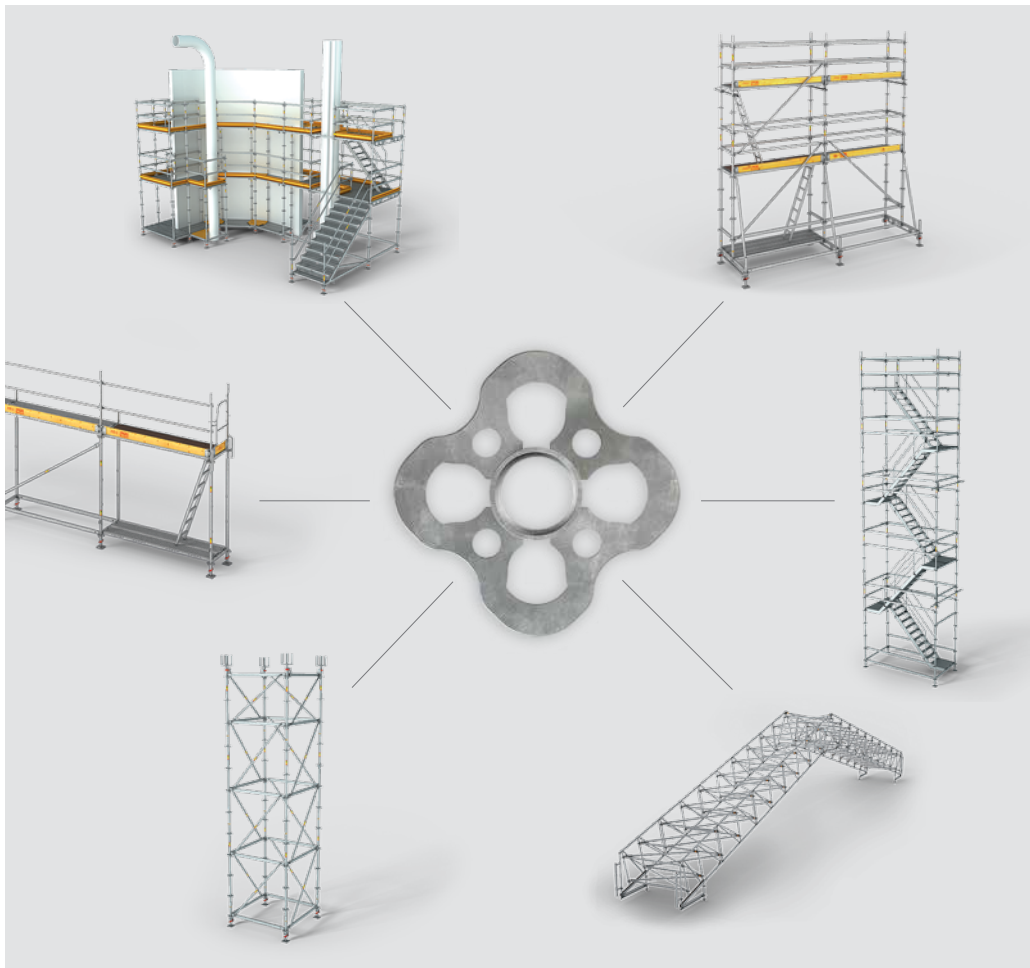


# PERI UP

## The modular system for a wide range of scaffolding applications

Product Brochure – Issue 06/2018



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\* Please note the information on page 22 regarding building authority approval for PERI UP Easy.

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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 re-

duced to show certain aspects. The safety installations that may not be shown in these detailed descriptions 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.



# PERI UP

## The Modular Scaffolding System

**The most important feature of the PERI UP scaffolding technology is the rosette nodes on the standards and frames. As horizontal components can be connected directly to these rosette nodes without any couplings, PERI UP offers a very wide range of applications using only a minimum number of system components.**

This connection technology not only removes the boundaries between frame and modular scaffolding but it is also very fast and safe. PERI UP thus combines the assembly speed of the PERI UP Easy Frame Scaffolding\* and the flexibility of the PERI UP Flex Modular Scaffold.

PERI UP scaffolding technology also features continuous metric grid dimensions. All system components, such as standards, ledgers and decks, follow a length grid arrangement of 25 cm or 50 cm. In addition, the system and decking widths use the metre as the base unit: for scaffolding assemblies

with modular scaffolding, 25-cm-wide steel decks are generally used. For the frame scaffolding with 67 cm or 100 cm widths, decks with 33 cm and/or 67 cm widths respectively are mounted.

Due to the identical height dimensions of the modular and frame scaffolding, both applications can also be combined horizontally in an almost unlimited number of ways. Thus, for example, brackets and ledgers for the erection of prefabricated stairs can be connected quickly without accessories.

PERI UP is also extremely flexible, due in part to the possibility of changing the direction of the decking. As a result, the scaffold assemblies can be optimally adapted to suit project-specific geometries, as well as different loads.

Whether it is shoring, facade, safety or working scaffold or access - PERI UP covers all common application areas of scaffolding technology with a single system and highly flexible system components.

### Fast assembly

Fast assembly with the Gravity Lock and Locking Deck

### Extremely safe

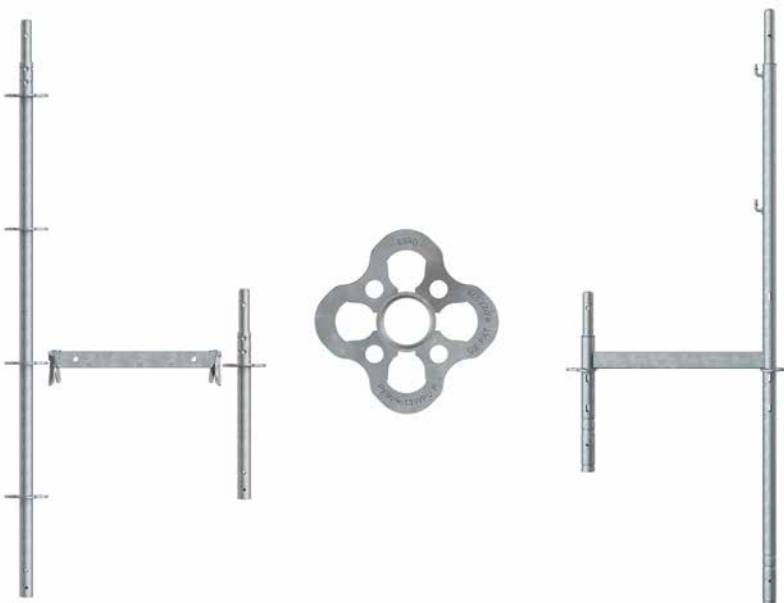
Non-slip decking, end-to-end protection provided by guardrails and toeboards in a signal colour

### Trip-free and even working levels

Working areas are completely covered without any gaps, and simple conversions are made to accommodate any obstructions

### Very high load-bearing capacity

Special node rigidity and high load-bearing connections



Due to the integrated rosette nodes on the standards of the PERI UP Flex Modular Scaffolding, as well as on the frames of the PERI UP Easy Frame Scaffolding\*, it is possible to combine the components of both systems.

\* Please note the information on page 22 regarding building authority approval for PERI UP Easy.

## Fast Assembly

### Fast assembly with the Gravity Lock and Locking Deck

#### The ledger with the Gravity Lock and the self-locking Locking Deck facilitate easy and safe assembly.

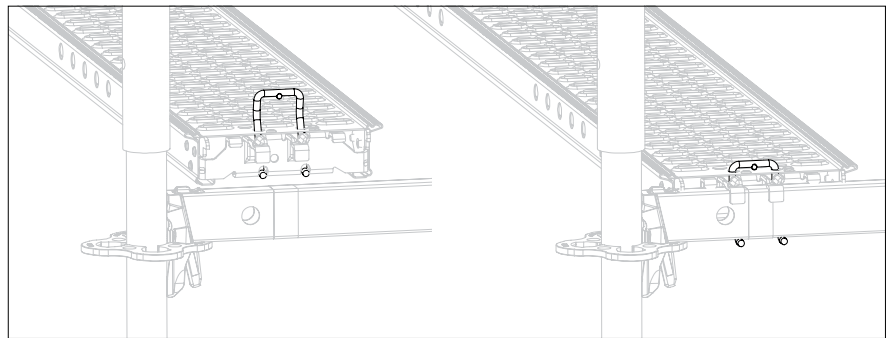
PERI UP Ledgers have a connection in the form of a wedge, which is hooked into the rosette opening. The securing wedge thereby drops into the rosette opening due to its own weight and locks automatically. This principle – PERI calls it the Gravity Lock – ensures that assembly operations are easy and safe. The wedge is then secured in position with one blow of a hammer.

The PERI UP decks are also secured without requiring any additional components: a securing device integrated in the deck engages the ledger immediately after being installed and secures each deck against lifting. Another advantage of this construction is that individual decks can also be subsequently removed if necessary, e.g. for bringing in materials.

The rectangular profile of the ledger not only leads to weight savings compared to circular tubes. It also prevents the assembly of tubes and couplers on components that are not suitable.



The Gravity Lock guarantees fast and safe assembly.



After installation, the decks are locked in place: the securing device slides under the ledger simply by the force of gravity – and the deck is immovably fixed in position.



The protection against lifting is integrated in the decking: the securing device reaches around the ledger and secures the individual deck each time.



The Gravity Lock allows quick and safe assembly with site personnel always in a secure position, whereby the wedge drops into the rosette opening due to its own weight.



The small width of the UH Ledger allows up to 4 ledgers to be carried at any one time by one scaffolder.

## Extremely Safe

Non-slip decking, end-to-end protection provided by guardrails and toeboards in a signal colour

**Numerous well-thought-out details, along with user safety integrated in the system, add up to cost-effective and safe working operations with PERI UP.**

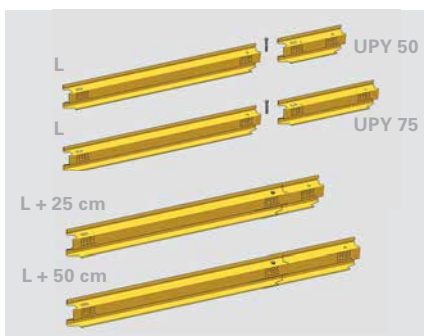
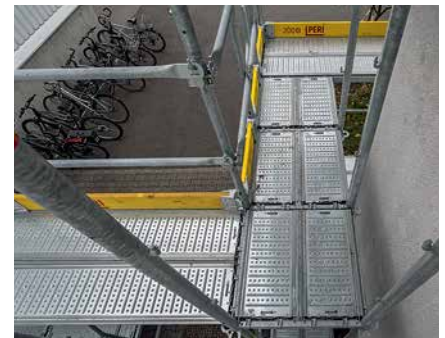
The steel decks feature a non-slip surface. Due to the perforations, the decking is particularly suitable for use in those operations where slip resistance has the highest priority. The small overall height and specially selected profile cross-section allow ergonomic transport by hand.

End-to-end toeboards provide a reliable safety element - they offer a visible border on the working scaffolds and platforms, on all sides if required. The striking signal colour makes it easy to check completeness even from a distance.

Toeboards are always installed between two vertical scaffold tubes. For corner operations, one of the toeboards is simply rotated. Toeboards are non-combustible, have a very low weight and can easily be stacked on top of each other.



Fall protection without additional components thanks to the systematic assembly procedure with protection provided by the guardrail mounted in advance



For intermediate lengths, the UPY 50 and UPY 75 toeboards can be screwed to longer toeboards.



Due to the low weight and easy stacking, the toeboard can also be easily transported by hand.



The Toeboard UPF is easily recognisable from afar due to the yellow signal colour.

