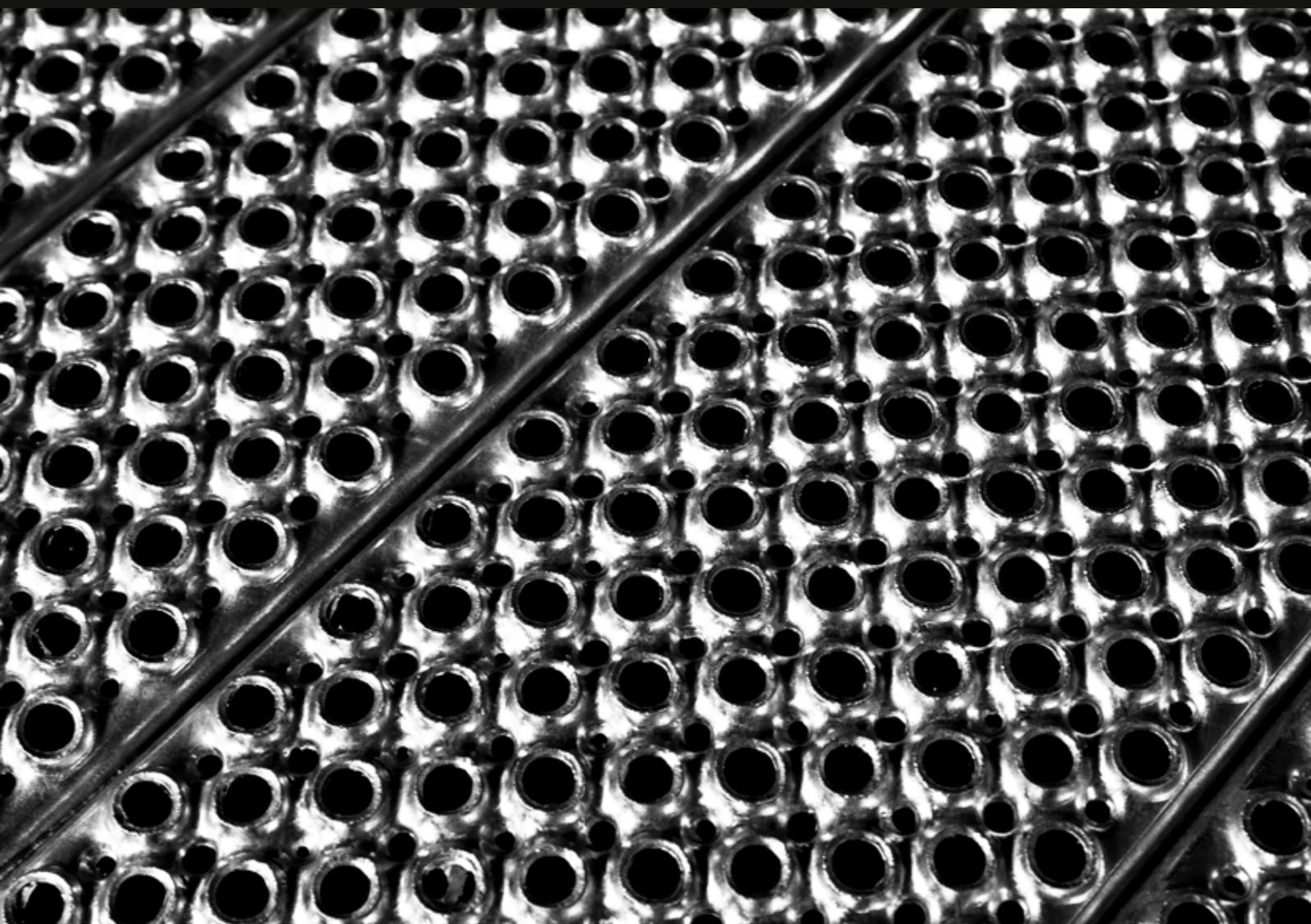




- Optimal performance, optimum safety!





PcP

 **OPTIMO®**

05 Best-in-class slip resistance

06 Benefits

08 Design and functionality

10 Products

18 Engineering Safety™

20 Bespoke solutions

23 Cases & applications

34 Product brands



The Sensation of Safety

OPTIMO® gratings embrace optimal safety and strength and is a favourite for industrial and public applications.

Best-in-class slip resistance

Pioneering Safety

Ever since its introduction in 1967, the OPTIMO® series of planks, panels, and treads have been synonymous with safety and stability. The OPTIMO® safety gratings design contains the characteristic punched hole pattern, allowing essential properties such as high slip resistance, drainage, airflow, and strength to weight ratio, recognised by clients and industries through decades.

The story behind OPTIMO®

Fuelled by the spirit of innovation, PcP set out to design and develop an alternative to the traditional mesh gratings. The aim was to engineer a versatile yet flexible grating design, that did not have limitations regarding where it could be installed. In 1967, the so-called "Safety Gratings" saw first light and became an instant bestseller. Today, the punched hole O-gratings are now recognised under the brand name OPTIMO®.

No matter the industry or application OPTIMO® is your solution for safety!

OPTIMO gratings are suitable for a range of applications, Public, Commercial & Industrial as follows:

- ✓ Platforms
- ✓ Mezzanines
- ✓ Gantries
- ✓ Walkways
- ✓ Stairways and landings



Benefits

The all-round solution

Flexible by design

The unique design of the OPTIMO® line with more than 15 different variations of gratings in 6 different materials, allows for almost endless possibilities. Lighter than the mesh grating but just as strong. The OPTIMO® product series is trusted through the use in public walkways, industrial complexes, platforms and much more. 10+ design variants mean OPTIMO® gratings can be multi-purposed for almost any application, wet and dry, hot and cold environments.

Furthermore, the special LHD® surface design offers unique flame-retardant capabilities, very suitable for use on transformer substations, offshore platforms, and other offshore environments.

Unlimited potential

OPTIMO® consist of planks welded together to form a complete grating. These panels are also available in the form of stair treads with different designs for numerous applications. Walkways, platforms, stairways, spiral stairs, scaffolding - the possibilities are endless. OPTIMO® brings together modern engineering with everyday practicality and safety.



High slip resistance

Carefully placed drainage holes and punched holes ensure that the OPTIMO® line proves end-users with maximum slip resistance.



Suitable for high altitudes

The OPTIMO® line is suitable to be used at high levels owing to low level of transparency providing the end user with a high degree of confidence.



Optimal strength to weight ratio

The sturdy design of the OPTIMO® line ensures a construction that is as light as its strong. Lighter than a mesh grating with the same strength.



Install with a breeze

OPTIMO® has been designed to be simple and easy to install. Just like the traditional mesh gratings they can be installed utilising clips or welded plates.



Flexible by design

OPTIMO® gratings can be used in numerous types of climates, environments, industries, and applications. The product line is available in various widths, heights, lengths, and profile forms and can furthermore be customised to meet your exact needs.



Certified Quality

The OPTIMO® product line has been rigorously tested and approved according to the European standards EN 1991 and EN ISO 14122.



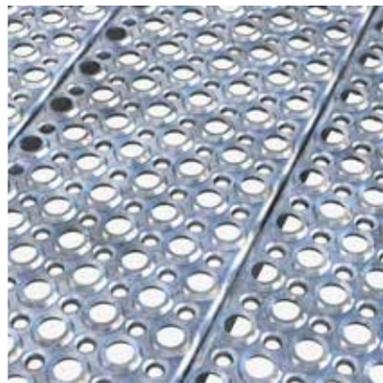
Design and functionality

The flexible and sturdy design means that OPTIMO planks, panels, and treads can be installed virtually anywhere.

