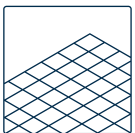


Gratings



Press Locked Gratings
Shelf Gratings
Press Welded Gratings
Special Gratings
Stair Treads

active for **70**
years

26
locations in Europe

Regional

2,800
employees
in Germany

28
own lorries

44
locations worldwide

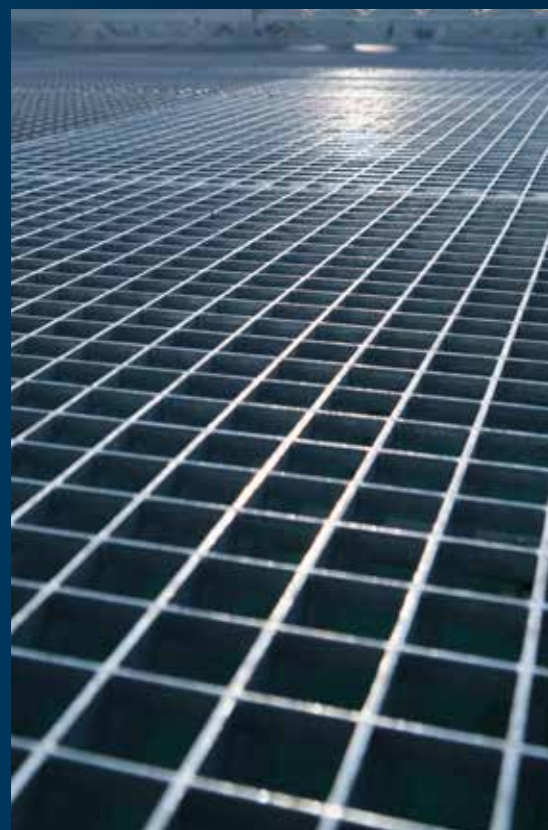
operating in over
50
countries

Global

represented on
6
continents

4,000
employees
worldwide

06	About us: Facts & figures
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Efficiency with vision

Even after 70 years of company history, MEISER remains true to the principles that made the company strong: working reliably, thinking long term, taking responsibility and maintaining direct contact with customers. Tradition is not about looking back, but it does form the basis for the further development that extends far beyond the company's headquarters in Saarland.

Today, around 4,000 employees work for MEISER, including more than 2,800 in Germany. The two main production sites in Saarland and Saxony form the company's industrial foundation. They are complemented by production facilities in Dubai, Hungary, France, Belgium, Egypt, Brazil, Morocco, Romania, the Czech Republic, the US, Mexico and Turkey. In addition, further branches connect us with all major markets.

This creates a combination that defines MEISER: international capability and personal support on site. Customers benefit from short distances, direct communication and an understanding of regional requirements – backed by the experience of a company that has been active in different markets for decades and has a broad market presence.

As a steel-processing company, MEISER is active in the fields of gratings, sheet metal profiles, GRP, slit strip and galvanising. Further business areas, such as road safety, expanded metal, viticulture products and mounting systems for photovoltaic installations as well as scaffolding and sliding fittings, expand the portfolio and show how versatile the company's expertise can be.



For us, an important factor in our quality is our high level of in-house value creation. With our own galvanising plants, slitting facilities and cold rolling mills, MEISER can control and coordinate all the central processes itself. This creates reliability – from planning through to the finished product. Modern production technology, state-of-the-art machinery and committed employees provide the foundation for stable processes and economical solutions.

Despite this growth, the focus on the customer remains decisive. For MEISER, progress means not only new technology or greater capacities, but, above all, better solutions developed through direct exchange. Many exceptional projects have emerged from this collaboration. They show what becomes possible when experience, proximity and trust come together.

We combine 70 years of company history with international presence and personal support. Customers can rely on this, today and in the future. MEISER – built for generations.

About us: Facts & Figures – at home worldwide

Whether it's Gratings, Expanded Metal or Road Safety – we develop solutions that work when it matters most. With Solar Systems, we're driving tomorrow's energy forward, whilst Agri Solutions delivers robust, practical systems. In Coating, we combine galvanising and powder coating to provide long-lasting surface protection. In addition, under Other Solutions, we bring together complementary services that complete projects. In every division, we rely on state-of-the-art technology, precision manufacturing and tailor-made concepts. People are always at the heart of what we do: Our teams, who act with experience and responsibility, and our customers, whose requirements we understand through partnership – today and in the future. That's us. That's MEISER.

150,000,000
square metres
of gratings

400,000
tonnes of steel per year

The background of the entire page is a high-contrast, blue-toned image of the Earth as seen from space. The curvature of the planet is visible, with the horizon line arching across the lower half. Darker blue areas represent landmasses, while lighter blue areas represent the oceans. The overall effect is a sense of global scale and environmental impact.

100,000

kilometres
of vehicle restraint systems

15,000

tonnes of zinc per year

8,000,000

through solar mounting
structures

more than

50,000,000

vineyard posts



MEISER

Our business divisions are synonymous with leading solutions in steel processing.



From the initial concept to the finished product, we support you with our expertise and innovative solutions in steel. We manufacture, finish and deliver with clearly defined responsibilities.

We operate cost-effectively and responsibly. With strong regional roots and an international presence, we provide reliable planning for your projects – from the initial consultation through to final acceptance.



Gratings

Customised solutions for complex tasks

meiser.de/en/business-areas/gratings



Road Safety

Well-thought-out solutions for the most stringent safety requirements

meiser.de/en/business-areas/road-safety



Solar Systems

Innovative mounting technology for the energy of tomorrow

meiser.de/en/business-areas/solar-systems



Agri Solutions

Genuine expertise for growing demands

meiser.de/en/business-areas/agri-solutions



Expanded Metal

Custom-made expanded metal designs at their best

meiser.de/en/business-areas/expanded-metal



Coating

Precision coatings for reliable corrosion protection

meiser.de/en/business-areas/coating



Other Solutions

Versatile solutions for specific challenges

meiser.de/en/business-areas/other-solutions



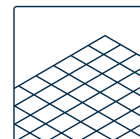


MEISER

The MEISER Portfolio

Our business divisions are synonymous with leading
solutions in steel processing.

Gratings



Customised solutions for complex tasks



On the walkable roller coaster Tiger & Turtle, MEISER press gratings with anti-slip protection provide secure footing at lofty heights.

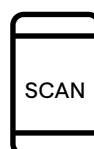
MEISER portfolio



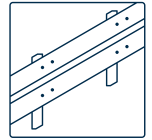
Gratings can be used both architecturally and aesthetically as well as industrially and functionally

Architects and civil engineers create cost-effective solutions by using grating in unconventional ways – for example, in combination with wood, glass or stone. Different mesh sizes create striking surface textures that offer ever-changing visual impressions depending on the angle of view and the light. We are happy to assist you with challenging design ideas. MEISER has developed over 5,000 types of grating, often based on precise specifications from customers and designers. Function is often the priority, aesthetics are frequently a consideration and the budget sometimes sets limits. When all these factors come together, special gratings are created – such as solid, comb or slatted gratings.

meiser.de/en/business-areas/gratings



Road Safety



Well-thought-out solutions for the most stringent safety requirements



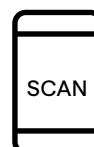
MEISER Road Safety vehicle restraint systems safeguard the demanding test tracks of AVL ZalaZONE



The honeycomb geometry of the Protector enables safe vehicle restraint

MEISER Road Safety offers high-quality vehicle restraint systems and bespoke solutions for national roads, country roads, motorways and other transport infrastructure. The systems combine high stability, durability and efficiency. They are characterised by proven safety and practical installation solutions. In this way, they combine functionality, innovative technology and aesthetic design to reliably protect road users and meet the requirements on construction sites, along busy roads and in commercial areas.

meiser.de/en/business-areas/road-safety



Solar Systems



Innovative mounting technology for the energy of tomorrow



The two-pile MEISER Portrait mounting system in a solar park in Nonnweiler

MEISER portfolio

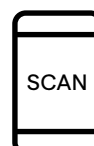


The VOLTWING ECO on the premises of MEISER Solar in Losheim am See

MEISER develops high-performance mounting systems for photovoltaic systems that are consistently designed for durability, simple installation and maximum stability. The portfolio includes substructures for large-scale solar projects and carport systems with modular constructions.

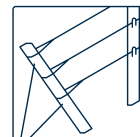
Planning, structural design and execution go hand in hand. All the solutions are designed for practical use, planned to meet the approval requirements and geared towards efficient implementation. Development, production and galvanising are exclusively carried out exclusively in our own plants.

meiser.de/en/business-areas/solar-systems



Agri Solutions

Genuine expertise for growing demands



The hooks on the MEISER vineyard post provide reliable support for wires in the vineyard

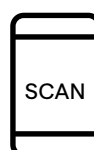


At a winery in Rhineland-Palatinate, our vineyard posts bring clear structure to the rows of vines

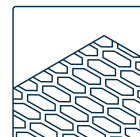
MEISER Agri Solutions brings together innovative product brands for viticulture and fruit cultivation under one roof. With solutions from market leaders such as Profil Alsace, Julien, Le Piquet, artos and MEISER Fassreifen, we support winegrowers worldwide in efficient cultivation, reliable protection of their vineyards and high-quality processing.

Quality, durability and practical technology are at the heart of everything we do, ensuring professional results under demanding conditions in daily use.

meiser.de/en/business-areas/agri-solutions



Expanded Metal



Custom-made expanded metal designs
at their best

Expanded metal is a versatile and sustainable metal product created by systematically forming a sheet of metal; it combines high strength, flexibility and durability. With a variety of mesh patterns, such as diamond, square, Experf or long-bar mesh, it offers tailored solutions for architecture, industry and engineering. Expanded metal is used in applications including batteries, automotive engineering and filters as well as for protective and safety solutions, ventilated façades, balustrade infills and decorative elements – always produced in a resource-efficient manner and without material waste. Its open mesh structure combines functionality, visual transparency and light transmission whilst creating aesthetically pleasing results. Thanks to the adaptability of the mesh size and material thickness, specific requirements can be met precisely, making expanded metal an ideal choice for both practical and design-oriented applications.

meiser.de/en/business-areas/expanded-metal

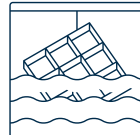


Our expanded metal impresses with its adaptability in a wide range of applications



On the façade of the Bilbao Exhibition Centre in Spain, MEISER expanded metal gives the architecture a modern and distinctive appearance

Coating



Precision coatings for reliable corrosion protection

Hot-dip galvanising is our core competence: Therefore, virtually all MEISER products are thus provided with long-term corrosion protection from within our own value chain. We have been carrying out our own hot-dip galvanising in Schmelz-Limbach since 1969; an additional modern hot-dip galvanising plant has been in operation here since summer 2011, followed by a further plant at the Oelsnitz site in early 2020. We complete the production process for most of our products on both lines – hot-dip galvanising is the final, crucial step and provides protection for many years without requiring any special maintenance. Whilst our site in Saarlouis continues to offer contract galvanising of individual items and powder coating services, our strip galvanising facility at the St. Ingbert site complements our portfolio, as this is where slit strip is finished using a continuous process.

meiser.de/en/business-areas/coating



Batch galvanising provides lasting protection against corrosion, ensuring robust, low-maintenance use outdoors

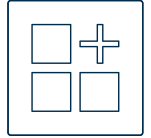


Powder coating provides excellent corrosion protection and true design versatility, allowing custom colours to be realised

Continuous strip galvanising ensures a uniform surface, economical processing and consistently high material quality



Other Solutions



Versatile solutions for specific challenges



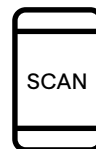
ALFIX scaffolding systems ensure safe and efficient work processes on demanding construction sites

ALFIX has been developing and manufacturing practical scaffolding systems for professional use for 75 years. The company offers solutions for façade, modular, mobile and canopy systems, meeting a wide range of requirements on construction sites. ALFIX is a MEISER company and complements the portfolio with scaffolding systems.

MEA sliding fittings are high-quality guide and load-bearing components specially developed for the manual transport of suspended loads, sliding doors and sliding gates. They feature a modular, coordinated product range that guarantees a long service life and precise functionality.

meiser.de/en/business-areas/other-solutions

MEISER portfolio



MEA sliding gate fittings set fixed structures in motion



Customer service that covers everything from planning to installation

The MEISER Gratings

An overview of industrial flooring



The observation tower in Presseck

Gratings is a construction element that, whilst being lightweight and highly transparent, offers a high load-bearing capacity. The form-fit connection between the bearing bars and infill bars and the edging makes the gratings a stable yet visually unobtrusive product. It has a wide range of applications: Gratings is widely used in industry and architecture. As a robust, safe yet lightweight platform surfacing, it is well established in many sectors of heavy industry.

Gratings is also installed in refineries, power stations, steelworks, mines and on oil platforms. Steel fabricators, metalworkers and metal fabricators use gratings in their trades. As flooring and shelving, gratings is increasingly being used in the logistics sector. Architects and builders value gratings as an aesthetic and at the same time functional product – whether as façade cladding, ceiling suspension or sun protection.



Gratings scores highly in architecture and industry

Gratings used for shading in Freiburg-Hochdorf





The BiggeBlick viewing platform in Attendorn



MEISER gratings used as a walkway on the Bad Oeynhausen bridge

MEISER offers a very wide range of gratings worldwide. The diversity of applications calls for a correspondingly wide variety of products. We will work with you to select the right gratings

from our range. Gratings is almost always safety-critical – we are fully aware of this responsibility. Anyone standing at a great height on a platform made of MEISER gratings will recognise the importance of quality and reliability. From planning right through to delivery, we set high standards for our products. MEISER gratings are 100% made by MEISER. More than 80 per cent of all gratings is made to measure for you at our two factories in the Saarland and Vogtland.

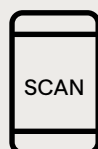
Our staff will be happy to support and advise you on the planning of your projects. Structural calculations and the preparation of measurements are also part of our range of services.

MEISER gratings – concepts that deliver.

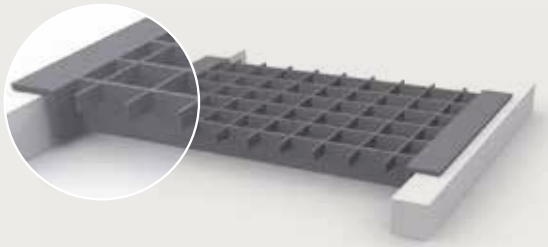
Technical terms –
the MEISER

ABC

The most important
information at a glance

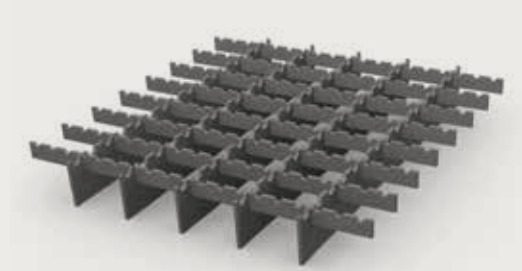


Angle collar



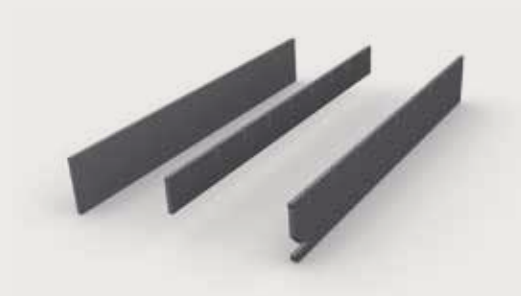
A bracket welded on one or more sides to the gratings. The span of the bracket should correspond at least to the height of the bearing bar in this version.

Anti-skid-properties (Serrations)



Notching of bearing and cross bars to increase slip resistance.

Bearing bars



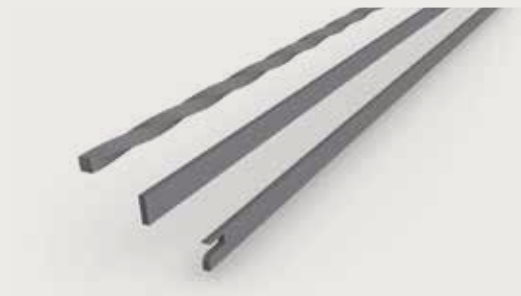
Bearing bars are load-bearing, vertical flat bars which run parallel to one another from one support to the next.

Clear Span



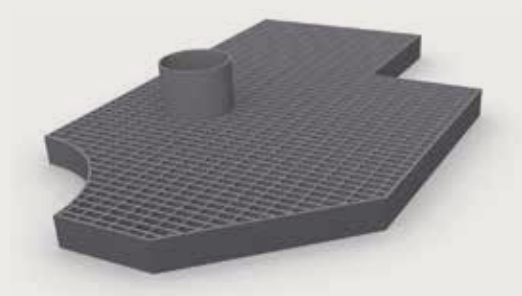
Is the clear distance between two supports.

Cross bars



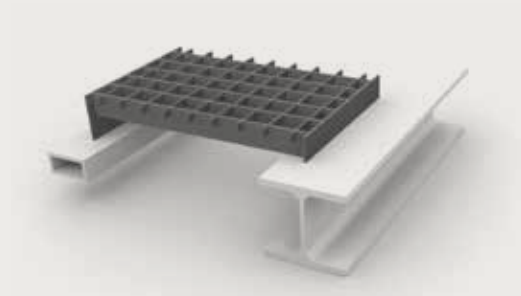
The cross bars run at right angles to the bearing bars, connecting them together through compression and/or welding at the crossover points.

Cut-outs



If the total length of the cutout is less than 0.5 mm, we call this a „Small Cut-Out“.

Deep Banding



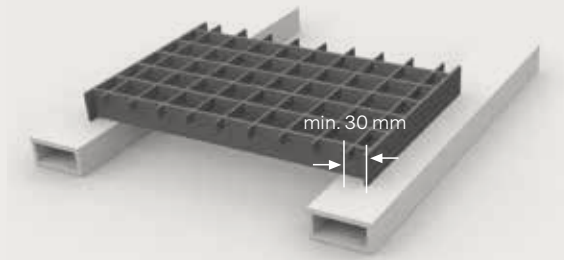
Reinforced and raised edge surround downwards, e.g. in order to achieve a certain installation height.

Edge banding



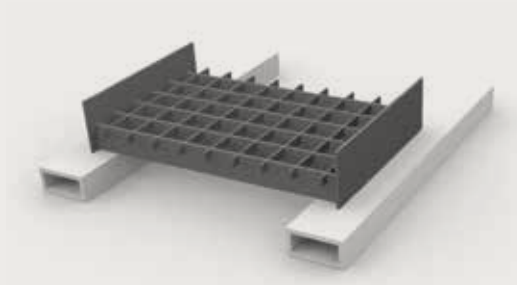
All gratings is banded as a rule by flat bars, T-shaped sections or U-shaped sections.

Gratings landing



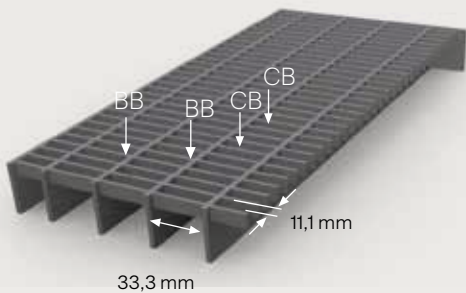
The term „gratings landing“ is used to describe the length of the bearing bar ends which lie on the support structure. It should correspond to the height of the bearing bars, but also be at minimum of 30 mm.

Kick Plate



A raised surround plate, also known as a toe plate, is welded on, increases safety when walked on and protects against sliding at the gratings edge. This is necessary if the clearance between the gratings and the adjacent component is more than 30 mm.

