



**Layher Allround Scaffolding®**  
**Layher Allround Technology**

The universal system  
for everyday and  
complicated tasks in scaffolding

made of galvanised steel  
or aluminium

General construction approvals  
Z-8.22-64, Z-8.22-64.1

Quality management  
certified according to  
ISO 9001:2008  
by German TÜV-CERT



**Allround Scaffolding**

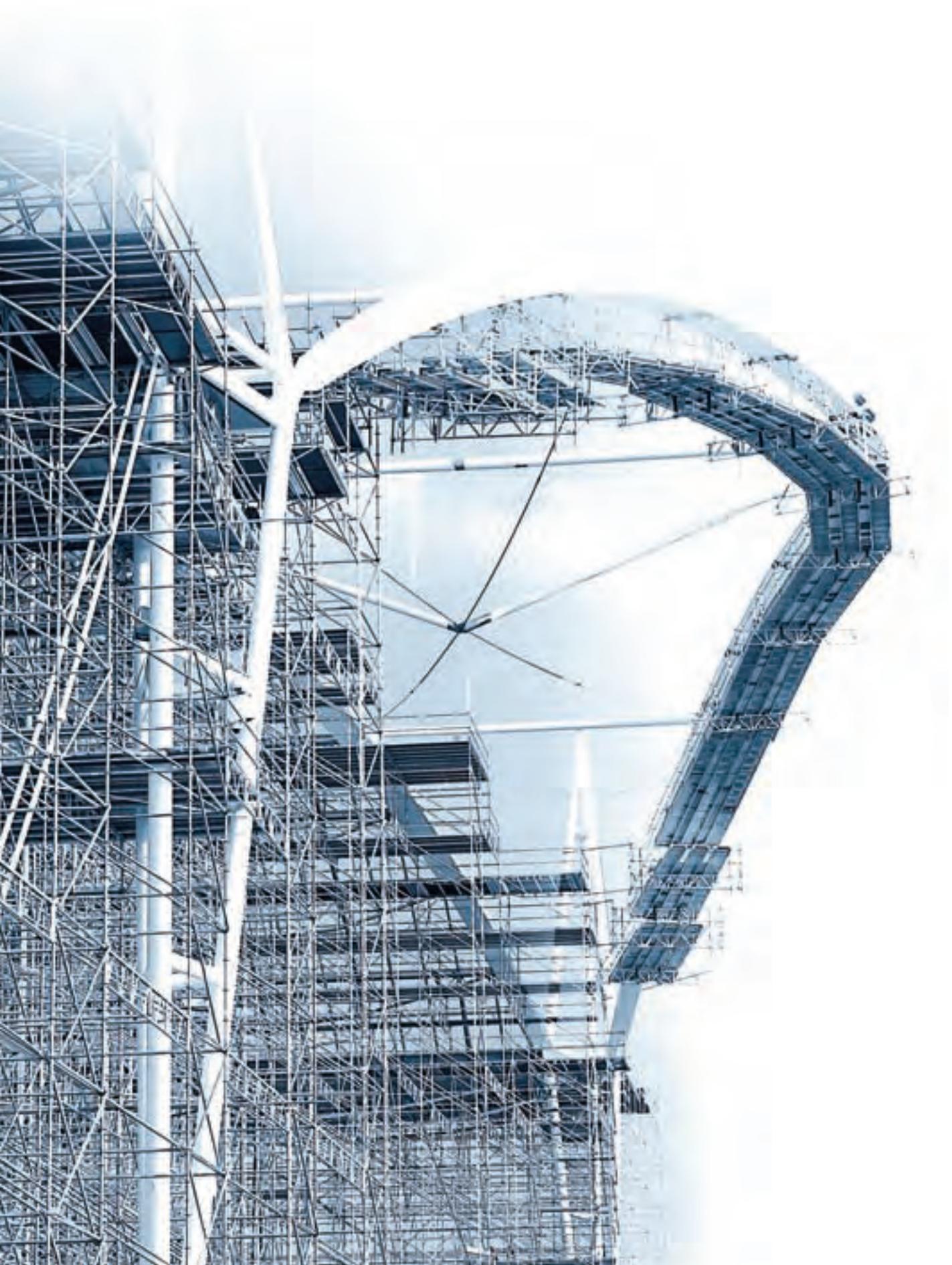
Ingenious. Strong. Limitless.

