MEISER

Expanded Metal

Expanded metal

Expanded Metal ABC
Areas of application
Mesh geometries
Mesh sizes

Regional

26
locations in Europe

active for 70
years

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

All data as of January 2026

06 About us:
Facts & figures

09 Product range

18 References & Inspiration

21 The Expanded Metal ABC

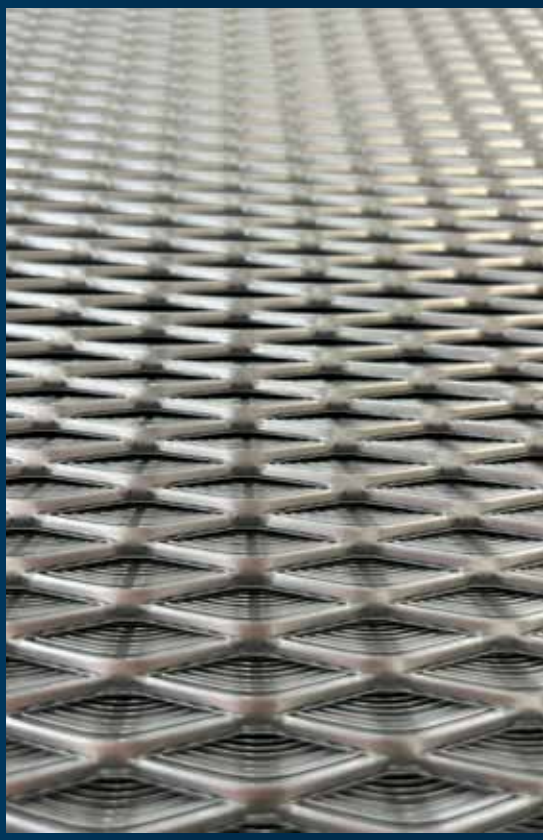
27 Applications

37 Mesh geometries

41 Mesh sizes

70 Service / Standards / Certificates

80 MEISER International



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.

Managing Directors Ulrich and Wolfgang Meiser

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

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

Total production figures up to 2026

MEISER

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

SCAN

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

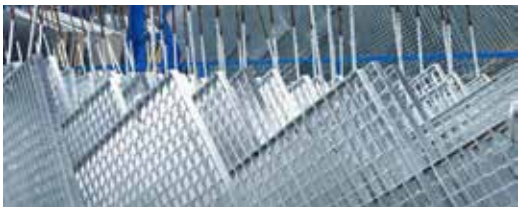
Genuine expertise for growing demands

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

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.

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

SCAN

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

SCAN

Solar Systems

Innovative mounting technology for the energy of tomorrow

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

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

SCAN

Agri Solutions

Genuine expertise for growing demands

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

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

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

SCAN

Expanded Metal

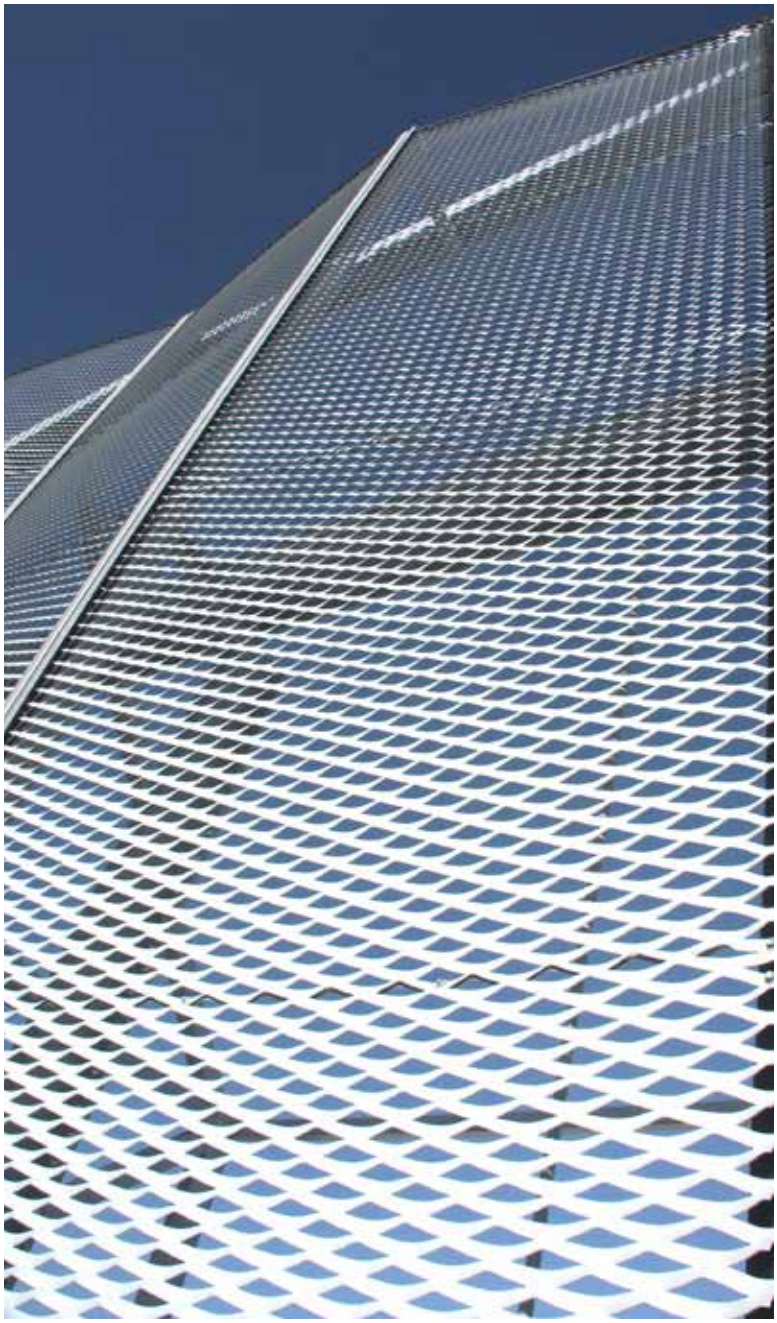
Custom-made expanded metal designs at their best

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 choice for both practical and design-oriented applications.

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

SCAN

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

SCAN

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

SCAN

MEA sliding gate fittings set fixed structures in motion

People, machines and metal – together they create precision expanded metal

Expanded Metal

Tailor-made for industry, architecture and design

Expanded metal creates a striking, artistic statement on the façade of the Wüstenrot headquarters in Salzburg

Our expanded metal combines high load-bearing capacity, low weight and open, flexible structures – properties that make it a particularly versatile material. In industry, construction and architecture, it impresses with its robustness and functionality, without compromising on a sophisticated appearance.

The range of applications is vast: from protective grilles in the automotive sector to façades, railings and ceiling cladding, right through to filter and ventilation systems. Every application benefits from the material's unique structure – robust, durable and versatile.

Exterior cladding of Friedberg University of Applied Sciences

A real statement of colour: powder-coated expanded metal at the waste-to-energy plant in Vienna

View of the Reiferbahn sports hall in Schwerin

Choosing the right expanded metal is crucial for safety, stability and durability. At MEISER, we create 100% 'made by MEISER' solutions – from bespoke manufacturing and structural calculations right through to delivery. Our team supports you with planning, measurements and implementation to ensure that every expanded metal project is delivered reliably, functionally and with an attractive finish.

Our expanded metal used as cladding on the Bilbao Centre in Spain

Technical terms – expanded metal

ABC

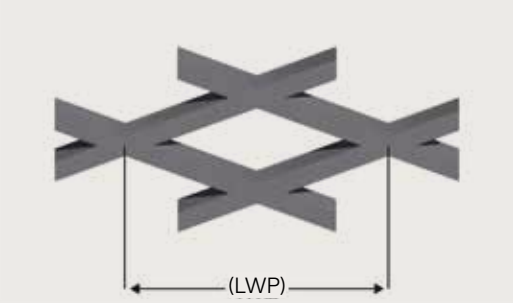
The most important information at a glance

SCAN

Mesh aperture

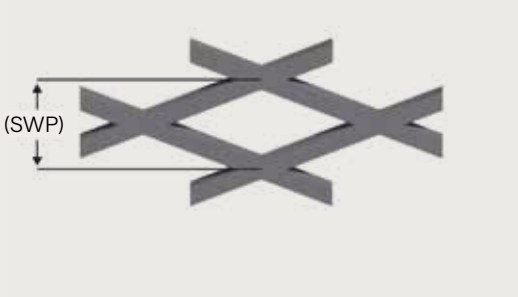
The openarea in the expanded metal mesh. Meshes are classified according to their mesh length and width and are selected depending on the intended application.

Long way pitch (LWP)



The distance between two opposite nodes along the long diagonal of the mesh – an important parameter for the sizing of expanded metal.

Short way pitch (SWP)



The distance between the nodes along the short diagonal of the mesh – this affects air and light permeability as well as strength.
of the grille.

Strand width (SWDT)

The width of the metal material between the openings – this affects the stability, load-bearing capacity and appearanceof the mesh.

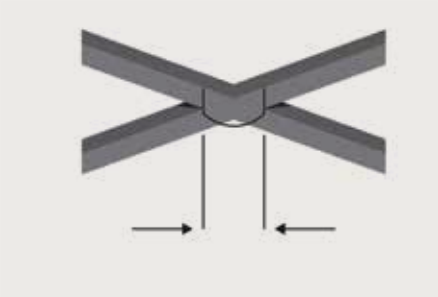
Strand thickness (STK)

Thickness of the material used – important for loadbearing capacity, weight and finish.

