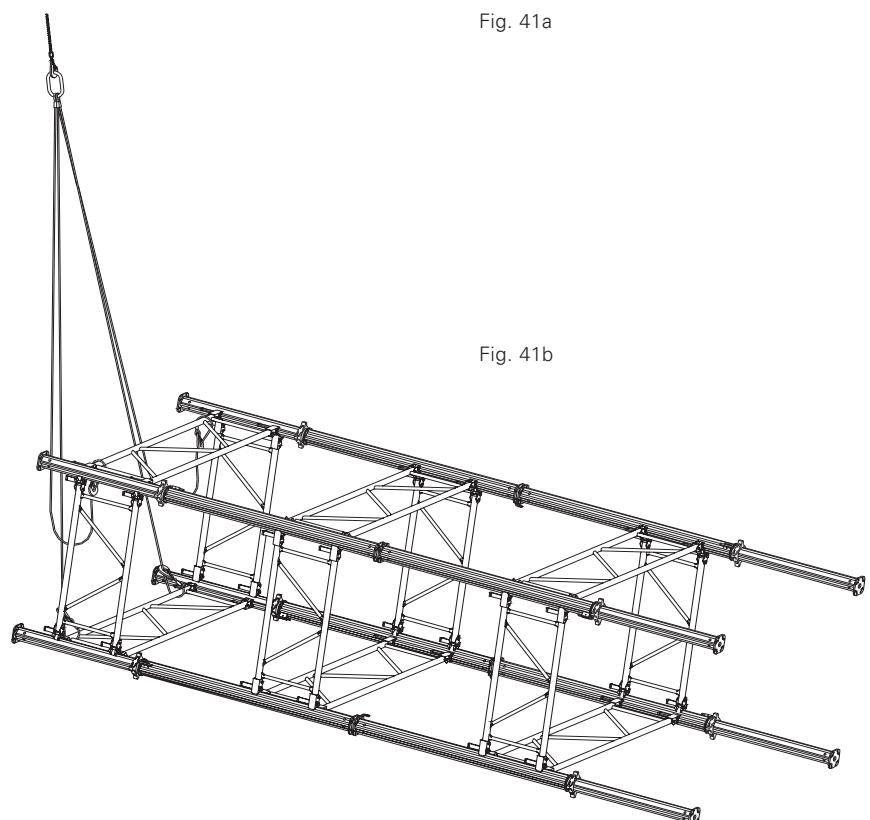


Fig. 41b

B1 Structural scaffold tube bracings

Scaffold Tube Coupling MG

Horizontal scaffold tube bracings may be used as an assembly aid. It consists of scaffold tubes Ø 48 mm and MULTIPROP Scaffold Tube Couplings MG-A or MG-B. The bracing is installed in segments and towers and serve to stabilize the MP props.

(Fig. 42)



Check stability against overturning!

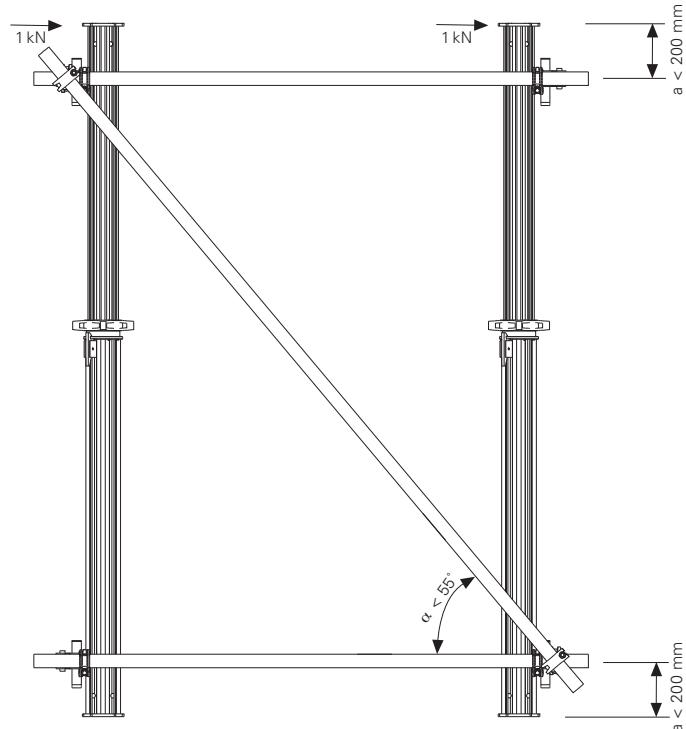


Fig. 42

Application 1:

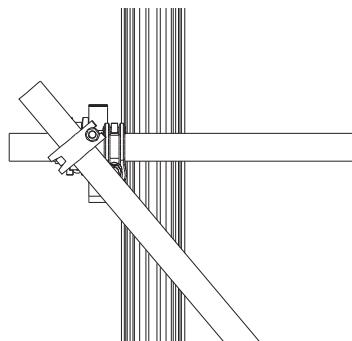
Scaffold Tube Coupling MG for structural connection of MULTIPROP props with scaffold tubes.

Assumption:

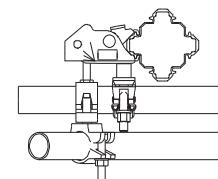
1. $a < 200 \text{ mm}$
2. $\alpha < 55^\circ$
3. Arrangement of the couplings, see Fig. 43a.

The bracing can carry a horizontal force of $F_H = 1 \text{ kN} + 1 \text{ kN} = 2 \text{ kN}$

Fig. 43a



Top view

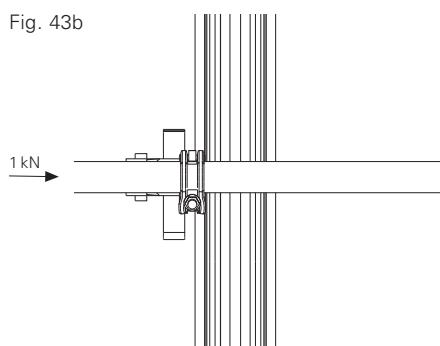


Application 2:

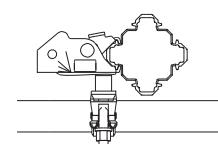
Scaffold Tube Coupling MG for transferring small horizontal forces.

