

RS Push-Pull Props

A programme with extension lengths up to 14 m



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Important notes

All current safety regulations and guidelines must be observed in those countries where our products are used.

The photos shown in this brochure feature construction sites in progress. In addition, computer graphics are used which are to be understood as system representations. For this reason, safety and anchor details in particular cannot always be considered as conclusive or final. These are subject to the risk assessment carried out by the contractor.

For a better understanding, detailed illustrations are partly incomplete. The safety installations which have possibly not been shown in these detailed descriptions must nevertheless be available.

The systems or items shown might not be available in every country.

Safety instructions and load specifications are to be strictly observed at all times. Separate structural calculations are required for any deviations from the standard design data.

The information contained herein is subject to technical changes in the interests of progress. Errors and typographical mistakes reserved.

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RS Push-Pull Props

A programme with extension lengths up to 14 m

RS Push-Pull Props are used for the vertical alignment and transferring of wind loads from PERI Wall and Column Formwork as well as prefabricated concrete elements.

The PERI programme includes push-pull props with an extension length of up to 14 m. During its development, special emphasis was placed on ensuring fast and reliable handling, durability and low maintenance costs. For permanent protection against corrosion, both the tubes as well as the threads are completely galvanized.

RS Push-Pull Props are extendable. With the push-pull props in the PERI programme, formwork can be aligned for heights of up to 14 m. For standard applications up to a formwork height of 9 m, one row of push-pull props is sufficient.

PERI Push-Pull Props serve simultaneously as kicker braces. The provision of separate kickers is therefore unnecessary which, in turn, simplifies the logistics.

Fast and safe handling

Rough and fine adjustment for realizing the appropriate length take place safely within seconds from the installation area.

Used also with prefabricated concrete elements

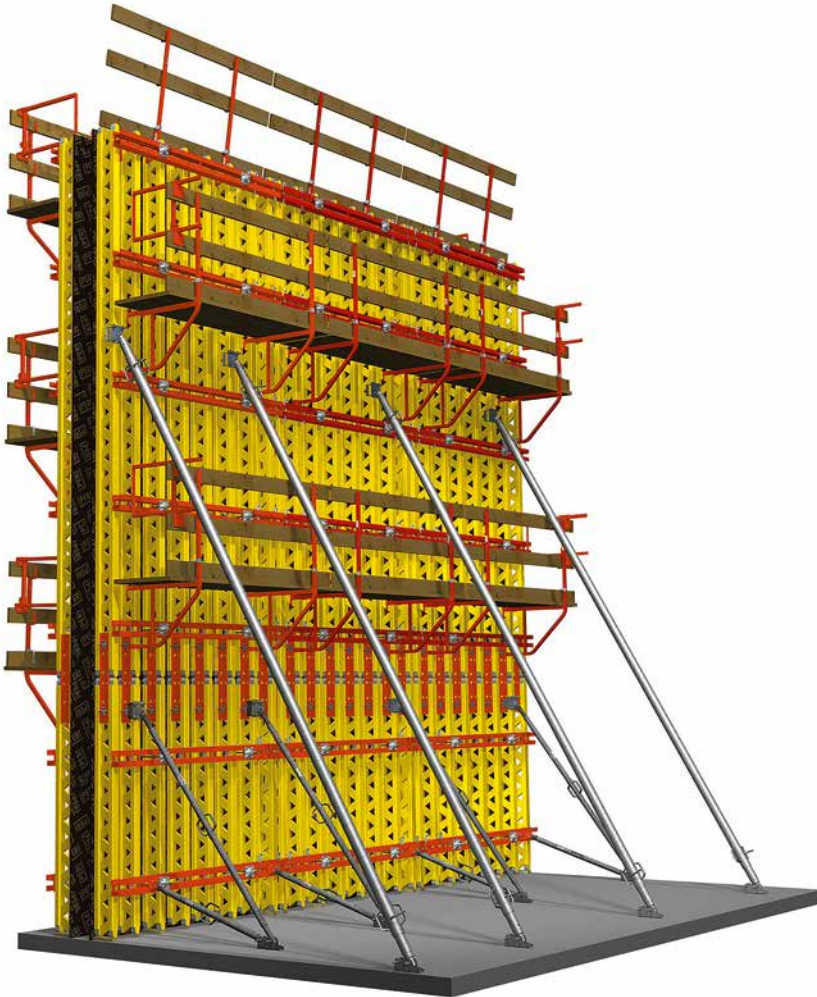
Mounted from a safe position on the assembly area using Push-Pull Prop Adapters and Quick Connectors.

