



# The world of Graepel gratings

For underfoot safety and more...

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### Public sector



Graepel-Perl



Graepel-Spikes



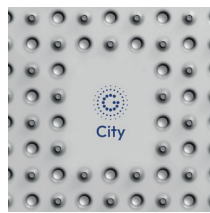
Graepel-Rhombus



Graepel-Garden

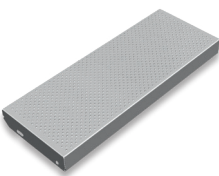


Graepel-Indoor

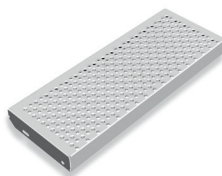


Graepel-City

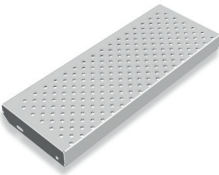
### Straight stairway steps



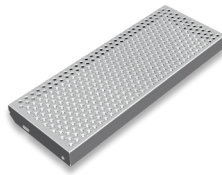
Graepel-Perl



Graepel-City



Graepel-Indoor



Graepel-Garden

### Spiral stairway steps



Graepel-Garden



Graepel-Garden with welded-on riser tube

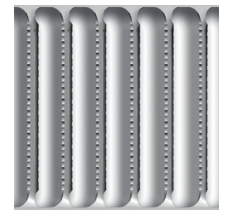
### Industrial sector



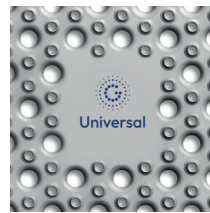
Graepel-Stabil



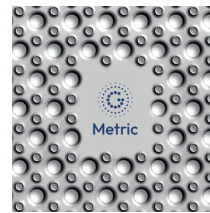
Graepel-Stabil Xtrem



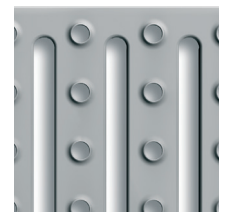
Graepel-Lichtprofil



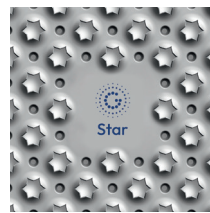
Graepel-Universal



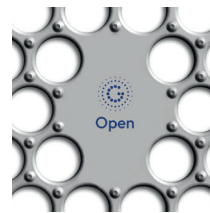
Graepel-Metric



Graepel-Steg



Graepel-Star

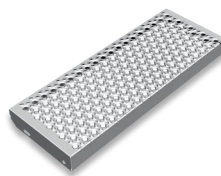


Graepel-Open



Graepel-Quattro

### Straight stairway steps



Graepel-Universal

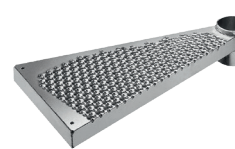


Graepel-Stabil

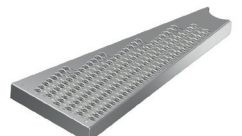
### Spiral stairway steps



Graepel-Universal



Graepel-Universal with welded-on riser tube



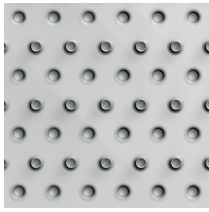
Graepel-Stabil



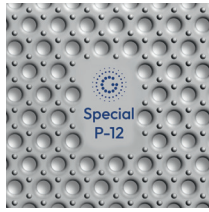
Graepel-Stabil with welded-on riser tube

## Special perforations

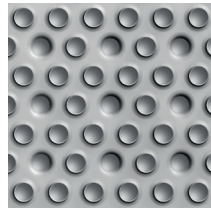
### A) Special perforations (selection)



Graepel-Eco



Graepel-Special P-12



Graepel-Special 14-14



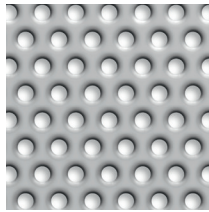
Graepel-Special 4-18

**Naming rule:** Graepel-Special holeØ upward-hole-Ø downward (P stands for Perl)

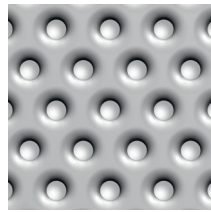
### B) Special perforations without slip resistance (selection)



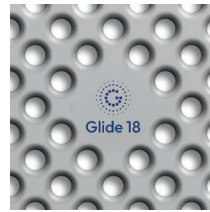
Graepel-Glide 4



Graepel-Glide 12



Graepel-Glide 15



Graepel-Glide 18

**Naming rule:** Graepel-Glide hole-Ø downward

Features like program perforation, edge perforation etc. are not shown as separate perforations but as options.

