

PRODUCT SELECTOR**INDUSTRIAL**

Linear drainage systems for environments that require strong and durable performance with practical design.



World Leader

Reliable Performance

A world leader in the manufacture of modular surface drainage systems, HAURATON drainage products have been supplied onto major projects within international markets for over sixty years.

We developed our first linear drainage system in 1956. Since that time the HAURATON brand has become known around the world as a benchmark for quality, reliability, durability and service.



Environmentally Aware

HAURATON has environmentally sound production facilities, processes and procedures.

RECYFIX® systems are manufactured from recycled Polypropylene (PP), which is 100% recyclable following life-time use.

HAURATON drainage systems can assist in the assignment of credits based on the BREEAM and LEED rating systems. HAURATON maintains an Environmental Management System according to DIN EN ISO 14001:2015

Refer to HAURATON for further information.



Surface Drainage

Product Range

HAURATON offers a wide range of external surface drainage systems suitable for a variety of project applications, including residential, commercial, municipal, industrial, military, transport and major infrastructure projects.

FASERFIX® - Strong and durable drainage channels in Fibre-Reinforced Concrete (FRC).

RECYFIX® - A robust, high-performance range in corrosion-resistant composite materials (PP, PA-GF). HAURATON is the innovator and market-leader in this field and provides the widest range of commercial-grade composite channel systems available.

SPORTFIX®, **DACHFIX®**, **DRAINFIX®CLEAN** and **RECYFIX®TRAM** are specialist ranges available for unique applications.

Systems can be supplied with a variety of functional, decorative and HeelSafe gratings or with discreet 'longitudinal' slot channel designs, for load-class applications from A15kN up to F900kN, offering significant choice and flexibility.

With superior design and engineering, HAURATON sets the industry standard with high-quality, visually aesthetic and technically innovative products that meet project requirements and complement modern building and landscape design.

Product Selectors

Our Product Selector's have been designed to provide industry professionals with a quick, simple and clear guide to choosing the appropriate HAURATON system to suit their project requirements.

Each Product Selector include's project applications with similar needs regarding loading and system performance:

- Roof Terraces, Balconies & Facades
- Public Realm & Shared Space
- Car Parks & Commercial
- Industrial
- Ultra-Heavy-Duty



Industrial

Linear drainage systems for environments that require strong and durable performance with practical design.

System Requirements

'Industrial' environments typically include the following characteristics:

- Medium to high loads; D400kN - F900kN (wheel, static, impact and dynamic).
- Medium to high traffic flow; varied traffic patterns (frequency, speed, acceleration, braking, turning, angled approach).
- Varied wheel type and configuration (small, solid, pneumatic, single, multi-tyre, single-axle/double-axle).
- High surface water run-off (extensive catchment areas).
- Corrosive environments (saline conditions, ground sulphates, high humidity, extreme temperatures, strong UV radiation, road gritting salts, de-icing solutions, chemicals etc).
- High-performance surfaces (concrete, high-spec asphalt, heavy-duty block paving).
- Durable, practical and functional system design.

HAURATON systems included in this Product Selector meet and exceed the requirements for 'Industrial' project applications.

Typical Applications

Projects where 'Industrial' environments exist include:

- Fire Stations
- Water Treatment Works
- Service Yards & Stock Yards
- Bio-Gas & Recycling Facilities
- Bus Terminals & Coach Parks
- Service Stations & Truck Stops
- Warehouses & Industrial Areas
- Logistics & Distribution Centres

*HAURATON 'Industrial' systems are not suitable for use on highways in locations that are subjected to fast moving traffic.



RECYFIX®MONOTEC

Designed and installed as a single monolithic unit, **RECYFIX®MONOTEC** is quick and easy to install and provides a stable, safe and secure surface environment for users. **RECYFIX®MONOTEC** is lighter and has higher drainage capacity compared with alternative mineral-based systems (for equivalent channel sizes and installed dimensions).

Manufactured from reinforced Polypropylene (PP) composite, channel units are strong, durable and UV-stable, with high impact, chemical and corrosion resistance for low-cost maintenance during life-time use. Refer to product brochure for detailed information.

