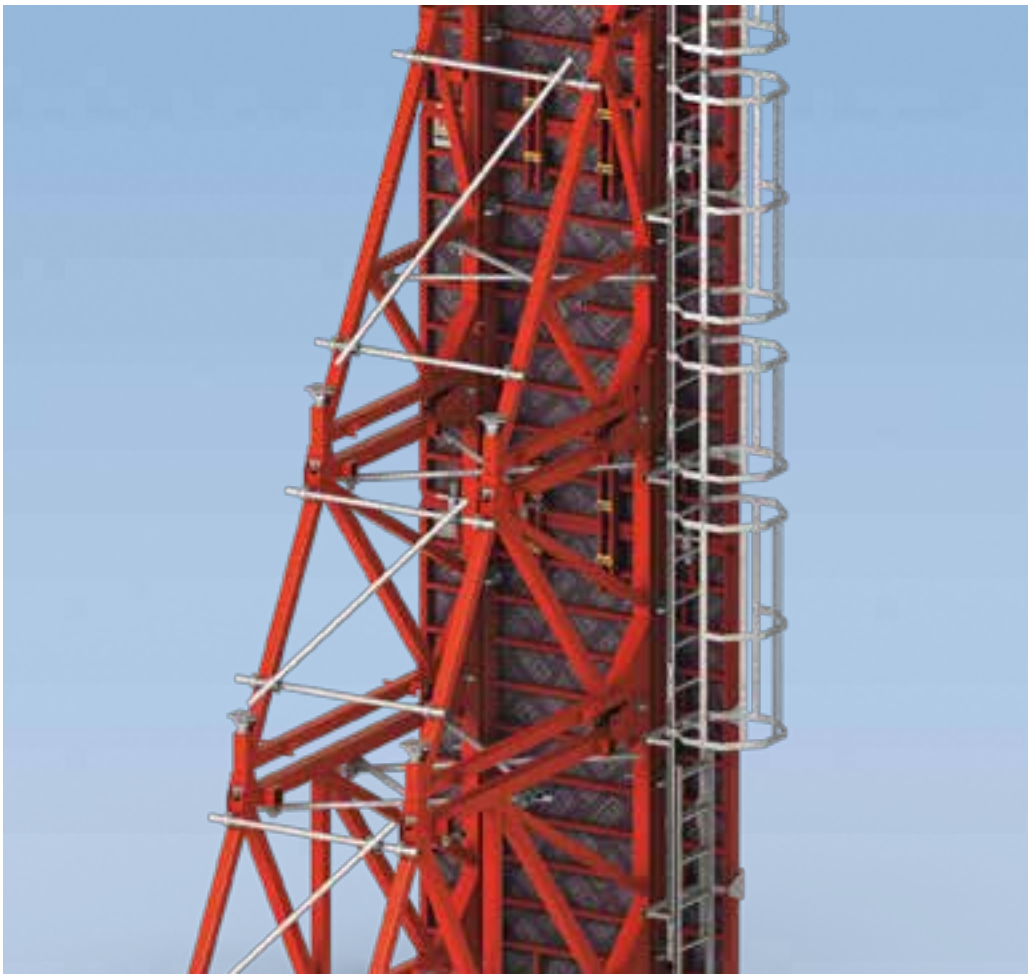
SB Brace Frame

Reliable load transfer for single-sided forming operations up to 8.75 m high

Product Brochure – Issue 09/2018



Content

Issue 09/2018

Publisher

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Important information

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

The photos shown in this brochure feature construction sites in progress. 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.

In addition, computer graphics are used, which are to be understood as system representations. To ensure a better understanding, these and the detailed illustrations shown have been partially reduced to show certain aspects. The safety installations that may not be shown in these illustrations must nevertheless still be available. Please note that 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.

The SB Brace Frame

Reliable load transfer for single-sided forming operations up to 8.75 m high

SB Brace Frames transfer the fresh concrete pressure into the sub-structure and foundations during single-sided concreting of components. In addition, they can be used as horizontal heavy-duty brackets.

When carrying out single-sided concreting operations against existing walls, rock or sheet piling, the full fresh concrete pressure exerted on the surface of the formwork must be transferred to the sub-structure, through a suitably anchored brace frame construction. PERI Brace Frames have been designed for concreting heights of up to 8.75 m and a fresh concrete pressure of maximum 60 kN/m².

The brace frame system consists of three versions. The Brace Frames SB-A0, A, B and C can be used individually or in combination to accommodate different heights. They can be extended modularly up to 8.75 m in height using bolts and cotter pins. Using a standard configuration, the SB-2 Brace Frame can be used up to a maximum concreting height of 6.00 m. For forming single-sided walls of up to 3.00 m concreting heights, the SB-L Brace Frame can be used without a crane. It is assembled on-site using standard components.

All Brace Frame frames can be quickly and easily connected to all PERI formwork systems. Through a corresponding assembly of scaffold tubes, the Brace Frame can be adapted to match the formwork regarding the width of influence. All individual components are sized to conform with truck or container transport requirements.

Quickly extended without any additional components
as all required connection parts are already mounted on the Brace Frame unit

Extremely versatile use
with all PERI wall formwork systems

Can be used horizontally
as working platforms up to 8.75 m wide

Quickly extended without any additional components

as all required connection parts are already mounted on the Brace Frame

The modular structure is a big advantage. Brace Frames can be extended up to 8.75 m high and are easily connected using bolts and cotter pins.

All required connection parts are already mounted on each Brace Frame. When extending, no further additional parts are needed; a hammer is the only tool required.

For lower concreting heights of 4.00 m, the frames of Brace Frames SB-A and SB-C can be combined.

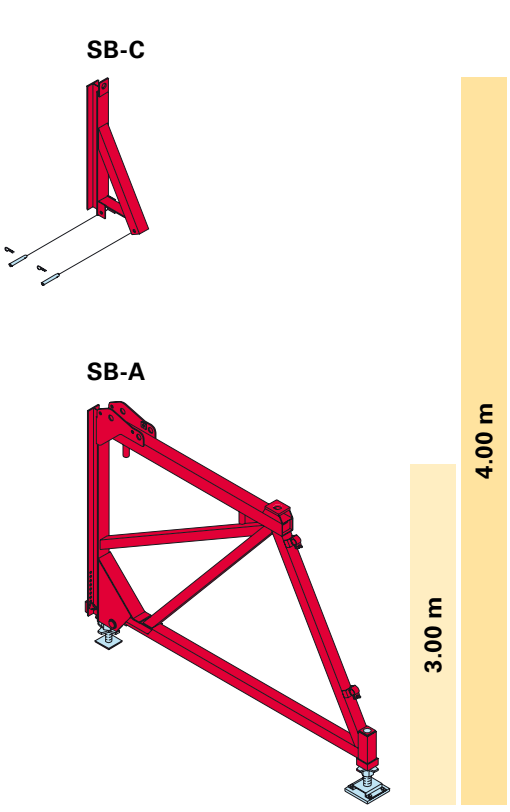
When concreting single-sided against existing sheet piling, the entire fresh concrete pressure is transferred into the sub-structure via the Brace Frame complete with corresponding anchorage.

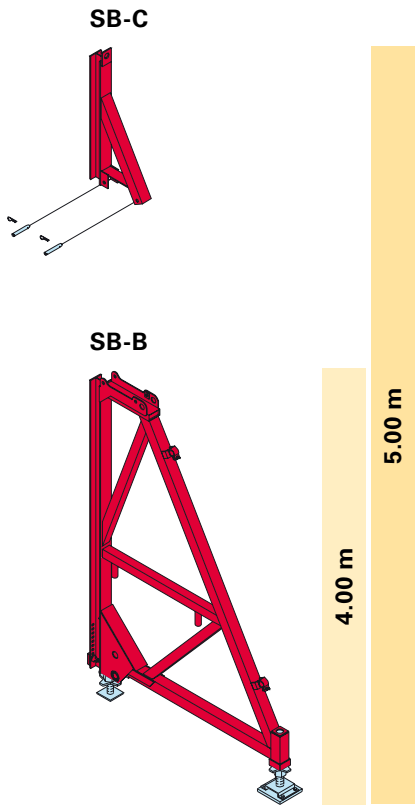
Through a corresponding assembly of scaffold tubes, the Brace Frame can be adapted to match the formwork regarding the width of influence.

Quickly extended without any additional components

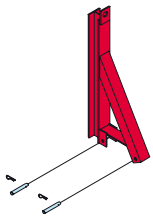
as all required connection parts are already mounted on the Brace Frame

Due to the modular combination of the Brace Frame frames, concreting heights of up to 8.75 m are possible. When extending, only bolts and cotter pins are needed, which are mounted on the Brace Frame.

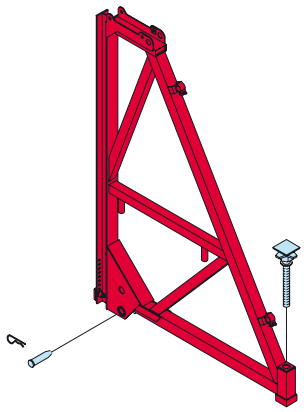




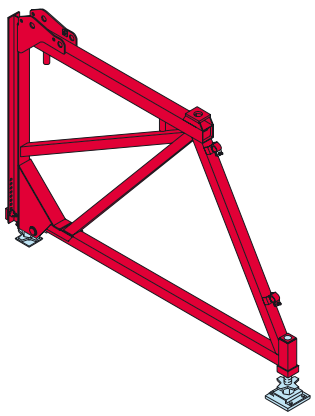
SB-C



SB-B



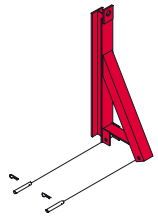
SB-A



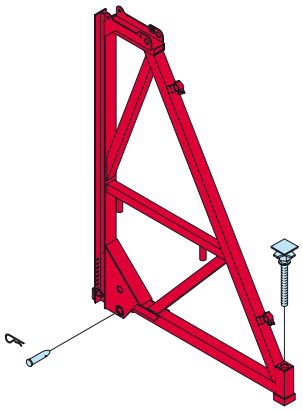
6.00 m

6.75 m

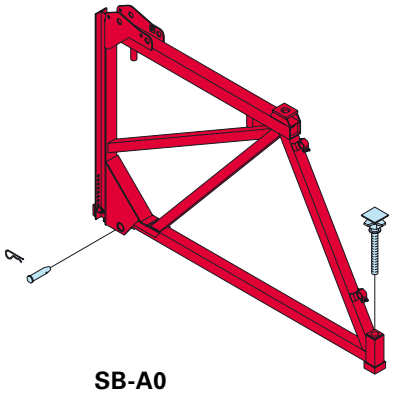
SB-C



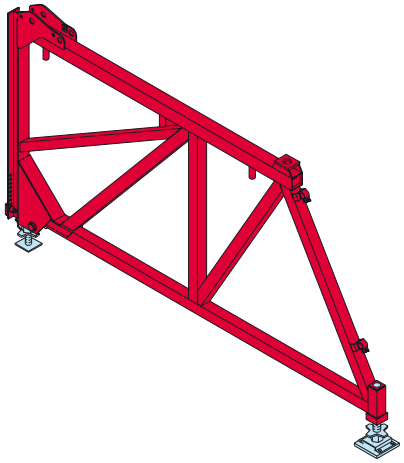
SB-B



SB-A



SB-A0



8.75 m

Extremely versatile use
with all PERI wall formwork systems

The SB-A0, A, B and C brace frames are designed with a strong European IPB wide flange beam section on the front which allows forces to be transferred to them at all points. Thereby, the selection of formwork panels for MAXIMO, TRIO, DOMINO or the position of the steel walers with VARIO GT 24 and RUNDFLEX is not an issue. The Brace Frames can be combined with PERI wall formwork systems using system connection parts.