## Straight stairway steps

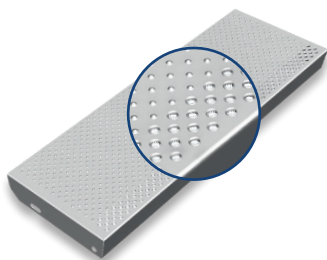


Graepel-Eco



Graepel-Special 4-18

## Special type: Architects step

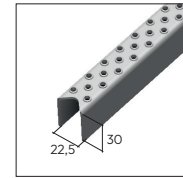


Graepel-Perl with perforated stepping edge

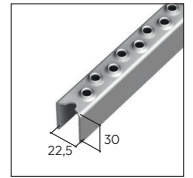
## Ladder rungs

### Naming rule:

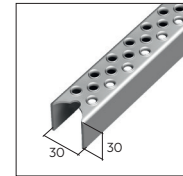
Graepel-Width-Perforation



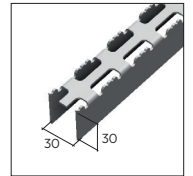
Graepel-22-Rund4



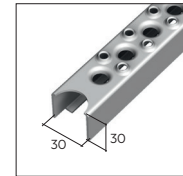
Graepel-22-Rund8



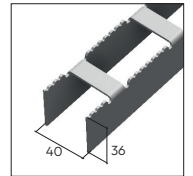
Graepel-30-Rund6



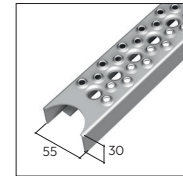
Graepel-30-Grip



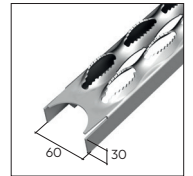
Graepel-35-Metric



Graepel-40-Lichtprofil



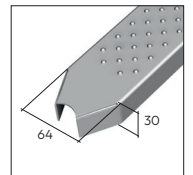
Graepel-55-Metric



Graepel-60-Stabil



Graepel-60-Stabil 90°



Graepel-64-Perl

**Please note:** The steps for all areas are program controllable.

For more information please visit [www.graepel.de/en](http://www.graepel.de/en)



Stairway steps



Ladder rungs

Graepel supports crane builders and manufacturers of wind power plants in managing their mammoth tasks.

# With us at the highest level

Helmets are compulsory on a building site. The helmet protects the head from impacts from above. Underfoot safety is ensured by Graepel gratings.



For more information on this industry and many more solutions, please visit [www.graepel.de/en](http://www.graepel.de/en)

They are particularly suitable for difficult conditions and meet the highest demands on durability and stability, because heavy pollution, vibrations, exhaust air and weather influences make maximum demands on man and machine on the building site.

Manufactured according to individual customer specifications, Graepel supplies treads, platforms and steps with railings for use on construction sites or as ready-to-install assemblies for use on construction machines.

Upward beads ensure slip resistance while debossed holes provide for drainage and thus also for ventilation and the view of underlying machine parts.





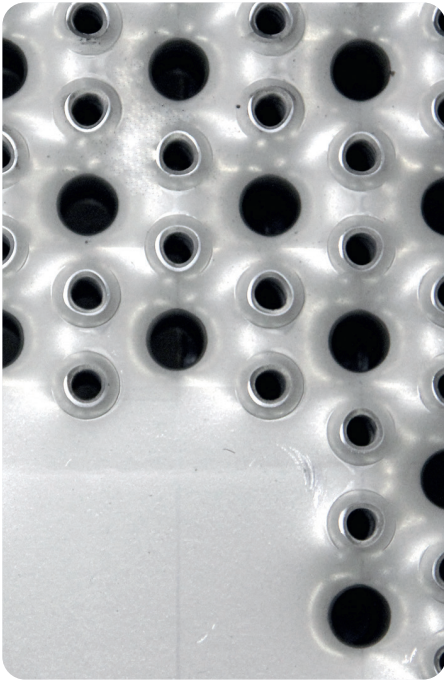
# With us, construction machinery becomes safer

Construction machines do a hard job. Graepel treads ensure that machine operators can get on and off easily and safely.

