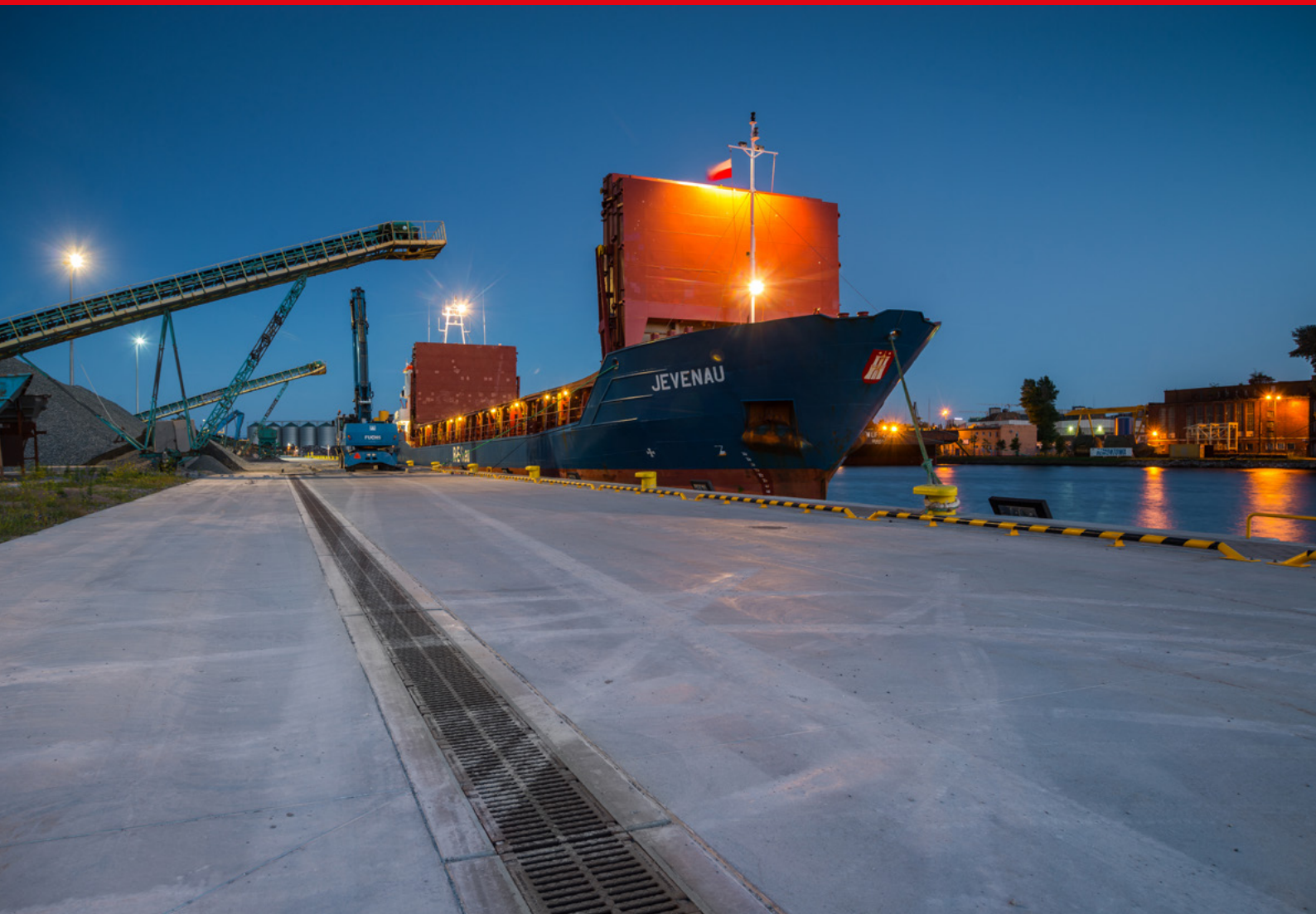




PRODUCT SELECTOR

PORTS & TERMINALS

Drainage systems for quayside and landside applications.



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-five 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 and water technology products suitable for a variety of project applications, including residential, commercial, municipal, industrial, military, transport and major infrastructure projects.

RECYFIX® - A robust, high-performance range of channel systems 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.

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

AQUAFIX® - A modern, efficient and versatile range of separators in composite materials (PP, PE), steel and concrete; for sustainable preservation of vital resources.

DRAINFIX® - Stable, safe and cost-effective infiltration and water storage systems.

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

Customised Drainage Solutions are also available for projects with special requirements.

HAURATON channel 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 A15 up to F900, offering significant choice and flexibility.

