



Ringlock

The modular scaffolding system
from Doka.

Formwork & Scaffolding.
We make it work.





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Important notes: The safety regulations applicable in the country of use must be followed to ensure safe use of our products. In addition, the user information (instructions for assembly and use) containing information on the standard methods for installation and intended use of Doka systems must be observed. The views shown in this document are installation states and therefore not always complete in terms of safety. Mixing our Ringlock components with products from other manufacturers may be subject to approval by the relevant local certification or construction authority, in accordance with applicable regulations. Changes in line with technical progress reserved.

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One scaffolding system. Infinite benefits.

Doka is your strong full-line service provider for formwork and scaffolding.

Efficient work on the construction site requires a safe workplace and fast, safe traffic routes. Whether for the erection of scaffolds for complex structures or for safe access to the construction site, Doka's Ringlock system offers a rental solution in the usual Doka quality with an attractive price-performance ratio. With their in-depth construction expertise, our engineers always plan scaffolding solutions to meet your specific requirements and at optimum cost – on request with Doka services tailored to your needs.



Everything from a single source

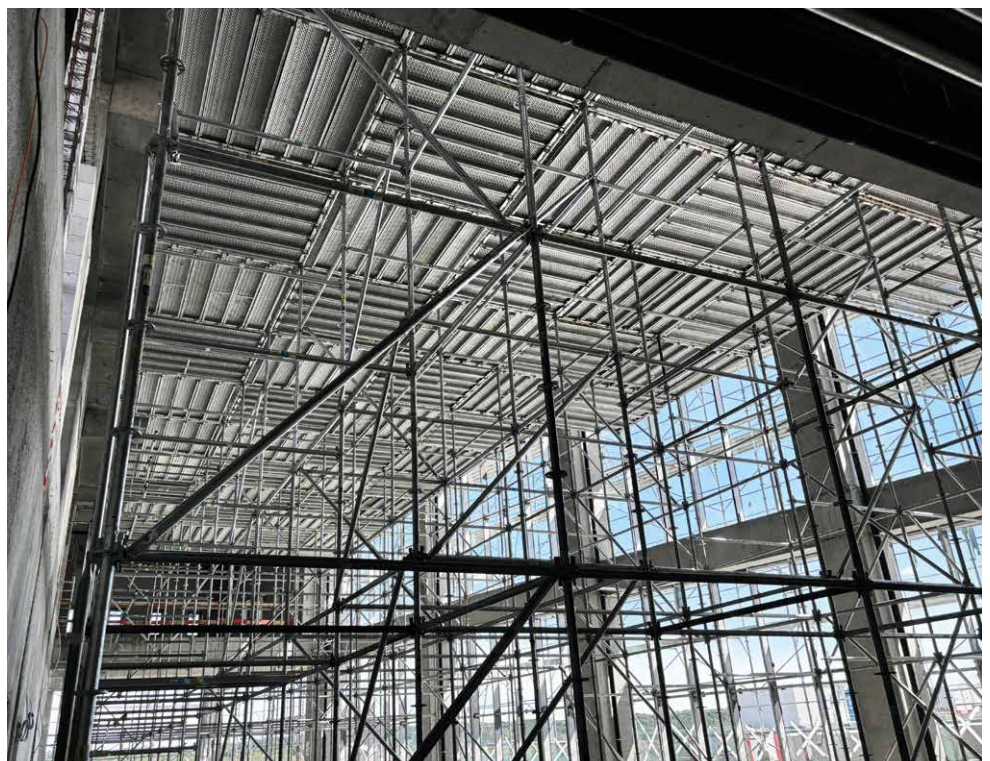
- One point of contact for formwork and scaffolding
- Perfectly matched formwork and scaffolding solutions
- Support with the work preparation, i.e. both formwork and scaffolding planning
- Cost reduction through transport of formwork and scaffolding together

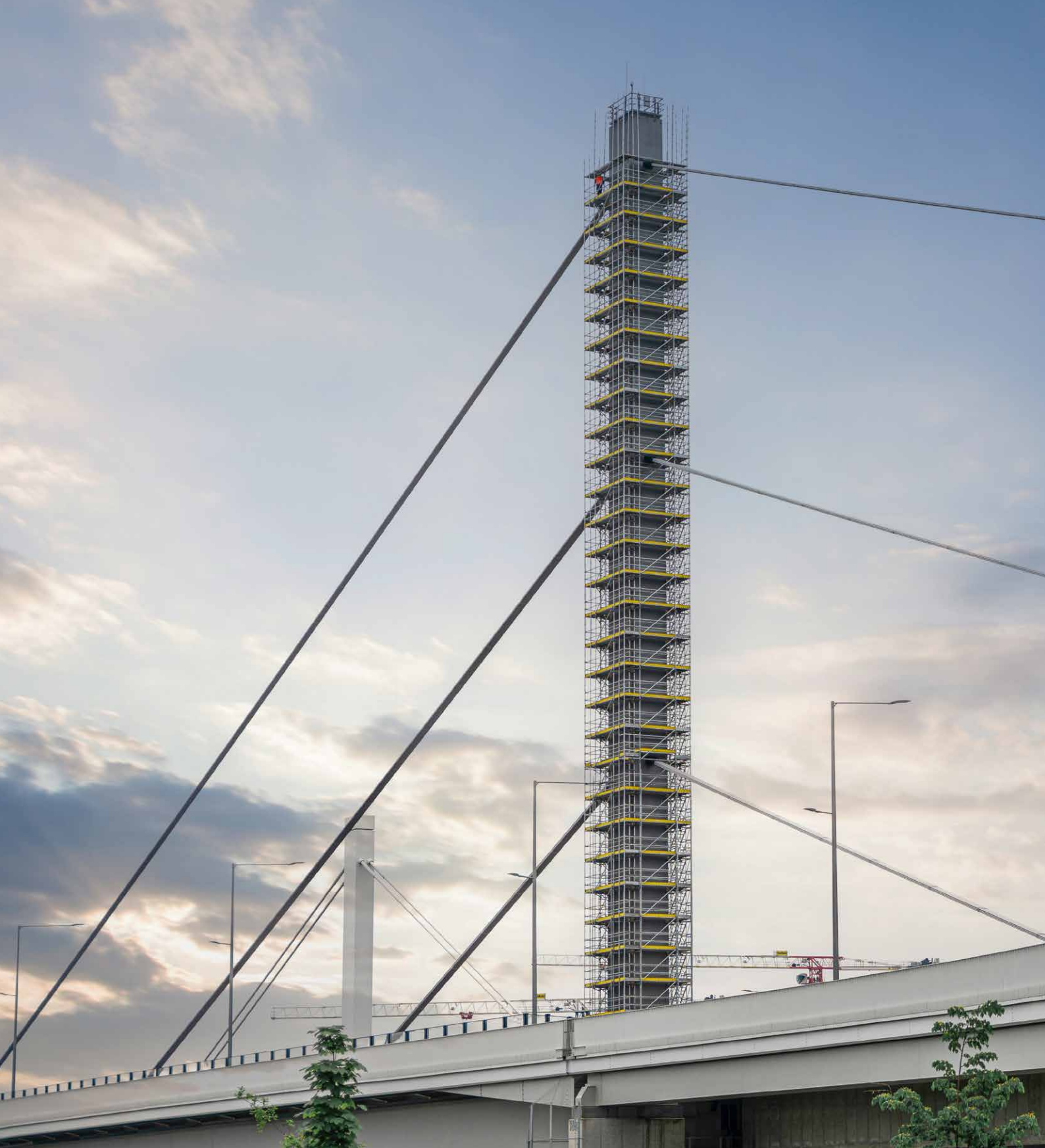
Available on short notice

- Supply reliability and short delivery times thanks to global distribution network
- Large quantities of material available for purchase or hire even on short notice

Full rental solution

- High-performance, high-quality rental fleet for formwork and scaffolding
- Professional and efficient rental process guarantees simple and smooth handling
- Additional rentals enable larger construction projects to be completed without high investments in new materials





Transparency for more sustainability!

We have calculated the CO₂ footprint of more than 7,000 products – including Ringlock. Our customers can therefore choose the product with the smaller CO₂ footprint and thus improve their own carbon balance. For us, the CO₂ footprint forms an important basis for more environmentally friendly product development.

One scaffolding system, limitless applications.

Thanks to its flexibility,
Ringlock is extremely versatile.

With the modular Ringlock working scaffolding, Doka offers a universal modular scaffolding system for a wide range of applications – from small to complex large-scale projects. The system impresses with its robustness, great flexibility and high user-friendliness. An integrated leading guard rail and high load-bearing capacity also ensure maximum safety.