**Layher®** 

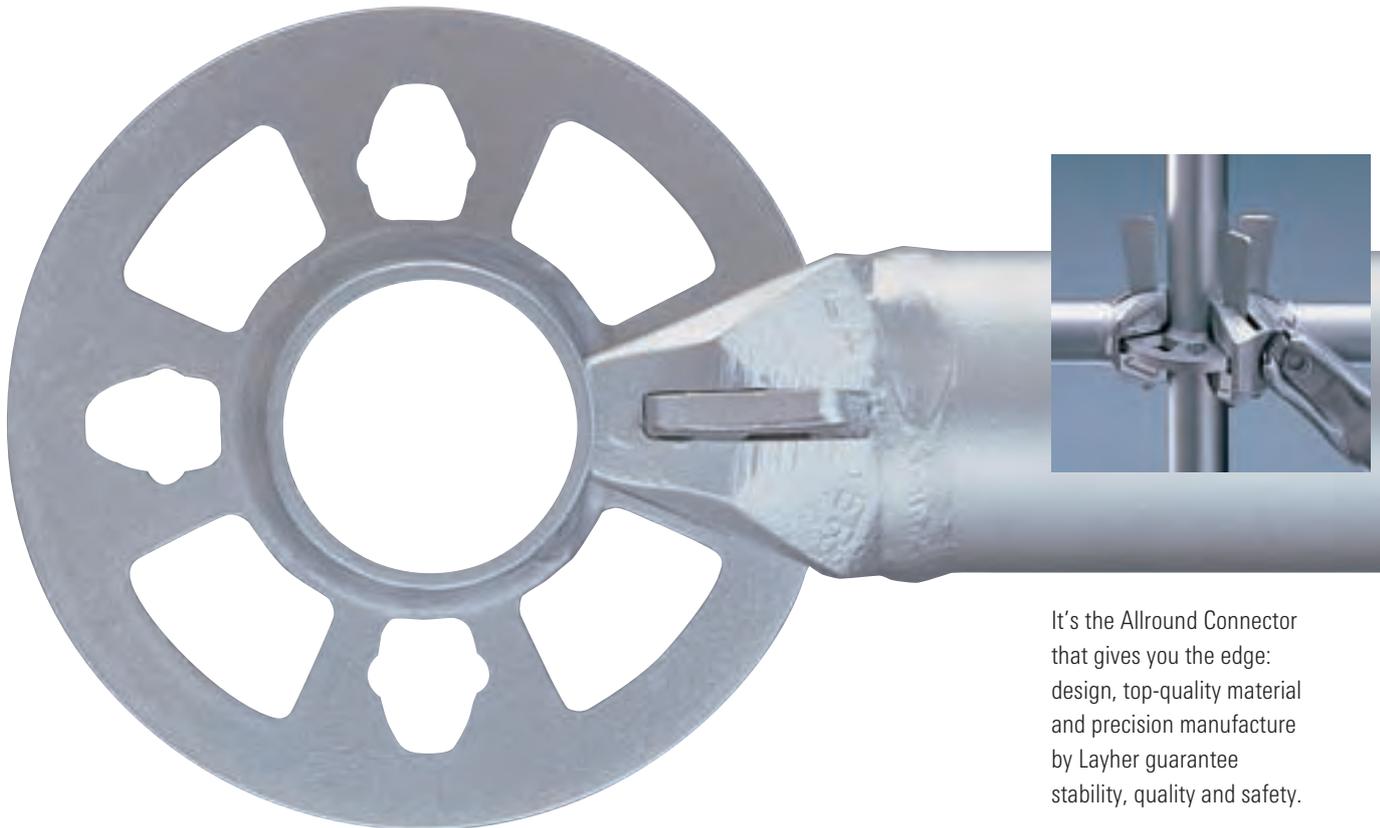
More Possibilities. The Scaffolding System.