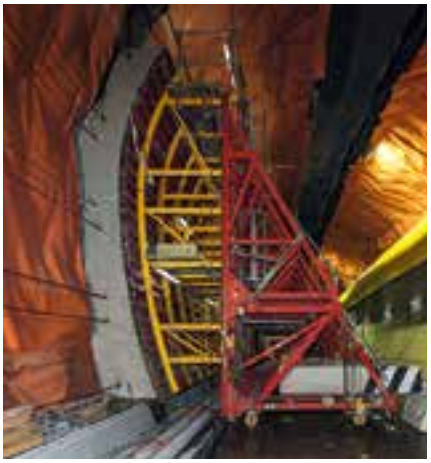
Brace Frames are assembled on the panels positioned horizontally on the ground. A crane is always required for mounting the Brace Frame on the formwork. The nature of the connection allows them to be lifted as a single unit.

The formwork support connects Brace Frames SB-A0, A, B, C with the MAXIMO, TRIO or DOMINO formwork systems.

The RUNDFLEX-Brace Frame connection is realised using a waler connector and wedge, just like the VARIO GT 24 Girder Wall Formwork.

Force is safely and reliably transferred at all connection points of the SB-A0, A, B and C.

For single-sided concreting, the Brace Frame transfers the high loads into the foundations.



The required working platforms are correspondingly attached to the respective formwork system.

Can be used horizontally
as working platforms up to 8.75 m wide

The Brace Frames can also be used as horizontal heavy-duty brackets. This application allows the formation of larger working platforms of up to 8.75 m wide, whilst simultaneously accommodating high shear forces.

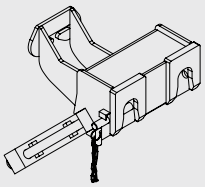
The large shear and tensile forces are transferred into the concrete via the building-approved PERI Climbing Cone-2 M36/DW 26.

Similar to crane-climbed systems, Brace Frame Brackets can be safely and easily hooked onto climbing cones by means of Scaffold Mounting Rings.

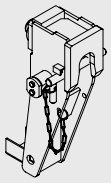
The connectable Brace Frames can be used horizontally as a load-bearing bracket construction.

The spacing and number of Brace Frame Sections are determined through the existing load.

For use as a horizontal heavy-duty bracket, two different suspension methods are available:



1. Double suspension with Wall Scaffold Hinge SB double
For the SB-A0, A and B systems, the permissible shear force for the Brace Frame Wall Scaffold Hinge-2 is 200 kN.



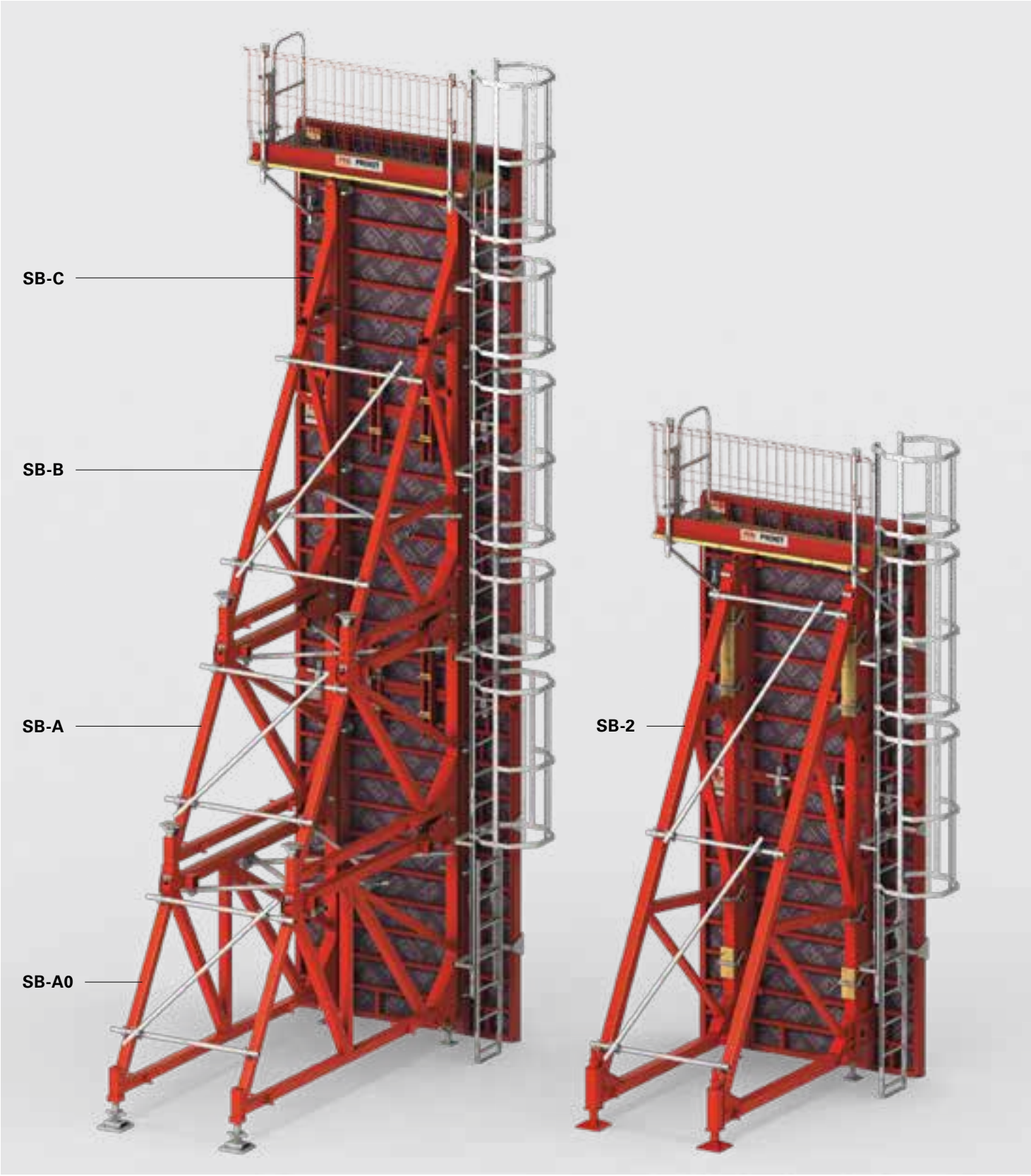
2. Single suspension with Wall Scaffold Hinge SB
For Brace Frames SB-A0, A, B and SB-2, the permissible shear force for the Brace Frame Wall Scaffold Hinge is 120 kN.

Horizontally mounted Brace Frame system combined with system components of the VARIOKIT Engineering Construction Kit form cantilevered working platforms.

Brace Frames and system components taken from the VARIOKIT Engineering Construction Kit formed large-sized platforms up to 8.75 m wide.

Horizontally positioned Brace Frames could replace high shoring structures for slab cantilevers.

The Brace Frame system at a glance



The Brace Frame system consists of three versions. The Brace Frames SB-A0, A, B and C can be used individually or in combination to accommodate different heights. They can be extended modularly up to 8.75 m in height using bolts and cotter pins.

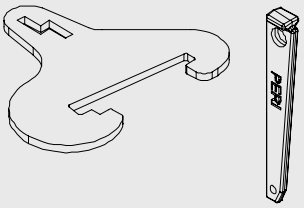
Using a standard configuration, the Brace Frame SB-2 can be used up to a maximum concreting height of 6.00 m.

For forming single-sided walls of up to 3.00-m concreting heights, the Brace Frame SB-L can be used without a crane. It is assembled on-site using standard components.

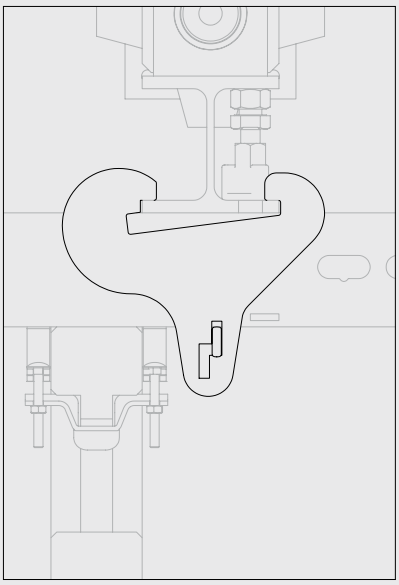
Connecting to system formwork

Connection to girder formwork with Waler Connector and Wedge

For mounting the Brace Frame on VARIO GT 24 Girder Wall Formwork with a maximum concreting height of 8.75 m or on RUNDFLEX Circular Formwork with a maximum concreting height of 8.40 m, one waler connector and one wedge are used per waler line.

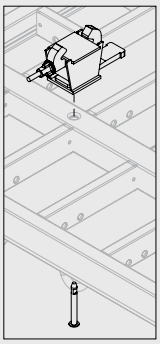


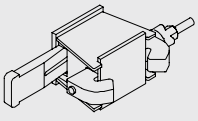
Waler Connector and Wedge for connecting Brace Frame SB-A, B, C to girder formwork.



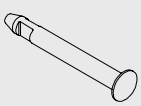
Connection to panel formwork with Brace Frame connection and bolts

For mounting the Brace Frame to panel formwork such as MAXIMO, TRIO or DOMINO with a maximum vertical concreting height of 8.75 m or 8.40 m horizontally, one Connector SB and one bolt are used per waler line / anchor point. For MAXIMO panel formwork, a sleeve is additionally inserted into the anchor holes.

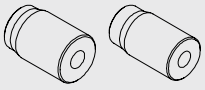




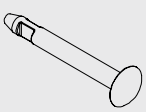
Connector SB-A, B, C - MX/TR/D



Bolt Ø 19x165



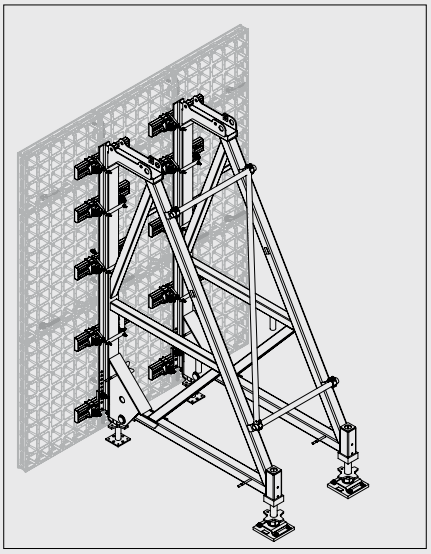
Sleeve SB-MAXIMO and SB-MAXIMO WDMX for removable sealings



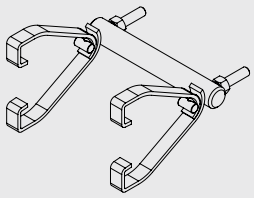
Bolt SB-MAXIMO

Connection to DUO Universal Formwork with Hook Strap SB DUO

For mounting the Brace Frame on the DUO Universal Formwork with a maximum concreting height of 5.40 m, the Hook Strap SB DUO is used in combination with the Compensation Waler DUO.



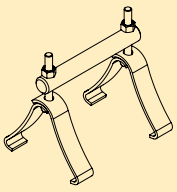
The Brace Frames are fixed at vertical joint positions of the panels mounted on the Compensation Waler DUO.



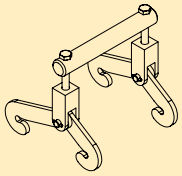
Hook Strap SB DUO for mounting the Brace Frame SB to the Compensation Waler DUO.

For mounting the Brace Frame SB-2 on girder wall formwork, one Hook Strap is required for each waler line. For fixing to the steel walers, the Hook Strap SB-1, 2 or Hook Strap SB-2 can be used asymmetrically.

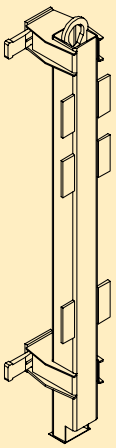
For mounting the Brace Frame SB-2 to MAXIMO, TRIO or DOMINO panels, a Connector is first fixed to the anchor holes. The Brace Frame can subsequently be connected to the lugs of the Connector by means of Hook Straps SB-1, 2.