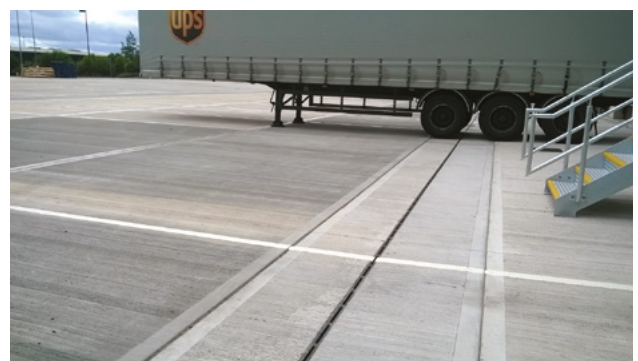
With superior design and engineering, HAURATON sets the industry standard with high-quality, visually aesthetic and technically innovative products that meet project requirements and complement modern building and landscape design.

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
- Airports
- Ports & Terminals



Ports & Terminals - Quayside

Drainage systems for corrosive environments subject to harsh conditions, 'ultra-heavy-duty' loads and extreme dynamic forces.

System Requirements

'Quayside' environments typically include the following characteristics:

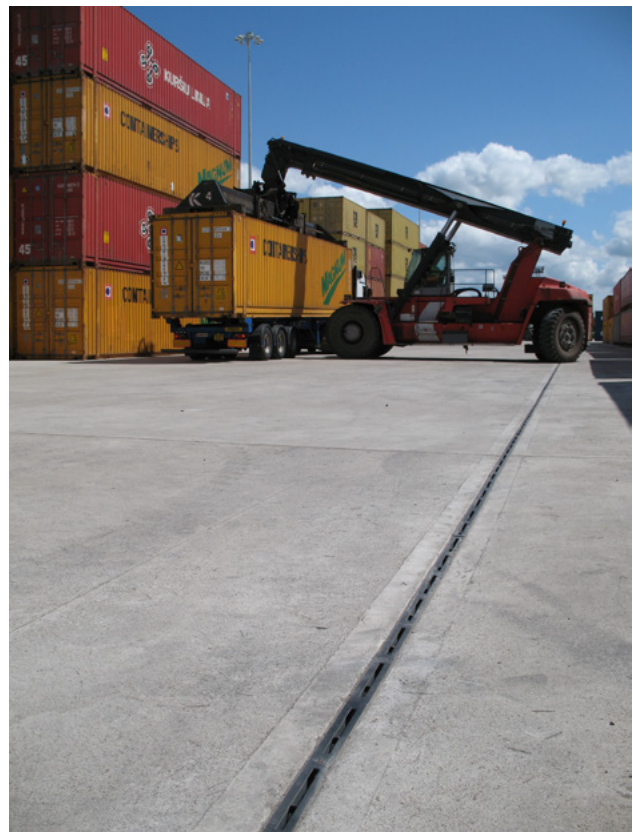
- High safety requirements; monolithic systems, retained gratings / covers, durable and secure locking mechanisms.
- Robust design of pavements and surface structures to prevent settlement; construction on reclaimed land.
- Extreme loads and forces; F900 (wheel, static, impact and dynamic). Constant traffic by fully-laden forklifts, reach stackers, heavy goods vehicles and other operations vehicles. Possibly the worst-case environment for surface drainage.
- Intense traffic patterns (variety, frequency, speed, acceleration, braking, turning, angled approach).
- Varied wheel type and configuration (small, solid, pneumatic, single, multi-tyre, single-axle/double-axle/multi-axle etc).
- High surface water run-off (high rainfall, extensive catchment areas).
- Dirty and corrosive environments (saline conditions, ground sulphates, high humidity, extreme temperatures, strong UV radiation, sand abrasion, de-icing salts, chemicals, hydrocarbon fuels and oils, loose raw materials etc).
- High-performance surfaces (concrete, high-spec asphalt, high-load paving units).
- Cost-effective installation and maintenance.

HAURATON systems meet and exceed the requirements for 'quayside' applications on ports and terminals, and have high-level resistance when subject to such intense and corrosive conditions.

Typical Applications

Applications in airport 'airside' areas include:

- Quayside Areas
- Ports & Docks
- Harbours & Wharfs
- Container Terminals
- Access Roads & Highways
- High Security Areas
- Transport Terminals
- Fuel Storage Facilities
- Warehouse, Distribution & Logistics Centres



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)