Mesh size



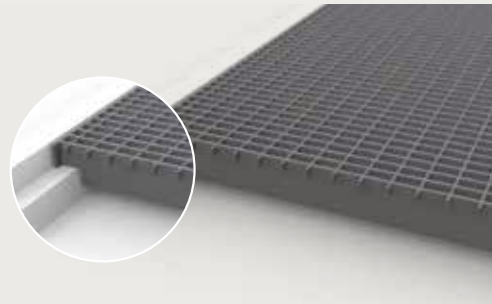
The mesh size is largely determined by the mesh spacing, whereby the distance between the bearing bars (BB) and cross bars (CB) can be different. In all tables the first value is the distance between of the bearing bars, the second

Installation / Erection clearance



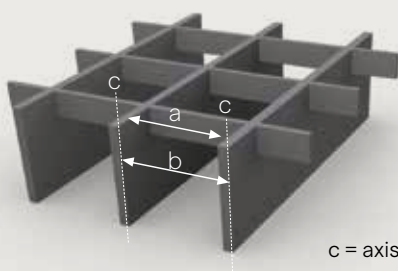
The installation clearance is used during assembly to compensate for tolerances between the steel structure and gratings.

Notched bearing bar



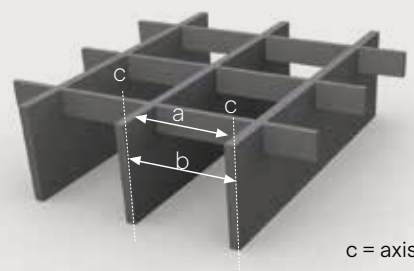
Special notching of the bearing bars and the panel banding bars local to the support structure (notches should be not more than half the height of the bearing bars).

Mesh spacing



(b) distance from centre to centre of bearing bars or the cross bars.

Mesh width



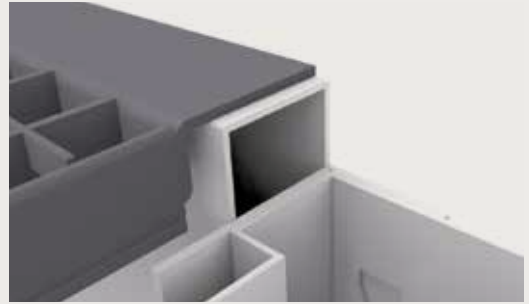
(a) the clear distance between the bearing bars or the cross bars.

Support beam centres

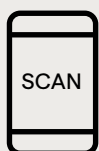


Is the centre-to-centre distance of the support in the direction of the bearing bar.

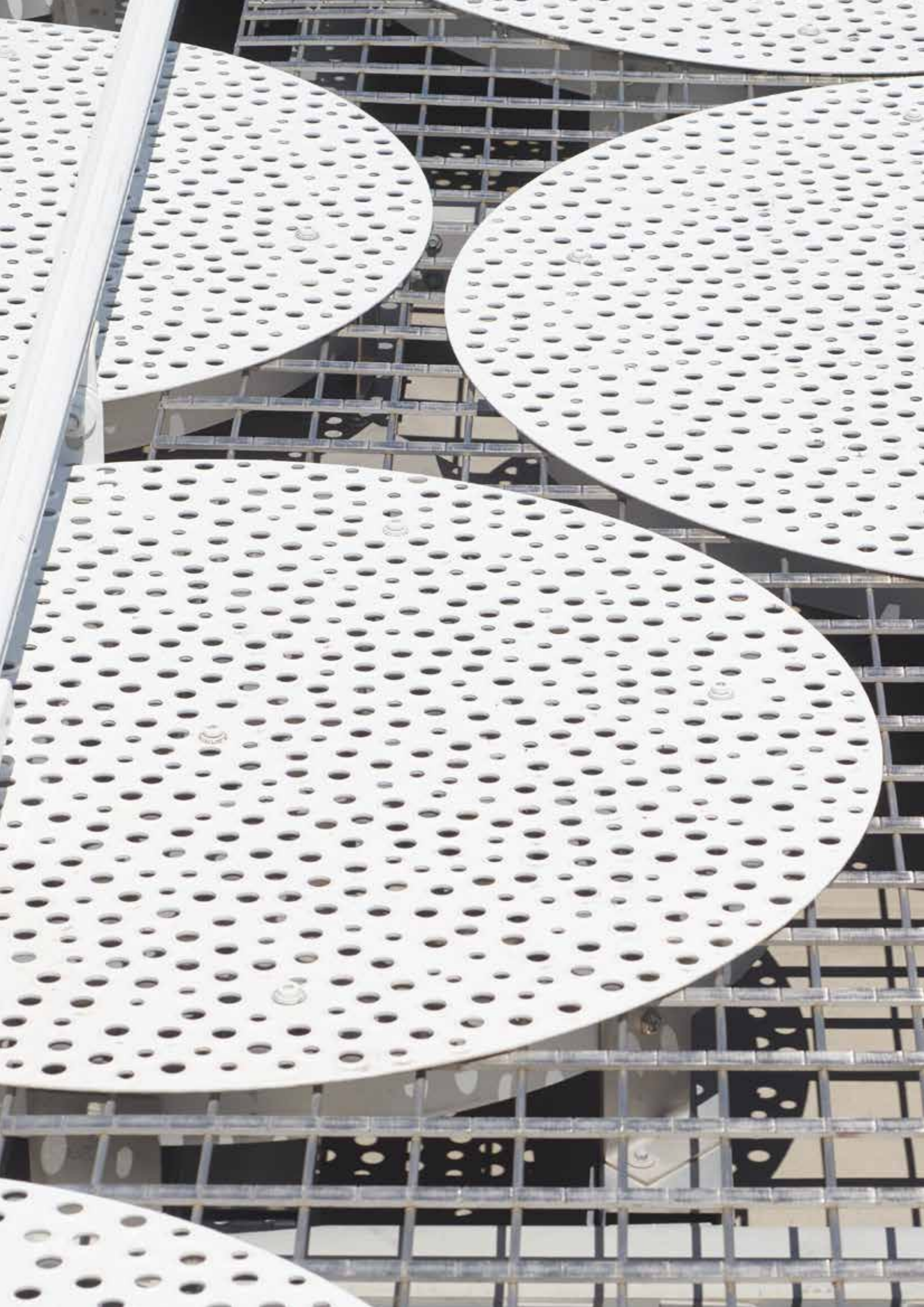
Z-shaped section / MEISER special angle collar



Angle section with two folds, similar to the angle collar, in which the section protrudes into a notch in the bearing bar.



You can find more information about our products here.



Press Locked Gratings

- 28 Applications
- 34 Full Gratings
 - Heavy Duty Gratings
- 35 Louvre Gratings
 - Full Press Locked Louvre Gratings

MEISER Pressed Gratings – in use

Endless possibilities



Facades

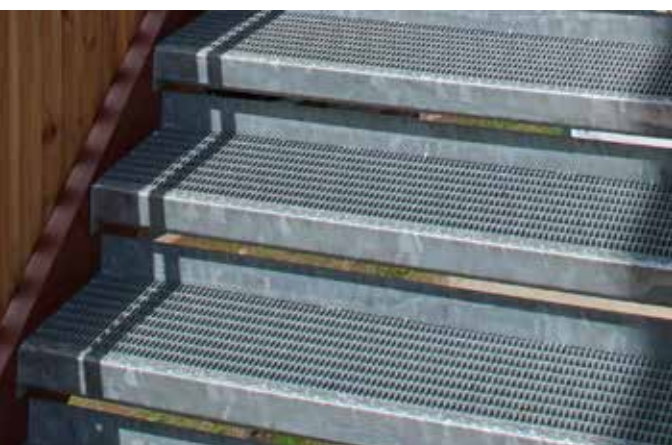
MEISER gratings are ideal as façade elements when architecture and function need to work in harmony: depending on the design, sun protection, privacy screening and air flow can be specifically combined.

Exclusive designer gratings with specially profiled aluminium slats – for effective sun protection whilst allowing natural airflow and providing a noticeable climate-regulating effect. Visually, they can be customised through anodising or coating; they reduce transparency where it is undesirable and are also used as cladding on façades, amongst other applications; different slat angles create, for example, varying degrees of openness. Horizontal or vertical lines can be emphasised, presenting an elegant, high-quality façade cladding.

The façade of the École St. Sophie, clad with MEISER press-formed gratings



Close-up from the CTLES Paris



Top: MEISER gratings steps installed at the Ecole Privée Notre-Dame Sainte-Sophie in Luxembourg
Bottom: Close-up of the steps installed at the Presseck observation tower

Steps

MEISER gratings steps are designed for staircases, access points and maintenance areas where durable and safe treads are required. As pressed gratings steps, we manufacture them using the same process as pressed gratings – tailored to the requirements of your project. Pressed gratings steps can be made from steel, stainless steel or aluminium.

For added safety, the tread surface can be finished with an anti-slip coating up to R13. Where large spans need to be accommodated, we also supply pressed gratings steps with heavy-duty support bars to ensure the required load-bearing capacity is achieved.

You will receive a step solution that can be tailored to your application in terms of material and design. We would be happy to assist you in selecting the appropriate design.



MEISER

Press Locked Gratings

Pressed gratings is now the most commonly used type of gratings in Europe. Thanks to a production technology that differs significantly from that of welded pressed gratings – and which allows for a much wider range of variants – it has almost unlimited applications.

The mesh pattern can be designed with a great deal of flexibility, as can the height and thickness of the support bars. In combination with the various materials from which pressed gratings can be manufactured, this results in gratings tailored precisely to the customer's requirements and the intended application. We do not claim that the pressed gratings is the better type of gratings; however, it is certainly the more attractive and customisable option compared to the welded pressed gratings.

In pressed gratings, the infill bars – which are usually made of cold-rolled flat steel – are pressed into the previously punched-out support bars. The edge trim is designed as a T-profile or flat bar and is attached using resistance welding. Where there is an increased risk of slipping, pressed gratings can be manufactured in an anti-slip design. To achieve this, the bearing and/or infill bars are notched out at the top. With pressed gratings, the opposing end meshes are usually the same size. However, the point made earlier still applies here: there are almost no limits to the imagination and variety of designs available for pressed gratings.

Common mesh spacing for bearing bars from 2 to 3 mm

Bearing bar	Cross bar								
11,1	11,1	16,65	–	22,2	33,3	44,4	49,95	66,6	99,9
21	11,1	16,65	21,0	22,2	33,3	44,4	49,95	66,6	99,9
22,2	11,1	16,65	21,0	22,2	33,3	44,4	49,95	66,6	99,9
33,3	11,1	16,65	21,0	22,2	33,3	44,4	49,95	66,6	99,9
44,4	11,1	16,65	21,0	22,2	33,3	44,4	49,95	66,6	99,9
55,5	11,1	16,65	21,0	22,2	33,3	44,4	49,95	66,6	99,9
66,6	11,1	16,65	21,0	22,2	33,3	44,4	49,95	66,6	99,9
99,9	11,1	16,65	21,0	22,2	33,3	44,4	49,95	66,6	99,9

Common mesh spacing for bearing bars from 4 to 5 mm

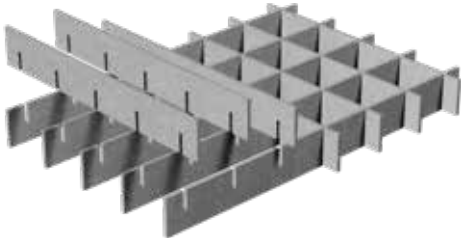
Bearing bar	Cross bar							
21	16,65	22,2	33,3	44,4	50	66,6	99,9	
25	16,65	22,2	33,3	44,4	50	66,6	99,9	
33,3	16,65	22,2	33,3	44,4	50	66,6	99,9	
50	16,65	22,2	33,3	44,4	50	66,6	99,9	
66,6	16,65	22,2	33,3	44,4	50	66,6	99,9	
99,9	16,65	22,2	33,3	44,4	50	66,6	99,9	

We are always happy to help with any special requests!

Standard bearing bar profiles			
Bearing bar 2 mm	Bearing bar 3 mm	Bearing bar 4 mm	Bearing bar 5 mm
20 × 2	20 × 3	–	–
25 × 2	25 × 3	25 × 4	25 × 5
30 × 2	30 × 3	30 × 4	30 × 5
35 × 2	35 × 3	35 × 4	35 × 5
40 × 2	40 × 3	40 × 4	40 × 5
45 × 2	45 × 3	45 × 4	45 × 5
50 × 2	50 × 3	50 × 4	50 × 5
–	60 × 3	60 × 4	60 × 5
–	70 × 3	70 × 4	70 × 5
–	80 × 3	80 × 4	80 × 5
–	90 × 3	90 × 4	90 × 5
–	100 × 3	100 × 4	100 × 5
–	–	–	110 × 5
–	–	–	120 × 5
–	–	–	130 × 5
–	–	–	140 × 5
–	–	–	150 × 5
–	–	–	160 × 5
–	–	–	170 × 5

Full Gratings

Full gratings bear this name because the bearing and cross bars have the same cross-section and are therefore of equal height. A bearing bar is one whose ends are both supported and whose underside is not slotted. The advantage compared to the normal press locked gratings is its improved screening and the attractive design.



Common mesh spacing for bearing bars from 2 to 3 mm					
Bearing bar	Cross bar				
22,2	16,65	22,2	–	44,4	66,6
33,3	16,65	22,2	33,3	–	66,6
44,4	16,65	22,2	–	44,4	–
66,6	16,65	22,2	33,3	–	66,6

Standard mesh spacing for 5 mm support bars				
Bearing bar	Cross bar			
33,3	16,65	33,3	66,6	99,9
66,6	16,65	33,3	66,6	–
99,9	16,65	33,3	–	99,9

Standard bearing bar profiles		
Bearing bar 2 mm	Bearing bar 3 mm	Bearing bar 5 mm
25 × 2	25 × 3	–
30 × 2	30 × 3	30 × 5
35 × 2	35 × 3	35 × 5
40 × 2	40 × 3	40 × 5
45 × 2	45 × 3	45 × 5
50 × 2	50 × 3	50 × 5
–	60 × 3	60 × 5
–	70 × 3	70 × 5
–	80 × 3	–
–	90 × 3	–
–	100 × 3	–

Heavy Duty Gratings

From the name you can guess the intended application of the MEISER heavy duty gratings. This is press locked gratings with particularly deep and/or thick bearing bars. The dimensions of the cross bar are adapted accordingly.

Counter gear teeth during the pressing process gives the MEISER heavy duty gratings additional stability, so that surface loads of more than 50 tonnes and wheel loads of 10 tonnes can be withstood without difficulty.

We adapt the exact design from case to case to the width between supports and the intended use. Production in high-grade steel is also possible.



Common mesh spacing			
Bearing bar	Cross bar		
25	50	75	100
50	50	75	100
75	50	75	100
100	50	75	100

Standard bearing bar profiles		
Bearing bar 8 mm	Bearing bar 10 mm	Bearing bar 12 mm
80 × 8	80 × 10	–
90 × 8	90 × 10	–
100 × 8	100 × 10	100 × 12
110 × 8	110 × 10	110 × 12
120 × 8	120 × 10	120 × 12
130 × 8	130 × 10	130 × 12
140 × 8	140 × 10	140 × 12
150 × 8	150 × 10	150 × 12
–	–	160 × 12
–	–	170 × 12
–	–	180 × 12
–	–	190 × 12
–	–	200 × 12

Louvre Gratings

Less transparency is sometimes what is required. In these cases the louvre gratings is used. There are a large number of applications, which are not restricted only to floor coverings in the case of bridges, walkways and crossovers. As a sun shield or cladding element, the louvre gratings is also used in the case of ventilation grilles, facades and suspended ceilings.

MEISER offers louvre gratings in steel, aluminium and high-grade steel. The cross bars can be pressed in at an angle of 15°, 30° or 45°, so that varying degrees of transparency can be achieved. Please note in your planning that for this type of gratings we are only able to produce cross bar lengths of up to 1,500 mm and infill bar lengths of up to 1,200 mm.

Note: A 15° crossbar inclination is technically only possible with a bearing bar thickness of 3 mm. Please contact us in advance.



Common mesh spacing			
Bearing bar	Cross bar		
33,3	22,2	33,3	66,6
66,6	22,2	33,3	66,6
99,9	22,2	33,3	66,6

Standard bearing barprofiles	
Bearing bar 2 mm	Bearing bar 3 mm
30 × 2	30 × 3
35 × 2	35 × 3
40 × 2	40 × 3
45 × 2	45 × 3
50 × 2	50 × 3
–	60 × 3
–	70 × 3
–	80 × 3
–	90 × 3
–	100 × 3

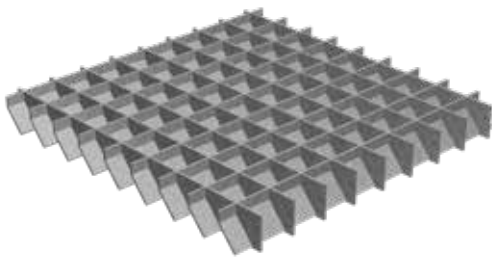
MEISER's heavy-duty grates are reliable and robust



Full Press Locked Louvre Gratings

This special design of the louvre gratings combines the technical properties of a conventional press locked gratings and full gratings with the attractive design of a louvre gratings. The full press locked louvre gratings is particularly suitable not only as facade cladding, but also as a crossover or walkway covering due to its static advantages.

The angle of the cross bars can be freely selected in this version. The load-bearing capacity of the full press locked louvre gratings benefits from the very small punch depth of the bearing bars, which is only 10 mm. MEISER offers the full press locked louvre gratings in steel and high-grade steel. A notching in the bearing bars is possible, so that this version also offers a high level of slip resistance. Please note in your planning that for this type of gratings we can only produce cross bar lengths up to 1,250 mm.