Hook Strap SB-1, 2



Hook Strap SB-2, asymmetric



Connector SB-1, 2 - MX/TR/D

Anchor systems

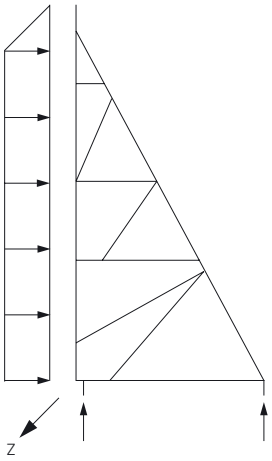
Connection to PERI formwork systems is realised using corresponding connection parts. There are three different anchor systems for tensile anchoring of the occurring forces in the ground.

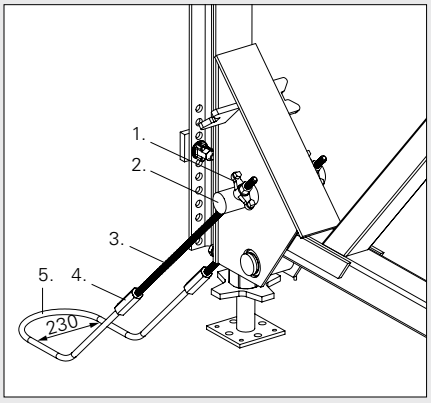
The choice of anchoring system is determined by the tensile force Z applied on the Brace Frame.

Depending on the anchor system used, a Double Anchor Tie Yoke or Anchor Waler is used.

Anchor system	perm. anchor forces
DW 15	90 kN
DW 20	150 kN
DW 26	250 kN

Anchoring is always carried out using 2 anchors per Brace Frame so that, e.g. when using the DW 20 system, a maximum tensile force of 2 x 150 = 300 kN may be allowed.

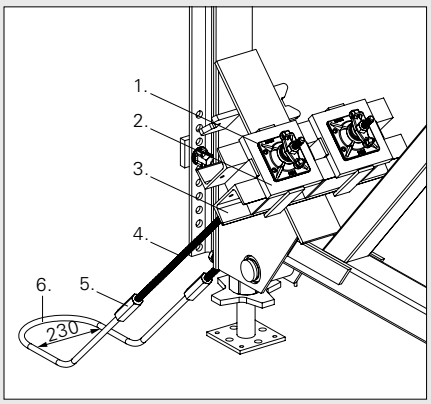




Tie System DW 15
in the execution with Double Anchor Tie Yoke
Permissible tension force 2 x 90 kN = 180 kN

1. Wingnut DW 15
2. Double Anchor Tie Yoke
3. Tie Rod DW 15
4. Hex. Nut DW 15 SW 30/108
5. Brace Frame Double Anchor DW 15

Alternatively with Tie Rod DW 15 with Threaded Anchor Plate DW 15



Tie System DW 15
in the execution with Anchor Waler
Permissible tension force 2 x 90 kN = 180 kN

1. Wingnut Pivot Plate DW 15
2. Anchor Plate SB DW 26
3. Anchor Waler U140, 0.55 m or Anchor Waler U140, 2.35 m
4. Tie Rod DW 15
5. Hex. Nut DW 15, SW 30/108
6. Brace Frame Double Anchor DW 15

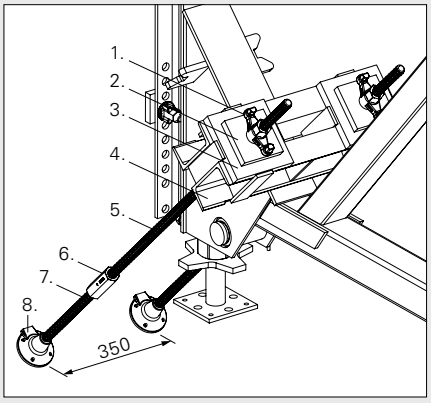
Alternatively with Tie Rod DW 15 with Threaded Anchor Plate DW 15

Particular attention must be paid to the following when using the Brace Frames.

The structural members (e.g. foundations or ground slabs) must be able to accommodate the tension and compression forces which occur. Check their design and anchor positioning before concreting.

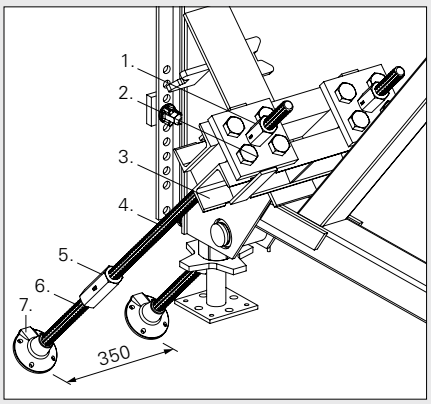
The “other side” of the single-sided formwork (existing walls, planking, rocks etc. must naturally be able to withstand the fresh concrete pressure acting upon it.

DW Tie Rods installed for anchoring purposes must not be welded or bent. When using other anchors or formwork systems, the possible applications as well as stability must be checked separately by the user.



Tie System DW 20
in the execution with Anchor Waler
Permissible tension force 2 x 150 kN = 300 kN

1. Wingnut DW 20
2. Counterplate DW 20, 120 x 120 x 20
3. Anchor Plate SB DW 26
4. Anchor Waler U160, 0.55 m
5. Tie Rod DW 20
6. Hex. Nut DW 20, SW 36/110
7. Tie Rod DW 20
8. Threaded Anchor Plate DW 20



Tie System DW 26
in the execution with Anchor Waler
Permissible tension force 2 x 250 kN = 500 kN

1. Hex. Nut DW 26, SW 46/80
2. Tension Release Plate SB DW 26
3. Anchor Waler U160, 0.55 m
4. Tie Rod DW 26
5. Hex. Nut DW 26, SW 46/150
6. Tie Rod DW 26
7. Threaded Anchor Plate DW 26

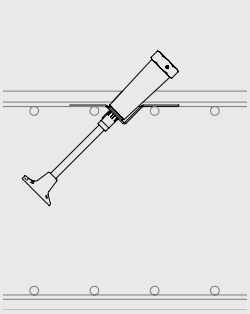
Simple and accurate anchor installation

With the PERI V-Tie Holder and Leading Anchor Coupler, accurate assembly of the Tension Anchor under 45° is possible. This ensures safe and reliable transfer of loads and, thus, maximum stability of the Brace Frame and formwork.

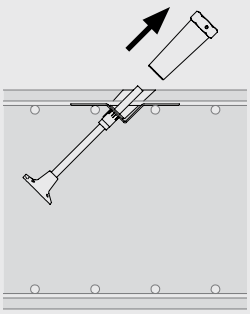
The economic advantages of the anchoring system with the V-Tie Holder and Leading Anchor Coupler are:

- **Only a small number of coupling nuts have to be stocked**
- **No need to cut tie rods off**
- **Tie rods are recoverable**

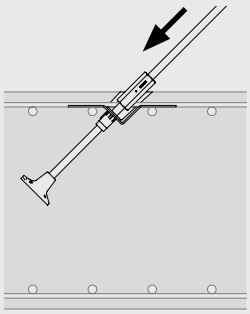
Work sequence for lost tie rods



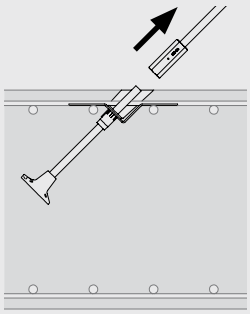
Before concreting, the V-Tie Holder together with Tie Rod, Threaded Plate and Leading Anchor Coupler are installed in the reinforcement.



After concreting, the Leading Anchor Coupler can be removed using the Spanner SW 70, and then re-used.

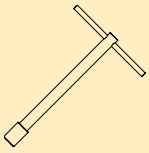


After the tie rod has been checked to ensure that it has been correctly fitted, the hex. nut and tie rod are securely fixed to the Brace Frame by means of the spanner.



When dismantling the Brace Frame, the tie rod and hex. nut are unscrewed with the spanner and the remaining hole is subsequently filled.

Required tools



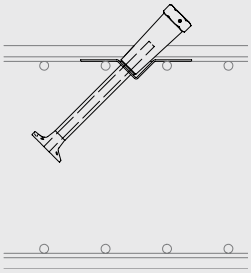
Tension Rod Wrench 20/26

Spanner SW 30, 36, 46, 70

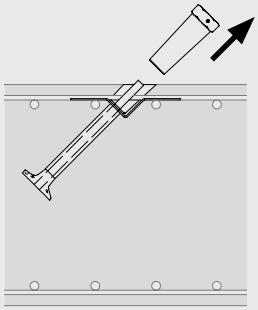
With the V-Tie Holder, as a lost part, an exact alignment of the Tension Anchor to 45 ° is possible.

The Leading Anchor Coupler can be recovered after concreting.

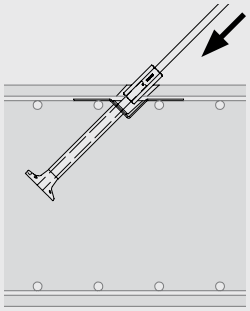
Work sequence for re-usable tie rods



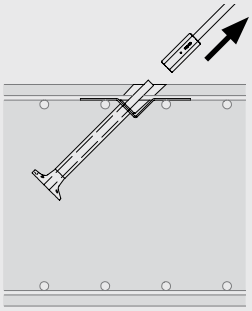
Before concreting, the V-Tie Holder, the Spacer Tube rough, Threaded Plate, tie rod and the Leading Anchor Coupler are all installed in the reinforcement.



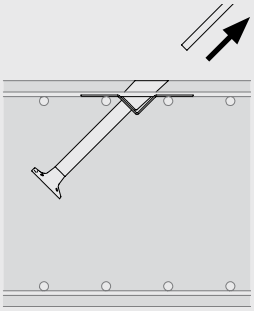
After concreting, the Leading Anchor Coupler can be removed using the Spanner SW 70, and subsequently be re-used.



After the tie rod has been checked to ensure that it has been correctly fitted, the hex. nut and tie rod are securely fixed to the Brace Frame using the spanner.



When dismantling the Brace Frame, the tie rod and hex. nut are unscrewed with the spanner.



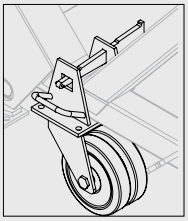
The tie rod can be removed using the Tension Rod Wrench and re-used. The remaining hole is subsequently filled.

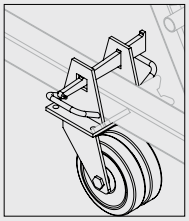
Simple logistics

Brace Frames can be moved as units, consisting of 2 Brace Frames including the formwork, with the crane using the suspension points provided for this purpose.

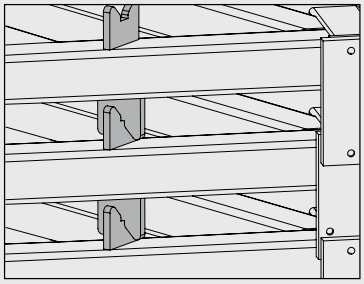
With the guide roller, the Brace Frame unit can be moved slowly without the help of any power-operated pulling means. The guide roller is simply pushed over the profile tube and secured with a wedge.

Diagonal bracing is required when moving the Brace Frame and aligning the formwork unit with the crane.