Durable

Galvanized tubes and threads for a long service life and low maintenance costs through hard-wearing corrosion protection.



Safe and fast handling from the assembly area



Fast

Rough adjustment of the push-pull prop in 10 cm increments is carried out by pulling in an outwards direction, and is realized very quickly. The fine adjustment then requires only a few turns of the push-pull prop.

Safe

The Push-Pull Props RS 210 to RS 450 as well as the RS 1400 can be adjusted from the assembly area regardless of the required extension length.

For the RS 1400, a chain allows attaching and releasing the crane slings without requiring a ladder.

For PERI Wall and Column Formwork

Matching accessories such as Push-Pull Prop Connectors, Head Pieces and Clamping Heads, allow the use of RS Push-Pull Props for both PERI Wall Formwork as well as PERI Column Formwork. Short push-pull props serve as kickers. These are connected to the same base plate as the push-pull prop and connected to the formwork using the designated accessory part.

The MXP Platform System, which is used with the MAXIMO and TRIO Wall Formwork Systems, has an integrated Push-Pull Prop Connector.



Easy and safe assembly of push-pull props and kickers on horizontally-positioned formwork, ...

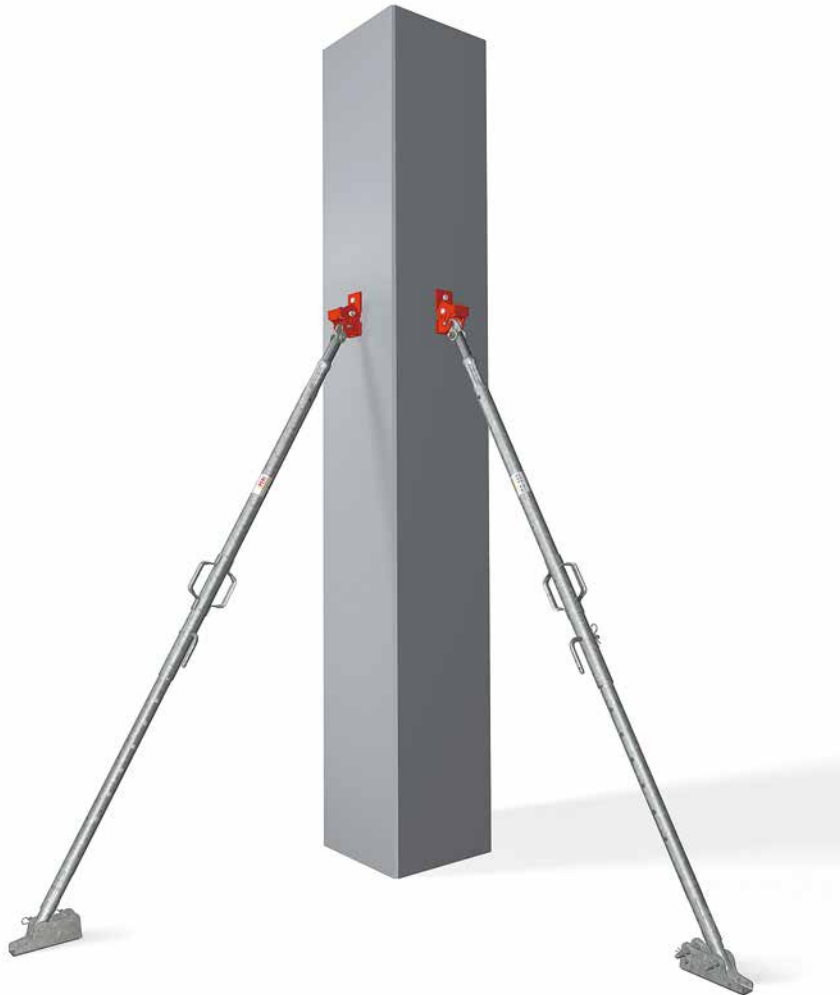


... moving the preassembled wall formwork units including push-pull props with the crane ...



... and installation at the required position.

Used also with prefabricated concrete elements **PERI** with Push-Pull Prop Adapter and Quick Connector



Supporting prefabricated components. For massive prefabricated components and hollow wall elements, the Push-Pull Prop Adapter RS and Quick Connector RS are used.