Key Features

Material

- Reinforced Polypropylene (PP) composite

Loading

- System load rated to D400 (EN 1433: 2002)

Channel Widths

- 100 & 200 mm

Channel Lengths

- 1.0m

Grating Options

- Monolithic channel with integral grating
- D400 (EN 1433: 2002)
- Slotted grating design (FIBRETEC® style)
- Reinforced Polypropylene (PP) composite

Channel Configuration

- Constant-depth (same channel depth)
- Stepped-fall

Edge Detail

- Monolithic design; channel edge and grating combined

*Not suitable for E600kN and F900kN load applications subject to traffic by forklift trucks and HGV's.



RECYFIX[®]NC

RECYFIX[®]NC combines heavy-duty (E600kN) loading capability with practical design, easy handling, quick installation and high-performance on site.

RECYFIX[®]NC has a polypropylene edge-frame incorporated within the channel body structure, for improved durability and resilience when trafficked. The system is supplied to site as a fully assembled unit, with heavy-duty slotted gratings (spheroidal ductile iron GJS 500-7) securely bolted within the edge-frame housing (eight steel bolts per metre) for extra strength and safety. Refer to product brochure for detailed information.

Key Features

Material

- Polypropylene (PP) composite

Loading

- System load rated to E600 (EN 1433: 2002)

Channel Widths

- 100, 150, 200, 300 & 400 mm

Channel Lengths

- 1.0m & 500mm (selected depths)

Grating Options

- Inlay design
- D400 & E600 (EN 1433: 2002)
- Spheroidal ductile iron GJS 500-7 'EN1563'
- Slotted grating

Channel Configuration

- Constant-depth (same channel depth)
- Stepped-fall

Edge Detail

- Polypropylene edge-frame
- Integral part of channel body structure



RECYFIX®TRAFFIC GUGI®BLOC

RECYFIX®TRAFFIC GUGI®BLOC incorporates an elevated grating structure (120mm high) in spheroidal ductile iron GJS 500-7, designed for maximum strength and durability to withstand dynamic forces and heavy-duty loads (E600kN).

FASERFIX®TRAFFIC GUGI®BLOC is available for F900kN load applications.

The 'grating-to-channel body' connection (eight fixings per metre) sits deep underground, achieving a monoblock type structure (no removable gratings) for high-security and improved safety for vehicles and pedestrians. Refer to product brochure for detailed information.

Key Features

Material

- Polypropylene (PP) composite
- Fibre-reinforced concrete

Loading

- RECYFIX®TRAFFIC system load rated to E600
- FASERFIX®TRAFFIC system load rated to F900 (EN 1433: 2002)

Channel Widths

- RECYFIX®TRAFFIC - 200 & 300 mm
- FASERFIX®TRAFFIC - 150 mm

Channel Lengths

- 1.0m & 500 mm (selected depths)

Grating Options

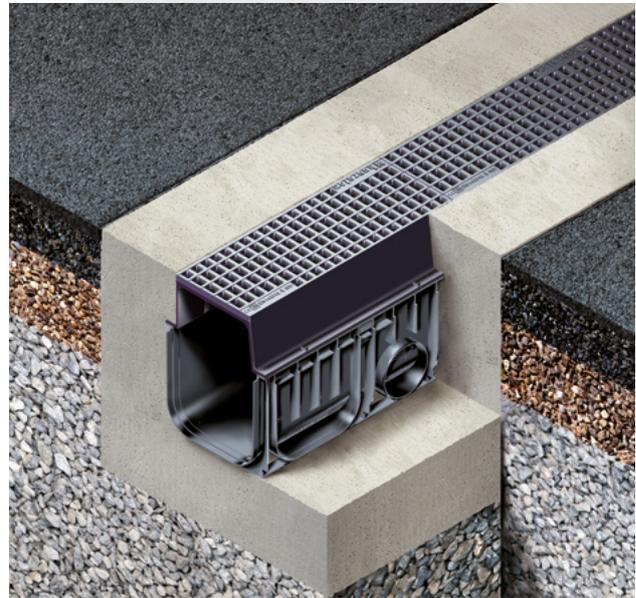
- Elevated grating structure (none-removable)
- D400 & F900 (EN 1433: 2002)
- GUGI®BLOC 'mesh grating' design
- Spheroidal ductile iron GJS 500-7 'EN1563'

Channel Configuration

- Constant-depth (same channel depth)
- Stepped-fall

Edge Detail

- GUGI®BLOC grating
- Spheroidal ductile iron GJS 500-7 'EN1563'
- Durable edge; impact resistant



FASERFIX®KS

Cast from fibre-reinforced concrete, **FASERFIX®KS** is a strong and durable 'general-purpose' channel system designed for use in a variety of applications (usually C250 - E600).

