

Green Cities

SYSTEMATIC TREE PROTECTION



MeierGuss – synonymous with expertise in tree protection for decades



Numerous successful projects in Germany and many other European countries have made MeierGuss synonymous with tree protection systems. Its ranges have been continuously enhanced in an ongoing dialogue with planners and city officials and offer countless options for design and planning. MeierGuss can also provide you with the best possible support for project-specific solutions.

The following pages contain a selection of case studies from Germany and further afield. Be inspired by the wide variety of tree protection systems on show – an indispensable design element for green cities.



A stylized map of Central Europe, including Germany, Poland, Czech Republic, Austria, and parts of Scandinavia, is shown in a light gray background. Overlaid on this map are numerous city names in a sans-serif font. The names vary in size and weight (bold vs. regular), suggesting a hierarchy or frequency of occurrence. The cities are distributed across the map, with a higher concentration in the German-speaking regions. The names are in shades of gray, with some being significantly bolder and larger than others.

City names visible on the map include:

- Schwerin
- Bad Salzungen
- Beuren
- Zug
- Frankfurt
- Jona
- Landau
- Bochum
- Bad Camberg
- Lachen
- Dinslaken
- Bielefeld
- Gent
- Malmö
- Berlin
- Oberstdorf
- Lenzburg
- Dusslingen
- Minden
- Stockholm
- Helsingborg
- Montabaur
- Hamburg
- Einsiedeln
- Cluj
- Langerwehe
- Friedberg
- Zürich
- Nacka
- Bottrop
- Augsburg
- Pfäffikon
- Salzburg
- Kiel
- Groningen
- Antwerpen
- Bern
- Binningen