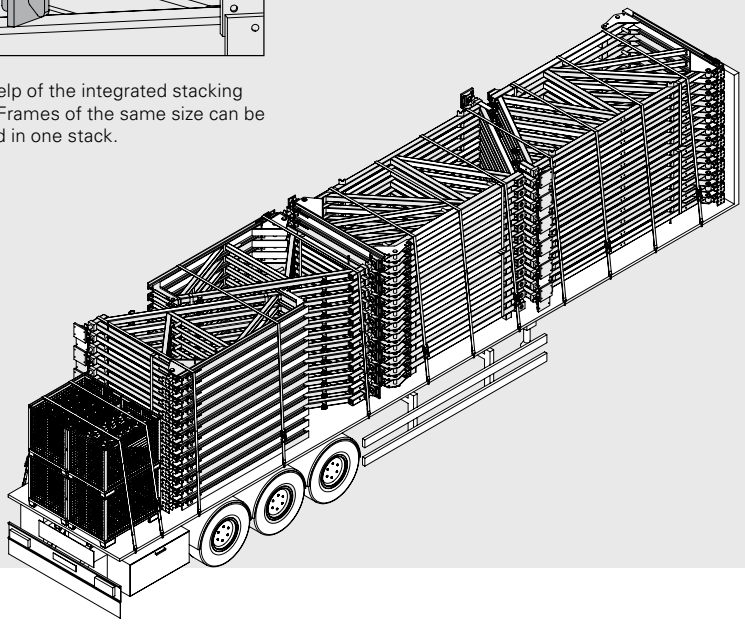




All individual components are sized to conform with truck or container transport requirements. Depending on the truck, 6 Brace Frames can be transported as one stack - 10 frames can be stacked when using the Brace Frame SB-C.

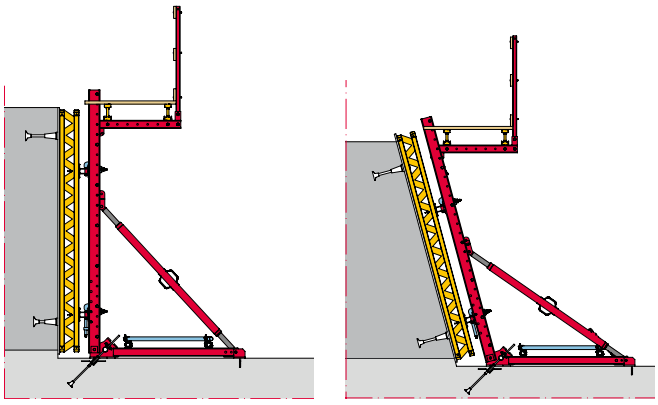


With the help of the integrated stacking aid, Brace Frames of the same size can be transported in one stack.



The Brace Frame SCS as a further single-sided solution

The Brace Frame SCS is a modular construction consisting of Strongbacks, Heavy-Duty Spindles and Starter Walers. For the first casting segment of the SCS Climbing System, a Starter Brace Frame is used while diagonal anchoring transfers the loads into the bottom slab.



The SCS Starter Brace Frame is designed in such a way that the Strongback, Spindle and formwork can also be used in the next casting segments with the climbing bracket.

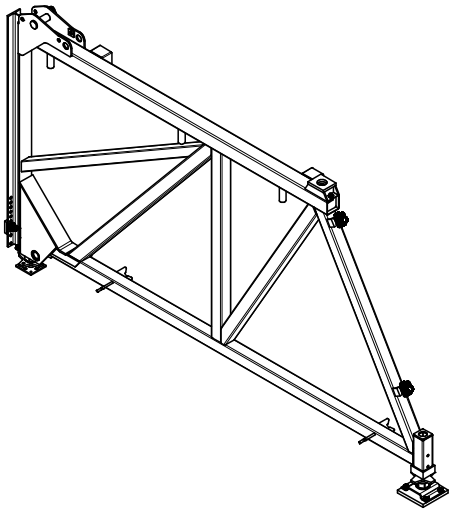
With SCS, inclined starters can also be realised as the inclination of the wall is adjusted using the Heavy-Duty Spindle.

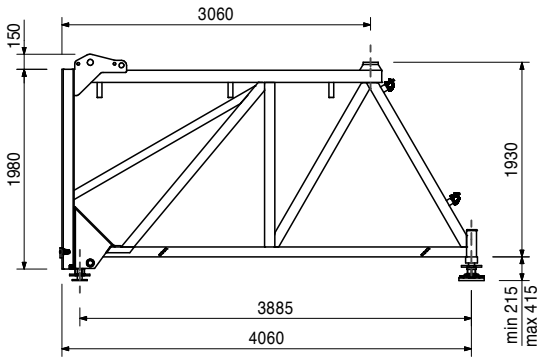
SB Brace Frame

Item no.	Weight kg
025690	412.000

Brace Frame SB-A0
For forming single-sided walls and special applications.

Complete with
1 pc. 700555 Rear Base Spindle for SB
1 pc. 700554 Adjusting Nut SB-A0/A/B
1 pc. 025730 Spindle TR 60 x 9/43
1 pc. 710545 Bolt Ø 50 x 150, galv.
1 pc. 710618 Cotter Pin 8, galv.
2 pc. 017040 Screw-On Coupler AK 48, galv.
1 pc. 700553 Adapter
1 pc. 030130 Cam Nut DW 15, galv.





Accessories

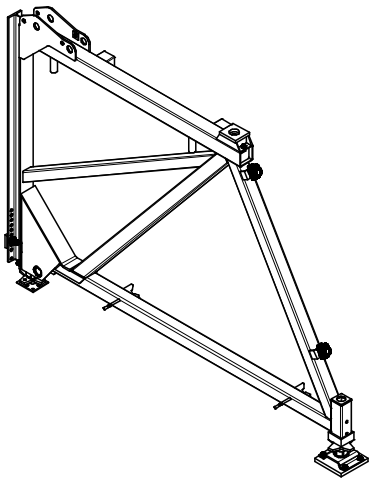
027210	3.300

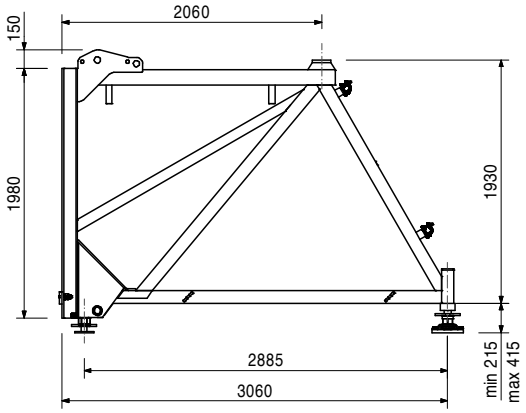
Spanner SW 80, for SB

025700	325.000

Brace Frame SB-A
For forming single-sided walls and special applications.

Complete with
1 pc. 700555 Rear Base Spindle for SB
1 pc. 700554 Adjusting Nut SB-A0/A/B
1 pc. 025730 Spindle TR 60 x 9/43
2 pc. 017040 Screw-On Coupler AK 48, galv.
1 pc. 700553 Adapter
1 pc. 030130 Cam Nut DW 15, galv.





Accessories

027210	3.300

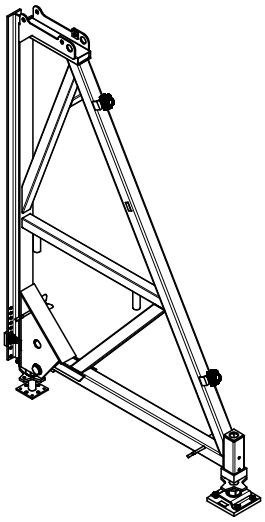
Spanner SW 80, for SB

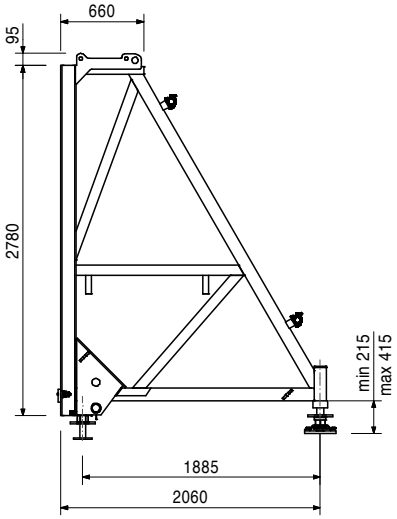
SB Brace Frame

Item no.	Weight kg
025710	276.000

Brace Frame SB-B
For forming single-sided walls and special applications.

Complete with
1 pc. 700555 Rear Base Spindle for SB
1 pc. 700554 Adjusting Nut SB-A0/A/B
1 pc. 025730 Spindle TR 60 x 9/43
1 pc. 710545 Bolt Ø 50 x 150, galv.
1 pc. 710618 Cotter Pin 8, galv.
2 pc. 017040 Screw-On Coupler AK 48, galv.
1 pc. 700553 Adapter
1 pc. 030130 Cam Nut DW 15, galv.





Accessories

027210	3.300

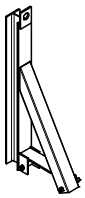
Spanner SW 80, for SB

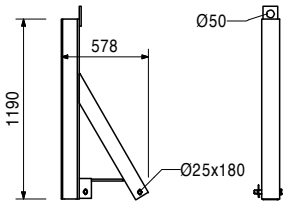
025720	49.900

Brace Frame SB-C
For forming single-sided walls and special applications.

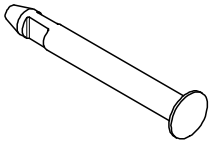
Complete with
2 pc. 715936 Pin Ø 25 x 180, incl. dowel pin Ø 6
2 pc. 018060 Cotter Pin 4/1, galv.

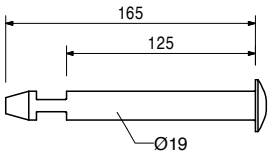
Technical Data
Permissible load-bearing point capacity
1.5 t with crane sling angle ≤ 15°,
2.5 t with vertical lift.





Item no.	Weight kg	
027690	0.368	**Bolt SB-TRIO/DOMINO, galv.** For panel formwork with 12 cm overall thickness.

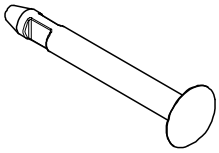


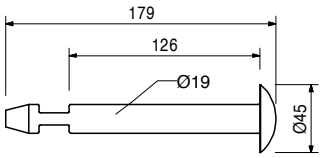


Accessories

114107	1.190	**Sleeve SB-MAXIMO, galv.**
114417	1.400	**Sleeve SB-MAXIMO WDMX**

113255	0.414	**Bolt SB-MAXIMO, galv.** For connecting MAXIMO Panels with Brace Frame SB.

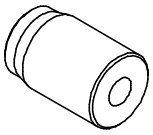


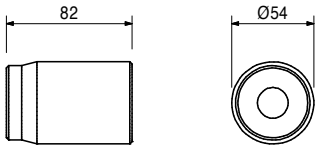


Accessories

114107	1.190	**Sleeve SB-MAXIMO, galv.**
114417	1.400	**Sleeve SB-MAXIMO WDMX**

114107	1.190	**Sleeve SB-MAXIMO, galv.** For connecting MAXIMO Panels with Brace Frame SB.	**Note** For use with Sealing Sleeve MX Ø 16 item-no. 112342 and Nut Sealing Sleeve MX Ø 16 item-no. 112338.

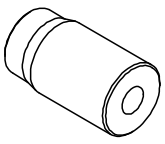


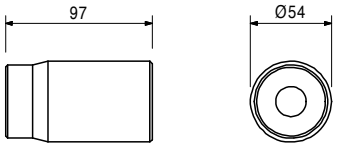


Accessories

113255	0.414	**Bolt SB-MAXIMO, galv.**
114417	1.400	**Sleeve SB-MAXIMO WDMX**

114417	1.400	**Sleeve SB-MAXIMO WDMX** For connecting MAXIMO Panels to Brace Frames SB.	**Note** For use with Sealing Sleeve MX 15 item-no. 123603 and Sealing Sleeve MX 18 item-no. 123604.



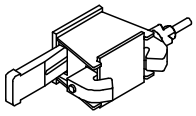


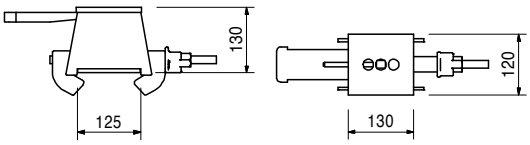
Accessories

113255	0.414	**Bolt SB-MAXIMO, galv.**

Item no.	Weight kg	
025740	9.140	**Connector SB-A, B, C - MX/TR/D** For connecting MAXIMO, TRIO and DOMINO Panels with Brace Frames SB-A0, A, B, C.