Common mesh spacing				
Bearing bar	Cross bar			
22,2	22,2	33,3	44,4	66,6
33,3	22,2	33,3	44,4	66,6
44,4	22,2	33,3	44,4	66,6
66,6	22,2	33,3	44,4	66,6
99,9	22,2	33,3	44,4	66,6

Standard bearing bar profiles	
Bearing bar 2 mm	Bearing bar 3 mm
30 × 2	30 × 3
35 × 2	35 × 3
40 × 2	40 × 3
45 × 2	45 × 3
50 × 2	50 × 3

First size mentioned = bearing bar direction; external gratings dimensions

Gutter gratings

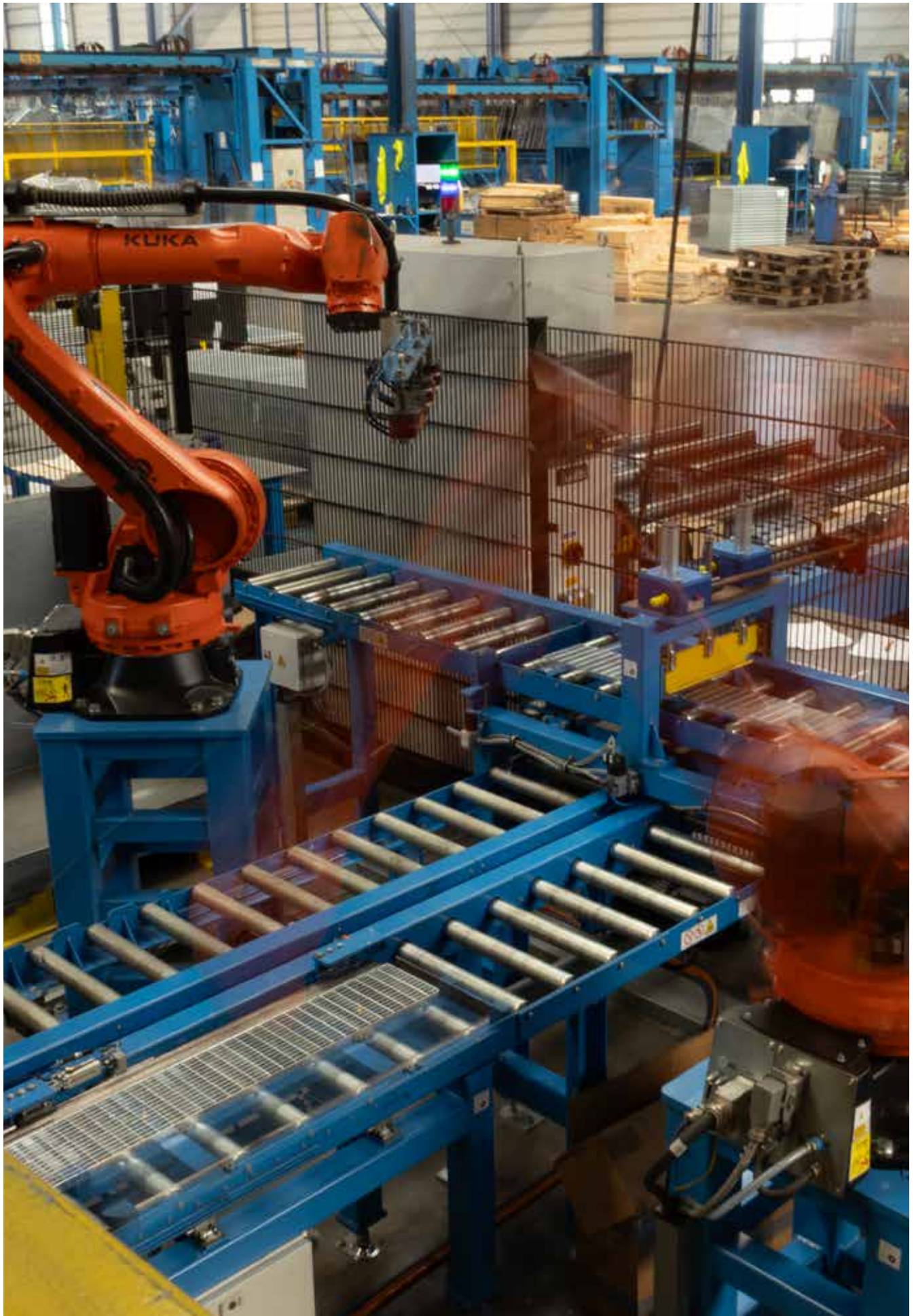
MEISER gutter gratings are manufactured from steel, stainless steel or aluminium – tailored to the application, the environment and the required load-bearing capacity. The channel covers are available in sizes up to a maximum of 300 × 1,500 mm and can be designed for applications ranging from pedestrian traffic to areas accessible to lorries. With a production capacity of approximately 20,000 units per month, we ensure planning reliability even for larger quantities.

We tailor the exact design to the span, load and intended use. Our in-house structural analysis and test bench technology ensure a reliable design and verified quality. By involving our research and development team at an early stage, we create bespoke channel covers that specifically combine technical requirements, cost-effectiveness and operational safety.



Common mesh sizes						
Bearing bar	Cross bar					
22,2	11,1	22,2	33,3	44,4	66,6	99,9
33,3	11,1	22,2	33,3	44,4	66,6	99,9
44,4	11,1	22,2	33,3	44,4	66,6	99,9
66,6	11,1	22,2	33,3	44,4	66,6	99,9
99,9	11,1	22,2	33,3	44,4	66,6	99,9

Standard support beam sections	
Bearing bar 2 mm	Bearing bar 3 mm
20 × 2	20 × 3
25 × 2	25 × 3
30 × 2	30 × 3
35 × 2	35 × 3
40 × 2	40 × 3



Press Locked Gratings

At MEISER, you'll find state-of-the-art technology, such as the bending robots in our new galvanising plant in Schmelz-Limbach



Shelf Gratings

38	Applications
40	Loose-fitting designs
42	Inserted designs
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MEISER Shelf Gratings – in practice

Organised and practical storage

MEISER shelving grids offer significant advantages over other shelving surfaces in logistics systems. In addition to their durability, their light and water permeability are particularly noteworthy.

This is especially important when sprinkler systems are installed. The open design of the grating allows light to pass through, ensuring good illumination throughout the logistics system. At the same time, the layout of the racking can be clearly seen from below. Sophisticated design features simplify the installation of the gratings and offer additional, integrated benefits. On the following pages, we present our range of solutions, which have been developed in collaboration with leading logistics system manufacturers.



Store in a stable, light-permeable and water-permeable place



Below: Sophisticated, tailor-made solutions for storage conditions

Above: Stable and secure, even in high-bay warehouses

Loose-fitting designs

These variants of the MEISER shelving grating can be easily secured to the cross-beams of the shelving structure. To this end, the T-profile frame, which is extended downwards, features a notch that is specifically tailored to the width of the cross-beams. The downward-extended T-profile frame features a notch specifically designed

to accommodate the width of the cross-beams. The notch extends down to the level of the load-bearing bars, ensuring that these structurally critical elements rest flush on the cross-beam. Further specific adjustments can be made at a detailed level, as described below.

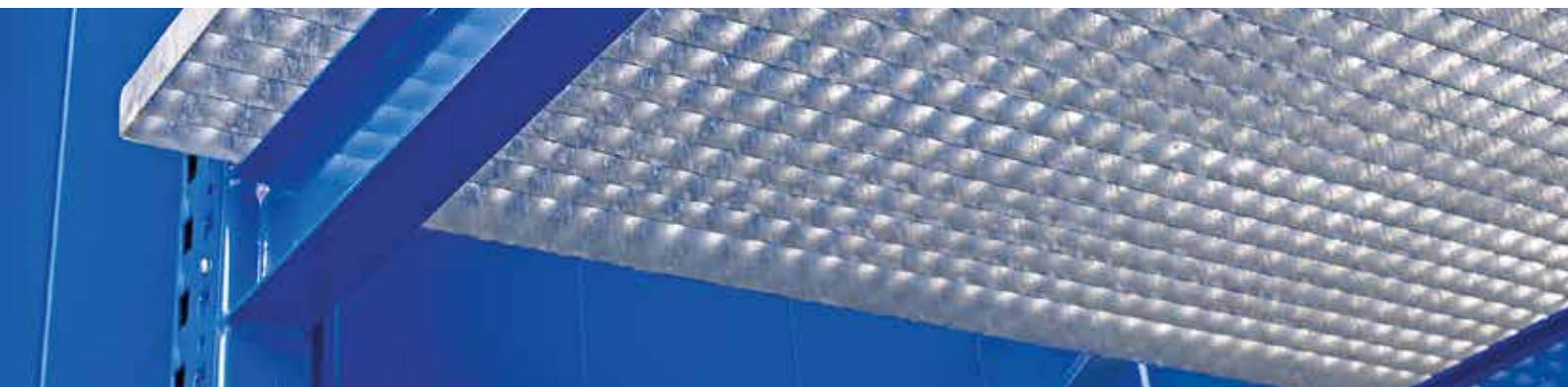
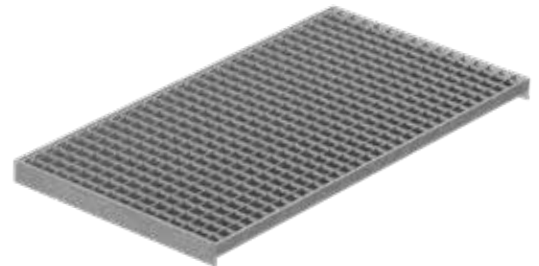
Shelf grating with notched T-profile edging

This is the standard design, which is cost-effective to manufacture and suitable for various shelving units with the same depth but with different cross-bar configurations.



Shelf grating, support bar side with raised edge trim

This grating features a raised edge, only at the ends of the support bars. As a result, the locking mechanism is less pronounced, allowing the grating to be used more flexibly, as it is not restricted to a specific cross-beam width.



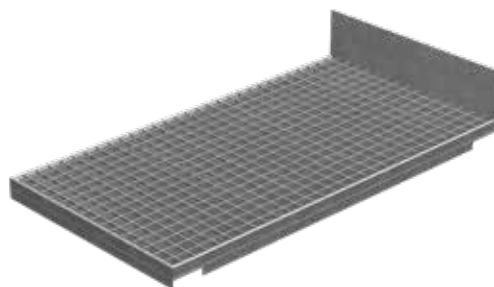
MEISER shelving grids, produced in our own hot-dip galvanising plant, are synonymous with durability and efficient warehousing



A wide range of shelving grating options allows for customised designs

Shelf grating, notched with anti-slip feature

In shelving systems, an anti-slip device is an important safety feature. If this has to be fitted separately, it incurs considerable costs. MEISER offers shelving grids with an integrated anti-slip device as part of its range. The rear is edged with a reinforced flat bar, the height of which can be selected as required.



Shelf grating with additional notches in the support area for double shelves

MEISER has also developed a special grating for what are known as double racks. Additional notches allow for a continuous connection across the double rack. Quick assembly is guaranteed.



Types of Shelf Gratings



Inserted designs

In addition to the standard variants, MEISER has developed this solution. The ends of the support bars are enclosed in a specially designed Z-profile, which is joined to the support bars by resistance welding. This makes the shelving grating equally robust. A key advantage

of the inserted shelving grating is the improved usable height of the shelving bays. As this grating is suspended between the longitudinal beams, it does not reduce the available insertion height.

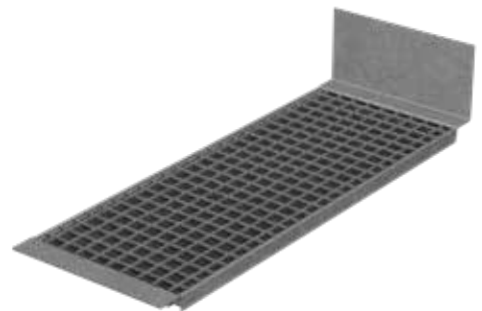
Shelf grating with Z-shaped angle profile edging/ MEISER special angle collar

This is the most common design for the inserted shelf grating. The angle collar consists of a specially developed rolled profile that is inserted into the support bars and additionally welded in place.



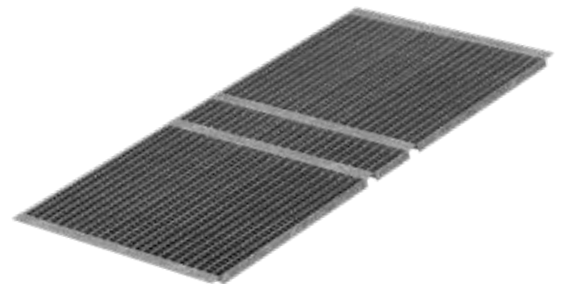
Shelf grating with Z-shaped angle profile edging and anti-slip protection

The inserted shelf grating can also be supplied with a slide-through guard. In this case, the special Z-profile is fitted with an additional leg, which prevents the goods from sliding through.



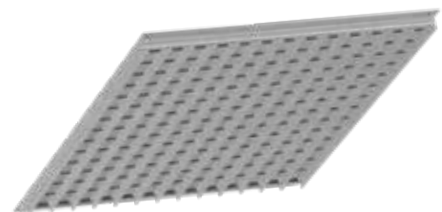
Shelf grating for double-deep racking

This shelving grating element consists of two grating panels joined together to form a single unit by means of notches at the centre. This creates a continuous connection across the double-deep racking unit, whilst maintaining the full usable height of the shelving.



Shelf grating fitted with a heat-retaining plate – Grating version

This grating has been specially developed to meet statutory fire safety requirements. A 0.8 mm thick, Sendzimir-galvanised smooth sheet is fitted to the U-sections or, in the case of mesh gratings, to the Z-sections. The sheet acts as a heat barrier and helps to retain heat in the event of a fire.

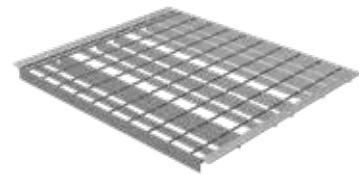


MEISER Modul – Strong. Light. Reliable.

Standard gratings are usually provided with bearing bars of the same size throughout. In storage racks, however, loads are often placed in fixed positions and are rarely moved, meaning that some bearing bars are subjected to significantly less stress than others. By using fixed dimensions and varying the height of the bearing bars according to the expected load, MEISER has developed a particularly lightweight shelf grating. Higher and therefore more load-resistant bearing bars are used in areas where higher loads are expected, while lower bearing bars are sufficient in less heavily loaded areas.



This intelligent design combines high load-bearing capacity with efficient material usage, resulting in a strong, lightweight and reliable shelving solution.



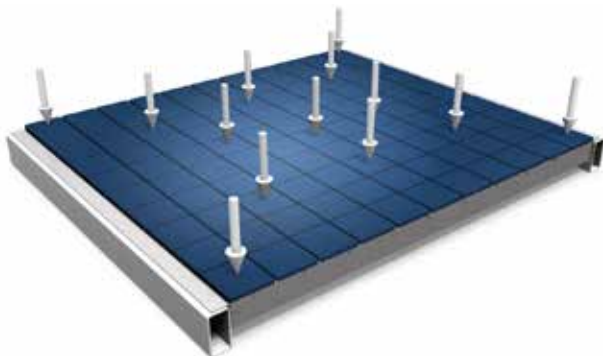
The exact loading conditions and permissible loads are already defined. The modules are ideally suited for Euro pallets or half pallets, positioned either lengthwise or crosswise, with different uniformly distributed loads.



Heightened bearing bars for heavy loaded areas facilitate euro pallet stocking.

Load table and type overview

The horizontal flange of the Z-profile measures 40 mm for all grating types.

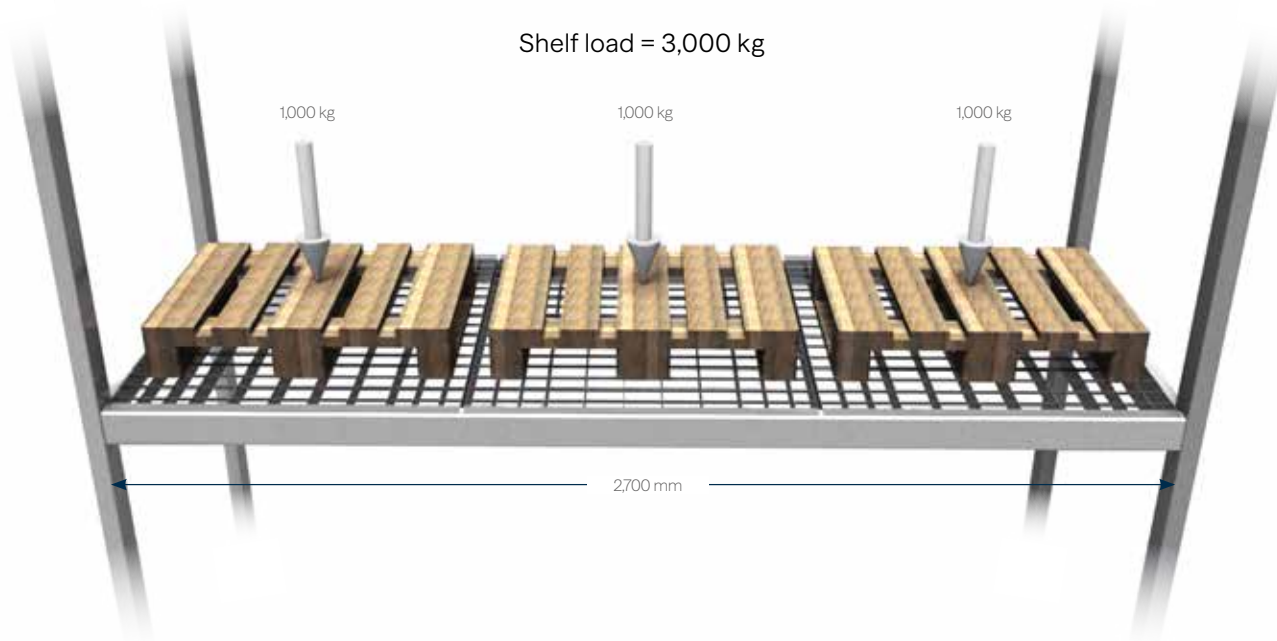


The composition of the MEISER module permits an evenly distributed payload

Load [kg/Rost]	Clear shelf depth [mm]	Width [mm]	Height [mm]	Material thickness [mm]	Mesh size [mm]	
					TS	FS
1.000	1.000 (995)	890	60	1,5	66 (99)	66
800	1.000 (995)	890	55	1,5	66(99)	99

Load specifications are available for EPAL 1 (1,200 × 800 mm) as well as EPAL 6 and EPAL 7 half-pallets (600 × 800 mm).

Load conditions: max. 1,000 kg uniformly distributed live load per grating (11,30kN/m²)		
Euro pallet / EPAL 1	lengthways or crossways	1,000 kg
Half-pallet / EPAL 6/7	lengthways or crossways	1,000 kg
2 Half-pallets / EPAL 6/7	lengthways or crossways	je 500 kg
Load conditions: max. 800 kg evenly distributed payload per grating (9,03kN/m²)		
Euro pallet / EPAL 1	lengthways or crossways	800 kg
Half-pallet / EPAL 6/7	lengthways or crossways	800 kg
2 Half-pallets / EPAL 6/7	lengthways or crossways	je 400 kg



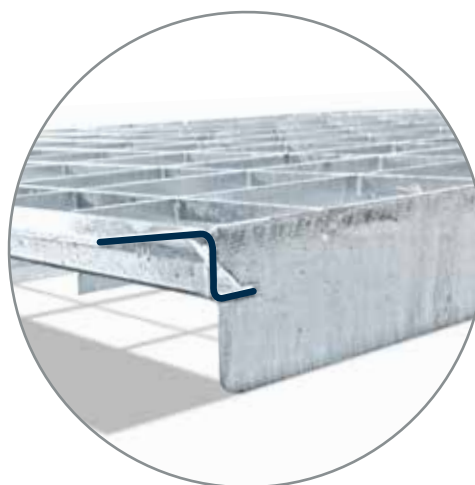
Example of application with 3 MEISER modular gratings, 995 × 890 mm, hot-dip galvanised, each with a maximum load of 1,000 kg

Possibilities to store europallets and half europallets



Advantages of the MEISER Modul

- Provided with a Z-profile to insert the shelf grating (overlying installation height max. 2 mm)
- Easy selection of the appropriate load category (see table)
- Current dimensions for most shelves e. g. 1800 (2 parts), 2700 (3 parts), 3600 (4 parts)
- Fast delivery of standard products (small quantities on call order within 48h, large quantities on request)
- Suitable for sprinkler systems (open cross section > 90%)
- Little deflection under load (deflection < L/200)
→ complies with the requirements of DIN EN 15635
- Low weight
- Cost-efficient
- Easy calculation of the maximum bay load



The Z-profile allows the shelf grating to be fitted

MEISER Ultra-Modul – Efficiency in every bay

Three variants. One idea: Maximum loading with minimal material usage.