Knuckle

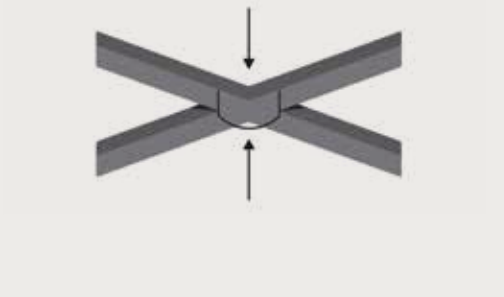
The area where four strands intersect – a structural reference point for determining mesh parameters and strength.

Knuckle length



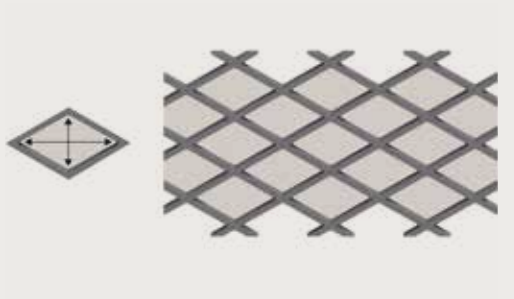
Dimensions that describe the distance between two long diagonals and affect dimensional stability and aesthetics.

Knuckle width



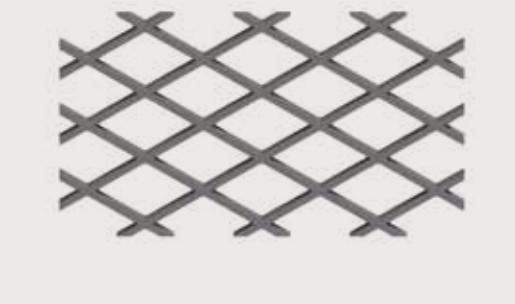
Dimensions, approximately twice the strand width (SWDT), and their impact on dimensional stability and aesthetics.

Open cross-sectional area



The proportion of open space in the mesh that allows air, light or liquids to pass through – important, for example, for ventilation, protection or filtration.

Diamond mesh



Classic, high strength and stability.

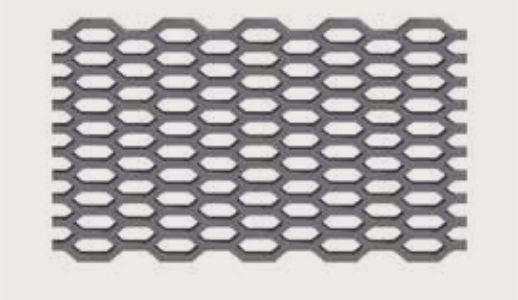
Square-/rectangular mesh

Good permeability.

Experf mesh

Resembles a round hole, can be rolled flat.

Hexagonal Mesh

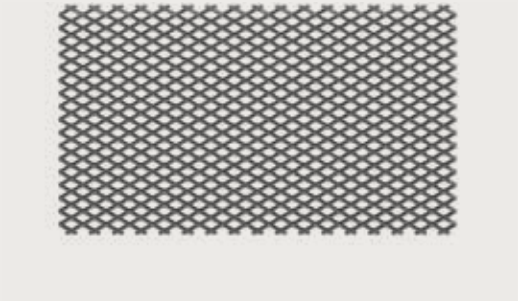


A distinctive look thanks to its wide bridge.

Micromesh

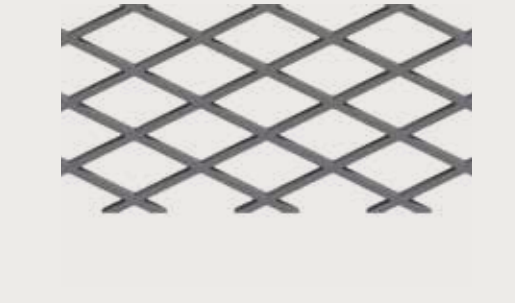
Classification by mesh size:
very fine mesh (0.5–6 mm).

Fine mesh



Classification by mesh size: 6–22 mm.

Centre mesh

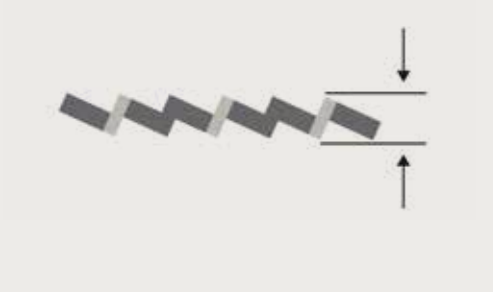


Classified by mesh size: 23–61 mm.

Large mesh

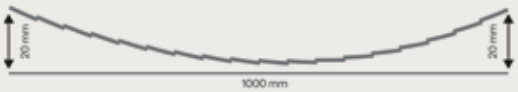
Klassifizierung nach Maschengröße: ab ca. 62 mm.

Expanded metal thickness



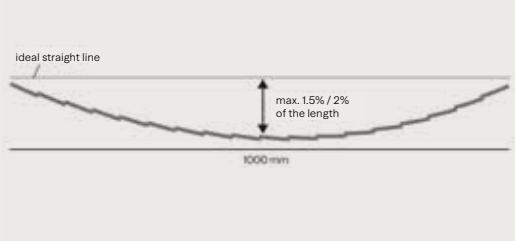
Total thickness of the expanded metal

Planarity



Expanded metal is considered flat if, when laid on a flat surface with the curvature facing upwards, the greatest distance between the sheets and that surface does not exceed 20 mm (per 1000 mm width). For heat-resistant sheets, this distance may be 40 mm.

Curvature



Expanded metal is considered to be straight along its longitudinal edge if, for sheet thicknesses up to 3 mm, the centre of curvature deviates from the straight line by no more than 1.5% of the length; for sheet thicknesses exceeding 3 mm, it deviates by no more than 2% of the length of the straight line.

Cut type

When cutting the expanded metal mesh to size, specific requirements regarding the cutting method must be observed. The following cutting methods are distinguished:

- BsLo: Width symmetrical, length open
- BgLo: Width closed, length open
- BLg: Width and length closed
- BLo: Width and length open / cut arbitrarily

SCAN

More information?
Here you'll find everything about expanded metal in detail.

Areas of application

29 Architecture
30 Automotive
31 Battery technology
32 Building materials
33 Renewable energy
34 Filtration
35 Roof flashing

Areas of application -
Endless possibilities

The Garden Curtain Wall in Singapore impresses with its continuous expanded metal façade, which lends the building a sense of lightness and transparency, as well as a striking architectural profile

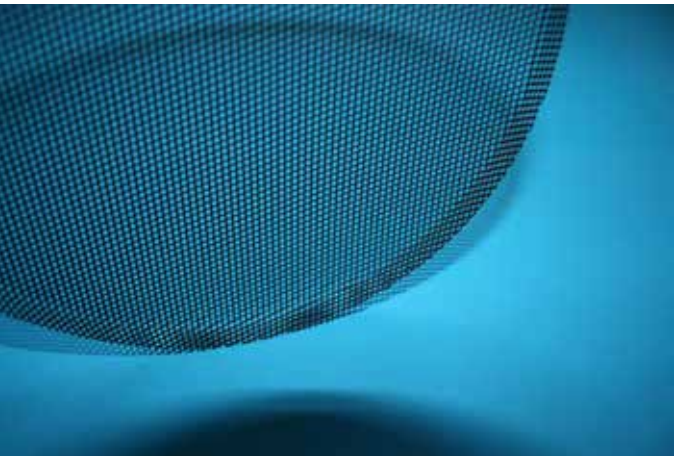
Architecture

In architecture, expanded metal combines aesthetics with functionality. It is used for façade cladding, privacy screens, railings, sun protection and ventilation grilles. Thanks to its open structure, it allows for ventilation and light to pass through, whilst offering protection from prying eyes, and can be flexibly adapted to suit a variety of architectural styles.

Top: Expanded metal at the Vienna waste-to-energy plant – functional privacy screening meets aesthetic façade design

Bottom: On the façade of the Wüstenrot headquarters in Salzburg, expanded metal adds a striking design feature and has a lasting impact on the building's appearance

Designed for maximum performance – expanded metal protects components even under extreme conditions



In the vehicle, expanded metal combines functionality with design. It provides reliable protection whilst adding visual interest

Automotive

Our expanded metal mesh is used in a wide range of applications within the automotive sector. It provides reliable protection for components whilst also serving as a design feature, for example as a speaker grille or a cover for technical components. On request, we can supply bespoke elements finished with surface treatments or coatings, giving vehicles a unique character through the mesh design.

Battery technology

Expanded metal also plays a key role in batteries and rechargeable batteries. It acts as a separator between the positive and negative electrodes, prevents short circuits and facilitates ion transport. At the same time, it provides mechanical stability to the electrodes and can be used as a current conductor to reduce internal resistance and improve charging and discharging efficiency.