A force F_H of 1 kN can be transferred along a horizontal scaffold tube. (Fig. 43b)

Fig. 43b



Top view



B2 Frames

Use as scaffold girder

For assembling the main and cross beams as well as panels, flooring can be fitted on one frame level. (Fig. 44) In order to be able to work at an optimal height, two additional frames must be installed if necessary. The assembly of the frames is carried out as described in A2.

Table
Permissible loads for the Frame MRK
as scaffold girder

Frame size	Perm. uniformly distributed linear load Q [kN/m]
MRK 296	1,1
MRK 225	2,0
MRK 150	4,0
MRK 120	5,0

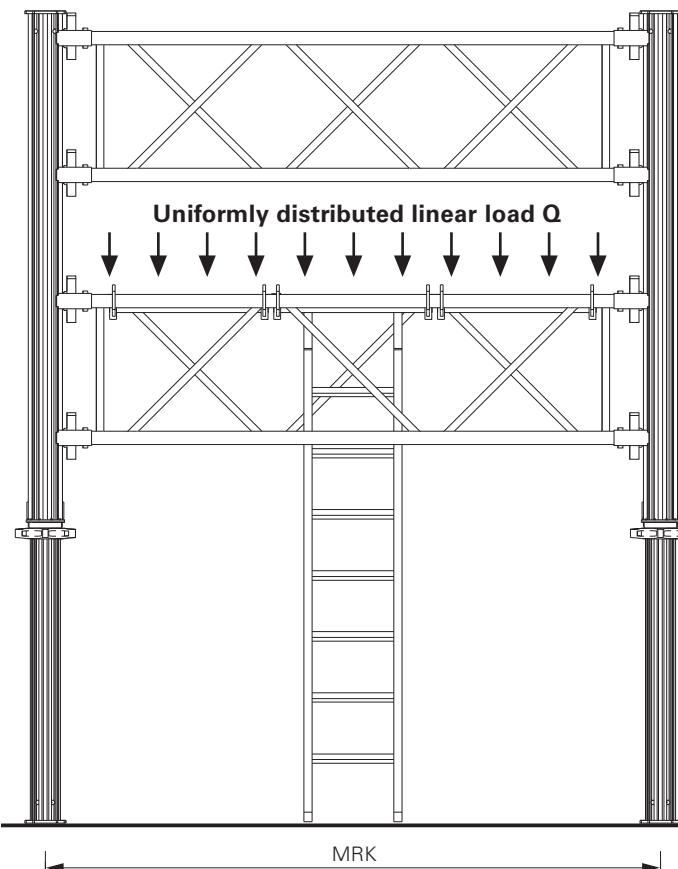


Fig. 44

B3 Tables and towers

Lowering



Check stability!

The lowering procedure must take place gradually.

1. Turn the adjusting collar (1.4) of the MULTIPROP prop and retract the inner tube (1.2).
2. Repeat the procedure for all props.



Frame on inner tube: release wedges on two diagonally-positioned places.



In order to make the lowering procedure easier, the table or tower can be held in position by the trolley and winch unit or the trolley. The props can be spindled in without being subject to any load.

(Fig. 45)

Moving with trolley and winch

1. Position two trolley and winch units in the centre of the narrow frame sides of the falsework for each table or tower.
2. Support the frames using the MULTIPROP adapters.
3. Uniformly raise the table or tower with the winches.
4. Move the table or tower.

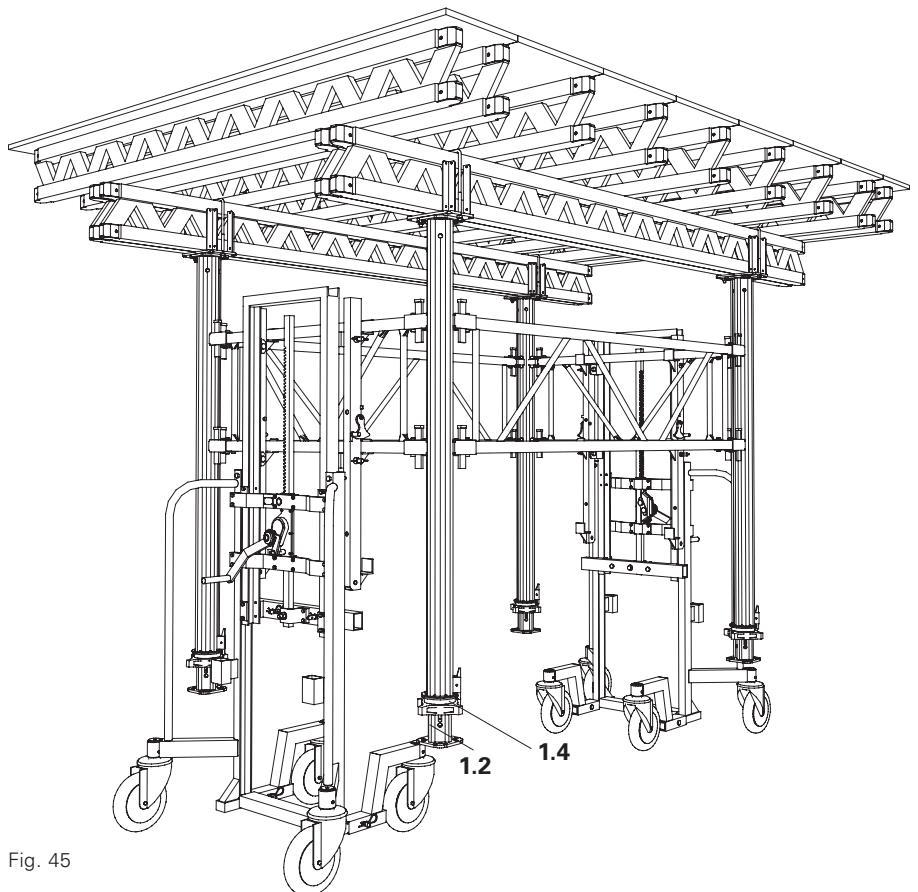


Fig. 45



Follow the Instructions for Use for the PERI trolley and winch unit.

Risk of breakage for the frame!

Table

Permissible load [kg] for the Frame MRK when picked up with the trolley and winch unit.