More possibilities. Quickly erected with safety.

# Original Layher Allround Scaffolding®



# – and its ingenious Allround technology



It's the Allround Connector that gives you the edge: design, top-quality material and precision manufacture by Layher guarantee stability, quality and safety.

## **The »Original« Layher Allround Scaffolding®**

For demanding and complex scaffolding applications – i. e. wherever conventional scaffolding technology falls short of optimal thus cost effective use, Layher Allround Scaffolding convincingly comes in with an unmatched range of advantages: unbeatably fast assembly, persuasive economic arguments and an extensive range of series-produced accessories. This and more is available thanks to allround versatility from one system.

Connections in this quick to assemble and spannerless scaffolding system make a unique combination: providing structural strength immediately on assembly and subsequent ultimate force transmission while offering a choice of automatically right-angled or splayed connections with unrivalled safety right from the start.

Layher Allround Scaffolding has become a by-word on the market for both modular scaffolding and outstanding quality.

Layher Allround Scaffolding is an investment in a perfected and complete system – in steel or aluminium – with all the necessary approvals, and rapid, safe, highly versatile and continually profitable scaffolding construction.

More possibilities. Unique connection technology.

# The Allround Force Connector makes it possible

For industry, chemical plants, power stations, aircraft hangars, shipyards, theatres and arenas, at any site or facility, the "Original" does full justice to its reputation as an all-rounder.

As work and protective scaffolding at the facade, as birdcage, tower and suspended scaffolding, or as a rolling tower – the right scaffolding at all times and for all jobs and requirements.

For very difficult ground plans and anchoring conditions, for very irregular structures, and for jobs with increased safety requirements.



**Structural assembly from the beginning:** By sliding the wedge head over the rosette and inserting the wedge into one of the holes ...

... the component is **immediately secured against any possibility of shifting or dropping out.** That means: safe 1-man-assembly, whatever the height.

**A blow with a hammer on the wedge transforms the connection from structural assembly to force transmitting rigidity.**

The flat rosette without recesses or raised edges prevents clogging with concrete, sprayed foam, dirt etc. that might otherwise hamper assembly.

Quality management certified according to ISO 9001:2008 by German TÜV-CERT



Member of IIOC.

D	B NL	CZ SQ	E	F	H
<p>Approval for Allround Modular System in steel: Z-8.22.64</p> <p>Approval for Allround Connector in aluminium: Z-8.22-64.1</p> 	 <p>Approval for Allround components: VGS – L 10</p>	<p>Approval for Allround modular system in steel: 235/032/2010</p>  <p>Approval for Allround modular system: 00001/115/2010</p> 	<p>Approval for the Allround Modular System in steel: A34/000006</p> 	 <p>Approval for Allround Connector and regular assembly: 07 P</p>	<p>Approval for Allround Connector in steel: G-215/91</p> <p>Approval for regular assembly in steel: G-215/91</p>

Further approvals and type testing in many other countries, accessible by the user whenever required.

# ible.

The wedge head is precisely matched to the radius of the standard at the front end – so forces are applied to a surface not a line and always centrally into the standard.

What use is a spannerless connection if the time saving is lost by having to measure for right angles?



Built-in assembly speed: the four narrow holes in the perforated rosettes centre the ledgers automatically and securely at right angles – while the four large holes permit the alignment of ledgers and diagonal braces at the required angle.

The result of superior design: up to 8 connections at various angles can be made in one plane with the structurally ideal Allround Connector. The assembly of the system is straight-forward.