In addition to reliability and safety, a design of construction machinery, such as wheel and hydraulic excavators, front-end loaders and crawler vehicles, meeting the exact requirements of the operator becomes more and more important.

Graepel produces e.g. steps with integrated tool box and perforated stepping edge to prevent slipping. Graepel gratings can also make crane booms accessible.

The program control allows the perforation to be adapted to contours or to create unperforated areas in the surface pattern, where holes, company logos or cut-outs can be placed later.



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## For power packages

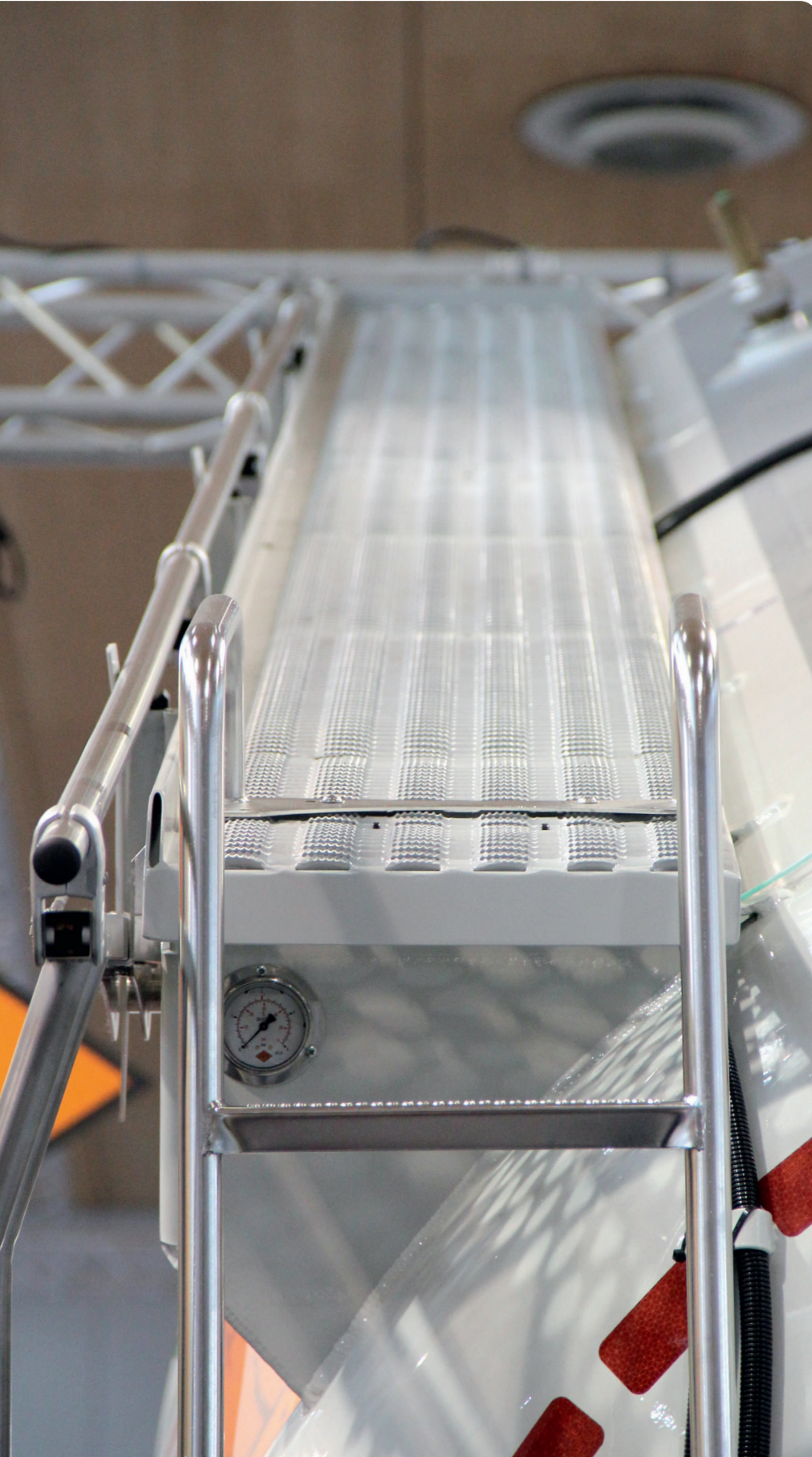
Graepel has developed assemblies which can be used wherever differences in height must be overcome on construction machinery. We manufacture e.g. two- or three-level steps for accessing the driver's cab. They are fitted in between the wheels and can vary in length depending on the manufacturer and type. The perforation Graepel-Universal ensures slip resistance.