Note
1 piece per anchor point.

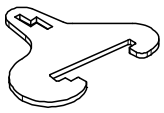


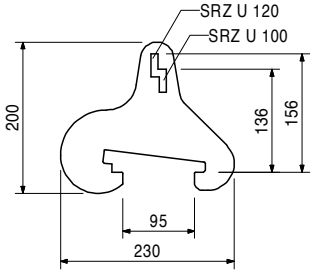


Accessories

027690	0.368	**Bolt SB-TRIO/DOMINO, galv.**
113255	0.414	**Bolt SB-MAXIMO, galv.**
114107	1.190	**Sleeve SB-MAXIMO, galv.**
114417	1.400	**Sleeve SB-MAXIMO WDMX**

025760	1.300	**Waler Connector SB-A, B, C** For connecting Steel Walers SRZ and SRU, Profile U100 respectively U120 to SB-A0, A, B, C.

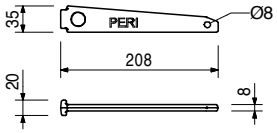




Accessories

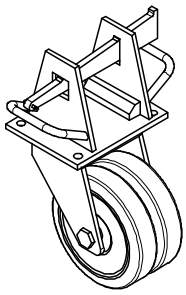
024250	0.331	**Wedge K, galv.**

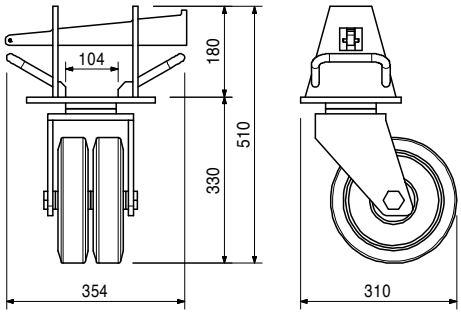
024250	0.331	**Wedge K, galv.** For Coupling Compression Plate KDP, Wedge Head Piece SRZ/SRU and Waler Connector SB-A, B, C.



025750	28.700	**Guide Roller SB-A, B** For moving SB-A0, SB-A and SB-B brace frame units.

Technical Data
Permissible load-bearing capacity 1.2 t.



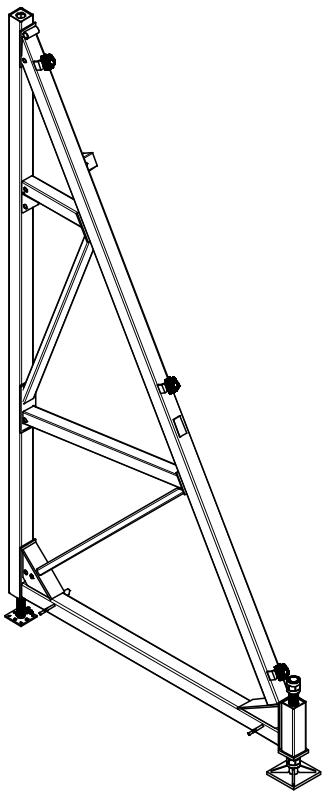


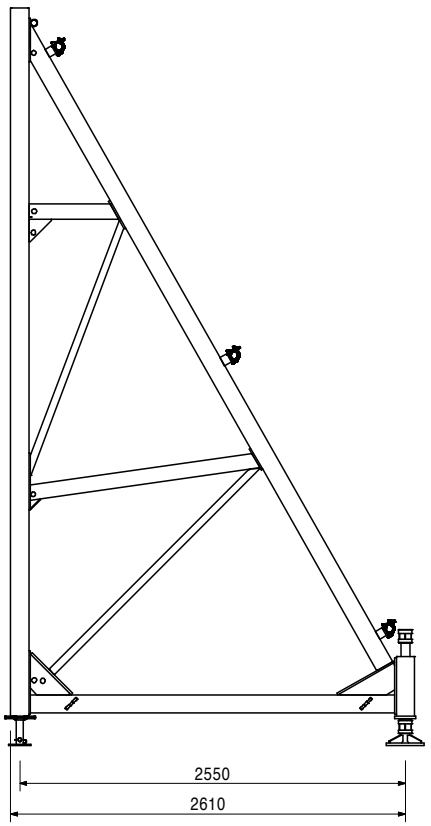
SB Brace Frame

Item no.	Weight kg
027510	365.000

Brace Frame SB-2
For forming single-sided walls and special applications.

Complete with
1 pc. 715121 Adjusting Unit SB-2
1 pc. 715110 Spindle SB-1, compl.
1 pc. 770012 Split Pin ISO 8752 8 x 60, galv.
3 pc. 017040 Screw-On Coupler AK 48, galv.





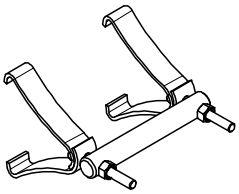
Accessories

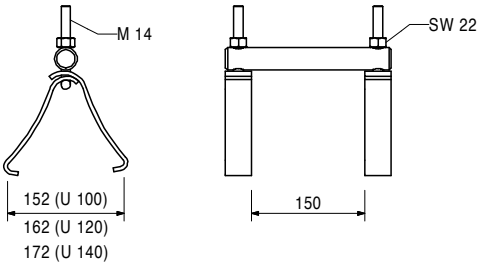
027210	3.300

Spanner SW 80, for SB

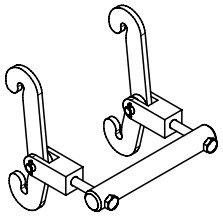
027590	2.400

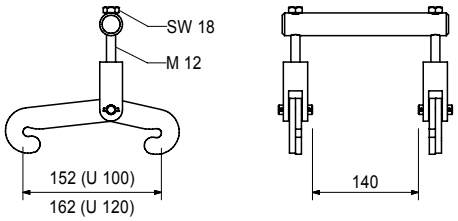
Hook Strap for SB-1, 2
For fixing Brace Frame SB-1 and SB-2 to Steel Waler SRZ and SRU Profile U100 – U140.





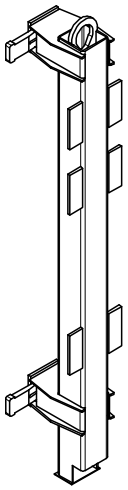
Item no.	Weight kg	
116078	3.970	**Hook Strap for SB-2, asymmetric** For fixing Brace Frame SB-2 to Steel Waler SRZ and SRU Profile U100 – U140.

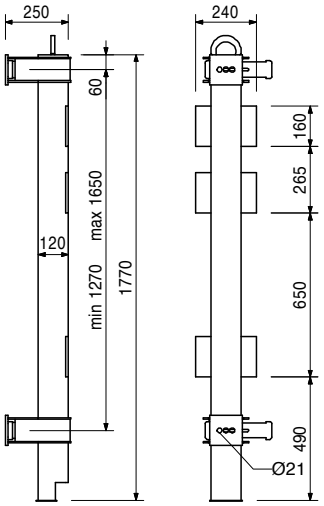




027680	49.600	**Connector SB-1, 2 - MX/TR/D** For assembly of Brace Frame SB-1, 2 to MAXIMO, TRIO and DOMINO Panels.

Technical Data
Permissible load-bearing point capacity 1.0 t with crane sling angle ≤ 15°.

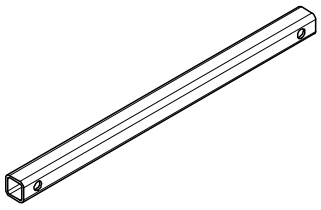


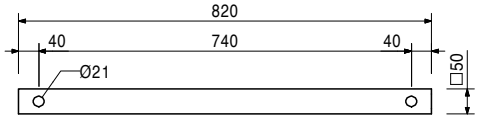


Accessories

027690	0.368	**Bolt SB-TRIO/DOMINO, galv.**
027590	2.400	**Hook Strap for SB-1, 2**
113255	0.414	**Bolt SB-MAXIMO, galv.**
114107	1.190	**Sleeve SB-MAXIMO, galv.**
114417	1.400	**Sleeve SB-MAXIMO WDMX**

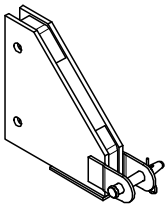
100901	5.370	**SB-L Tension Strut, l = 740 mm** For Brace Frame SB-L. For forming single-sided walls.

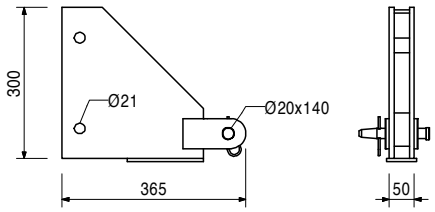




SB Brace Frame

Item no.	Weight kg		
100903	12.000	**SB-L Anchor Bracket** For Brace Frame SB-L. For forming single-sided walls.	**Complete with** 1 pc. 105400 Pin Ø 20 x 140, galv. 1 pc. 018060 Cotter Pin 4/1, galv.

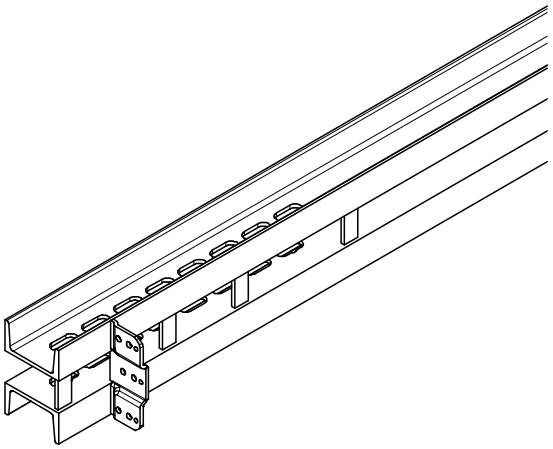


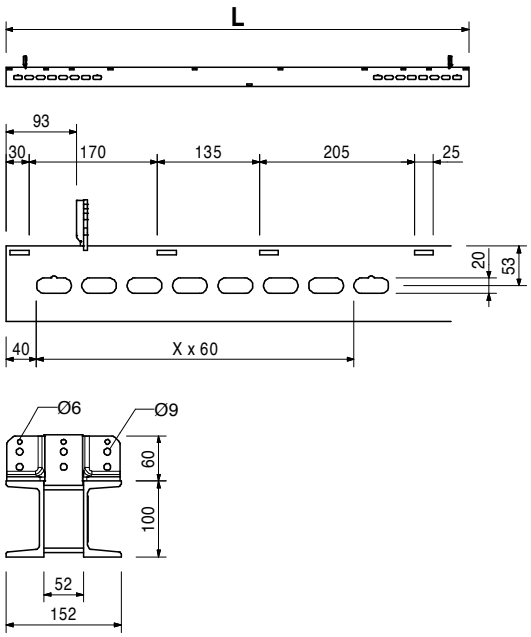


Accessories

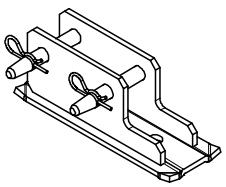
024910	0.303	**Bolt ISO 4014 M20 x 100-8.8, galv.**
710334	0.064	**Nut ISO 4032 M20-8, galv.**
024180	0.126	**Compensation Washer 20, galv.**

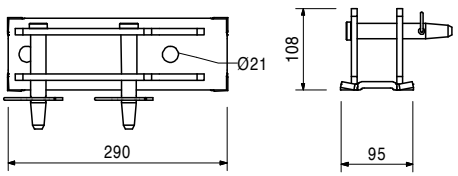
010050	51.600	**Steel Waler SRZ U100, l = 2.45 m** Steel waler for VARIO GT 24 panels and special applications.	**Note** Special lengths and other profile sizes on request. **Technical Data** U100: Wy = 82.4 cm³, Iy = 412 cm⁴



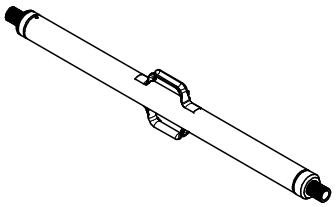


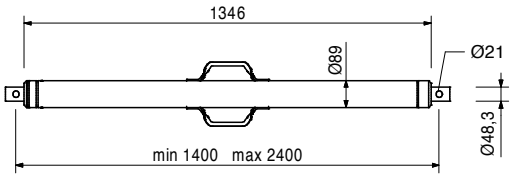
102018	4.880	**Base Plate-2 for RS 1000/1400, galv.** For assembly of Push-Pull Props RS 210, 260, 300, 450, 650, 1000, 1400 and Heavy Duty Spindles.	**Complete with** 2 pc. 105400 Pin Ø 20 x 140, galv. 2 pc. 018060 Cotter Pin 4/1, galv.