Forget about ...  
 ... lengthy measuring and levelling,  
 ... time-consuming spanner work,  
 ... repeated adjustments,  
 ... tube/coupling entanglements,  
 ... undefined structural force situations...



I

Approval for Allround Modular System in steel: 20036/OM-4 and extensions



N S

Norway: Approval for regular assembly in steel: 76/02



Sweden: Approval for regular assembly in steel Allround: 154801



Approval for regular assembly in aluminium Allround: 154806

PL



Approval for Allround Connector in steel: B/02/003/07

RUS

Approval for the Allround System in steel and aluminium: POCC DE.AB34.B00212



UKR

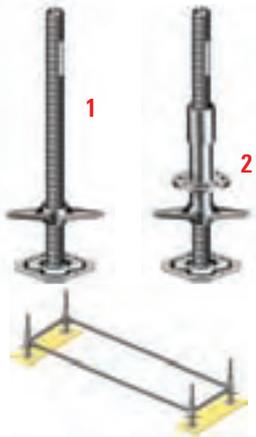
Approval for the Allround System in steel: UA 1.082.0053930-10



Approval for the Allround system in aluminium: UA 1.082.0053933-10

# Standard configuration

The Allround wedge lock system offers an ideal and safe positive connection between standards, ledgers and diagonal braces. The system provides permanent safety for erectors and users alike. By applying a blow with a 500 g hammer, the joint is secured. Standard lift height is 2 m; other heights are possible but may require special components or procedure. Consult Layher for further information.



**(1)** Starting at the highest point place threaded base plates at the required centres. Use soleplates where necessary to distribute the load.  
For allowable loads and max. spindle extensions  $h$  (see page 17 and Tab. 20, page 20)

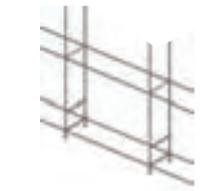
**(2)** Fit a collar over the threaded base plates.



**(3)** Connect collars using ledgers. Use the small holes of the rosette for right-angle connections.  
Then, level the base commencing at the highest point of the ground, by adjusting the wing nut.



**(4)** Fit standards, then at the next lift height connect one board bearer/ledger and two longitudinal ledgers (when using scaffold boards), or one U-transom and standard decking units with lock against lift-off plates.  
Installation of 2nd transverse ledger 0.5 m above the bottom transverse ledger (in the case of facade scaffolding structures with more than 60 % of the permissible standard load).

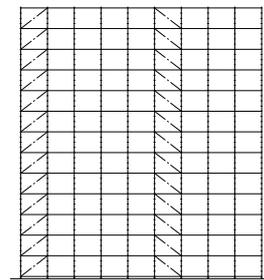


**(5)** Select lengths of standards in such a way that the joints occur at either deck level or transom level.

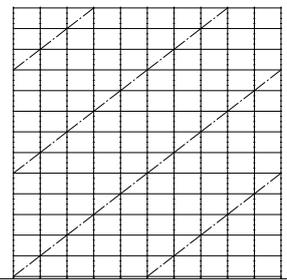


**(6)** Fix diagonal braces according to static requirement. At standard scaffold assemblies according to approval vertical diagonal braces are not required. If required they can be fixed in every 5th bay in tower-like **(6 a)** or in large area configuration **(6 b)**.

Diagonal braces Allround scaffolding, at assemblies different from the standard assembly



**(6 a)** Tower-like configuration

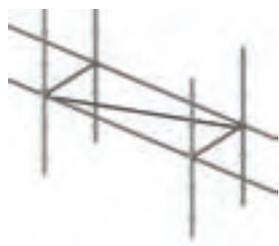


**(6 b)** Large area configuration

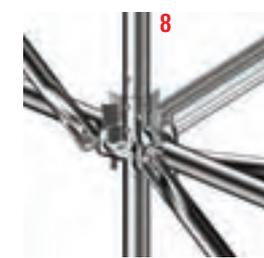
(drawings do not show anchorages)



**(7)** All wedge connections must be knocked in with a 500 g hammer until the blow bounces.



For timber plank decking or when no decks are installed, longitudinal ledgers must be installed and, in every fifth bay, horizontal diagonal braces, each level.