These steps, which can also be combined with an integrated, lockable tool box, come as a complete assembly. The tool box can be made of painted steel, galvanized steel or plastic as requested by the customer.



This step with integrated tool box also has a flexibly suspended lower tread.





If vehicle manufacturers use Graepel gratings for equipping their trucks, it's only because both of them have the same standards for quality and perfection.



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# With us safely on the road

Everything would stand still without commercial vehicles. However, they can only fulfill their purpose if they are safe to use.



Because each commercial vehicle is different, we develop customer-specific solutions based on our Graepel gratings. We produce e.g. runways with beveled skirting board for tank and silo vehicles, treads and steps for various commercial vehicles (ambulances, distribution vehicles, recycling vehicles, etc.), service platforms for semitrailers and containers as well as ramp tracks and ramps for trailers and delivery vehicles.

All these components have the same task: to enable the operator to get on and off safely. They are designed in such a way that they fit perfectly into the individual appearance of the vehicles and are supplied pre-assembled and ready-for-installation: All at one stop.



# Handling loads with us

Container terminals are the hub for trade and cargo handling. Despite high automation, the human factor is still decisive.

Modern container terminals are top performers. Short turnaround times guarantee high profitability. This “organism” is a broad application area for Graepel products.

Whether as steps on container stackers and terminal tractors or as maintenance platforms and stairs of cranes and bridges: Graepel gratings, steps and treads provide for underfoot safety and thus for more movement.

And finally, more mobility leads to more speed and productivity in the port. And that keeps the economy going.

## For heavyweight machinery

Reachstackers are superior in transporting heavy loads in the most extreme conditions: in ports, in metal processing, mining and other heavy load applications, they offer reliable robustness and dependability.

Thanks to an outstanding manoeuvrability and superior handling speed, reach stackers achieve maximum space utilization on container terminals and ports. Graepel provides reliable and proven components for the safe entry and exit of the drivers.



Tread of type Graepel-Stabil, hot-dip galvanized steel, all-round welded-on with integrated stepping edge