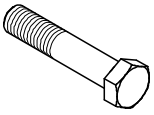


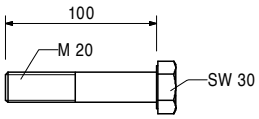
Item no.	Weight kg	
101776	24.900	**Heavy Duty Spindle SLS 140/240** As adjustable spindle in lattice frameworks with SRU Steel Walers and RCS Climbing Rails.



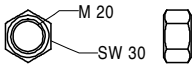


024910	0.303	**Bolt ISO 4014 M20 x 100-8.8, galv.**

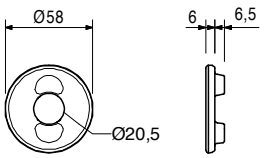




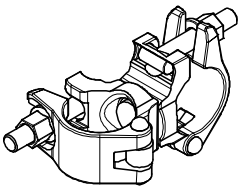
710334	0.064	**Nut ISO 4032 M20-8, galv.**

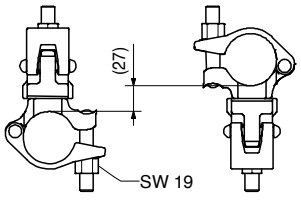


024180	0.126	**Compensation Washer 20, galv.**



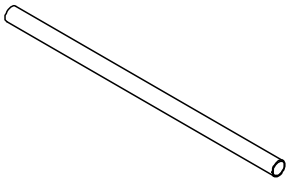
017010	1.400	**Swivel Coupling SW 48/48, galv.** For Scaffold Tubes Ø 48 mm.

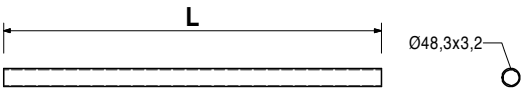




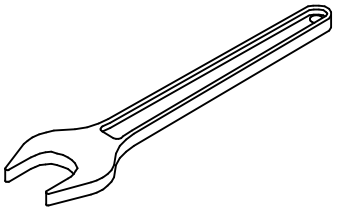
SB Brace Frame

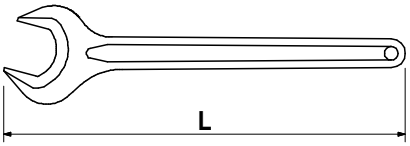
Item no.	Weight kg		
		Scaffold Tubes Steel Ø 48.3 x 3.2	**L**
026415	3.550	**Scaff. Tube Steel Ø 48.3 x 3.2, special length**	
026417	0.000	**Cutting Cost Scaffold Tube**	
026411	3.550	**Scaff. Tube Steel Ø 48.3 x 3.2, l = 1.0 m**	1000
026412	7.100	**Scaff. Tube Steel Ø 48.3 x 3.2, l = 2.0 m**	2000
026413	10.650	**Scaff. Tube Steel Ø 48.3 x 3.2, l = 3.0 m**	3000
026414	14.200	**Scaff. Tube Steel Ø 48.3 x 3.2, l = 4.0 m**	4000
026419	17.750	**Scaff. Tube Steel Ø 48.3 x 3.2, l = 5.0 m**	5000
026418	21.600	**Scaff. Tube Steel Ø 48.3 x 3.2, l = 6.0 m**	6000



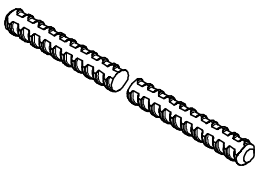


		Spanners SW for SB	**L**
027210	3.300	**Spanner SW 80, for SB**	645
027213	2.300	**Spanner SW 70, for SB**	570
027211	0.760	**Spanner SW 46, for SB**	380
		For different applications.	

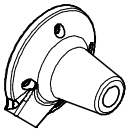


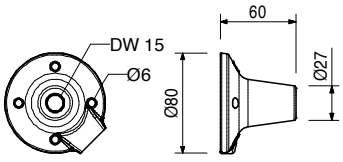


		Tie Rods DW 15	**Note**
030030	1.440	**Tie Rod DW 15, spec. length**	Non-weldable! Take official Approval into consideration!
030050	0.000	**Cutting Cost Tie Rod DW 15, B 15**	
030005	0.720	**Tie Rod DW 15, l = 0.50 m**	**Technical Data**
030480	1.440	**Tie Rod DW 15, l = 1.00 m**	Permissible tension force 90 kN.

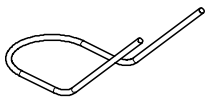


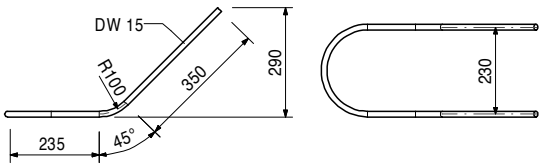
030840	0.515	**Threaded Anchor Plate DW 15**	**Note**
		For use with Tie Rod DW 15 or B 15. For anchoring in concrete.	Lost anchor part.



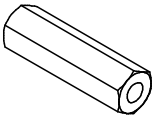


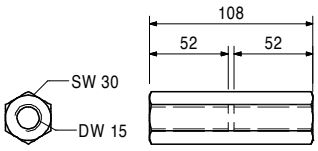
Item no.	Weight kg		
030060	2.130	**Brace Frame Double Anchor DW 15** Non-weldable! Take approval into consideration!	**Technical Data** Permissible load 2 x 90 kN. Dependent on concrete strength and installation depth.



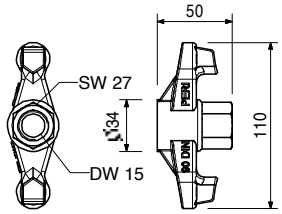


030090	0.402	**Hex. Nut DW 15 SW 30/108, galv.** For coupling Tie Rod DW 15 and B 15.	**Technical Data** Permissible load 90 kN.

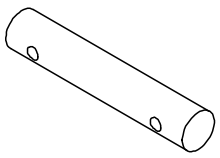


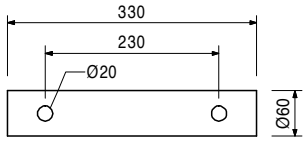


030100	0.439	**Wingnut DW 15, galv.** For anchoring with Tie Rod DW 15 and B 15.	**Technical Data** Permissible load 90 kN.

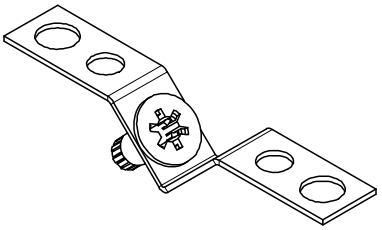


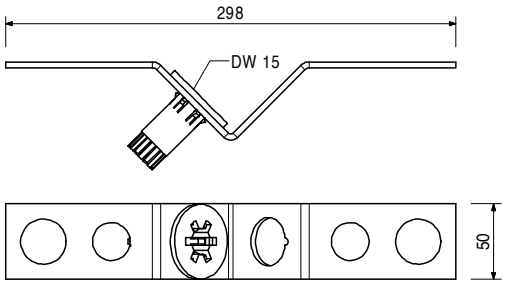
027520	7.030	**Double Anchor Tie Yoke DSW** For anchoring with Tie Rod DW 15.	**Technical Data** Permissible load 2 x 90 kN.



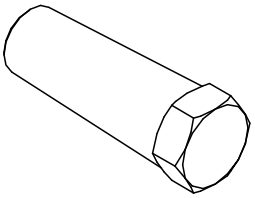


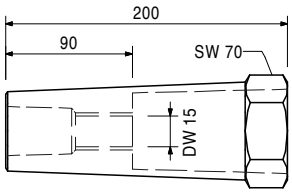
Item no.	Weight kg	
031580	0.440	**V-Tie Holder DW 15** For easy installation of DW 15 Tie Rods at 45° inclinations.



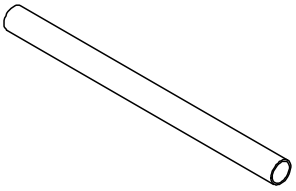


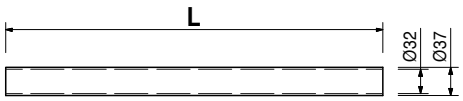
031631	0.345	**Leading Anchor Coupler DW 15, compl.** For easy installation of DW 15 Tie Rods at 45° inclinations.





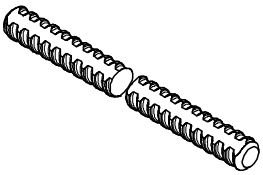
031627	0.967	**Spacer Tube rough DR 32, l = 3.00 m** Plastic spacer tube for DW 26.



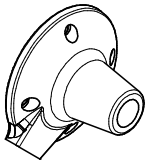


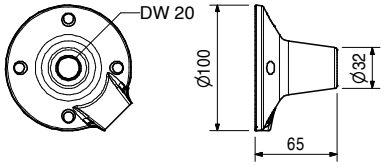
		Tie Rods DW 20
030700	2.560	**Tie Rod DW 20, spec. length**
030800	0.000	**Cutting Cost Tie Rod DW 20/B 20**
030640	1.280	**Tie Rod DW 20, l = 0.50 m**
030641	2.560	**Tie Rod DW 20, l = 1.00 m**

Note
Non-weldable! Take official Approval into consideration!
Technical Data
Permissible tension force 150 kN.

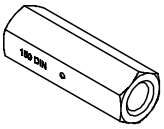


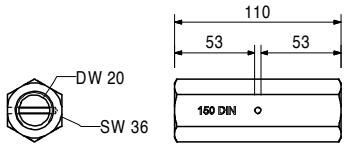
Item no.	Weight kg		
030860	0.792	**Threaded Anchor Plate DW 20** For use with Tie Rod DW 20, B 20 or Screw-On Cone-2 M24/DW 20. For anchoring in concrete.	**Note** Lost anchor part.



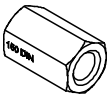


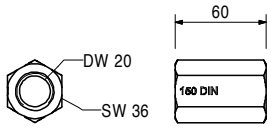
030590	0.685	**Hex. Nut DW 20 SW 36/110, weldable** For coupling Tie Rod DW 20 and B 20.	**Note** Weldable! **Technical Data** Permissible load 150 kN.



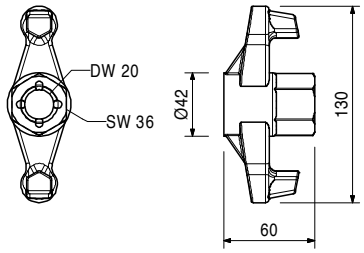


030580	0.371	**Hex. Nut DW 20 SW 36/60, weldable** For anchoring with Tie Rod DW 20 and B 20.	**Note** Weldable! **Technical Data** Permissible load 150 kN.

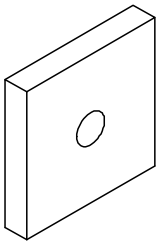


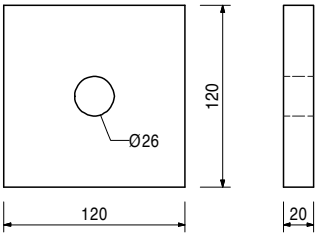


030990	0.786	**Wingnut DW 20, galv.** For anchoring with Tie Rod DW 20 and B 20.	**Technical Data** Permissible load 150 kN.