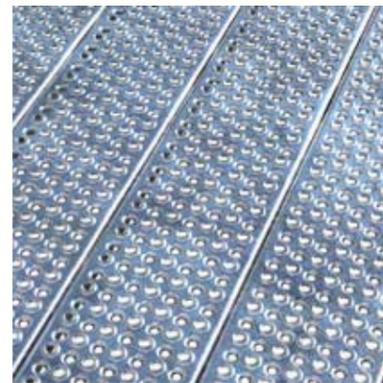
OPTIMO® gratings and treads are the best-in-class safety grating for industrial building and construction. OPTIMO® is typically a punch hole grating with drainage holes, purposely designed to be easy to install, flexible in its construction and a strong foundation for any safety need across industries and applications. With round holes for optimal slip resistance and drainage- the design offers a very high safety for applications in the public and industrial sectors.



OPTIMO O2
steel | stainless steel | aluminium
pattern: dia. 9/5 mm



OPTIMO O3
steel | stainless steel | aluminium
pattern: dia. 14/8,5 mm



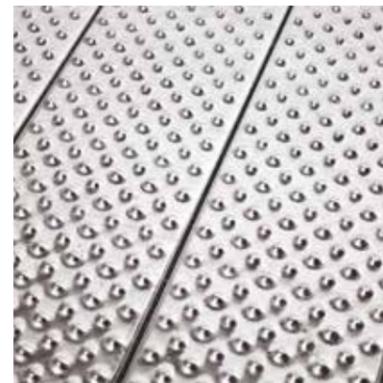
OPTIMO O5
steel
heel proof
pattern: dia. 5/5 mm



OPTIMO LHD
steel
fire protection
pattern: dia. 6/6 mm



OPTIMO US
steel | stainless steel | aluminium
increased open area
pattern: serrated 48x14/48x14 mm



OPTIMO D
steel | stainless steel | aluminium
heel proof | closed surface

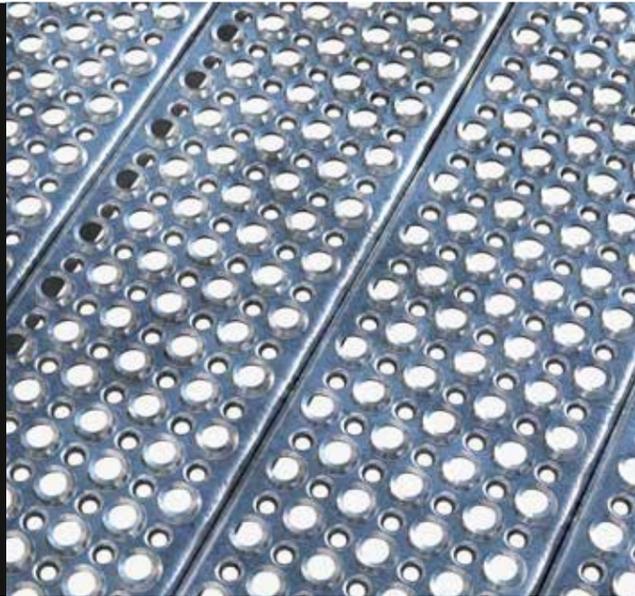
6 material grades





02

Planks, gratings and treads

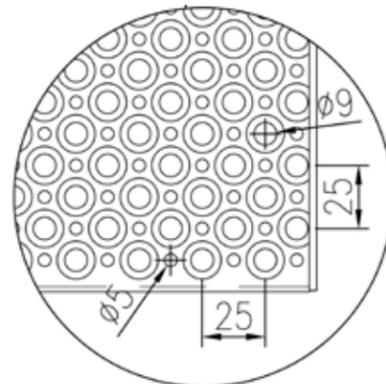


Specifications

PTV guidelines	36+ Low Slip Potential acc. to BS 7976
Dry PTV average	66 multi-directional acc. to BS 7976
Wet PTV average	50 multi-directional acc. to BS 7976
Slip resistance	R13 = slope >35° acc. to DIN 51130
Free area	20-25 %
Upward grip holes	dia. 9 mm
Downward drainage holes	dia. 5 mm
C-C grid	25 x 25 mm
Load capacity	1,5 kN / 100 x 100 mm acc. to EN ISO 14122
Ball proof	15 mm in accordance with BS 4592 20 mm in accordance with BS 4592 35 mm in accordance with BS 4592

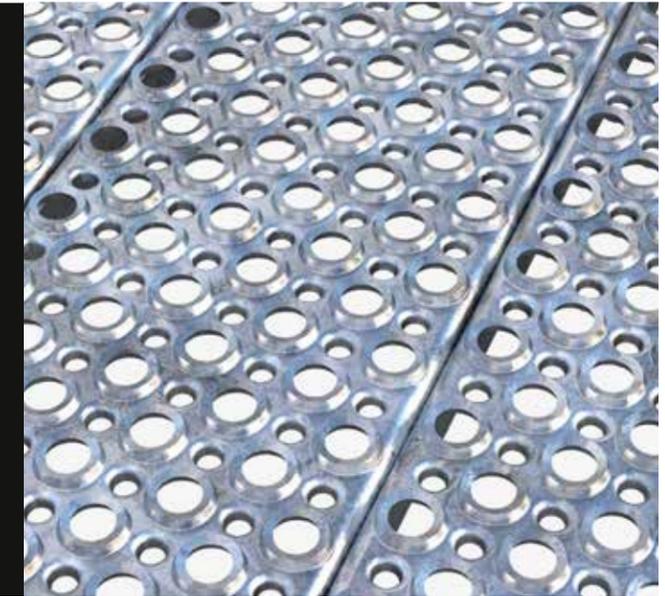
Suitable application areas

Access Walkways & Maintenance Platforms



03

Planks, gratings and treads



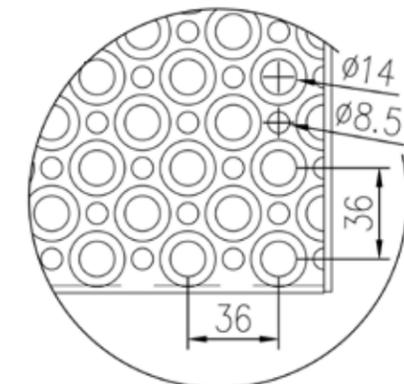
Specifications

PTV guidelines	36+ Low Slip Potential acc. to BS 7976
Dry PTV average	73 multi-directional acc. to BS 7976
Wet PTV average	51 multi-directional acc. to BS 7976
Slip resistance	R13 = slope >35° acc. to DIN 51130
Free area	28-32 %
Upward grip holes	dia. 14 mm
Downward drainage holes	dia. 8,5 mm
C-C grid	36 x 36 mm
Ball proof	15 mm in accordance with BS 4592 20 mm in accordance with BS 4592 35 mm in accordance with BS 4592

