

MEISEGrate® Special Forms Grating



Special Forms

Finned gratings

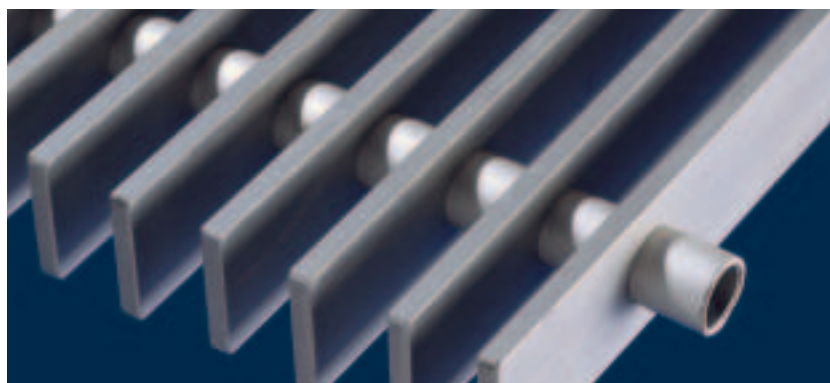
Finned gratings are both decorative and practical. Which is why they are suitable for many different purposes.

As a rule, they are used as ventilation covers for underfloor convection heating system and as overflow channels at swimming pools.

In our finned gratings we have replaced the cross bar with a pipe.

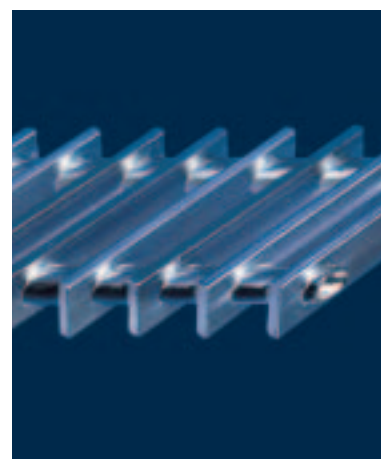
The standard form comes without edging, however if required it can be supplied with edging. In both cases the ends of the pipes are left open to ensure a maximum corrosion resistance.

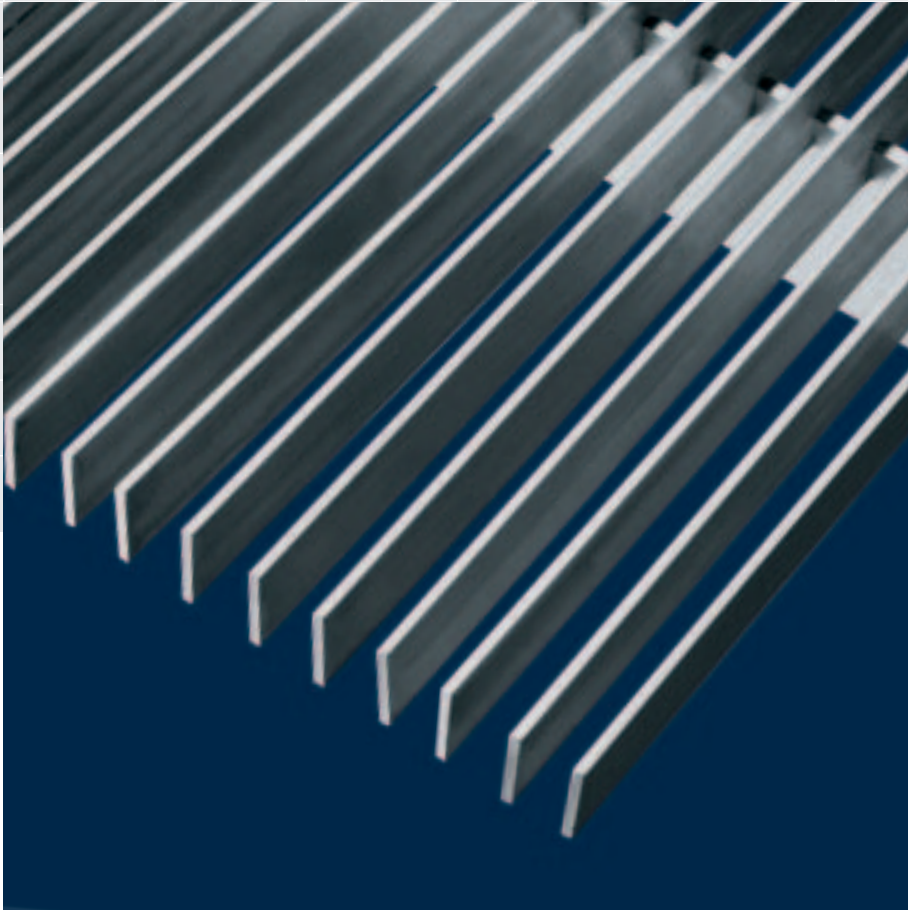
Finned gratings can be supplied in a variety of material, profile and colour. The bearing bars can be produced also with SP anti-skid material.



