

SCS Climbing System

ONE SYSTEM, VARIOUS STRUCTURES



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The Climbing System SCS is used for both one-sided and two-sided applications. In the one-sided application, the loads resulting from the fresh concrete pressure are thereby transferred via the brackets into the previous concreting section by the climbing ties. Typical areas of application for the Climbing System SCS are dams, locks, cooling towers, bunkers, pier heads, tunnels and various applications in highrise. With only a minimum of additional components, the system can also be used economically for two-sided applications.

SCS units are crane-climbed. They consist of two brackets, working platforms and a fixed PERI wall formwork section. Either VARIO GT 24 Girder Wall Formwork or system formwork such as TRIO or MAXIMO can be used. The formwork must not be removed for climbing.



One-sided climbing

The system's one-sided application makes it possible to realise constructions that only allow the formwork to be positioned on one side, such as dams, locks and tunnels.



Complex structures

Due to the horizontal alignment of the platforms even for inclined working operations, it is possible to climb structures with complex geometries safely.



Accelerated construction cycles

Due to the large, crane-climbed units, fewer units are required overall, optimising the use of crane time – also in the case of large formwork heights and circular structures.



Top Product Features

- Realisation of both simple and complex geometries.
- Ability to climb complex structures in one and two-sided application.
- Safe working conditions thanks to tiltable working platforms.
- Time- and cost-efficient solution thanks to large units and dual application.
- Efficient use of materials due to load-bearing brackets and optimised anchoring for maximum widths of influence.
- No investment risk due to the system being rentable in its entirety.
- Pre-Assembled delivery to the construction site with fast final assembly enabled by the system's modular design.



Optimised for concreting heights of 3 m height in one-sided applications and up to 6 m in two-sided applications

Adjustable working platforms to enable forward and backward inclinations of up to $\pm 15^\circ$ sowie um $\pm 30^\circ$ for climbing tilted structures.

Compatibility with VARIOKIT also enables project-specific solutions

Fully rentable solutions due to its standardised system parts

Spacious access and working platforms thanks to a form-work retraction distance of up to 67 cm offered by SCS 250

Space and cost saving option on narrow sections with tight working platforms of only 1.90 m for SCS 190

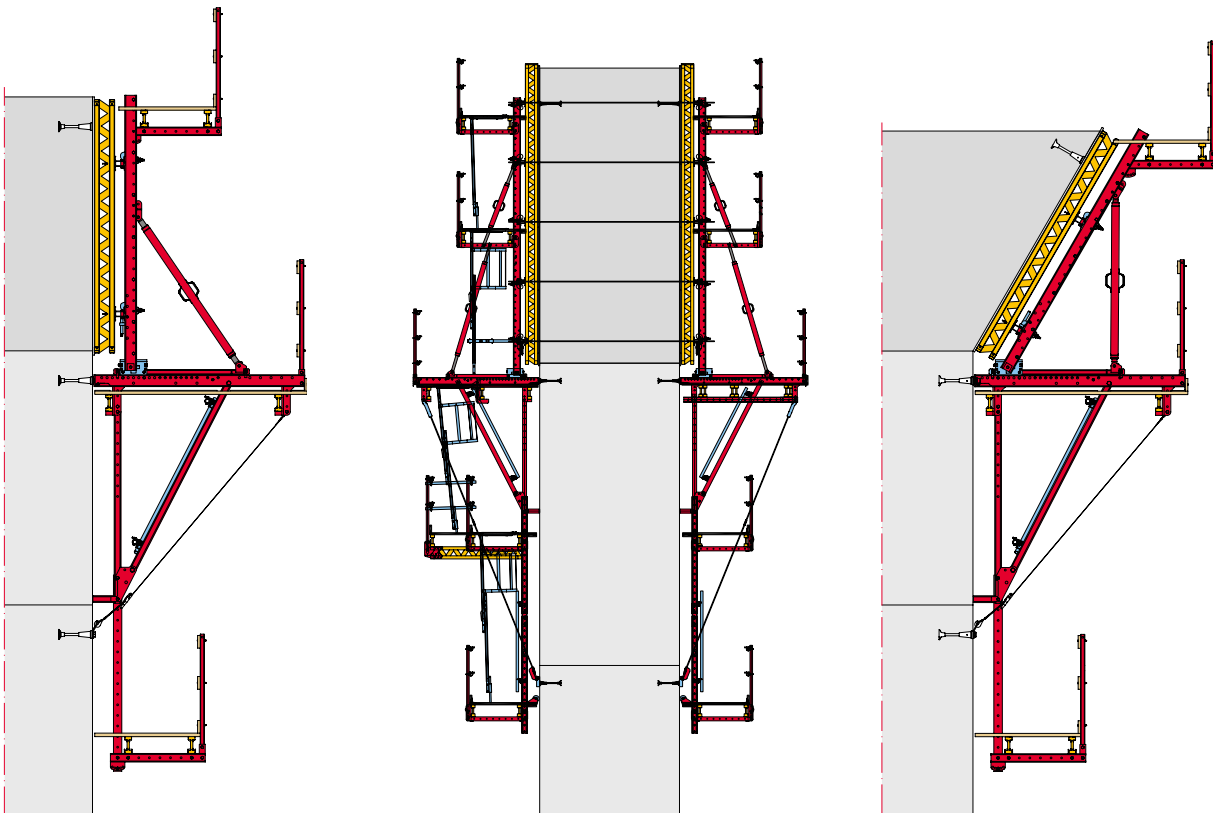
Use of the same material for start and standard cycles