Suitable application areas

Access Walkways & Maintenance Platforms

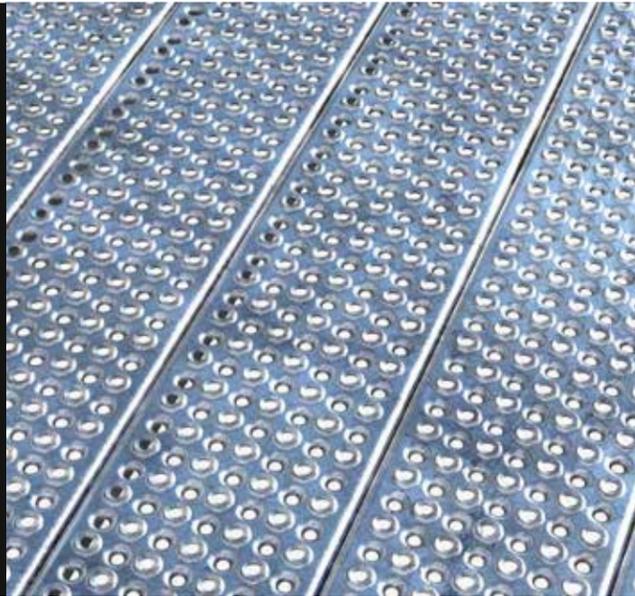
Vehicular





05

Planks, gratings and treads

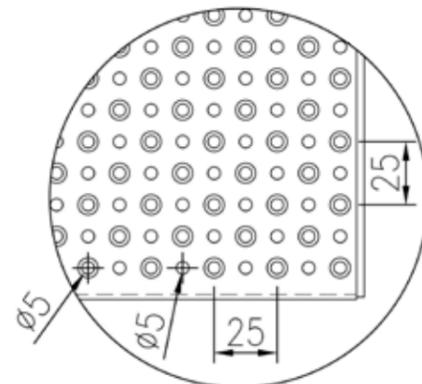


Specifications

PTV guidelines	36+ Low Slip Potential acc. to BS 7976
Dry PTV average	96 multi-directional acc. to BS 7976
Wet PTV average	79 multi-directional acc. to BS 7976
Slip resistance	R13 = slope >35° acc. to DIN 51130
Free area	8-9 %
Upward grip holes	dia. 5 mm
Downward drainage holes	dia. 5 mm
C-C grid	25 x 25 mm
Heel proof	
Ball proof	15 mm in accordance with BS 4592 20 mm in accordance with BS 4592 35 mm in accordance with BS 4592

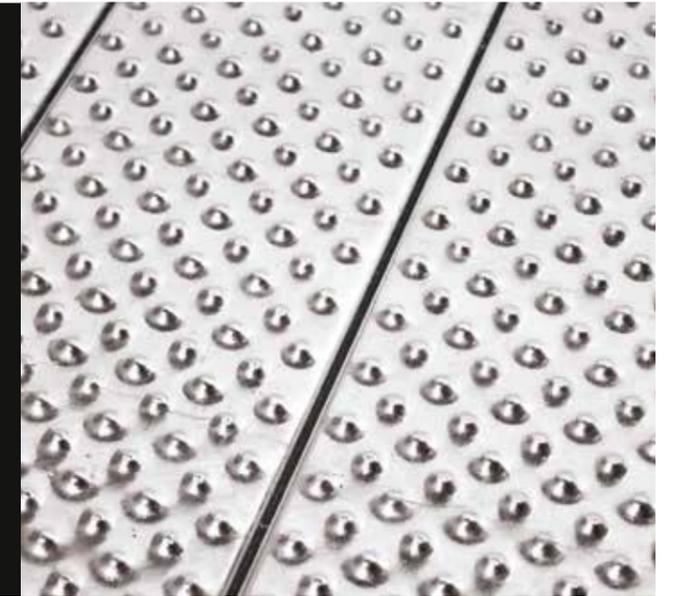
Suitable application areas

- Access Walkways & Maintenance Platforms
- Public access
- Escape routes
- Motorway gantries



D

Planks, gratings and treads



Specifications

PTV guidelines	36+ Low Slip Potential acc. to BS 7976
Dry PTV average	86 multi-directional acc. to BS 7976
Wet PTV average	60 multi-directional acc. to BS 7976
Free area	~0 %
Heel proof	
Closed surface	
Ball proof	15 mm in accordance with BS 4592 20 mm in accordance with BS 4592 35 mm in accordance with BS 4592

Suitable application areas

- Public access
- Rail gantries
- Vehicular
- Access Walkways & Maintenance Platforms



LHD

Planks, gratings
and treads

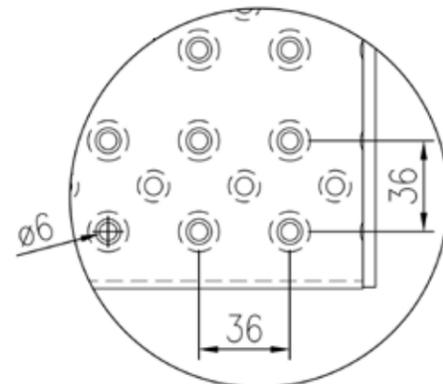


Specifications

PTV guidelines	36+ Low Slip Potential acc. to BS 7976
Dry PTV average	91 multi-directional acc. to BS 7976
Wet PTV average	55 multi-directional acc. to BS 7976
Slip resistance	R11 = 27° > slope > 19° acc. to DIN 51130
Free area	2,4 - 3,7 %
Upward grip holes	dia. 6 mm
Downward drainage holes	dia. 6 mm
C-C grid	72 x 36 mm
Ball proof	15 mm in accordance with BS 4592 20 mm in accordance with BS 4592 35 mm in accordance with BS 4592

Suitable application areas

Transformer station bunds



US

Planks, gratings
and treads

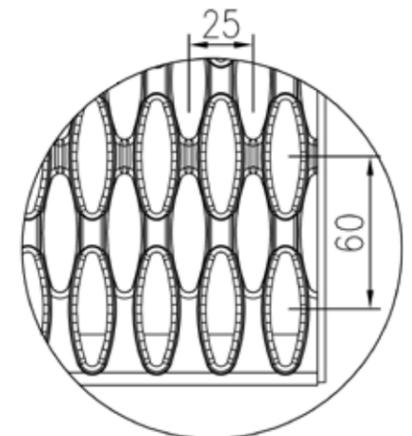


Specifications

Slip resistance	R12 = 35° > slope > 27° acc. to DIN 51130
Free area	42 - 55 %
Upward grip holes	Serrated ellipse 48 x 14 mm
Downward drainage holes	ellipse 48 x 14 mm
C-C grid	60 x 26 mm
Ball proof	15 mm in accordance with BS 4592 20 mm in accordance with BS 4592 35 mm in accordance with BS 4592

Suitable application areas

Offshore HGV walkways and steps





ACHIL

Stair treads



The OPTIMO® Achil stair treads are strong, durable and slip resistant; as a result, they are good structural components for public stairways, walkways, and platforms. Generally, we recommend Achil treads for applications in public areas where many people walk. With its unique design with rolled flanges, the Achil tread prevents accidents and damages on the heel, when walking on up the stairs. The rolled flanges provide the stair tread a high load capacity, while protecting footwear and sharp edges are avoided.