Flexible

- Wide range of applications – from simple façade scaffolding to special constructions
- High flexibility thanks to eight connection options on the Ringlock node – every 0.50m on the standard
- Adaptable to different site conditions

Simple and safe

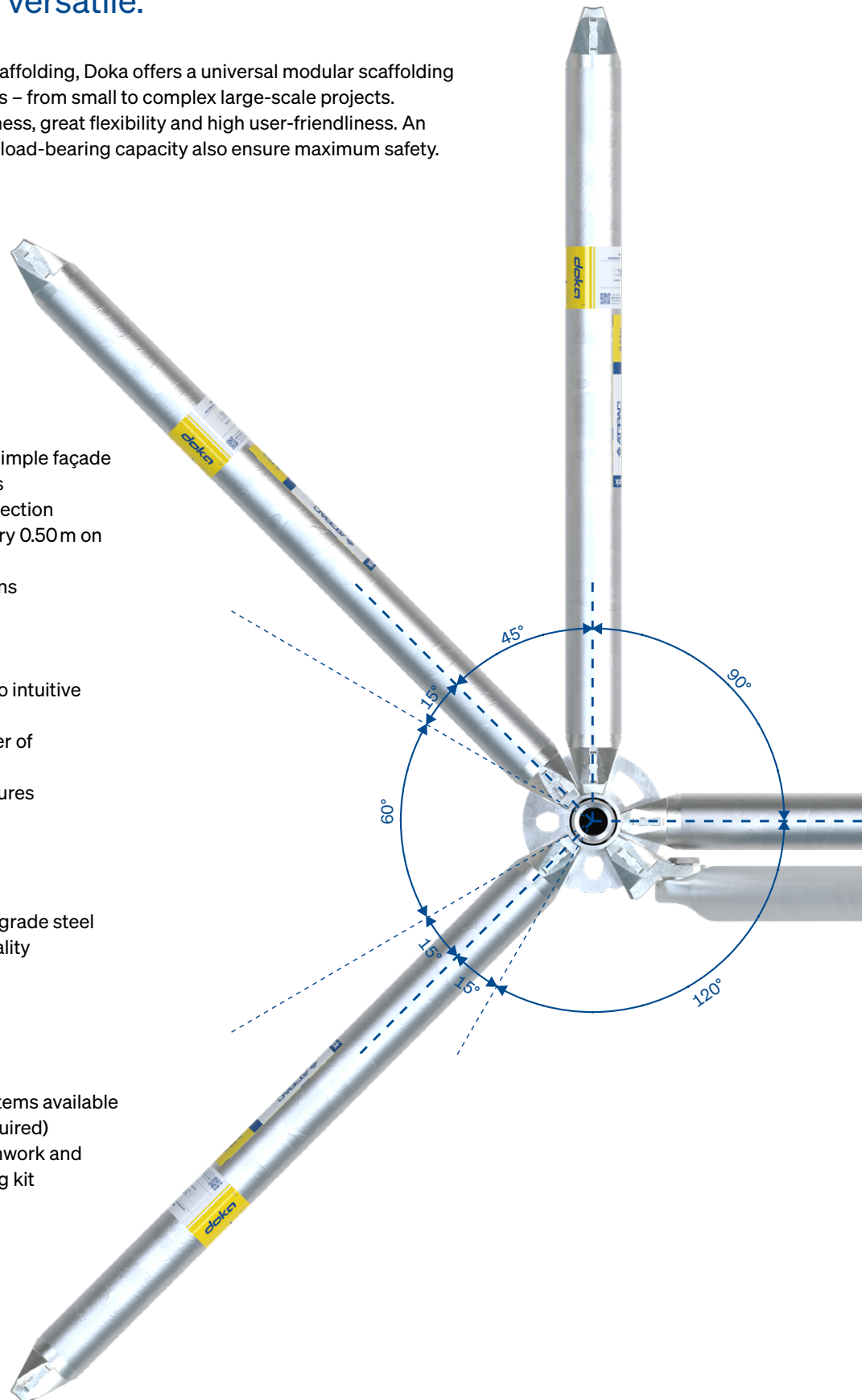
- Simple assembly principle thanks to intuitive wedge-head connection
- Practical thanks to the small number of main components
- Innovative advancing guardrail ensures maximum safety

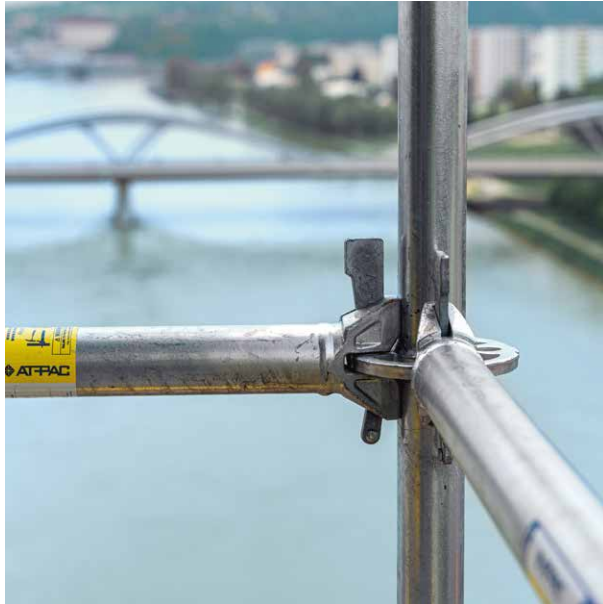
Durable

- Extremely resistant thanks to high-grade steel
- Long service life thanks to high-quality hot-dip galvanising
- Sturdy steel planks and toeboards

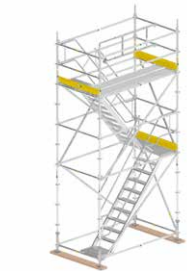
Compatible

- Compatible with most modular systems available on the market (mixing approval required)
- Can be combined directly with formwork and Doka UniKit heavy-duty engineering kit





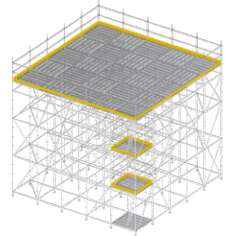
Facade scaffolding



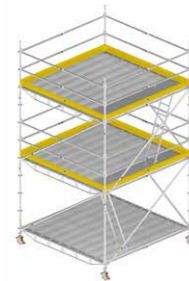
Stair tower



Rebar scaffolding



Birdcage scaffolding



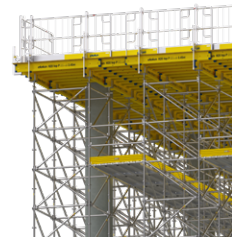
Mobile scaffolding



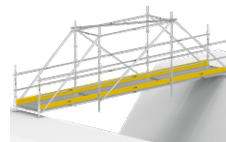
Suspended scaffolding



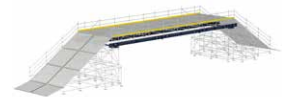
Circular scaffolding



Shoring



Trench bridge



Cable bridge



Construction site sign

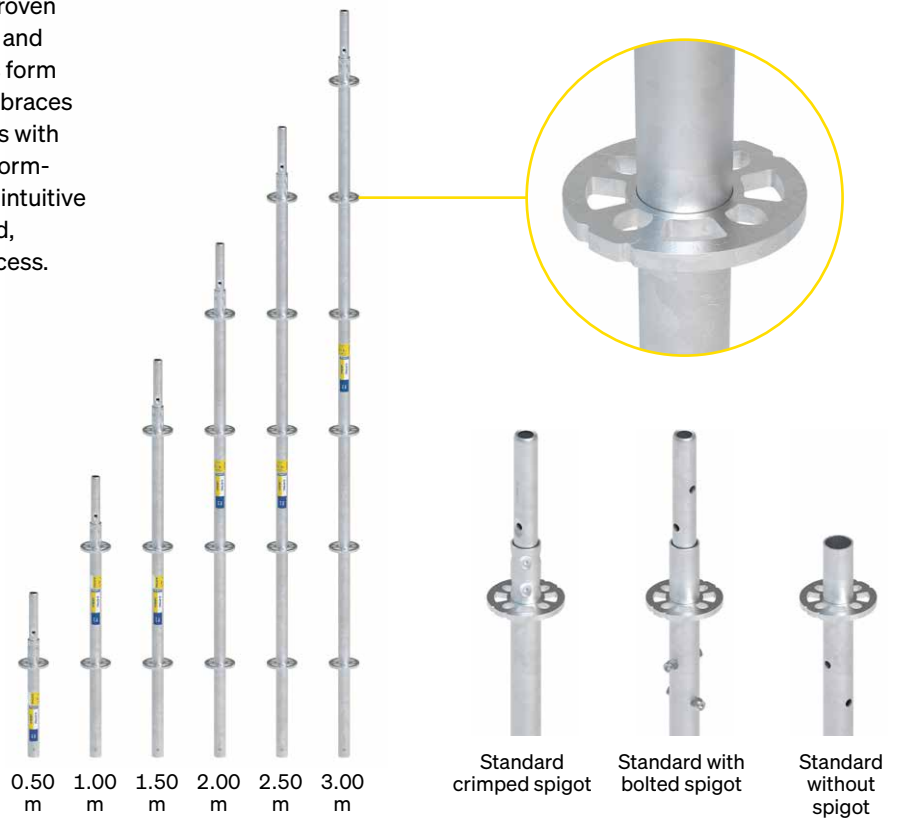
Minimum components for maximum efficiency.

The name Ringlock is synonymous with high cost-effectiveness.

The Ringlock modular scaffolding consists of just a few main components and is based on the proven wedge-head technology. Vertical, horizontal and diagonal components as well as steel planks form a stable scaffold structure. Ledgers and bay braces are connected to the rosette of the standards with the wedge-head with a hammer to create a form-locked connection. Thanks to its simple and intuitive principle, Ringlock can be quickly assembled, contributing to an efficient construction process.