Cross bar tubing with a diameter of 10 or 15 mm,
Cross bar spacing 50, 100, 150, 200... mm
Bearing bars: 25 mm up to 100 mm

Bearing bar spacing	Bearing bar thickness
21	2-5 mm
22	2-5 mm
23	2-5 mm
28	2-5 mm
32	2-5 mm
33,3	2-5 mm
43	2-5 mm
and multiples	





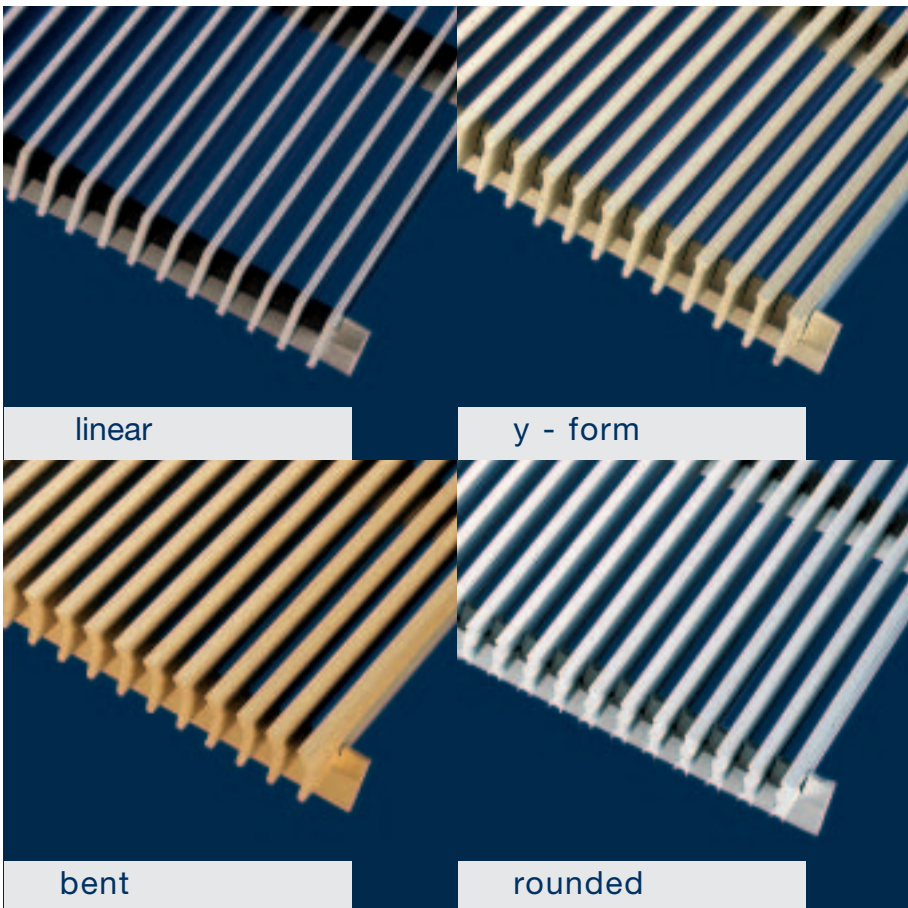
Special forms

Comb grating

Comb gratings are enclosed pressure locked gratings, with cross bars which protrude above the surface of the grating. The cross bars are pressed into the notched bearing bars on center-to-center spacings of 11.1 mm, 16.65 mm and 22.2 mm. The standard spacing between the bearing bars is 100 mm, but can be varied to suit the end users loading requirements. The gratings are designed for „pedestrian access“.