FASERFIX®KS has thicker sidewalls (30mm) compared with alternatives. A metal edge-frame (galvanised or stainless steel) cast deep within the channel body achieves a rigid and discreet edge-detail for extra strength and enhanced aesthetics. Gratings are fixed into position with a 10-point locking system (SIDELOCK plus central bolt and bar arrangement) for added safety, stability and security. Refer to product brochure for detailed information.

Key Features

Material

- Fibre-reinforced concrete

Loading

- Channel body load rated to F900 (EN 1433: 2002)
- System typically installed in E600 load environments
- Suitable for F900 environments (light traffic only)
- Refer to FASERFIX@SUPER for F900 environments (heavily trafficked)

Channel Widths

- 100, 150, 200 & 300 mm

Channel Lengths

- 1.0m & 500 mm (selected depths)

Grating Options

- Inlay design
- Load options ranging from A15 - F900 (EN 1433: 2002)
- Variety of grating designs and material's available (over 20)
- Refer to product brochure

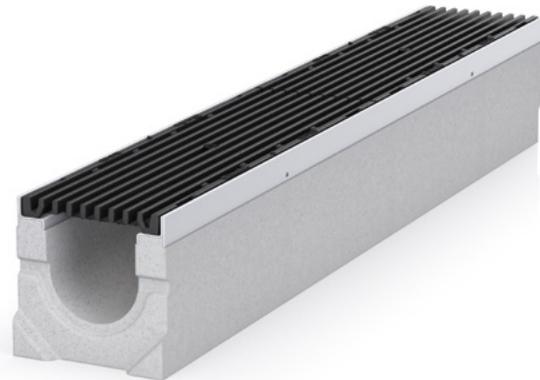
Channel Configuration

- Constant-depth (same channel depth)
- Built-in fall (150, 200, 300)
- Stepped-fall

Edge Detail

Two options:

- Galvanised steel S275J263+Z
- Stainless steel CNS 1.4301
- Neat, discreet, rigid and aesthetic



FASERFIX®SUPER

A strong, durable and reliable grated channel system in fibre-reinforced concrete, with a proven structural design for superior resistance to dynamic forces and extreme loads.

FASERFIX®SUPER has a higher specification compared to alternatives, for assured performance and reduced maintenance costs during all stages of the projects life. Refer to product brochure for detailed information.

Key Features

Material

- Fibre-reinforced concrete

Loading

- Channel body load rated to F900 (EN 1433: 2002)

Channel Widths

- 100, 150, 200, 300, 400 & 500 mm

Channel Lengths

- 1.0m & 500mm (selected depths)

Grating Options

- Inlay design
- D400, E600 & F900 (EN 1433: 2002)
- Spheroidal ductile iron GJS 500-7 'EN1563'
- Slotted grating
- GUGI-mesh grating
- Solid cover
- KTL 'cathodic dip' coating (optional)

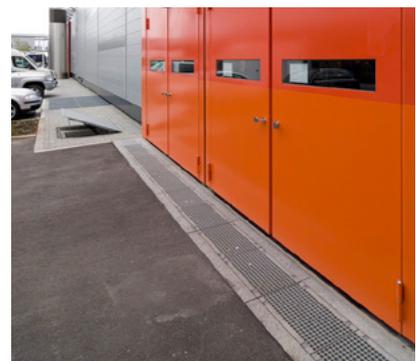
Channel Configuration

- Constant-depth (same channel depth)
- Built-in fall (150, 200, 300)
- Stepped-fall

Edge Detail

Two options:

- Galvanised steel S275J263+Z
- Spheroidal ductile iron GJS 500-7 'EN1563' (KTL 'cathodic dip' coated).



FASERFIX®BIG BL

Cast from high-performance 'HRS' cement concrete, **FASERFIX®BIG BL** has a mega-monoblock design incorporating the channel surround, base and steel reinforcement cage within a single rigid 'concrete beam' structure for increased strength, stability and high resistance to impact loads.