...in focus

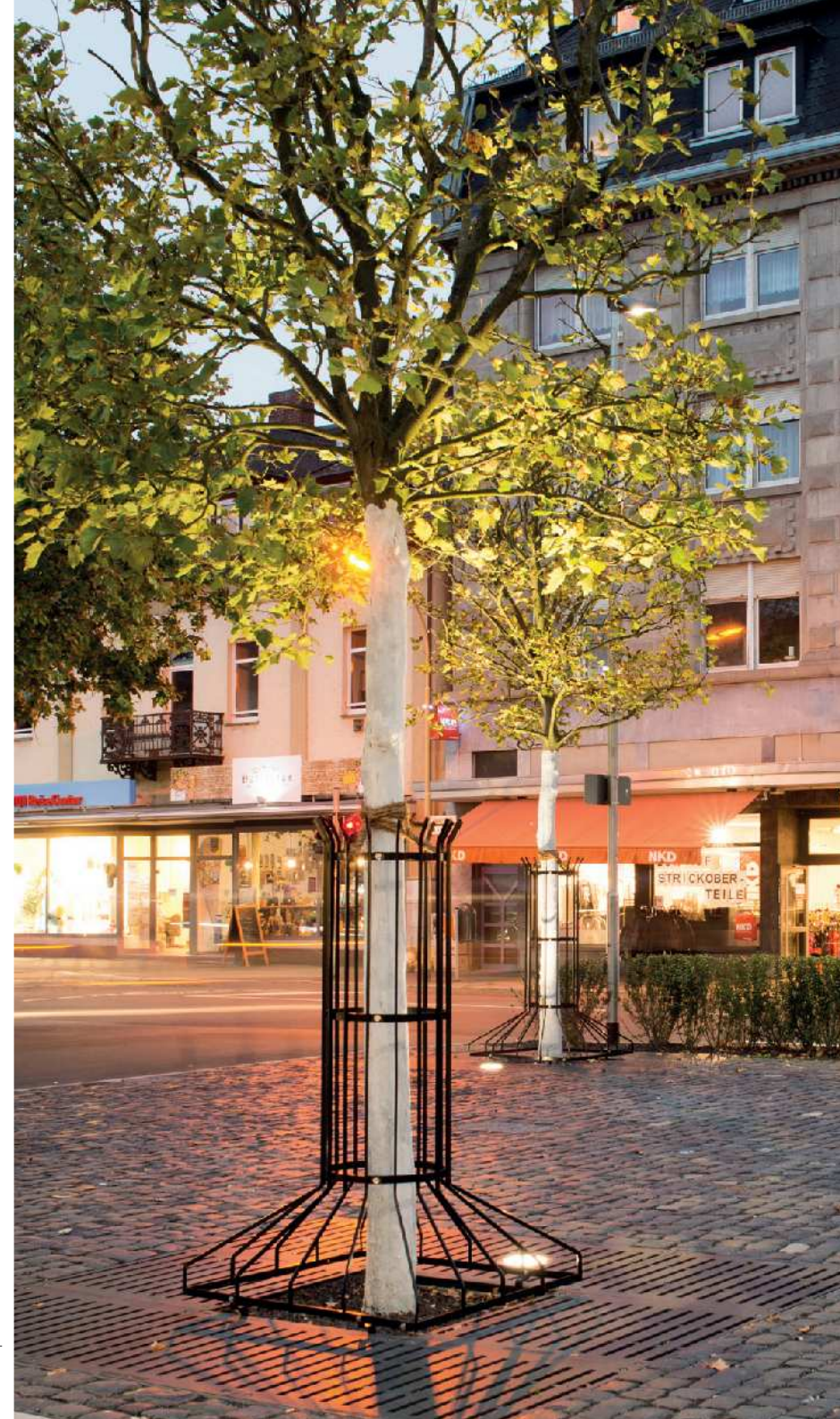


Groves of trees and boulevards are the oases of cities, ensuring a high quality of life for everyone. The trees are generally given little space in order to utilise the available space for traffic. However, these are spaces that a tree urgently needs to develop and grow healthily.

Tree protection systems from MeierGuss help to safeguard the trees' growth and preservation.

Our standard cast-iron range offers many advantages. Due to its ability to "grow with the tree" and its great functionality and robustness, a MeierGuss tree grill is practically unbeatable from an economic and ecological viewpoint. As a visually appealing product, it forms a symbiosis with the trees, thereby creating a welcoming space.

Besides its visual appearance, the tree's healthy development is also the focus of property-specific solutions.



Beuren | Germany



When the square outside the Panorama Therme thermal baths was being re-developed, the modern LATERAL® 2.0 tree grill was chosen to contrast with the light natural-stone surface.

Using the cast-iron tree grills to cover the soil around the trees allows the seating to be brought up close to the trunks while still preventing the tree pits from being compacted. This allows optimal use of the space, while the trees provide a shaded spot where people can linger in summer. The multifunctional opening inside the tree grills allows one or two Dot-spot® LED spotlights to be integrated into each one to create a pleasant atmosphere in the evenings too.





- Panorama Therme Beuren
- Redevelopment of the square outside and the space for outdoor dining
- Linear-style LATERAL® 2.0 tree grills including Dot-spot® LED spotlights
- Size 2,000 x 2,000 mm





Schwerin | Germany



- Schlachtermarkt
- Jet-style CLASSICO®2.0 tree grills including LIGERO® tree guards
- Size 3,000 x 3,000 mm
- Unique feature: manhole covers featuring Schwerin's coat of arms were also installed in this exquisitely redeveloped square.



The 3,000 x 3,000 mm tree grills selected for the redesigned Schlachtermarkt provide ideal protection for the square's trees.

Their city-centre location means that the tree pits tend to dry out, particularly in dry summers. The 9 m² area laid with special open-pore plant substrate in accordance with FLL (Forschungsgesellschaft Landschaftsentwicklung Landschaftsbau e.V.) specifications allows a certain amount of water to be stored. A process of "return evaporation" during hot periods helps to improve the city-centre climate.





Bielefeld | Germany

- Neumarkt
- Redesign of the whole site, including building a new hotel
- Jet-style CLASSICO® 2.0 tree grills including LIGERO® tree guards or collision protector
- Size 2,000 x 2,000 mm and diameter 2,000 mm



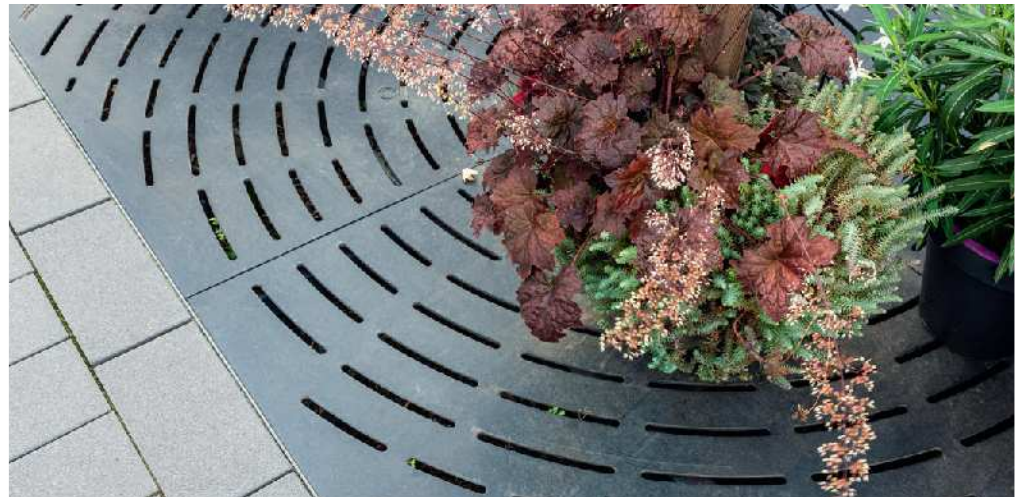
The whole area around the Neumarkt was redesigned and integrated into the contemporary planning concept as various new buildings (including a hotel) were constructed. As the area also sees heavy bicycle traffic, the CLASSICO® 2.0 tree grills with their special slit design offer an ideal response to being run over. Whatever direction you approach it from, you will almost always pass over the slit in the tree grills at a comfortable 90° angle.