## Trip-Free and Even Working Levels

Working areas are completely covered with almost no gaps; simple conversions are made to accommodate any obstructions

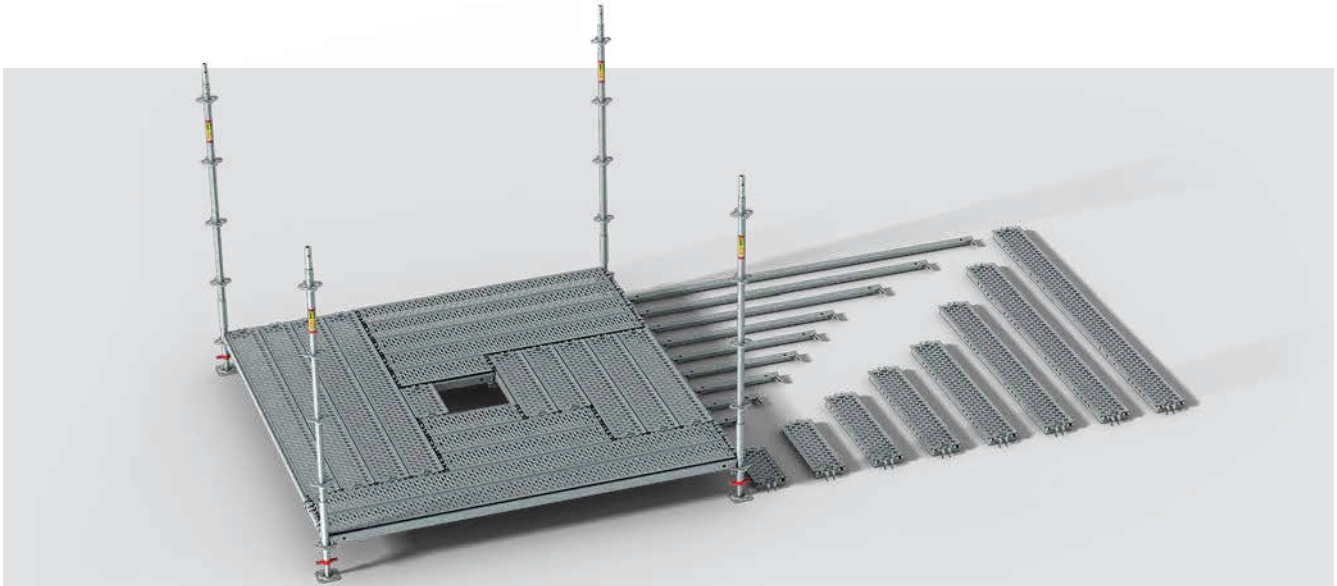


**Complex scaffolding tasks are also quickly and easily realised. Thanks to the different ledger and decking lengths, deck width of 25 cm and the possibility of changing the direction of the decking, working areas can be covered with virtually no gaps. Tube passages or other openings, including guardrails and toeboards in the system can be safely modified.**

With PERI UP, the mounting direction of the decking can be changed within an individual bay of four load-bearing verticals at any point – also several times if required. In this respect, ledgers are easily installed within one bay, which then form the support for the decking. As these ledgers fit between two adjacent decks, this allows the decking to be installed in the most favourable laying direction. For tubes or diagonals unfavourably positioned, openings can also be created by overlapping the decks.

Complicated geometries can also be scaffolded cost-effectively, e.g. old buildings with bay windows and cantilevers.

In a vertical direction, the rosette node provides connection possibilities in all directions in a 50 cm grid.



#### Fits in all directions:

PERI UP Rosett Flex has a system grid of 25 cm and 50 cm respectively. The wide range of ledgers with lengths starting from 25 cm allow the direction of the decking to be changed during installation. This ensures maximum adaptability to suit project-specific geometries - no couplings are required. Decking surfaces can be completely closed using system components. Even with obstacles, the maximum clear space is less than 25 cm.

#### Continuous metric grid dimensions

The entire PERI UP scaffolding technology is based on metric grid dimensions. All PERI UP decks are available in incremental lengths of 50 cm, whilst the widths of the decking also take the metre into consideration as the base unit. PERI UP Flex Modular Scaffolding normally uses 25-cm-wide steel decks with lengths ranging from 50 cm to 300 cm for all applications from shoring and various work scaffolds through to access solutions.

The PERI UP Easy\* Frame for use as facade scaffolding is available with 67 cm and 100 cm system widths respectively; depending on the width, it is possible to use 66-cm-wide combi-decking, as well as 33-cm or 25-cm-wide steel decks. Three EDS Decks form a width of 1 m.

\*Please note the information on page 22 regarding building authority approval for PERI UP Easy.



Decking areas can be completely covered. Projecting steel columns can be built around using system components.



The high degree of flexibility provided by the decking arrangement is used especially in complicated industrial plants to ensure quick assembly.



External and internal corners with PERI UP Easy\* are executed quickly and requiring very few system components.

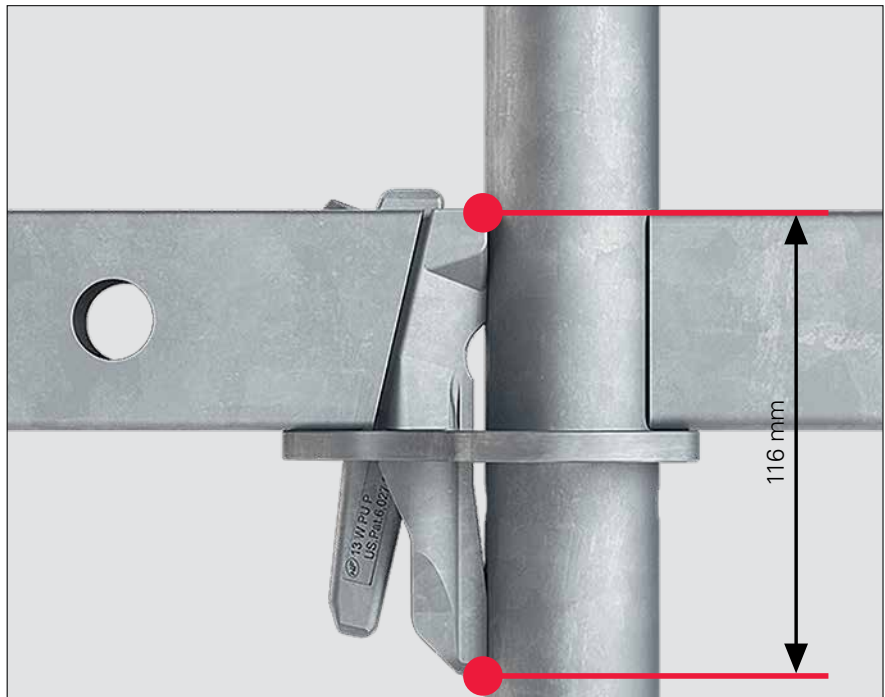
## Very High Load-Bearing Capacity

Special node rigidity and high loadability of the connection

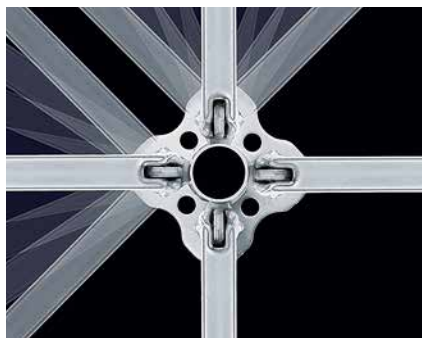
**The high rigidity of the ledger connection allows only small deformations to occur on the standards. This results in high leg loads and greatly reduces the number of diagonals to be used - the ledgers provide a sufficient level of bracing.**

Tension-proof connections are used to connect the standards to each other. Thus, complete units can be pre-assembled safely and quickly on the ground and then joined together to form larger scaffold units. Due to the high rigidity of the ledger connections, large-sized scaffold units can also be moved by crane.

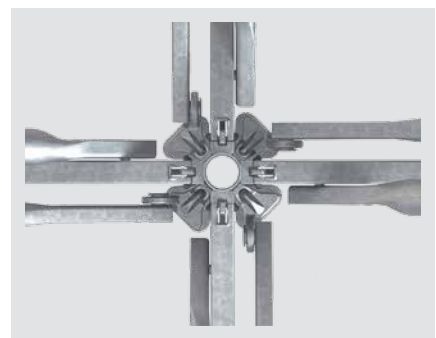
The static function of the ledger is of primary importance; in this respect, the ledgers are optimised regarding both form and weight.



The wide contact point spacing of the ledger head on the standard results in a high level of flexural strength in the connection area.



The PERI UP Rosett nodes allow for connections up to 45°.



The node area offers 12 connection possibilities. In addition to four ledgers and node braces respectively, four ledger braces can be connected.



## Combination of PERI UP with VARIOKIT Steel Components

Requirement-specific solutions through compatibility

**As PERI UP is compatible with system components taken from the VARIOKIT Engineering Construction Kit, even more complex solutions for working platforms, shoring and access means can also be realised cost-effectively in the system.**

In the case of non-everyday requirements, the combination with system steel components from the VARIOKIT Engineering Construction Kit in particular ensures a very high level of efficiency. Planning and delivery through a single source prevents any interface losses during the planning phase itself as well as on the construction site. In addition, the formal procedure for users is much easier and less time-consuming, as PERI also provides verifiable statics on request.

The worldwide PERI rental park network means that solutions are not least extremely cost-effective because the standardised components can be rented according to project-specific requirements each time. Thus, scaffolders can often expand their range of tasks without requiring any additional investment.



PERI UP Flex modular scaffolding can be complemented by components taken from the VARIOKIT Engineering Construction Kit, in order to create a wide range of very safe and reliable PERI system solutions.



## PERI UP at a Glance

A wide range of applications with a single system

### Industrial Scaffolding

- PERI UP Flex Working Platform – Page 16
- PERI UP Flex Suspended Scaffold – Page 18
- PERI UP Flex Bridging – Page 19
- PERI UP Flex Working Platform LGS 150 – Page 20



### Facade Scaffolding

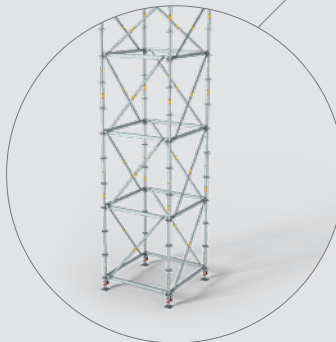
- PERI UP Easy Facade Scaffolding 67 / 100\* – Page 22
- PERI UP Flex Facade Scaffolding 75 / 100 – Page 24



\* Please note the information provided on page 22 regarding building authority approval for PERI UP Easy.

### Shoring Systems

- PERI UP Flex Shoring Tower – Page 26
- PERI UP Flex Shoring Tower Plus – Page 28
- PERI UP Flex Shoring Tower MDS K – Page 29
- PERI UP Flex Heavy-Duty Prop HD – Page 30

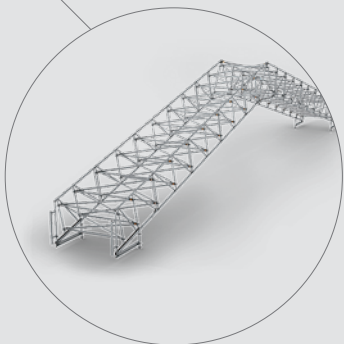


**Working Scaffolds**

- PERI UP Flex Reinforcement Scaffold 75 / 100 – Page 32
- PERI UP Flex Trench Bridge – Page 34

**Access Means**

- PERI UP Flex Stairs 75 – Page 36
- PERI UP Flex Staircase 100 / 125 – Page 38

**Safety Scaffold**

- PERI UP Flex Weather Protection Roof LGS 150 – Page 40

The PERI UP modular scaffolding kit has been designed to ensure that a very wide range of applications can be achieved using a minimum of different system components. This guarantees increased cost-effectiveness along with a number of other benefits for users.