FASERFIX®BIG BL is estimated to be ten times quicker to install (F900 locations) compared with alternative systems. Refer to product brochure for detailed information.

Key Features

Material

- 'HRS' cement concrete

Loading

- System load rated to F900 (EN 1433: 2002)
*Units tested up to 2000kN without failure

Channel Widths

- 100, 150, 200 & 300 mm

Channel Lengths

- 4.0m & 1.0m

Grating Options

- Inlay design
- D400, E600 & F900 (EN 1433: 2002)
- Spheroidal ductile iron GJS 500-7 'EN1563'
- Slotted grating
- GUGI-mesh grating
- Solid cover
- KTL 'cathodic dip' coating (optional)

Channel Configuration

- Constant-depth (same channel depth)

Edge Detail

- Galvanised steel S275J263+Z



RECYFIX®HICAP®F SLOT CHANNEL

Manufactured from high-grade modified Polypropylene (PP) composite, **RECYFIX®HICAP®F SLOT CHANNEL** is a high-capacity linear drainage system used to provide efficient and cost-effective drainage and attenuation within extensive hard surface areas. Refer to product brochure for detailed information.

Key Features

Material

- Modified Polypropylene (PP) Composite
- Some components in Polyamide (PA-GF)

Loading

- System load rated to F900 (EN 1433: 2002)

Channel Sizes

- HICAP®F 1000, 2000, 3000, 5000, 8000 & 10000

Channel Lengths

- 1.0m & 1.145m (RECYFIX®HICAP®F 10000)

Grating Options

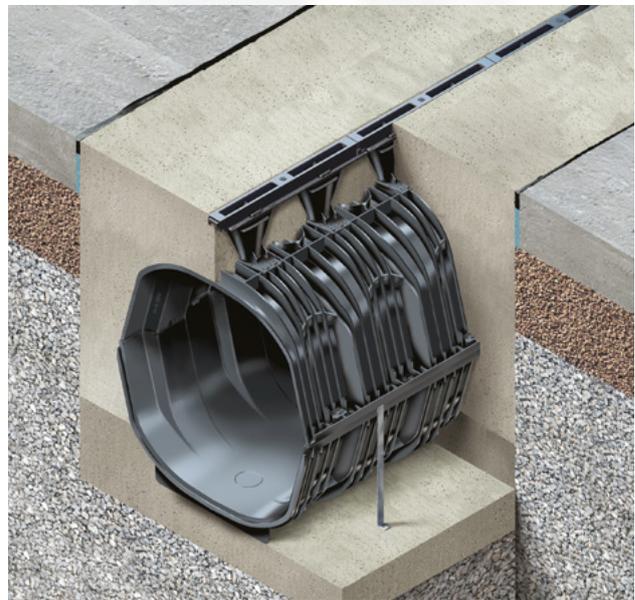
- Retained grating design (non-removable)
- D400 & F900 (EN 1433: 2002)
- Spheroidal ductile iron GJS 500-7 'EN1563' (KTL 'Cathodic Dip' Coated)

- Slot 14mm
- Slot 28mm
- Mesh 13/28mm
- Slot 6mm

Channel Configuration

- Constant-depth (same channel depth)
- Stepped-fall

*This system is especially resilient to dynamic forces caused by the turning/twisting action of wheels.



SERVICE CHANNELS

HAURATON SERVICE Channels provide a safe, practical and durable solution for the management and routing of underground cables, utilities and services. The system is supplied with a range of modular accessories including cable trays and junction boxes for easy access and flexible 'space-efficient' design.

SERVICE Channels can be configured from either **RECYFIX®** or **FASERFIX®** systems, with the most suitable type and size of channel selected to suit specific project requirements.