Bottrop | Germany



MeierGuss tree grill systems 2.0 enable project-specific solutions to be realised. The cast-iron tree grills are installed with a dip in the middle relative to gutter and street level. This ensures that the soil around the trees is protected without the problem of any differences in height. Local bars and restaurants are able to make full use of almost all the space.



- Redevelopment of the pedestrianised zone
- Radial-style RONDELLO® 2.0 tree grills including LIGERO® tree guards
- Size 2,500 x 2,500 mm



Berlin | Germany



- Redesign of the area around the Marienkirche
- Jet-style CLASSICO® 2.0 tree grills
- Size (diameter) 2,000 mm





The open space around the Marienkirche church at the foot of the TV Tower in Berlin was made more open and welcoming. The concept was devised by landscape architects Levin Monsigny, who had already redeveloped the area around the TV Tower.

The newly planted trees are to be protected by jet-style CLASSICO® 2.0 tree grills from MeierGuss.



Leipzig | Germany

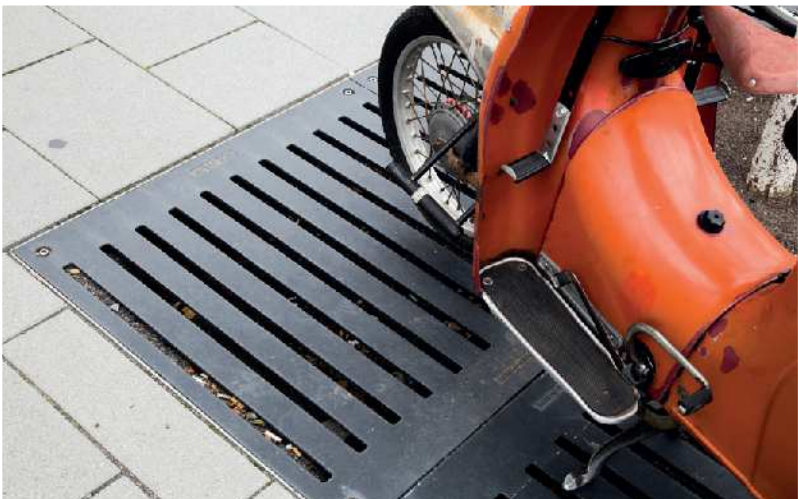


- Redevelopment of Liebigstraße and Lützner Straße
- Uniform design across several construction stages
- Linear-style LATERAL®1.0 tree grills
- Size 2,000 x 3,000 mm



6 m² covers for the soil around the trees were chosen in accordance with the requirements of DIN 18916 and the FLL (Forschungsgesellschaft Landschaftsentwicklung Landschaftsbau e.V.) and ensure clear lines thanks to the linear look of the LATERAL®.





Dinslaken | Germany



As part of the opening of the Neutor-Galerie shopping centre, the square outside – Neutorplatz – was also redeveloped. As the square is also to be used for markets and festivals in the future on account of its open design, the rows of trees running around it need particular protection.

The tree grills had to be adapted to the grid pattern on the cobbled surface while taking account of a root bale diameter of 1,200 mm. Linear-style tree grills from the LATERAL® range provided the perfect solution.





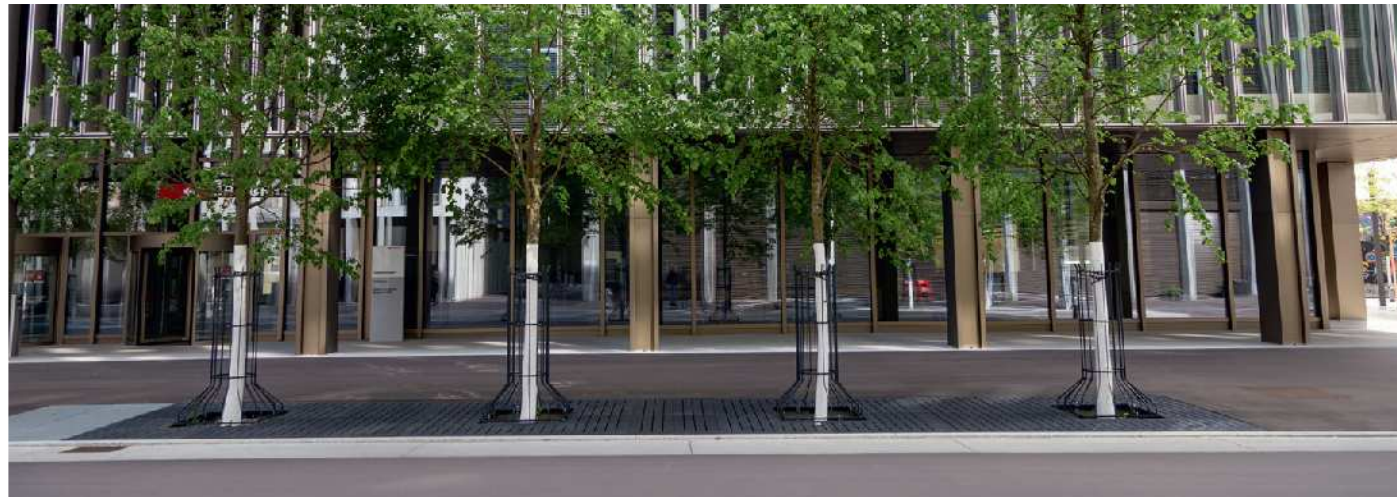
- Neutorplatz
- Redevelopment of a central event space and meeting place
- Linear-style LATERAL® 1.0 tree grills
- Sizes 6,000 x 1,500 mm / 3,000 x 1,500 mm / 2,000 x 2,000 mm