## PERI UP Flex Working Platform

Safe working at any height through the high flexibility of the modular scaffolding

With PERI UP Flex, safe working platforms can be realised at any height. With the continuous metric system grid of all components and the possibility of changing the direction of the decks, the modular scaffolding can be optimally adapted to suit virtually any local conditions. With the self-securing ledger connection on the rosette and the integrated protection against lifting in the decking, PERI UP Flex can be mounted extremely quickly. During use, the end-to-end guardrails and yellow toeboard, as well as the slip-resistant decks, ensure a high level of working safety.

### **Trip-free and even working levels**

Working areas are completely covered without any gaps, and simple conversions are made to accommodate any obstructions

### **Extremely safe**

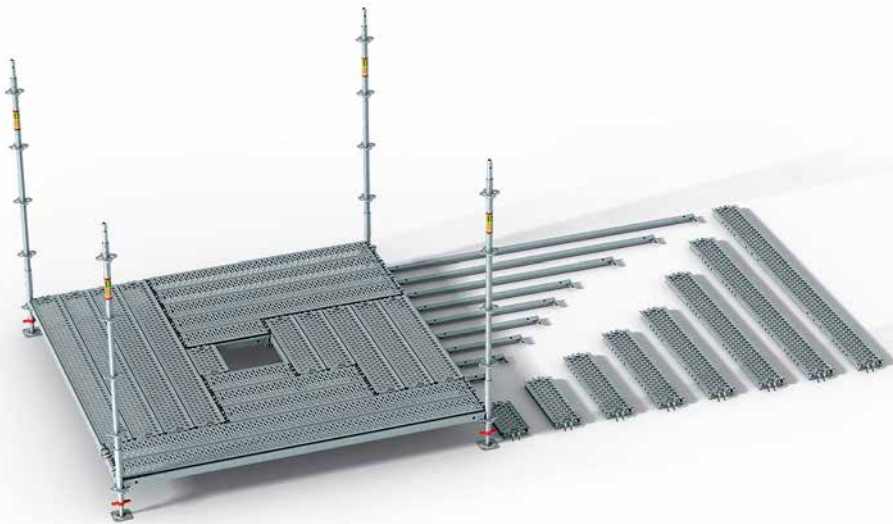
Non-slip due to perforated decking; end-to-end protection is provided by guardrails and toeboards in a signal colour

### **Fast assembly**

Fast assembly with the Gravity Lock and self-securing decking (Locking Deck)

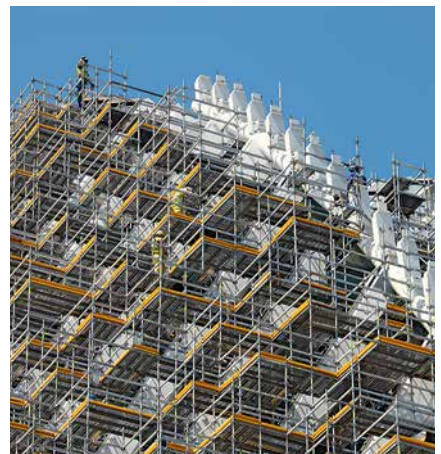
### **Very high load-bearing capacity**

Special node rigidity and high loadability of the connection



### **Fits in all directions**

PERI UP Rosett Flex has a system grid of 25 cm and 50 cm. The wide range of ledgers with lengths starting from 25 cm allow the direction of the decking to be changed during installation. This ensures maximum adaptability to suit project-specific geometries - no couplings are required.





- Modular scaffolding for erecting complex work scaffolds
- Fits in all directions: a uniform, metric length and width grid arrangement of all 25 cm and 50 cm system components; connection possibilities to the standards with 50-cm spacings
- Deck lengths: 50 cm, 75 cm, 100 cm, 125 cm, 150 cm, 200 cm, 250 cm, 300 cm
- Easy and safe assembly with the Gravity Lock: when placing the wedge head in the rosette, the wedge drops into the opening due to its own weight and automatically locks
- Non-lift decking due to the integrated lock against lift off (Locking Deck); slip-resistant decks
- Level working areas without any gaps between the decks
- Rigidity of the ledger connections allows high leg loads, which means fewer diagonals are required
- High level of working safety through the end-to-end guardrails and toeboards
- Can be used with a wide range of supplementary system components and accessories for diverse applications

# PERI UP Flex Suspended Scaffold

## Mobile Solutions

For movable-type solutions, the standards and the Trolley UFS 20 can be attached to I-shaped steel profiles. The trolley carries loads of up to 19.7 kN and allows entire platforms to be moved, e.g. on the underside of oil platforms or bridges. For project-specific solutions, rentable steel components from the VARIOKIT Engineering Construction Kit or other PERI formwork systems for the supporting structure are often used.

### System grid construction

through the variable adjustment of the mounting for the standards independent of the flange width

### Easy moving procedure

with minimal effort due to the smooth-running plastic rollers

### Can be used on different steel profiles

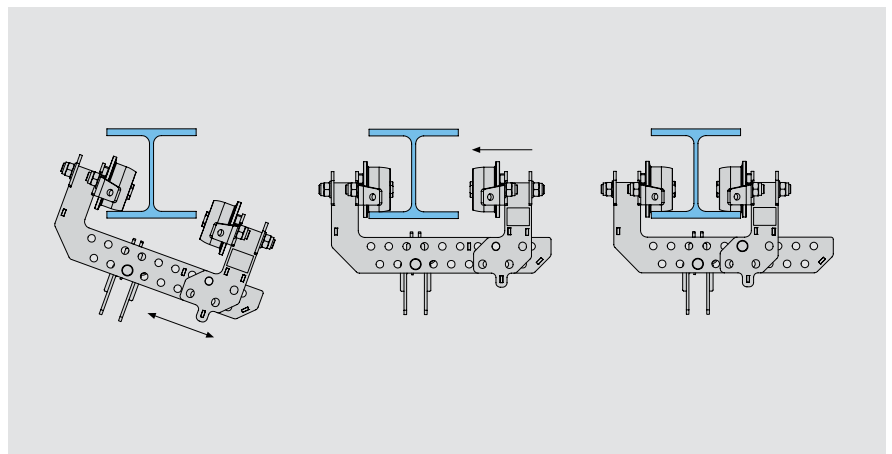
due to the site-compliant design and can be adapted to suit girders of 20 to 32 cm in width with flange thicknesses up to 40 mm



The Trolley UFS 20 can also be used on PERI RCS Rails - as shown here for transporting materials in a refurbishment project.



One of the roller holder legs can be moved for installation. The roller spacing can be adapted to accommodate the steel girder and is secured by means of a bolt.



## PERI UP Flex Bridging

Working platforms up to 10 m in length with the Lattice Beam ULS Flex

With the PERI UP Flex Lattice Beam ULS, spans up to 10 m can be bridged cost-effectively. The beam consists of 5 easy-to-handle individual components with a maximum length of 1.50 m and maximum weight of 15.4 kg. The beam length can be adjusted in 25-cm increments. The proven UDG Decks can be directly mounted on the upper chords of the beam.

### Ideal for refurbishment projects

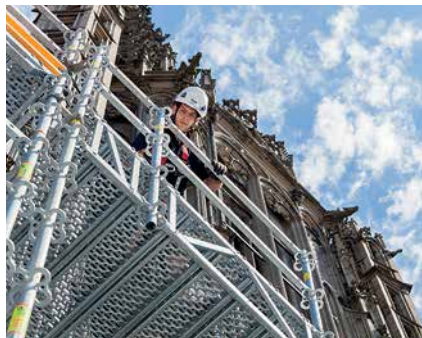
due to the compact dimensions and low weight; can also be used in confined spaces and for access via man-holes

### Simple and fast assembly

with pins and cotter pins, also for bracing with diagonals - without any tube-coupler connections

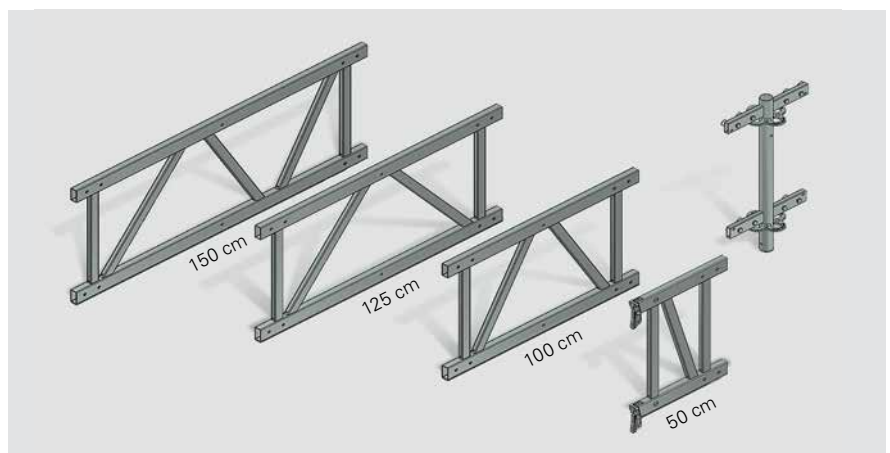
### Extremely cost-effective

through combined use with PERI UP Flex standards and decking



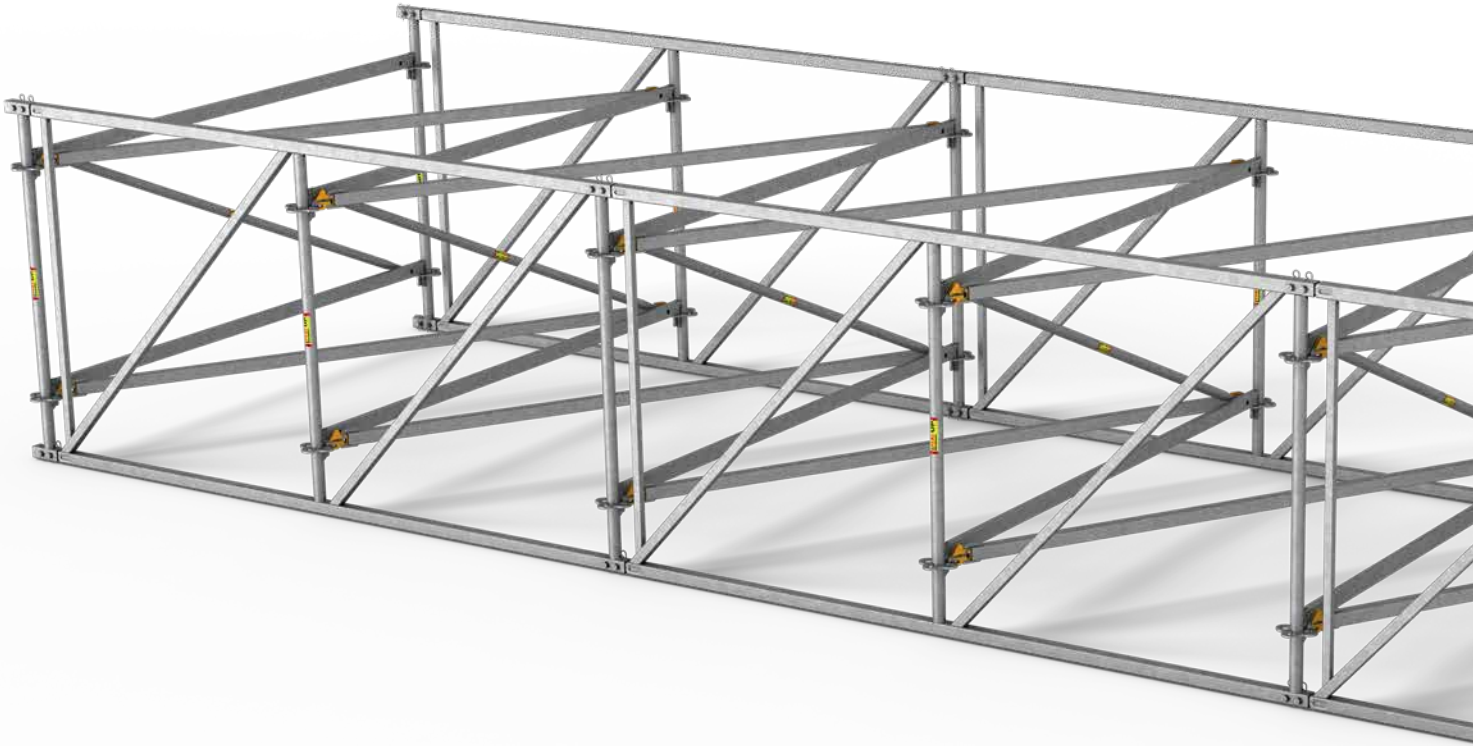
The system is comprised of 3 intermediate elements and one connecting element, as well as a 50-cm-long end element that is connected to the rosettes.