Key Features

Material

- **RECYFIX®** channels in modified Polypropylene (PP)
- **FASERFIX®** channels in fibre-reinforced concrete

Loading

- Polypropylene (PP) channels load rated to E600
- Fibre-reinforced concrete channels load rated to E600 (EN 1433: 2002)

Channel Widths

- 100, 200, 300, 400 & 500 mm

Channel Lengths

- 1.0m

Cover Options

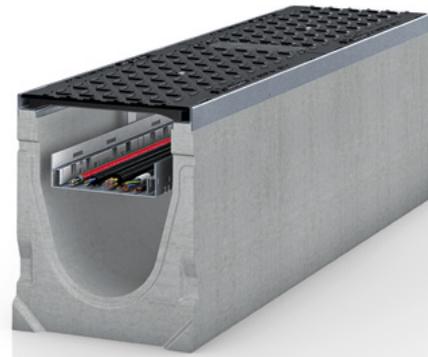
- Inlay design
- Solid covers (anti-slip)
- A15 & E600 (EN 1433: 2002)
- Galvanised steel 'chequer plate' (A15)
- Spheroidal ductile iron GJS 500-7 'EN1563'
- KTL 'cathodic dip' coating (optional)
- Side-Lock boltless locking mechanism

Channel Configuration

- Constant-depth (same channel depth)

Edge Detail

- Galvanised steel S275J263+Z
- Spheroidal ductile iron GJS 500-7 'EN1563' (KTL 'cathodic dip' coated)



DRAINFIX®CLEAN

DRAINFIX®CLEAN linear drainage 'water treatment' system is a cost-effective, ecological, efficient and immediate solution for the draining, collection and treatment at source of storm water run-off.

The system contains CARBOTEC®60, a carbonate-rich filter substrate through which the cleansing of stormwater occurs, for safe and hygienic use as sanitary water (toilet flushing) and irrigation of soft-landscaping. **DRAINFIX®CLEAN** is very effective when used in densely populated areas (streets, parking areas, service yards, landscape projects).

Key Features

Material

- RECYFIX® channels in modified Polypropylene (PP)
- FASERFIX® channels in fibre-reinforced concrete
- CARBOTEC®60 filter substrate (high carbonate content)

Loading

- Polypropylene (PP) channels load rated to D400
- Fibre-reinforced concrete channels load rated to F900 (EN 1433: 2002)

Channel Widths

- 300, 400 & 500 mm

Channel Lengths

- 1.0m

Grating Options

- Inlay design
- Slotted grating
- D400, E600 & F900 (EN 1433: 2002)
- Spheroidal ductile iron GJS 500-7 'EN1563'
- KTL 'cathodic dip' coating (optional)

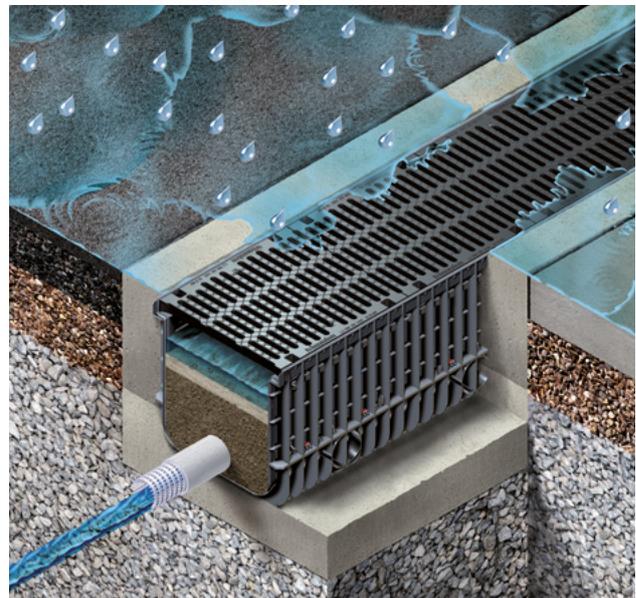
Channel Configuration

- Constant-depth (same channel depth)

Edge Detail

Three options:

- Polypropylene (PP)
- Galvanised steel S275J263+Z
- Spheroidal ductile iron GJS 500-7 'EN1563'



Total Support

Projects Team

HAURATON provides close support to ensure drainage design, specification and installation is quick, efficient and cost-effective.

A team of regional, specification and project managers are available to assist industry professionals at every stage of the construction process. Refer to HAURATON for contact details (www.hauraton.com).

A multinational company, HAURATON has production facilities, subsidiary offices, technical engineers and partners located in many countries and regions of the world.

HAURATON has the knowledge, experience and resources to manage and support all projects successfully, regardless of location.