Standards

The standards with their rosettes manufactured from high-grade steel, welded and heat-treated at intervals are the vertical load-bearing components of Ringlock. Depending on the requirements, they are available with crimped or bolted spigots or without spigots in lengths from 0.50 m to 3.00 m in 0.50 m increments and 4.0 m length.



Ledgers

The ledgers are the horizontal load-bearing components of the Ringlock system. They connect to the standards, define the bay length, support scaffold planks, and serve as guardrails. Their sturdy wedge-head connection reliably transfers loads.

The ledgers are available in lengths of 0.15 m, 0.39 m, 0.45 m, 0.73 m, 1.04 m, 1.09 m, 1.40 m, 1.57 m, 2.07 m, 2.57 m, 3.07 m.

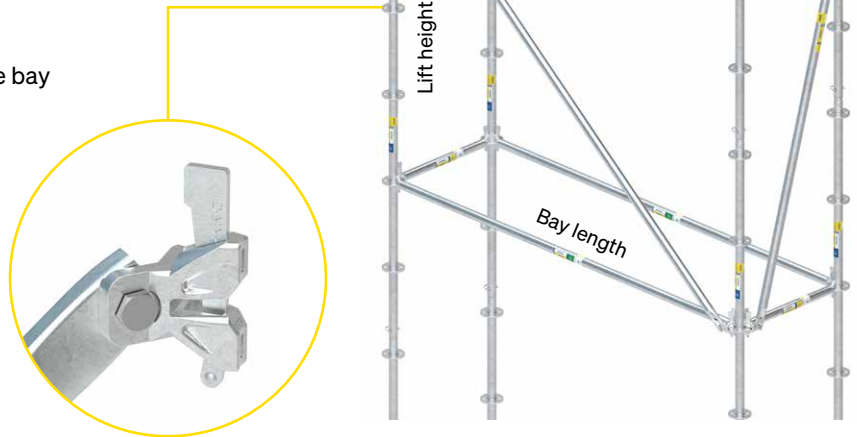
If scaffolds have to withstand higher loads, truss ledgers are used to hold the decks.



Bay braces

Bay braces give the scaffold rigidity and stiffness. The swivel wedge-heads at the ends ensure optimum flexibility during installation thanks to their articulated joint.

The lengths of the bay braces are matched to the bay lengths and lift heights. For special constructions, bay braces can also be used as structural members, e.g. for suspending or supporting cantilevers.



Steel planks

Ringlock steel decks are hot-dip galvanized, and offer optimum strength, durability and safety. They are hooked onto the ledgers and secured against lifting with the anti-liftout guard.

The wind latch and therefore water-permeable decking surface also contributes to safety. It minimises dirt accumulation and ice formation to prevent slipping.

Steel toeboards

Together with the guardrails, steel toeboards form an integral part of the three-part side-protection system. They help prevent materials and tools from falling, protecting both site personnel and passers-by.

A slotted plug connection at the ends of the steel toeboards enables easy, tool-free installation in the longitudinal direction and secure interlocking at a 90° angle.



0.39m	0.73m	1.04m
1.09m	1.40m	1.57m
2.07m	2.57m	3.07m

Marking of the bay lengths

Each bay length has its own designated color code with which the horizontal components (ledgers, decking planks, steel toeboards) and the bay braces can be identified. This makes it easy and fast to select the correct components for a given bay length.

Advancing guardrails for a high level of safety.

With Ringlock, occupational health and safety are integrated into the system.

With the integrated leading guardrail system, Ringlock meets all the requirements of TRBS 2121-1 during both installation and dismantling. Personnel are therefore protected from falling during installation, modification and dismantling. Ringlock thus contributes to efficient construction processes, as there is no need for external installation safety railings.

The main components of the guardrail system are the guardrails and the leading end guardrails IG.



Guardrail IG

The lightweight guardrail IG has a hook at one end that can be hooked onto the rosette of the standard already installed. The innovative hook also prevents the guardrail from accidentally jumping out of the rosette during dismantling.

The next standard is connected with an articulated wedge head at the other end of the guardrail IG. The rotating function of the wedge head allows two guardrails to be installed at the same time.

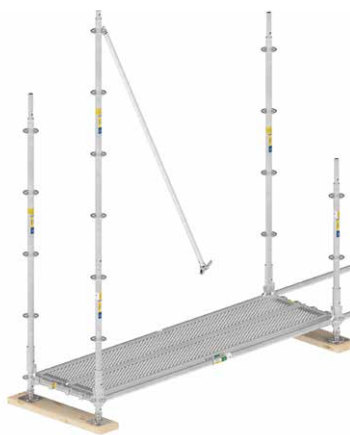
The guardrail is available in lengths of 1.57 m, 2.07 m, 2.57 m and 3.07 m.

End guardrail IG

The end guardrail IG secures the ends of the scaffold level and is hooked in from the secured position at the height of the next deck level.



Assembly sequence



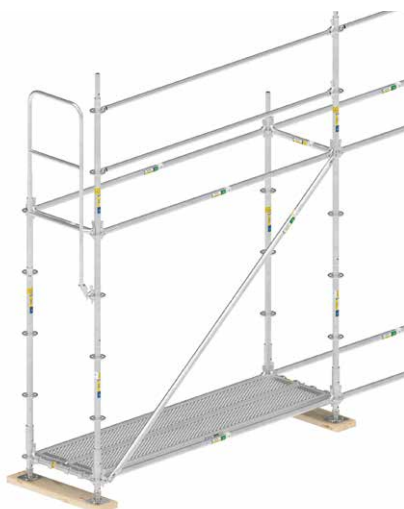
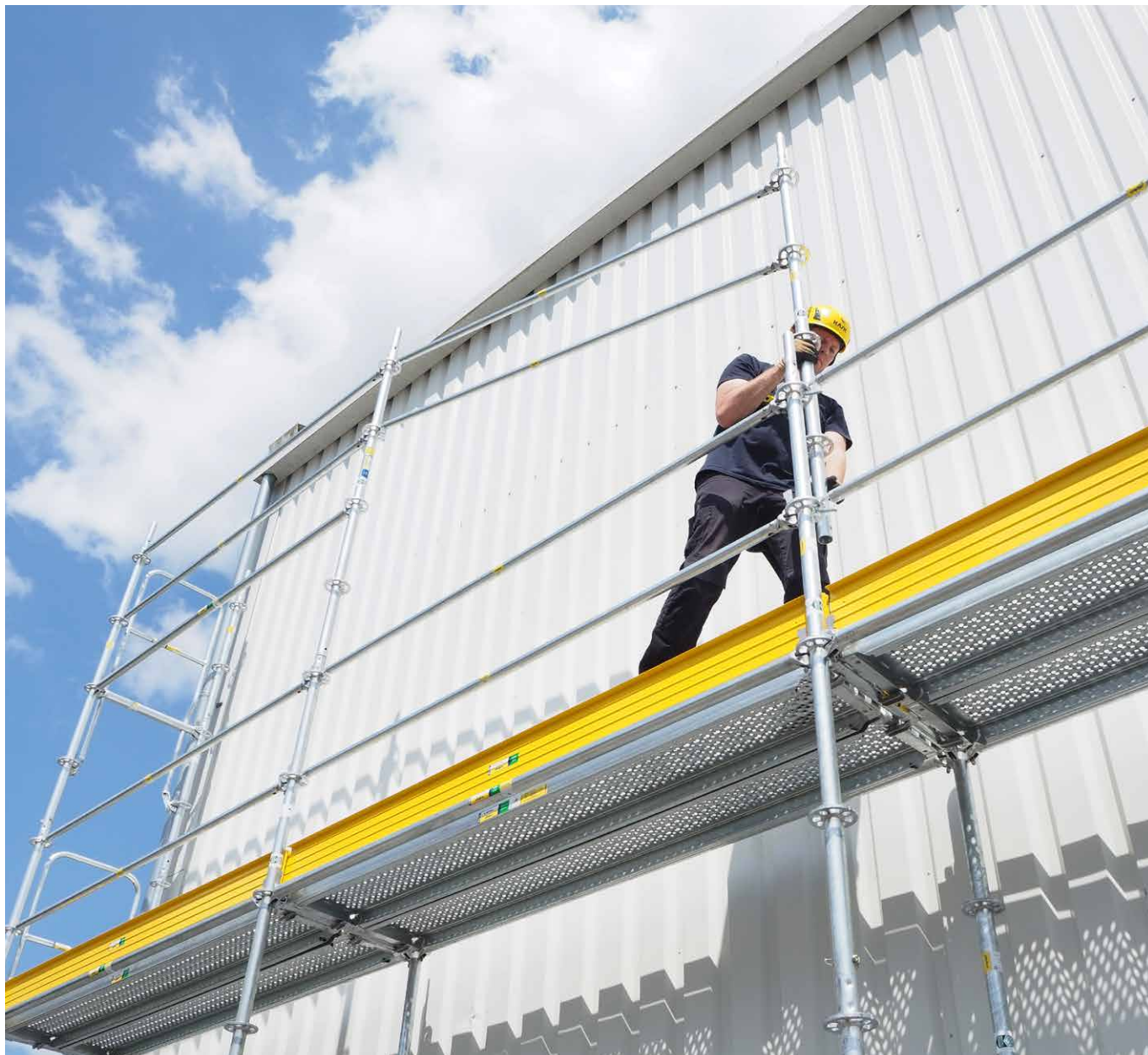
The guardrail IG is hooked into the rosette of the standard already installed.