- Loads up to 3 kN/m<sup>2</sup> with spans of up to 10 m
- Spans from 3 m - 10 m in 25 cm increments
- Installed on the rosettes of the standards
- Compact dimensions with individual lengths from 50 cm – 150 cm and a beam height of 50 cm



## PERI UP Flex Working Platform LGS 150

For wide-span working platforms and temporary pedestrian footbridges

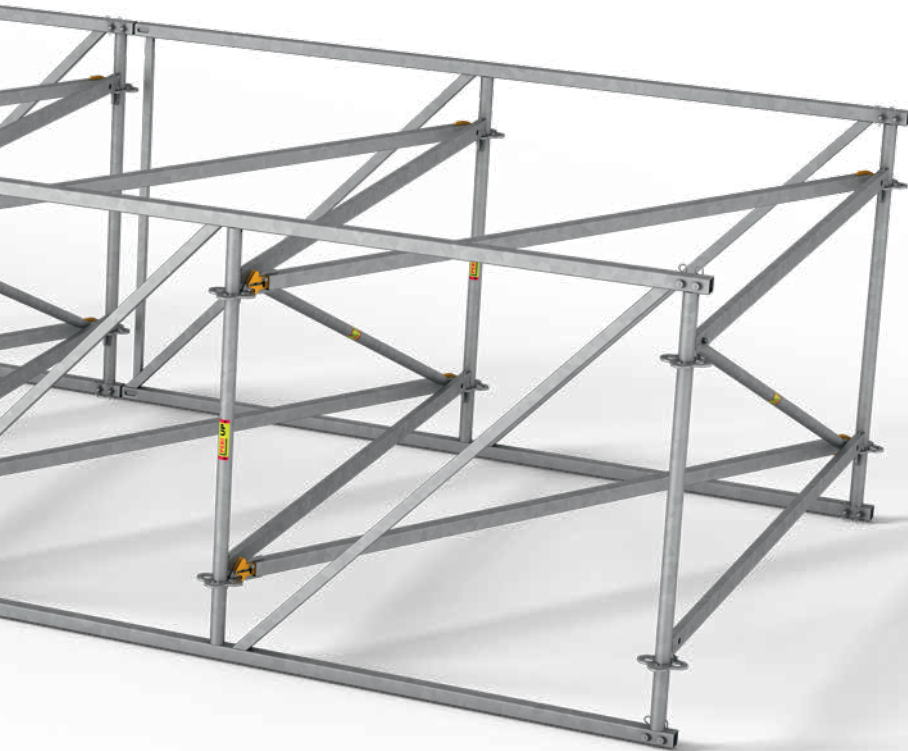


Safe working platforms can be realised with the LGS Lattice Girder System.

LGS as a temporary pedestrian bridge fulfils the requirements regarding guardrail loading and geometries for use in public areas.

This manually movable scaffolding with its 20-m span is based on the LGS system and, among other things, serves as a working platform for implementing corrosion protection measures.





The LGS Lattice Girder System offers safe and efficient solutions for large spans and/or high loads. Apart from the use of trusses for weather protection roofs, temporary (pedestrian) bridges or working platforms can be realised at any height with the LGS truss segments.

**Fast assembly**

Ledgers and diagonals can be connected to form very stable and load-bearing units

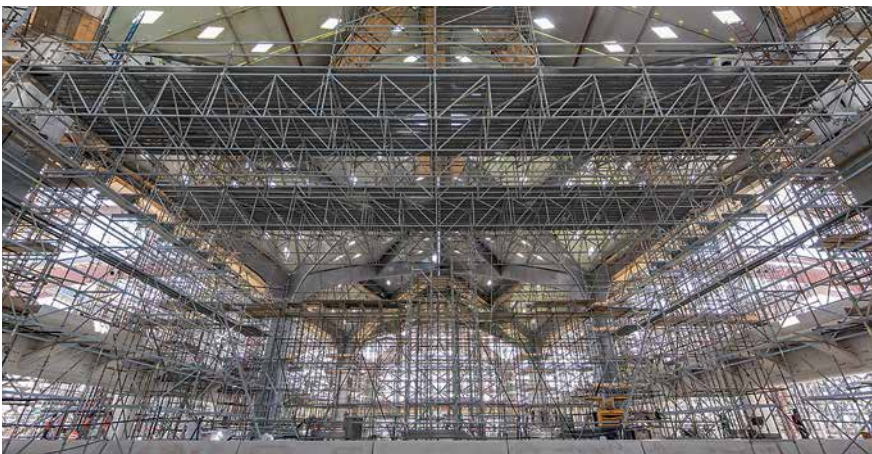
**For large spans**

The high bending capacity allows large spans to be realised

**Versatile**

Can adapt flexibly to suit different geometries – as a platform or bridge

Movable platforms with 25-m spans provide safe working areas for different tasks to be carried out on the underside of a railway station roof.



- Lattice girder for wide-span bridging and temporary pedestrian footbridges
- Technical values: 12 m spans with 5 kN/m<sup>2</sup> or 20 m spans with 2 kN/m<sup>2</sup>

## PERI UP Easy Facade Scaffolding\*

The lightweight and fast frame scaffold for safe working conditions on facades

The design concept of the scaffolding system with the Easy Frame combines safety and cost-effectiveness. The scaffolding is very light, resulting in significantly reduced assembly and dismantling times. As the guardrail for the next scaffolding level is mounted without any additional components when using the Easy Frame, the scaffolder is secured against falling on every level without requiring rope protection. The special feature: the Easy Frame rosette allows for combination with system components of the PERI UP Flex Modular Scaffolding. This opens up new application possibilities, including for complex tasks.



\* General Building Inspectorate Approval for PERI UP Easy  
Approval is not required in Bavaria (Germany), Austria and Switzerland. In Germany, this has been granted for the 67-cm system width. Approval for the 100-cm system width has been requested. Usage in individual cases is already possible with building regulation approval. More information is available at [www.easy.peri.de](http://www.easy.peri.de) or from your PERI sales engineer.



Due to the special shape of the Easy Frame, the guardrail for the next scaffolding level can be mounted from the safety of the lower level - without any additional components and the extra time involved.



For PERI UP Easy, the 66-cm-wide combi decking and 33-cm-wide steel decks are available. All decks are equipped with the integrated protection against lifting.



Stairs, for example, can be directly connected to the rosettes of the Easy Frame - without requiring any additional frames or components.



Assembly of the basic structure takes place virtually without any couplers, whilst the Easy quick anchoring system also reduces assembly times.

**Low weight**

Fast working due to the low weight of the individual components

**High degree of safety**

Fall protection without any additional components through the system-dependent assembly process

**Fast assembly**

Mounting takes place with virtually no couplers and a minimum use of tools

**Special range of applications**

Can be combined with PERI UP Flex system components

- Facade scaffolding as working and safety scaffold
- Standard configuration with system width 67 cm or 100 cm\*
- For use as working scaffold in accordance with DIN EN 12811-1:2004-03
- Can be used as Class D safety and roof protection scaffold, and as roof safety scaffold with protection panels Class SWD 1 in accordance with DIN 4420-1: 2004-03
- One-piece combi decking b = 66 cm with integrated protection against lifting, can be loaded up to max. LC 3 (2 kN/m<sup>2</sup>)
- One-piece steel deck b = 33 cm with integrated protection against lifting, can be loaded up to LC 4 (3 kN/m<sup>2</sup>) with L = 3 m
- Gap-free decking surfaces without separate gap coverings
- Internal bracket decking, removable for use on external walls with a thermal insulation system
- Fast opening and closing of scaffold bays, e.g. for the transport of materials

## PERI UP Flex Facade Scaffold

Extremely adaptable and with a high load-bearing capacity

PERI UP Flex Modular Scaffolding can be used to create facade scaffolding with very high load-bearing capacity. The decks are directly mounted on the ledgers, and the bay lengths are adjustable using the 25 cm grid dimensions. Connections of other system components are possible using node spacings of 50 cm on the standards. Integrated lock against lifting and the Gravity Lock accelerate the assembly process. Optionally, the ledgers can be pre-assembled from a safe position.

### Extremely flexible

Adjustments take place in uniform 25 cm increments, facilitating a high level of flexibility for complex facade scaffolding

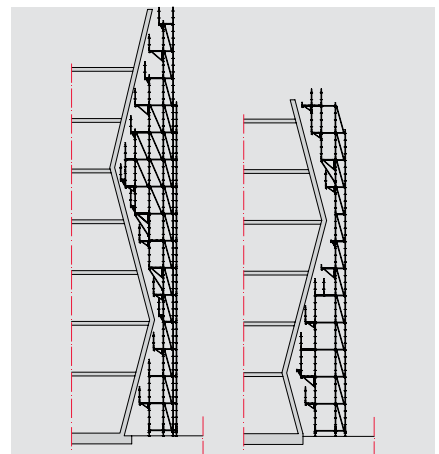
### Decking levels without any tripping hazards

Each bay can be completely fitted with system decking and free of any tripping hazards

### High load-bearing capacity

Depending on the assembly up to Load Class 6

- Modular scaffolding as facade scaffold; standard configuration with a 75 cm or 100 cm system width
- Suitable for all work to be carried out with  $w = 75$  cm for Load Classes 1 to 4 ( $0.75 \text{ kN/m}^2 - 3 \text{ kN/m}^2$ ), as well as with  $w = 100$  cm for Load Classes 1 to 6 ( $0.75 \text{ kN/m}^2 - 6 \text{ kN/m}^2$ )
- Complies with the requirements of European standards EN 12810 and EN 12811
- Uniform, metric length and width grid arrangement of all 25-cm and 50-cm system components
- Scaffold bay lengths: 50 cm, 75 cm, 100 cm, 125 cm, 150 cm, 200 cm, 250 cm, 300 cm
- Easy and safe assembly with the Gravity Lock: when placing the wedge head in the rosette, the wedge drops into the opening due to its own weight and automatically locks
- Non-lift decking through the integrated lock against lift off (Locking Deck); flat and slip-resistant deck surfaces

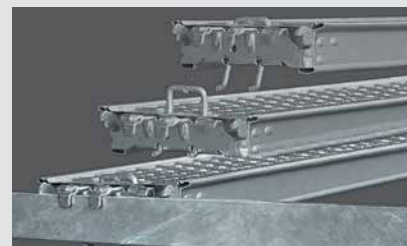




**The Gravity Lock and Locking Deck are essential, advantageous features of the PERI UP Flex modular scaffolding.**



During the assembly, the wedge falls into the opening of the rosette through its own force of gravity and locks automatically.



The decks are directly mounted on the steel ledgers and secured against lifting without requiring any additional components.