Design Service

HAURATON offers a comprehensive design service for all product ranges. This is available free of charge and without obligation.

Our approach is to provide innovative 'value-engineered' designs to achieve the most cost-effective drainage solution for the benefit of all parties.

Design proposals can be provided within 24 - 48 hours, depending on the size of the project. Information offered includes:

- Hydraulic calculations for each channel run
- System configuration drawings
- Parts list schedules
- Product dimension drawings
- System installation drawings
- Product and material technical datasheets
- Other technical and support information

Feel free to contact us should you require assistance.



Design Software

Hydraulic Design Software

Our channel drainage configurations are designed and sized using in-house 'hydraulic design software' specifically developed for HAURATON systems.

The formula used within the software is based on that determined by Gauckler-Manning-Strickler. Accuracy has been verified by physical testing of HAURATON systems within a hydraulic discharge test flume, replicating and evaluating hundreds of flow scenarios.

HAURATON 'hydraulic design software' has been used successfully in-house by our technical personnel and partners for over 25 years with total reliability.

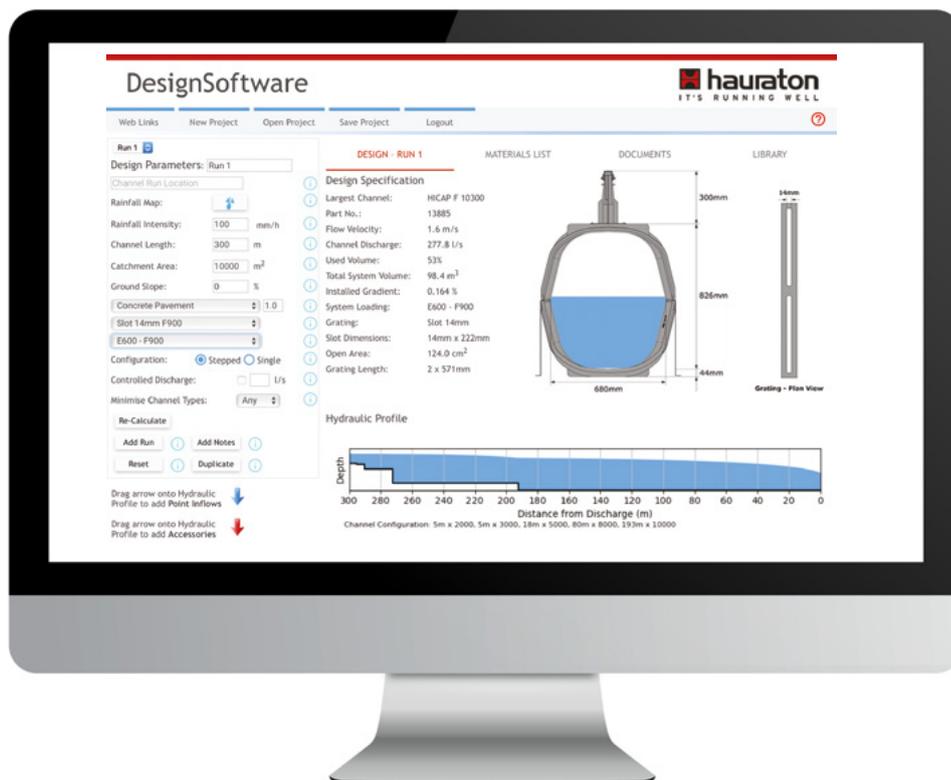
HAURATON DesignSoftware

Hydraulic design software is also available free of charge to industry professionals. Intuitive and user friendly, 'HAURATON DesignSoftware' allows engineers to create drainage schemes for HAURATON's range of civil engineering systems on tablets, desk-top computers or through the internet (web-based application). Refer to HAURATON for further information.

Hydraulic Design App

For smaller projects where a quick indication of the appropriate channel size and system is required for a given catchment area, HAURATON can provide a 'Hydraulic Design App'. Refer to HAURATON for details of how to download this software application.

The 'Hydraulic Design App' provides quick sizing of HAURATON channel systems following input of rainfall intensity data, the run-off coefficient (surface type) and catchment area size.



Quality Assurance

High Standards

HAURATON products and procedures bring quality assurance.