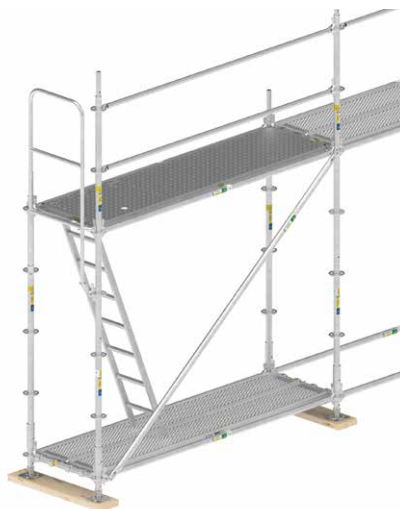
In the next step, the guardrail IG is connected to the next standard with its rotating wedge-head.



The standard including attached guardrails is then swung up and installed.



Next, the transoms and longitudinal ledgers are installed at deck level. The bay braces are then fitted in the first bay, followed by the end guardrails.



Only now are the decks hooked in from below and secured against being lifted out.



Protected by the guardrail, the three-part side protection is finally completed.



Façade scaffolding

Designing higher workplaces safely and flexibly.

Façade scaffolding is a temporary structure that provides safe and comfortable access for work at height on construction sites and façades. With the integrated advancing guardrail, Ringlock can enable scaffold erection without PFAS, subject to the approved configuration, instructions for use and local regulations.

The advantages of the Ringlock modular scaffolding system are especially evident on structures with complex geometries. Its high flexibility allows the scaffold to be adapted to virtually any situation. In addition, Ringlock's rigidity and stiffness enable free-standing solutions where anchoring to the façade is not possible

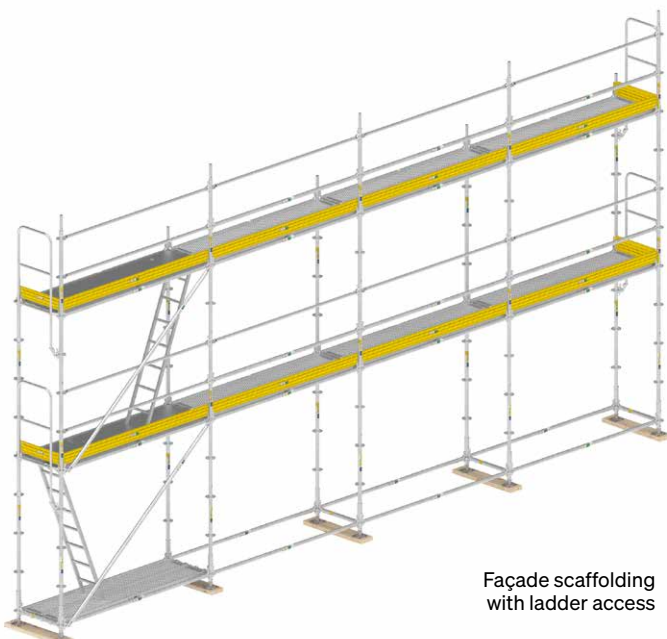
Technical details

Maximum topmost deck height:
24.00m in the standard version

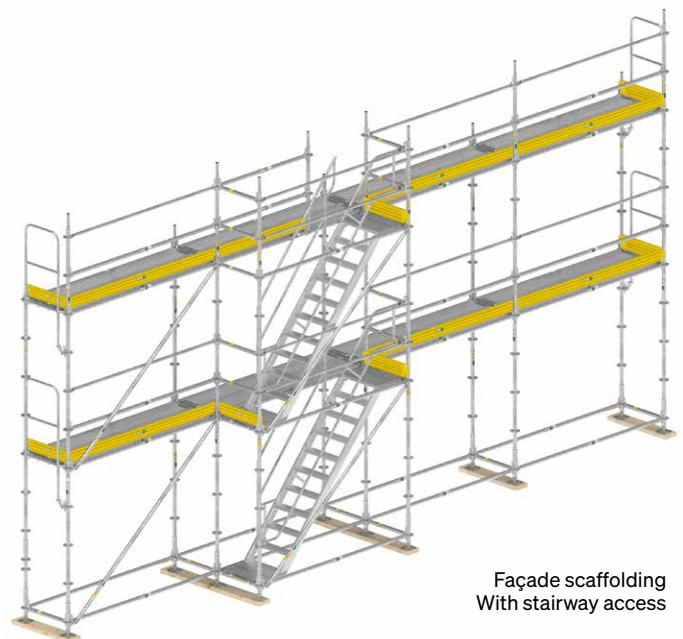
Advancing guardrails

**Vertical access with stairs or
hatch-deck ladders**

DIBt certified standard configurations



Façade scaffolding
with ladder access



Façade scaffolding
With stairway access

Stair tower

The safe access to
all work-deck levels.

Construction site stair towers are the quickest and easiest way of accessing the various scaffolding levels or work-deck levels on the construction site. They enable safe access – even when carrying material or tools.

The stairway accesses can be integrated directly into the main scaffold or constructed as a stand-alone 4-leg stair tower. A stand-alone stair tower can be quickly repositioned using a crane. The aluminium stair platforms are available in different lift heights: 2.00 m, 1.50 m, 1.00 m, 0.50 m.

Technical details

Footprint:

2.57 / 3.07 m x 1.40 m

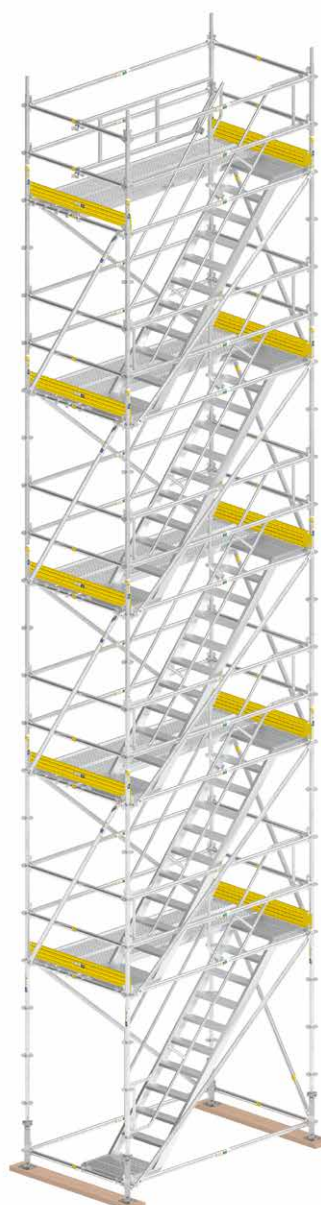
Configuration variants:

In the same direction or
alternating direction

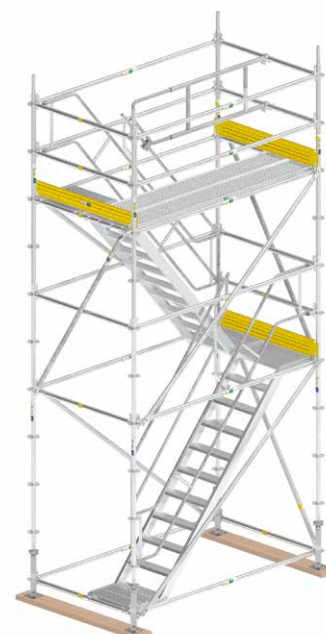
Load class 3

to EN 12811-1

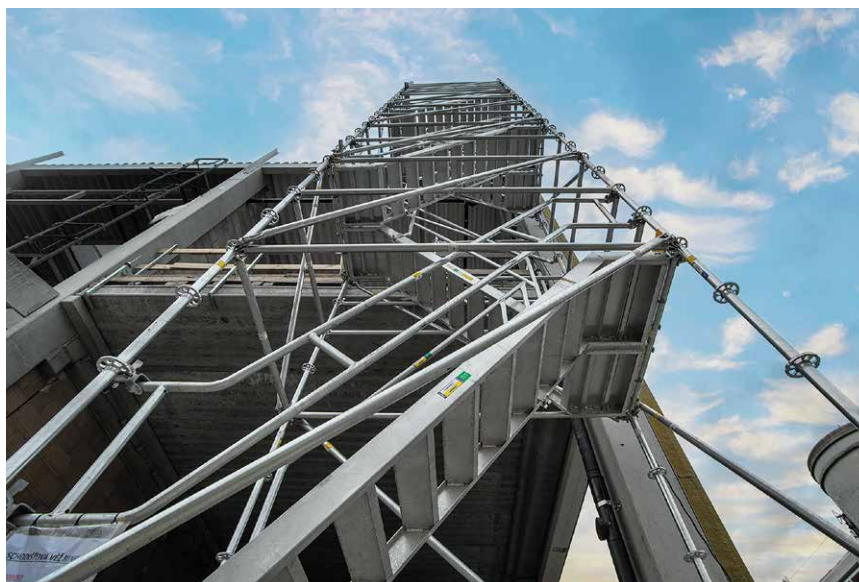
Class A to EN 12811-1



Stair tower with the access
in the same direction



Stair tower with the access
in the alternating direction.