## PERI UP Flex Shoring Tower

A high degree of flexibility in shoring solutions

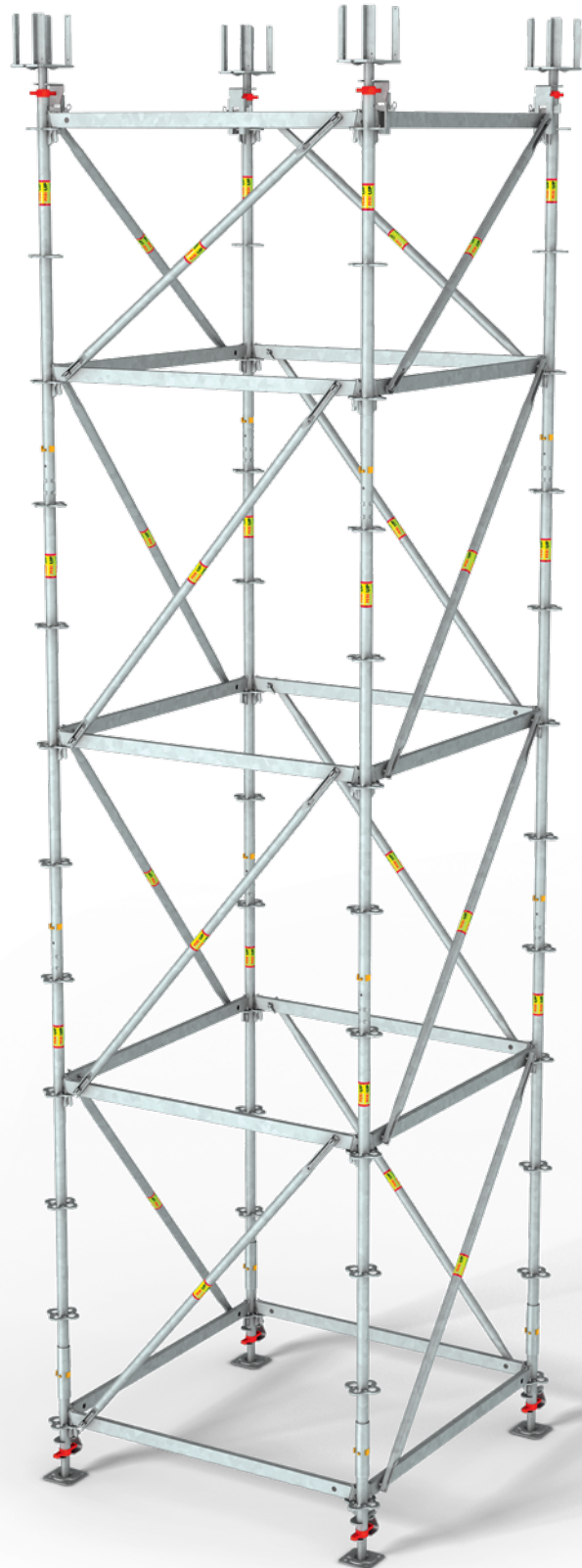
PERI UP Flex is the universal modular scaffolding for a wide range of tasks. For realising shoring assemblies, the 25-cm and 50-cm system grid dimensions provide optimum adaptation possibilities to suit different geometries and loads. Thus, for example, the legs are simply bundled together in order to transfer concentrated loads. With PERI UP Flex, shoring towers, shoring towers with additional frames, and spatial shoring can be assembled cost-effectively. The system provides a very high level of safety thanks to the self-securing deck, ledger with Gravity Lock and the completely flat covering of the working areas.

**High degree of material utilisation**  
through the optimal positioning of the standards according to the respective load situation

**Maximum adaptability**  
with a uniform grid size in all three dimensions

**Movable in large-sized units**  
through the extremely rigid node connection between the standards and ledgers

**Flexible compatibility**  
thanks to optimal coordination to match PERI slab formwork systems, as well as common steel and timber dimensions





- Modular scaffolding with fully galvanised standards, ledgers, diagonal braces and decking, guardrails and other accessories for shoring assembly
- As type-tested, free-standing shoring tower up to 8.39 m high and for loads up to 40 kN; restrained at the top up to 21.89 m high (or 22.34 m with spindle extension) and for loads up to 46 kN
- As shoring tower with additional frames or column framework unit for high vertical and/or horizontal loads
- Project-specific planning as spatial load-bearing structure for virtually all geometries and loads
- Standards and top standards, ledgers, diagonal braces and decking in many lengths in 25 cm and 50 cm grid dimensions; continuous height adjustment through the combination of 2-m-long standards and top standards in different lengths
- Easily adaptable with bay lengths in 25-cm and 50-cm grid dimensions and a node spacing of 50 cm in all 3 directions

## PERI UP Flex Shoring Tower Plus

### The height-flexible table support

With standards and ledgers from the PERI UP Flex Modular Scaffolding and just a few additional components, shoring can easily be realised specifically for slab tables. For the head and base areas, strengthened standards and spindles featuring large extension lengths are used with the PERI UP Flex Shoring Tower Plus. This allows the table construction to be lowered as required, particularly important when moving under beams.

#### Large spindling range

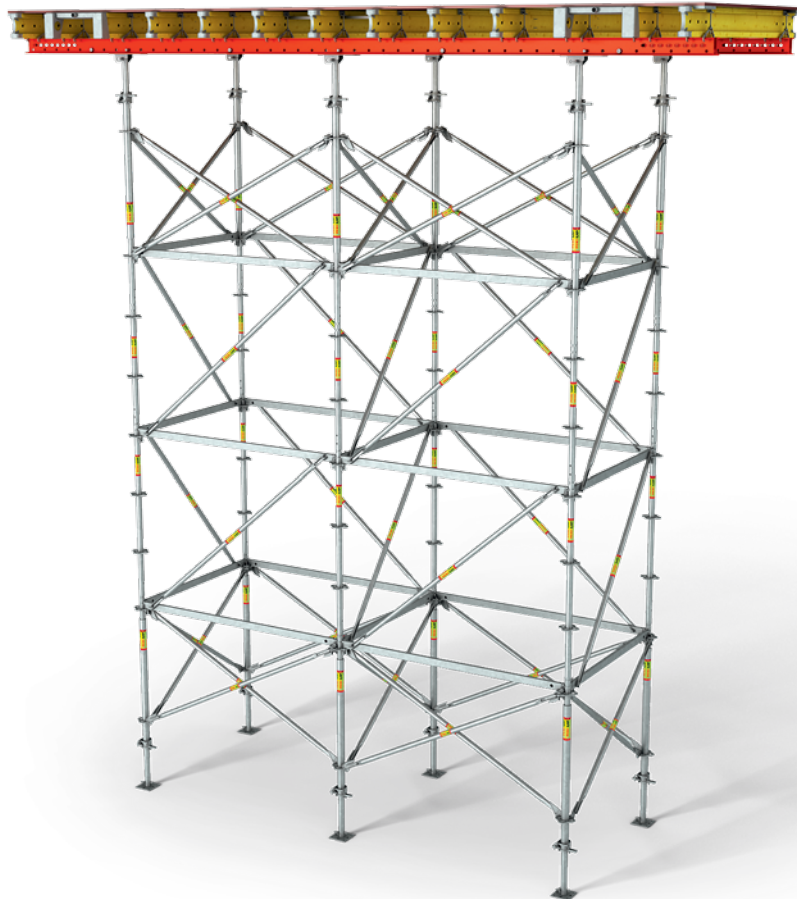
of up to 88 cm in the head and base areas

#### Cost-effective

through the use of system components from the PERI UP Flex modular scaffolding range

#### Enhanced load-bearing capacity

for heights up to 8.76 m and leg loads up to 52 kN



- Reliable load-bearing capacity: 52 kN (restrained at the top)
- Variable ground plan in 25 cm and 50 cm increments
- As support under slab tables: 4-legged or 6-legged for large-sized tables (e.g. VARIODECK)
- Continuous height adjustment with up to 88 cm spindle extensions at the top and bottom
- Use as shoring tower also possible
- Can also be used with reinforced standards just in the base area and with standard components in the head area

## PERI UP Flex Shoring Tower MDS K

The shoring tower with system-integrated safety for vertical assembly and dismantling

Assembly and dismantling of the MDS K Shoring Tower takes place with protection always provided by means of end-to-end guardrails. The user is always in a safe and secure position during all assembly situations – without requiring any additional measures. The MDS Decking is attached to the ledgers without tools while any unintentional lifting from below is simply not possible. The supply of materials is carried out through the inside of the shoring tower.

### Safe assembly without additional components

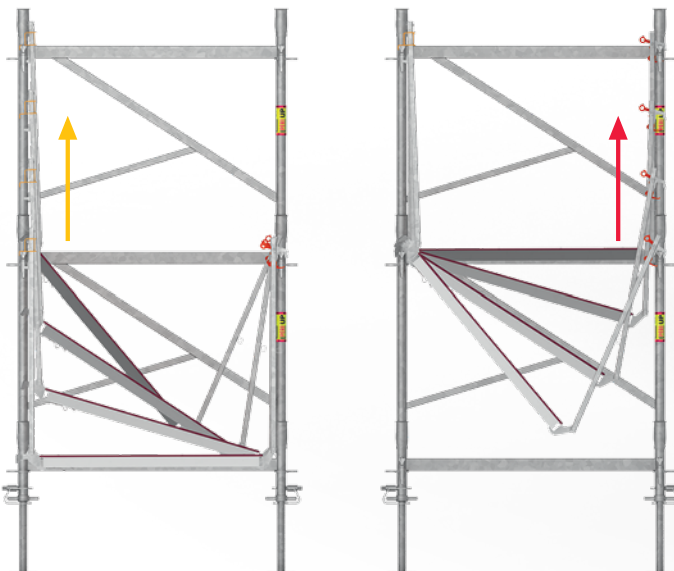
through the specific type of design with platforms and peripheral guardrails

### Accelerated working operations

with only minimal system components and constantly repeated assembly steps

### Effortless handling

through the low weight and ergonomically advantageous working operations in the centre of the body



- Vertically-assembled shoring tower comprised of PERI UP Flex system components and additional decks
- As a free-standing shoring tower with assembly heights up to 6.39 m and for loads up to 45 kN; restrained at the top, for heights up to 9.39 m and loads up to 50 kN
- Ground plan: 1.25 m x 1 m | 1.50 m | 2 m | 2.50 m | 3 m
- As a shoring tower with additional frames for concentrated vertical loads
- Modular adaptation of the tower ground plan in a longitudinal direction
- Height adjustment in 50 cm increments by combining the MDS 100 K Frame and MDS 50 Intermediate Frame; fine adjustment via the Head and Base Spindles

## PERI UP Flex Heavy-Duty Prop HD

The heavy-duty prop with integrated load control

The 4-legged heavy-duty prop consists of PERI UP Flex system components and carries concentrated loads of up to 200 kN. The hydraulic cylinder in the base allows displacement and force-controlled lowering of the prop under load, as well as planned force-controlled pre-stressing, which is required with shoring in existing buildings. The hydraulics can be moved from prop to prop, reducing cylinder requirements.

**Systematic pre-stressing**  
with hydraulic cylinders, e.g. for shoring in existing buildings

**Controlled release under load**  
through the hydraulic cylinder in the base

**Cost-effective**  
through the use of standard components from the PERI UP Flex modular scaffolding system

**Lightweight and small components**  
for easy handling in confined spaces during refurbishment in existing building and industrial facilities



The rentability and simple assembly of the lightweight PERI system components, especially for temporary use in existing buildings, facilitates significant cost and time advantages.



The 4-legged heavy-duty prop consisting of standard PERI UP system components can be used for transferring concentrated individual loads of up to 200 kN.



By means of only one hydraulic unit, the PERI UP heavy-load props can be pre-stressed and – after reaching the full load-bearing capacity of all repaired reinforced concrete columns - undergo controlled lowering when under load.