The complete assembly and dismantling of the push-pull props is carried out from the assembly area. Thus, the work is significantly safer and faster because ladders or working scaffold are not required.

Safe assembly

The Quick Connector RS is mounted on the horizontally-positioned prefabricated component, and the Push-Pull Prop Adapter to the push-pull prop. The prefabricated component is positioned with the crane. When attaching the Push-Pull Prop Adapter to the Quick Connector, the securing lock is first pushed up and then it falls through its own weight and is secured in position. The push-pull prop remains securely fixed through tensile stress and pressure.

Fast dismantling

For dismantling the push-pull prop, the securing lock is simply pushed up with a board or a reinforcement bar and the push-pull prop is released.



When attaching the Push-Pull Prop Adapter RS to the pre-assembled Quick Connector ...

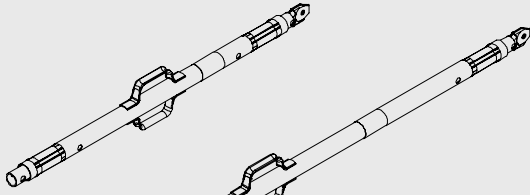


... the securing lock of the Quick Connector is secured and fixes the push-pull prop in position.

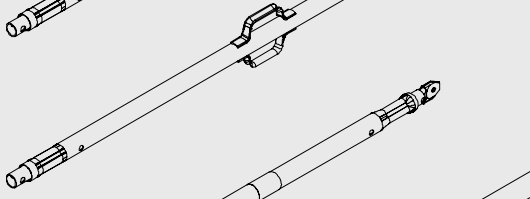
RS Push-Pull Props in detail

Product overview and technical data

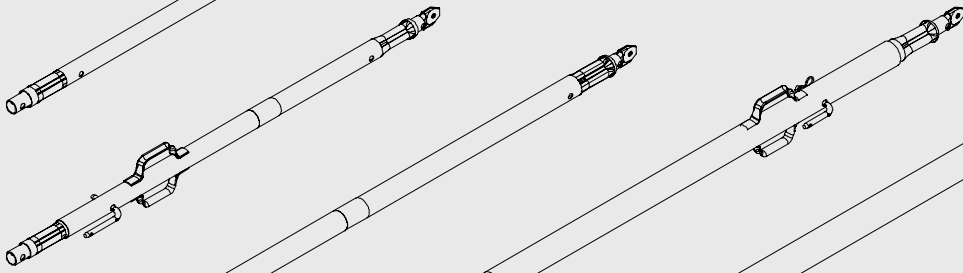
RS 210
L = 1.30 – 2.10 m



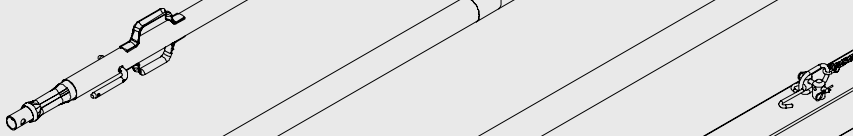
RS 260
L = 2.30 – 2.60 m



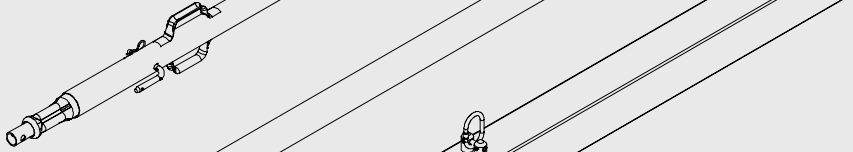
RS 300
L = 1.90 – 3.00 m



RS 450
L = 2.80 – 4.50 m



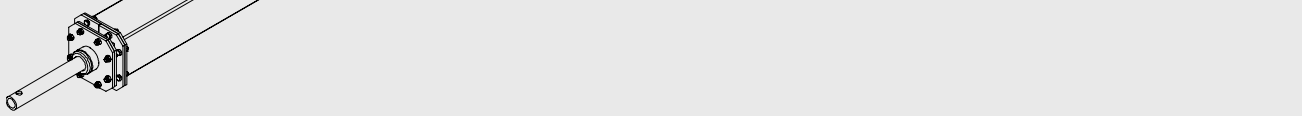
RS 650
L = 4.30 – 6.50 m



RS 1000
L = 6.40 – 10.00 m

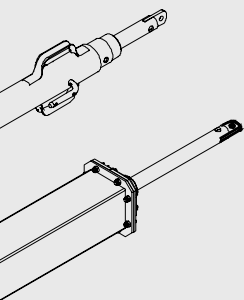


RS 1400
L = 6.40 – 14.00 m



Head Pieces

For every PERI Wall and Column Formwork System, matching head pieces are available for the push-pull props. This is documented in the product overview at the end of this brochure.