Bern | Switzerland



The large surface area of the cast-iron tree grill, whose extended shape makes it the perfect fit for the modern design of the buildings around it, guarantees a suitable gas and air exchange for the species of tree planted here and gives them ideal conditions for life.



- Bern Wankdorf-City
- Development of a new urban area for mixed residential and office use
- Linear-style, large-area LATERAL® 1.0 tree grills in line with individual specifications of the project planners including LIGERO® tree guards
- Size 13,000 x 2,500 mm



Pfäffikon | Switzerland

The new “Zentrum Staldenbach” in Pfäffikon has a stylish, brightly coloured look and is a stone’s throw from the SBB railway station. The QUADRAL® 1.0 tree grills were chosen for their design and integrate perfectly into the surrounding surface.

- Zentrum Staldenbach
- Newbuild project with mixed use (residential and commercial/hospitality)
- QUADRAL® 1.0 tree grills
- Size 2,000 x 2,000 mm





Oberstdorf | Germany

Particular requirements were placed on the covers for the soil around the trees when the town centre was to be redeveloped because they are situated next to the road. At the same time, the parking situation was also to be improved.

The 2.0 system guarantees a load-bearing capacity of 50 kN for self-supporting structures. This allows the tree to develop fully as there is no need to insert a steel substructure that would have a detrimental effect.

- Redevelopment of Markt Oberstdorf town centre
- Modernisation of Nebelhornstraße
- Radial-style RONDELLO® 2.0 tree grills including LIGERO® tree guards
- Size 2,000 x 2,000 mm







- Allerpark leisure and adventure park including VfL stadiums and centre
- Radial-style RONDELLO® 1.0 and 2.0 tree grills including LIGERO® tree guards
- Sizes 2,500 x 2,500 mm and 1,800 x 1,800 mm