The hydraulic unit consists of the lifting cylinder and hand pump. The manometer shows the pressure (bar) along with the direct force (kN).

- 4-legged heavy-duty prop for transferring concentrated loads up to 200 kN, for assembly heights up to 8 m
- Comprising PERI UP standards with lengths from 50 cm to 3 m, Ledgers UH Plus, lowering and head spindles and an additional hydraulic unit for the base
- Continuous height adjustment via the head spindle; pre-stressing and release via the lowering spindle with the help of the hydraulic Lowering Unit HD
- Mechanical load transmission when at rest via the adjusting nut
- Head spindle with 3° tiltable head plate; connection to HDT Main Beam possible

## PERI UP Flex Reinforcement Scaffold

Practical scaffold units for working on the formwork – extremely stable without ballast or anchors

The PERI UP Flex Reinforcement Scaffold with a base width of 150 cm or 250 cm can be assembled up to a length of 3 bays in a longitudinal direction. It is very stable without requiring any ballast or anchors, as long as it is positioned in front of a wall or formwork that can then provide the required support. The self-securing ledger connection and the integrated protection against lifting in the decks guarantee fast assembly. The continuous, gap-free uniform deck covering provides users with a very high level of safety during work operations.

### **Guaranteed stability without anchors or ballast**

Used without anchors and ballast in front of formwork and walls

### **Simple to plan**

Fast calculation of material requirements thanks to prefabricated units

### **Movable in large-sized units**

Due to the tension-proof connections, entire large-sized units can be moved by crane



- Working scaffold for reinforcement, shuttering and concreting operations
- Working scaffold for Load Classes 1 – 3 according to EN 12811-1 (0.75 kN/m<sup>2</sup> to 2 kN/m<sup>2</sup>)
- Fulfills wind load requirements according to DIN EN 1004 and DIN EN 12811
- System width: 75 cm and 100 cm
- Storey height: 200 cm
- Scaffold bay lengths: 150 cm, 200 cm, 250 cm, 300 cm
- Maximum standing height 6.60 m (with base width 150 cm) or 10.80 m (base width 250 cm)



## PERI UP Flex Trench Bridge

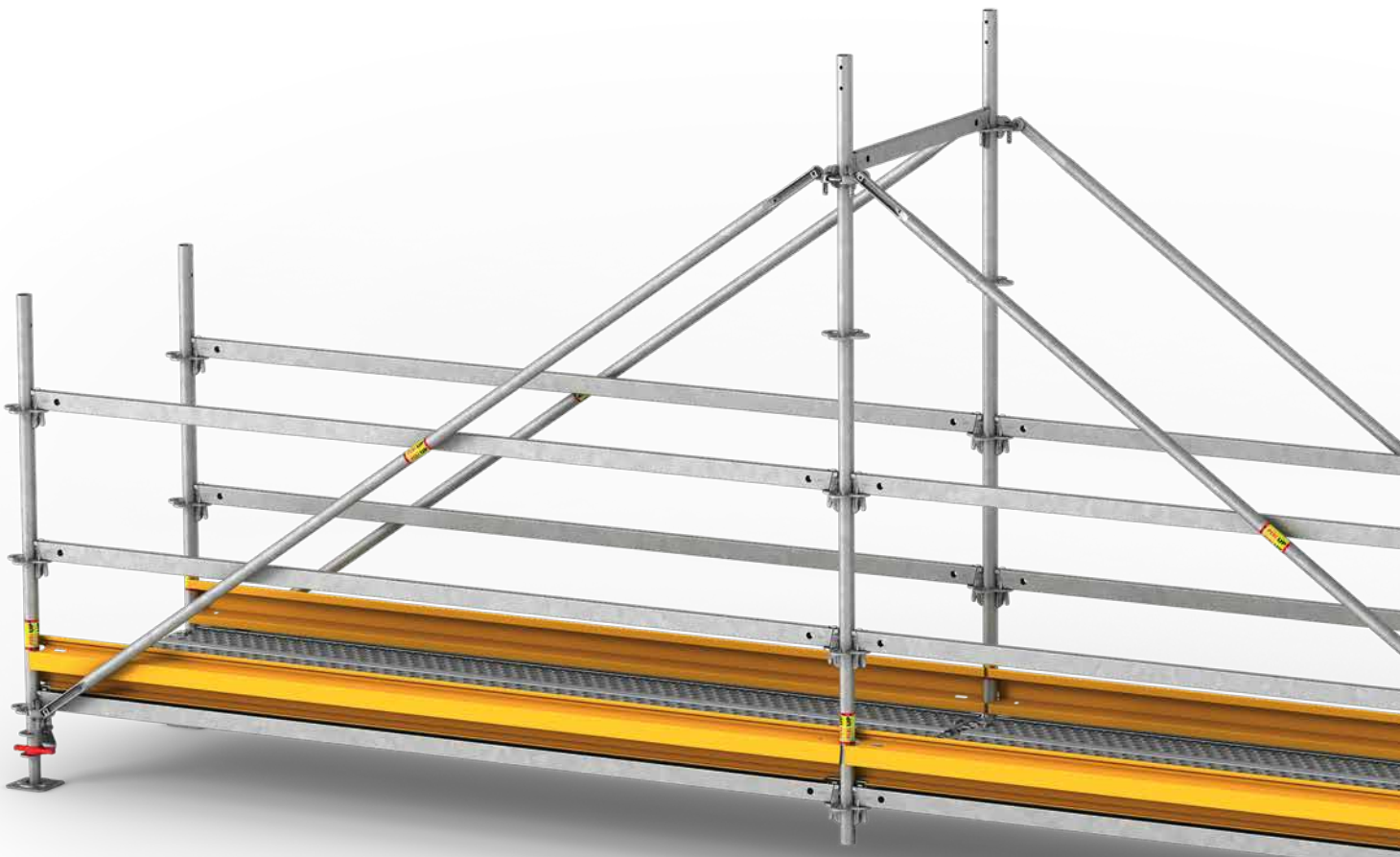
Simple and fast solution that provides safe passage over excavation pits, trenches and cable trenches

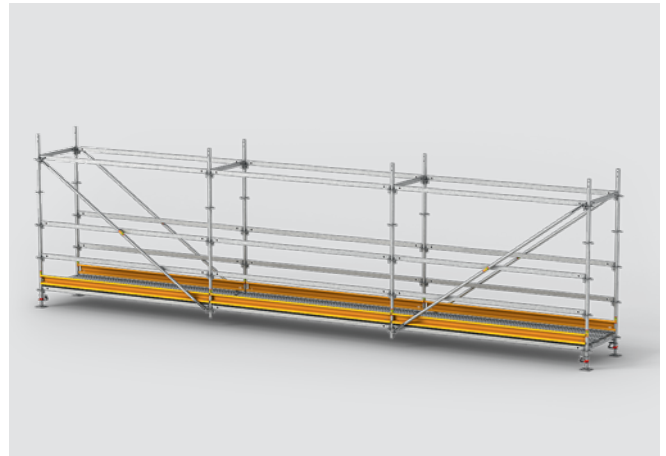
The craneable PERI UP Flex Trench Bridge serves as a temporary and safe crossing over excavation pits or trenches for construction site personnel. The scaffolding assembly is based on the PERI UP Flex modular scaffolding system. The PERI UP Gravity Lock guarantees fast and safe assembly. By inserting the wedge head into the rosette, the wedge drops by force of gravity into the hole and then locks in position. With the self-securing deck (Locking Deck), the decks are locked into place directly after being installed.

**Fast and safe assembly**  
with standard components from the PERI UP Flex Engineering Construction Kit

**Safe access**  
through decking with integrated protection against lifting, non-slip, perforated surfaces, and toeboards installed along the bridge

**Crane-movable standard configurations with 6-m and 9-m spans**  
with a permissible load of up to 200 kg/m<sup>2</sup> (corresponds to Load Class 3)





- Standard configuration with 6 m and 9 m spans for a maximum permissible load of 2 kN/m<sup>2</sup>; other spans or loads are possible on request
- Robust against weather conditions due to timber-free construction
- Comfortable access due to the 1-m width, also when transporting materials and for site personnel to pass each other
- Can easily be moved as a complete unit by crane



## PERI UP Flex Stairs 75

The lightweight stair tower for flexible access solutions

The lightweight aluminium flights of stairs with 75-cm widths are mounted on ledgers of the PERI UP modular scaffolding system. This results in 4-legged stair towers with alternating staircase units or staircase units in the same direction with heights of up to 100 m. The PERI UP Flex Stairs 75 are designed to accommodate 2 kN/m<sup>2</sup> loads and serve as access to working areas or construction sites.

### Flexible assembly

Thanks to the 25 cm grid dimension, all bays can be completely closed even in the smallest of spaces

### Easily adapted

for accessing building openings with brackets and small flights of stairs - regardless of storey heights

### Fast assembly

with only a minimum number of ledgers and anchors

- Quickly assembled, welded flights of stairs with 75 cm widths (clear stair width 67 cm)
- Can be used for alternating staircase units or staircase units in the same direction with assembly heights from 2 to 66 m (project-specific planning up to approx. 100-m assembly height)
- Ground plan: 1.50 m x 2.50 m or 1.50 m x 3 m
- Permissible loads: 2 kN/m<sup>2</sup> for flights of stairs and 2 kN/m<sup>2</sup> for the entire construction for a run of staircase and landing of 20 m
- Adaptation for accessing building openings in height increments of 25 cm by means of laterally-mounted brackets
- Flights of stairs can also be installed next to each other with movements in both directions, as well as centrally attached guardrails





With the Staircase 75, all working levels on construction sites can be reached quickly and safely.

Stair tower with twin staircase units for the construction of a liquid gas tank. Guardrails mounted on the outer and middle stringers provide safe passage.



Height adjustments to building openings are carried out by means of short flights of stairs and externally mounted brackets – regardless of the floor height.



## Site and Stairwell Staircases

The version for narrow spaces

With the site and stairwell staircases, compact access means can be provided on the inside of buildings with small staircase wells. For this, shorter ledgers are connected at the same height at 90° angles, while using flights of stairs with smaller run lengths and heights. At the same

time, the stairwell staircases serve as working platforms for carrying out further work on the sides of the walls. With standard components, access can be created to all floors in height increments of 25 cm. Standard versions are available for common floor heights.

Short flights of stairs with 75-cm widths offer maximum adaptability for small areas and narrow geometries.



## PERI UP Flex Staircase 100 / 125

The stairs for high load-bearing and accessibility requirements

The PERI UP Flex Staircase 100 / 125 is assembled using stringers and individual stair treads. The 10-legged stair tower with heights of up to 50 m is designed to accommodate loads of up to 3 kN/m<sup>2</sup>. With 100-cm or 125-cm step widths and separate landings, the staircase is ideal for large numbers of users.