Tread ACHIL O2
Steel 240 YP
AISI 304/316
Aluminium 3005-16/H66

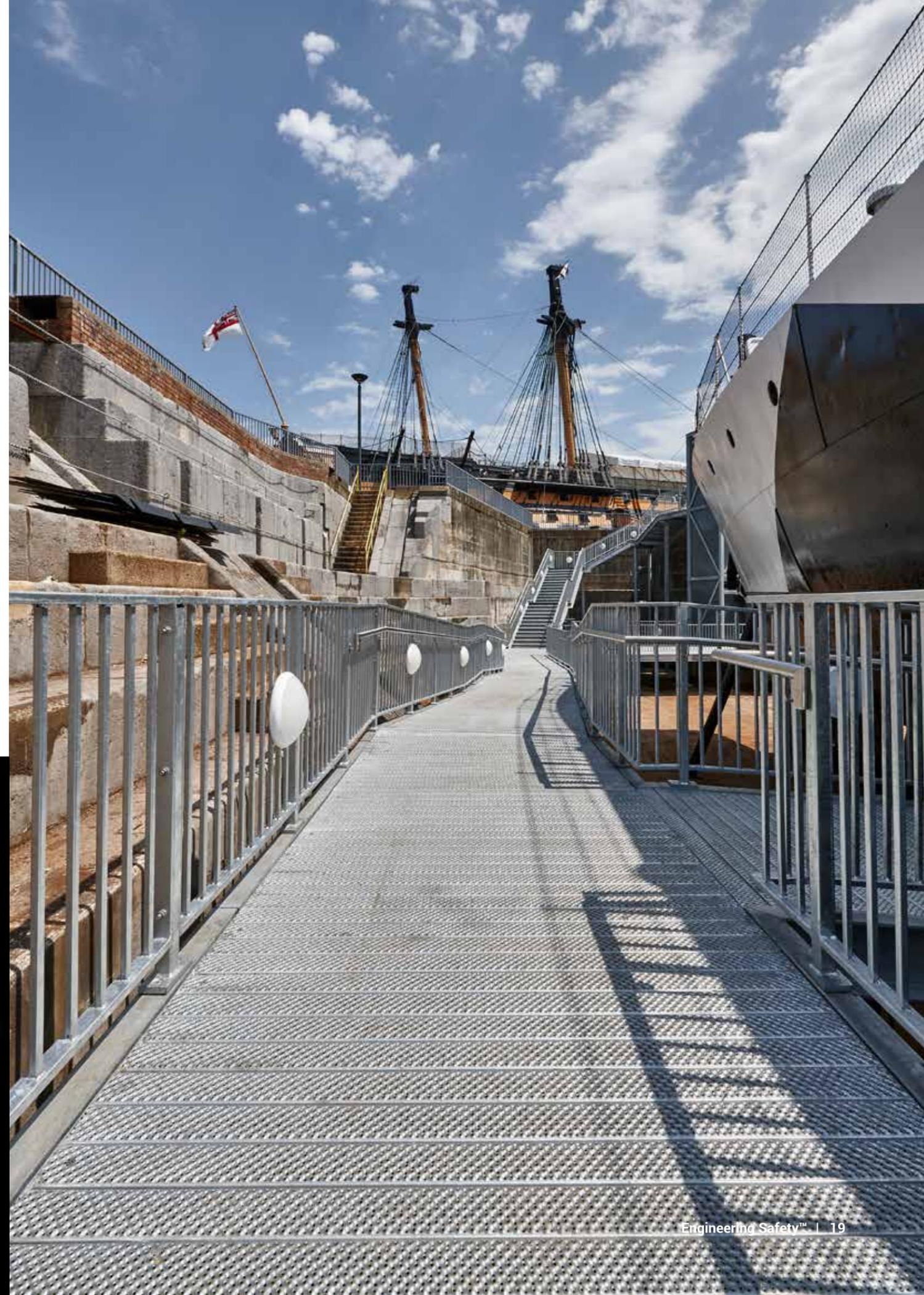
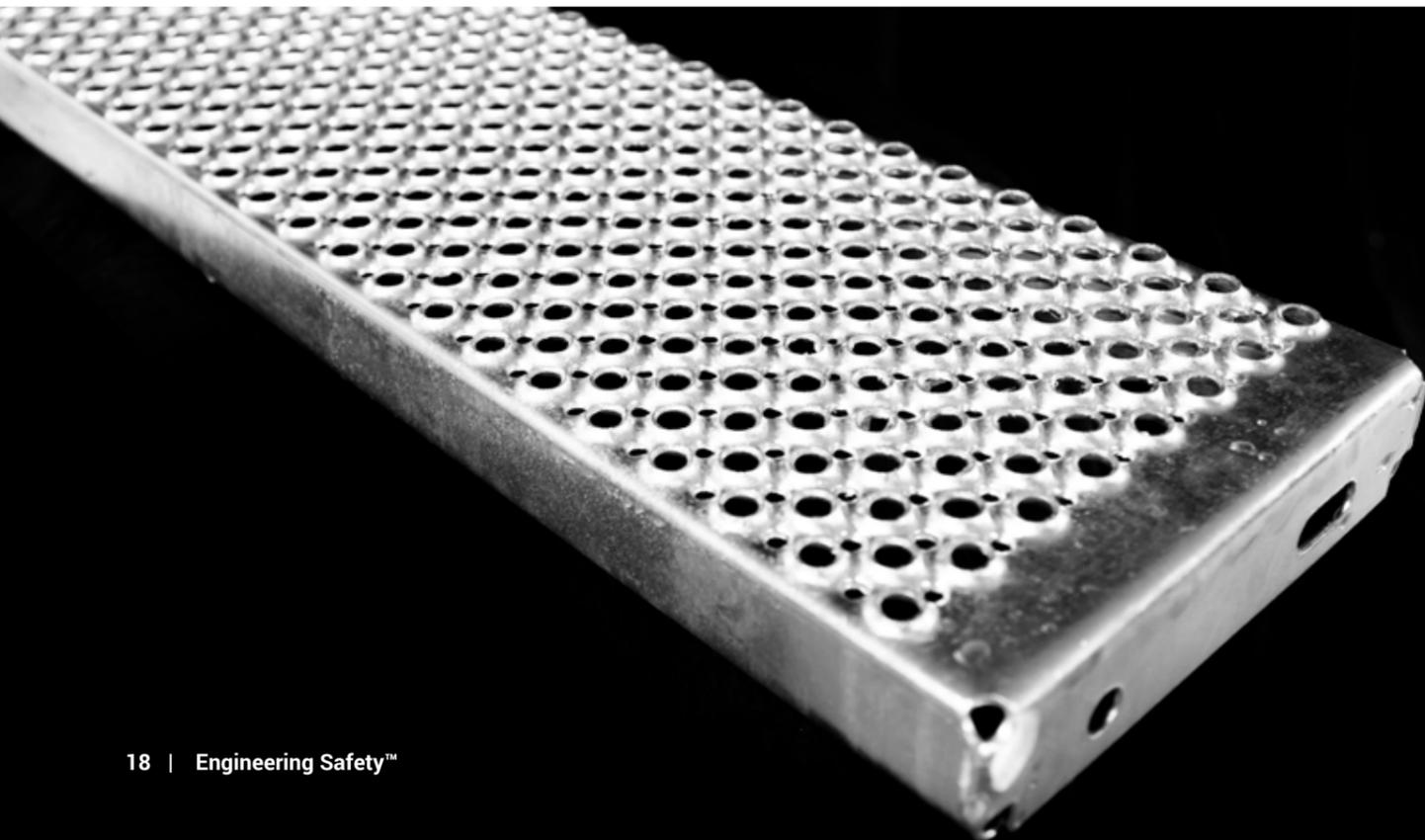


Tread ACHIL HI-VISUAL O5
Steel 240 YP

Engineering Safety™

Safety is present in all aspects of what we do.

Safety is at the very heart of our products, solutions and through everything we do. Our drive is to enable our customers - no matter your industry - to safely operate in their business environment, supported and surrounded by innovative PcP solutions. PcP is dedicated to help professionals engineer safety into every project and strive to follow our brand promise: Engineering Safety™. Our products and solutions are used in many different types of buildings, applications, and installations. They are often exposed to harsh influences in heavy cargo, chemicals, high frequency cleaning, and weather and wind. Therefore, our products must live up to a high level of safety. The advice we offer about the dimensioning, use and maintenance of the products ensures our customers the optimal and safe solution for their particular project.