Wolfsburg | Germany



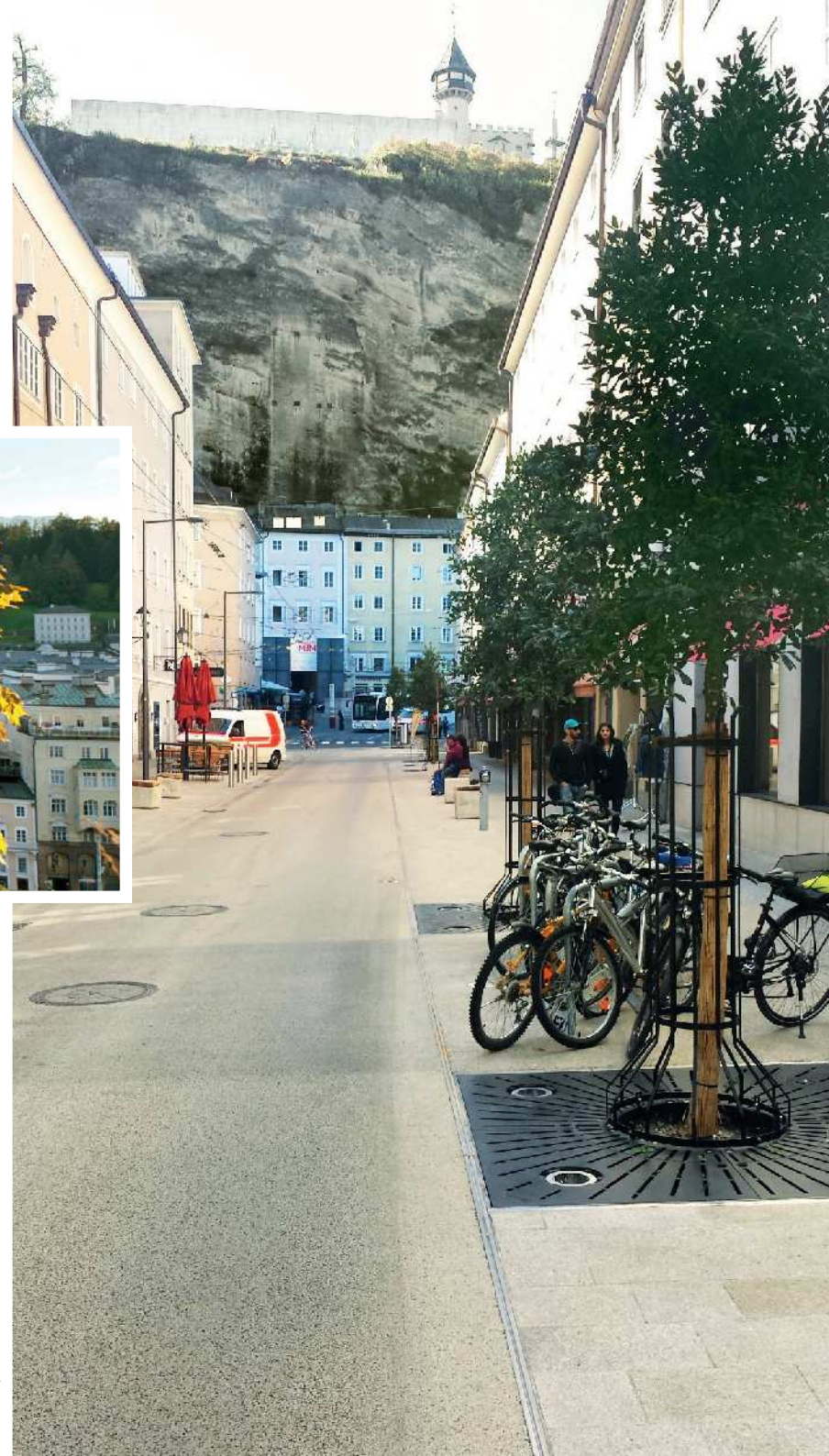
Wolfsburg is home to a large number of leisure and adventure parks, which make it an attractive destination for tourists. Developing this site on the banks of the Aller river, including planting new trees, formed the basis for an integrated design concept spread across several construction stages.



- Redevelopment of Griesgasse as a promenade
- Jet-style CLASSICO® 2.0 tree grills including LIGERO® tree guards
- Size 2,000 x 2,000 mm
- Integrated LED spotlights



Salzburg | Austria



Changes to the traffic flow in the city centre also saw Griesgasse redeveloped as a promenade that only buses, taxis and delivery vehicles are permitted to drive down.

The modern jet-style design of the CLASSICO® 2.0 series was further enhanced by the integrated LED spotlights and offers a pleasing contrast to the houses steeped in history.



- Construction of the new Langerwehe-Pier district
- Radial-style RONDELLO® 2.0 tree grills including LIGERO® tree guards
- Size 2,000 x 2,000 mm

Langerwehe | Germany

The new Langerwehe-Pier district was created because some people in the municipality of Inden were being relocated as a result of expanding lignite mining operations. The new trees that were being planted had to be protected in a contemporary style without neglecting visual and design characteristics.





Arnhem | Netherlands



The city of Arnhem has been making successful use of tree grills from the CLASSICO® range for many years now. The square surrounding St Eusebius' Church is an ideal spot to linger thanks to the large trees and the fantastic backdrop provided by the church itself. As road sweepers also pass over the square on a regular basis, protecting the trees and ensuring their healthy growth is the top priority.

- St Eusebius' Church ("Grote Kerk")
- Jet-style CLASSICO® 2.0 tree grills including Samson tree guards (similar to LIGERO®)
- Size 2,000 x 2,000 mm



Antwerp | Belgium



- Various locations across the city
- Project solution for the city of Antwerp based on a RONDELLO® 2.0 tree grill, modified with a 70 kN load-bearing capacity and larger ventilation cross-section
- Size 1,500 x 1,500 mm and 1,800 x 1,800 mm



Jonen | Switzerland

As part of the renovation of Dorfstraße, complete with traffic-calming measures and new pedestrianised zones, spacious tree-lined spots were also created. To handle this enlarged tree pit, the self-supporting CLASSICO® 2.0 tree grills with a 2,000 mm diameter were supplemented with extension segments and an outer load-bearing structure. LATERAL® 1.0 tree grills had already been installed successfully in parking areas several years ago.