Aluminium frame	Perm. load [kg]
MRK 296	350
MRK 266 – 225	440
MRK 201,5	560

Steel frame	Perm. load [kg]
MRK 150	880
MRK 137,5	920
MRK 120	1000

B3 Tables and towers

Moving along with pole

In order to bring the slab table into the exact position, the PERI MULTIPROP table can be moved by means of an assembly lever and a pole.

Moving

1. Insert assembly lever (15) into the bottom drilled holes of the MULTIPROP props.
2. Move the slab table with the pole (16).
(Fig. 46)

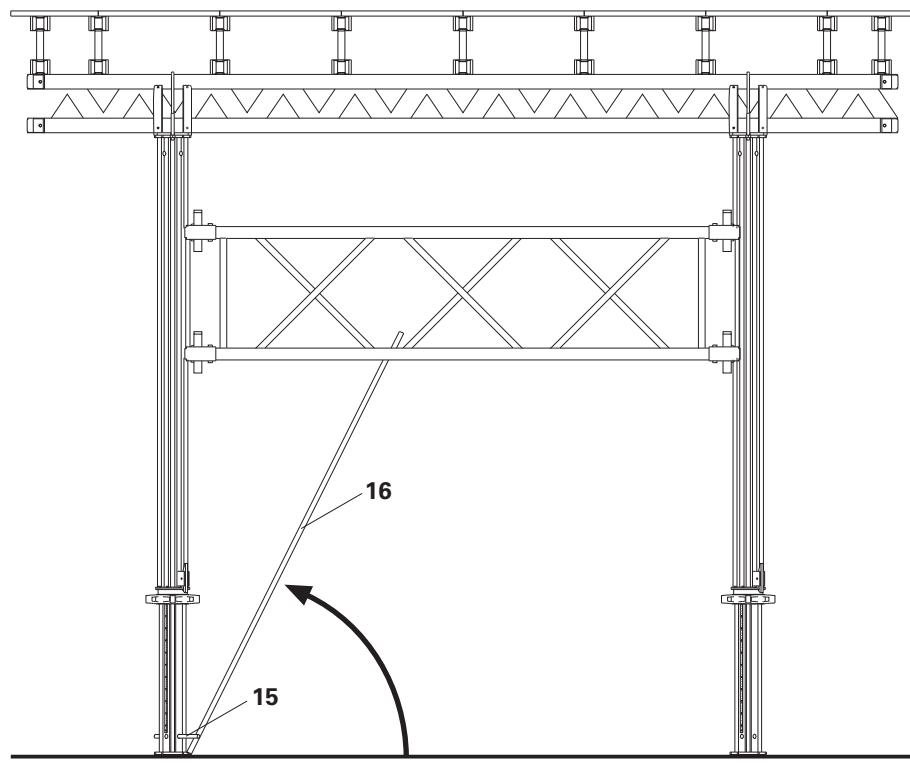


Fig. 46

B3 Tables and towers

Moving with the crane

Towers without formwork assembly

Attach the 4-sling lifting gear to two frames positioned opposite each other on the top row of frames.
(Fig. 47)

Towers with formwork assembly

When using load-carrying equipment, the respective Instruction for Use are to be followed at all times.
(Fig. 48)

Fig. 47

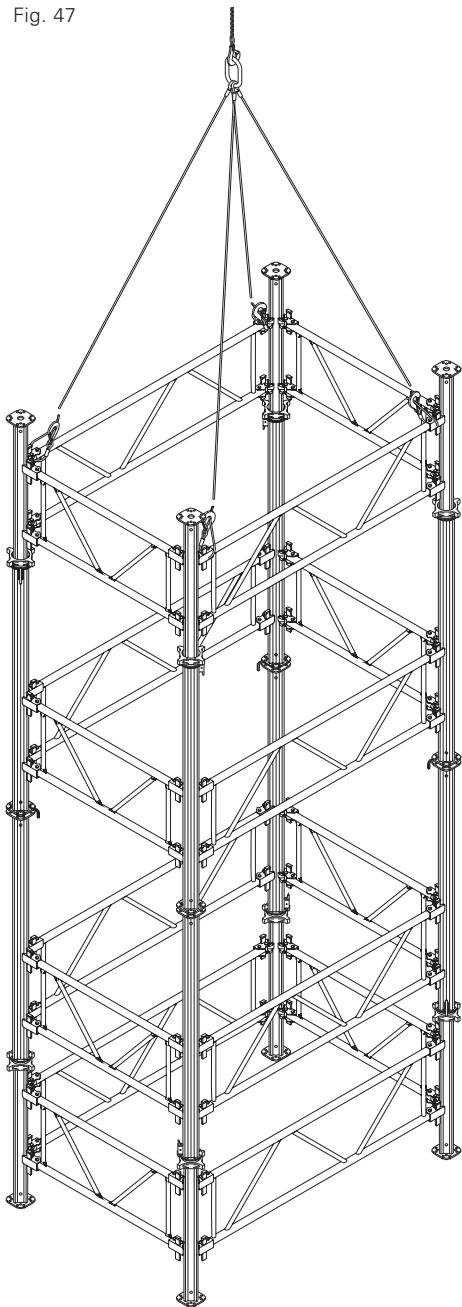
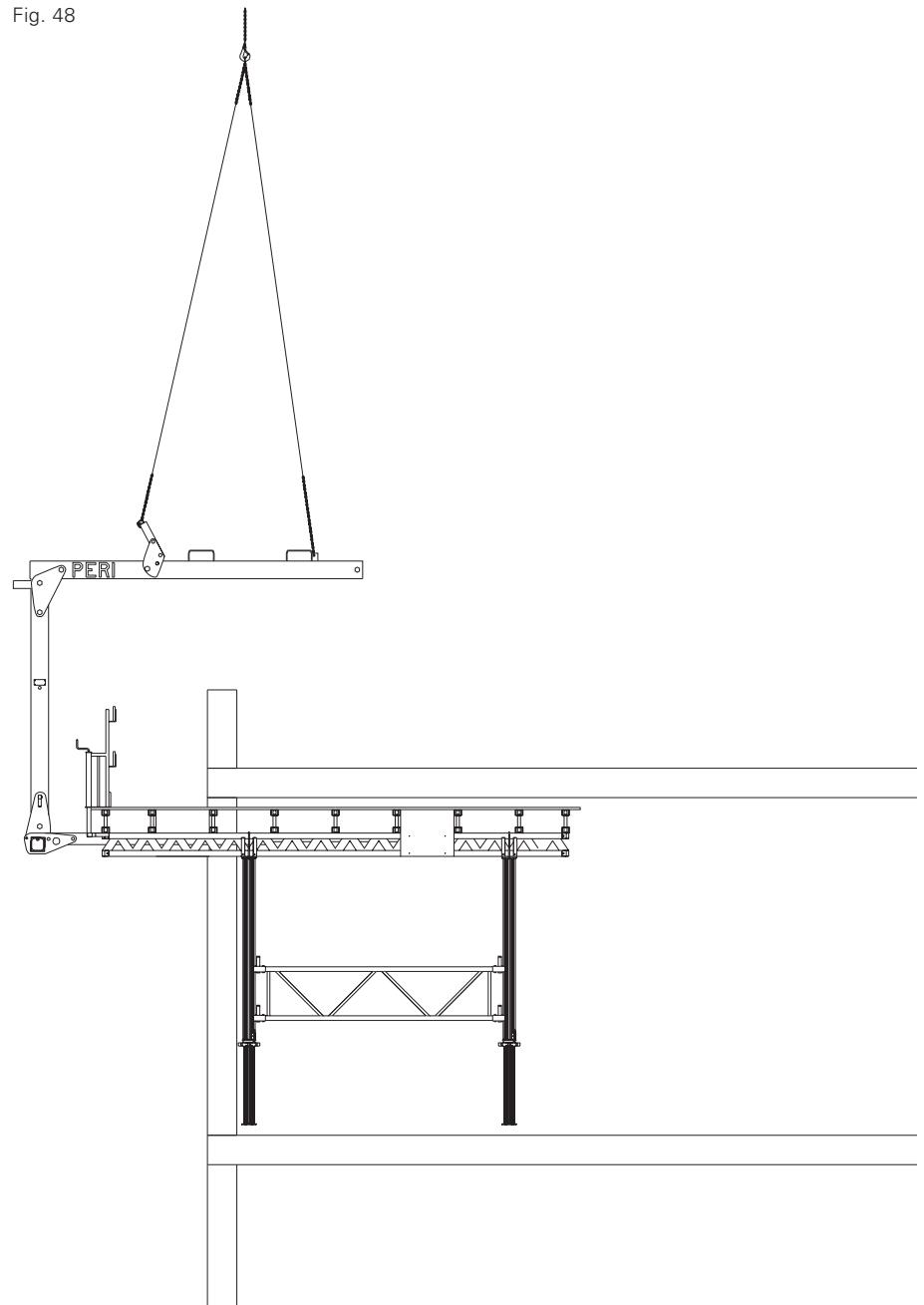