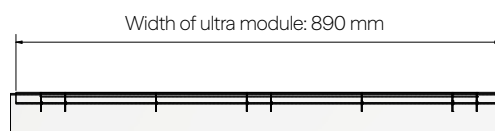
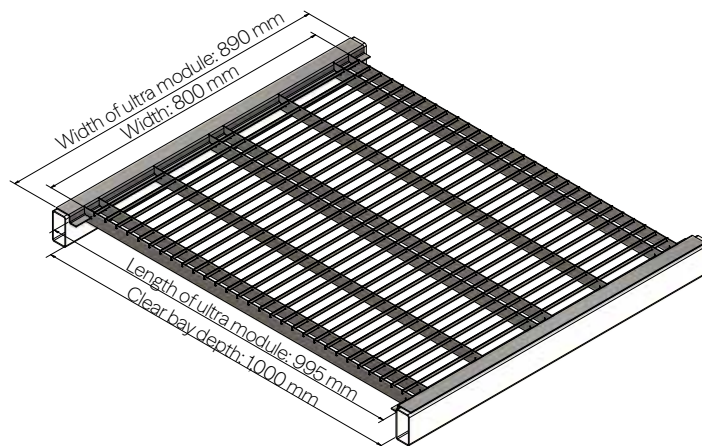
The ultra module is a high-quality shelf grating made of Sendzimir-galvanised slit strip, measuring 995 × 890 mm. It is ideally suited for shelving bays with a depth of 1,100 mm*. The material makes the Ultra-Modul suitable for indoor applications only.

The clear bay depth must be no more than 1,000 mm.

Product variants:

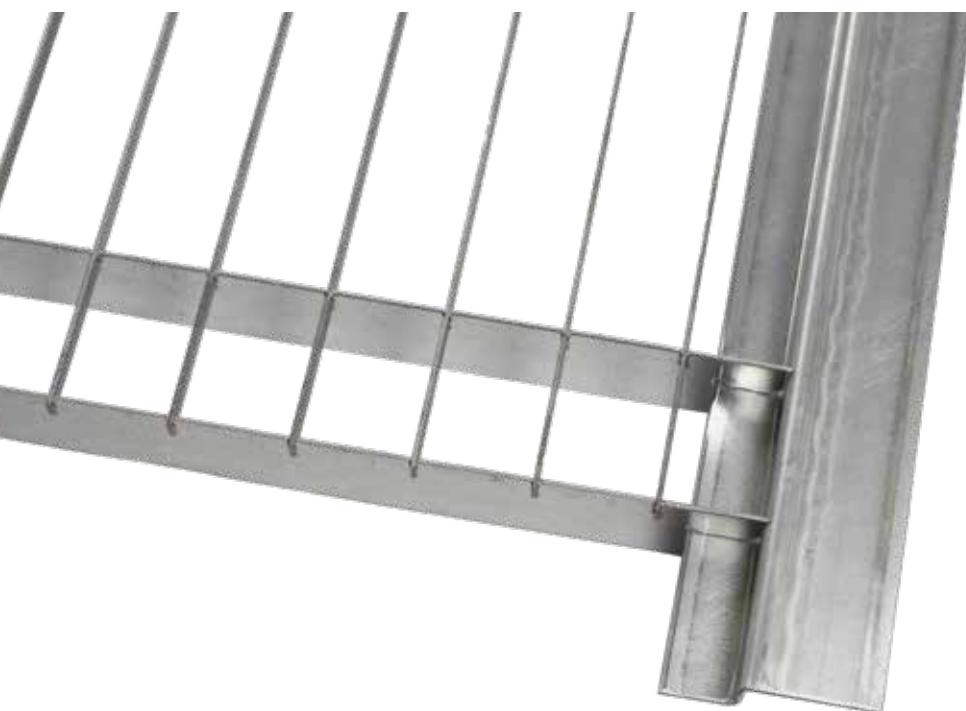
- Ultra-Modul 500 kg 995 × 890 svz
- Ultra-Modul 800 kg 995 × 890 svz
- Ultra-Modul 1,000 kg 995 × 890 svz

Loads are specified for EPAL 11, 200 × 800 mm and EPAL 6 and EPAL 7 half pallets 600 × 800 mm.



Load capacity in detail – tested and recommended

Ultra-Modul	EPAL 1 lengthwise/ crosswise	EPAL 6/7 lengthwise	EPAL 6/7 crosswise
500 kg 995 × 890 svz	500 kg	290 kg	275 kg
800 kg 995 × 890 svz	800 kg	550 kg	460 kg
1,000 kg 995 × 890 svz	1,000 kg	660 kg	550 kg



Detail of a MEISER Ultra module

Storage recommendations for customers:

Benefits at a glance

- Standard dimensions: 995 × 890 mm
- Suitable for shelving bays 1,800 / 2,700 / 3,600 mm wide
- Minimal deflection under load
- Recessed installation using a Z-profile
- Compatible with sprinkler systems
- Fast delivery, even for very small quantities
- Easy selection based on load requirements

Ultra-Modul 500 kg 995 × 890 svz		
Euro pallet / EPAL 1	lengthwise	500 kg
Euro pallet / EPAL 1	crosswise	500 kg
Half-pallet / EPAL 6/7	lengthwise	290 kg
Half-pallet / EPAL 6/7	crosswise	275 kg

Ultra-Modul 800 kg 995 × 890 svz		
Euro pallet / EPAL 1	lengthwise	800 kg
Euro pallet / EPAL 1	crosswise	800 kg
Half-pallet / EPAL 6/7	lengthwise	550 kg
Half-pallet / EPAL 6/7	crosswise	460 kg

Ultra-Modul 1,000 kg 995 × 890 svz		
Euro pallet / EPAL 1	lengthwise	1,000 kg
Euro pallet / EPAL 1	crosswise	1,000 kg
Half-pallet / EPAL 6/7	lengthwise	660 kg
Half-pallet / EPAL 6/7	crosswise	550 kg



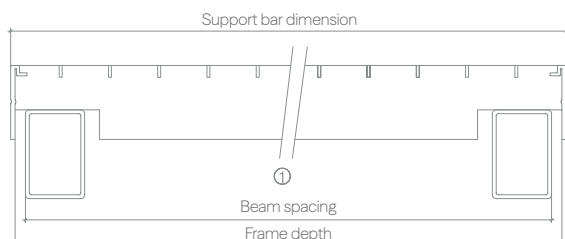
Checklist



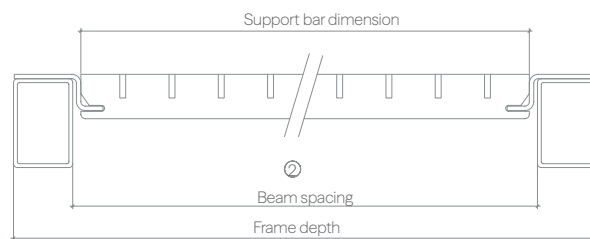
Shelf Gratings

Please use the checklist as a template to help you place your order.

Quotation number / Project number _____



☐ Loose-fitting designs



☐ Inserted designs

Project details

Postcode area _____ Delivery date _____ Editor _____ Date _____

Types of grating

☐ Support grating with anti-slip device

☐ with a target

Mesh size as per the customer's requirements:

☐ Insertable grating with angle flange

☐ optimise according to the target

_____ mm x _____ mm

Load

☐ per subject (Frame depth _____ mm x Beam length _____ mm)

☐ TS specification: _____

_____ kg Live load

☐ TS optimises according to load

☐ per m²

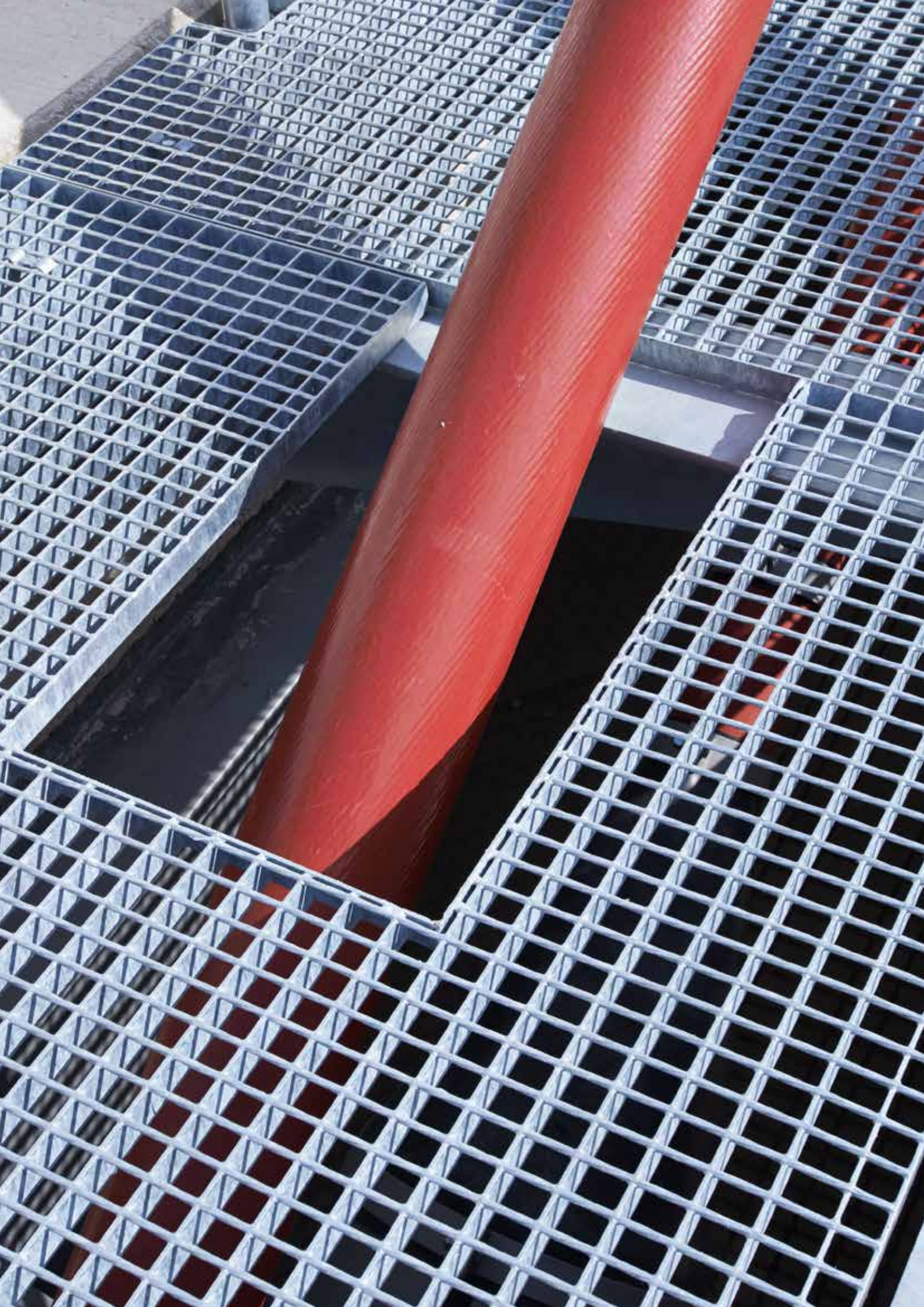
☐ Point load

Dimensions				
Live load	Frame depth	Beam length		Quantity



Press Welded Gratings

- 51 Applications
- 52 MEISER Press Welded Gratings
MEISER Offshore Press Welded Gratings
- 53 MEISER Press Welded Gratings with Smooth Round Bars



Press Welded Gratings

MEISER press welded gratings is traditionally used in many areas of industry. The continuous welding of each individual intersection point of the bearing bar and cross bar produces an extremely stable and hard-wearing structure. The cross bars normally used in the press welded gratings are twisted square wires, which are resistance welded to the bearing bars.

This is carried out under high pressure using automatic resistance welding. The laying plans are optimised so that as much of the gratings as possible are produced with a cross bar length of 1000 mm, fitting pieces are made to measure. This optimisation allows the press welded gratings to be produced with little waste and maximum productivity. You as our customer benefit from this just as much as the environment, as production is also very resource-friendly. If you require larger cross bar dimensions, please do not hesitate to contact us.

MEISER press welded gratings is primarily used in the oil and gas industry, petro-chemical industry, mining industry and in power stations. Where strong shearing forces occur and platform flooring has to be changed frequently, the superiority of the press welded gratings comes into its own. Steel fabricators also appreciate the press welded gratings, whose stability is ideally suited to the subsequent working of materials. MEISER press welded gratings panels are normally banded with flat sections and can be produced normally banded with flat sections and can be produced in V2A and V4A with round or ribbed cross bars. Upon request, for gratings manufactured in mild steel, the cross bars can be supplied in the size 7 mm (twisted) or 8 mm (ribbed).

Standard bearing bar profiles			
Bearing bar 2 mm	Bearing bar 3 mm	Bearing bar 4 mm	Bearing bar 5 mm
25 × 2	25 × 3	25 × 4	25 × 5
30 × 2	30 × 3	30 × 4	30 × 5
35 × 2	35 × 3	35 × 4	35 × 5
40 × 2	40 × 3	40 × 4	40 × 5
45 × 2	45 × 3	45 × 4	45 × 5
50 × 2	50 × 3	50 × 4	50 × 5
–	60 × 3	60 × 4	60 × 5
–	70 × 3	70 × 4	70 × 5
–	80 × 3	80 × 4	80 × 5

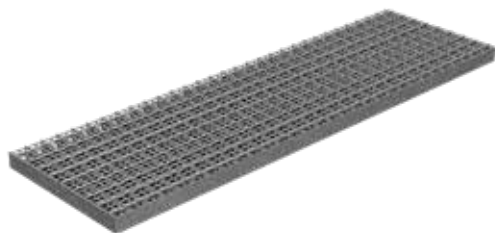
Please discuss the manufacturability of your grates with your contact person in advance.

Common mesh spacing						
Bearing bar	Cross bar					
15,08	–	–	38,1	50,8	76,2	101,6
17,15	–	–	38,1	50,8	76,2	101,6
20,77	–	24,0	38,1	50,8	76,2	101,6*
23,69	–	24,0	38,1	50,8	76,2	101,6*
25,00	–	–	–	–	76,2	101,6
30,15	–	–	38,1	50,8	76,2	101,6
34,30	19,25	24,0	38,1	50,8	76,2	101,6
41,45	–	24,0	38,1	50,8	76,2	101,6
45,23	–	–	38,1	50,8	76,2	101,6
51,45	–	–	38,1	50,8	76,2	101,6
60,30	–	24,0	38,1	50,8	76,2	101,6
68,60	–	24,0	38,1	50,8	76,2	101,6

*available with restrictions

MEISER Press Welded Gratings

In the case of press welded gratings, it is not possible to produce very small mesh widths for technical reasons. If the customer requires the use of press welded gratings but would nevertheless like to ensure that the gratings is 8 mm ball proof, then this is the gratings that could be used. By welding perforated sheets with an aperture of not more than 8 mm between the bearing bars, it is possible to produce a very “close-meshed” gratings for a reasonable cost. This gratings corresponds to the Spanish standard no. 486/1997 (BO 23rd April 1997, no. 97/1997).



Common mesh spacing		
Bearing bar	Cross bar	
34,3	38,1	50,8

Standard bearing bar profiles	
Bearing bar 2 mm	Bearing bar 3 mm
25 × 2	25 × 3
30 × 2	30 × 3
40 × 2	40 × 3

MEISER Offshore Press Welded Gratings

This type of gratings has been specially designed for use in the offshore oil and gas industry. The background to this is the specification is that a test ball with a diameter of 15 mm must not fall through the gratings. In order to guarantee this, an intermediate round bar is welded parallel and centrally between the bearing bars to the underside of the twisted square cross bars using the automatic resistance welding method. This provides the offshore gratings with additional stability, which is very useful in the harsh conditions on offshore oil rigs.



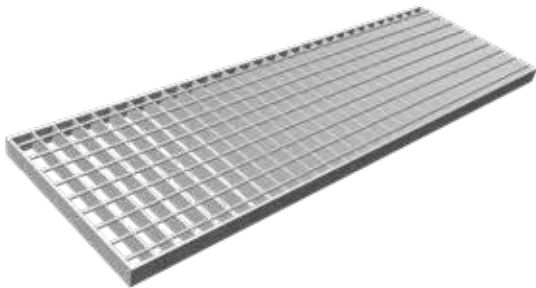
Common mesh spacing	
Bearing bar	Cross bar
34,30	101,6
38,28	101,6

Standard bearing bar profile	
Bearing bar 3 mm	Bearing bar 5 mm
25 × 3	25 × 5
30 × 3	30 × 5
35 × 3	35 × 5
40 × 3	40 × 5
45 × 3	45 × 5
50 × 3	50 × 5
60 × 3	60 × 5

MEISER Press Welded Gratings with Smooth Round Bars

The classical press welded gratings is produced with twisted square bars, which offer a certain degree of slip resistance. If aesthetic aspects are important, it is also possible to use smooth round bars as cross bars.

This version is possible for all common mesh spacing.



