

MEADRAIN[®] Line Drainage

Keeping the world's air traffic flowing freely



Auckland International Airport
(Photo: Auckland International Airport Ltd)

Many airports around the world
have one thing in common:
they also rely on the successful
MEADRAIN® drainage system.



Dresden Airport *(Photo: Flughafen Dresden GmbH / Weimer)*





Christchurch International Airport (Photo: Christchurch International Airport Ltd)

MEADRAIN® heavy-duty drainage channels For extreme demands on air- and landside

A MEA speciality: airport drainage

Abu Dhabi, Alghero, Auckland, Dresden, Rotterdam, Vienna, Warsaw and many other major airports – airport operators around the world depend on MEA and its professional approach to line drainage.

MEADRAIN® high-quality and durable channel systems can reliably cope with all the special requirements in an airport environment and are held in great esteem. Our comprehensive range extends from special channels for airside installations, specifically developed for areas in the F 900 load class, to sturdy standard channels for landside applications.

Conditions are tough on the runway

Only the most robust drainage systems are equipped to cope when used long-term in the challenging environment of an airport. Especially airside, on the apron, taxiways, take-off and landing runways, including the hangars, the load on drainage systems is enormous: immense forces are applied by the movements of aircraft, plus there may be climatic extremes due to geography and the seasons, or tremendous downpours of rain, water from melting snow or fire-fighting, and the risk of aviation fuel spillages during refuelling.

MEADRAIN® heavy-duty drainage channels made of polymer concrete and concrete can take on the challenges in civil engineering.

MEADRAIN® drainage

Installed at numerous airports around the world

References on landside:

Germany:

Frankfurt Airport
Berlin Schönefeld Airport

Great Britain:

London Heathrow Airport

Netherlands:

Amsterdam Schiphol Airport

Spain:

Madrid Airport

References on airside:

Austria:

Vienna Airport
Graz Airport
Linz Airport
Salzburg W. A. MOZART Airport

Germany:

Dresden Airport
Spangdahlem Air Base
Eurocopter, Donauwörth
Niederrhein/Weeze Airport

Ireland:

Shannon Airport

Iceland:

Keflavik Airport, Reykjavik

Italy:

Alghero Airport, Sardinia

Netherlands:

Rotterdam Zestienhoven Airport

New Zealand:

Auckland International Airport
Christchurch International Airport

Poland:

Okecie Airport, Warsaw
Balice Airport, Krakow

Russia:

Vnukovo Airport, Moscow
Pulkovo Airport, St. Petersburg
Yemilanovo Airport, Krasnoyarsk
Norilsk Airport, Norilsk

Sweden:

Linköping Military Airport, Stockholm

United Arab Emirates:

Abu Dhabi Airport



Rotterdam Zestienhoven Airport

The advantages of polymer concrete components:

- 1 metre units
- quick and easy to install by hand
- chemical-resistant material

Special Airport Force Heavy-duty drainage channels in polymer concrete

The strong candidates in the MEADRAIN® Supreme product range

Lightweight, robust, resistant – these are the strengths of our polymer concrete product range. **MEADRAIN® Supreme** systems can reliably withstand the strain of heavy loads, for example aircraft repeatedly taxiing over them, containers being transported and special vehicles manoeuvred. This is thanks to the combination of two components: the cast iron edges set in ultra-strong polymer

concrete, and the inflow gratings made of ductile iron. The smooth inner surfaces of the channel play an important part in the outstanding discharge capacity of MEA systems, enabling sealed surfaces to drain extremely efficiently. The high resistance of polymer concrete to liquid chemicals, and the fact that channel runs, including accessories, can be completely sealed serve as a sound basis for groundwater protection.



MEADRAIN® Supreme EN 2000/3000

Opening: 200/300 mm
Total width: 240/354 mm
Total height: 280/490 mm
Length: 1000 mm
Total weight: 67.6-115.2 kg/running m
Gratings: ductile iron
Grating fixings: PROFIX®/bolted
Load class: F 900, Type M

MEADRAIN® Supreme EN 3070

Opening: 300 mm
Total width: 394 mm
Total height: 760 mm
Length: 1000 mm
Anchoring: MEAGRIP
Total weight: 167 kg/running m
Gratings: ductile iron
Grating fixings: bolted (x8)
Load class: F 900, Type M

MEADRAIN® Supreme EN 4000

Opening: 400 mm
Total width: 494 mm
Total height: 465 mm
Length: 1000 mm
Total weight: 145 kg/running m
Gratings: ductile iron
Grating fixings: bolted (x8)
Load class: F 900, Type M



Graz Airport

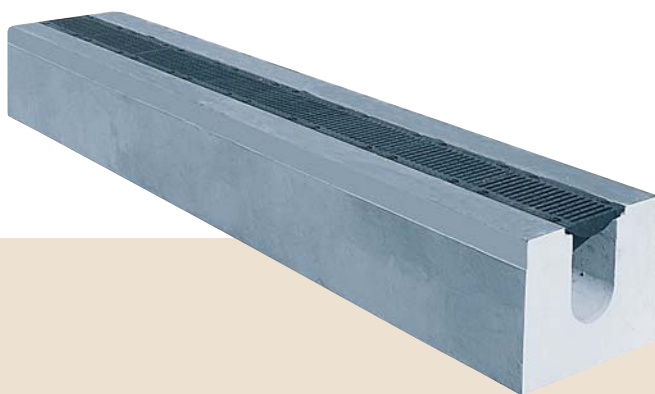
The advantages of concrete components:

- 4.0/5.8 metre lengths
- channel elements with solid, steel-reinforced concrete sides
- no need for additional cladding of sides with a surface layer of concrete

Heavy-duty drainage channels in concrete

MEADRAIN® Classic. Safety experts with experience

The **BG safety channel** in concrete has been specially designed for use on operational airport areas. This robust drainage system, with a **built-in seamless, sheet-steel frame** for high-quality edge protection, is equally resistant to the accelerating and braking forces of an aircraft, as it is to baking heat and arctic temperatures. This means that **BG safety channels** pass the tests of everyday life in the demanding airside environment with flying colours.

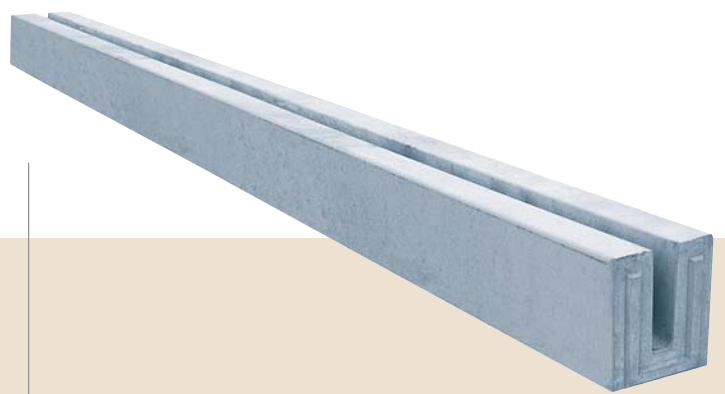


MEADRAIN® Classic BG safety channel

Opening:	100/200 mm
Total width:	500/600 mm
Total height:	485 - 585 mm
Length:	4000 mm
Total weight:	561.65/622.20/722.20 kg/running m
Gratings:	ductile iron
Grating fixings:	bolted (x8)
Load class:	F 900 as per EN 1433, Type I

MEADRAIN® Classic. Ideal for special purposes

BG slotted channels in concrete ensure that the drainage of airside operational areas at airports is at safety level 1. This channel component is suitable for all types of special applications: it is used to mark the boundary between runways, taxiways and adjacent green areas, and carries away all rainwater from such areas quickly and reliably. **The BG slotted channel** does not require a grating.



MEADRAIN® Classic BG slotted channel

Opening:	100 mm
Total width:	410 mm
Total height:	500 mm
Length:	5800 mm
Total weight:	425 kg/running m
Load class:	E 600/F 900 in conformity with EN 1433, Type I



Salzburg W. A. MOZART Airport (Photo: Salzburg Airport Archives)

MEADRAIN® heavy-duty drainage channels

On the safe side, airside

Unbeatable advantages

Durable stability

These channel systems are able to withstand weights of many tonnes – whether as a result of aircraft, special vehicle or container movements. **MEAGRIP** ensures that, even with particularly high side walls, channel components are always anchored perfectly in the concrete haunch (EN 3070).

High and reliable discharge capacity

Smooth inverts and an excellent self-cleaning effect optimise drainage performance.

Durable products

Both polymer concrete and concrete are resistant to weathering, frost and de-icing salt, are largely wear-resistant and have proved themselves time and again over decades.

High resistance to hazardous substances

The high resistance of channel materials to liquid chemicals provides active and reliable groundwater protection. In addition, thanks to our close cooperation with partners in the sealants industry, we can supply suitable and highly effective materials to ensure perfect installation results.

For all applications

Specific solutions can be provided for special airside areas as well as adjacent applications landside.

System solutions with a complete range of accessories

In addition to the choice of materials between polymer concrete and concrete, there is also a range of nominal widths, ductile iron gratings as well as silt boxes, gullies and end caps.

Amsterdam Schiphol Airport





Photo: Raport AG

MEADRAIN® drainage The professional and versatile system

The airport, with its airside and landside zones, is one of the specific fields we have expertise in – but there are many more. The **MEADRAIN®** system, in the four product ranges – Supreme, Classic, Solution and Traffic – combined with an innovative and broad range of gratings, ensures that we can plan a successful solution for every type of application. Whether here, in the very special setting of an international airport, or in fact anywhere where there is a need for professional line drainage that is impressive both functionally and visually: **MEA has the solution.**

- MEADRAIN® Supreme** Drainage systems in polymer concrete
- MEADRAIN® Classic** Drainage systems in concrete
- MEADRAIN® Solution** Solutions for special situations
- MEADRAIN® Traffic** Polymer concrete drainage channels for roads
- MEADRAIN® Top** Gratings with innovative securing systems for the complete range of **MEADRAIN®** drainage channels
- MEATEC** Roof and facade drainage in galvanised steel and stainless steel



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