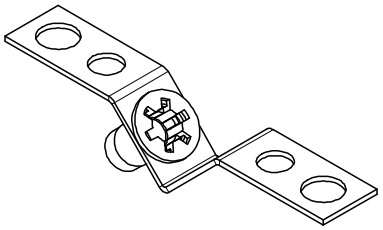


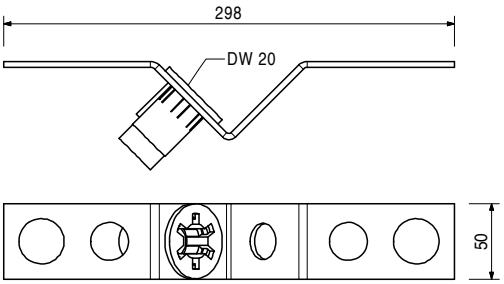
Item no.	Weight kg		
030830	2.180	**Counterplate DW 20, 120 x 120 x 20** For anchoring with Tie Rod DW 20 and B 20.	**Technical Data** Permissible load 150 kN.



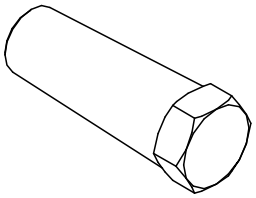


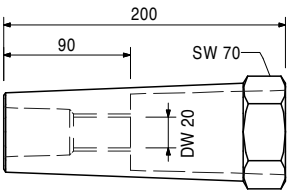
031590	0.420	**V-Tie Holder DW 20** For easy installation of DW 20 Tie Rods at 45° inclinations.



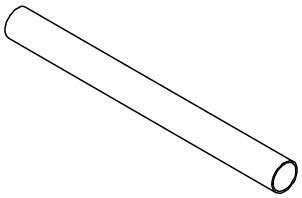


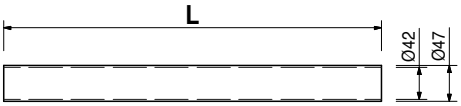
031632	0.355	**Leading Anchor Coupler DW 20** For easy installation of DW 20 Tie Rods at 45° inclinations.



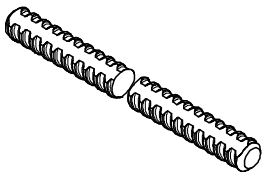


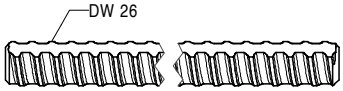
031634	1.250	**Spacer Tube rough DR 42, l = 3.00 m** Plastic spacer tube for DW 20, 26.



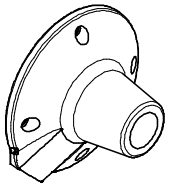


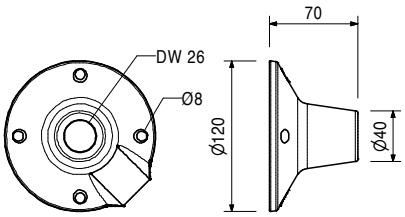
Item no.	Weight kg		
		Tie Rods DW 26	**Note**
030340	4.480	**Tie Rod DW 26, spec. length**	Non-weldable! Take official approval into consideration!
030500	0.000	**Cutting Cost Tie Rod DW 26**	**Technical Data**
030645	2.240	**Tie Rod DW 26, l = 0.50 m**	Permissible tension force 250 kN.
030646	4.480	**Tie Rod DW 26, l = 1.00 m**	



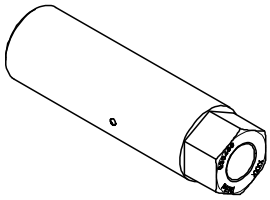


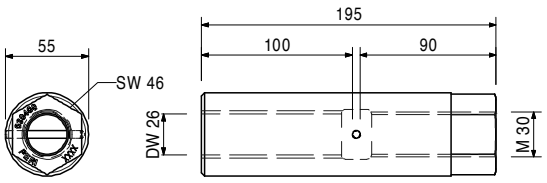
030870	1.260	**Threaded Anchor Plate DW 26** For use with Tie Rod DW 26 or Screw-On Cone M36/DW 26. For anchoring in concrete.	**Note** Lost anchor part.



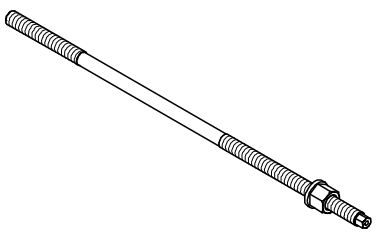


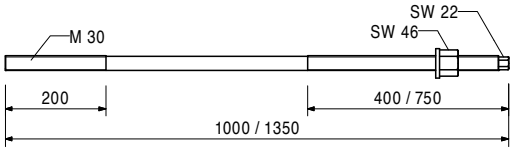
030400	2.620	**Coupling Nut M 30/DW 26, galv.** For coupling Tension Rod and Tie Rod DW 26.	**Technical Data** Permissible load 250 kN.



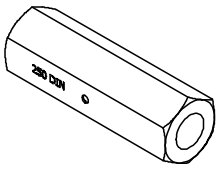


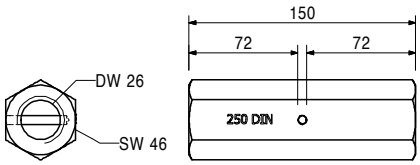
		Tension Rods M30 with Nut	**Technical Data**
027540	5.170	**Tension Rod with Nut 100/M30**	Permissible load 250 kN.
027230	6.810	**Tension Rod with Nut 135/M30**	
		For anchoring the Brace Frame SB.	



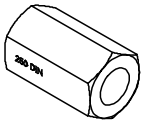


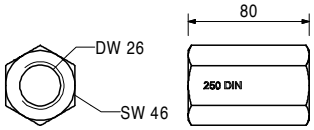
Item no.	Weight kg		
030980	1.540	**Hex. Coupler DW 26 SW 46/150, weldable** For coupling Tie Rod DW 26.	**Note** Weldable! **Technical Data** Permissible load 250 kN.



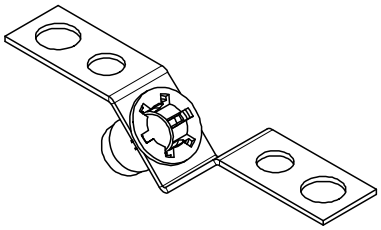


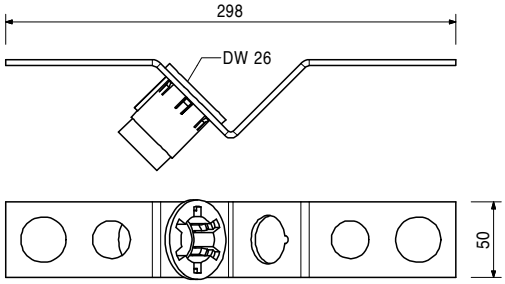
030970	0.800	**Hex. Coupler DW 26 SW 46/80, weldable** For anchoring with Tie Rod DW 26.	**Note** Weldable! **Technical Data** Permissible load 250 kN.



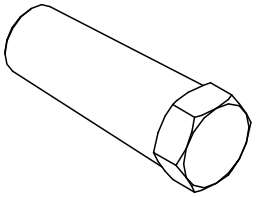


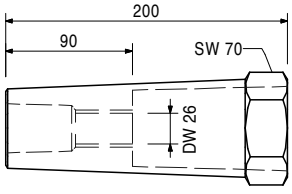
031600	0.430	**V-Tie Holder DW 26** For easy installation of DW 26 Tie Rods at 45° inclinations.	





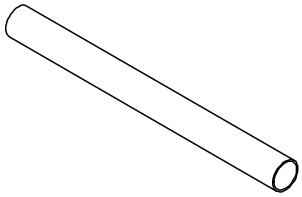
031633	0.365	**Leading Anchor Coupler DW 26** For easy installation of DW 26 Tie Rods at 45° inclinations.	

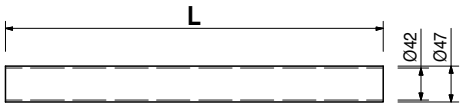




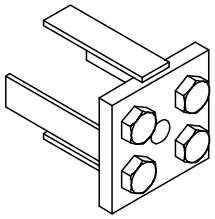
SB Brace Frame

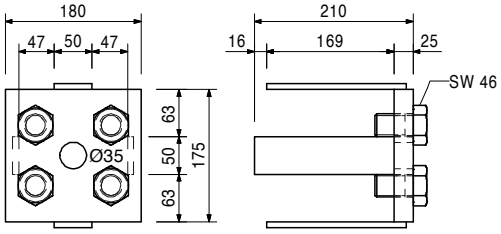
Item no.	Weight kg	
031634	1.250	**Spacer Tube rough DR 42, l = 3.00 m** Plastic spacer tube for DW 20, 26.



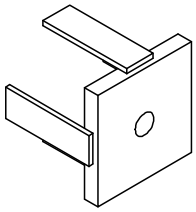


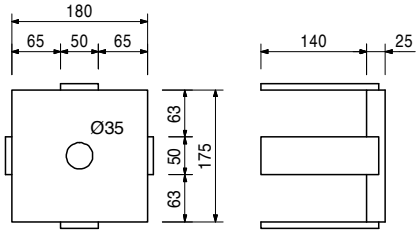
101621	10.100	**Tension Release Plate SB DW 26** For anchoring of Brace Frame SB. Allows easy release of higher tensile loads. In connection with Anchor Waler 55 or 235. Turn bolt to working position before shuttering. **Complete with** 4 pc. 724563 Hex. Bolt ISO 4017 M30 x 50-8.8, galv. **Technical Data** Permissible load 250 kN.



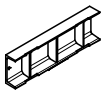


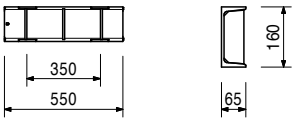
027480	7.960	**Anchor Plate SB - DW 26** For anchoring of Brace Frame SB. **Technical Data** Permissible load 250 kN.



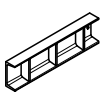


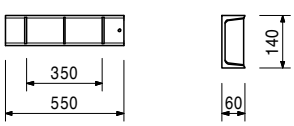
109017	11.600	**Anchor Waler U160, l = 0.55 m** For anchoring of Brace Frame SB. **Technical Data** Permissible load 2 x 250 kN.





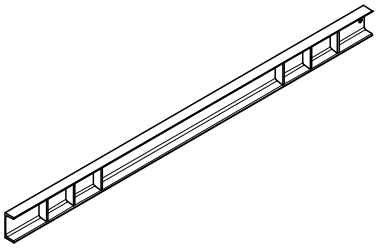
027650	9.940	**Anchor Waler U140, l = 0.55 m** For anchoring of Brace Frame SB. **Technical Data** Permissible load 2 x 135 kN.

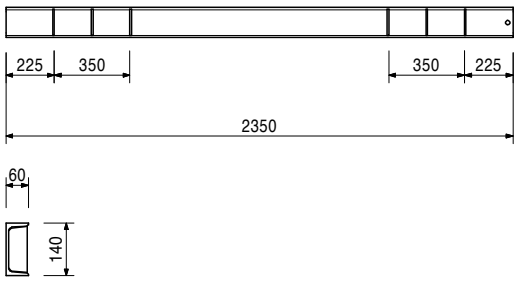




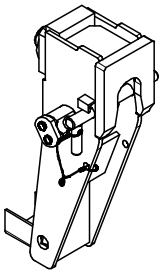
SB Brace Frame

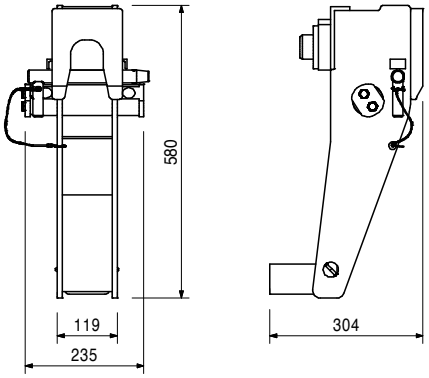
Item no.	Weight kg		
027530	39.800	**Anchor Waler U140, l = 2.35 m** For anchoring of Brace Frame SB.	**Technical Data** Permissible load 4 x 135 kN.