A single system for one-sided or two-sided, circular and inclined structures of all complexities



▶ VIDEO

Various application possibilities



Flexible system usage

One-sided application

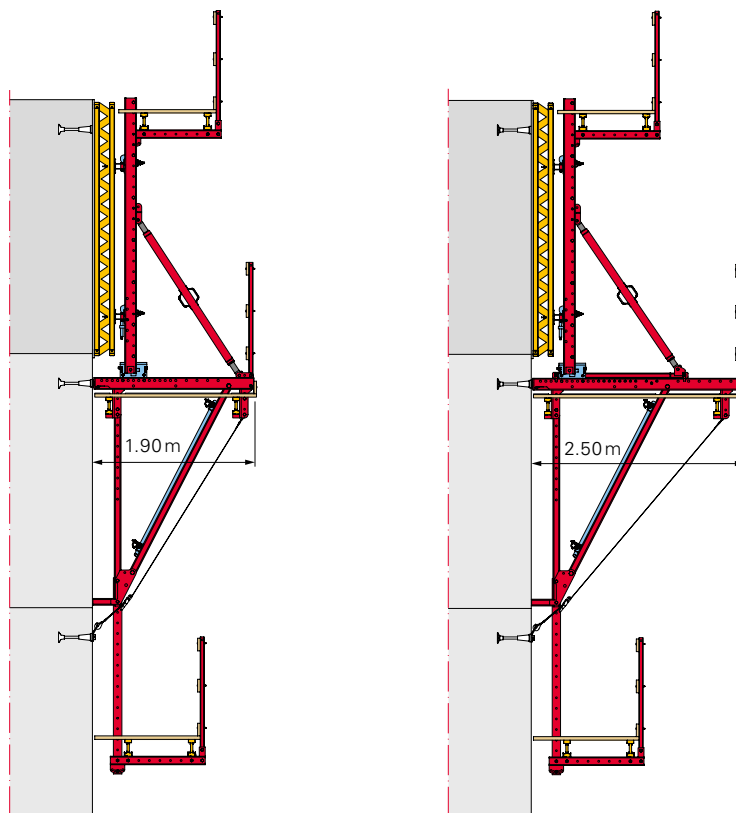
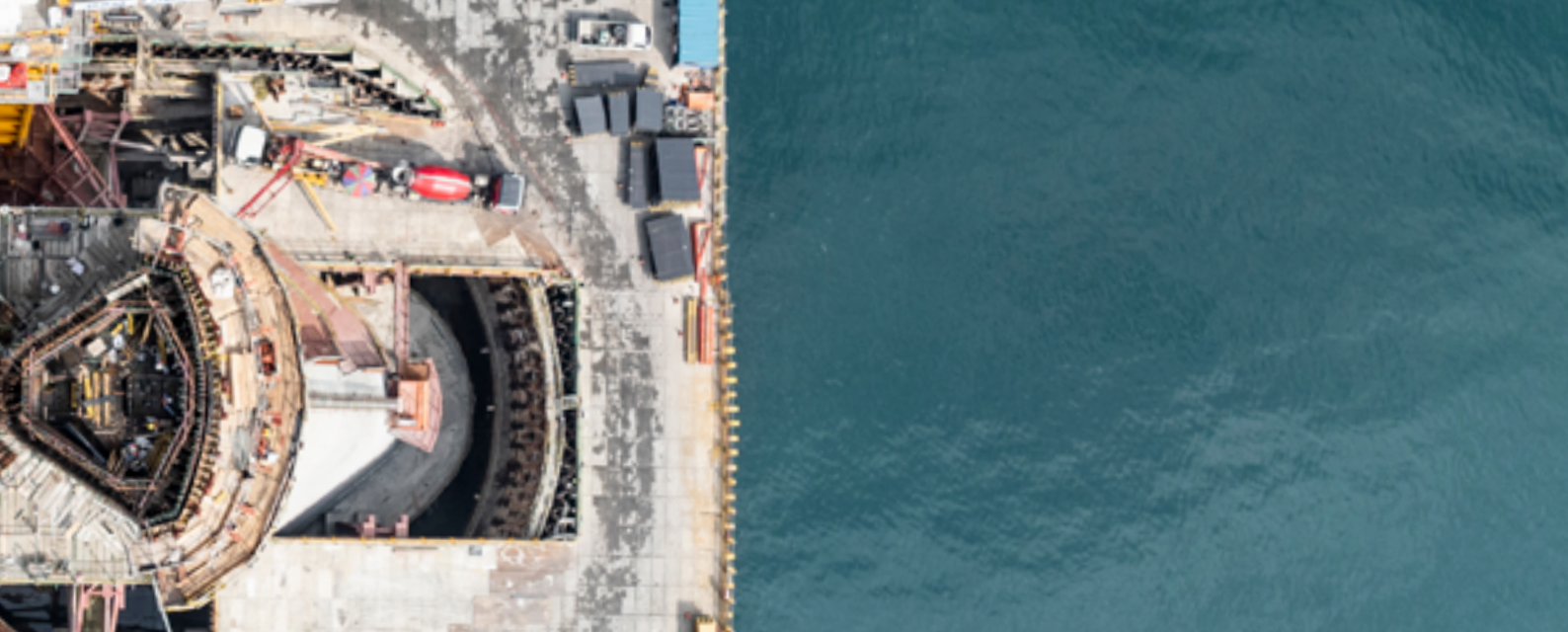
The one-sided SCS application allows the system to be used for any type of structure. Specifically complex geometries require a flexible climbing system that allows access from only one side.