Bespoke Solutions

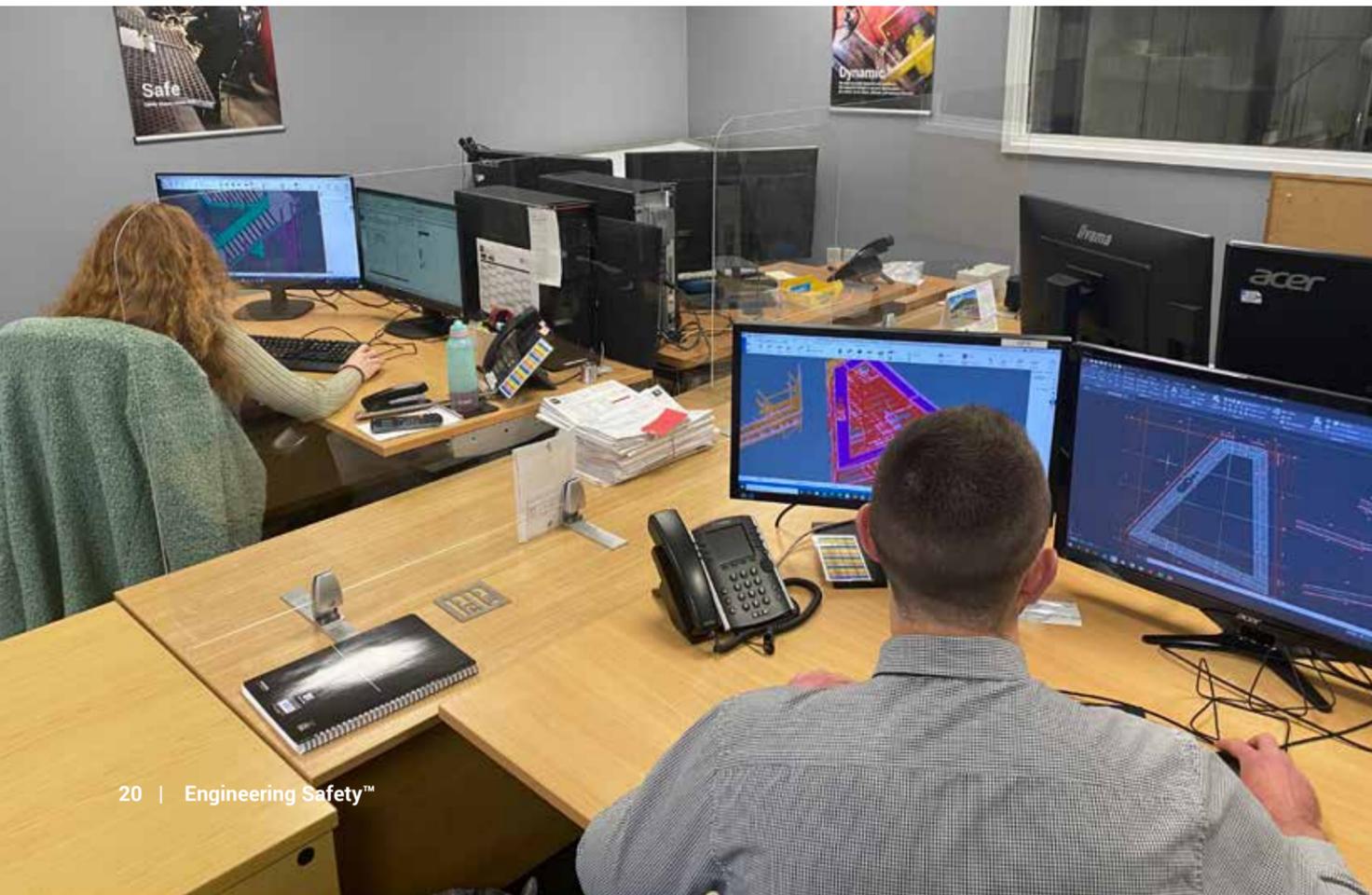
From your first request to design, manufacturing, and delivery, PcP strives to meet your project expectations in every way possible. At PcP, we believe successful customised projects consists of committed collaboration combined with years of experience.

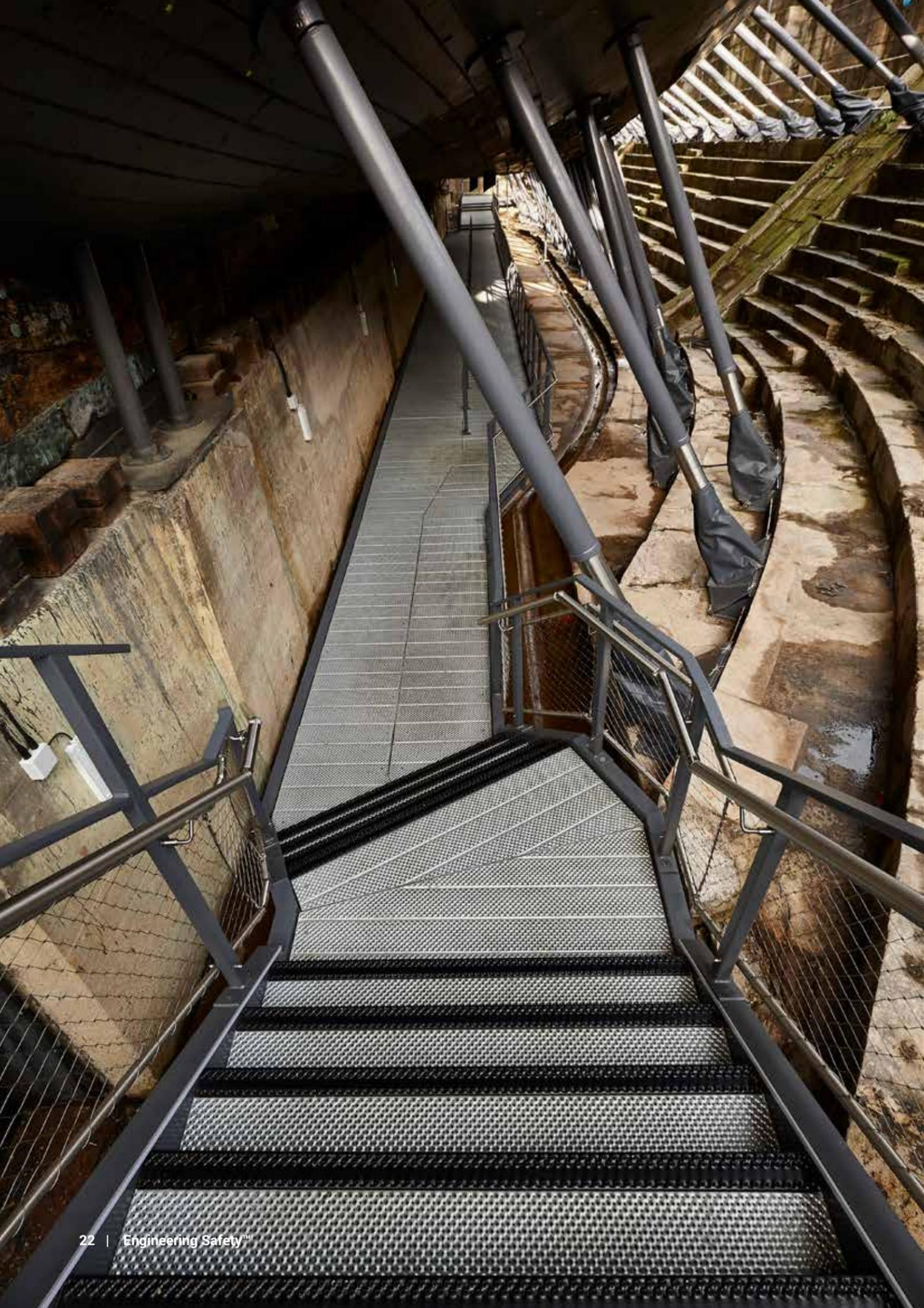
Wherever you are in the early stages of development of your project or further down the road we are happy to advise about norms, application-specific or industrial requirements, and much more. The OPTIMO® line is available in both standard and custom dimensions and can be modified to meet your exact project criteria. We welcome your next project with know-how and willfulness to realise your specific requirements. Since the beginning of PcP in 1927, we have delivered customised solutions of very high quality at competitive prices. Over the years, PcP has built up an excellent production capability, vast knowledge and broad experience in what it takes to make a good, safe and economically optimal solution for a wide range of applications.