Common mesh spacing						
Bearing bar	Cross bar					
15,08	–	–	38,1	50,8	76,2	101,6
17,15	–	–	38,1	50,8	76,2	101,6
20,77	–	24,0	38,1	50,8	76,2	101,6*
23,69	–	24,0	38,1	50,8	76,2	101,6*
25,00	–	–	–	–	76,2	101,6
30,15	–	–	38,1	50,8	76,2	101,6
34,30	19,25	24,0	38,1	50,8	76,2	101,6
41,45	–	24,0	38,1	50,8	76,2	101,6
45,23	–	–	38,1	50,8	76,2	101,6
51,45	–	–	38,1	50,8	76,2	101,6
60,30	–	24,0	38,1	50,8	76,2	101,6
68,60	–	24,0	38,1	50,8	76,2	101,6

*available with restrictions

Standard bearing bar profiles			
Bearing bar 2 mm	Bearing bar 3 mm	Bearing bar 4 mm	Bearing bar 5 mm
25 × 2	25 × 3	25 × 4	25 × 5
30 × 2	30 × 3	30 × 4	30 × 5
35 × 2	35 × 3	35 × 4	35 × 5
40 × 2	40 × 3	40 × 4	40 × 5
45 × 2	45 × 3	45 × 4	45 × 5
–	50 × 3	50 × 4	50 × 5
–	60 × 3	60 × 4	60 × 5
–	70 × 3	70 × 4	70 × 5
–	–	80 × 4	80 × 5

Press Welded Gratings

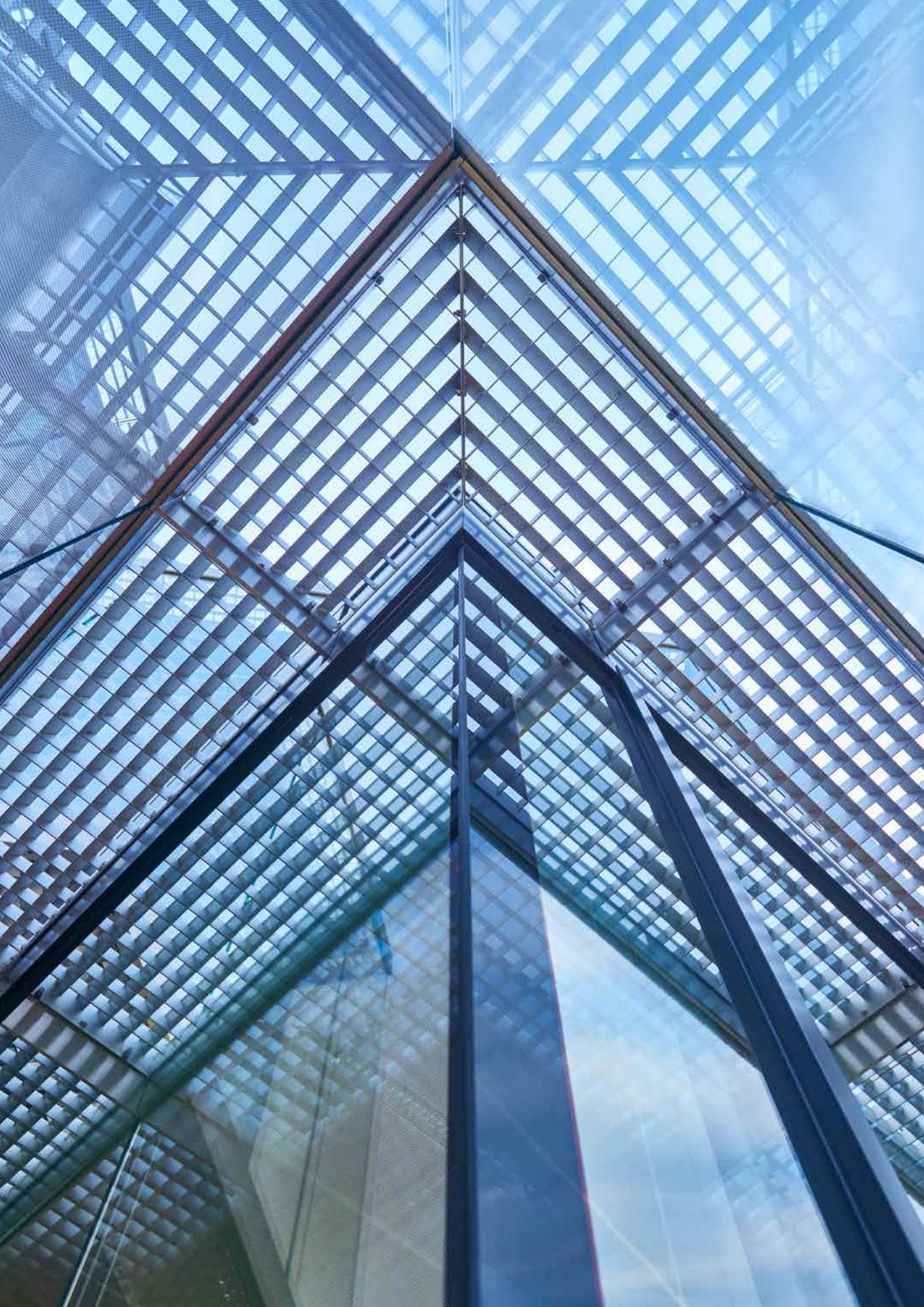
In industrial buildings such as this one at LEUNA-Harze, MEISER welded press-locked gratings are the preferred choice for floor and platform surfacing





Special Gratings

- 57 Applications
- 58 Finned Gratings
Barefoot Gratings
- 59 Comb Gratings



Special Gratings

Over time, MEISER has developed and produced more than 5,000 different types of gratings. Most of these versions were created from very detailed specifications by the customer, architect or planning office.

Often the main focus is on functionality, although it is not unusual for aesthetics to play a certain role, with a tight budget sometimes setting clear limitations. If everything comes together, we speak of special solutions or special gratings, which we find particularly appealing. Imagination and technical know-how are what's needed when it comes to comb gratings, finned gratings or Tolsun.

If load-bearing capacity is less important than visual screening, MEISER louvre gratings are used. The requirements come from our customers, but the development and the technically reliable solution is provided by us.

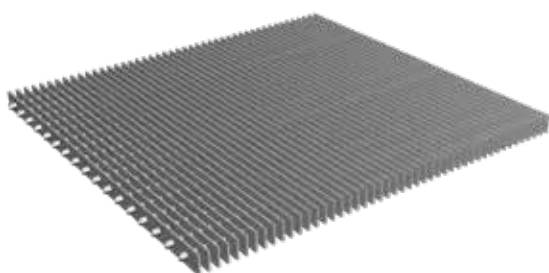


Left: Pressed and louvre grilles at the OneonOne House in Luxembourg
Top: Close-up of the OneonOne House
Bottom: Louvre grilles at the Erfstadt bicycle park

Finned Gratings

MEISER finned gratings stands out considerably compared to a classical gratings. The function of the cross bar is taken over in this version by a pipe that is inserted centrally in the bearing bars. This provides the finned gratings with a very high-quality appearance, although this is less suitable for larger span widths.

In normal cases the finned gratings is not provided with a surround, particularly in order not to disrupt the very clear design. Finned gratings is often used as a high-quality ventilation cover for use indoors. To this purpose they can be manufactured from aluminium and high-grade steel, or of course in the classical version of hot dip galvanised steel. They can be further adapted to individual requirements through the use of special bearing bar profiles and different pipe diameters.

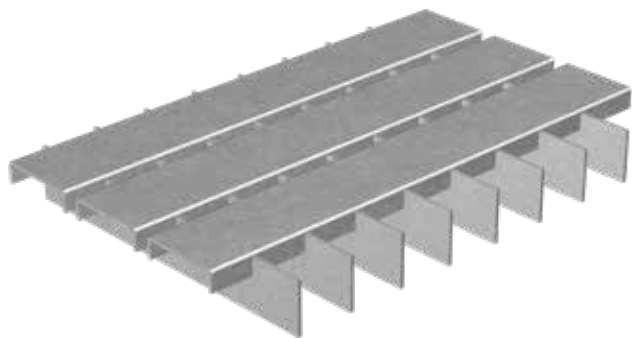


Common mesh spacing				
Bearing bar	Cross bar			
18,50	50	100	150	200

Standard bearing bar profiles	
Bearing bar 3 mm	
25 × 3	
30 × 3	
35 × 3	
40 × 3	
45 × 3	
50 × 3	

Boat jetty gratings

Our product range of special gratings also includes the MEISER barefoot gratings. Instead of commonly used transverse rods, we utilise cross bars with a U-shaped profile that is pressed in at a flat angle. Therefore, the barefoot gratings are ideal for all floor coverings that permit only a limited downward view. The clearance between the treads is approx. 9 mm; they are manufactured from steel or stainless steel.



Common mesh spacing	
Bearing bar	Cross bar
33,3	11,1
66,6	11,1

Standard bearing bar profiles	
Bearing bar 2 mm	Bearing bar 3 mm
30 × 2	30 × 3
35 × 2	35 × 3
40 × 2	40 × 3
45 × 2	45 × 3
50 × 2	50 × 3
-	60 × 3

Comb Gratings

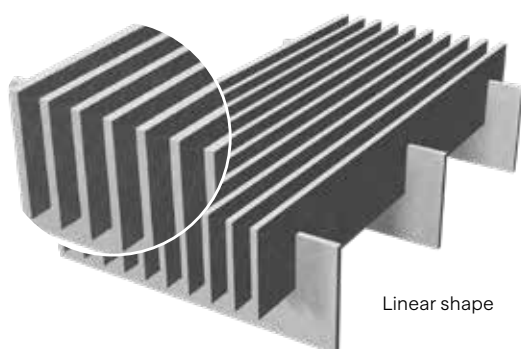
MEISER comb gratings is a press locked gratings with cross bars which protrude above the top surface of the bearing bars. This makes the bearing bars almost invisible, so that the gratings no longer looks like a grille, but more like a comb. The emphasis on the cross bars produces a very elegant and light appearance. The clearance and number of bearing bars can be varied and are adapted to the static requirements. There are also several possible variations for the clearance of the cross bars.

MEISER comb gratings can have a variety of uses, although their main application is usually where there are high aesthetical demands on appearance. This gratings is therefore frequently found as a covering indoors, e.g. for air conditioning systems and heating ducts, but also as a high-quality channel grate and facade cladding in order to emphasise horizontal or vertical lines.

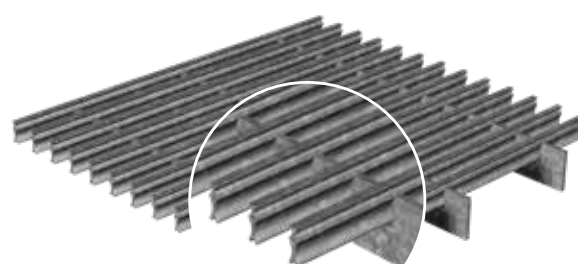
The special arrangement of the bearing and cross bars means that they can also be readily used as sun shade elements. Like the finned gratings, the comb gratings can also be produced with different materials and surfaces; furthermore, special profiles can be used as the cross bar for this special gratings in order to provide particularly attractive effects.

Common mesh spacing				
Bearing bar	Cross bar			
21,0	11,1	16,7	22,2	33,3
22,2	11,1	16,7	22,2	33,3
33,3	11,1	16,7	22,2	33,3
66,6	11,1	16,7	22,2	33,3
99,9	11,1	16,7	22,2	33,3

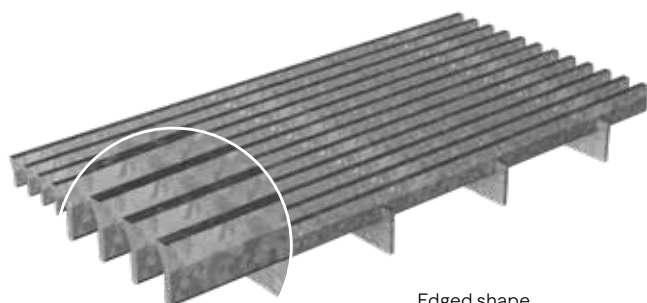
Standard bearing bar profiles	
Bearing bar 2 mm	Bearing bar 3 mm
30 × 2	30 × 3
35 × 2	35 × 3
40 × 2	40 × 3
45 × 2	45 × 3
50 × 2	50 × 3



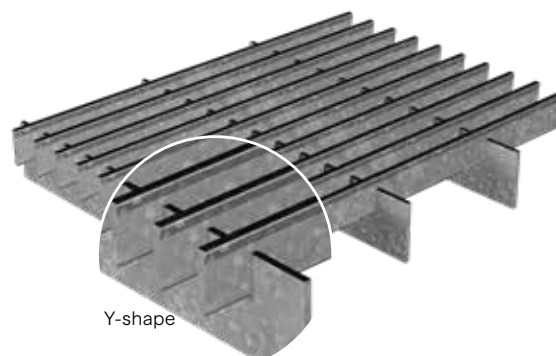
Linear shape



Rounded shape



Edged shape



Y-shape



Stair Treads

62	Applications
64	Press Locked Gratings Treads
	Press Welded Gratings Treads
	Endplates
65	Safety toe cap
66	MEISER XSL Stair Treads
	MEISER XXL Stair Treads
	MEISERfloor

MEISER Stair Treads – in der Anwendung

Sturdy and stable

MEISER stair treads are manufactured from gratings incorporating endplates and non-slip safety nosing to their leading edge.

The tread as an essential safety element of all types of staircases must always function correctly, be it during everyday intensive use on the access path to a ski lift, or where subjected to extreme loads, if, for example, the staircase is used in an uncontrolled manner as an escape route by many people during a fire. MEISER is aware of this responsibility and has designed its stair treads accordingly. The extended, perforated safety nosing fulfils and even exceeds the latest regulations. It provides additional stability, reduces the maximum depth of the opening to 120 mm and fulfils safety class R11. At the request of the customer, the nosing can also be made of a special section, e.g. a non-slip steel flooring plate or a sanded steel angle. The safety endplates have a pronounced bead, which interlocks with the bearing bars.



Perforated gratings steps with standard anti-slip surface SR4

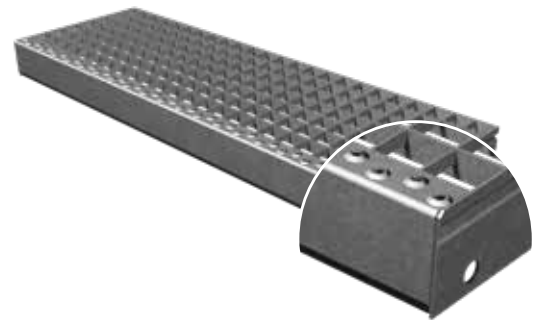


Lighthouse, Glückstadt

This prevents the endplate from tearing off prematurely if it is subjected to significant excess loads and causing the tread to fail. The tread surface of the MEISER stair treads can be designed individually. As a matter of principle, stair treads can be produced as press locked gratings treads and press welded gratings treads. The mesh spacing and height of the bearing bar are determined by the effective width and the customer's requirements. Of course we know what is required in the case of publicly accessible staircases. The stair treads are produced in accordance with the specifications of DIN 24531-1 and provide for a corresponding hole pattern in the endplates. Individual hole patterns are of course possible, as well as notched bearing bars and cross bars, so that slip resistance up to class R13 is possible. It goes without saying that stair treads can also be designed in aluminium and high-grade steel; special designs allow stair tread widths of up to 4,000 mm.

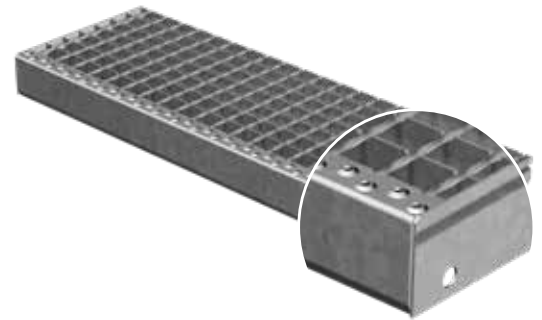
Press Locked Gratings Treads

Press locked gratings treads can be produced from mild steel, high-grade steel and aluminium. They are produced in accordance with the same principle as for press locked gratings. It is possible to provide these stair treads with anti-skid-properties up to R13 by including special notches on the bearing bars and cross bars. Even very large tread widths can be produced by designing the bearing bars in the same way as heavy duty gratings. Thus it is possible for even extreme loads to be reliably absorbed.



Press Welded Gratings Treads

Press welded gratings treads can be produced from mild steel and high-grade steel. Here too, production is based on the process used for the manufacture of press welded gratings. It is possible to provide this tread design with anti-skid-properties up to R12.



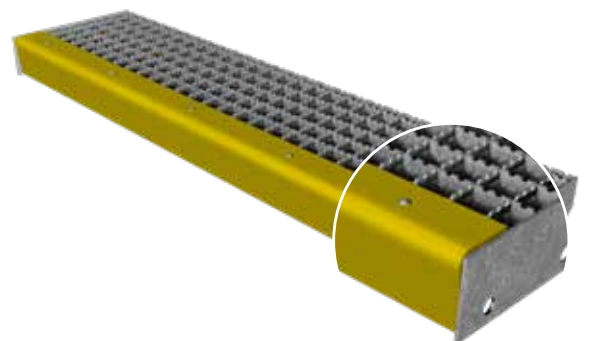
Endplates

For standard stair treads, the safety endplate with bead is generally used. However, upon request a special endplate with a different drill-hole size can be attached. From a bearing bar height of 50 × 3 mm upwards the drill-hole size should be coordinated in all cases in order to avoid installation problems.



Conspicuous safety:

Press-locked gratings treads with a powder-coated nosing and increased slip resistance.



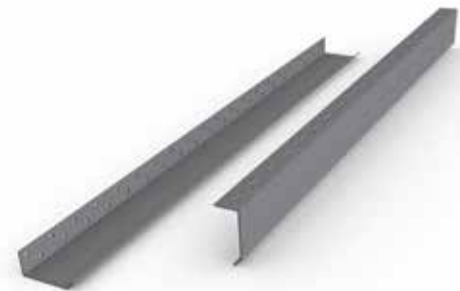


The spiral staircases of the Anna-Sofien-Höfe in Langen

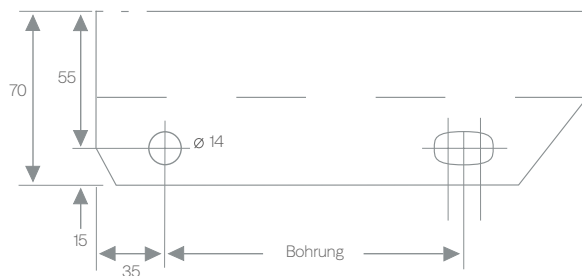
Standard steps with 70 mm safety toe board

For the purposes of slip resistance and in order to increase their load-bearing capacity, stair treads are provided on the front edge with a perforated, specially shaped angle section. This so-called nosing is welded together with the endplate and the bearing bar and contributes to reinforcing the stair tread. It can also be produced from non-slip steel flooring or checker plate. We comply with specific customer wishes as well as with deviating foreign standards.

In the case of publicly accessible staircases, regulations are increasingly specifying a maximum clearance of 120 mm between the treads. We have taken this specification into account with a 70 mm-high nosing and therefore fulfil ÖNORM B 5371, which in the case of pitches of up to 190 mm permits a maximum step-through height of 120 mm.



Safety nosing 70 mm



Height of the clips 70 mm

Stair tread endplates with DIN standard drill-hole up to 40 mm cross bar height	
Length [mm]	Drill-hole
240	120
270	150
305	180



Perforated metal steps in Munich

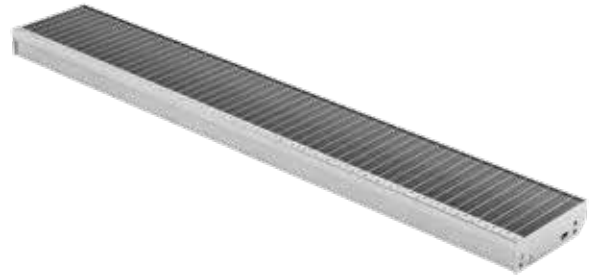
MEISER XSL Stair Treads

The MEISER XSL stair tread is a steel gratings stair tread with a safety nosing, designed for emergency and service staircases. The system combines lightness with stability and can be combined with matching landings and intermediate landings – for a uniform mesh pattern and clean lines. Depending on the installation situation, spans of 500 to 1600 mm are possible.



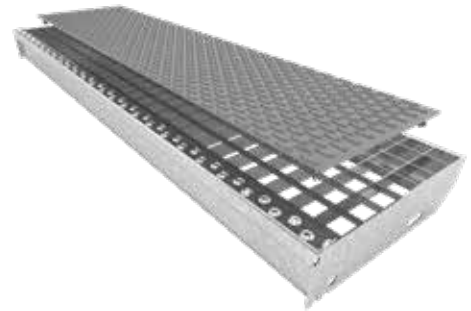
MEISER XXL Stair Treads

The MEISER XXL stair tread is a modular step designed for large spans and is suitable for emergency and external staircases where a self-supporting, load-bearing solution is required. Depending on the version, slip-resistant treads are available; side edging with pre-drilled holes facilitates screw fixing to the staircase structure. The step features a safety nosing and is hot-dip galvanised.



MEISERfloor

MEISERfloor are plastic gratings covers that significantly improve comfort and safety on gratings surfaces. They create a quieter walking surface, make it easier to manoeuvre pushchairs, walking frames or shopping trolleys, and reduce vibrations as well as the risk of wheels getting caught in the mesh. At the same time, they provide greater privacy from above and below and can be used as coloured markings for pathways. MEISERfloor locks securely into the gratings mesh and is particularly suitable for areas with public footfall – such as crossings, stairs and walkways in public spaces.





Stair Treads



Fixing Clips

- 72 Clamp B
 Clamp B10
 Safety Clamp A
- 73 Head bolt fastener
 Safety Clamp C
 Safety Clamp D
 Double Clamp B
- 74 Hilti clamp XMGR
 Fixing clips for industrial gratings
 Welded-in Holed Fixing Plates

EIGER

3970 m

MÖNCH

4099 m

JUNGFRAU

4158 m



MEISER

Fixing clips – in use

Quality starts with the smallest components

MEISER gratings fixing clips are an important part of our service. The gratings can only fulfil its function properly if it is correctly attached, as otherwise accidents can quickly happen.