- Renovation of Dorfstraße
- Jet-style CLASSICO® 2.0 tree grills
- Size: (diameter) 2,800 mm
(project-specific solution)

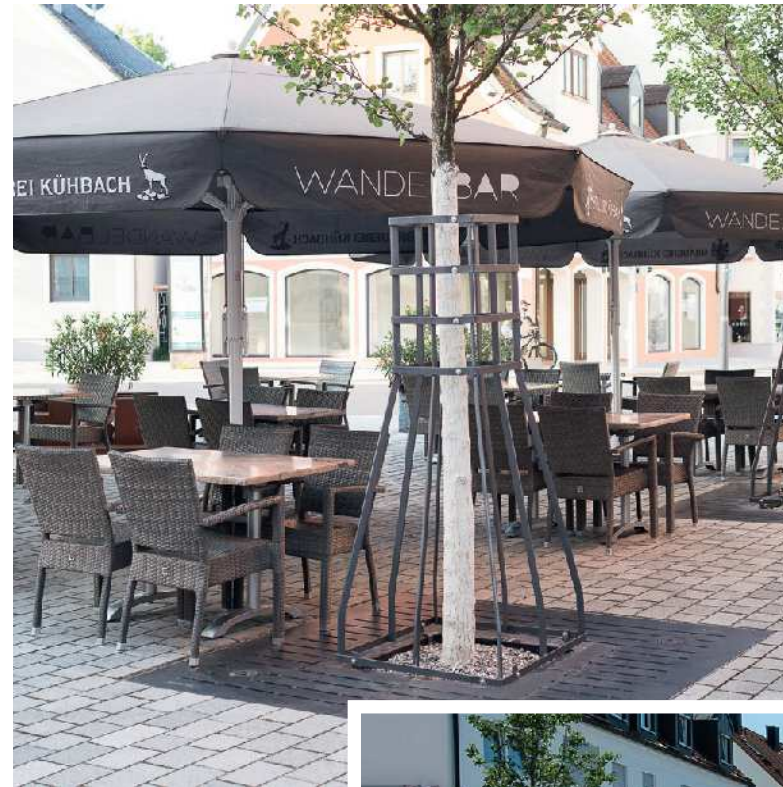




Aichach | Germany

The tree itself is the central design element. Tree guards and covers for the soil around the trees should take this into account and provide only a discrete visual accompaniment to them.

This was why the modern linear design of the LATERAL® 2.0 tree grill was chosen for this extensive redevelopment project. The straight-lined look is reflected in the tree guards selected.



- Renovation of cross-town thoroughfare
- Linear-style CLASSICO® 2.0 tree grills including KASTELL® tree guards
- Size 2,000 x 2,000 mm





Montabaur | Germany



With the Fashion Outlet Center Montabaur, a spacious promenade with numerous shops and restaurants was created in the ICE-Park, between the intercity railway station and the city centre. The radial look of the RONDELLO® 2.0 tree grills echoes the design of the oval-shaped buildings, while the angular outer dimensions provide a contrast and allow optimum integration into the cobbled surface.

- Construction of the new Fashion Outlet Center (FOC) in Montabaur's ICE-Park
- Radial-style RONDELLO® 2.0 tree grills
- Size 2,000 x 2,000 mm