### High load-bearing capacity

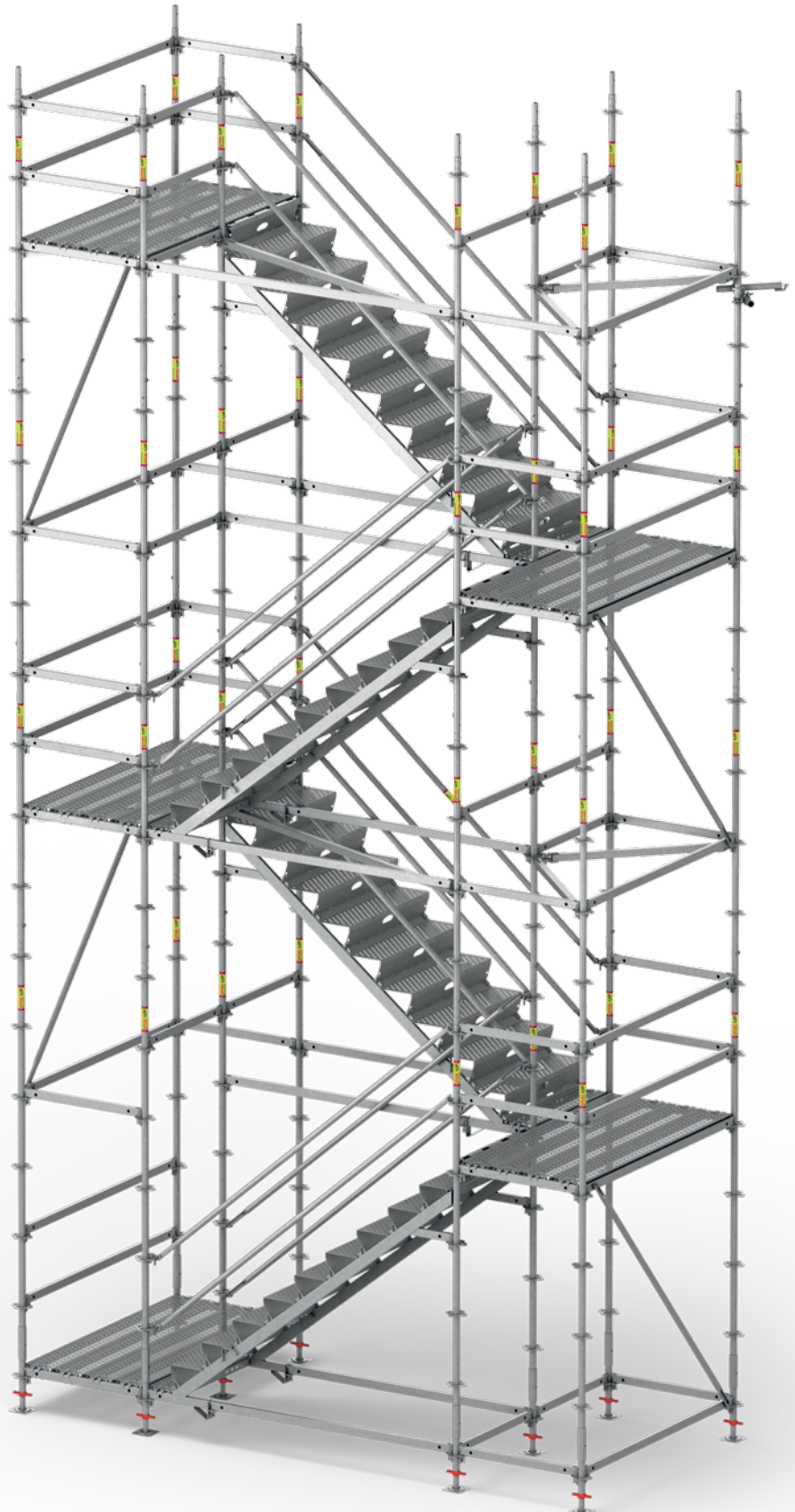
Designed for loads of 3 kN/m<sup>2</sup> for a run of staircase and landing of 20 m

### With conveniently-sized widths

Sufficient space for site personnel to pass each other, transport of materials and stretchering injured persons

### Erection without the use of tools

The stringers are mounted first, followed by the steps, which interlock during installation without requiring any additional components





- Staircases comprised of stringers and individual stair treads with 100-cm or 125 cm widths (clear stair widths of 96 cm or 121 cm)
- Can be used as staircase units in the same direction or alternating staircase units with assembly heights of 2 to 50 m
- Ground plan: 2 m x 4.50 m (Staircase 100) or 2.50 m x 5 m (Staircase 125)
- Permissible loads: 3 kN/m<sup>2</sup> for flights of stairs or 40 kN for the entire construction or 3 kN/m<sup>2</sup> for a run of staircase and landing of 20 m

The perforated decking is extremely slip-resistant – also when walked on with oil-smearing shoes.



The lightweight individual steps are quickly installed; they interlock during assembly and secure automatically without any additional measures.



The PERI UP Flex Staircase 100 / 125 also provides sufficient space to allow people to pass each other easily. This is a big advantage with large numbers of users.



## PERI UP Flex LGS Weather Protection Roof

Reliable protection against the effects of the weather with the lattice girder system – also for large spans

With the PERI UP LGS Weather Protection Roof, temporary and protective roofing facilities can be realised quickly and easily. The system is used for roof refurbishment, extension work, bridge and motorway construction sites or at jobsites during the colder winter months. LGS is designed to accommodate large spans and high loads. It provides a high level of safety during both assembly and use. As an option, the roof can be designed as a movable version.

### Fast assembly

Easy pre-assembly on the ground, and raising the complete girder package by crane

### Flexible adaptability

Can be realised with different inclinations and geometries

### Safe without requiring personal protective equipment

Walkways ensure safe working conditions on the roof segments without requiring personal protective equipment against falls from a height

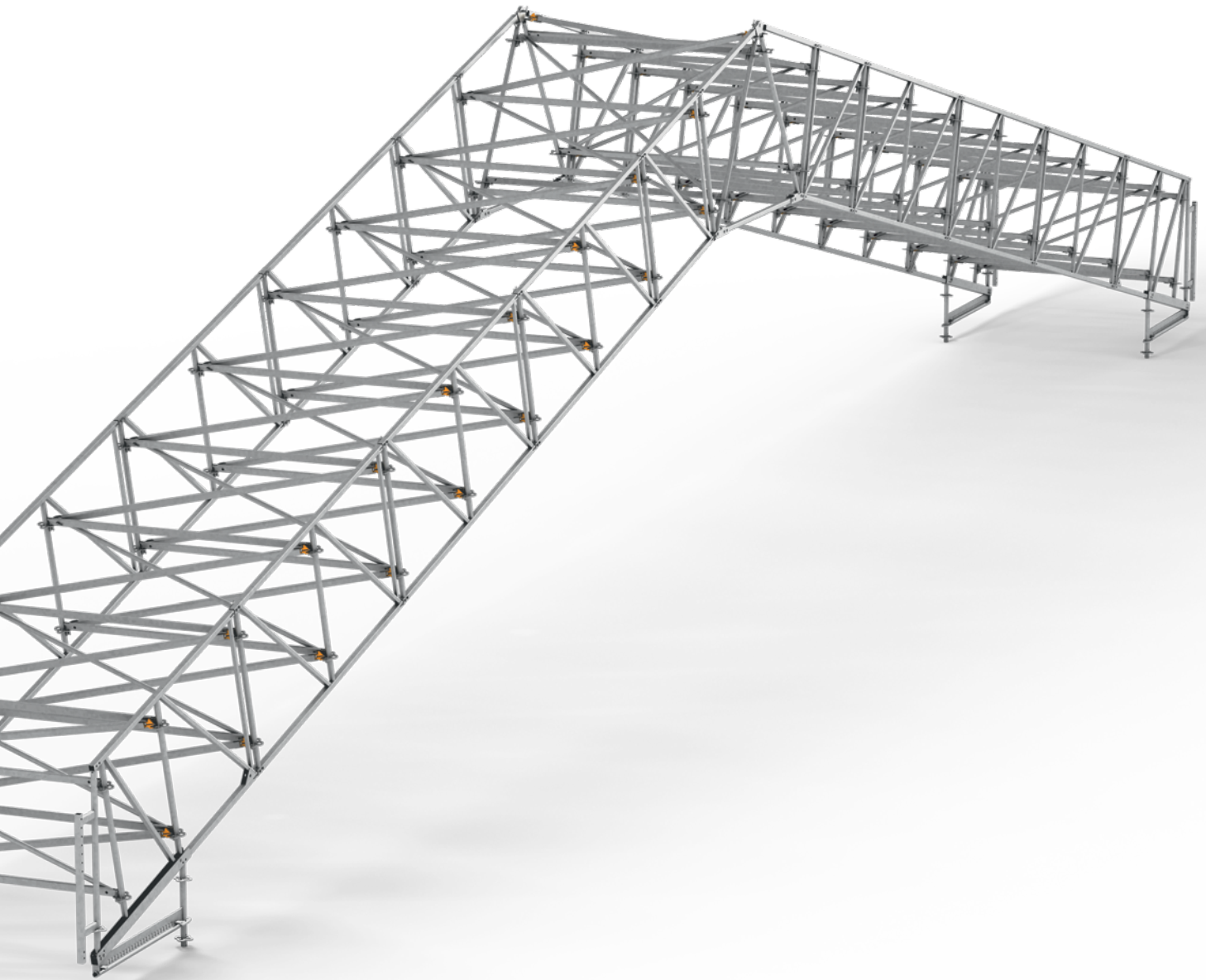
- Spans up to 45 m, up to 35 m without a tension system
- Standard roof inclination 15°; project-specific roof inclinations on request
- Dimensions of LGS Basic Element H = 150 cm, L = 300 cm or L = 150 cm
- Variable girder spacings from 50 cm to 300 cm
- Individual roof geometries through project-specific adaptation of the ridge elements

The roof segments can be pre-assembled on the ground, subsequently they are lifted by crane to their final position.



Walkways along the girders ensure safe access during assembly of the individual segments.





Smooth-running rollers support the uniform rolling up procedure and fast dismantling of the Keder tarpaulin across the entire field width.

As an option, the tarpaulin can be closed by means of an electric drawing-in device. A tube facilitates the drawing-in of the Keder rails.

The roof elements can be moved longitudinally by means of wheels so that, for example, materials can be lifted in by crane.



## PERI Services for the Best Results





**PERI customers can rely on a comprehensive range of engineering and service solutions.**

The focus of all PERI activities is on having a collaborative partnership with customers and ensuring that we provide cost-effective project solutions - consistent, close cooperation throughout the entire project is a matter of course to us.

## Continual Support in all Project Phases

Our services and performance are project-specific overall concepts that bring our customers decisive competitive advantages. We also support contractors and site management during the construction phase and continuously throughout the whole project.

The sales engineer is the main point of contact for our customers; he has profound specialist knowledge and under-

stands the precise requirements and needs of the project parties. The extensive network of sales engineers ensures close proximity to users and reliable support.

Requirements are analysed, solution proposals are created and the price-performance ratio is carefully considered – all on a project-related basis. Detailed discussions with the sales engineers,

experts from specialist departments and the site management result in optimised and cost-effective scaffolding solutions.

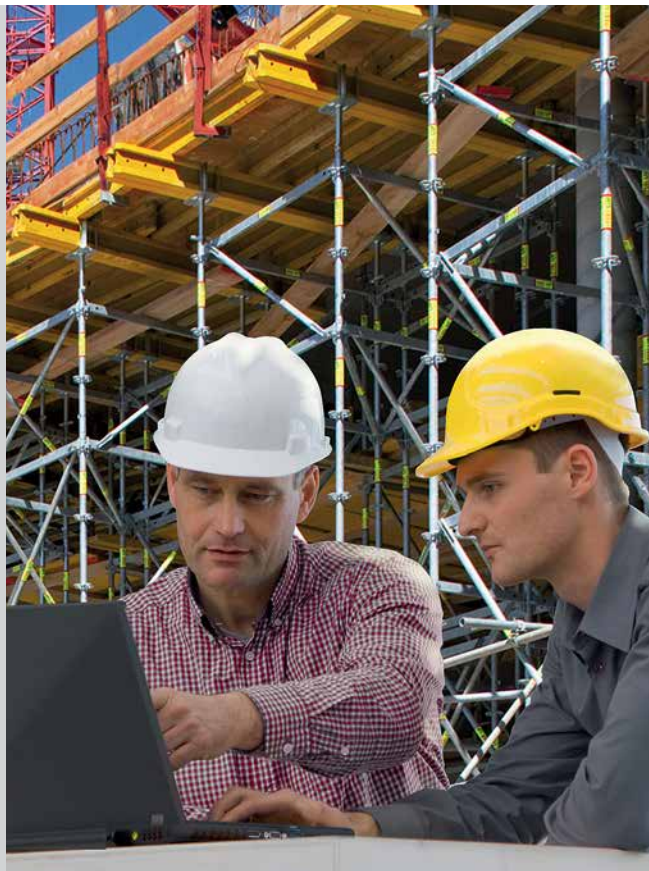
### Customer requirements

Cost-effectively optimised system equipment for every application

The optimised solution for every scaffolding task

Safe and cost-effective processing

Reliable partner



### The PERI sales engineer

He is the first point of contact for our customers and supports them continuously throughout the project. Depending on the project phase and requirements, he involves the appropriate specialists in the customer service.