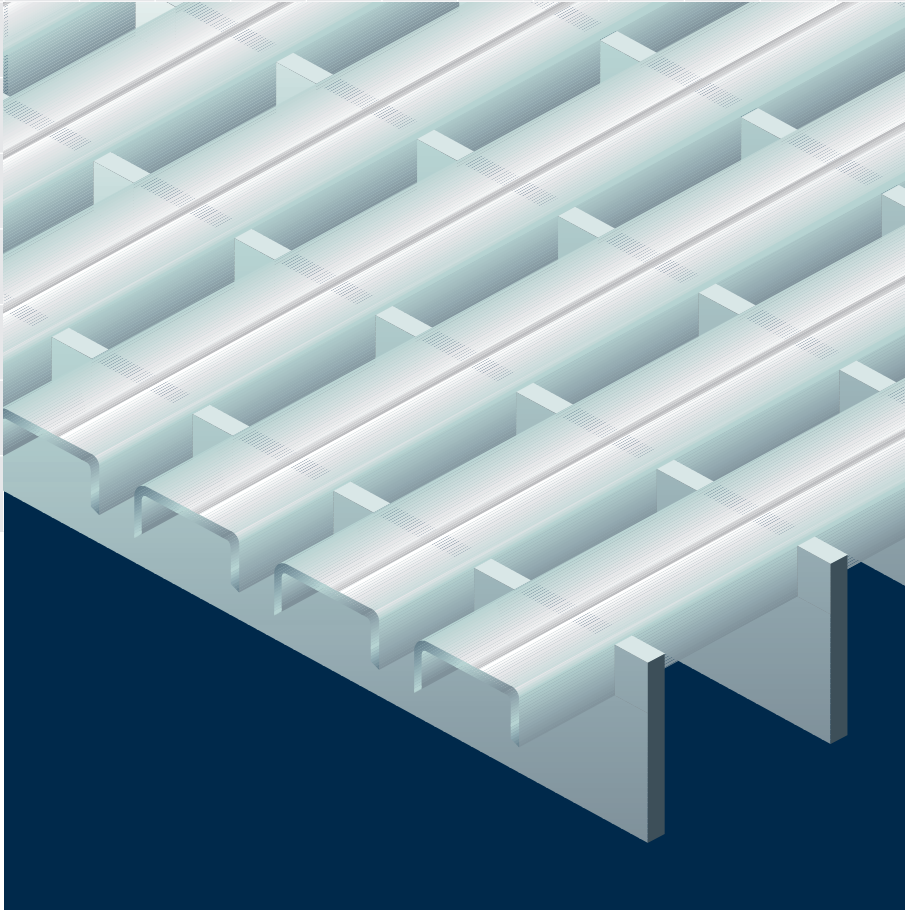
MeiseGrate comb gratings are suitable for various applications: Facades, such as sun screens, drainage channels and air grills; As ventilation grilles used in air conditioning and heating engineering, on inlet and outlet elements of air conditioning and heating units; As covers for overflow channels, in swimming pools.

Comb gratings of the type linear are available in steel, aluminium and stainless steel. Other types are available in aluminium. The MeiseGrate comb gratings are generally produced without edging.