MEISER has the proper fixing clip for every application, from the simple standard clamp to the customised individual solution. MEISER produces many clamps itself, but also works together with well-known fastening specialists.

Together with the HILTI company, the XMGR clamp has been developed, which is insensitive to vibrations and offers enormous installation advantages. On the following pages we show you the most common safety systems, which in most cases represent a good and low-cost solution.

Clamp B

Consisting of a saddle top clip, clamp lower part, M8×60 hexagon screws and M8 square nut.



galvanised		V2A
Designation	Mesh width [mm]	Mesh width [mm]
M0531	33 × 33	33 × 33
M0531	34 × 38	34 × 38

Clamp B 10

Consisting of a stirrup top clip, hexagon socket screw, clip lower part and nut.



galvanised		V2A
Designation	Mesh width [mm]	Mesh width [mm]
M2331	33 × 11	33 × 11
M2331	33 × 21	33 × 21

Safety clamp A

Consisting of safety upper part, clamp lower part, hexagon screw and square nut.



galvanized		V2A
Designation	Mesh width [mm]	Mesh width [mm]
M0731	34 × 38	34 × 38



Assembly bottom part 31 uni mesh division > 34,3 mm



Assembly bottom part 31 uni mesh division ≤ 34,3 mm

Head bolt fastener

Consisting of head bolts and retaining flange; for highly corrosive environments (e.g. offshore), also available as X-BT; pre-mounted version X-GR RU.



galvanized		V2A
Designation	Mesh width [mm]	Mesh width [mm]
X-FCM + X-M8	22 × 22 – 44 × 44	22 × 22 – 44 × 44
X-FCM + X-BT	22 × 22 – 44 × 44	22 × 22 – 44 × 44

Safety clamp D

Consisting of safety upper part, clamp lower part, hexagon screw and square nut.



galvanized		V2A
Designation	Mesh width [mm]	Mesh width [mm]
M0833	34 × 38	34 × 38

Double clamp B

Consisting of 2 saddle top clips, clamp lower part, 2 hexagon screws and 2 square nuts.



galvanized		V2A
Designation	Mesh width [mm]	Mesh width [mm]
M0540	33 × 33	33 × 33
M2240	33 × 22	33 × 22
M2340	33 × 11	33 × 11



The illustrations are not assembly instructions.

Hilti clamp XMGR

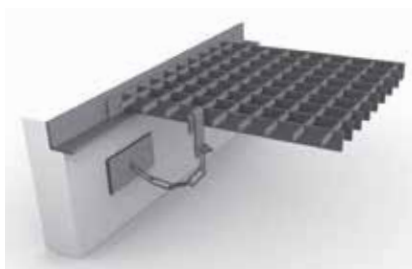
Consisting of saddle top clip and lower part connected to one another; high resistance to vibrations, easy portability by 1 person and thereby significantly shorter installation times.



galvanized	V2A
Designation	Mesh width [mm]
XMGR	33 × 33 / 34 × 38 / 34 × 24

maximum gratings height 40 mm

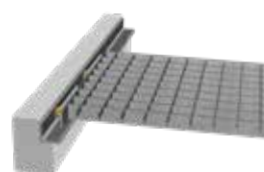
Fixing clips for industrial gratings



Safety chain



Socket wrench clasp



Hinge

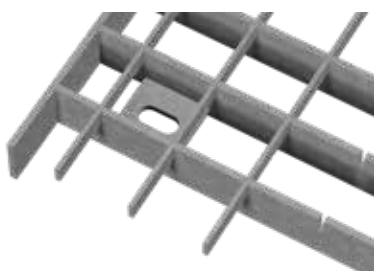
Panel Attachments

(supplied loose)

galvanized
Designation
Safety chain
Hinge
Socket wrench clasp
Welded-in perforated plates

Welded-in Holed Fixing Plates

consisting of welded-in holed plate hole size is according to customer's specifications; screws are provided by the customer. The design and position of the welded in plate depend on the load to which the gratings is subjected and the fastening possibilities available on site.



Anchor bolt fixings hold the pressed gratings in place at the BMW car park in Paris



Fixing Clips



Statics & Loads

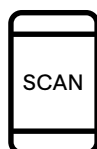


Statics & Loads

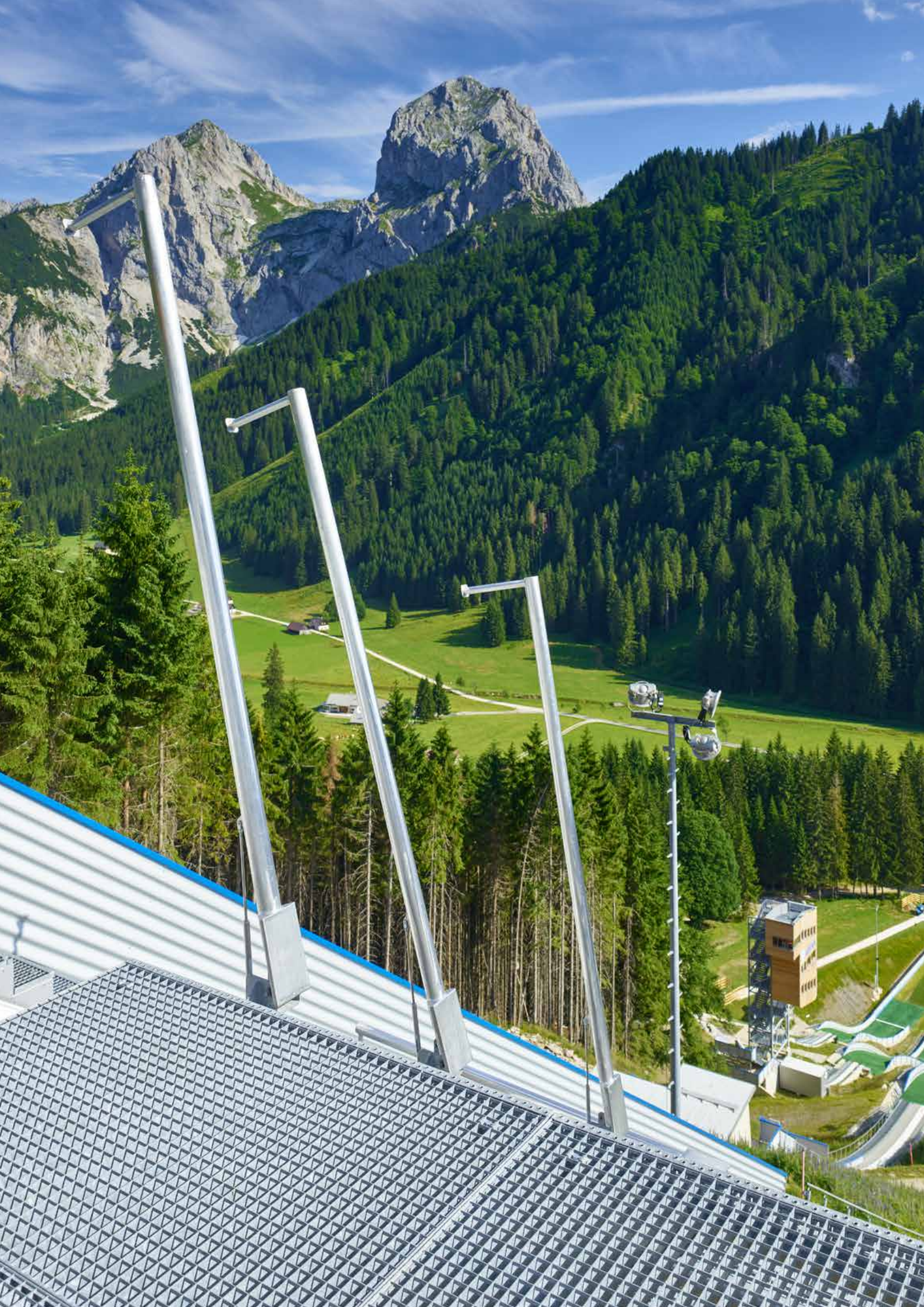
Gratings have to withstand a variety of loads, especially when they are used as floor coverings.

Depending on the customer, requirements range from foot-traffic loads to areas driven on by trucks. This is where the statics of the grates come into play. Their load-bearing capacity and suitability for use are decisive characteristics: the first indicates the weight that the gratings are able to bear. With regard to their suitability for use, on the other hand, the deflection of the gratings under a certain load must be considered. Depending on the customer's requirements, however, there are also some additional aspects that have to be taken into account, e.g. the size of the open ventilation cross-section, the slip resistance or mounting type. No matter what properties a gratings combines, the aim is always to determine the most material-efficient solution for you. MEISER makes no distinctions between large and small inquiries in this regard. Your satisfaction is our top priority. Thanks to our experience, we can respond promptly to a wide variety of customer requirements. Every one of our customers is given competent advice and supplied quickly.

Tiger and Turtle – a large-scale, walk-through sculpture in the style of a rollercoaster



Further information is
available at www.meiser.de



Safety

82	Applications
84	Anti-Skid-Properties
85	Pointed Tooth Serration SR1
	Saw Tooth Slide Serration SR2
	Super Slide Serration SR3
	Standard Slide Serration SR4

Safety comes first



Perforated metal steps with anti-slip surfaces at the Gobelwarte Grein



Stability combined with an unobstructed view – MEISER steps, installed in the stair tower at Mannheim University of Applied Sciences



Anti-slip protection provides added safety for both profiled sheet metal gratings and mesh gratings

Health and safety at work and accident prevention are essential for every business. The safety and protection of our staff are also our top priority. Together with our customers, we aim to make our working and living environments safer. That is why we at MEISER have developed a whole range of products designed to help prevent accidents. Our wide variety of gratings designs also contribute to this. Whether indoors or in extreme terrain, our gratings ensures a firm footing. At the same time, the adjustable mesh spacing ensures safety from above, whilst still allowing light to pass through. The range extends from anti-slip industrial flooring to walkways and fire escape staircases. Constantly being further developed, they are now also used as shelving gratings. Let your MEISER contact advise you and work with us to analyse how we can make your workplace safer.

Anti-Skid-Properties

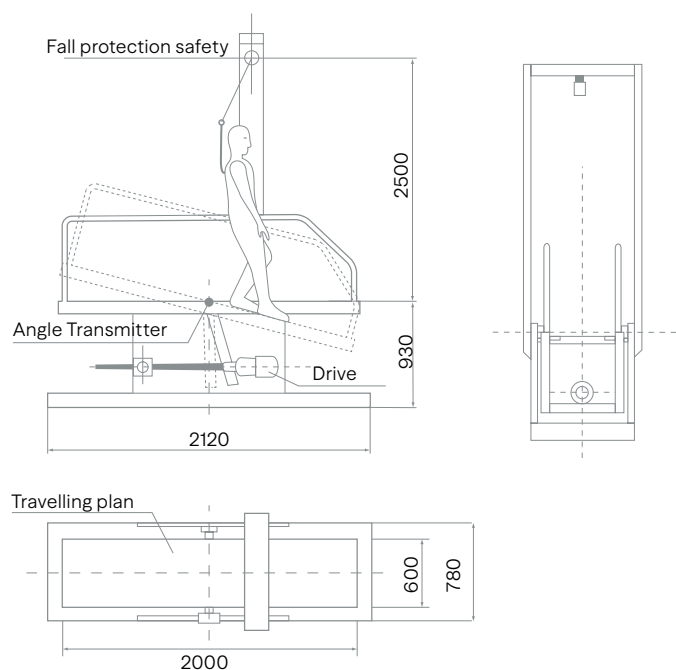
In recent years the issue of the slip resistance of walkable surfaces has gained in importance. Wherever work is carried out with glide-enhancing substances, i.e. where oils, greases and emulsions are used, there is an increased risk of slipping.

Outdoors, the weather plays a crucial role. Rain and snow quickly transform many areas into slides. However, MEISER offers a solution to this problem and guarantees a safe grip with MEISER anti-skid gratings.

These greatly reduce the risk of slipping. Depending on the regulations or personal safety needs, MEISER can supply gratings with a classification from R9 to R13. The required R number for different fields of application is specified by the „Professional Association Rule for Safety and Health at Work (BGR181)“.

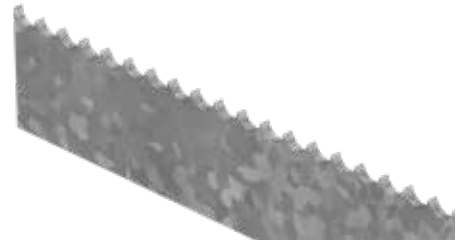
An analysis of this slip resistance capability is carried out by an independent test institution with clearly defined test equipment (see illustration).

Classification	
Degree	R-Class
from 3° to 10° R9	R9
from 10° to 19° R10	R10
from 19° to 27° R11	R11
from 27° to 35° R12	R12
more than 35° R13	R13



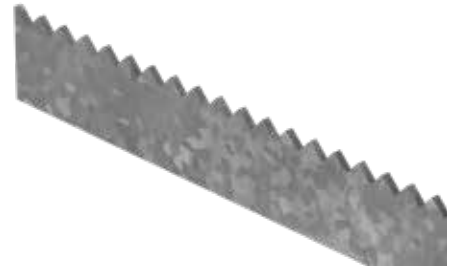
Pointed Tooth Serration SR1

The pointed tooth serration is used exclusively for press welded gratings. In this form, the bearing bar is provided with particularly sharp notches by arranging crescent-shaped recesses continuously next to one another. This significantly increases the slip-resistant properties of this type of gratings. With this profile it is possible to achieve slip resistance class R12 with certain mesh widths.



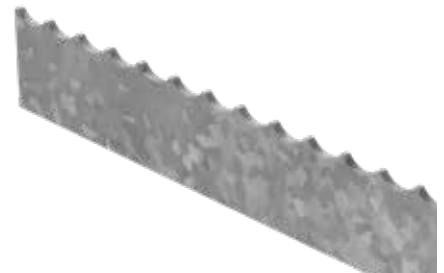
Saw Tooth Slide Serration SR2

Saw tooth slide serration is only possible in the case of press locked gratings and is characterised by the saw tooth-shaped notching of the bearing bars and/ or cross bars. With this form of slide protection, the maximum slip resistance class that can be reached is R12. This slide protection profile forms a basis for other special forms in accordance with foreign standards (e.g. Danish Railways). Please contact us about this if required.



Super Slide Serration SR3

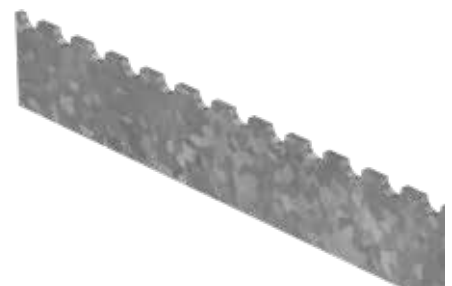
Super slide serration is only possible in the case of press locked gratings and is characterised by extremely high levels of anti-skid-properties. Here, the bearing bars and cross bars are punched to be particularly sharp-edged. With this form, the highest resistance class, i.e. R13, can be reached. This type of serration is used particularly in the food industry and in areas with high levels of contamination or regular contact with liquids.

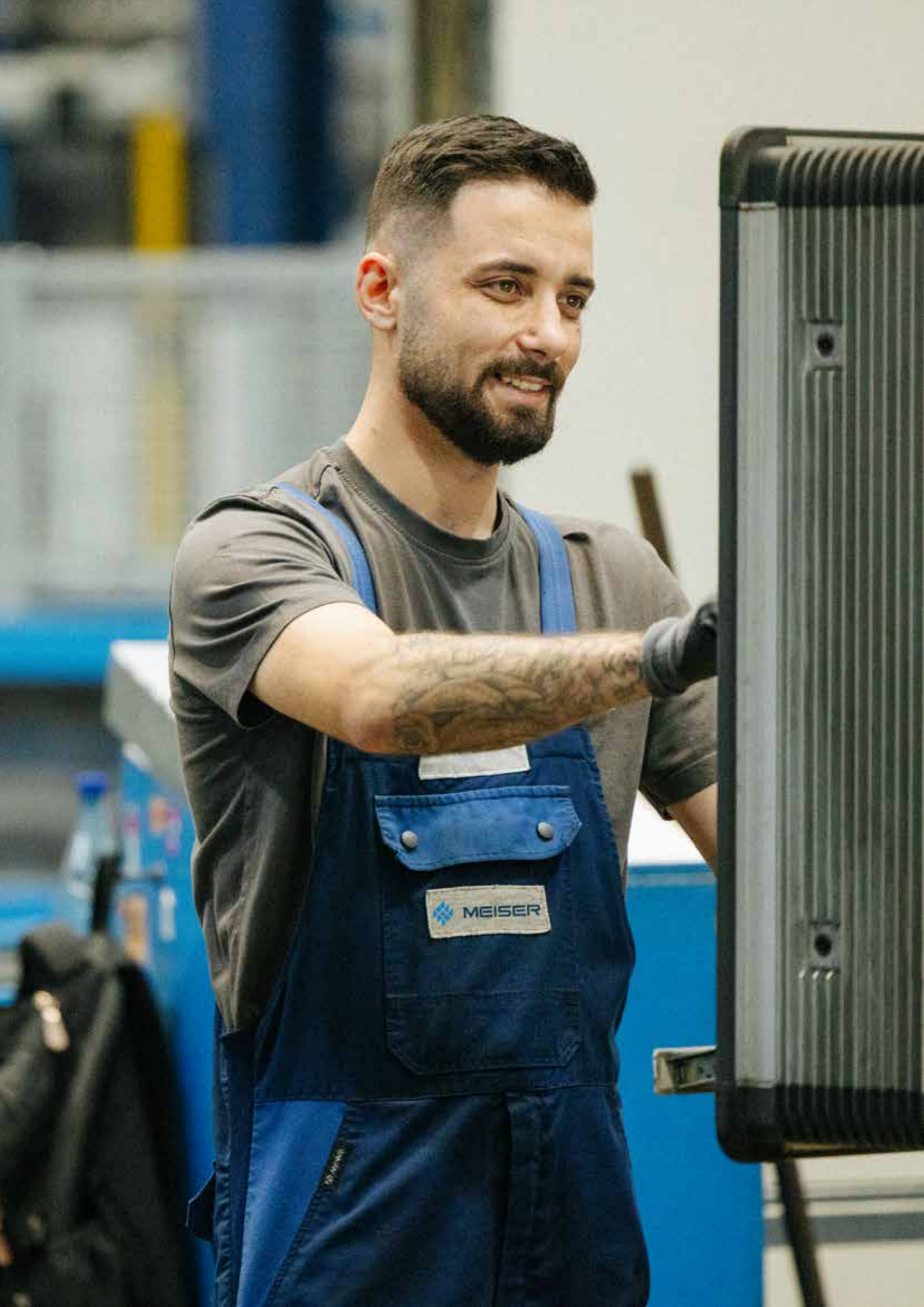


Safety

Standard Slide Serration SR4

The standard slide serration is characterised by the semi-circular notching on the bearing bars and/or cross bars, with residual webs being left between the notches. This means that in the case of press locked gratings, a slip resistance class of up to R12 (notching of the bearing bar and cross bar) and in the case of press welded gratings up to R11 (notching only possible on the bearing bar) can be achieved. This version is used as the standard gratings in outdoor areas which are regularly frequented and accessed.