Small in size, big in impact – expanded metal enables reliable solutions for innovative energy storage systems

Expanded metal is a robust and versatile building material

Modern and robust: expanded metal fences combine security with an open, clean-lined look

Building material

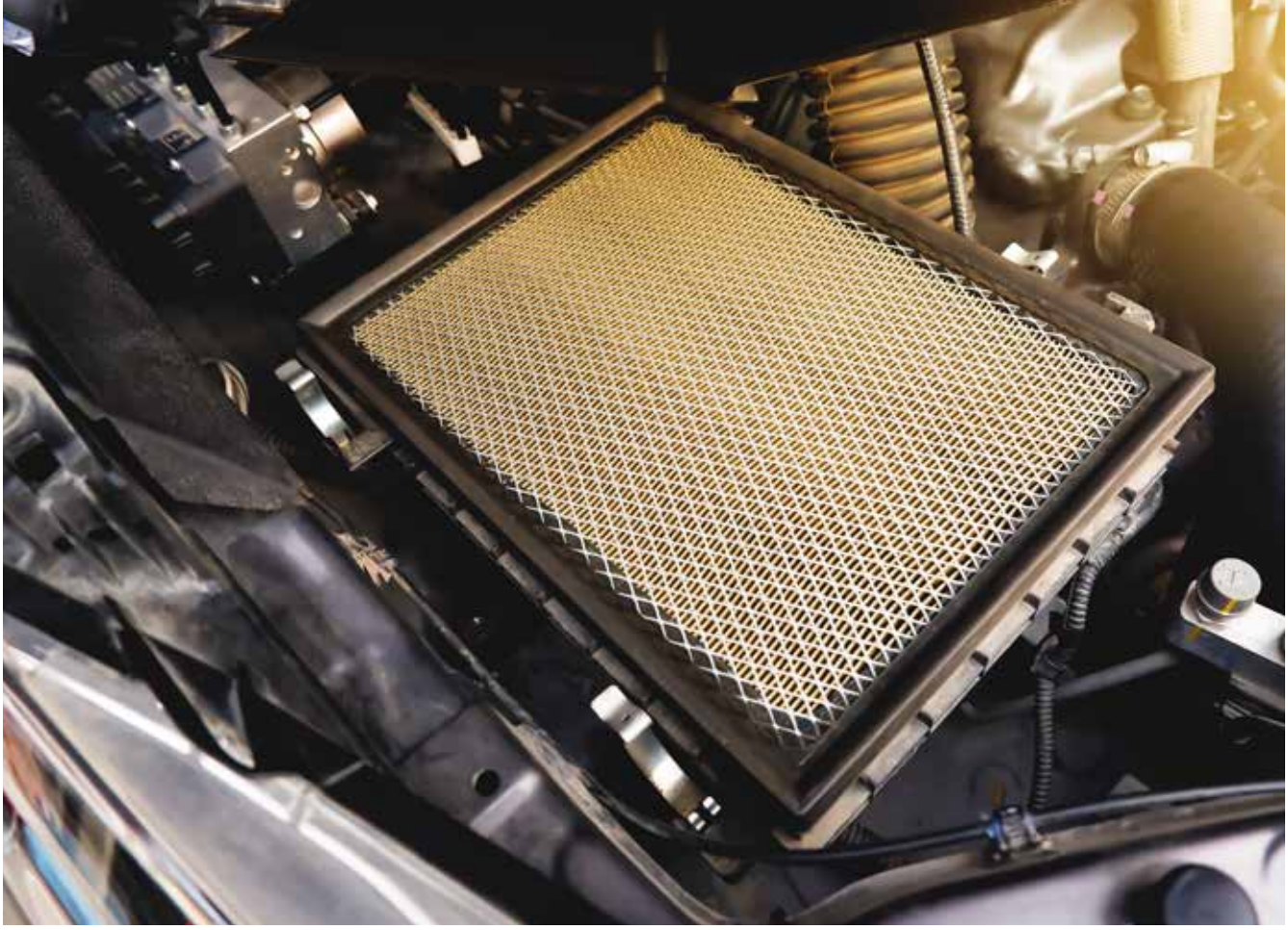
Expanded metal is an excellent choice as a building material. It is used as a plaster base, for protective and security fencing, or for fall protection. It also works well in interior design as ceiling cladding, room dividers or furniture elements. Its open structure creates a modern, airy aesthetic, whilst maintaining stability and durability.

Renewable Energy

Expanded metal plays a key role in modern energy systems, particularly in hydrogen production and fuel cell technology. It is highly porous, stable, electrically conductive, highly corrosion-resistant and efficiently dissipates heat. Versions made from titanium, nickel or stainless steel enable long-lasting, cost-effective use in electrolysis and fuel cell plants and actively contribute to the energy transition.

Top: Used as a protective mesh in front of the fan and heat exchanger, expanded metal protects the components of modern heat pumps whilst allowing air to circulate freely

Bottom: Expanded metal is used in electrolysers for the production of hydrogen



Cabin or engine air filters often contain expanded metal to support the paper or fleece media

Round cartridge filter elements are used in engine oil, fuel and hydraulic filters

Filtration

Our expanded metal products enable precise control of flow rates and particle sizes whilst maintaining structural integrity. The mesh geometry and component dimensions can be tailored precisely to our customers' requirements. This results in efficient and durable filtration solutions that reduce costs whilst optimising production processes. With Filtafoil, we also offer an aluminium filtration medium that is malleable and easy to clean. It prevents loose wire ends and spillage during cleaning, which is crucial for demanding applications.

Expanded metal provides a durable seal and clean lines

Roof flashing ensures proper water drainage

Roof Flashing

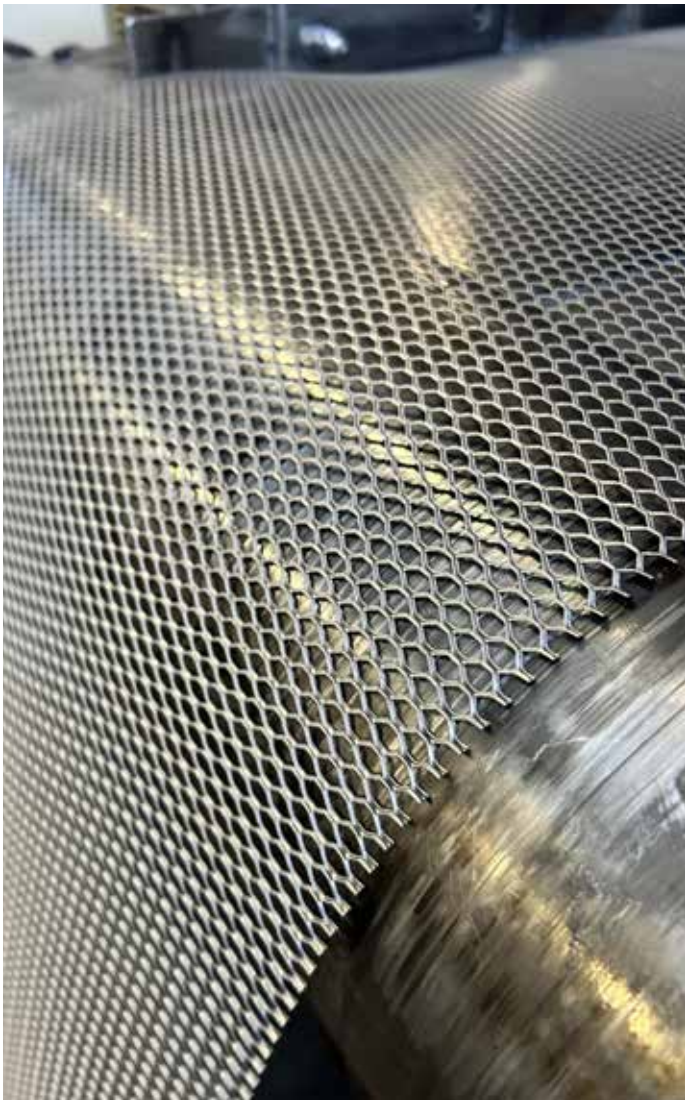
In the field of roof flashing, our expanded metal mesh improves the stability and waterproofing of roofs. As a component of roof waterproofing systems, it reinforces roof edges and transitions, protects against moisture and distributes loads evenly. At the same time, it remains flexible enough to adapt to varying weather conditions. Its simple installation and low maintenance requirements make it the ideal solution for long-lasting roof systems.

Mesh geometries

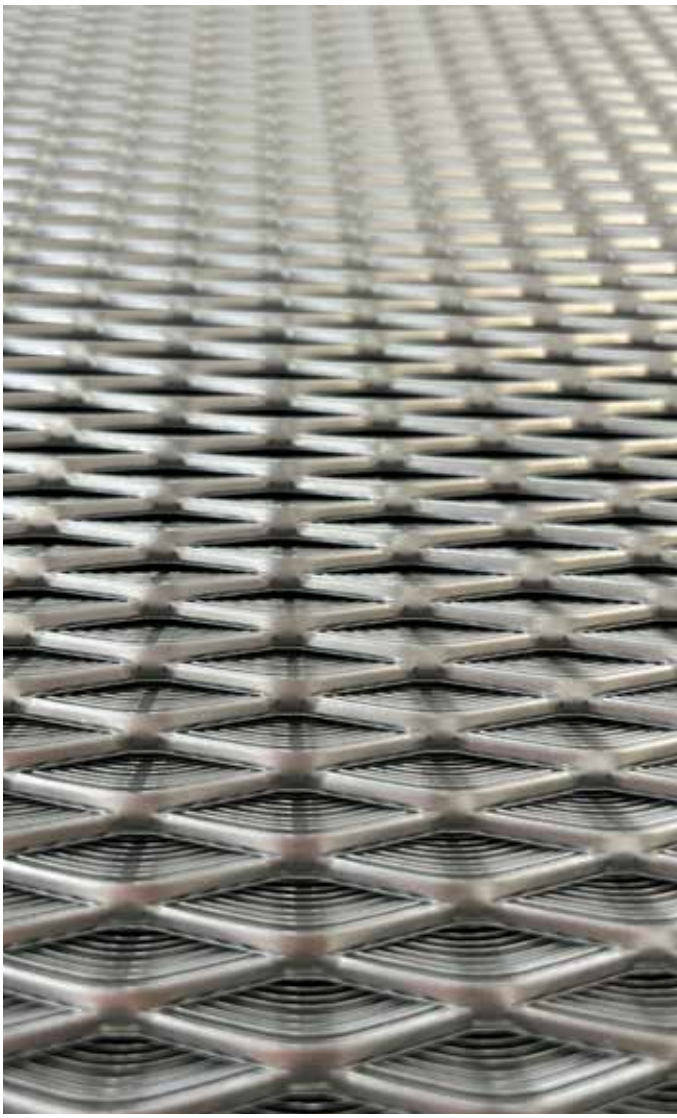
39 Diamond mesh
Experf mesh
Square mesh
Hexagonal Mesh

Mesh geometries -
Form meets function

Expanded metal does not always look the same. On the contrary. Thanks to the wide variety of mesh sizes, materials and processing methods, countless unique products can be manufactured. For clarity, a distinction is made not only by mesh size but also by mesh shape.