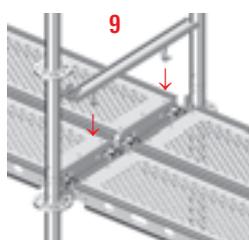


**(8)** To extend scaffold further repeat steps **(4)**, **(5)**, **(6)** and **(7)**.

Timber planks must be laid if required. Insert standard decks as stiffeners every 2 m apart in the upward direction as building work progresses.

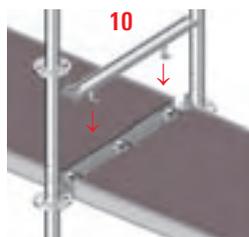
## Scaffold decking

The Layher system allows you to choose between decking elements made of hot-dip galvanized steel, aluminium, solid wood or an aluminium frame with plywood deck, depending on application, load class and your operational requirements. An inherent characteristic of all Layher decking elements is their reinforcing effect within the scaffolding. Longitudinal ledgers are not necessary; see also item (9).



### Standard decking

(9) and (10) Suspend decks in U-transoms and secure them with lock against lift-off. Deck selected depending on loading and standard spacing.



(11) Overlapping on transverse ledgers

Timber deck according to Tab. 2, DIN 4420, pt. 3.



(12) Without height offset, butt-joined on support ledger with due consideration of support points.

## Three-part lateral protection



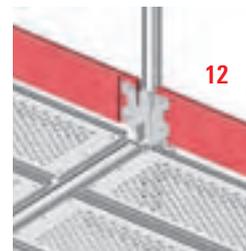
(11 a) Mount one ledger at 0.5 m above deck level as an intermediate hand rail and at 1.0 m as the main guard rail. Attach toe boards to the scaffolding bays and to the ends.



(11 b) When overlapping timber planks are used as decking element and when the guard rail height is less than 95 cm, add an additional ledger at a height of 1.5 m.



(12) Place longitudinal and end toe boards behind the wedges.



# Allround Scaffolding in allround application

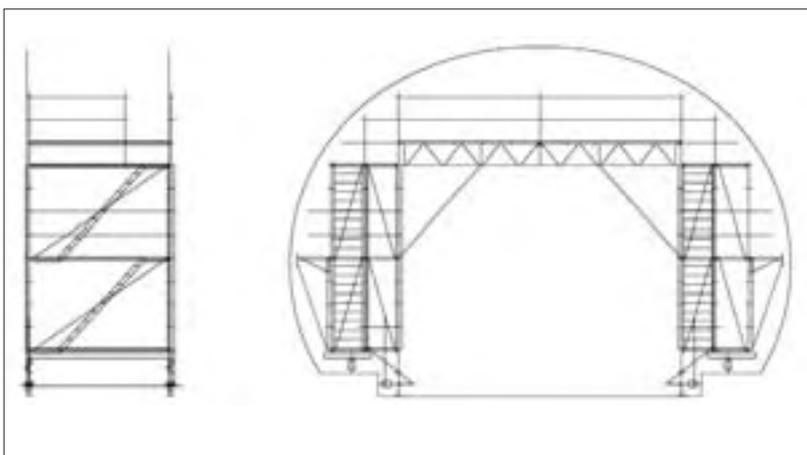
Universal scaffolding for any loading capacity required.



Facade scaffolding for heavily structured facades

The Layher Allround Scaffolding reduces assembly times, labour costs and increases safety when erecting scaffolds around church steeples, monuments and restaurants in high places, for scaffolds at or in boiler plants, tanks and pipe lines, for scaffolds across working places, and supply lines, around machines, at or under bridges – scaffolds on construction sites or mobile scaffolds in tunnels. Simply each and every job can be carried out safer and quicker with Allround Scaffolding thus saving costs.