Trusted partnership

We work with each client to understand their needs and develop customised solutions to meet each project criteria. Our experienced team is ready to take you through the challenging task from design and development to manufacturing and on-time delivery. In close collaboration, we help you define which minimum requirements your customised solution should meet. To design your solution, we only need a construction drawing of your application. When entering into a project partnership with PcP, you can expect to receive support for the following project elements:

- ✓ Static calculations
- ✓ The optimal layout of pcP products in the construction for the most economical solution
- ✓ Physical testing of the solution if necessary
- ✓ 2D or 3D drawing material on the finished solution
- ✓ Drawing packages utilised are: Tekla Structures | Autodesk - Autocad LT & Fusion 360
- ✓ Approval of drawings at the customer premises
- ✓ Production
- ✓ Delivery





Pioneering safety across industries and applications

Explore our cases and applications



Stairways and landings

Slip resistant surface. Reliable solution.

PcP manufactures stair treads for straight-flight staircases and assembly systems suitable for industrial buildings and public spaces which are subject to strict requirements regarding slip resistance and load capacity. In designing our products, user safety is paramount.

Our products are designed according to parameters such as slip resistance, drainage, load capacity and where applicable contrasting nosing's. PcP stair treads are manufactured with different grating designs and surfaces to meet the latest criteria for safety and slip resistance for public spaces and industrial areas.

Custom or standard solution? The choice is yours.

We offer standard dimensions or tailor-made dimensions in a range of materials and finishes. Explore our extensive product range of OPTIMO® gratings and treads for maximum safety, robustness and slip resistance. OPTIMO® gratings and treads are the optimum choice for public and industrial stairways and landings, combining optimal safety and optimum strength to weight ration. OPTIMO® gratings are supplied in a range of design options and standard dimensions, and can be tailor-made to your need.

Benefits when using OPTIMO® in stairways and landings



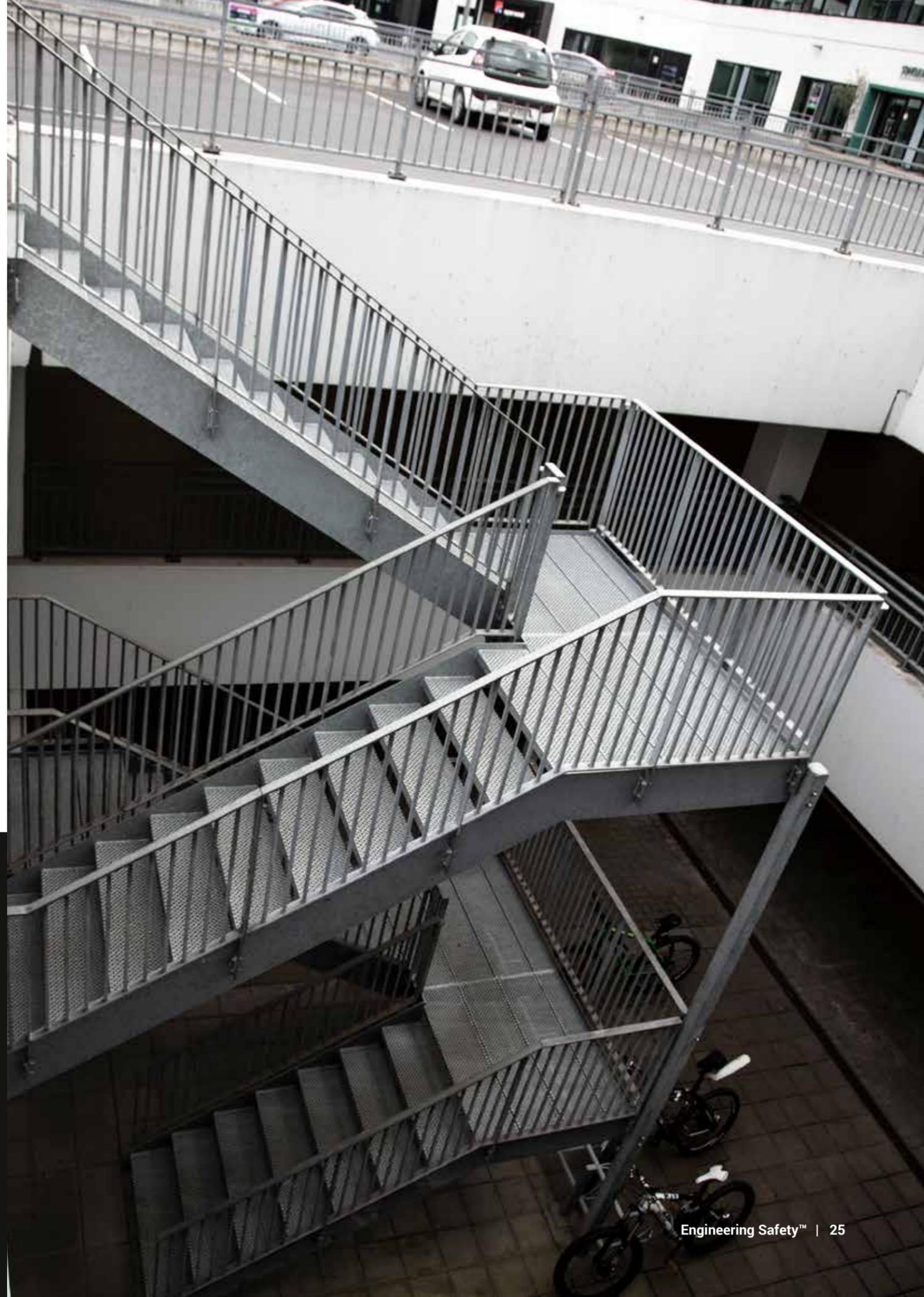
Optimal slip resistance

Carefully placed drainage holes and punched holes ensure that the OPTIMO® treads proves end-users with maximum slip resistance.



High strength. Low weight

The sturdy design of the OPTIMO® line ensures a construction that is as light as its strong. Lighter than a mesh grating with the same strength.



Access walkways & Maintenance platforms

Steel flooring solutions for industrial and public safety

OPTIMO® gratings are the optimal solution for open steel flooring and access walkways in all industries without compromising safety or quality. OPTIMO® gratings offer optimal safety and strength and are an effortless fit for maintenance platforms, public walkways, emergency access, specialised or restricted access, i.e. areas with a specific design criterion. We have designed OPTIMO® steel flooring solutions to ensure the highest safety for the users.