Service Standards Certificates

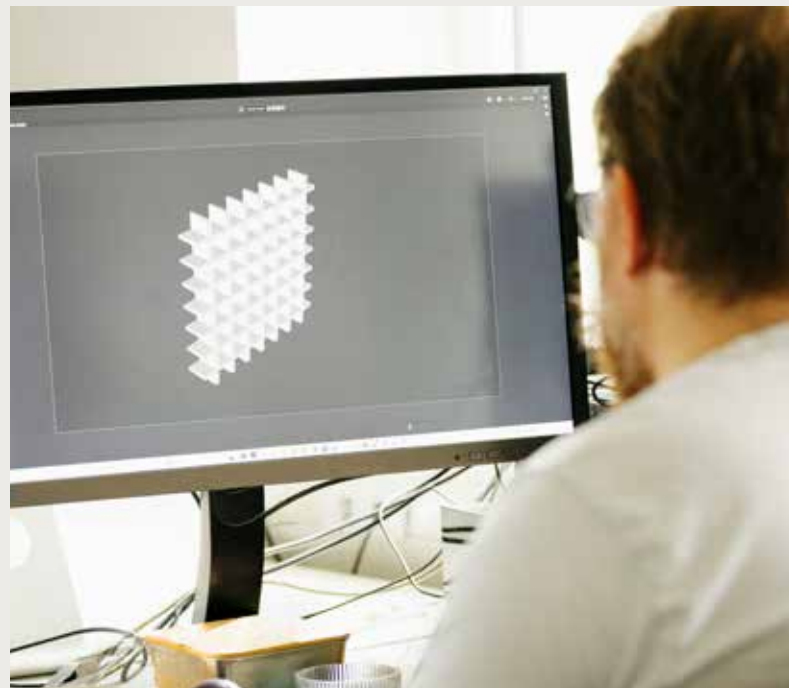
88	Service
90	Service and Complaints Management
91	Standards and certificates
92	Quality and the Environment
94	Accounting information
98	Galvanisation plants
101	Steel grades
102	Surface refinement

Service

– right on the mark, every time

MEISER understands service as providing customers with the greatest possible added value with the reliable and timely delivery of high-quality products.

This begins with our offering you an extensive planning service. As professionals in the field of steel processing, we are able to plan an application faster and better than a planner who only deals with this topic from time to time or even for the first time. A further special interest of ours is solving unusual tasks. We do not want to reduce your ideas to the possibilities at our disposal, but rather expand our possibilities through the development of new solutions. That is why new tasks are not only a technical challenge to us, but also the opportunity to improve and develop as a company.



Our products are designed and manufactured in-house



MEISER operates in over 50 countries

Service

Design and manufacture – all under one roof

Our offer to you includes the planning, manufacture and, upon request, assembly and preparation of installation plans — all under one roof. The continuous development of new products and the refinement of existing ones for a wide range of applications enable us to satisfy your requirements. Service is our top priority. For you this means:

- Advice on design, standards and regulations
- Preparation of assembly and manufacturing drawings
- Development of customer-specific special solutions

For us, quality assurance is a matter of course. The designs comply — where applicable — with the latest DIN / EN standards, the requirements of German accident prevention regulations and the specifications of the Professional Associations.

Service and Complaints Management

The key to ensuring our customers' continued satisfaction is providing excellent after-sales support.



Quality must be evident in every detail – exceptions can be subject to a comprehensive complaints management process

The prerequisite for the long-term satisfaction of our customers is good support - also after their purchase. A well-functioning service and complaints management system is an important part of our corporate culture and an essential part of successful and long-term cooperation.

We see it as our task to scrutinise our processes at regular intervals, initiate preventive measures and optimise our processes in order to be able to offer you an optimum service.

Should something go wrong, our employees ensure that complaints are handled promptly and that customers are kept regularly informed about the progress of the process.

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Email kundenservice@meiser.de

Oelsnitz

Tel. +49 37421 50-2217

Email oe.ks@meiser.de

You'll find your contact person on our website at www.meiser.de

From the coil to the finished product, nothing can be left to chance





Do you have any questions? Please get in touch!

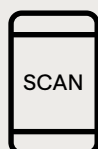
Standards and certificates

Service



Applicable standards

RAL GZ 638	Grating
DIN EN ISO 14122-3	Steel staircases
DIN 24531 -2,3	Profile grating stair treads and GRP grating stair treads
DIN 24537	Grating as floor coverings - Part 1: Grating made of metallic materials
DIN EN ISO 1461	Zinc coatings applied to steel using hot dip galvanising (piece galvanising) - requirements and testing
BGI 588	Leaflet for metal grating
BGR 181	Anti-skid properties for floors in workrooms and work areas where there is a danger of slipping
BS 4592	Industrial floors and stair treads - General requirements and fitting recommendations



Further information is available at
www.meiser.de

Service and Quality



With a focus on planning services and a personal approach, we support our clients



Quality is never left to chance

From initial planning to assembly drawings and the delivery of a product that perfectly meets your requirements: We offer a comprehensive service and quality made in Germany – all from a single source. By continuously developing new products and refining existing solutions for a wide range of applications, we meet your requirements precisely – with a clear focus on service and practicality. We advise you on design, standards and regulations, prepare assembly and manufacturing drawings as well as develop customised special solutions when standard options are not sufficient. Quality assurance is an integral part of our approach. Where required, our designs comply with comply – where required – with the latest DIN/EN standards, take into account the provisions of the UVV (Accident Prevention Regulations) and meet the requirements of the employers' liability insurance associations. The result is a solution that is technically sound, safe to use and efficient to install – reliably planned, clearly documented and developed with practical application in mind. One solution – MEISER.



Helping to shape the future means taking responsibility for it

Environment and Sustainability

At MEISER, sustainability and social responsibility go hand in hand. As an international family-owned business, we consider sustainability across the entire value chain: from raw materials through production to delivery.

We continuously review our processes, reduce material consumption and, where appropriate, rely on resource-efficient technologies and renewable energy. We invest in efficient systems, use data for process control and think in terms of cycles – for example, when it comes to heat, water and materials. This makes responsibility tangible and transparent in our day-to-day operations.

At the same time, we create working envi-

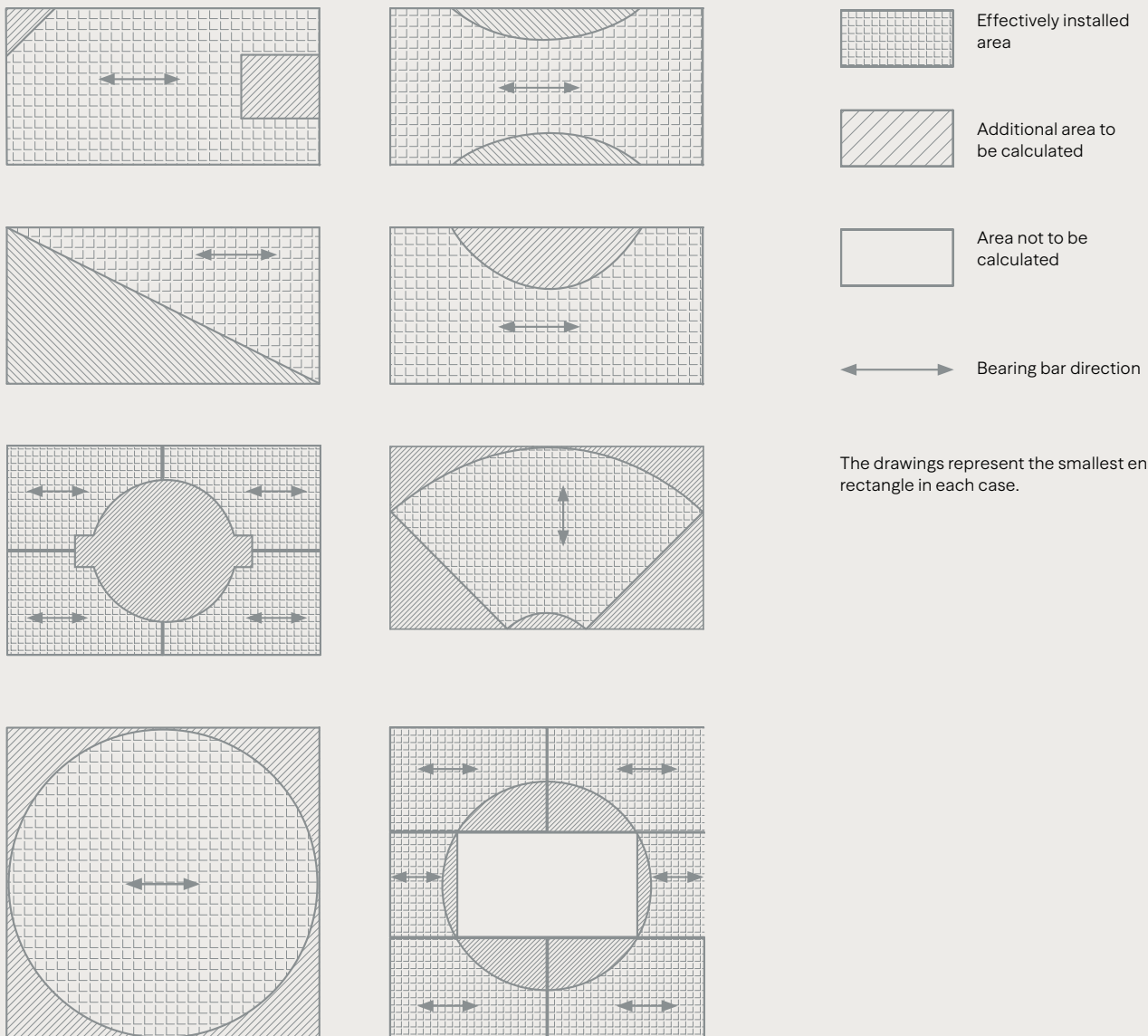
ronments that combine safety, productivity and well-being. Our development team takes a holistic approach to solutions: It designs products, plans processes through to completion and builds the necessary structures itself. This is how we ensure consistent quality and long-lasting results for applications that function reliably over the long term. For us, sustainability does not end at the factory gate. That is why we have been supporting culture, sport and education in the region and at our sites for many years. We support projects that bring people together, create opportunities and make a difference – in partnership, transparently and with a forward-looking approach.

Accounting Information for Grating

Please note the following information about our calculations:

Our calculations are performed on the basis of the surface to be completed according to the smallest rectangle or square surrounding the grating in m^2 (as is used in Worksheet H 10 of the Arbeitsgemeinschaft Industriebau e.V. (Working Committee for Industrial Construction)). Cut-outs and sections are calculated, including edge surround in running metres. Cut-outs and sections in the case of grating with openings and adaptations are included in the calculation as well as the area of the grating to be manufactured. Micro-incisions are calcu-

lated, including the edge surround up to an individual length of 0.5 m at a unit price per metre. Each additional piece is subject to a surcharge. Additional services such as the attachment of fastenings or reinforcements are calculated with a unit price. As a basis for our invoices, we use the order confirmation, an installation plan and/or the measurements carried out on site.



Quality and Test Specification

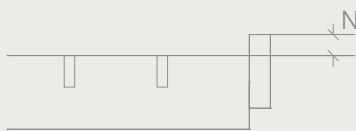
Quality and Test Specification are described in the quality assurance document RALGZ 638.

These manufacturing and delivery tolerances must be observed for the production of all grating in accordance with the following specification of sizes:

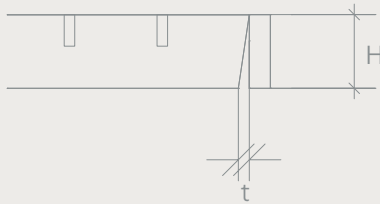
- for bearing bars $\leq 60 \text{ mm} \times 5 \text{ mm}$
- mesh spacing max. 68 mm and min. 11 mm
- grating size of a max. 2.0 m^2 with a permissible lateral
- dimension of a max. 2,000 mm.

Permitted tolerances for press locked gratings:

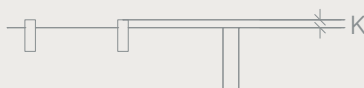
The tolerances occurring under a load (deformations) are not included.



Top protruding edge N max. = 1.0 mm



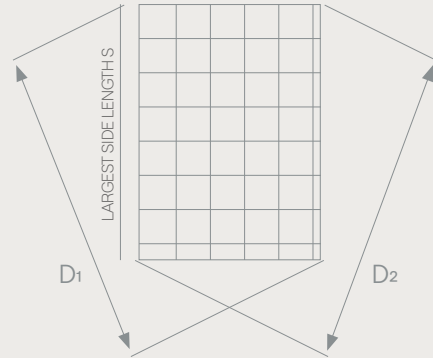
Oblique section of the bearing bar and cross bar t max. = $\pm 0.1 \times H$, but max. 3 mm



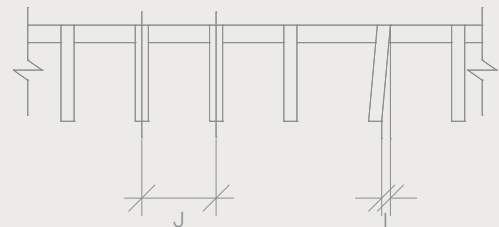
Higher cross bar K max. = 1.5 mm



Bottom protruding edge M max. = 1.0 mm



Diagonal distortion: $D1 - D2 \leq 0.01 \times s$



Inclination of the bearing and edge bars J max. = $0.1 \times J$, but max. 3 mm



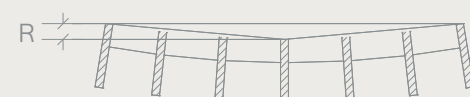
Deviations for convex O max. = $1/200$ of the length for dimensions $> 450 \text{ mm}$; max. 8 mm for dimensions smaller than 450 mm; max. 3 mm



Deviations for concave P max. = $1/200$ of the length for dimensions $> 600 \text{ mm}$; max. 8 mm for dimensions smaller than 600 mm; max. 3 mm



Deviations for convex Q max. = $1/200$ of the width for dimensions $> 450 \text{ mm}$; max. 8 mm for dimensions smaller than 450 mm; max. 3 mm



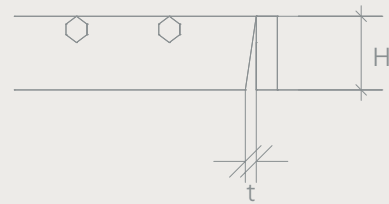
Deviations for concave R max. = $1/200$ of the width for dimensions $> 600 \text{ mm}$; max. 8 mm for dimensions smaller than 600 mm; max. 3 mm

Permitted tolerances for press welded grating:

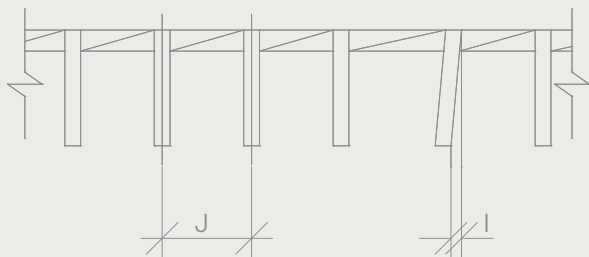
The tolerances occurring under a load (deformations) are not included.



Projecting cross and edge bar L max. = 0.5 mm



Inclination of the bearing and/or cross bar t max. = $\pm 0.1 \times H$, but max. 3 mm



Inclination of the bearing and edge bars J max. = $0.1 \times I$, but max. 3 mm



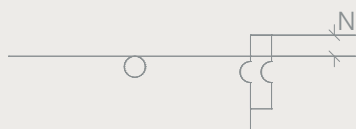
Deviations for convex O max. = $1/150$ of the length for dimensions > 450 mm; max. 8 mm for dimensions smaller than 450 mm; max. 3 mm



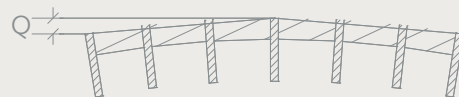
Higher cross bar K max. = 1.5 mm



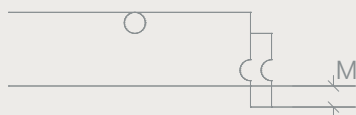
Deviations for concave P max. = $1/200$ of the length for dimensions > 600 mm; max. 8 mm for dimensions smaller than 600 mm; max. 3 mm



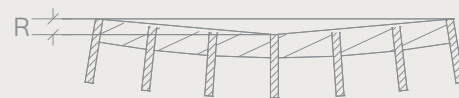
Top protruding edge N max. = 1.0 mm



Deviations for convex Q max. = $1/150$ of the width for dimensions > 600 mm; max. 8 mm for dimensions smaller than 450 mm; max. 3 mm



Bottom protruding edge M max. = 1.0 mm



Deviations for concave R max. = $1/200$ of the width for dimensions > 600 mm; max. 8 mm for dimensions smaller than 600 mm; max. 3 mm

MEISER Galvanising Plants: modern and low-emission

Our galvanising plants in Limbach, St. Ingbert, Saarlouis and Oelsnitz are among the most modern hot-dip galvanising facilities in Europe. The state-of-the-art design of the facilities enables MEISER to operate with reduced emissions.

Each product to be galvanised is first automatically picked up by the conveyor and guided through the plant. In the preceding production stages, oils and greases are used to reduce wear and tear on the machinery.

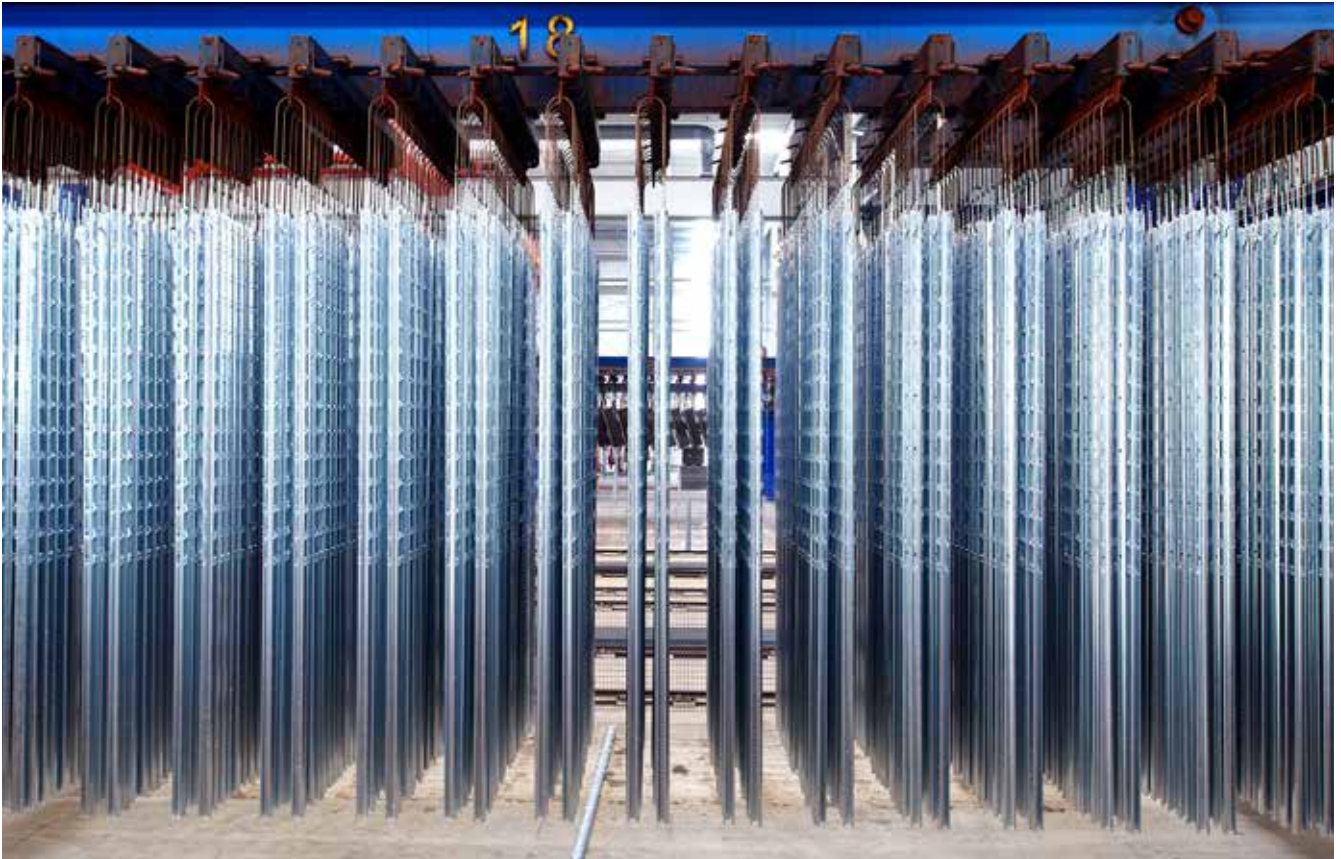
However, prior to galvanising, the surface must be completely free of any contamination. Rust particles and metal dust must also be completely removed. To this end, the grates pass through a series of rinsing and acid baths. The chemical pre-treatment, an environmentally sensitive process, takes place in a fully enclosed area. This ensures that the environment is not impacted, as all resulting emissions are fed into a complex filter system.