The building industry is presenting increased demands for load-bearing capacity and assembly variability in scaffolding. This is where Allround Scaffolding is now setting new standards: a single system, as bricklayer's scaffolding, work scaffolding, safety scaffolding or falsework, with 73 cm, 109 cm or 140 cm bay width, with selectable storey heights and live loads of up to 6 kN/m<sup>2</sup> depending on the bay width. Or assembled as scaffolding for formwork or support: with Allround Scaffolding you're prepared for anything.



Mobile tunnel scaffolding



Shoring in industrial construction, bridge-building and solid construction

# Allround Scaffolding – bird cage scaffolds

R e n o v a t i o n   W o r k s .

The renovation of buildings will be task of the years to come. With Allround Scaffolding you can do each and every scaffold job. Concrete works at large buildings as well as the renovation of old historical buildings, or the interior scaffold for the removal of asbestos as well as for the restoration of precious ceilings in castles and museums.



# Structural scaffold – church towers

S c a f f o l d   f o r   d i f f i c u l t   s t r u c t u r e s .

Due to the irregular structural shapes at or in churches scaffolding was extremely difficult in respect to safety and could only be erected requiring a lot of time with high costs involved. The Layher Allround Scaffolding proves here its adaptability – in quick, boltless assembly and dimensional precision up to the greatest height. Hence you create quickly safe working places for roofers, stonemasons, carpenters and stuccoworkers, for plumbers and glaziers – either inside or outside.

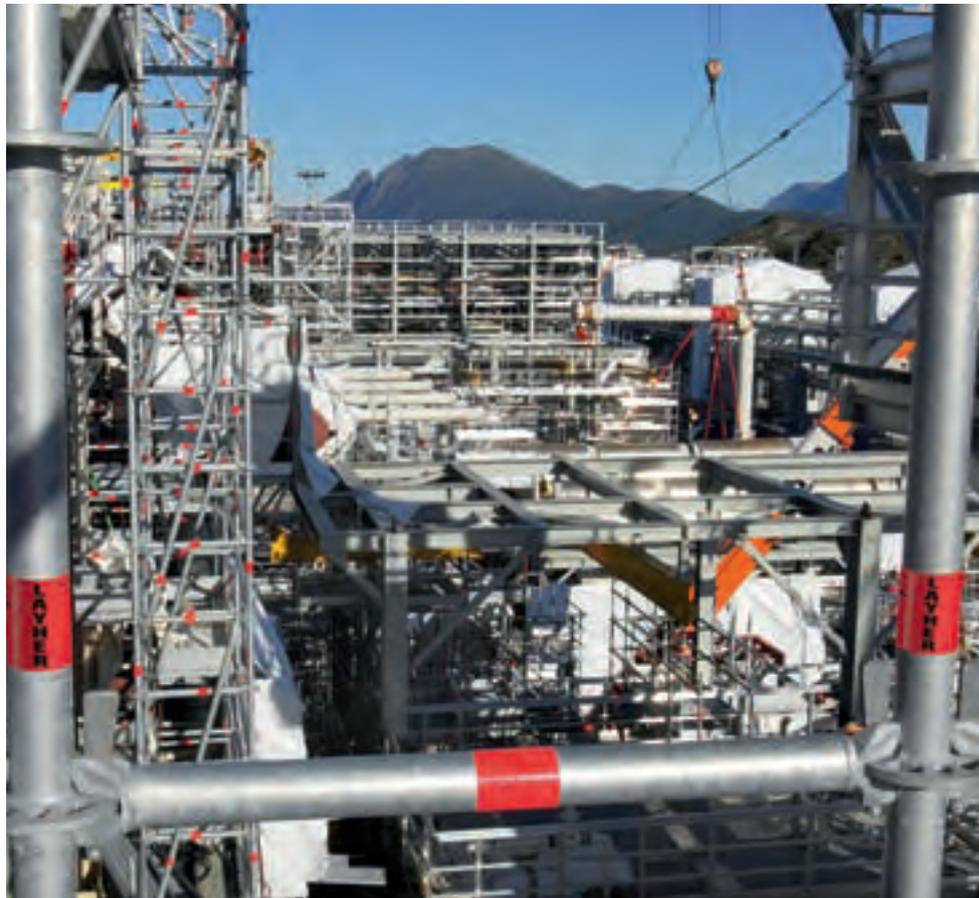
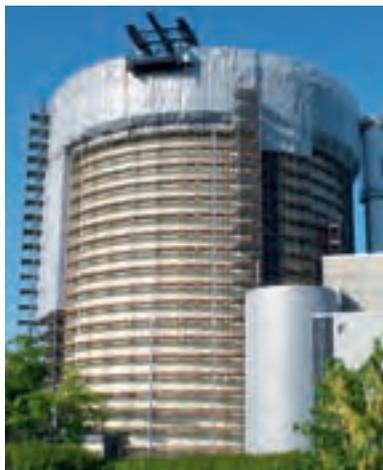