Technical details

Maximum topmost deck height:
10.50 m

Scaffold width:
0.73 m or 1.09 m

Other designs possible, adapted to the building and formwork

Repositioning by crane following the construction process

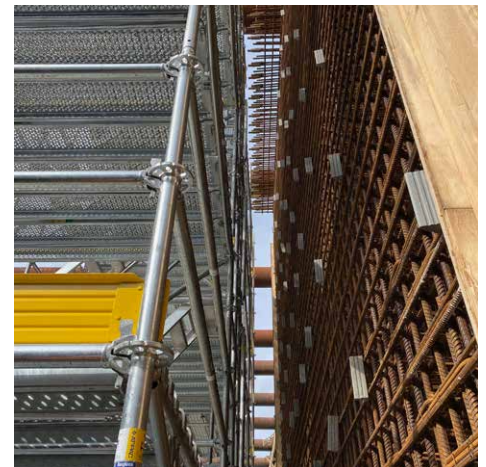
Stair access

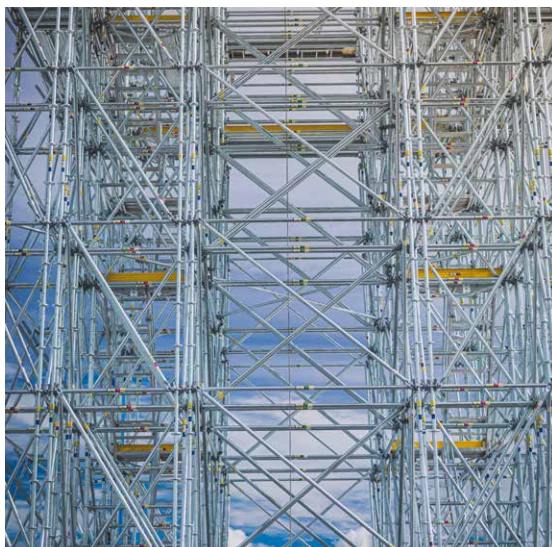
Rebar scaffolding

Creating anchorage-free, crane-positionable work decks.

Typically, rebar scaffolds have widths of 0.73 m or 1.09 m. Ringlock's flexibility, however, also allows configurations with varying bay lengths and lift heights, as well as higher load classes—for example, for storing reinforcement. Aluminium stairways provide safe access and make it easier to carry materials and tools.

Up to a topmost deck height of 4.50 m, the working scaffold remains stable as a free-standing structure, without requiring additional bracing against a wall or formwork. This enables uninterrupted work on the reinforcement. Its high inherent rigidity and the tensile strength of its connections also allow it to be repositioned quickly and easily by crane, ready for use at the next location.

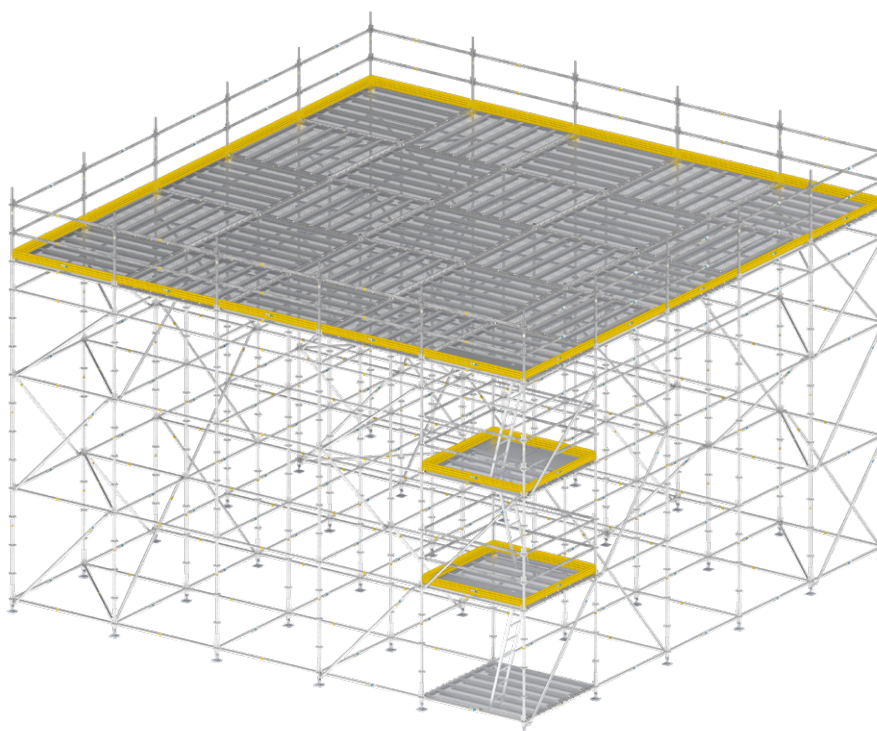
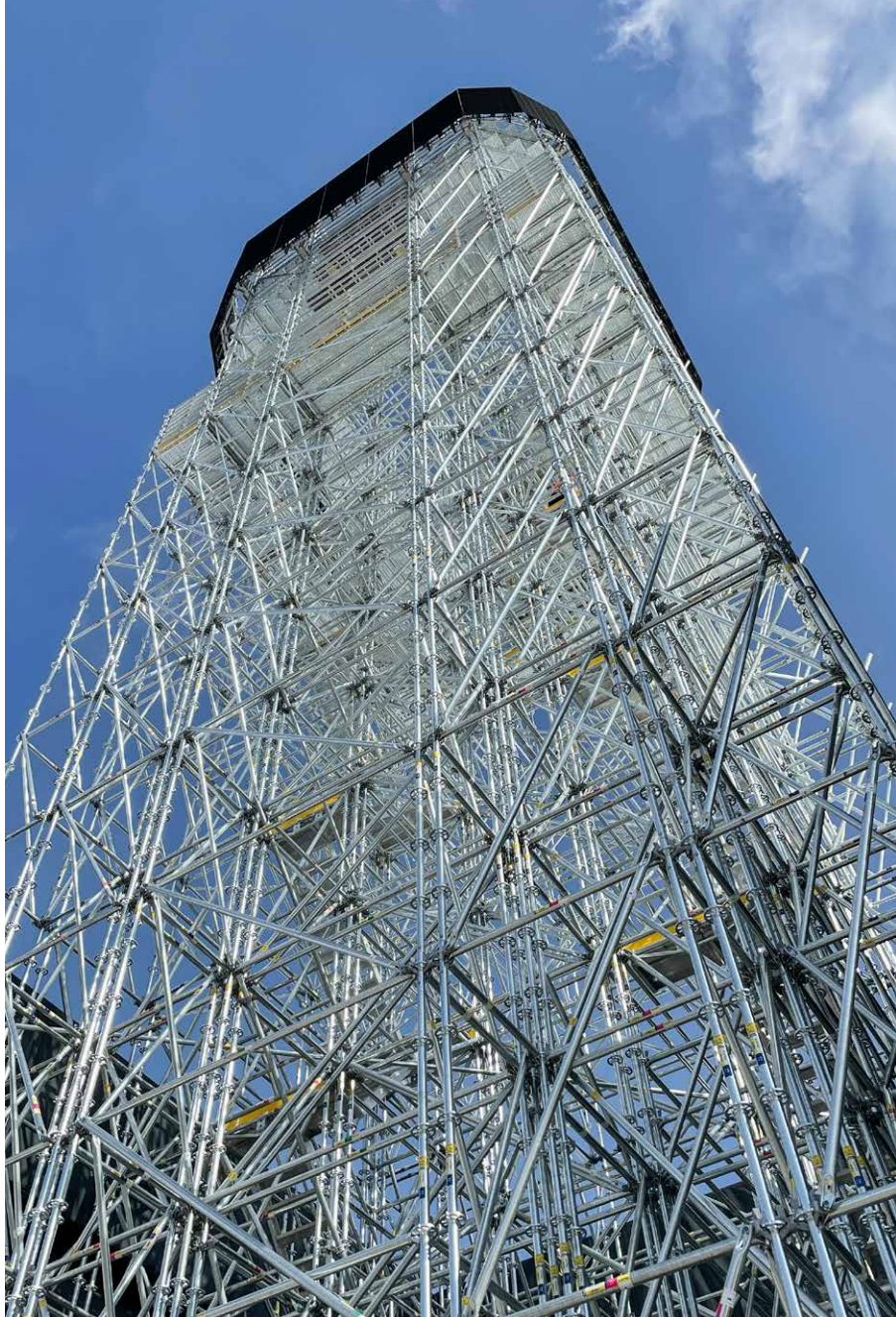