Fig. 48



MULTIPROP 250, 350, 480, 625

Permissible prop load [kN] according to the type test

Extension Length [m]	MP 250 l = 1,45 – 2,50 m		MP 350 l = 1,95 – 3,50 m		MP 480 l = 2,60 – 4,80 m		MP 625 l = 4,30 – 6,25 m	
	Outer Tube Bottom	Inner Tube Bottom	Outer Tube Bottom	Inner Tube Bottom	Outer Tube Bottom	Inner Tube Bottom	Outer Tube Bottom	Inner Tube Bottom
1,45	73,3	76,2						
1,50	73,3	76,2						
1,60	73,3	76,2						
1,70	73,3	76,2						
1,80	71,7	76,2						
1,90	68,6	76,2						
1,95	67,0	76,2	88,3	87,4				
2,00	65,4	76,2	88,3	87,4				
2,10	63,8	74,6	83,0	87,4				
2,20	62,2	73,0	77,7	87,4				
2,30	61,1	70,5	72,9	86,6				
2,40	60,6	67,0	68,6	85,1				
2,50	60,0	63,6	64,4	83,5				
2,60			61,9	80,7	85,9	71,4		
2,70			59,3	77,8	81,2	71,1		
2,80			57,5	74,9	76,5	70,8		
2,90			55,7	71,9	71,8	70,4		
3,00			54,3	68,3	67,1	70,1		
3,10			52,9	64,6	63,0	69,4		
3,20			51,4	60,0	58,9	68,6		
3,30			49,8	55,4	54,8	67,9		
3,40			46,4	50,3	52,5	66,2		
3,50			42,9	45,1	50,2	64,5		
3,60					47,9	62,8		
3,70					46,0	58,6		
3,80					44,2	54,4		
3,90					42,3	50,2		
4,00					40,4	46,9		
4,10					38,5	43,7		
4,20					36,6	40,4		
4,30					34,8	38,2	56,2	44,6
4,40					32,9	36,0	54,7	44,6
4,50					31,1	33,7	53,1	44,6
4,60					29,3	31,5	50,9	43,8
4,70					27,4	29,3	48,8	43,0
4,80					25,6	27,1	46,4	42,1
4,90							43,8	41,2
5,00							41,2	40,3
5,10							38,6	38,8
5,20	MULTIPROPs are classified according to official approval as follows:						36,1	37,3
5,30	MP 250 = Class T 25		MP 480 = Class D 45				33,8	35,9
5,40	MP 350 = Class R 35		MP 625 = Class D 60				31,9	34,5
5,50	Note:						29,9	33,1
5,60	We recommend using the HD Wingnut Spanner, Item no. 022027, to release the loads > 60 kN.						28,4	31,6
5,70	MULTIPROP 350 and 480 clamped in the Table Swivel Head or UNIPORTAL Head fitted to PERI tableforms have a permissible load of MP 350 minimum 56 kN, MP 480 minimum 36 kN over the entire extension range.						26,9	30,1
5,80							25,5	28,6
5,90							24,3	27,0
6,00							23,1	25,4
6,10							22,0	24,1
6,20							20,9	22,8
6,25							20,4	22,1

MULTIPROP 250, 350, 480, 625**With Base MP 50****Permissible prop load [kN] according to the type test**