106661	31.800	**Brace Frame Wall Scaffold Hinge** For hoizontal use of PERI Brace Frames SB-A0, A, B and SB-2 as climbing brackets.	

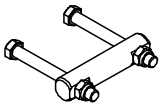


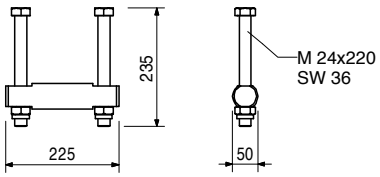


Accessories

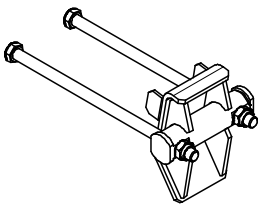
106662	4.870	**Brace Frame Adaptor SB A0, A, B**
106663	13.800	**Brace Frame Adaptor SB-2**

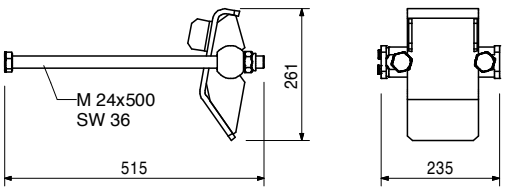
106662	4.870	**Brace Frame Adaptor SB A0, A, B** For mounting the brace frame wall scaffold hinge to the Brace Frame SB-A0, A or B.	**Complete with** 2 pc. 106803 Nuts ISO 7042 M24-10, galv. 2 pc. 106797 Bolt ISO 4014 M24 x 220-10.9, galv.



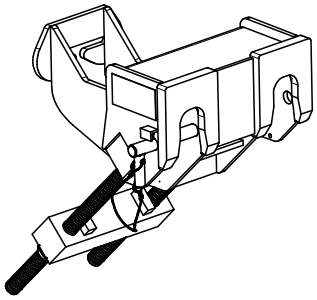


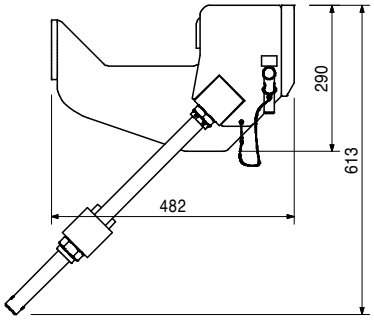
106663	13.800	**Brace Frame Adaptor SB-2** For mounting of Brace Frame Wall Scaffold Hinge to the Brace Frame SB-2.	**Complete with** 2 pc. 106798 Bolt ISO 4014 M24 x 500-10,9, galv. 2 pc. 106803 Nuts ISO 7042 M24-10, galv.

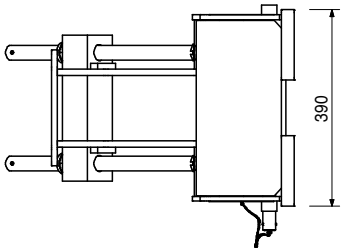




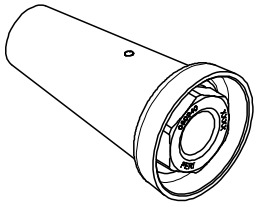
Item no.	Weight kg	
111866	64.600	**Wall Scaffold Hinge SB double** For hoizontal use of PERI Brace Frames SB-A0, A, B as climbing bracket.



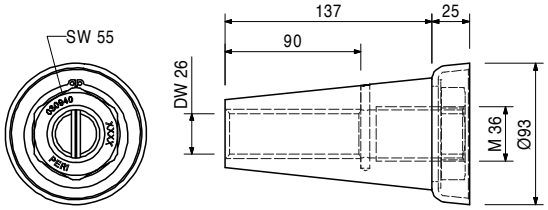




030940	3.040	**Climbing Cone-2 M36/DW 26, galv.** Tie System M36. For anchoring of climbing systems.



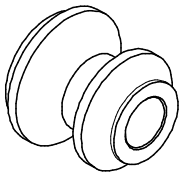
Note
Separate design information on request.

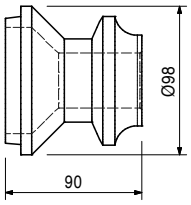


Accessories

030870	1.260	**Threaded Anchor Plate DW 26**
030340	4.480	**Tie Rod DW 26, spec. length**

029490	1.760	**Scaffold Mounting Ring M36, galv.** Tie System M36. For anchoring of climbing systems.

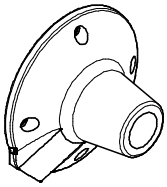


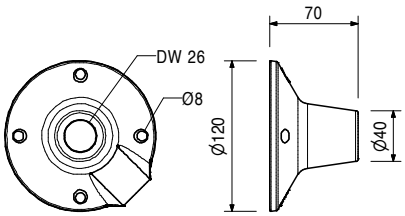


Accessories

029550	1.400	**Bolt ISO 4014 M36 x 130-10.9, galv.**

Item no.	Weight kg	
030870	1.260	**Threaded Anchor Plate DW 26** For use with Tie Rod DW 26 or Screw-On Cone M36/DW 26. For anchoring in concrete.

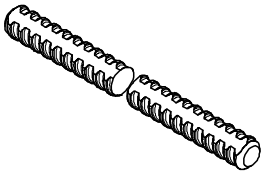


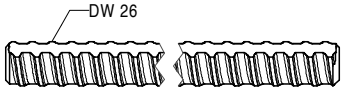


Note
Lost anchor part.

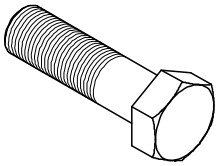
		Tie Rod DW 26
030340	4.480	**Tie Rod DW 26, spec. length**
030500	0.000	**Cutting Cost Tie Rod DW 26**

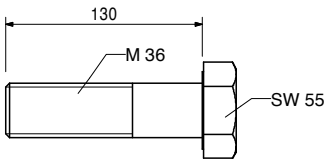
Note
Non-weldable! Take official approval into consideration!
Technical Data
Permissible tension force 250 kN.



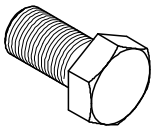


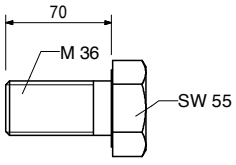
029550	1.400	**Bolt ISO 4014 M36 x 130-10.9, galv.** High-strength bolt for anchoring of climbing systems.



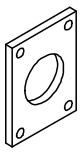


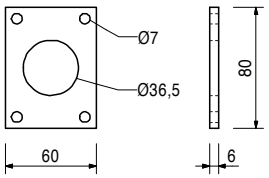
029430	0.930	**Bolt ISO 4017 M36 x 70-8.8, galv.** Bolt for anchoring of climbing systems and as advancing bolt.





Item no.	Weight kg	
029390	0.170	**Anchor Positioning Plate M36, galv.** For fixing the M36 anchor system if the plywood formlining is drilled through.

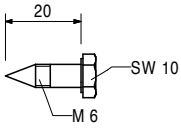




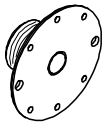
Accessories

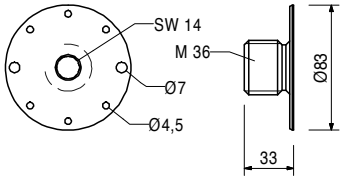
029440	0.005	**Lag Screw DIN 571 6 x 20, galv.**

029440	0.005	**Lag Screw DIN 571 6 x 20, galv.**



026460	0.308	**Anchor Positioning Stud M36, galv.** For fixing the M36 anchor system if the plywood formlining is not drilled through.

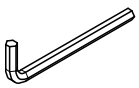


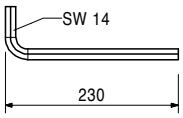


Accessories

027212	0.445	**Allen Key SW 14, long**
710312	0.005	**Nail 3 x 80**

027212	0.445	**Allen Key SW 14, long** Fits to PERI Anchor Positioning Studs and Allen Key Bolts M16.





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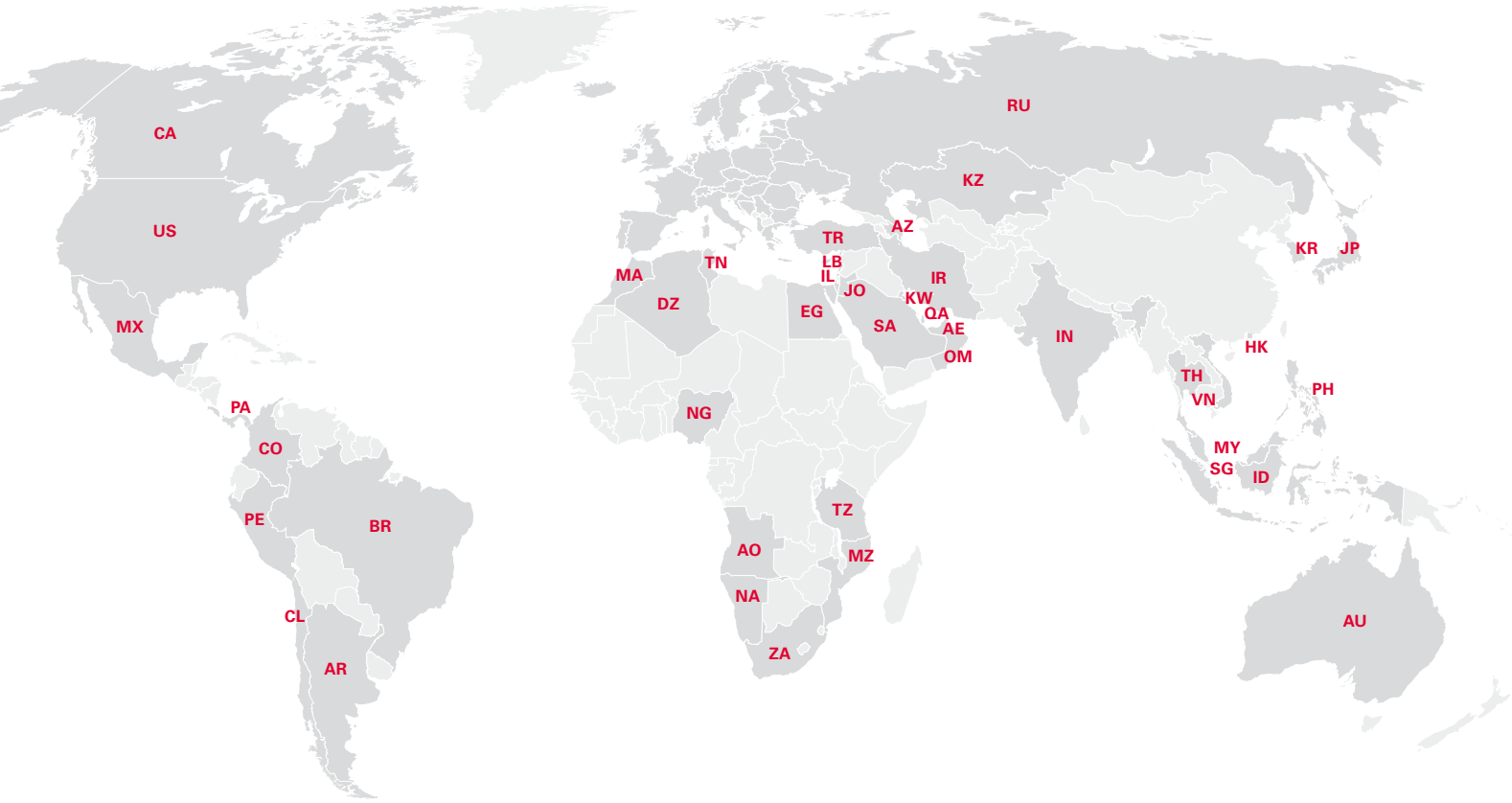

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