The fully automated system now transports the workpieces to the zinc baths. In the molten zinc, which is heated to 450 degrees, the products are coated with the liquid metal. An exhaust air and dust filtration system is used here to protect both people and the environment. In this way, we create a safe and modern working environment for our employees.

With the long-lasting corrosion protection provided by hot-dip galvanising, our products have completed the final stage of the manufacturing process. Now, following a highly efficient finishing process, they are on their way to you, our customers.



Modern galvanising plants for efficiency, safety and environmental protection



Ideal and state-of-the-art facilities for galvanising vineyard posts, gratings, support systems and more

Category	Details
Galvanising capacity	over 250,000 tonnes per year
Plants (main sites)	3 state-of-the-art plants (Limbach, Oelsnitz, Saarlouis)
Special feature in St. Ingbert	Continuous strip galvanising line – one of only approx. 5 worldwide in this form
Special feature in Saarlouis	Additional powder coating
Galvanising plant area (Saarland)	Limbach: approx. 8,500 m ² Saarlouis: approx. 5,000 m ²
Kettle dimensions / zinc baths	Oelsnitz approx. 8 × 1.6 × 3,5 Saarlouis approx. 7.2 × 1.6 × 3 Limbach 2x approx. 6.5 x1.4 x2.5 and approx. 7.2 × 1.6 × 3
Zinc bath temperature	approx. 450°C



Responsibility that makes a difference: for the environment, safe working conditions and efficient processes



Working with steel also means using a versatile material in different grades for a variety of applications



State-of-the-art technology ensures products of reliable quality

Steel grades

Material No.	Tensile Strength	Yield Point	Elongation at break*
	Rm N/mm ² mind.	ReL N/mm ² mind.	
1.0038	360 – 510	≥ 235	26 %

Material No.	Tensile Strength	Yield Point	Elongation at break*
	Rm N/mm ² mind.	ReL N/mm ² mind.	
1.0044	430 – 580	≥ 275	23 %

Material No.	Tensile Strength	Yield Point	Elongation at break*
	Rm N/mm ² mind.	ReL N/mm ² mind.	
1.0045	510 – 680	≥ 355	22 %

* The values apply to product thicknesses ranging from 3 mm to 40 mm and longitudinal samples with $L_0 = 5,65 \cdot \sqrt{S_0}$

Custom steel grades: the right steel for your project

MEISER has its own slitting lines, wire drawing machines and cold rolling mills.

This enables us to design steel products precisely in line with our customers' requirements and needs. Oversizing makes little sense, whilst undersizing must be avoided at all costs. The optimal combination of material thickness and height, combined with the appropriate steel grade, ensures the greatest possible

economic benefit. That is our commitment – no more and no less. We would like to explain the most common variants to you below:

Grades of steel

S 235 JR (DIN EN 10025-2)

S 235 JR has proven itself in practice thanks to its good weldability, formability and strength.

S 275 JR (DIN EN 10025)

S 275 JR has comparable product properties to S 235, but stands out due to its slightly higher tensile strength and load-bearing capacity.

S 355 JR (DIN EN 10025)

The most important steels in the construction industry, alongside the well-known reinforcing steels, are S 235 JR and S 355 JR.

None of the materials listed have a passive layer and must therefore be protected against corrosion. For indoor use, a primer with an additional coat of paint is sufficient. For outdoor use, hot-dip galvanising is required as a minimum.

Stainless steel

Stainless steel has become indispensable in many everyday applications. Depending on the intended use, this versatile material can be alloyed to suit specific requirements. In Germany, two general terms are used to describe stainless steel: V2A (1.4301) is a type of stainless steel commonly found in everyday life, used, for example, in the construction of railings, vehicles and sinks. V4A (1.4404) is similar to V2A, but is additionally alloyed with 2% molybdenum (Mo). This makes the stainless steel more resistant to corrosion in chloride-containing media. V4A stainless steel is used in salt water, swimming pools and the chemical industry. In addition, the surface of stainless steel is often pickled and polished. We will discuss these processes in detail on the following page.

Aluminium

Lightweight aluminium (AlMg1 5005) has long been regarded as a genuine alternative to steel. It is now a fully competitive building material. Its key advantage: weighing just 2.7 kg/dm³, aluminium is around 60 per cent lighter than steel. Combined with its relatively high strength and good weldability, this light metal is superior to many other raw materials.

COR-TEN

COR-TEN steels form a particularly dense barrier layer on their surface, beneath the actual rust layer, consisting of tightly bound sulphates or phosphates, which protects the component from further corrosion. A distinction is made between Corten A and Corten B. Corten B ASTM A 588 material no. 1.8963, EN 10027-1: S 355J2W is not phosphorus-alloyed, is approved by building authorities, has good weldability and good cold and hot formability. Due to its resistance to weathering and its characteristic patina, COR-TEN steel is also used for architectural accents, such as façade cladding.

Surface refinement: Functionality and aesthetics

MEISER steel products are characterised by their durability and high quality. This crucially depends on the correct surface treatment. We offer our customers a wide range of options, whether the focus is on functionality or aesthetics. Several factors play a role in selecting the right surface treatment: our customers' individual preferences, their budget and the required level of corrosion protection.

Hot-Dip Galvanising

MEISER steel products are typically hot-dip galvanised. At our two modern facilities in Limbach and Oelsnitz, commissioned in 2011 and 2020, respectively, this process is carried out in accordance with the requirements of DIN EN ISO 1461. State-of-the-art galvanising and environmental technologies guarantee long-lasting corrosion protection that easily withstands the mechanical and chemical stresses encountered in everyday use.



Pickling (stainless steel)

MEISER stainless steel products are usually pickled after production, as the welding process can cause scale and discolouration on the surface, creating potential starting points for corrosion. During the pickling process, the gratings are immersed in a pickling bath, giving them a metallically pure and protected surface.



Natural matt finish (aluminium)

Etching is a chemical process used to treat the surface of aluminium. It involves the controlled removal of the natural oxide layer, resulting in a more uniform, slightly silvery-matt surface. Compared to anodised surfaces, it appears more natural and uniform. However, as pickling does not create an additional protective layer, the surface is more delicate than an anodised layer. It is therefore more susceptible to scratches, fingerprints and other signs of wear. For this reason, pickled aluminium is particularly suitable for architecturally sophisticated interior applications.



Electrochemical polishing (stainless steel)

Electropolishing is essentially the reverse of electroplating. Under the influence of direct current, a thin layer of is removed from the surface of the workpiece, which is connected to the anode in an electrolyte. The process produces smooth, shiny surfaces that are highly corrosion-resistant and easy to clean.



Glass bead blasting

By using glass beads as the blasting medium, MEISER products made of stainless steel and aluminium can be further refined. The blasting process creates matt or satin-finished surfaces and helps to conceal minor surface imperfections in the material.

The resulting satin-matt finish is durable and retains its appearance over time. At the same time, the surface is cleaned of adhering foreign particles and additionally compacted, which helps to improve its durability.



Anodising (aluminium)

Anodising is an electrochemical process used to treat aluminium surfaces. It enhances the natural oxide layer and transforms it into a durable protective coating.

First, the material is degreased and etched (E6) before the anodising takes place. Electrochemical oxidation creates a solid oxide layer that bonds firmly to the base material.

The result is a uniform, functional surface with improved corrosion resistance and greater resistance to environmental influences. The anodised layer can also be coloured in shades C31 to C35, unless the natural aluminium colour (C0) is desired.

Due to the process and alloy-related factors, slight colour variations may occur. These cannot be completely avoided and do not constitute a quality defect.



Cathodic immersion bath coating (CDC)

Electrocoating offers an excellent combination of corrosion protection, quality, cost-effectiveness and environmental compatibility. It provides effective, long-lasting corrosion protection, providing good resistance to mechanical and chemical stresses.

The process is based on the principle that oppositely charged particles attract each other, ensuring excellent coating adhesion. A direct current is applied to the workpiece, which is then immersed in a coating bath containing oppositely charged coating particles. The coating is subsequently cured in an oven at approximately 180 °C to achieve maximum durability. Different film thicknesses are possible, although the range of colours is limited.

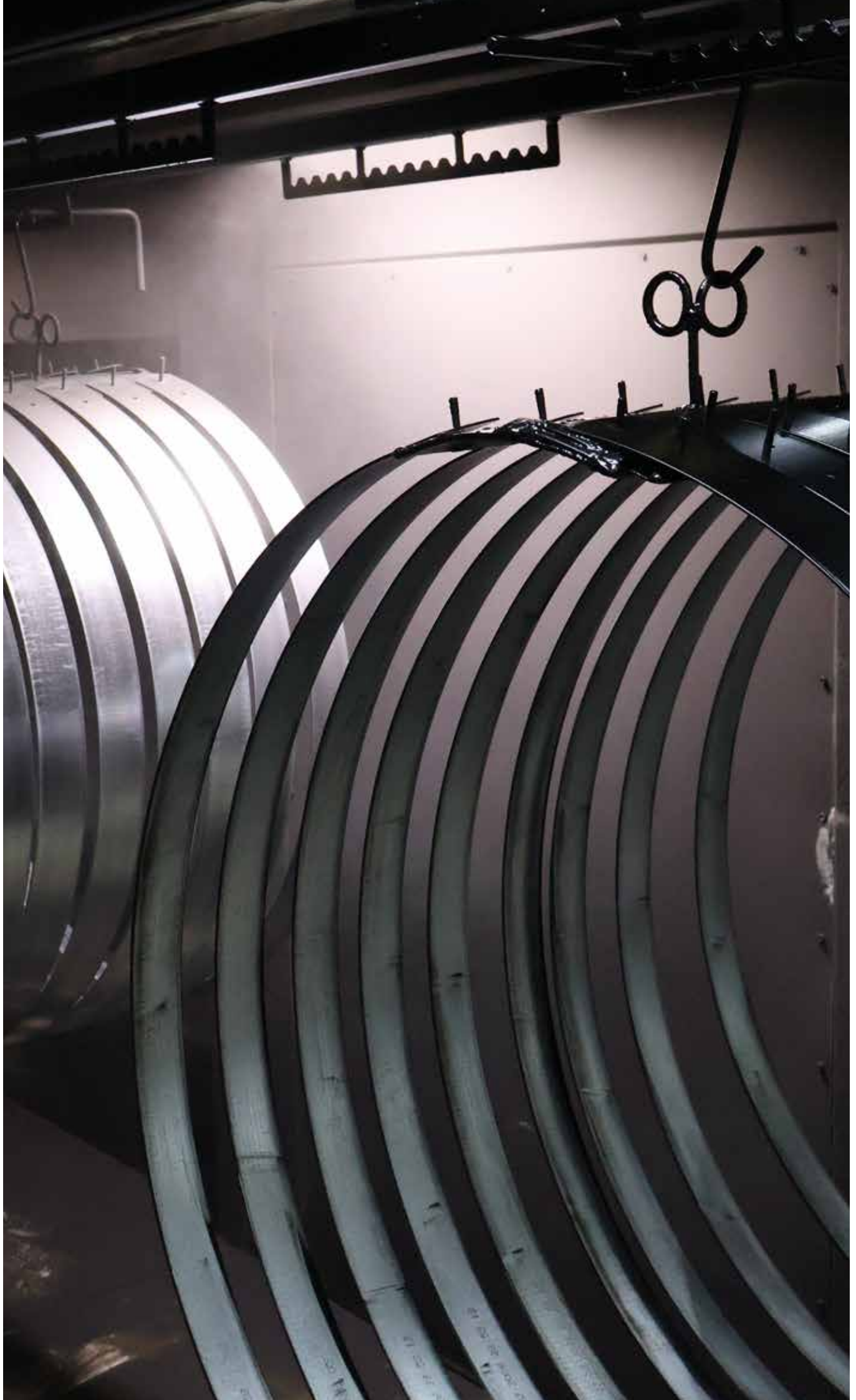


Powder coating

If you wish to colour your products, powder coating is the most cost-effective and durable solution. The process begins with the products being degreased, pickled and zinc-phosphated in immersion baths. The powder coating is then applied electrostatically and cured at approximately 180°C. The MEISER Duplex coating, consisting of hot-dip galvanising followed by powder coating, offers particularly long-lasting corrosion protection.

Powder coating is available in all RAL colours, with various gloss levels and surface textures. Furthermore, we offer coating systems for corrosivity categories C1 to C5, making them suitable for a wide range of applications.





Surface refinement



since 1956
in Schmelz-Limbach

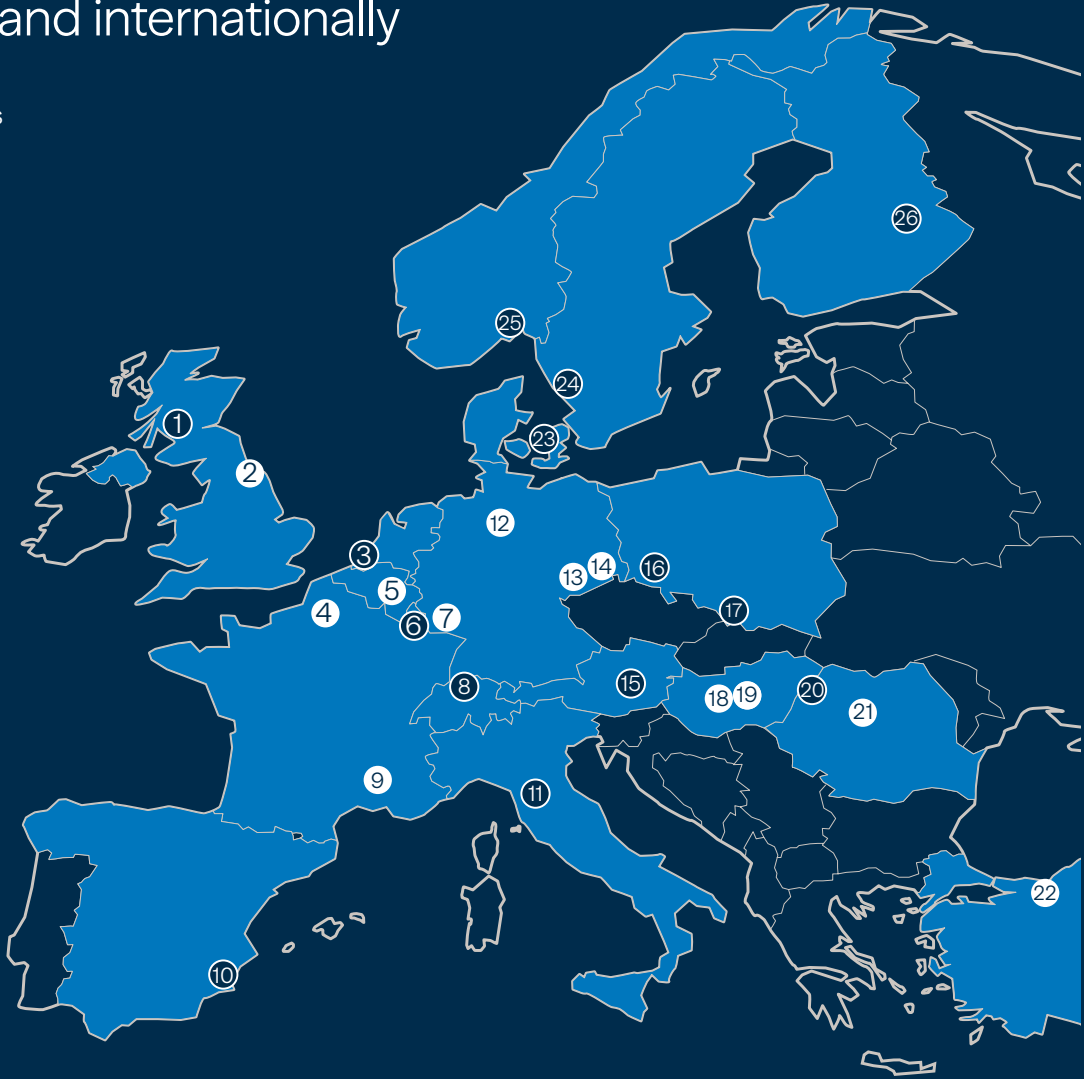
since 1991
in Oelsnitz/Vogtland



- ① Meiser UK Ltd
- ② The Expanded Metal Company
- ③ RST Meiser Nederland B.V.
- ④ Meiser Sarl
- ⑤ Meiser Fameco S.A.
- ⑥ Distriroute SAS
- ⑦ Gebrüder Meiser GmbH
Meiser Solar GmbH
Meiser Road Safety GmbH
- ⑧ PMI MEISER Gitterroste AG
- ⑨ Meiser Agriculture Solutions S.A.S.
- ⑩ Meiser Rejillas Hispania S.L.
- ⑪ Meiser Agriculture Solutions Italia
- ⑫ Sorst Streckmetall GmbH
- ⑬ Meiser Vogtland GmbH & Co. KG
- ⑭ ALFIX GmbH
- ⑮ Meiser Österreich GmbH
- ⑯ Meiser Road Safety Sp.z o.o
- ⑰ Meiser Polska SP.z o.o
- ⑱ Meiser Ferrote Kft.
- ⑲ ALFIX Ungarn Kft.
- ⑳ Meiser România SRL
- ㉑ Meiser FRP S.R.L.
- ㉒ Meiser Izgara San ve Tic Ltd Sti
- ㉓ Meiser SEMITECH A/S
- ㉔ Meiser Sweden AB
- ㉕ Meiser Norway AS
- ㉖ Finnritilä OY
- ㉗ IKG - Mexico
- ㉘ IKG - Houston, Texas
- ㉙ Meiser gratings Inc.
- ㉚ IKG - Indiana
- ㉛ Marangoni MEISER USA
Marangoni MEISER
- ㉜ Meiser-Maghreb GmbH
- ㉝ Meiser Algerie Sarl.
- ㉞ Hady MEISER Egypt
- ㉟ Meiser AC Sarl
- ㊱ Lionweld MEISER LLC

MEISER's production sites and branches. Nationally and internationally

- Production sites
- Offices



MEISER Worldwide



Scan here to see all MEISER locations and other branches – worldwide



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