Span (mm)	Public pedestrian access 5 kN/qm or 2kN (200x200mm)	Pedestrian access 3,5 kN/qm or 1,5kN (200x200mm)
100	25x3	25x3
200	25x4 / 30x3	25x3
300	25x5 / 35x3	25x4 / 30x3
400	30x5 / 40x3	25x5 / 35x3
500	35x4 / 40x3	30x5 / 35x3





Special forms

Barefoot gratings

The thing is, though, there are shoeless areas where grating can come in quite handy – at swimming pools, for instance. Reason enough for MeiseGrate to develop a grating which is even

kind to the bare foot!

Bearing bar measurement
30 x 2 mm up to 60 x 2 mm
30 x 3 mm up to 60 x 3 mm

The cross bar is a flat-pressed U-shaped banding. The clearance between these treads is around 14 mm or 6 mm.

They can be manufactured in steel, galvanised or powder coated.

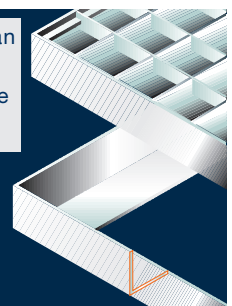
Tree gratings

MeiseGrate tree gratings are basically press locked gratings.

Tree gratings can be seamlessly built into pavements and thus increase the area available to pedestrians. These gratings enable trees to be given a superior maintenance, ventilation and watering service. They even protect the tree roots.



MeiseGrate can supply the angled frame as well



Special forms

Offshore gratings (O-SP-SS)

As its name suggests, offshore grating was originally developed for use on offshore oil rigs. Basically it is a press welded grating which has been strengthened by round bars welded beneath the twisted cross bars and in the same direction as the bearing bars (see photo to the right).

O-SP-SS has a mesh spacing of 38.28 mm x 101.6 mm. The additional 7 mm \varnothing bar welded to the underside of the twist bars, is designed to prevent a 15 mm \varnothing test ball from falling through.

The O-SP-SS range can be manufactured from 20 x 2 mm up to 60 x 5 mm bearing bars.