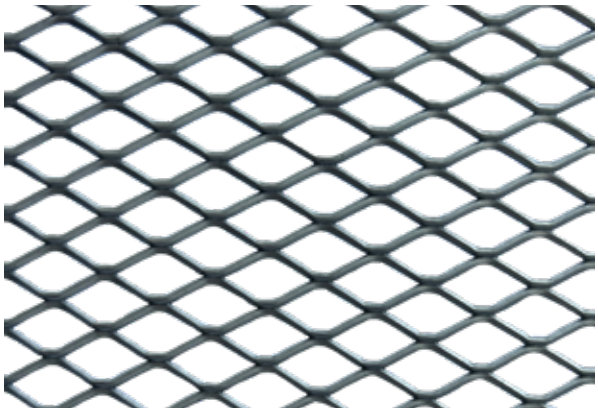
A robust roller guide ensures precise wire mesh production



Whether large, small or diagonal – the variety of mesh patterns gives expanded metal its unique aesthetic

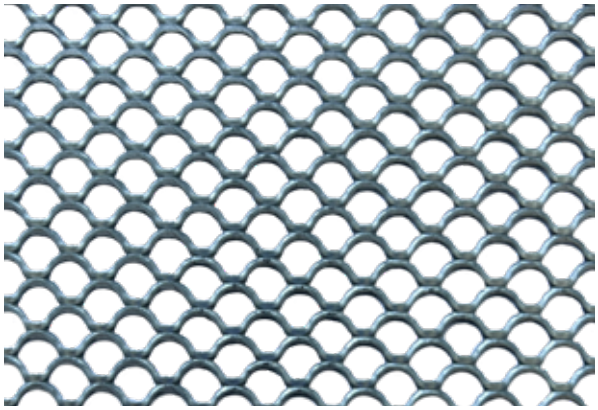
Diamond mesh

In most cases, the mesh of expanded metal takes the form of a diamond.



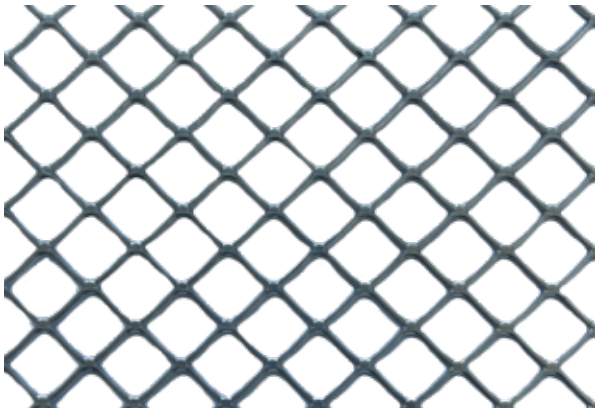
Experf mesh

Expanded metal is often regarded as a more cost-effective and sustainable alternative to perforated sheet metal. In the case of an Expf mesh, the mesh pattern resembles a round hole.



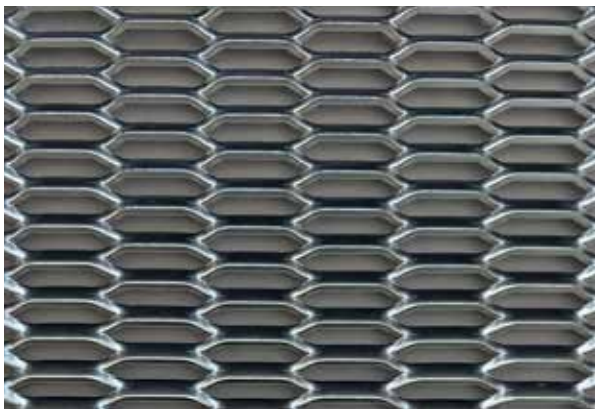
Square mesh

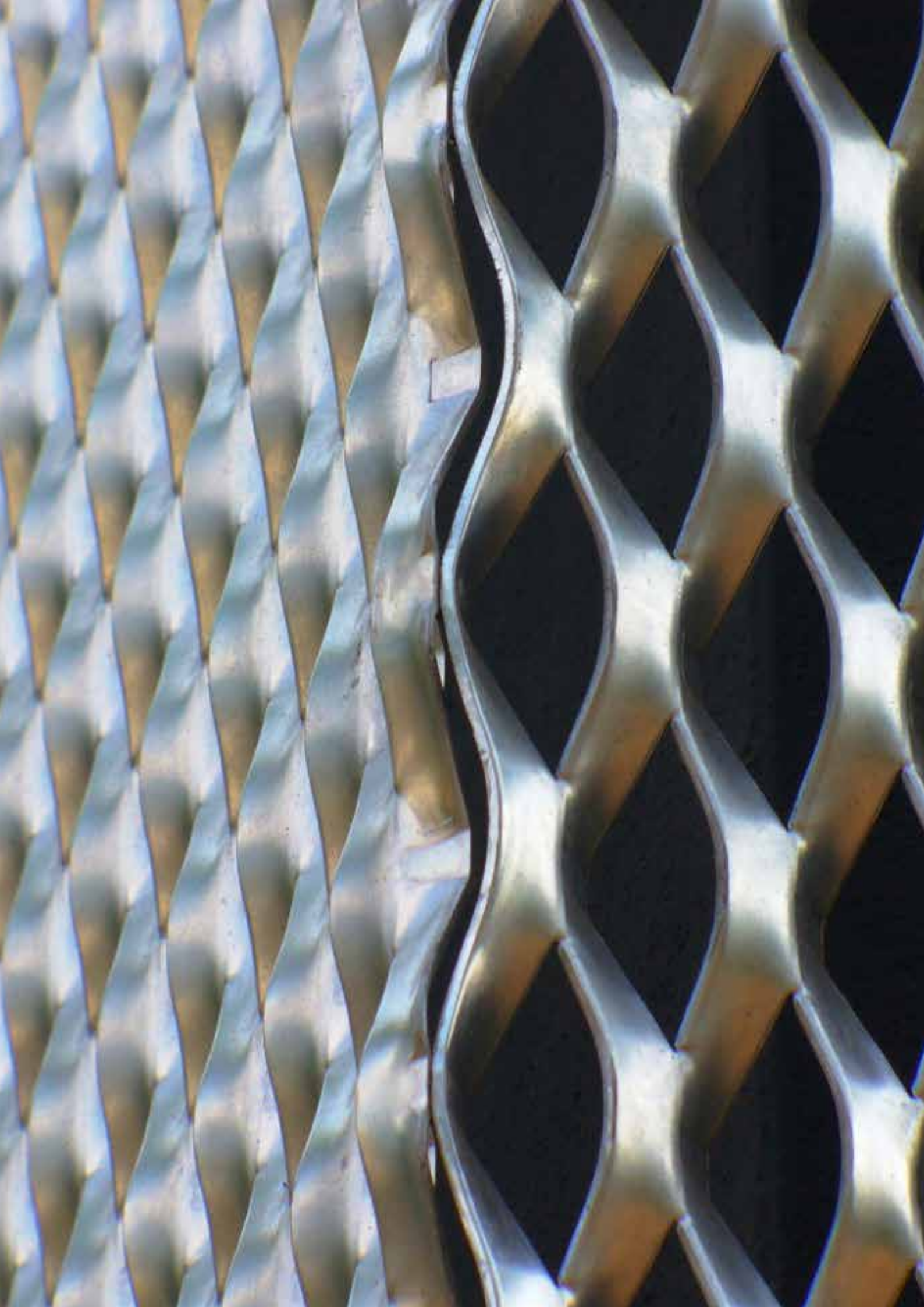
Expanded metal is usually rolled flat into a square mesh, resulting in a large open area despite the relatively small mesh openings.



Hexagonal Mesh

The long-stretch knit really stands out thanks to its distinctive look.