Extension Length [m]	MP 250 + MP 50 l = 1,95 – 3,00 m		MP 350 + MP 50 l = 2,45 – 4,00 m		MP 480 + MP 50 l = 3,10 – 5,30 m		MP 625 + MP 50 l = 4,80 – 6,75 m	
	Outer Tube Bottom	Inner Tube Bottom	Outer Tube Bottom	Inner Tube Bottom	Outer Tube Bottom	Inner Tube Bottom	Outer Tube Bottom	Inner Tube Bottom
1,95	74,4	71,5						
2,00	74,4	71,5						
2,10	74,4	71,5						
2,20	74,4	71,5						
2,30	72,3	70,7						
2,40	68,2	69,2						
2,45	66,1	68,5	85,1	81,7				
2,50	64,1	67,7	85,1	81,7				
2,60	61,4	65,7	80,6	80,3				
2,70	58,7	63,7	76,1	78,8				
2,80	56,1	61,2	71,4	75,9				
2,90	53,4	58,3	66,7	73,6				
3,00	50,8	55,4	62,0	71,4				
3,10			59,0	68,5	74,6	71,2		
3,20			55,9	65,6	72,2	70,7		
3,30			53,6	62,8	69,8	70,2		
3,40			51,2	60,0	67,4	69,7		
3,50			49,3	57,4	65,0	69,2		
3,60			47,4	54,8	60,8	67,9		
3,70			45,5	50,7	56,5	66,7		
3,80			43,6	46,6	52,3	65,4		
3,90			40,5	42,6	49,7	61,0		
4,00			37,4	38,6	47,2	56,7		
4,10					44,6	52,3		
4,20					42,6	48,6		
4,30					40,6	44,9		
4,40					38,6	41,2		
4,50					36,5	38,8		
4,60					34,5	36,3		
4,70					32,4	33,9		
4,80					30,8	32,2	47,3	43,2
4,90					29,2	30,4	46,1	43,1
5,00					27,6	28,7	44,9	43,0
5,10					25,9	27,0	43,3	41,8
5,20					24,3	25,2	41,6	40,6
5,30					22,7	23,5	39,9	39,2
5,40							38,0	37,7
5,50							36,2	36,1
5,60							34,3	34,5
5,70							32,4	33,0
5,80	MULTIPROPs are classified according to official approval as follows:							
5,90	MP 250 = Class T 25		MP 480 = Class D 45					
6,00	MP 350 = Class R 35		MP 625 = Class D 60					
6,10								
6,20								
6,30								
6,40								
6,50								
6,60								
6,70								
6,75								

MULTIPROPs are classified according to official approval as follows:

MP 250 = Class T 25 MP 480 = Class D 45

MP 350 = Class R 35 MP 625 = Class D 60

Note:

We recommend using the HD Wingnut Spanner, Item no. 022027, to release the loads > 60 kN.

Item no. Weight kg

027288	10,300
027289	15,600
027290	19,700
027291	25,000
027305	34,800

MULTIPROP MP

MULTIPROP MP 120

MULTIPROP MP 250

MULTIPROP MP 350

MULTIPROP MP 480

MULTIPROP MP 625

Slab prop made of aluminium. Used as individual prop as well as in combination with MULTIPROP Frames MRK to form towers.

min. L **max. L**

800 1200

1450 2500

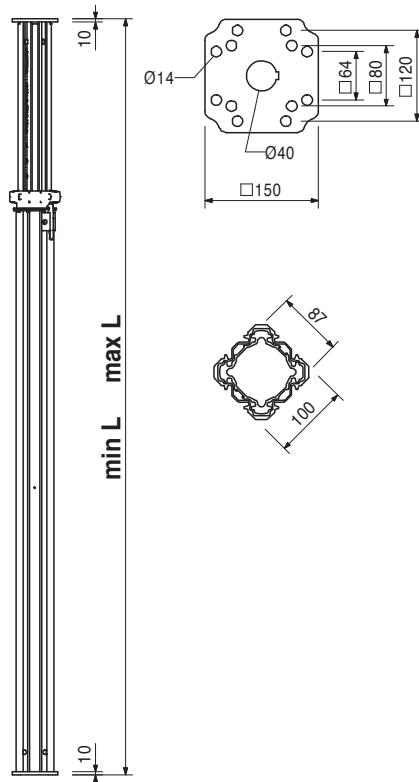
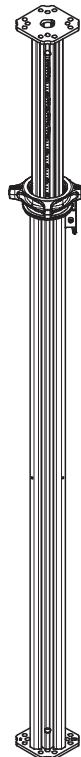
1950 3500

2600 4800

4300 6250

Note

Approved by the German Building Authorities No. Z-8.312-824. Permissible load: see PERI Design Tables.



028390	9,890
028400	10,100
028330	11,300
028340	14,000
028380	15,400
028350	16,300

MULTIPROP Frames MRK, Steel

Frame MRK 62,5

L **X**

545 625

Frame MRK 75

670 750

Frame MRK 90

820 900

Frame MRK 120

1120 1200

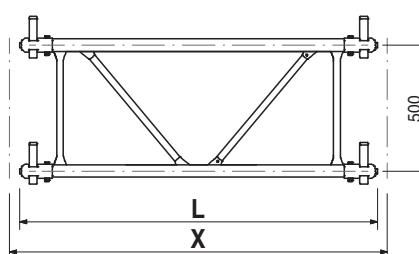
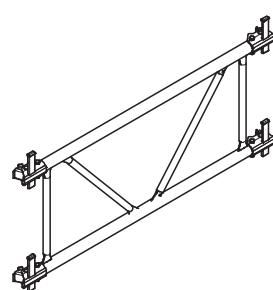
Frame MRK 137,5

1295 1375

Frame MRK 150

1420 1500

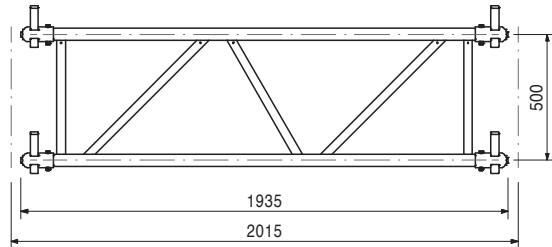
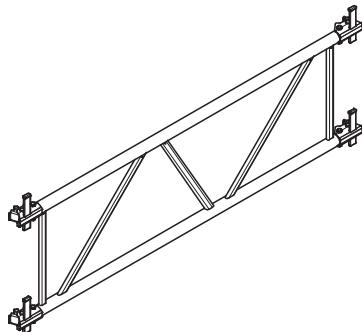
Bracing frame for MULTIPROP. For connecting to outer and inner tube. With captive wedge coupling.