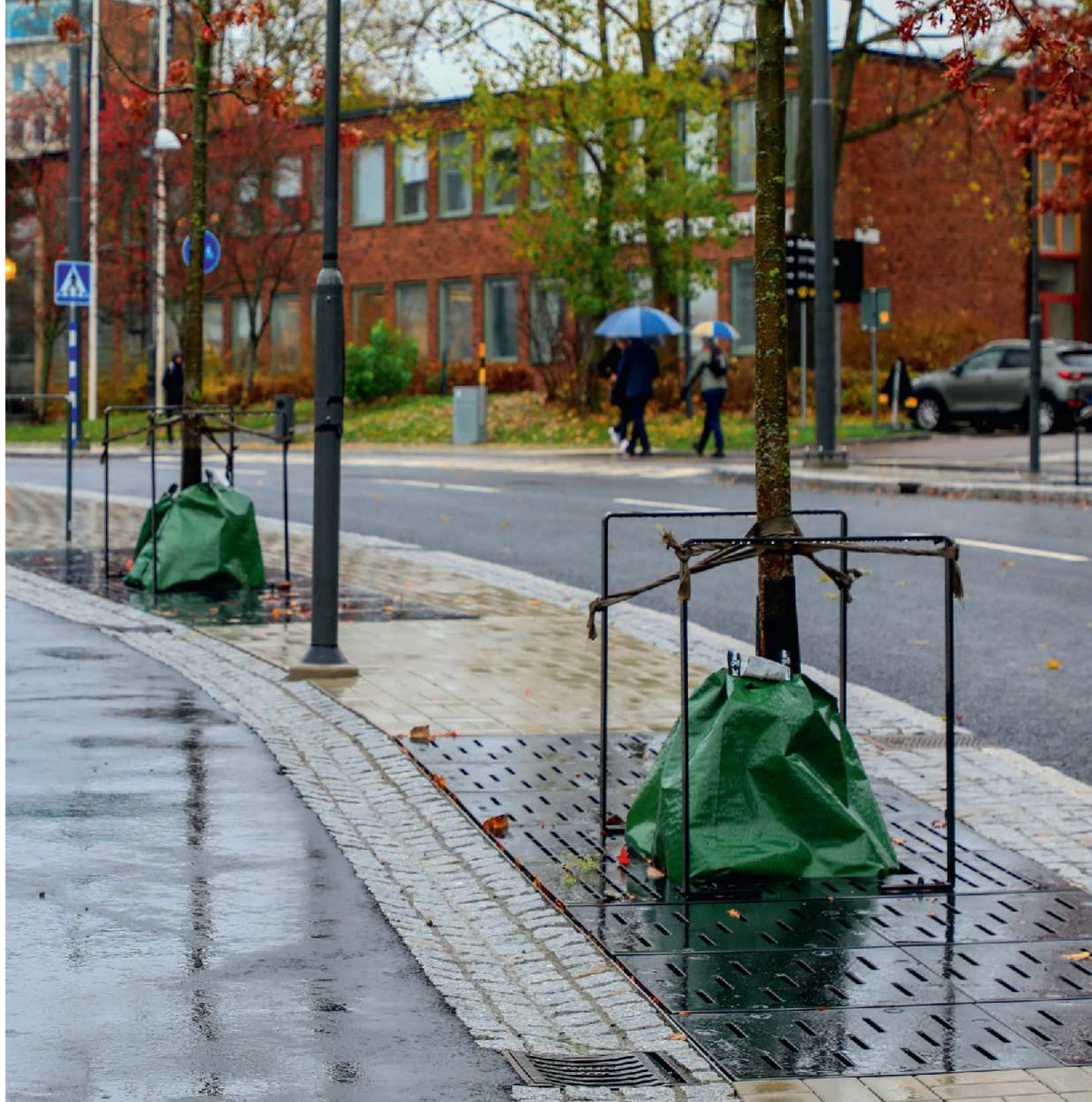
Nacka | Sweden

Climate change is forcing a rethink in the planning process. Heavy rain and hot spells in particular are on the increase. Precipitation from the surrounding areas is collected and cleaned in “rain gardens”, from where it can percolate into the soil. Corresponding sites for trees have been integrated into the process.

The large-area MeierGuss tree grills provide cover for this system to enable healthy tree growth and an attractive design for the surrounding streets.



- Installation of “rain gardens”
- Linear-style LATERAL® 2.0 tree grills with corresponding extension segments
- Size 1,500 x 6,000 mm



Zürich | Switzerland



Zurich's world-famous Bahnhofstraße is a promenade and central traffic route rolled into one. As part of its redevelopment, a project-specific tree tree grill was developed together with the city of Zurich and our local distribution partner. Individual requirements such as a high loadbearing capacity, a specific type of surface and a reduced number of slits were implemented to perfection. Over 120 tree grills are now in place, contributing to the stylish overall impression given off by the revamped Bahnhofstraße.





- Redesign of Bahnhofstraße
- “Modell Zürich-Bahnhofstraße” tree grills
(tree grills based on the city of Zurich’s design specifications)
including TMH Hagenbucher collision protector
- Size (diameter) 2,700 mm
- The planning specifications included retaining many of the
existing trees and ensuring a load-bearing capacity of up to 75 kN



Friedberg | Germany

- Elvis-Presley-Platz: Redesign of the square for surrounding shops and market venue
- Linear-style LATERAL® 1.0 tree grills including LIGERO® tree guards
- Size 2,880 x 2,880 mm
- LED spotlights integrated into the cast-iron element



Since Elvis-Presley-Platz is used as a space for surrounding shops and a market, there has to be unrestricted use of the area around the base of each tree. It had to be possible to plant large plane trees with a root bale diameter of over 1,200 mm with a certain time lag. The modern design of the LATERAL® 1.0 tree grills integrates harmoniously with the cobblestones and is further enhanced by integrated LED spotlights.





Kiel | Germany



Redevelopment of the promenade on Kaistraße between the rail station and port. The modern RONDELLO® 2.0 tree grills are the perfect fit for the chosen cobble surface and the surrounding contemporary architecture. The possibility of widening the opening inside the cast-iron tree grill from 700 mm to 1,100 mm in diameter over time and as the trunk grows ensures that the grill will remain in use for decades and that the tree pits and the soil around the trees will be protected against compaction.





- Kaistraße promenade
- Radial-style RONDELLO® 2.0 tree grills including LIGERO® tree guards
- Size 2,000 x 2,000 mm







Zug | Switzerland

- Postplatz
- Linear-style LATERAL® 2.0 tree grills including TMH Hagenbucher collision protector
- Size 2,000 x 2,000 mm



Renovation and upgrading of the pedestrianised zone on Postplatz in Zug. The LATERAL® 2.0 tree grills selected are ideal for both newly planted and existing trees since the inside opening can be adjusted as the trunk widens.





Turku | Finland



The pick-up area and car park in front of the ferry terminal in the Finnish city of Turku was redesigned as part of the redevelopment of the whole site. The CLASSICO® 2.0 tree grills enable excellent use to be made of the whole space.