Maximum safety on industrial maintenance platforms

We offer a wide selection of steel, stainless steel gratings and treads for industrial maintenance access platforms. With an excellent slip resistance, strength-to-weight ratio and high load capacity, OPTIMO® gratings are a safe and robust choice for industrial maintenance access and work platforms.

Standard or custom. The choice is yours.

We have a significant number of stock products in the CUBE® series, ready for immediate delivery. But if your project has unique requirements, our flexible production allows for quick manufacturing and low cost of your next project.



Benefits when using OPTIMO® in walkways and platforms

High strength. Low Weight

The OPTIMO® grating offers the optimal balance between weight and strength, making it a suitable and cost-efficient solution for all types of industrial applications.

Enhanced slip resistance

The slip resistance offered by the OPTIMO® complies with BS 7976-2 and with DIN 51130.



Motorway Gantries

Safe Motorway Gantries

Gantries are used on a highway or railway as a walkway over a road. The gantries are communication platforms for signage typically positioned on the side of a road/ motorway. Every gantry is designed to accommodate a specific set of equipment including ladders, access platforms, signs, lights, cameras, control gear.

Steel flooring for maintenance on motorway gantries

Maintenance walkway over a road or rail like a metal bridge, a structure needs a nonslip flooring for safety and drainage. You don't want any large object to fall through the flooring. The high risk of falls can be controlled with safe platforms, gantries that are designed and built to the requirements needed for safe access. Our steel flooring products for gantries are independently tested and certified, giving the maintenance workers peace of mind needed to safely carry out their work in order to service the cameras and signs.

OPTIMO steel gratings for safe access on gantries

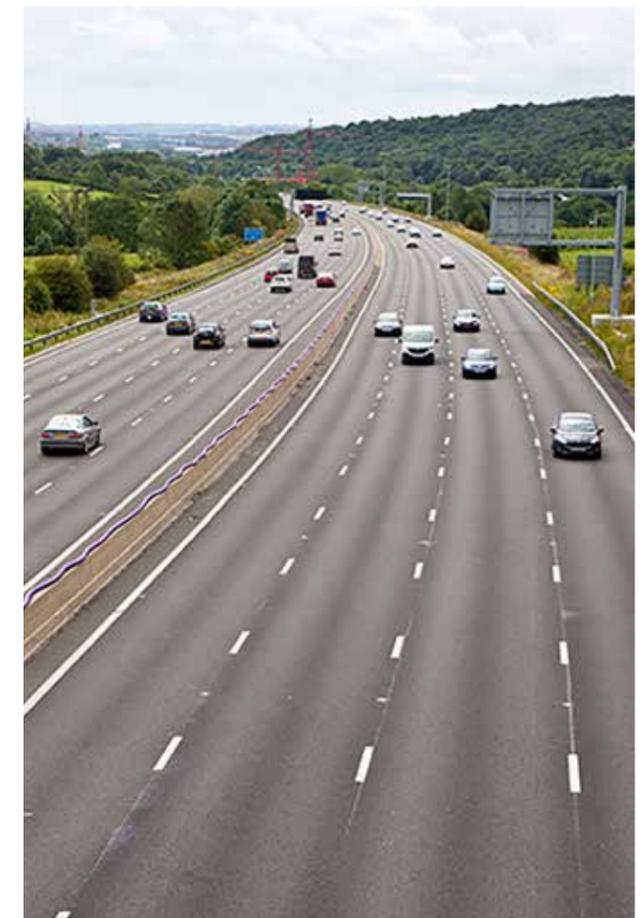
The requirements for a steel walkway/platform on a gantry are completely fulfilled with the OPTIMO O5 and O2 gratings. OPTIMO gratings O2 and O5 are applied where high demands for slip resistance and weight is required. The closely spaced holes form an even and transparent surface and provide an optimal strength/weight ratio. The gratings are produced in different dimensions and profiles and supplied as standard products or can be customised to your needs.



Benefits when using OPTIMO® gratings in gantries

 **High strength. Low Weight**
The OPTIMO® grating offers the optimal balance between weight and strength, making it a suitable and cost-efficient solution for all types of industrial applications.

 **Enhanced slip resistance**
The slip resistance offered by the OPTIMO® complies with BS 7976-2 and with DIN 51130.



Backstage Upkot Studenthousing

Safe steel stairways and platforms for Backstage² Upkot student house in Ghent, Belgium

The ancient printing house of "De Vooruit" in the Center of Ghent, was completely stripped to only the ancient concrete supporting structure. From there the renovation to an ultramodern student home was to be made with steel, providing safe stairways, safe and easy to walk on platforms, as well as outside sitting areas for the students. The solution was to be made in aesthetical harmony with other building materials, such as COR-TEN steel that also was used in the project to create a modern look, aspiring to the students.

The solution

Lannoo Konstruktie chose the OPTIMO® O2, Spiral treads – Type K and panels, as these high-quality products met all the stated requirements for the new student accommodation building. In addition, it was a bonus that the OPTIMO® O2 perforation is easy to walk on in all types of shoes, and is even suitable for outdoor furniture, such as tables and lounge chairs.

"The strength-to-weight ratio of the PcP solution is very favourable. This was very helpful for us, as we had to mount the new steel structure onto the old concrete supporting beams. It was important to have a light but very strong panel and steps. PcP was ideal for this purpose."

– Christophe Lannoo, CEO, Lannoo Konstruktie



Benefits from using OPTIMO® in the solution



Slip-resistant platform

The risk for accidents and falls is significantly minimized.



High strength

With CUBE gratings and treads in standard sizes, it was quick to install the platform and stairs.



Comfort & security

Today, it's easier and safer to check fuel and make tests



Fast delivery

Maintenance workers feel safer during the job.



HMS Victory

OPTIMO® gratings for access walkways, landings and stairs for public safety HMW Victory.

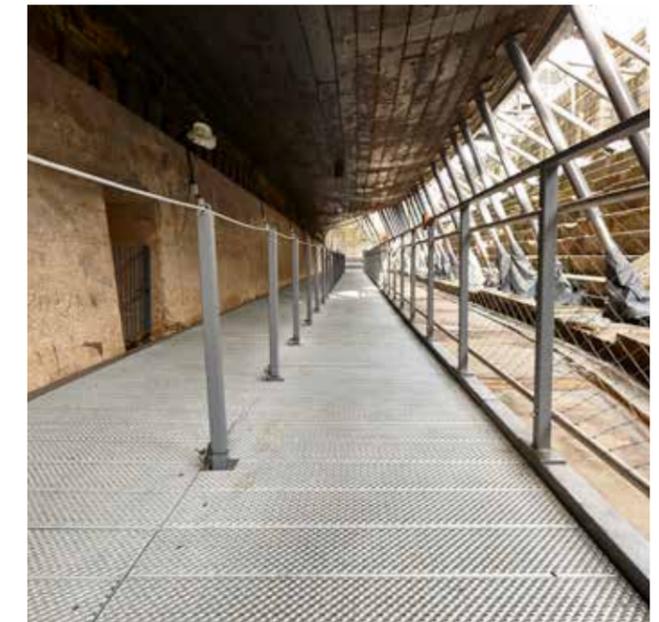
HMS Victory situated in Portsmouth Historic Dockyard, HMS Victory is best known for her role in the Battle of Trafalgar, Victory currently has a dual role as the Flagship of the First Sea Lord and as a living museum to the Georgian Navy. She transferred to The National Museum of the Royal Navy in 2012.