Item no. Weight kg

		MULTIPROP Frames MRK, Aluminium	L	X
028460	11,600	Frame MRK 201,5	1935	2015
028360	12,400	Frame MRK 225	2170	2250
028470	12,500	Frame MRK 230	2220	2300
028480	12,700	Frame MRK 237	2290	2370
028490	13,900	Frame MRK 266	2580	2660
028370	14,800	Frame MRK 296	2880	2960

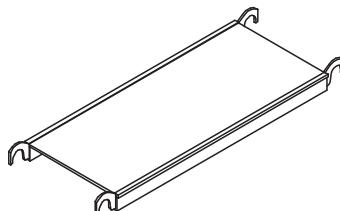
Bracing frame for MULTIPROP. For connecting to outer and inner tube. With captive wedge coupling.



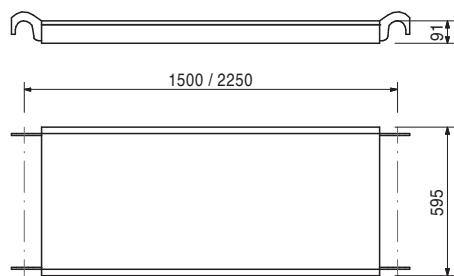
107169	12,000
107170	18,000

MULTIPROP Platforms
MULTIPROP Platform 150 x 60
MULTIPROP Platform 225 x 60

For assembly of a working scaffold.



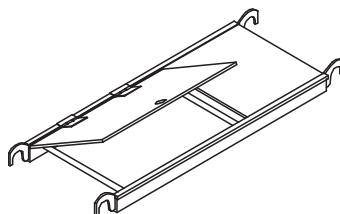
Technical Data
Permissible load up to 200 kg/m².



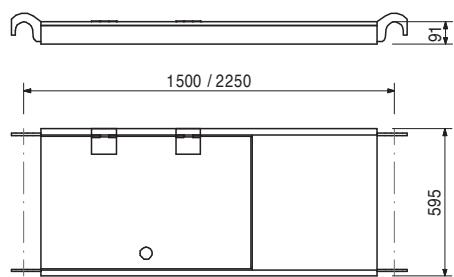
107171	12,500
107172	18,500

MULTIPROP Platforms with Hatch
MULTIPROP Platform 150 x 60 with Hatch
MULTIPROP Platform 225 x 60 with Hatch

For assembly of working scaffold. Self-locking hatch opening for access ladder.



Technical Data
Permissible load up to 200 kg/m².

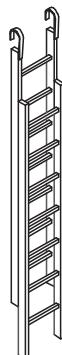


Item no. Weight kg

107173 9,000

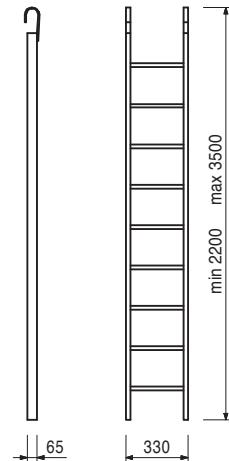
Ladder 220 x 350, telescopic

As access for MULTIPROP towers. Mounted to decking with hatch.



Technical Data

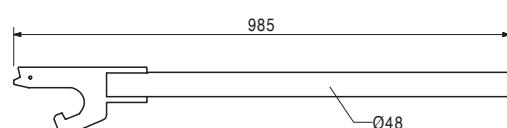
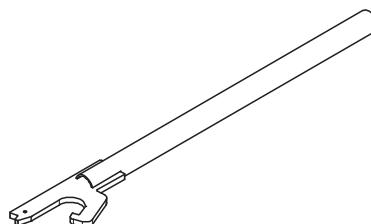
Extension length 2.20 - 3.50 m.



022027 4,230

Wing Nut Spanner HD

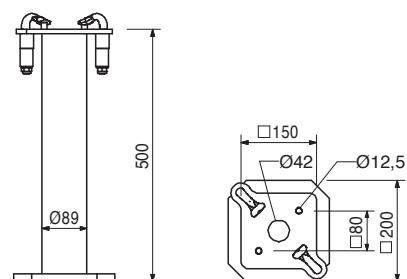
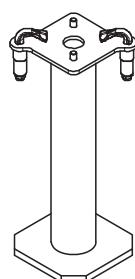
For easy release of the Head Spindle HDK 45 and MULTIPROP slab props.



027310 8,900

Base MP 50

For use with slab props with an end plate thickness of 6-10 mm. With clamped quick-release fastener.

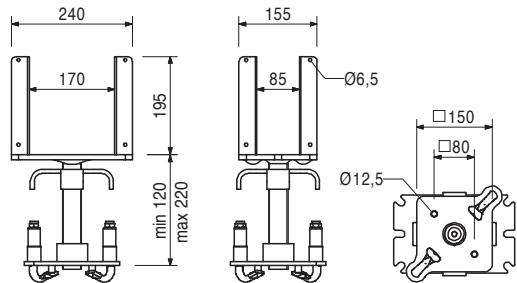
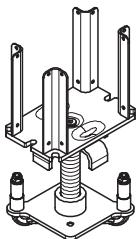


MULTIPROP

Item no.	Weight kg
027297	8,730

Tilting Forkhead MKK

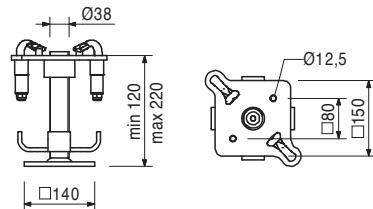
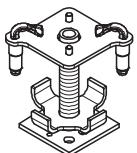
For tilt-resistant support of one or two GT 24 or VT 20 girders. Can be pivoted up to 3° on all sides. With clamped quick-release fastener.



027296	6,220
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Tilting Base MKF

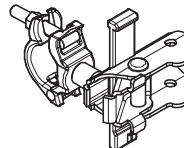
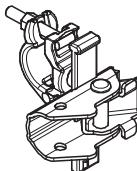
For use on inclined assembly areas. Tiltable on all sides up to 3°. With clamped quick-release fastener.