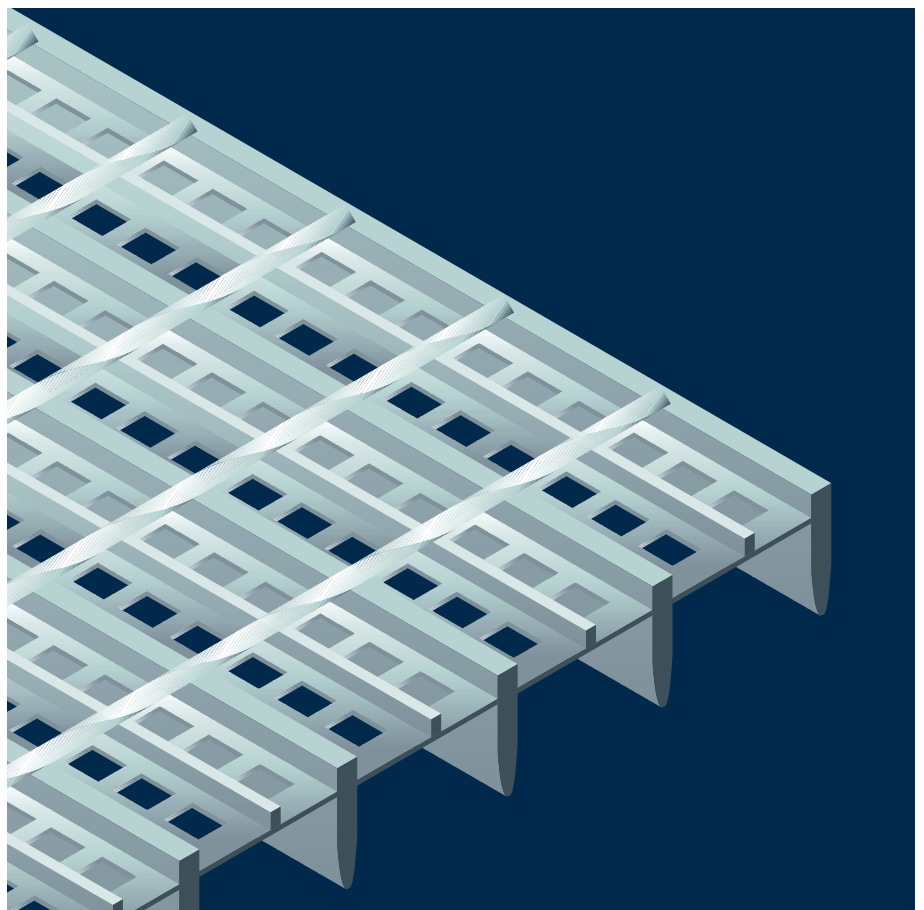
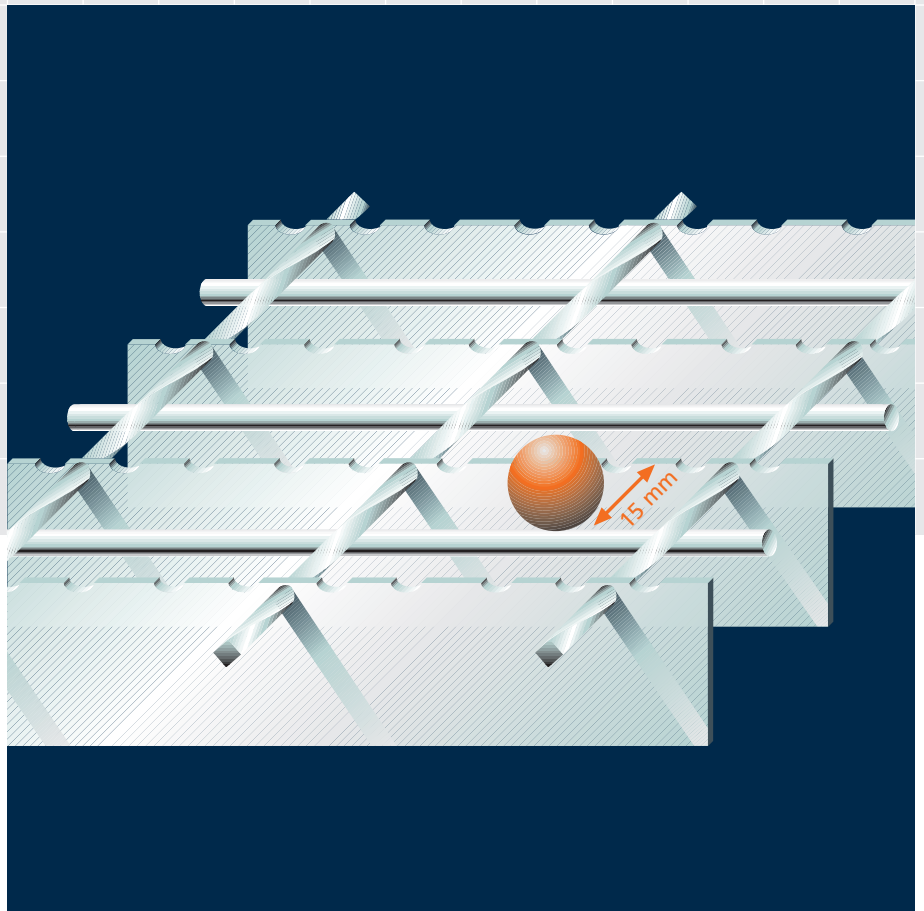
Press welded grating with perforated sheet

We offer a special form of press-welded gratings in 6000 x 1000 mm mats, with a perforated sheet welded between the bearing bars.

The 1.2 mm thick perforated sheet has 8 x 8 mm square openings spaced at 4 mm intervals and is manufactured with a profiled edge for resistance welding.

Cross bar possible in SP anti-skid design.

Mesh division of 34.3 x 38.1 mm is possible.