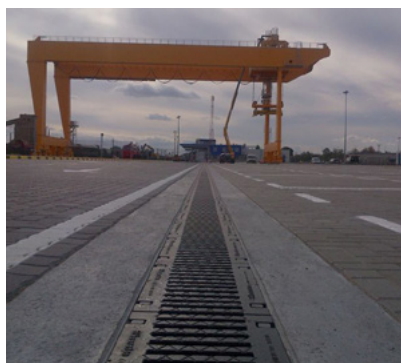
Channel Configuration

- 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

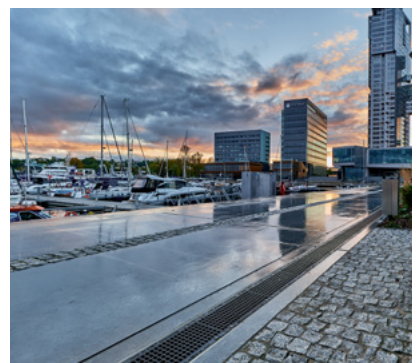
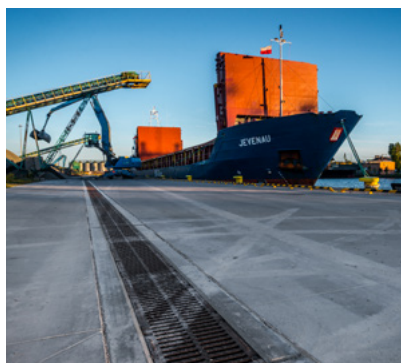
- Inlay design
- D400, E600 & F900 (EN 1433: 2002)
- Spheroidal ductile iron GJS 500-7 'EN1563'
- Slotted grating
- GUGI-mesh grating
- Solid cover
- KTL 'cathodic dip' coating (optional)

Channel Configuration

- Constant-depth (same channel depth)

Edge Detail

- Galvanised steel S275J263+Z



FASERFIX®TRAFFIC GUGI®BLOC

FASERFIX®TRAFFIC GUGI®BLOC incorporates an elevated grating structure (100mm high) in spheroidal ductile iron GJS 500-7, designed for maximum strength and durability to withstand dynamic forces and heavy-duty loads (F900). **RECYFIX®TRAFFIC GUGI®BLOC** is available for E600 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

- Fibre-reinforced concrete
- Polypropylene (PP) composite

Loading

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

Channel Widths

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

Channel Lengths

- 1.0m & 500 mm (selected depths)

Grating Options

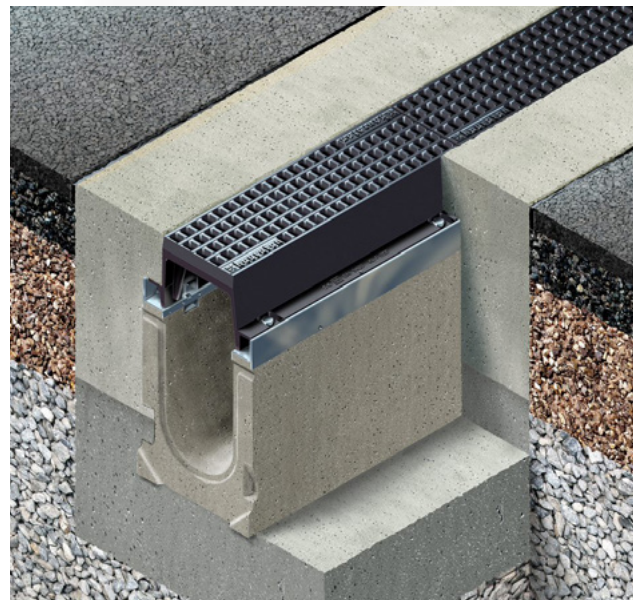
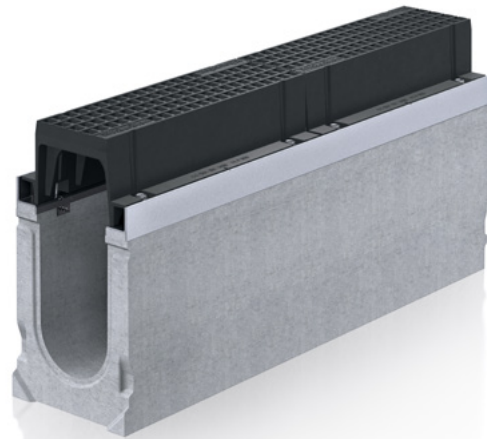
- Elevated grating structure (none-removable)
- E600 & F900 (EN 1433:2002)
- GUGI®BLOC 'mesh grating' design
- Spheroidal ductile iron GJS 500-7 'EN1563'

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



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

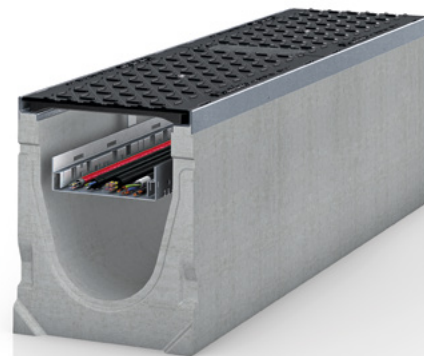
- Inlay design
- Solid covers (anti-slip)
- A15 & E600 (EN 1433: 2002)
- Galvanised steel 'chequer plate' (A15)
- Spheroidal ductile iron GJS 500-7 'EN1563'
- KTL 'cathodic dip' coating (optional)
- Side-Lock boltless locking mechanism