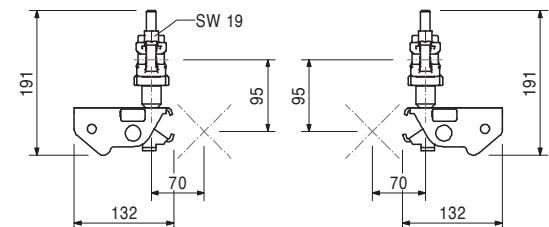
027298	1,930
027299	1,930

Scaffold Tube Coupler**Scaffold Tube Coupler MG-A/C****Scaffold Tube Coupler MG-B/D**

For connecting scaffold tubes Ø 48 mm to the MULTIPROP MP slab props.

**Note**

Wrench size SW 19.



028000	9,170
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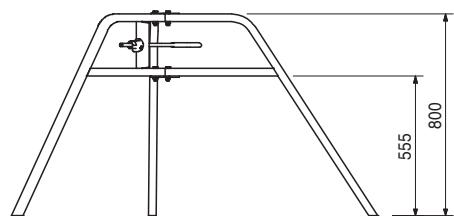
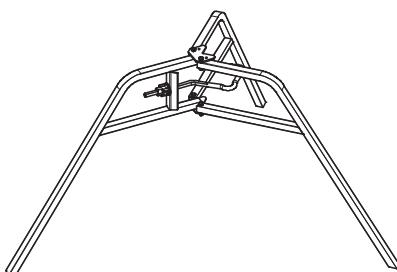
Universal Tripod, galv.

Erection aid for slab props with Ø 48 - 120 mm and 120 x 120 mm.

Can also be used in combination with MULTIPROP MP Slab Props and Base MP 50.

Safety Instructions

Only use as assembly aid!

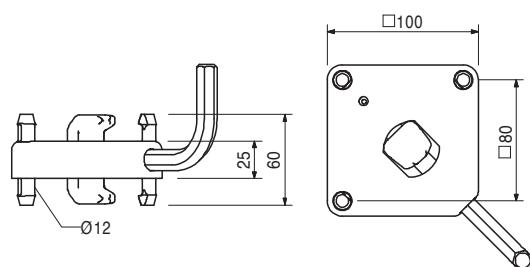
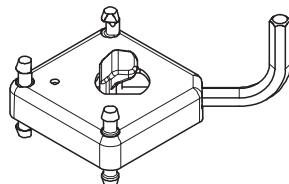


Item no. Weight kg

027301 1,020

Connector MPV-2

For connecting 2 MULTIPROP slab props.



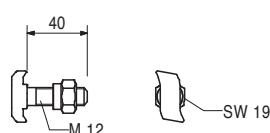
111142 0,082

MULTIPROP Bolt with Nut

For connecting 2 MULTIPROP slab props and assembly of accessories on the Alu Beam MPB 24.

Note

Wrench size SW 19.



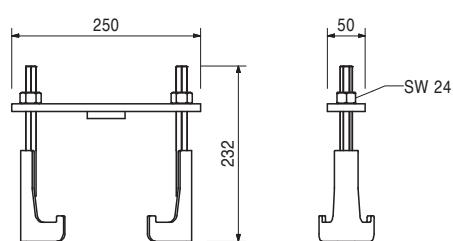
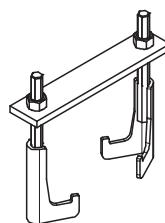
027302 2,100

MULTIPROP Strap SRZ U100 - U140

For fixing Steel Walers SRZ and SRU, Profile U100 to U140 on MULTIPROP slab props.

Note

Wrench size SW 24.

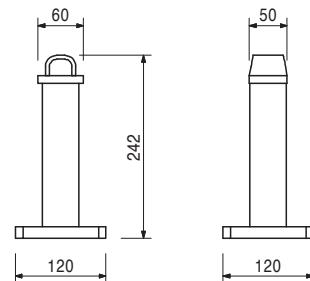
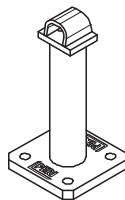


Item no. Weight kg

107161 3,050

Compression Brace Head MP/SRU

As connecting element between MULTIPROP slab props and Steel Waler SRU/SRZ.



Accessories

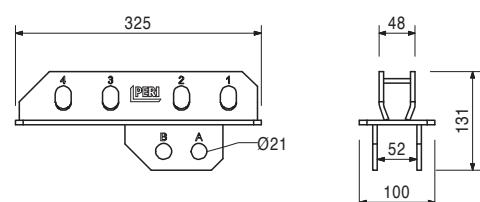
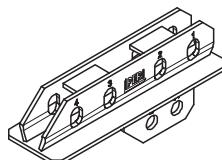
104031 0,462
018060 0,030

Fitting Pin Ø 21 x 120 Cotter Pin 4/1, galv.

107160 3,960

Connector MP-SRU

As compensation element between the Prop Head MP/SRU and inclined positioned Steel Waler SRU.



Accessories

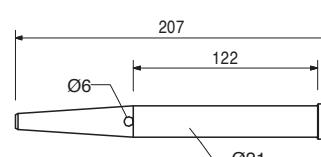
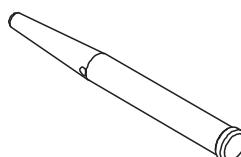
104031 0,462
018060 0,030

Fitting Pin Ø 21 x 120 Cotter Pin 4/1, galv.

104031 0,462

Fitting Pin Ø 21 x 120

For different connections.



Accessories

018060 0,030

Cotter Pin 4/1, galv.

For bolts up to Ø 25 mm.