Mesh size

45 Large mesh
47 Centre mesh
49 Fine mesh
51 Micromesh

Mesh size -
Customised texture

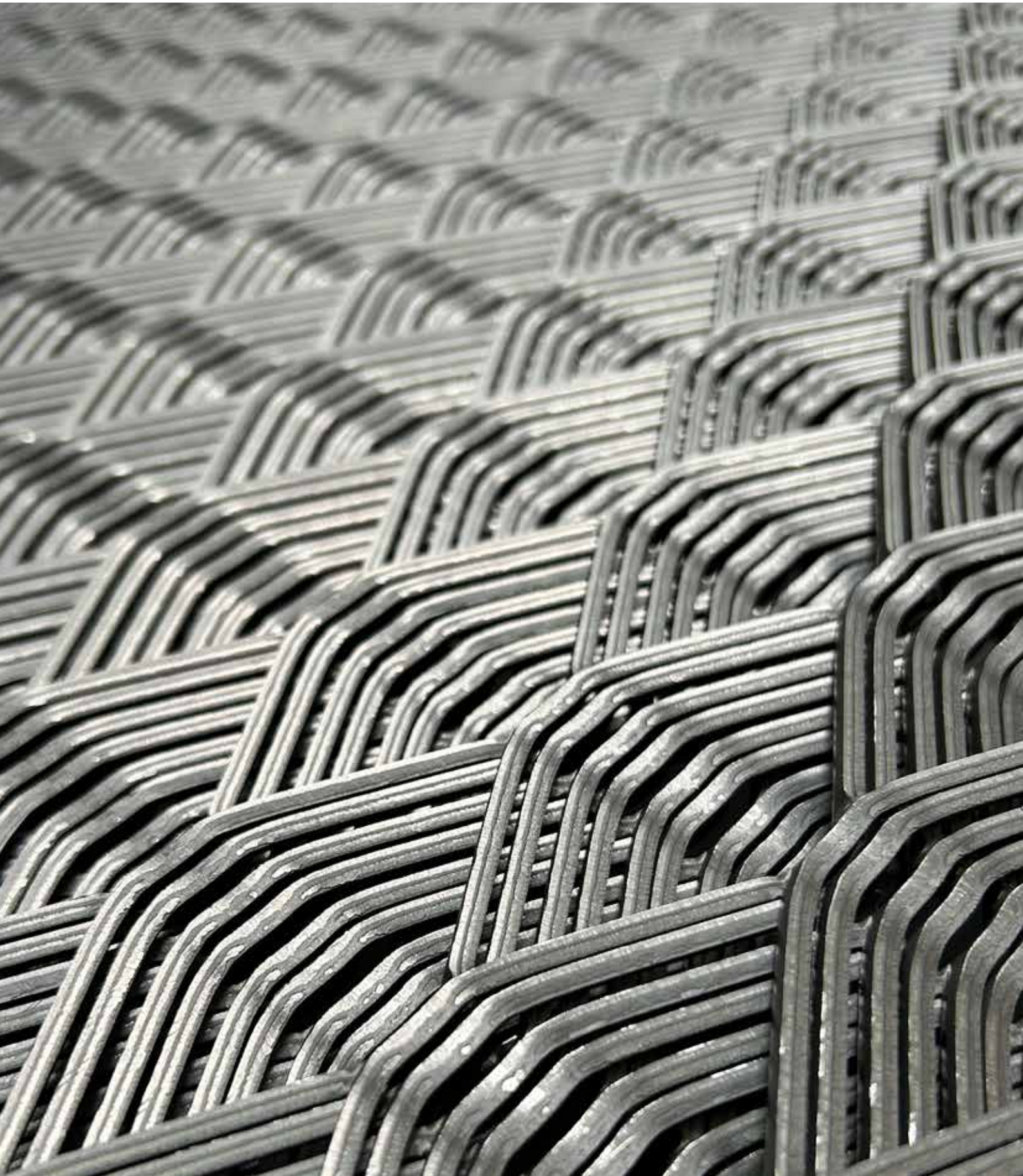
Theresienwiese Munich

Reiferbahn Sports Hall in Schwerin

Mesh size of expanded metal

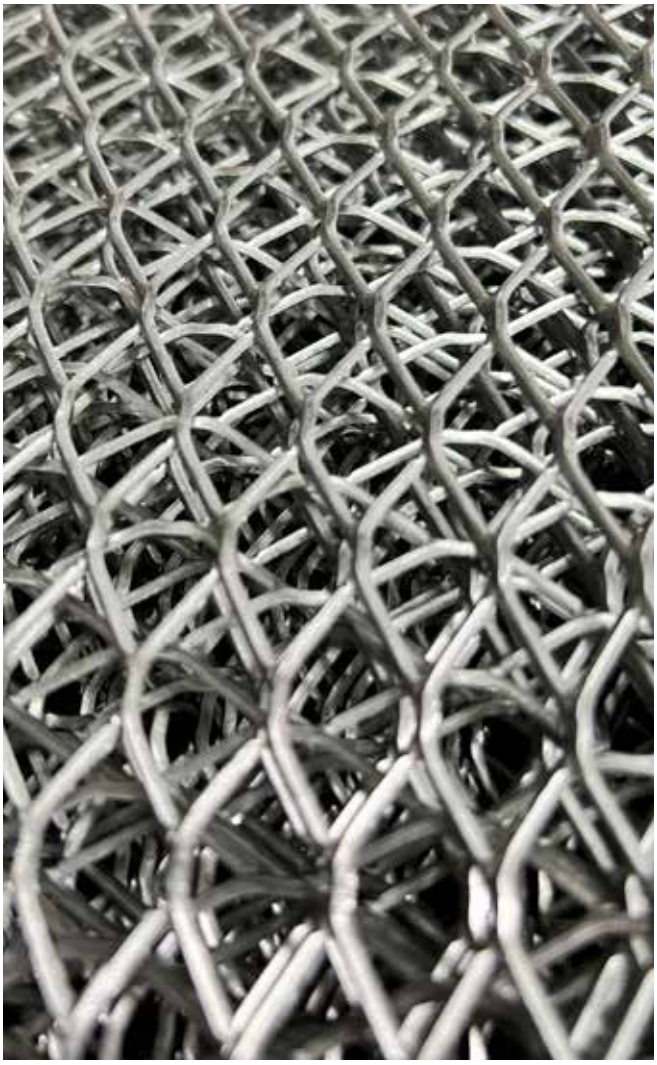
Mesh size is a key characteristic of expanded metal and influences both its visual impact and its functionality. Whether large, small or diagonal – each mesh pattern has its own unique properties. Fine meshes provide greater privacy and a delicate aesthetic, whilst coarse meshes increase light transmission and give the material a more robust character. Diagonally arranged meshes create additional dynamism and produce exciting shadow and light effects. By combining different mesh geometries, façades, railings or room dividers can be customised and optimally adapted to architectural and functional requirements. In this way, expanded metal becomes a flexible design element that harmoniously combines design, transparency and protection.

Large mesh



Large mesh expanded metal combines high dimensional stability with maximum open area and low weight. It is a cost-effective and versatile solution for architecture, industry and urban applications.

Wide-mesh expanded metal covers the range with mesh sizes from 62 mm upwards and offers all the advantages of traditional expanded metal: high load-bearing capacity, ease of handling and optimised cost-effectiveness. It is used in a wide range of applications – from façades and sun protection in architecture and urban planning, through safety and protective grilles, industrial baskets, and walkways and bases for metal pallets, to furniture, street furniture, exhibition and shop fittings, and fencing.

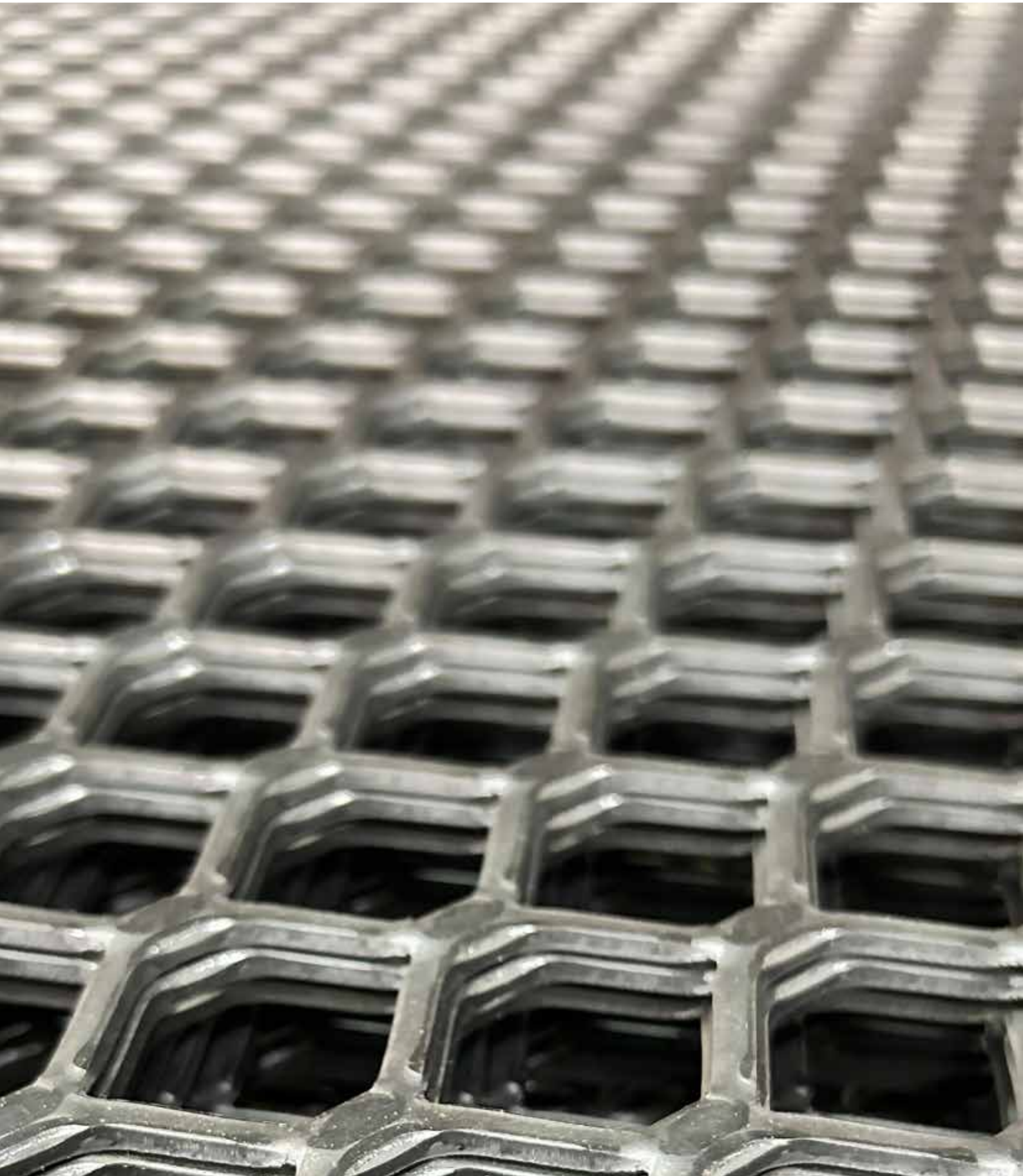


The stacked large-mesh wire looks almost like a work of art made of lines and light