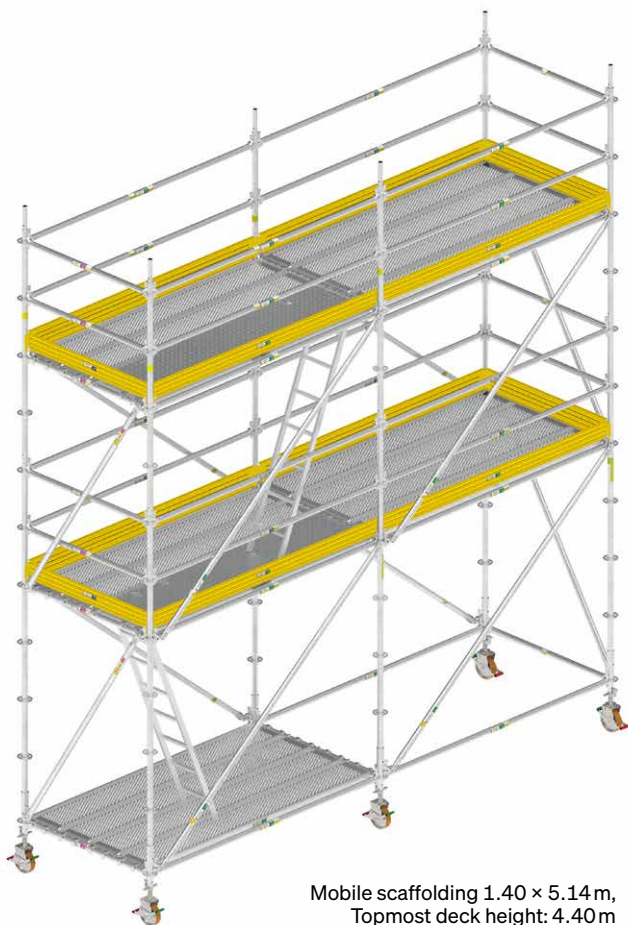


Birdcage scaffolding

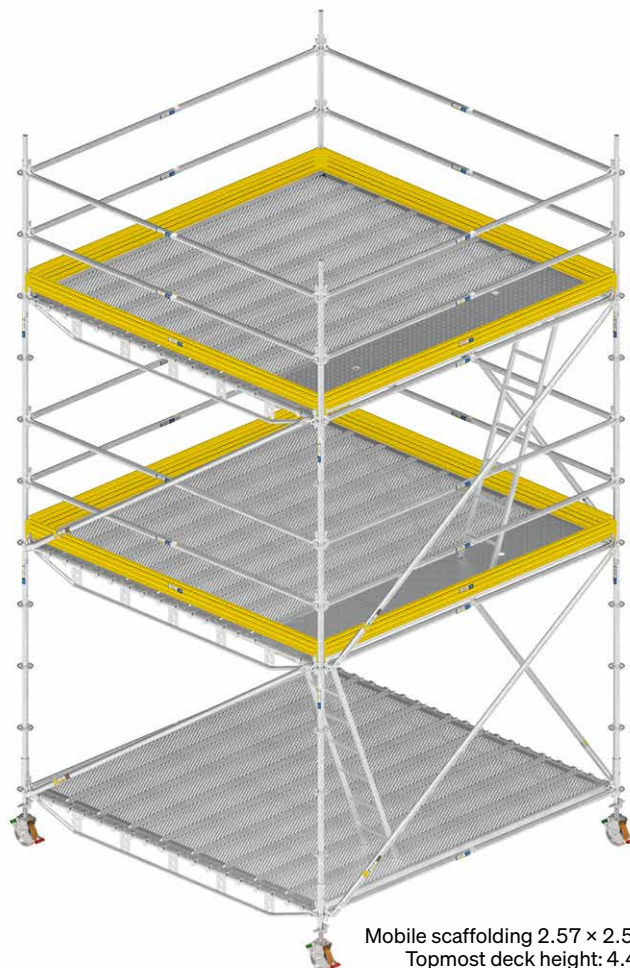
Safe work on floor slabs.

Birdcage scaffolding is a large-area working platform used, for example, to provide safe access to ceilings. Aluminium stair platforms can be integrated to ensure safe and convenient access between levels.





Mobile scaffolding 1.40 × 5.14 m,
Topmost deck height: 4.40 m

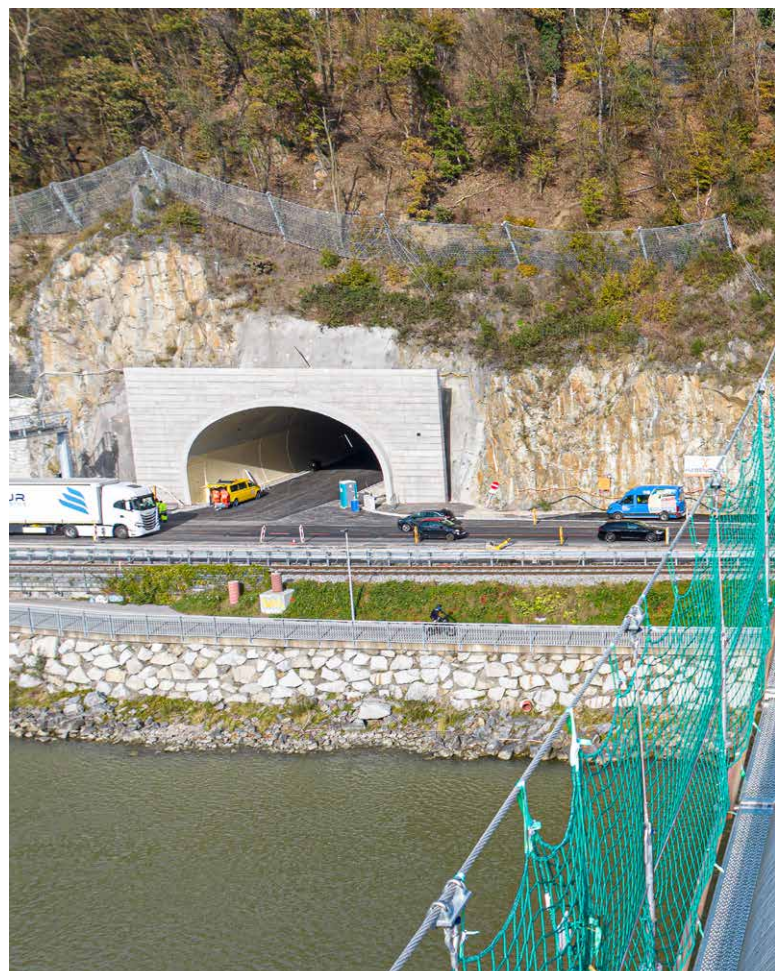


Mobile scaffolding 2.57 × 2.57 m,
Topmost deck height: 4.40 m

Mobile scaffolding

Working scaffolding always in the right place.

Thanks to its modular design, Ringlock can be quickly converted into a mobile scaffolding on castor wheels. Suitable for working platforms, rebar work, and other applications, it can be easily moved on site without a crane. The scaffold is free-standing, with ballast added where required.