Two-sided application

SCS can be adapted for two-sided applications. The two-sided system only requires a few more components and can be used for formwork heights of up to 6 metres. This ensures increased material utilisation of the system components, thereby improving the cost-effectiveness of your investment.

Inclined applications

The SCS platforms can be inclined by $\pm 15^\circ$ or $\pm 30^\circ$. For inclined applications, platforms for working, concreting and finishing are adjustable to various angles. SCS thus enables safe working conditions even with inclined structures thanks to horizontal working platforms.



Various bracket widths

SCS 190

The SCS 190 has a width of 1.90 m and requires only a minimum of space. Further, it's a more cost-effective alternative. The formwork is simply tilted when striking.

SCS 250

The SCS 250 has a bracket width of 2.50 m and is equipped with a formwork carriage. The carriage allows the wall formwork to be retracted by up to 79 cm (valid for MAXIMO and TRIO) or up to 63 cm (valid for VARIO GT 24) without requiring a crane. This provides sufficient space for the reinforcement work, assembly of the scaffold anchors, as well as shuttering and striking of box outs.

Reference projects

Danjiang Bridge | Taiwan

KSECO, Taiwan

The asymmetric cable-stayed Danjiang Bridge over the Tamsui River on the outskirts of Taipei was designed by Zaha Hadid and will reach a height of 200.00 metres after its completion. A major challenge: the cross-section of the pylon changes as the height increases – convex at the bottom and concave at the top. To realise the various shapes and radii of the pylon, the SCS Climbing System made it possible to construct the inclined design at the upper and lower ends. Furthermore, the horizontal alignment of the system's working platforms ensured safe working conditions at great heights and on an elaborately shaped surface.



“Since we have been using PERI products, the project has been running smoothly. The efficiency is constantly high so that our requirements regarding the progress of the projects are fully fulfilled. For us, it is a good feeling to know that PERI is always able to competently solve any problems that arise during the entire construction process. We are very satisfied with PERI's service because it enables us to work efficiently.”

Zeng Wei-Cheng, Site Manager
KSECO, Taiwan



VIDEO



Panama Canal | Panama

Grupo Unidos Por el Canal,
SA (GUPC) Joint Venture

Opened in 1914, the Panama Canal shortens the dangerous journey around South America and Cape Horn and is one of the most important waterways in the world. A huge challenge was the dam structure as the climbing system could only be attached on one side. PERI therefore developed SCS, a specific solution which enabled one-sided climbing. The customer was impressed and chose PERI over other competitive solutions. The in-house-developed climbing system helped the customer to achieve high cost efficiency with rapid construction progress.



“In PERI, we have found the right collaborator for our Panama Canal project. The PERI team developed a detailed technical solution for every lock component and provided superb support to our GUPC construction team.”

José Pelaez, Site Manager
Gatun/ Atlantic, Panama

Customer Benefits

Minimal assembly effort

Thanks to its modular design, the SCS can be delivered pre-assembled to the construction site with swift final assembly. As a rentable solution, SCS requires no up-front investment.



Concreting of up to 6 m in height

The SCS Climbing System has been optimised for a concreting height of 3.00 m (vertical applications) or 2.50 m (forward-inclined applications). With only a small number of additional components, it is also possible to incorporate anchored formwork for walls up to 6.00 m high.



Construction of inclined structures

SCS enables safe and simple construction even on inclined geometries with its flexible working platforms, as the platform's angle can be adjusted individually.