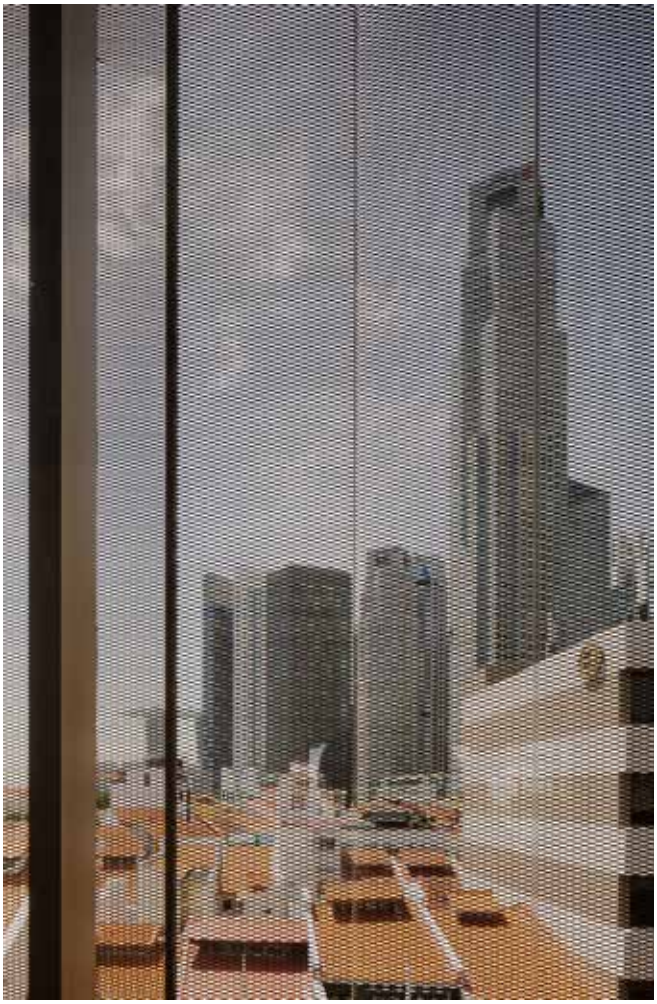
Large mesh expanded metal is robust, open-weave and versatile

Choosing the right large mesh expanded metal is crucial for stability, safety and a long service life. MEISER consistently focuses on high-quality, project-specific solutions – from bespoke manufacturing and technical design through to on-time delivery.
The focus is on the large-mesh expanded metal itself: precisely manufactured, versatile and optimally tailored to the specific requirements. This results in solutions where the large-mesh expanded metal is not merely a component, but takes on a central role – as a load-bearing, defining element of the entire structure.

Centre mesh



Expanded metal with centre mesh offers impressive dimensional stability, versatile applications and efficient use of the available cross-sectional area.



Through the expanded metal façade of the Garden Curtain Wall, the view extends to the Singapore skyline

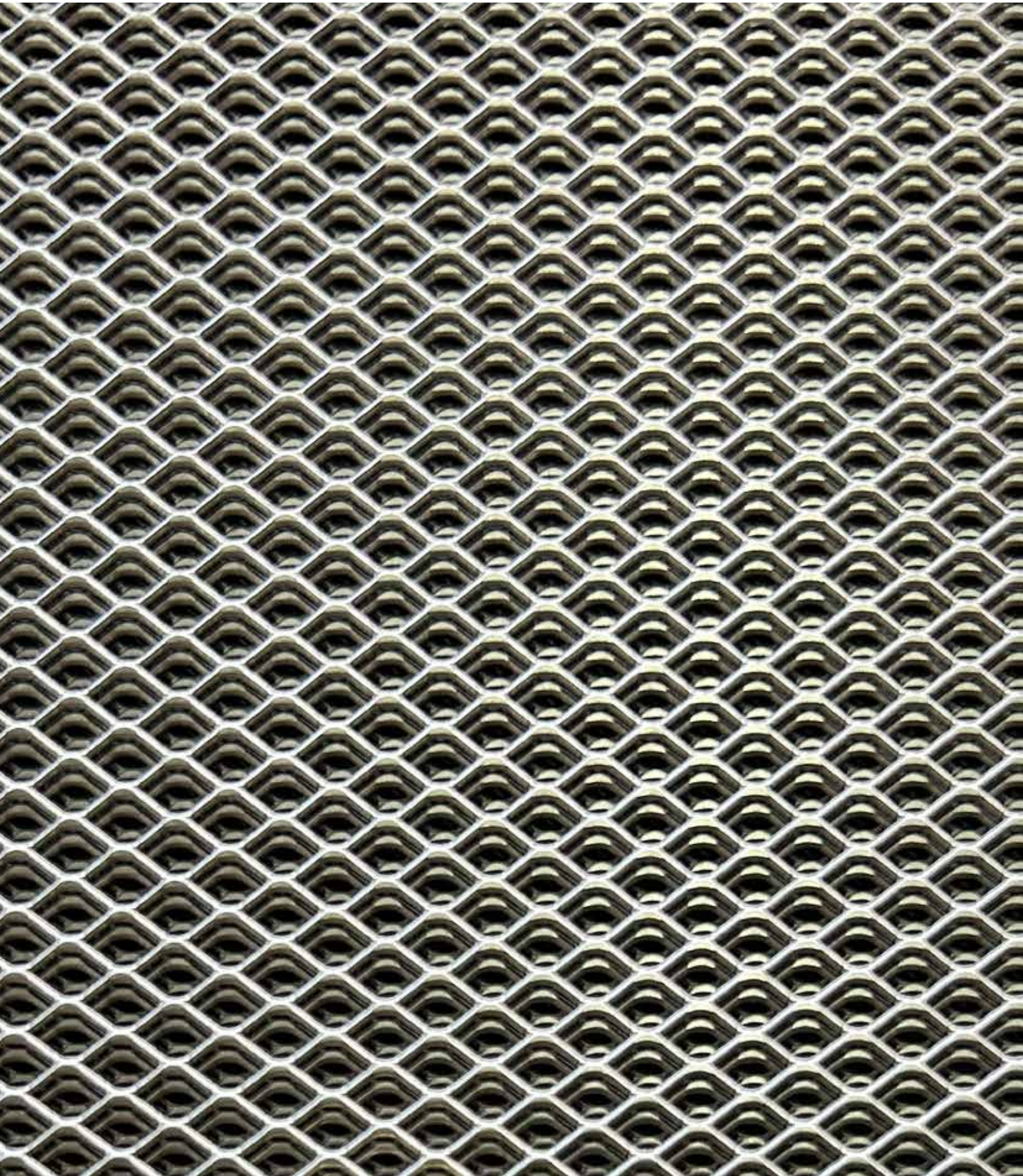
'Centre mesh' expanded metal features mesh sizes ranging from 23 mm to 61 mm and offers the perfect balance between strength, transparency and versatility. The mesh panels can be cut to size as required and are suitable for both three-dimensional applications and when flattened.

Centre mesh expanded metal grids are found in many areas of our daily lives: as ceiling cladding, railings and balcony infills, grating cladding, in household appliances and household goods, walkways and bases for metal pallets, ventilation systems, as well as in exhibition and shopfitting, furniture and street furniture, or fences.

Every Centre mesh expanded metal product from MEISER is a well-thought-out complete solution. From precise custom manufacturing and the calculation of structural requirements right through to on-time delivery, we support you every step of the way. With over 80% of products custom-made at our factory in Hanover, we ensure that your project is not only functional and durable, but also visually impressive – delivered reliably, cost-effectively and with a perfect fit.

As a stair railing, expanded metal combines stability with modern design

Fine mesh

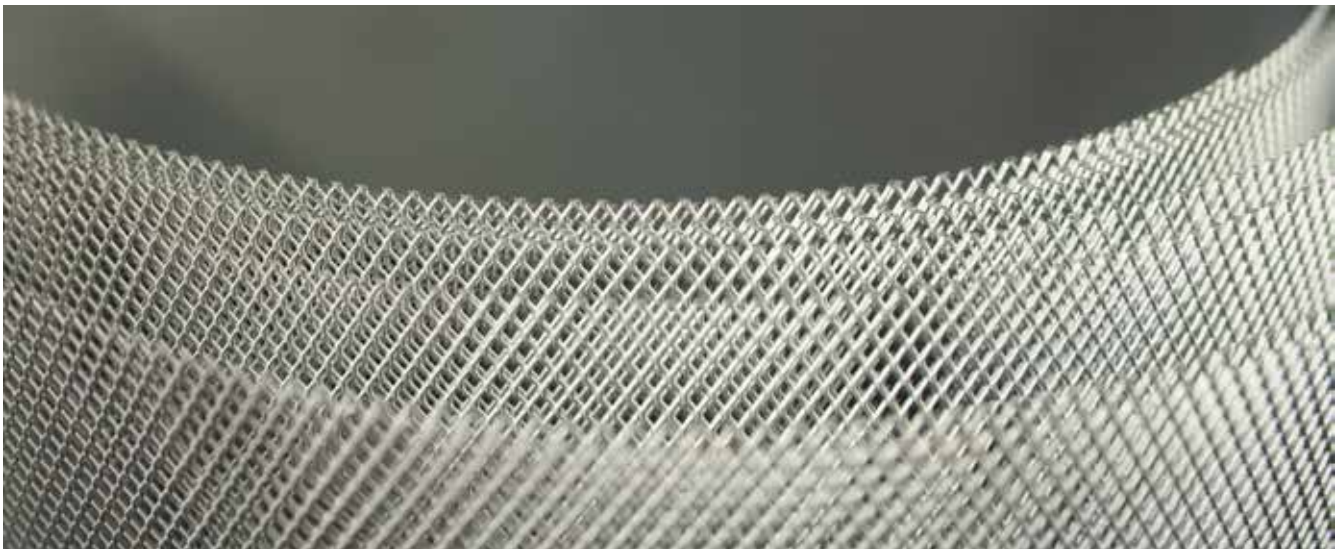


Fine mesh expanded metal combines precision, flexibility and efficient use of the clear cross-section.