Push-Pull Prop RS 210 L = 1.30 – 2.10 m

Extension length [m]	1.30 – 2.00	2.10
Perm. compressive force F [kN]	25.0	23.6
Perm. tension force F [kN]	25.0	

Push-Pull Prop RS 260 L = 2.30 – 2.60 m

Extension length [m]	2.30	2.60
Perm. compressive force F [kN]	25.0	22.1
Perm. tension force F [kN]	25.0	

Push-Pull Prop RS 300 L = 1.90 – 3.00 m

Extension length [m]	1.90 – 2,30	2.50	3.00
Perm. compressive force F [kN]	25.0	21.6	14.2
Perm. tension force F [kN]	25.0		

Push-Pull Prop RS 450 L = 2.80 – 4.50 m

Extension length [m]	2.80 – 3,60	4.00	4.50
Perm. compressive force F [kN]	25.0	17.2	11.8
Perm. tension force F [kN]	25.0		

Push-Pull Prop RS 650 L = 4.30 – 6.50 m

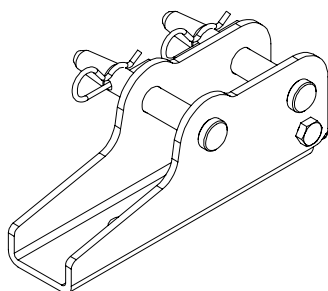
Extension length [m]	4.30 – 4,90	5.00	5.50	6.00	6.50
Perm. compressive force F [kN]	25.0	24.4	18.5	15.9	13.2
Perm. tension force F [kN]	25.0				

Push-Pull Prop RS 1000 L = 6.40 – 10.00 m

Extension length [m]	6.40	7.00	8.00	9.00	10.00
Perm. compressive force F [kN]	29.5	26.0	19.6	14.6	11.1
Perm. tension force F [kN]	30.2				

Push-Pull Prop RS 1400 L = 6.40 – 14.00 m

Extension length [m]	6.40 – 11.00	12.00	13.00	14.00
Perm. compressive force F [kN]	30.9	28.6	23.4	19.1
Perm. tension force F [kN]	31.8			



Base Plate-3 RS

Base Plate RS

All PERI Push-Pull Props are connected to the ground by means of the Base Plate-3 RS. The Base Plate is equipped with 2 bolts and thus additionally allows the connection of a shorter push-pull prop as kicker.

Project examples

RS Push-Pull Props in use



Use with VARIO GT 24 Girder Wall Formwork
 Bridge piers, Velim railway testing facility of the VUZ
 Research Institute, Czech Republic.

Use with VARIO GT 24 Girder Wall Formwork
 The Arctic Ring, Copenhagen Zoo, Denmark.

Use with LICO Column Formwork
 ITCC Phase II, Riyadh, Saudi Arabia.





The HELIOS building completed the INES complex, the National Institute for Solar Energy, in Le Bourget du Lac, France.

The 2.40 m wide and 13.50 m high movable units consisting of TRIO Panel Formwork were assembled on the ground and brought into position with the crane. Four rows of RS Push-Pull Props served to vertically position the formwork elements as well as transferring the wind loads. The props are connected to the Platform MXP which is tightly connected to the formwork thus facilitating safe working conditions at great heights.

Use with TRIO Wall Formwork

Bâtiment HELIOS pour l'INES, Le Bourget du Lac, France.

Use with MAXIMO Panel Formwork

CIMC Silvergreen production hall and administration building, Günzburg, Germany.



Use with TRIO Panel Formwork

Biomass storage facility, sugar factory Anklam, Germany.



Use with MAXIMO Formwork and MXP

Customer Service Centre, Winnenden, Germany.



**The optimal System
for every Project and
every Requirement**



Wall Formwork



Column Formwork



Slab Formwork



Climbing Systems



Bridge Formwork



Tunnel Formwork



Shoring Systems



Construction Scaffolding



Facade Scaffolding



Industrial Scaffolding



Access



Protection Scaffolding



Safety Systems



**System-Independent
Accessories**



Services



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