### Our service

Intelligently designed products of the best quality

For rationalisation of working procedures and the longest possible service life.

Customer-oriented engineering services

Project-related preparation and planning of the best solution.

Competent logistics and distribution

Fast and flexible deliveries, and permanent support provided throughout the whole project.

Best service for our customers

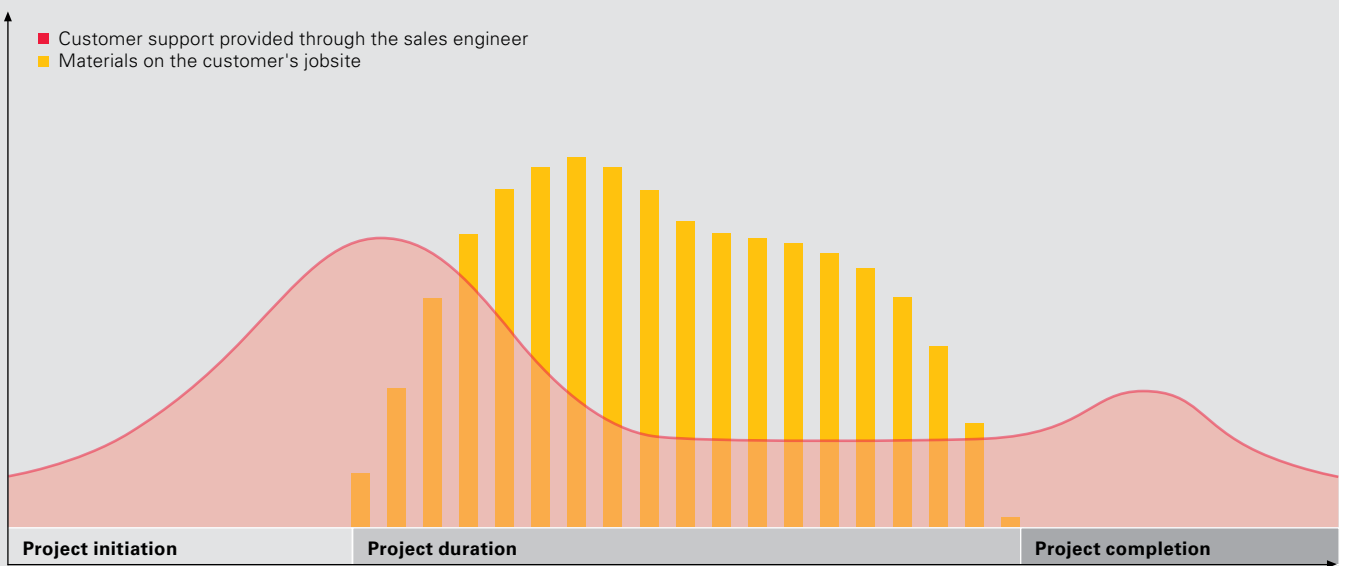
Our experience and high level of commitment make us a very reliable partner.

Project-specific solutions are developed in a team. Our engineers' different experiences and approaches optimise the solution – particularly in terms of cost-effectiveness and safety.



### Project process

Our participation and provision of services begin long before the actual start of the project and go far beyond project completion.



# Safety throughout the Product Life Cycle

With the PERI UP system technology, PERI has demonstrated that safety does not preclude cost-effectiveness in any way. We follow the principle that the best solution for the customer must always be one of the safest.

At the same time, PERI understands safety in a processual sense, whereby PERI engineering and scaffolding technology is integrated into the customer's project and construction site processes in a timely and targeted manner.

A functioning safety concept covers all aspects of the entire product life cycle. It has to be fully integrated - therefore, we also take into consideration topics such as legal certainty and future viability. Binding offers and clearly regulated criteria for rental and return of materials also offer you security. Many items can also be rented on a project-related basis. Take advantage of our simple work preparation procedure and execution control using our PERI software for scaffolding planning. Standardised parts

lists, easy and quick ordering options and return deliveries allow optimised personnel deployment and material usage.



### High degree of material utilisation

With only one scaffolding system, identical connection logic and a minimum of system components, a wide range of applications can easily be realised.



### Legal certainty

PERI provides complete and comprehensive documentation that takes into consideration all current standards, requirements and regulations. In addition, this serves as an optimum basis for customer-specific construction site documentation, such as assembly instructions and risk assessment.



### Employee protection

Lightweight individual components for fatigue-free working, integrated user safety and an easily understandable system with design-related logical assembly sequences ensure a high level of employee satisfaction.



### Quality

State-of-the-art production and inspection processes ensure that PERI systems are suitable for tough everyday operations on the jobsite and can be used reliably. The entire process of the serial production that follows is subject to continuous quality assurance.



Smooth construction process: with the latest material technology, approvals and type tests, as well as a comprehensive range of services, PERI makes a significant contribution by supporting the experts on site in carrying out successful construction projects. Risk assessments and assembly instructions can be created easily with the support and documentation provided. Instruc-

tions for Assembly and Use are the basis for a cost-effective and safe working practice. PERI offers a high level of safety during assembly by providing the Instructions for Assembly and Use in different languages. The presentations of individual assembly steps and the complete structure are easy to understand.

## PERI – Your Reliable Partner Worldwide

For more than 45 years, PERI has been a competent provider of formwork and scaffolding systems. Apart from proven and innovative products and systems, PERI also offers a wide range of services that improve and increase the economic efficiency of projects. These include not only individual planning and structural calculations but also, for example, optimised logistical operations and constant support for our customers during construction.

Since the company was founded in 1969, the central functions, development and the main production plant for formwork materials have been located in Weissenhorn, south of Ulm. Since

2016, a new, ultra-modern production facility for the PERI UP scaffolding technology has been operating in the nearby town of Günzburg. Worldwide, over 70 subsidiaries, a large number of branches and more than 140 efficiently-run storage facilities ensure close proximity to our customers and markets.

Market and practice-oriented solutions are realised for all construction projects – whilst always taking the total costs resulting from labour and materials into account -based on our employees' in-depth technical know-how and our extensive knowledge of local requirements.

We know and understand the requirements of our customers intimately, supporting them from the first solution idea to successful conclusion of the project and beyond.

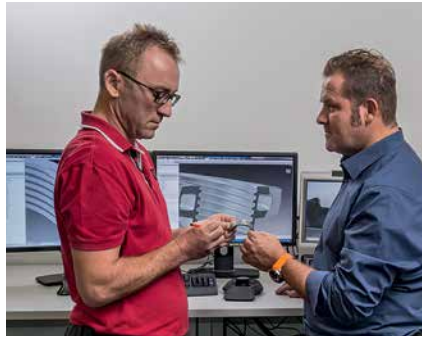
Our maxim is enhanced customer service in all respects. All our employees apply this guiding principle on a day-to-day basis and around the world – they have shaped PERI since the company was founded. This fact, along with our experience from over 45 years of company history and our global activities, benefit each customer and every project – regardless of size.

PERI in Weissenhorn: company headquarters, development and production.





The very latest production facilities, the expertise of the PERI workforce, efficient operational processes and stringent quality tests guarantee the high quality of PERI products and systems.

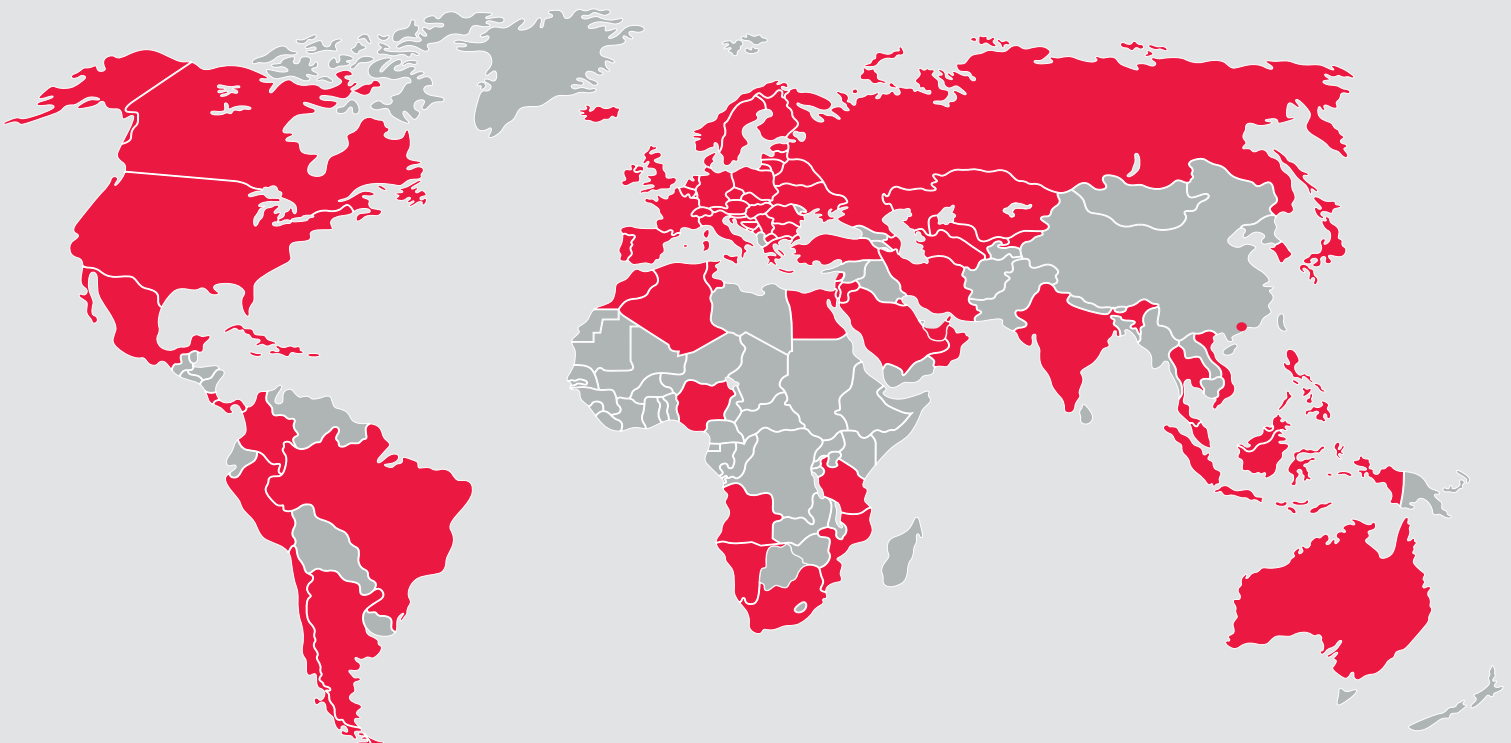


Product development at PERI is teamwork: practice-oriented scaffolding that is easy and safe to use is created through the collaboration of specialists in the field, development and manufacturing.



Apart from the purchasing option, PERI also offers the possibility of renting formwork and scaffolding systems. In particular, the combination of both models allows cost-effective project realisation.

With over 70 subsidiaries and numerous branch offices, we serve our customers efficiently all over the world.







**PERI**

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