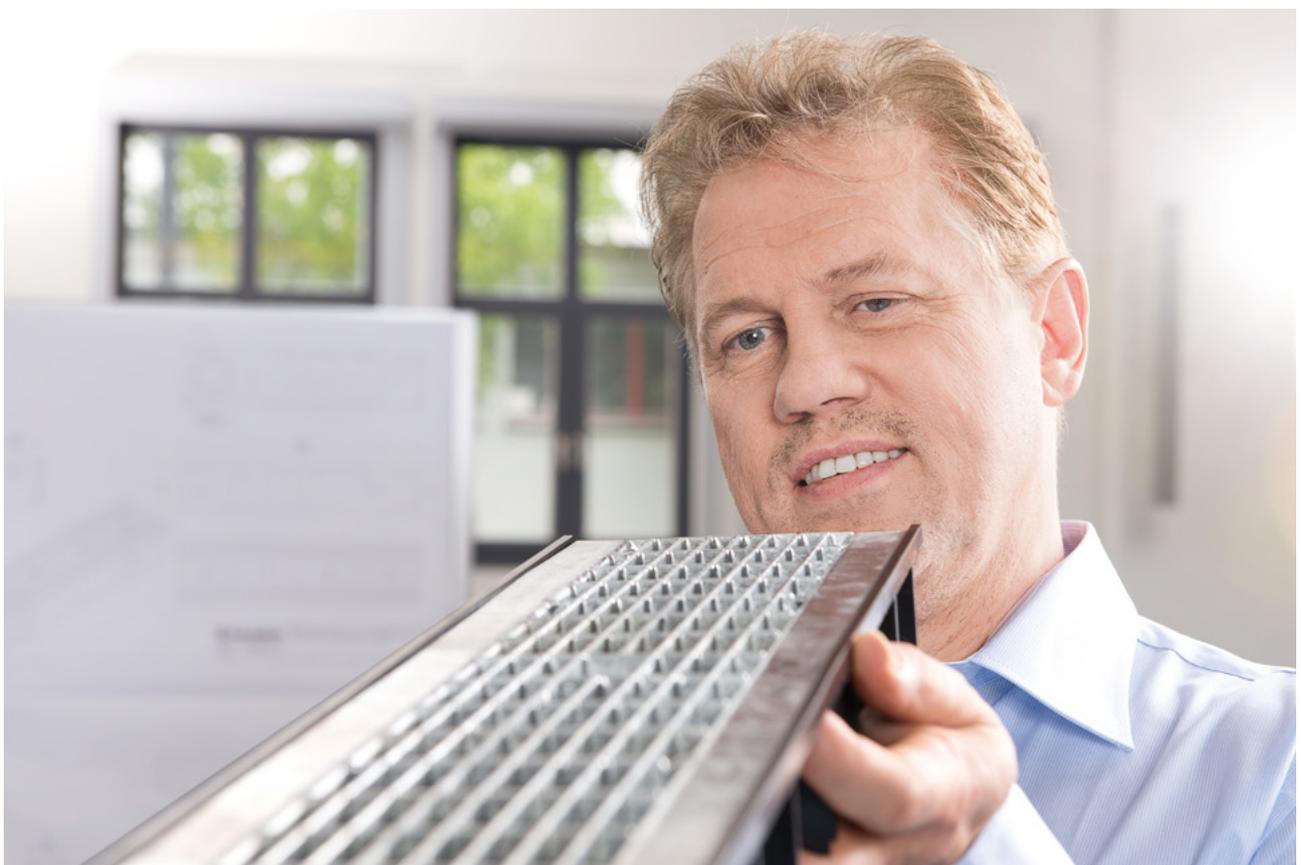
The company operates in accordance with EN ISO 9001: 2015. Production within modern, mechanised facilities in Europe is carefully monitored and controlled to achieve consistent product quality.

HAURATON drainage channels have been independently tested for load capacity and watertightness in accordance with the European Standard EN 1433: 2002. Systems are CE marked for quality assurance.

Proven Performance

Supplied for over sixty years and twenty-five years respectively, **FASERFIX®** and **RECYFIX®** systems have proven performance, having been used successfully on major projects around the world. Individual project case studies are available from HAURATON.

HAURATON has a reputation for products of the highest quality, durability and reliability.



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