Standard-to-standard connection
with high tensile strength



Suspended scaffolding

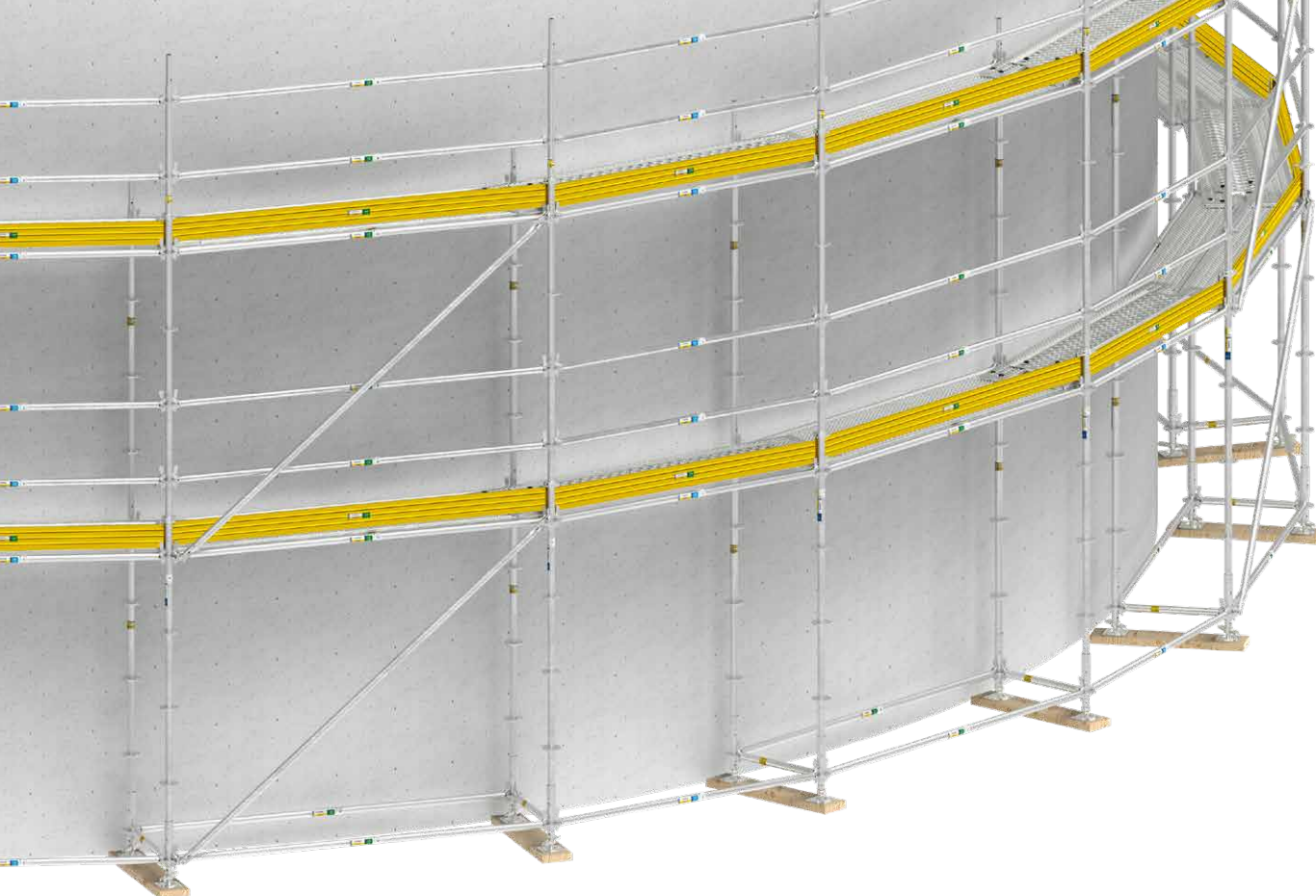
Safe workplaces from above

Suspended scaffolding is used to optimize the amount of material needed to create a safe workplace at extreme heights or when erection of a ground-up supported scaffolding is not possible. Whether as a working scaffolding or stair tower, Ringlock is ideal for these applications thanks to its high rigidity and tensile strength of the connections.

Technical details

Tensile load on the vertical legs: 45.8 kN for standards with double-bolted spigots

Project-specific special solutions possible



Circular scaffolding

Safe working even with round geometries.

Thanks to the connection variability of the rosette, Ringlock can also be used as a circular scaffolding, e.g. on round building shapes, tanks or silos, etc.

Shoring

Efficient load transfer.

Ringlock is an economical and efficient multi-directional shoring solution for building construction and civil engineering. Its variable bay lengths allow flexible adaptation to different geometries and loads. Lightweight components, safe access, walkways, and working platforms ensure efficient installation while improving site safety and construction time.



Trench and temporary bridge

Safe traffic routes to and on the construction site.

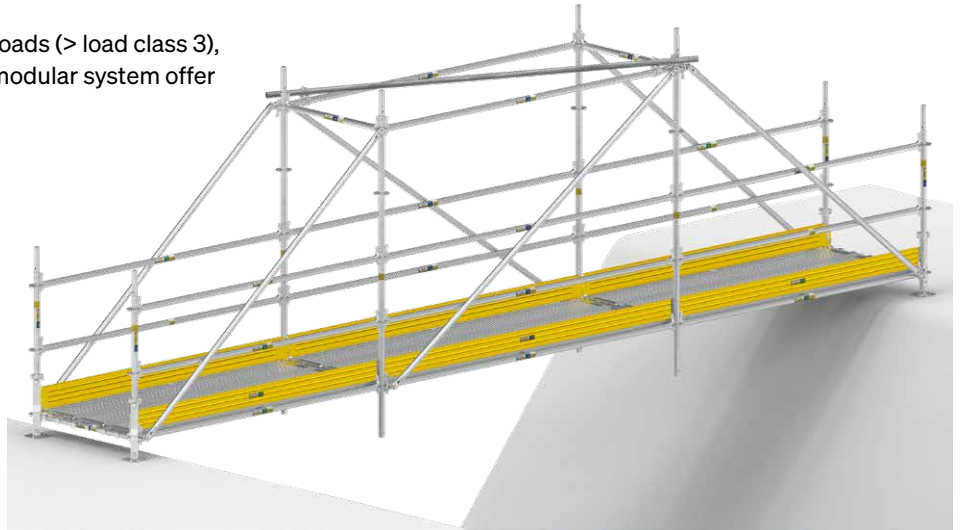
With Ringlock as a trench bridge, hazardous areas on traffic routes, such as construction pits, watercourses or trenches, can be safely negotiated. Ringlock can be flexibly adapted in width and length to the respective project requirements. In combination with construction stair towers, even greater differences in height can be safely overcome. Multi-span trench bridges are first safely assembled on the ground and then lifted into place with a crane.

For larger spans (> 9.21m) or extreme loads (> load class 3), temporary bridges from the Ringlock modular system offer the optimum solution.

Technical details

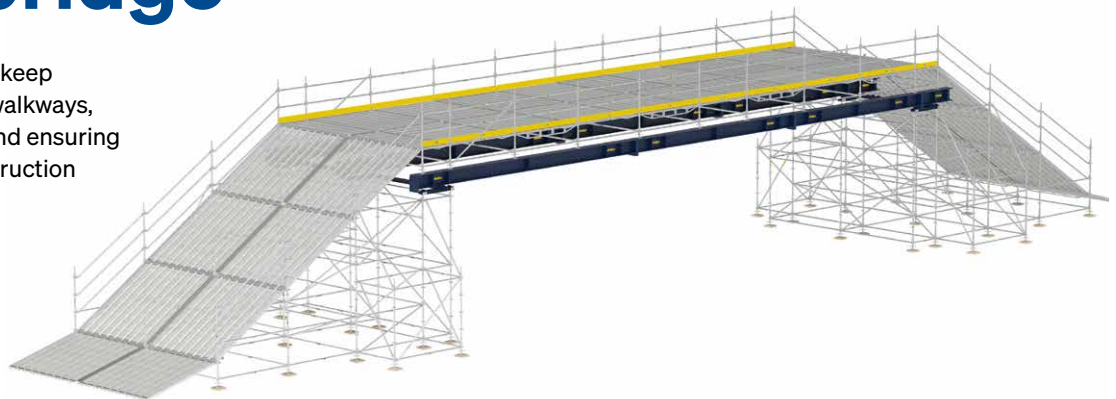
Width: 1.09m / 1.40m

Maximum length: 9.21m



Cable bridge

Temporary cable bridges keep cables and hoses above walkways, preventing trip hazards and ensuring clear access during construction and maintenance.



Construction site sign

Scaffolding frames provide a stable, highly visible support structure for temporary construction-site signage. Their modular design allows the sign to be positioned flexibly and securely on site.



Kühbrücke over the Kleine Salzach



Location: Hallein, Austria

Contractor: Ing. Hans Bodner
Baugesellschaft m.b.H. & Co. KG

Completion: 2023

Project duration: 3 months

Products used:
Ringlock modular scaffolding

Challenge:
Maintaining the supply lines over
the Kleine Salzach river during
construction of the new bridge



The Kühbrücke, an important link for pedestrians and cyclists to Perner Island, was getting old and needed to be renovated. Due to severe weathering, the entire supporting structure and superstructure of the bridge had to be replaced. During the three-month construction period, Ringlock was used as a cable bridge, carrying various cables and pipes for water and electricity.



“Delivery of the material and the construction went smoothly. Although this was the first time we had erected a cable bridge from a modular scaffolding, the construction went very well.”

Dipl.-Ing. Markus Oberbucher, BSc
Ing. Hans Bodner
Baugesellschaft m.b.H. & Co. KG

→ Project solution

In order to be able to achieve the required traffic loads with the enormous spans of $2 \times 22\text{m}$, the cable bridge was constructed from Ringlock with double trusses.

Ringlock rebar scaffolding for the Zdíky Viaduct on the D3

On the new D3 motorway section between Kaplice-nádraží and Nažidly, MI Roads is constructing the 612m-long Zdíky viaduct across the Zdíky stream valley. Doka provided a coordinated formwork, shoring, access and scaffolding solution for the bridge substructure.

“Doka Ringlock scaffolding is strong and stable, which increases safety and allows smooth progress of work at heights. We appreciate the quick and easy handling.”

Ing. Branislav Richnavský
Construction Site Manager



→ Project solution

Customised Doka formwork gave the 15 pairs of piers their required shape. The Top 50 beam formwork and Staxo 100 shoring tower provided a robust, adaptable solution for the demanding structural geometry and the reinforced-concrete works. Ringlock scaffolding and Staxo Stair 250 access towers created safe routes and work areas for reinforcement, formwork and concreting operations. Doka Safety components complemented the protection concept. The integrated approach to formwork, shoring and Ringlock scaffolding reduced interfaces on site and supported a smoother construction process. With myDoka, the project team could monitor progress, coordinate logistics and document the construction process throughout execution.

Location: Zdíky, Czech Republic

Project: D3 motorway,
Zdíky viaduct

Length: 612m

Construction company: MI Roads

Application: Bridge / viaduct
construction

Doka systems: Special formwork,
Top 50, Staxo 100, Ringlock,
Doka Safety

Digital solution:
myDoka customer portal

Challenge:
Fifteen pairs of bridge piers, complex pier geometries and elevated work areas called for an adaptable, safe and efficient solution. The systems had to support precise concrete work while keeping access, reinforcement operations and logistics under control.