- Renovation of ferry terminal
- Jet-style CLASSICO® 2.0 tree grills including Haveno tree guards
- Size 1,500 x 1,500 mm





- Extensive redevelopment of the city centre and creation of new park and ride site at the rail station
- Two different tree grill designs: radial-style RONDELLO® 2.0 and linear-style LATERAL® 2.0
- Two different sizes (diameters): 2,000 mm and 1,500 x 1,500 mm



Lachen | Switzerland



The town centre was extensively redeveloped and traffic-calming measures were introduced when a new ring road was laid. The radial-style tree grills chosen meld harmoniously with the completely revamped site.

The area around the rail station showcases the perfect way to combine trees with a park and ride site.

The lateral design is the ideal complement to the arrangement of parking spaces.



Mersch | Luxembourg



- Construction of a new bus station as part of the redevelopment of the entire rail station site
- Radial-style RONDELLO® 2.0 tree grills
- Size 2,500 x 2,500 mm





Giving trees a lot of space is very important to ensure their healthy development. Suitable tree protection systems from MeierGuss protect their sites and enhance them from a design perspective. They offer safety and security thanks to a load-bearing capacity of 50 kN, are self-supporting and will add design value over the long term too since the inner diameter of the tree grills can be adjusted as the trees continue to grow.

Kaarina | Finland



- Redevelopment project
- Jet-style CLASSICO® 2.0 tree grills including Haveno tree guards
- Size 1,500 x 1,500 mm





Bad Camberg | Germany

With climate change, care should be taken to ensure that sustainable tree-planting solutions are chosen for newly built areas as well. The cast-iron tree grill with steel tree guard provides the tree with a good level of protection against damage and requires only minimal care. Thanks to the 2.0 system, the tree grills are self-supporting up to 50 kN and give optimum protection to the soil around the trees.

- Jet-style CLASSICO® 2.0 tree grills including LIMES® tree guards
- Size 1,500 x 1,500 mm



Cluj-Napoca | Romania



Redesign of city-centre areas and rerouting traffic to boost sustainable mobility and reduce CO₂ emissions.

The locations of existing trees were afforded special protection as part of the project to strengthen sustainable mobility and thus create more spaces for both pedestrians and cyclists. Additional tree sites were created.





- Redevelopment of city-centre areas
- Three different tree grill designs:
Radial-style RONDELLO® 2.0 and linear-style LATERAL® 1.0 and 2.0
- Four different sizes: 1,500 x 1,500 mm, 2,000 x 2,000 mm, diameter 2,000 mm and 1,000 x 2,500 mm





sustainable





Whether it has grown naturally over time or was planned on a drawing board, the presence of ample greenery indicates that residents were borne in mind when planning and developing a town or city. Where roadside trees or car parks have to give way to newbuilds, the planning process is often focused shortsightedly on maximising space. However, towns and cities designed with sustainability in mind can and must afford green spaces, because being green long since stopped being just a question of prestige. Nowadays, the focus is shifting increasingly towards health benefits and environmental responsibility too.

Green spaces improve the climate, and parks give people and animals somewhere nearby to recharge their batteries. A canopy of leaves improves the climate along the road, while, below the ground, plant roots help to protect public spaces against the damage caused by storms.

Cities across the world are facing similar problems, particularly the major ones: climate change, demographics, traffic. They need to respond, both because they are directly affected and because they have a duty of care. Climate change and the air pollution and space problems that road traffic creates are no longer abstract threats – they have been making their presence felt for a long time. And not just in New York and Tokyo – in Frankfurt and Bottrop too. Adding greenery to our towns and cities is a key part of this solution.



Although we care about healthy growth and preserving the trees, environmental protection at MeierGuss begins long before that. As a company focused on the future, MeierGuss places great value on environmentally friendly production processes, the careful handling of resources, and developing products that help to protect and conserve the environment.



All of our production is done in our foundries in Germany. Besides DIN EN ISO 9001 certification, the MeierGuss Group is also certified in environmental management to DIN EN ISO 14001 and was one of the first companies in the sector to obtain energy management certification in accordance with DIN EN ISO 50001. This includes the foundries in Rahden and Limburg, the concrete plants and the sales company MeierGuss Sales & Logistics.





Protecting the trees



Tree protection application consulting international

Jan Nolting

Sales Manager International

Tel.: +49 5771 918-207

Mobile: +49 176 13918207

E-Mail: jn@meierguss.de

www.meierguss.de/baumschutz



MeierGuss Sales & Logistics GmbH & Co. KG

Auf der Welle 5-7 | 32369 Rahden | Germany

Phone: +49 5771 918-0 | Fax: +49 5771 918-218

Limburg Office

Elzer Straße 23-25 | 65556 Limburg | Germany

Phone: +49 6431 291-0 | Fax: +49 6431 291-168

You will find all contact information online at:

www.meierguss.de