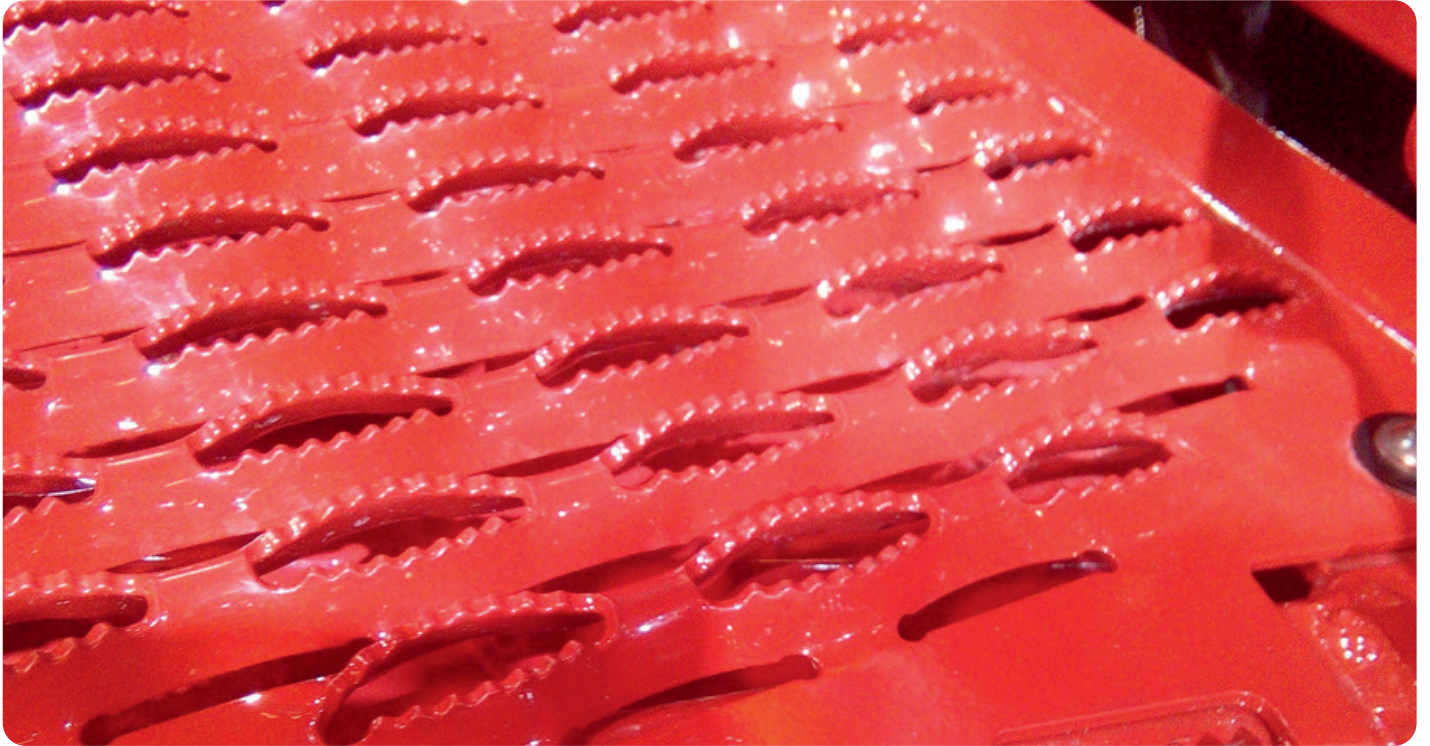


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# Harvesting success with us

Whether it is a matter of developing individual parts or supplying entire assemblies: Graepel meets the special requirements in agriculture.



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Agricultural machines work fields and meadows, forest areas and vineyards, lane by lane. They plow and sow, fertilize and select, clear and mow, chop and sieve, separate and press.

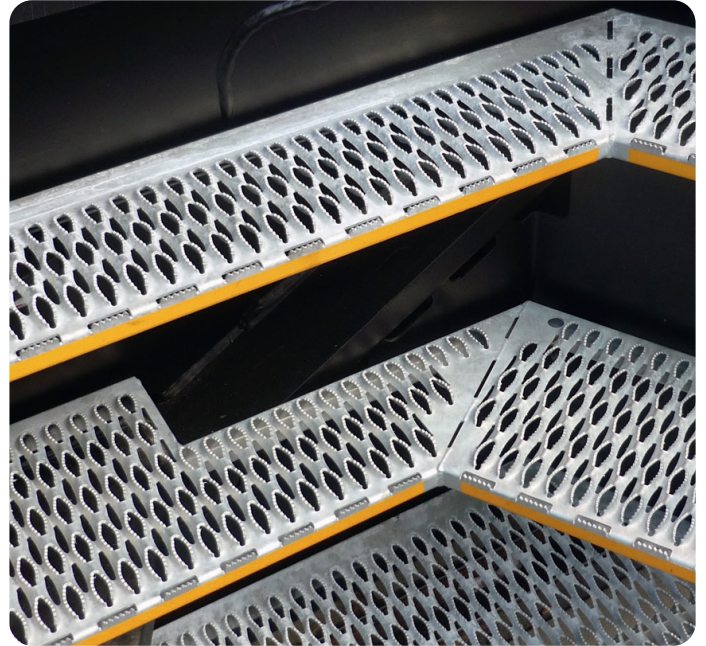
Real all-rounders are used which can be combined with various attachments, or highly effective specialized machinery. For the most diverse product families of agricultural machinery, Graepel offers treads, platforms and runways with maximum underfoot safety.



Graepel gratings ensure underfoot safety as reliably as agricultural machines work the land lane by lane.

# Moving a lot with us

Railway vehicles are in constant use for a long time. That is why their treads have to meet highest demands regarding life and load capacity.