Fine mesh expanded metal features mesh sizes ranging from 6 mm to 22 mm and offers outstanding formability. It can be bent, deep-drawn or finished, and is highly versatile whether used with a textured, three-dimensional surface or a flat-rolled finish.

Thanks to its fine mesh, this expanded metal is particularly suitable for applications where precision, protection or permeability are key factors. Typical areas of application include, for example, precision filter and sieve technology, protective grilles in electronics, fine ventilation and air duct systems, as well as decorative elements in architecture and interior design. The fine mesh is also used in renewable energy applications, as a backing material or in formwork, thanks to its stability and adaptability.

Expanded metal combines privacy with transparency, making it a popular choice for windows



Fine mesh expanded metal for industrial applications

Micromesh

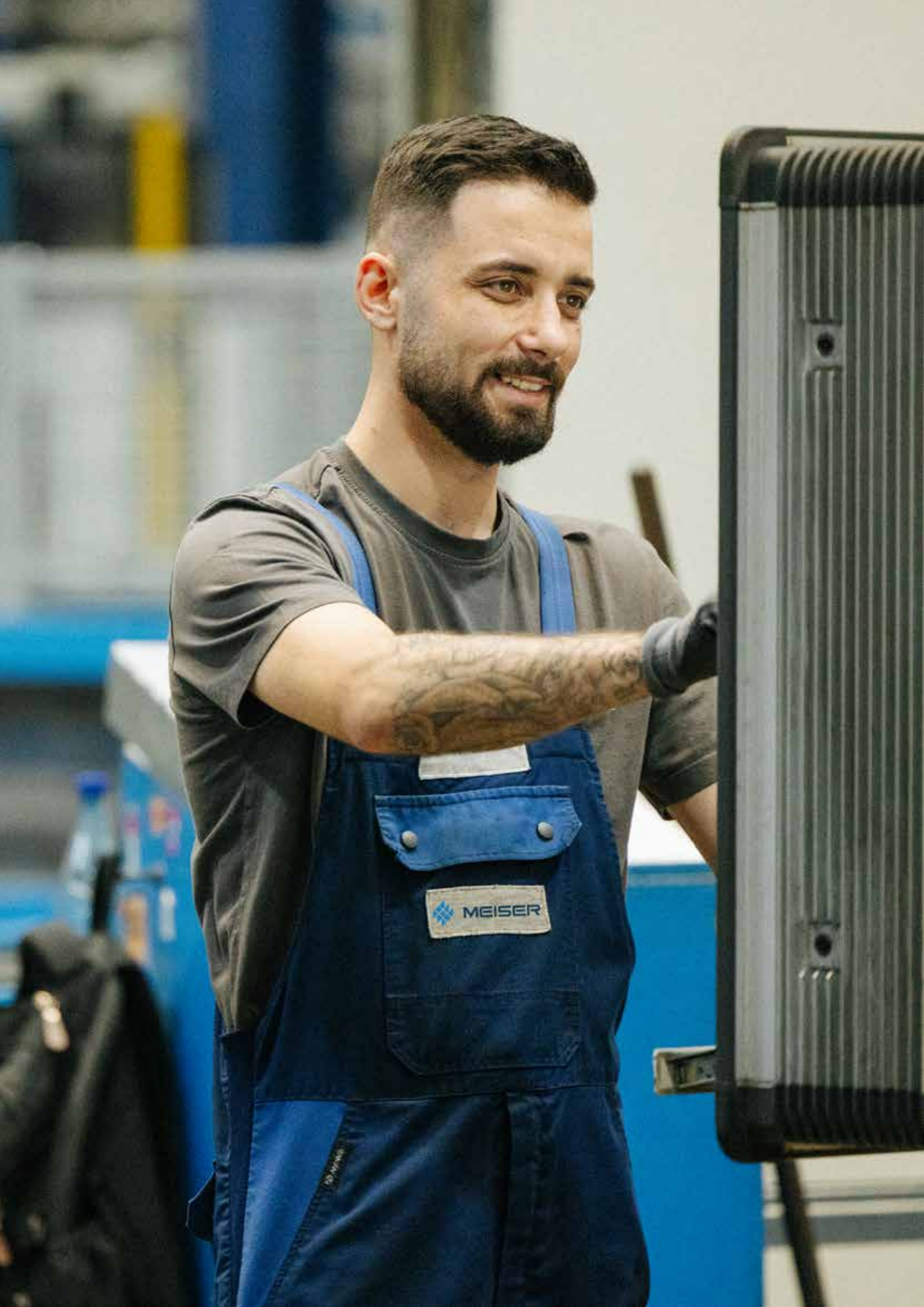
Micromesh expanded metal offers the highest precision and maximum stability, even with the smallest mesh sizes.

With mesh sizes ranging from 0.5 mm to 6.0 mm, Micromesh offers exceptional edge stability, consistently smooth surfaces and high open area. Despite its fine structure, the material remains flexible and cost-effective – ideal for applications requiring close-meshed, durable grids.

The range of applications is vast: Micromesh is ideal for precision shielding, in the automotive sector, for batteries, renewable energy, filtration, loudspeaker covers or as a carrier material. In many projects, it replaces traditional metal mesh or perforated sheets when particularly fine meshes and a clean edge are required.

Responsible manufacturing – expanded metal is produced with care and expertise

Micromesh expanded metal is lightweight, robust and dimensionally stable


MEISER

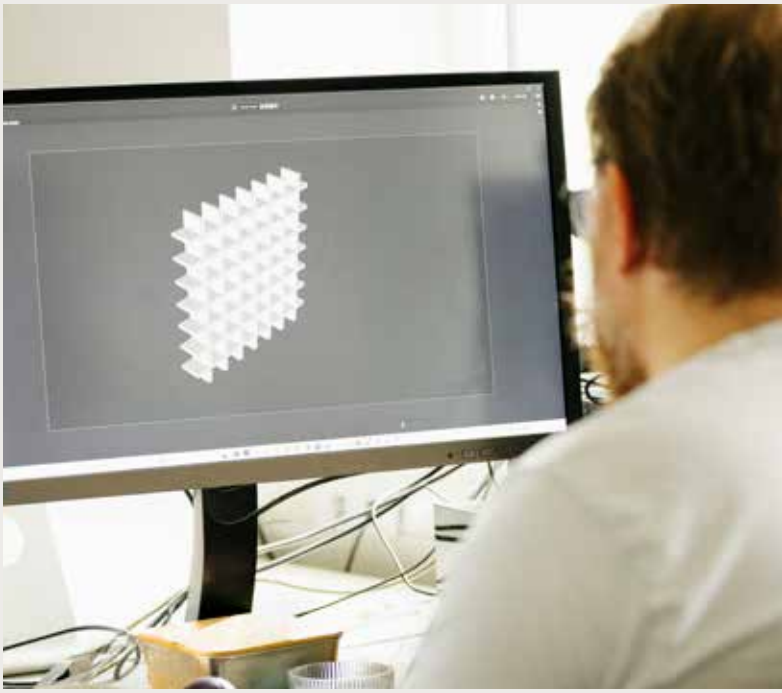
Service Standards Certificates

54 Service
56 Complaints Management
57 Standards and certificates
59 Quality and the Environment
60 Accounting information
62 Galvanisation plants
64 Steel grades
66 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

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 preventative measures and optimise our processes in order to be able to offer you an optimum service.

However, should something go wrong, the speedy processing of a complaint and the regular provision of information to our customers about progress with respect to processing the complaint is a matter of course for our employees.

Get in touch with us:

Hannover
Tel. +49 511 - 67 67 56 50

Email info-streckmetall@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

Applicable standards

DIN EN ISO 9001	Quality management system

SCAN

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 environments 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.

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 technology of the facilities enables MEISER to operate with reduced emissions.