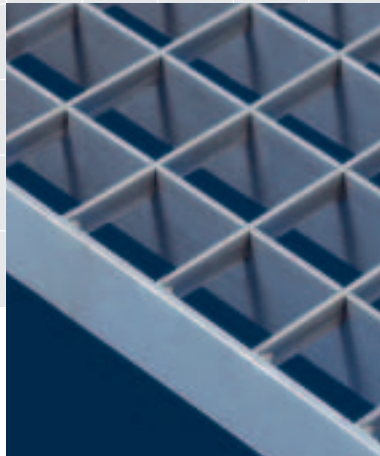




Baking varnishing

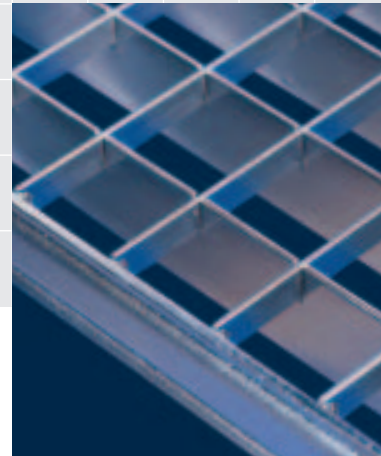
First immersion degreased, then primary coated and painted to 2-KPUR. Available in all RAL colours.

The drying process lasts for an hour at 60 to 80 °C.



Pickling (stainless steel)

The passive layer which processing removes can be restored by pickling the metal in a step tank and then treating it with a passivating solution and VE water.



Electro-chemical polishing (stainless steel)

Carried out by means of an electrolyte bath to produce a homogeneously polished surface with a dirt repelling effect.



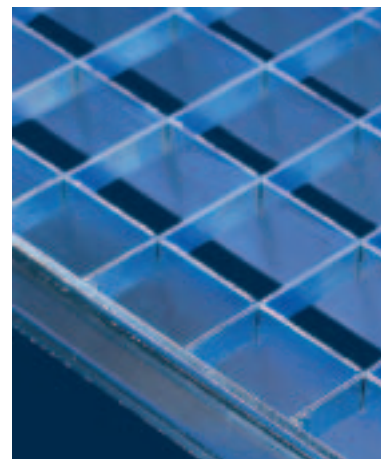
Electrolytic oxidation (aluminium)

Here the metal is degreased, pickled and washed in tanks before being electrolytically oxidised in an anodic bath to E6EV1. Following this process, the metal can be dyed in various colours.



Rickert dip process

A process which is a good qualitative development on bitumination.



Electrolytic galvanising

The material is degreased and pickled in tanks and galvanised in electrolyte baths.

Material and Surface

A further quality feature with MeiseGrate gratings is their service life – which is partly the result of meticulous surface treatment during production.

The various possibilities – from the purely expedient to the high-grade – underpin the unique aesthetic appearance of grating applications.

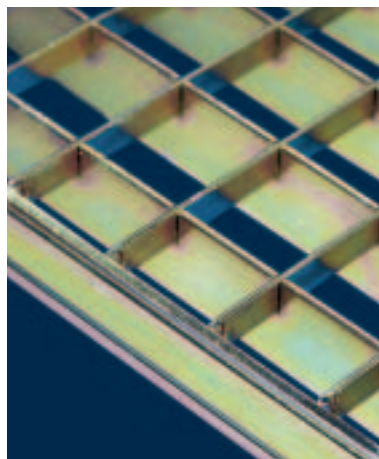
Hot dip galvanising

MeiseGrate steel gratings are routinely hot dip galvanised to DIN EN ISO 1461. Due to the 99.9% purity of the zinc coating, no zinc peels off under normal mechanical load conditions.



Powder coating

Depending on the various materials, the material is degreased, pickled and chromated in tanks. Then the powder is sprayed on automatically and baked on at a temperature of around 170°C. Coat thickness 60–80 my.



Chromating (steel)

After electrolytic galvanising, the chromating process takes place via immersion. The material is paintable in various colours.