Because of their high quality standards, Graepel treads are extremely suitable for assembly onto railway vehicles.

Graepel safety gratings are increasingly used as walking surfaces on freight wagons. They can be mounted on the roof for inspecting the containers, but also as platforms between the wagons. They can also be used as coverings or tracks for wagons which transport vehicles of various types by rail, e.g. for tunnel or car trains.

They can also be used as decks or tracks for wagons that transport a wide variety of vehicles by rail, for example on tunnel railroads or car trains. As assemblies, Graepel gratings are used as steps on locomotives of various manufacturers.



For more information on this industry and many more solutions, please visit [www.graepel.de/en](http://www.graepel.de/en)

## For passengers

This tread has been specifically designed to allow passengers to safely get in and off regional trains. It bridges the distance between the train and the platform, thereby increasing the safety of the passengers.

The serrated stepping edge prevents anyone from slipping over the edge.



One-level treadboard with all-round welded-on anti-skid edge of type Graepel-Universal, stainless steel, pickled.







Picture: Walking surface on a brewery plant in Voronezh (co. Krones AG)

# Reaching new dimensions with us

Even if not all projects are as spectacular as the fairground rides all over the world, accessibility is a prerequisite for the safe operation of installations irrespective of their size.

Graepel gratings offer significant advantages over open mesh flooring in steel construction: They offer highest load capacities at a low dead weight. And less substructure is required due to the load capacity in longitudinal direction.

With slip resistance and drainage effect, Graepel gratings and steps provide for safe accessibility all year round.

Graepel has developed a catwalk system for accessing roofs, containers, tunnels or facades which offers various standard modules with integrated railings, which can be combined as desired.

This makes it easy to adapt internally mounted or all-round catwalks to a wide range of different tasks.



For more information on this industry and many more solutions, please visit [www.graepel.de/en](http://www.graepel.de/en)



# Climbing up with Graepel

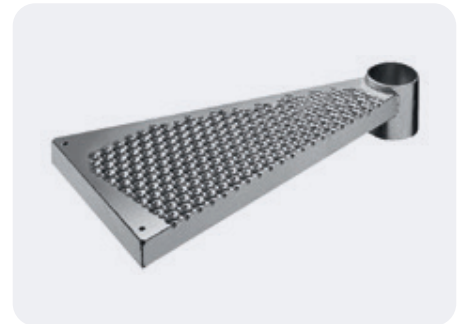
Individual staircase solutions, made to measure and precisely tailored to your needs – use our guide to create your dream spiral staircase from standardized components.

Spiral staircases are suitable as a space-saving alternative staircase solution both outdoors and indoors, as the flight of stairs winds around a supporting column or spindle.

Graepel spiral staircases – regardless of whether they are used in public or private areas – comply with DIN EN 1991-1, which means that we guarantee that the steps can be loaded with 2 kN on a surface of 50 x 50 mm, which corresponds to a load of 5 kN/m<sup>2</sup>.

The spiral staircases are hot-dip galvanized in accordance with DIN EN ISO 1461 as standard; they are also available in untreated steel or stainless steel on request.

All fasteners (fixing and assembly parts) are supplied in stainless steel.



There are various surface embossings to choose from. Here: Graepel-Universal with perforated leading edge



## With us in the spotlight

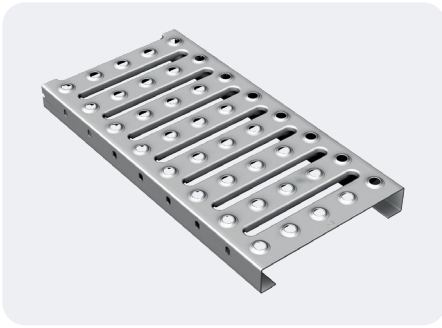
Our gratings allow for a dazzling presentation and have the potential to become an eye-catcher in public buildings.

Graepel gratings are primarily used to ensure underfoot safety. Due to their pattern of holes and beads, they have a graphical structure that also adds an aesthetic appeal to the gratings.

That is why architects are increasingly using the gratings as ceiling lining and facade cladding. They are air and light permeable, dissipate waste heat, reduce solar radiation, and the view through the gratings is prevented. And the metal “dress” has another advantage: it also provides mechanical protection.