Stack tables for thyssenkrupp Steel



To erect gigantic stack tables, massive “table tops” with a slab thickness of approx. 2m had to be constructed – at a height of almost 14 m. In order to cope with the enormous loads from the concreting work in an economical manner, a mobile shoring solution was designed. The combination of the Doka UniKit shoring system and the Ringlock working scaffold ensured both a reliable transfer of the loads and protected work-deck levels.

“Right from the planning stage and later on the construction site, the cooperation with Doka was simply fantastic. This mobile UniKit unit was a real game changer for this project: innovative, economical and time-saving. And thanks to the permanently integrated Ringlock platforms, our people always had a safe working environment wherever we needed it.”

Roeland Bekhof,
Operations Scheduling Formwork
Mainka Bau GmbH & Co. KG



Location: Duisburg, Germany

Contractor:

Mainka Bau GmbH & Co. KG

Project duration:

January – March 2024

Products used: Doka UniKit primary and secondary beams, Doka UniKit shoring tower 1000, Ringlock modular scaffolding, Load-bearing tower Staxo 100, Supporting formwork Dokaflex

Challenge:

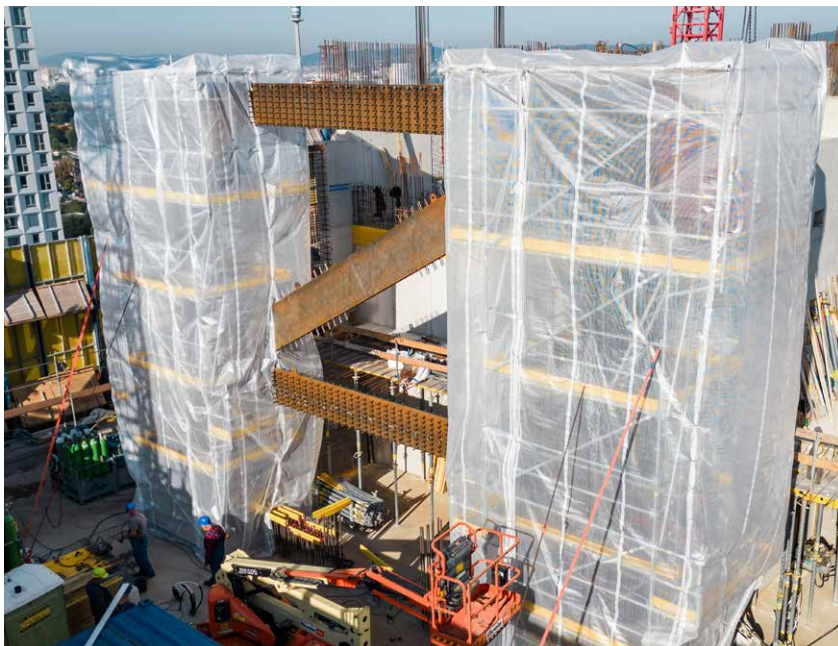
Enormous loads to be transferred with minimum use of material and a tight time schedule

Safe working environment at great height



➔ Project solution

The mobile unit consisting of three UniKit shoring towers fitted with Ringlock not only ensured safe load transfer but also provided a protected working environment.



Location: Vienna, Austria

Contractor:
ARGE V22 HABAU/DYWIDAG

Project duration: 2022 – 2025

Products used:

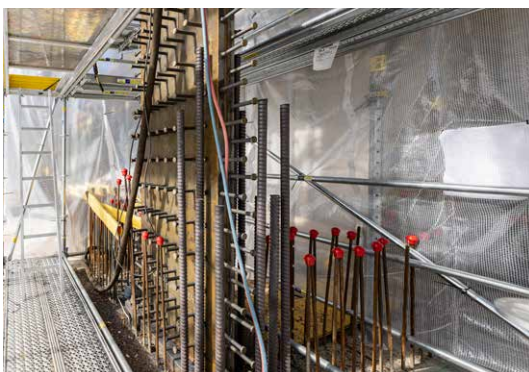
Ringlock modular scaffold
Panel floor formwork Dokadek 30,
Protection screen Xclimb 60, loading
platform, FreeFalcon, Xsafe edge
protection system XP,
Framed formwork Framax Xlife,
Framed formwork Alu-Framax Xlife

Challenge:

Creation of a safe temporary
workplace for the demanding
welding work on the outriggers.

VIENNA TWENTYTWO

The new urban district VIENNA TWENTYTWO is being built on a 15,000 m² site in Vienna, offering space for apartments, offices, hotels and commercial premises. The building complex consists of six structures: four low-rise buildings and two diagonally positioned towers. Outriggers were installed to brace the taller tower (155 m). Ringlock was used as a working scaffolding for the assembly of these massive steel trusses and was additionally enclosed for welding work and weld seam inspection.



→ Project solution

The high flexibility of Ringlock enabled the modular scaffolding to be ideally adapted to the geometry of the steel structure, thus ensuring a safe workplace around the outriggers. The quick assembly and the possibility of enclosure for carrying out the welding work in the required quality were further impressive factors.

“Especially after completion of the steel construction work, we were so impressed by the flexibility of the Ringlock scaffolding that we immediately used it for further work on other components.”

Herbert Hochstöger
Foreman, ARGE V22 HABAU/DYWIDAG

Ringlock rebar scaffolding for a landmark concrete structure

For the construction of a 55.6m reinforced-concrete landmark, Doka supplied around 300 tonnes of Ringlock scaffolding. Configured as rebar scaffolding, it supported safe access and working areas while the highly detailed sculpture took shape. The project combined demanding three-dimensional geometry, architectural-concrete requirements and an ambitious schedule – requiring a flexible scaffold solution that could be adapted to the changing structure throughout execution.

Location: Kikół, Poland

Project: Statue of the Virgin Mary

Height: 55.6m

Construction period: March 2025 – July 2026

Customer: Grażyna and Roman Karkosik

Construction company: Wysowa Mosty

Application: Rebar scaffolding

Doka systems: Ringlock, Top 50, H20, Framax

Doka service: Engineering and initial installation of 3D formwork

Challenge:

Reinforcement work had to be carried out safely around a rapidly changing, highly complex structure. The scaffold needed to provide reliable access and working areas while adapting to the evolving geometry and the project's fast four-day concreting cycles.



→ Project solution

Around 300 tonnes of Ringlock were configured as rebar scaffolding to provide flexible, safe access and working areas around the structure. The modular system supported the evolving construction sequence, while Top 50, H20 and Framax formwork solutions addressed the complex concrete geometry.





Location: Linz, Austria

Contractor: ARGE Donau
Brücke A26, icm construction

Project duration: 12 months

Products used:
Ringlock modular scaffold

Challenge:
Safe workplace for subsequent
corrosion protection and
installation work on the spanned
cables of the suspension bridge

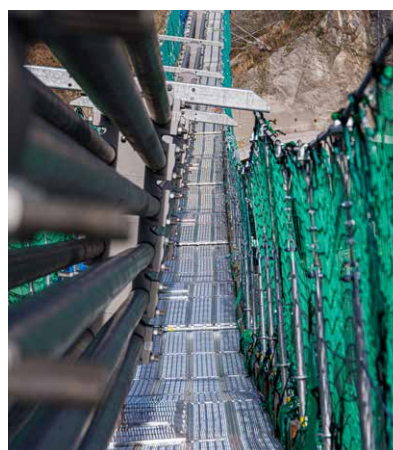
Suspended scaffolding on the A26 bridge over the Danube

The new, seemingly suspended A26 bridge over the Danube in Linz connects the two banks of the Danube in a visually appealing way. As the bridge was built without pylons, large suspension cable bundles are used. These are spanned between anchor blocks above the tunnel portals on both sides of the Danube. Ringlock was the convincing choice as suspended scaffolding for subsequent corrosion protection and installation work on the spanned suspension cables.



“The flexibility of the Ringlock scaffolding system was the ideal answer to our demanding requirements, such as coping with very challenging geometries.”

Günther Keuschnig
Managing director, ARGE Donau Brücke A26,
icm construction



➔ Project solution

In order to save material, costs and time while ensuring the safety of the construction site personnel, a special Ringlock suspended structure was designed.



Ringlock. One Scaffolding System. Limitless Applications.

Technical Information

Ringlock

Tube diameter	48.3 mm
Wall thickness	3.2 mm
Steel grade	S355 J0H
Surface protection	Hot-dip galvanized
Possible applications	Infrastructure • Building • Industrial • Events
Type of Scaffolding	Façade • Suspended • Shoring • Access towers • Rebar • Working Platforms • Birdcage • Flyovers • Mobile Scaffolding
Steel decks 3.07 m and 2.57 m *	Class 4 / Class 5
Steel decks < 2.07 m *	Class 6
Access decks and staircases *	Class 3
Available standards	0.50 m • 1.00 m • 1.50 m • 2.00 m • 2.50 m • 3.00 m • 4.00 m
Available ledgers	0.15 m • 0.39 m • 0.45 m • 0.73 m • 1.04 m • 1.09 m • 1.40 m • 1.57 m • 2.07 m • 2.57 m • 3.07 m
Crane liftable	✓
Cladding	✓
Rubbish retaining	✓
Certification	DIBT Z-8.22-992

*load class according to EN 12810-1



For further information, go to:
www.doka.com/ringlock