# Scaffold for industry

For safe working and maintenance.

High machinery and manufacturing plants have to be maintained and repaired, machines and installations have to be assembled, electrical units must be renewed among other things, either inside or outside.

With the Allround Scaffolding safe working and assembly places are established at the spur of a moment in each and every industrial company or craftsman's establishment. Today at one place, tomorrow at another place – everywhere it facilitates smooth working due to a safe platform at the required height.

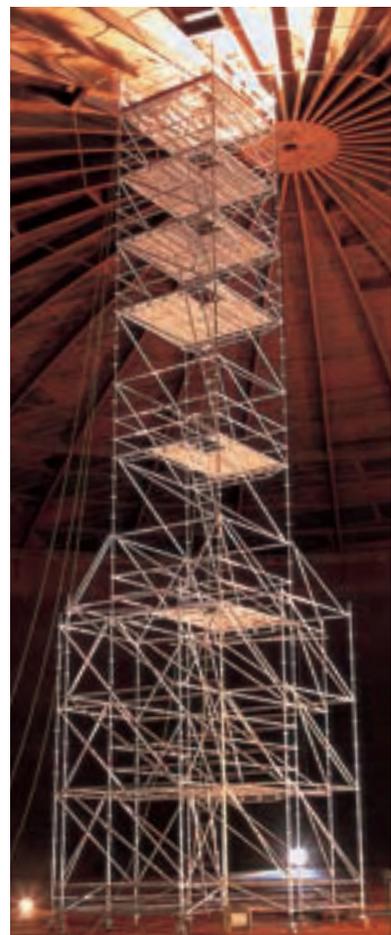
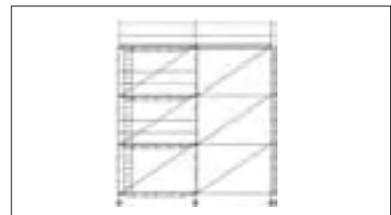


# As a basic system for versatile use

Stairway towers – rolling towers –  
protective cladding.



The high degree of variability and rigidity of Allround Scaffolding means that a wide variety of applications can be catered for, thanks to the use of a few additional parts. The use of stringers and guardrails allows the construction of stairways towers on sites as well as stairways for public access areas. Rolling towers can be built in all sizes and heights. Allround Scaffolding in conjunction with the Protect System allows weatherproof coverings to be provided, including complete facades for the purpose of asbestos removal.



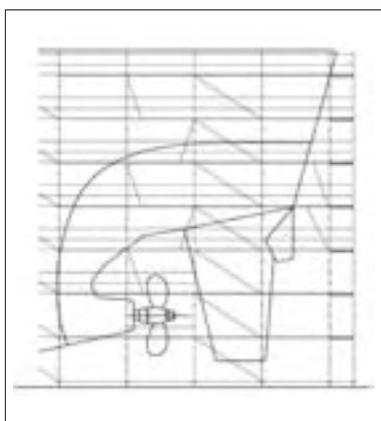
# Shipyards and offshore

Short erection times – thus short repair time.