Graepel also offers suitable steps for straight and spiral stairways for an attractive design of exterior and interior spaces.

The gratings are now also offered in various colors, but remain as slip-resistant as ever, despite the coating, and make individual projects an eye-catcher.



The Graepel-Steg perforation can be used in a variety of ways: as runway or for enclosures and covers.



## For builders

The aesthetic look of our perforations persuaded architect Daniel Libeskind to use Graepel gratings for the extension of the Military History Museum in Dresden. He has driven a wedge through the historic building to symbolize the destructive power of war. For the design of the facade, he used Graepel gratings made of anodized aluminum. The metal itself, the rhythm of the perforation and the strictly symmetrical arrangement of the metal profile gratings

allow associations to the military and correspond to the exhibition. The tip of the wedge points to the place where the bombardment of the city started on 13 February 1945.

In the end, the wedge itself becomes an exhibit as its interior is accessible and offers visitors views of Dresden.



For more information on this industry and many more solutions, please visit [www.graepel.de/en](http://www.graepel.de/en)

# With us through time and space

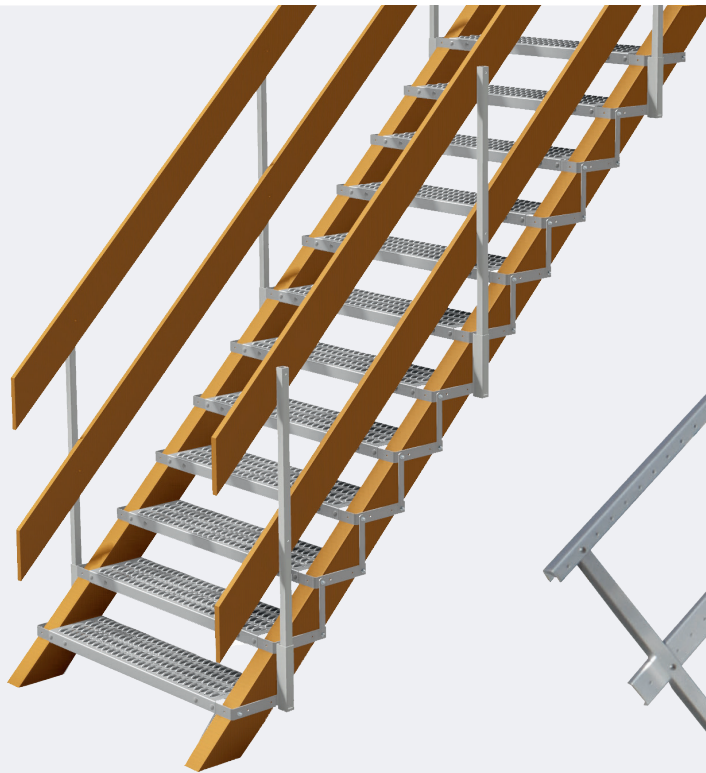
Although our gratings are designed for continuous use, they can also be used for temporary purposes. Graepel offers different standard solutions.

Our pedestrian bridges can bridge trenches up to a width of 3.80 m temporarily. The integrated access ramp allows also wheelchair users and pedestrians with baby carriages to safely cross trenches. Thanks to the aluminum construction, they can be folded, stacked and transported without much effort.

To make slopes accessible, Graepel offers special embankment stairs made of aluminum that can be adapted to the slope. They are delivered with railings. If loose surfaces - as on building sites - must be made accessible also with heavy vehicles, Graepel flooring sheets are a safe option for making unpaved areas temporarily or permanently accessible. They are reusable.



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Construction stairway overcomes a max. height of 3 meters



Aluminum stairway overcomes a max. height of 3 meters, variable in height, rise and slope

Note: All stairways are designed for up to 1.5 kN individual load and 3.5 kN/m<sup>2</sup> evenly distributed load

## Going up with a movable stairway system from Graepel

### Construction stairway

The standard version of the construction stairway is made of aluminum (Graepel-Stabil steps) and consists of a stairway package of approx. 70 kg. You only need 2 two-by-fours, 4 planks and mounting screws.

Simply insert two sufficiently long two-by-fours on the right and left side, then put upright and unfold the stairway like an accordion. Bolt the railing posts and planks, these serve as handrail and knee protection. Ready is a stairway that must simply be set-up and fastened.