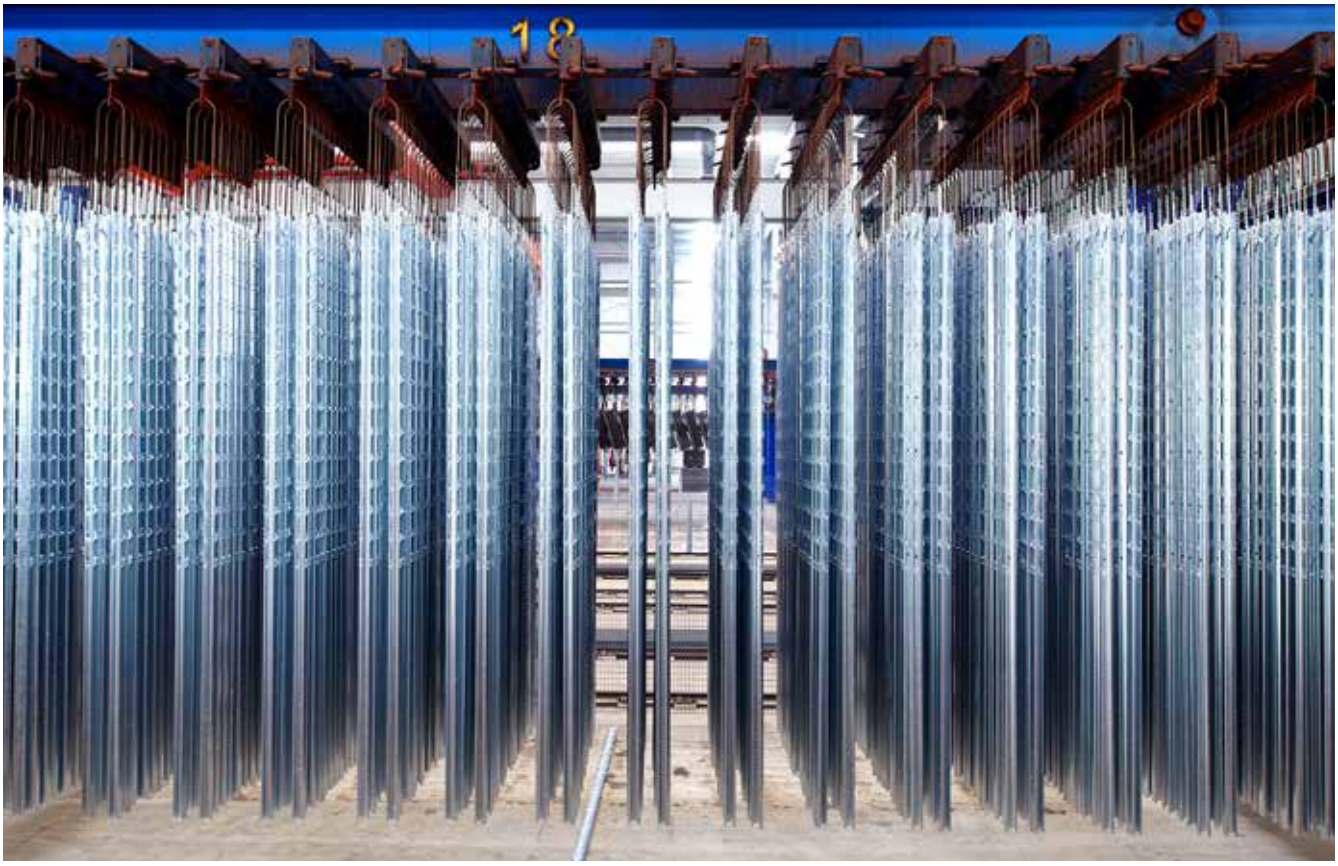
Each product to be galvanised is automatically picked up by the conveyor and guided through the plant. During the preceding production stages, oils and greases are used to reduce wear and tear on the machinery.

Before galvanising, however, the surface must be completely free of any contamination. Rust particles and metal dust must also be completely removed. To achieve this, the gratings pass through a series of rinsing and acid baths. The chemical pre-treatment, an environmentally sensitive process, takes place in a fully enclosed area. All resulting emissions are fed into a complex filtration system, ensuring that they do not affect the surrounding environment.

The fully automated system now transports the workpieces to the zinc baths. The molten zinc is heated to 450°C, where, the products are coated with the liquid metal. An exhaust air and dust filtration system protects both people and the environment. This helps us to, 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. After 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, grating, 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 m² Saarlouis: approx. 5,000 m²
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 an impact: for the environment, safe working conditions and efficient processes

Manufacturing process

How expanded metal is produced

The production of expanded metal involves several steps. First, metal sheets or coils made of steel, aluminium, stainless steel or other metals are selected in the required thickness and width.

Expertise meets state-of-the-art manufacturing

From sheet metal to structure – expanded metal is created through a series of precise manufacturing steps

In the next step, the raw material is clamped into the machine, where a blade cuts into the sheet metal crosswise whilst simultaneously stretching it. The uniform feed rate ensures that the material is stretched evenly, creating the expanded metal mesh. This allows the surface area of the raw material to be increased many times over.

Advantages of expanded metal

High stability

Expanded metal consists of a three-dimensional metal mesh that offers high strength. It can withstand heavy loads and is therefore ideal for use in building and construction projects.

High flexibility

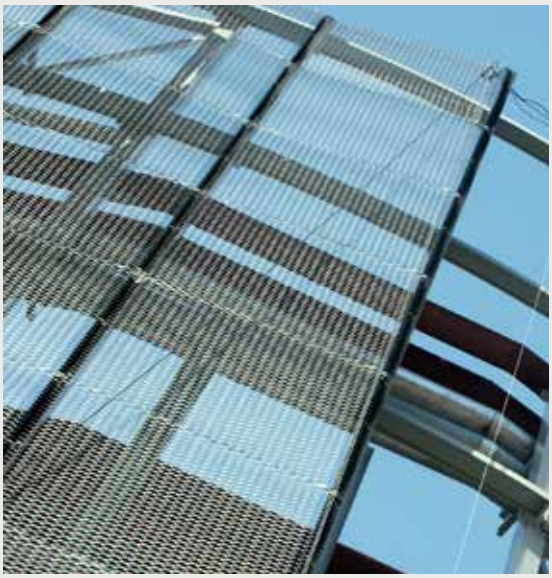
Thanks to its corrugated structure, expanded metal is extremely flexible. It can easily be shaped into various forms and sizes to meet the requirements of different applications. This allows for enormous versatility in the use of expanded metal.

Durability and corrosion resistance

Expanded metal is an extremely durable material. It is corrosion-resistant and can withstand extreme weather conditions. This makes it ideal for use both indoors and outdoors, as well as in areas with high humidity or salty air, such as coastal regions.

Lightweight

Thanks to its light weight, expanded metal is particularly easy to handle and transport. It can be easily cut to size, shaped and assembled, making it simple to install in a variety of applications.



Expanded metal offers impressive stability, efficiency and versatility

Transport of a coil, the raw material for expanded metal

Steel grades

Material	Designation	Yield strength	Tensile strength	Elongation at break	
		Rel MPa	Rm MPa	A5 %	A80 %
1,0332	DD11	170-340	max. 440	min 28	
1.0398	DD12	170-320	max. 420	min 30	
1.0335	DD13	170-310	max. 400	min 33	
1.0330	DC01	270-410	max. 280		min. 28
1.0347	DC03	270-370	max. 240		min. 34
1.0338	DC04	270-350	max. 210		min. 38
1.0312	DC05	270-330	max. 180		min. 40

Custom steel grades: the right material for your project.

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

Grades of steel

Both hot-rolled grades (DD11–DD13) and cold-rolled strips are used in the manufacture of expanded metal. Thanks to their good formability and weldability, they are suitable for a wide range of applications.

Aluminium

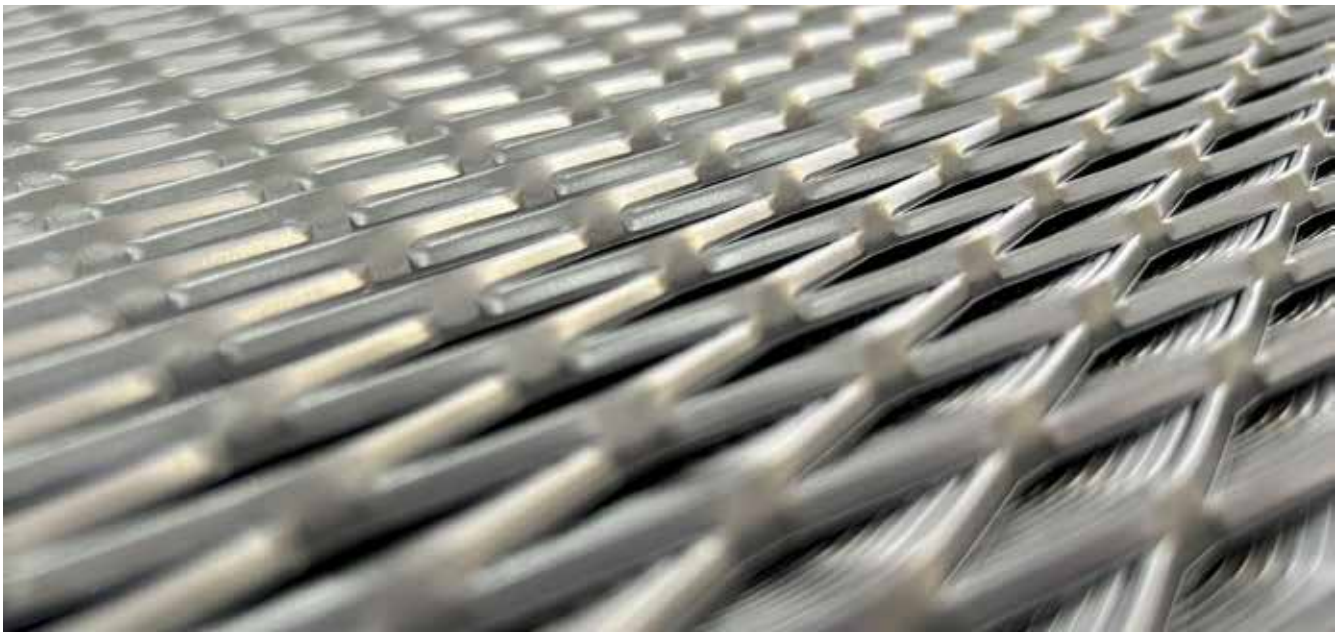
Lightweight aluminium (AlMg1 5005) has long been regarded as a genuine alternative to steel. It is now a fully competitive building material. Its key advantage: with a density of just 2.7 kg/dm, aluminium is around 60 per cent lighter than steel. Combined with its relatively high strength and good weldability,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

Stainless steel

Stainless steel has become indispensable in many everyday applications. Depending on the intended use, this practical material can be alloyed accordingly. 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.

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 and it 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.



42 steel

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.

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.

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.

Space for your notes

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. Meiser 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 Ferroste 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

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

Meiser Holding GmbH
Edmund Meiser Straße 1
66839 Schmelz-Limbach

Tel: +49 6887 309-0
Email: info@meiser.de

digital / 10.2026