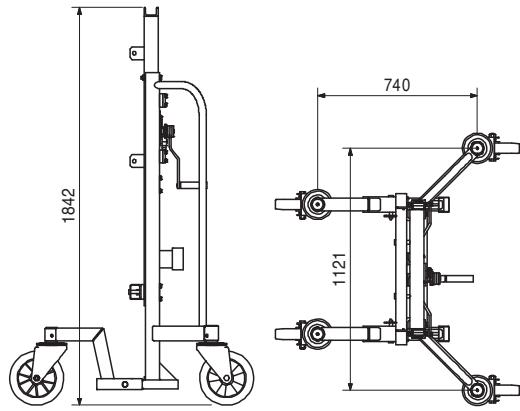
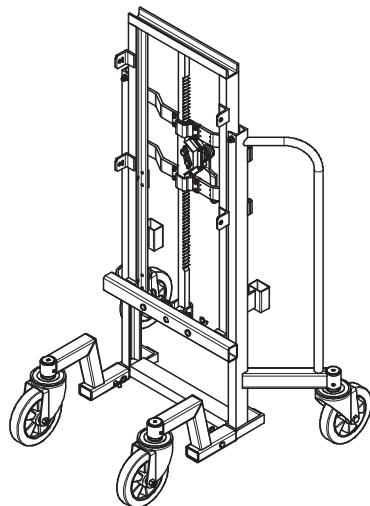
Item no.	Weight kg
019200	162,000

Trolley with Winch

For moving Towers and Tables with MULTIPROP, Rosett, Rosett Plus and PD 8.

Safety Instructions

Follow Instructions for Use at all times.
Load-carrying capacity 1.0 t.



Accessories

118114	14,200
118605	21,500
117954	21,200
118115	11,000

Connector MP - Trolley

Connector Rosett - Trolley

Connector Rosett Plus - Trolley

Connector PD 8 - Trolley

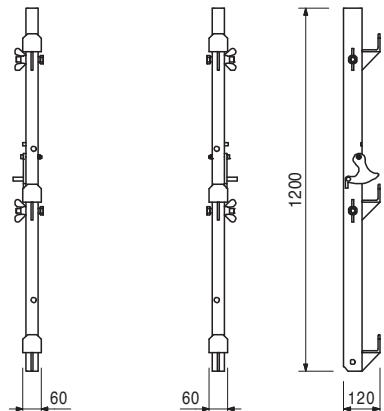
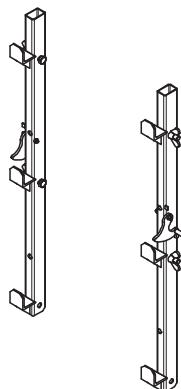
118114	14,200
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Connector MP - Trolley

For moving MULTIPROP Towers with Trolley with Winch.

Note

Consisting of 2 parts:
support left and right.

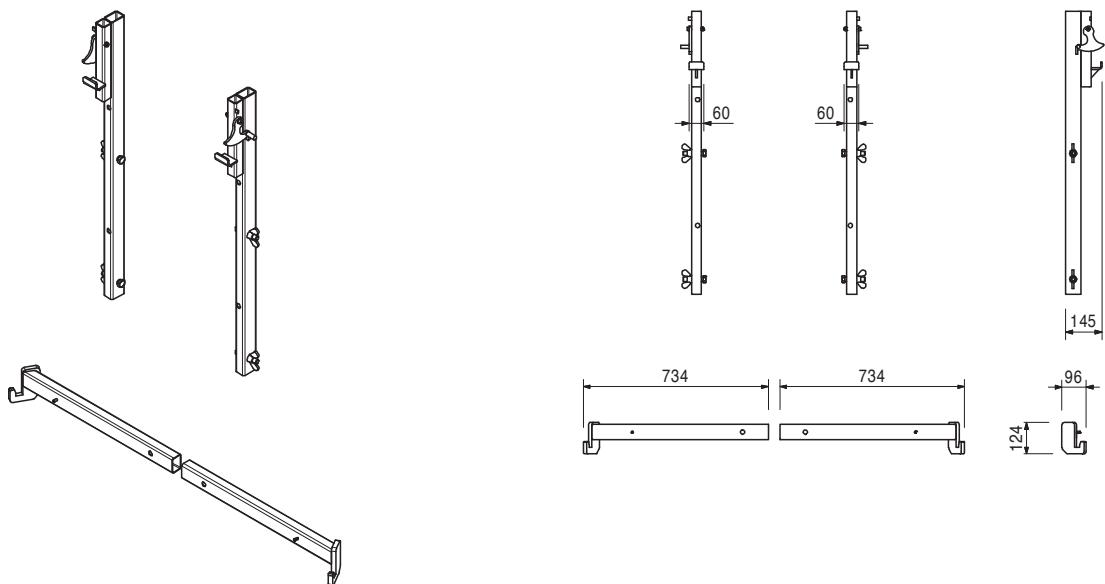


Item no. Weight kg

118605 21,500

Connector Rosett - Trolley

For moving Rosett Towers with Trolley with Winch.

NoteConsisting of 2 parts:
support left and right.

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37 Lebanon Lebanon Representative Office Jdeideh lebanon@peri.de www.peri.de	43 Kazakhstan TOO PERI Kazakhstan 050059 Almaty peri@peri.kz www.peri.kz	50 Azerbaijan PERI Kalip ve İşkeleleri Baku peribaku@peri.com.tr www.peri.com.tr	56 Jordan PERI GmbH - Jordan 11947 Amman jordan@peri.com www.peri.com	63 Panama PERI Panama Inc. 0832-00155 Panama City info@peri.com.pa www.peri.com.pa
38 Lithuania PERI UAB 02300 Vilnius info@peri.lt www.peri.lt	44 Russian Federation OOO PERI 142407 Noginsk District moscow@peri.ru www.peri.ru	51 Turkmenistan PERI Kalip ve İşkeleleri Aşgabat ahmet.kadioglu@peri.com.tr www.peri.com.tr	57 Kuwait PERI Kuwait 13011 Kuwait kuwait@peri.com www.peri.com	64 Angola PERIcofragens, Lda. Luanda renato.portugal@peri.pt www.peri.pt
39 Morocco PERI S.A. Tanger peri25@menara.ma www.peri.com	45 South Africa Wiehahn Formwork and Scaffolding (Pty) Ltd. 7600 Stellenbosch info@wiehahn.co.za www.wiehahn.co.za	52 Belarus PERI Belarus 220030 Minsk info@peri.by www.peri.com	58 Saudi Arabia PERI Engineering Division of Jamjoom Consult Saudi Arabia 21463 Jeddah info@peri.com.sa www.peri.com.sa	65 Nigeria Heights Access Nigeria Ltd. Victoria Island, Lagos info@heightsaccessng.com www.heightsaccessng.com
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