A field of application for Allround Scaffolding is the construction of scaffolds in shipyards and offshore. The scaffolding of difficult structural shapes at or in the ship, on or beneath deck, at or under offshore platforms is no problem with Allround Scaffolding neither are the required quick erection times.

Today Allround Scaffolding is indispensable for the maintenance of drilling platforms offshore or in the repair shipyard.

You receive with the Layher Allround Scaffolding the Layher application technique, i. e. the technical expert advice for the erection. You will get this advice from qualified, trained partners. At your company, on your construction site, from the Layher representative or branch which is nearest to your company or from our central technical staff. Or trained erection foremen, who assist you in making an optimal use of the lucrative possibilities of the Allround System.



# Airplanes are easy to scaffold

S a f e t y . R e l i a b i l i t y . E c o n o m y .

Safety and service are written large when it comes to aircraft. That goes not only for the flight itself, but also for maintenance work, and hence for the maintenance scaffolding. Whether it's rolling maintenance units and special structures, Layher Allround Scaffolding is the right choice for any scaffolding where dependable and safe working at precisely the right height is crucial.

Flexibility thanks to

- ▶ variable working heights
- ▶ selectable bay lengths and widths
- ▶ outstanding adaptation to the aircraft fuselage

Dependability and safety thanks to

- ▶ bolt-free connection technology
- ▶ rapid assembly and dismantling, ensuring shorter aircraft idle times
- ▶ non-slip decking, convenient stairways, strong castors, and other components besides from a well thought out and sophisticated system.

It's clear to see that Layher Allround Scaffolding is outstandingly suitable for aircraft repair and maintenance.



# Spectator stands, stages – inside and outside

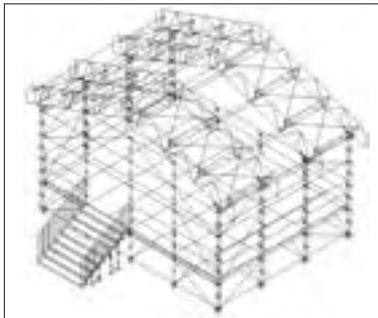
For all events.

Using the Layher Allround Scaffolding system, you can assemble safely, inexpensively and quickly mobile stands and stages for indoors and outdoors, for any occasion, in variable sizes.

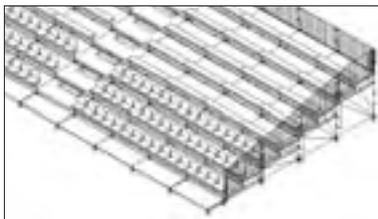
An official inspection book can be included in the delivery.

Matching roof structures are available as keder roofs, cassette roofs and variable-height roofs – in mono-pitch or double-pitch design, made from standard parts.

Event stages



Event stand



We're there for you. Wherever and whenever you need us.

## Layher in Germany

Branches and delivery warehouses nationwide.

## Layher International

Subsidiaries:

Argentina, Australia, Austria, Belgium, Brazil, Bulgaria, Chile, Colombia, France, Greece, Hungary, India, Italy, Kazakhstan, Lithuania, Morocco, Netherlands, New Zealand, Norway, Peru, Poland, Russia, Serbia, Singapore, South Africa, Spain, Sweden, Switzerland, Turkey, United Kingdom, USA.

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Croatia, Czech Republic, Denmark, Estonia, Finland, Hong Kong, Japan, Jordan, Kuwait, Latvija, Lebanon, Libya, Oman, Philippines, Romania, Saudi-Arabia, Slovakia, Slovenia, United Arab Emirates and many other countries.

**Layher** 

More Possibilities. The Scaffolding System.

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## The Layher Product Range

