

LAYHER INFO

April 2025 | Ref. No. 8116.354

Information about products and
technology for clients and partners



Bridging in the system

From small to large spans for construction and industry

It doesn't matter if it's for bridges across an excavation or road or for supporting inside work scaffolding: self-supporting bridging is a typical challenge encountered at sites, both in construction and in industry, and is often the material-saving and economical variant. With just a few additional components, scaffolding can be provided using existing stocks of Layher material.

Allround Bridging System

Large spans of up to about 30 metres and structures with high load capacities can be built using the Allround Bridging System. This modular lattice system is fully combinable with Layher Allround Scaffolding thanks to the attached wedge heads, and increases its load-bearing capacity.

- Unrestricted combinability with the Allround Scaffolding range.
- Only a few additional components needed.
- Combinable with protective systems for roofing and enclosures.
- Preassembly of the bridge on the ground with simple pin connection technology and lifting into place by crane.

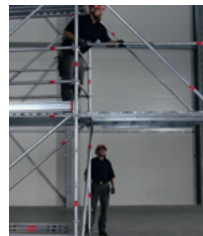


Allround Bridging System for support of facade scaffolding above a projecting roof

Allround FW System

To bridge larger spans of up to about 20 metres or to support higher loads, the Allround FW System is available.

- Dimensionally and structurally integratable into Allround structures, since the components are in the system axes in all three spatial directions.
- Easy handling thanks to lightweight components of 19 kg maximum and rapid assembly with pin connections.
- High load-bearing capacity thanks to great static height and sturdy parts made of high-tensile steel.
- Preassembly on the ground is possible, as is lifting into place using a crane or using the cantilever method from a secured level.



Cantilever method of bridging using Allround FW System



Mobile ceiling work scaffolding over a swimming pool

Aluminium TwixBeam

For large-area, high load-bearing with passages, passageways or for applications with a low overall height (e.g. industrial plants), the aluminium TwixBeam is available.

- Only 200 mm high, approx. 50 % lower than the steel lattice beam 450 LW to maintain the clearance height of motorway bridges.
- Consisting of two bolted aluminium U-profiles and an extensive range of accessories such as spindles, struts and much more
- The hole pattern enables problem-free further construction with Allround scaffolding material and the combination with the aluminium FlexBeam.
- Can also be used as a yoke beam for shoring.



Aluminium TwixBeam in a birdcage scaffolding of a bridge tower

Aluminium FlexBeam

For large-area and suspended bridge substructures with high load-bearing capacities or for applications with low height (e.g. industrial plant) the Aluminium FlexBeam is the ideal solution.

- Up to 2.5 times higher bending load capacity than with the Steel Lattice Beam 450 LW, permitting larger support and suspension configurations.
- Only 280 mm structural height, about 40 % less than with the Steel Lattice Beam 450 LW, for retaining the headroom for vehicles at motorway bridges.
- The upper side of the section permits direct suspension of standard decks.
- The hole configuration permits problem-free further construction using Allround Scaffolding material.



Aluminium FlexBeam as work scaffolding underneath a motorway bridge

Lattice beams

A comprehensive range of steel and aluminium lattice beams is available for bridging small to medium spans.

- Top and bottom chords made of 48.3mm tube, designed for connecting scaffolding couplers at structurally favourable points and for various bay length configurations.
- Use of high-tensile steel to reduce the component weight.
- Allround lattice beams with wedge heads and U-section for system scaffolding decks available.



Allround lattice beams with wedge heads



Steel System Lattice Beam 450 LW

The Benefits for You

- Extensive technical documentation made up of Instructions for Assembly and Use, technical brochure, load tables and general building authority approval improves planning certainty
- Integrated system for meeting every requirement with existing stocks of scaffolding and by purchasing a few supplementary components
- Extensive range of expansion parts for safer and more economical solutions to every requirement
- High assembly flexibility thanks to cantilever method or preassembly on the ground followed by crane emplacement
- Available at short notice thanks to high level of stocked material in the close-knit Layher service network

Wilhelm Layher GmbH & Co KG

Ochsenbacher Strasse 56
74363 Gueglingen-Eibensbach
Germany

T +49 (71 35) 70-0
info@layher.com
www.layher.com

Subject to technical modification. Component weights are subject to fluctuations due to tolerances and may therefore diverge from what is specified. Some of the scaffolding structures shown may still be undergoing assembly. We would be happy to send you these on request. They may be accessed gtc.layher.com.