The solution

More than 150m² walkways/landings plus stair treads with DDA compliant Nosings for public access at HMW Victory. The under-hull walkway required new access walkways, landings, and stairs for visitors to be able to visit this area of the ship. It was essential to provide a safe solution that not only met but exceeded the criteria for public access walkways, treads & landings while also meeting the design brief.

"Working with the PCP team ensured the complex arrangement of flooring required on this project was delivered and installed on time and fitted without any major issues. Our installation team appreciated the manner in which the deliveries were made and packaged helping speed up our installation task. The team were always keen to help and address any issues. Looking forward to working with them on projects in the future."

Stephen Makepeace, General Manager at Power System Services Ltd



Benefits from using OPTIMO® in the solution



Loading Calculations

Most economical solution with excellent high-quality finish



Strength

Better strength-to-weight ratio than the twisted bar that originally was considered



DDA Compliance

Product supplied fit for purpose



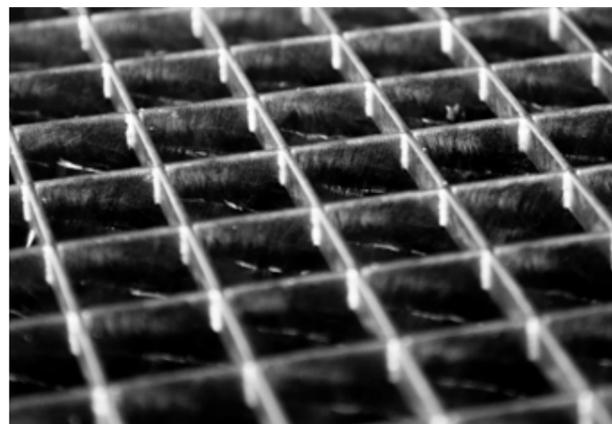
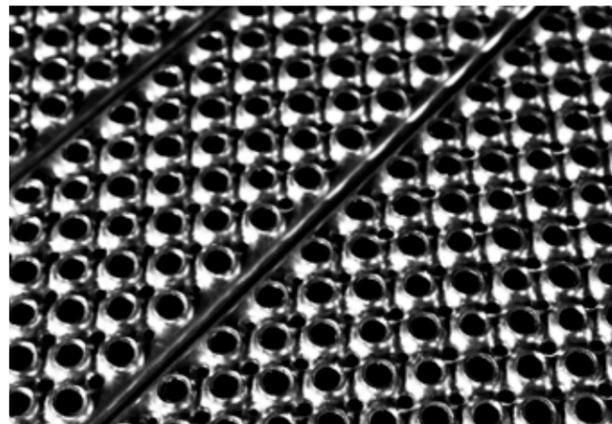
Fully Dimensional Drawing

Access to after-sales support including relevant datasheet and certification



Extended product programme

We strive to deliver value through our diverse product brands and exceed expectations across all industries and applications. Explore our most popular brands below - gratings, treads, planks and much more. Available in standard or custom sizes.

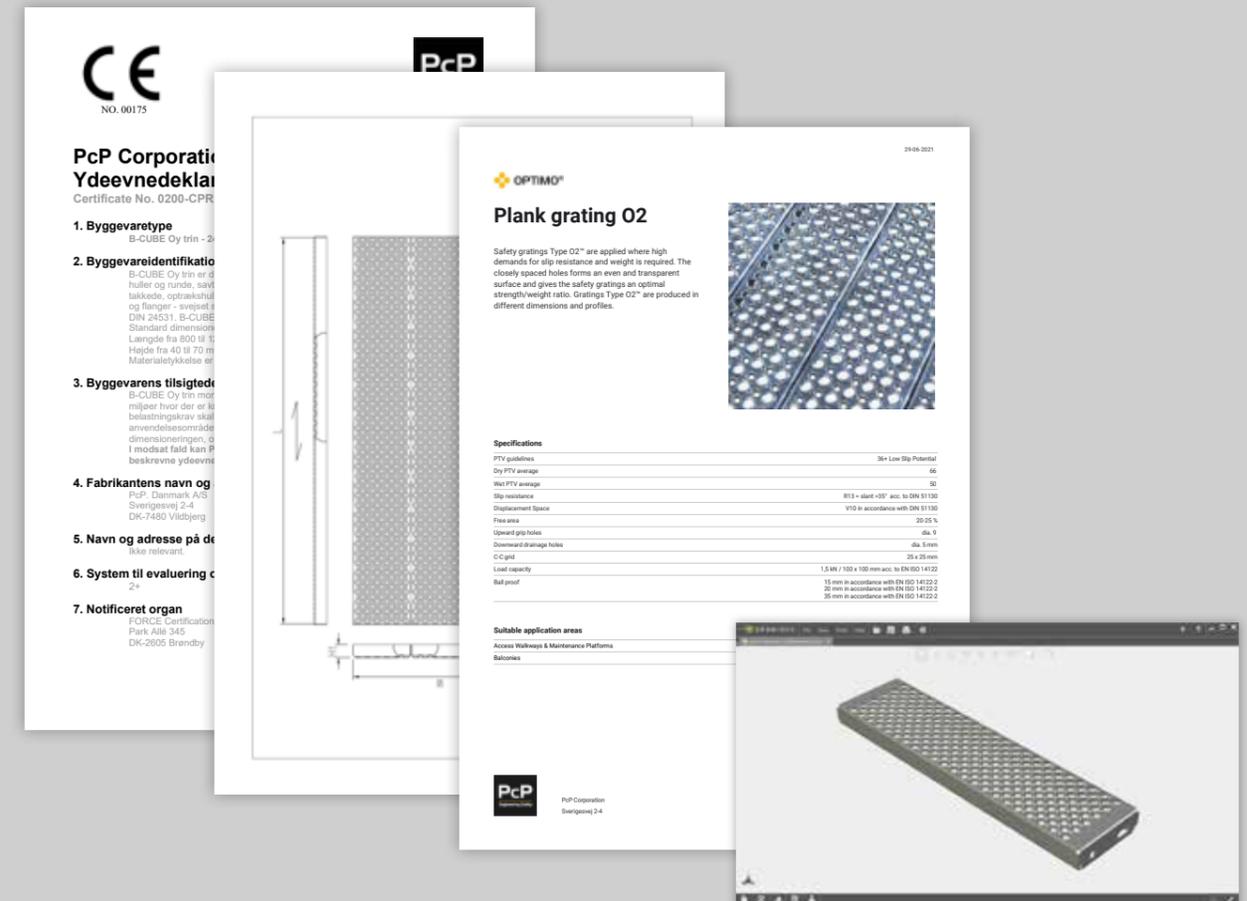


Technical information

To ensure safe handling and installation of our standard products, we provide all the relevant information. Besides, we offer the technical support and knowledge needed to optimise your application with a suitable and financial solution. We are always available to support you with technical advice and guidance - contact our experienced team if you need help to find precisely the solution that suits your needs.

On our website www.pcp-corp.com, you can find all documentation about the standard products such as:

- ✓ 3D and 2D drawings
- ✓ Product data sheets
- ✓ Cargo specifications
- ✓ Performance Declarations
- ✓ User manuals
- ✓ Examples of typical applications



Engineering Safety™

Safety is at the very heart of our products and through everything we do. Our drive is to enable our customers - no matter their industry - to safely operate in their business routine, supported and surrounded by innovative PcP solutions.

DENMARK

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