### Aluminum stairway

This flexible stairway assembly kit is designed for human load. The steps (Graepel-Universal) are bolted between two stable aluminum strings. The elongated holes in the strings and steps allow you to modify the rise of the stairway at installation. You can even create a flat surface.

The standard version consists of 15 steps. All required components and assembly instructions are completely delivered. Other lengths are also available on request.



# Play it safe with us

Plants for alternative energy generation shall be trouble-free at long sight and must therefore be maintained on a regular basis. However, their walking surfaces made of Graepel gratings and steps are naturally low-maintenance and easy-care.

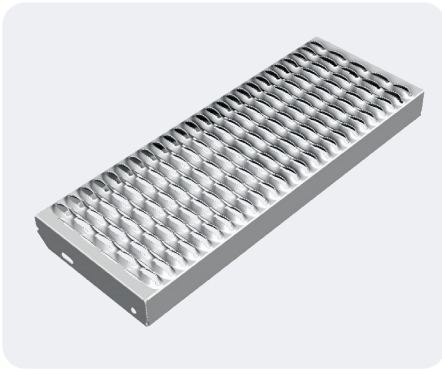
Due to their large open area, the perforations of type Graepel-Stabil and Graepel-Stabil Xtrem are particularly suitable for outdoor applications with high dirt volume and precipitation. Therefore, they are ideally suited for running boards on fermenters of biogas plants.

Hot-dip galvanizing ensures a long service life even under extreme stress due to weather conditions and aggressive substances.

For wind power plants, Graepel offers a variety of components: entrance stairways and resting platforms for tower construction as well as walking surfaces and covering areas for the gondola. The aluminum design is particularly suitable for reducing the weight in the gondola.



For more information on this industry and many more solutions, please visit [www.graepel.de/en](http://www.graepel.de/en)



Graepel offers various straight stairway steps for the public and industrial sectors. The step of type Graepel-Stabil is only suitable for use in industrial plants and offers high slip resistance and drainage.



## For all-rounders

Using Graepel gratings for all walking surfaces is a safe decision: Graepel supplies catwalks with railings and mounting brackets, steps and platforms according to individual specifications. This allows for a high degree of flexibility in your projects.

Graepel offers various straight-running stair treads for the public and industrial sectors. The Graepel-Stabil step is exclusively suitable for use in industrial facilities and offers a high degree of slip resistance and drainage.

In high and low tides, in all weathers:  
Thanks to Graepel gratings, landing  
docks are accessible all year round.



# Withstanding wind and waves with us

Underfoot safety and secure grip are provided by Graepel gratings made of sea water resistant materials.

Due to extreme weather conditions, workplaces in offshore facilities require a maximum degree of slip resistance.

We keep that in mind. The design and material of Graepel runways, steps and ladder rungs are perfectly adjusted to the extreme conditions at sea and make them excellent for use in marinas and fish farms.

Offshore wind power plants require a platform on the turbine house where the servicing staff can be safely dropped off from the helicopter.

We supply complete platforms of type Graepel-Star of saltwater-proof aluminum which were painted in the colors required by the regulations for helicopter decks on offshore wind power plants.

For drilling platforms, Graepel offers offshore steps with perforation Graepel-Stabil. The stairway step is equipped with an anti-skid edge which prevents slipping off.



For more information on this industry and many more solutions, please visit [www.graepel.de/en](http://www.graepel.de/en)

# Setting accents with us

Visibility, safety, design - with Graepel-ColorGrip coating, Graepel gratings can be individually and durably designed in the desired color and at the same time safely protected against corrosion.

Graepel-ColorGrip coatings offer many color design options for your gratings and components. At the same time, the coating ensures high slip resistance of class R13 and effective protection against corrosion. This unique combination enables the use of powder-coated perforated plates and assemblies in numerous areas of application.

Offshore are often only reached by maintenance teams can often only be reached by helicopter. The platforms, also known as heliost platforms, must comply with clearly defined legal requirements. In addition to a high level of slip resistance, this also includes a colored design of the platform surfaces to clearly mark escape, rescue and evacuation routes.



**We will be happy to advise you.**

Our staff will be happy to help you.

Please feel free to call us at any time or send us an e-mail:

**+49 (0) 5432-850**  
**gl.info@graepel.de**