Channel Configuration

- Constant-depth (same channel depth)

Edge Detail

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



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

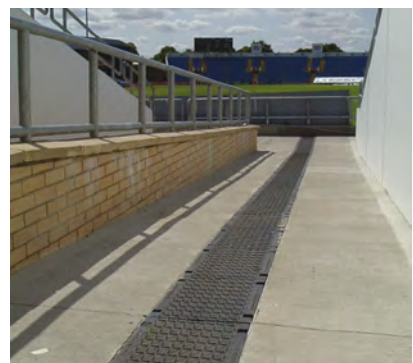
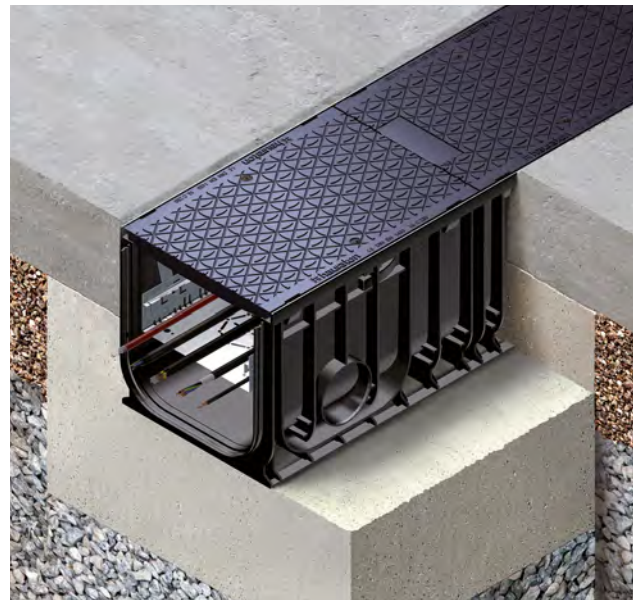
- Inlay design
- Solid covers (anti-slip)
- A15 & E600 (EN 1433: 2002)
- Galvanised steel 'chequer plate' (A15)
- Spheroidal ductile iron GJS 500-7 'EN1563'
- KTL 'cathodic dip' coating (optional)
- Side-Lock boltless locking mechanism

Channel Configuration

- Constant-depth (same channel depth)

Edge Detail

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



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

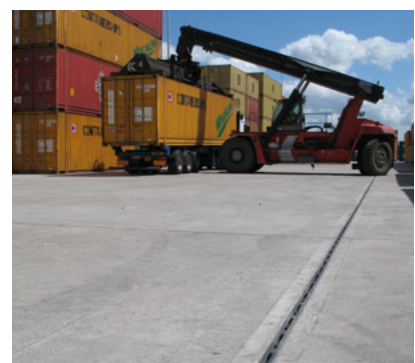
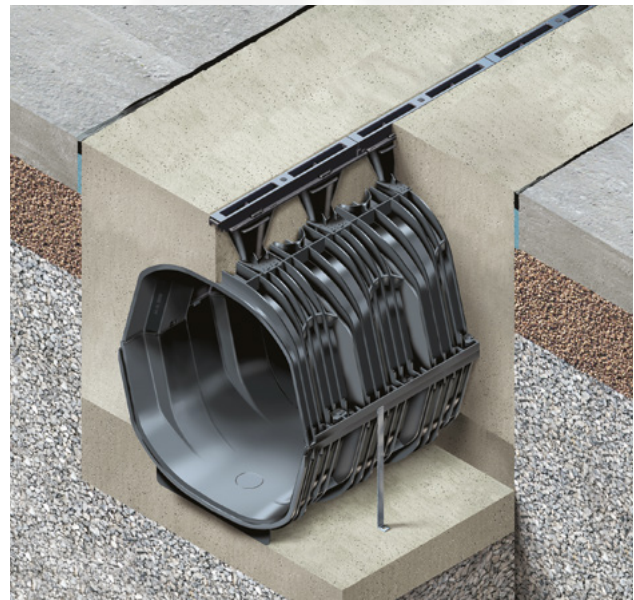
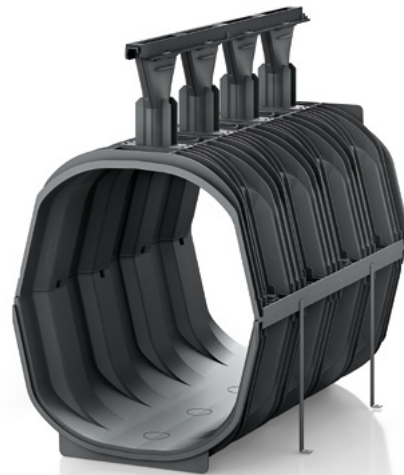
- Retained grating design (non-removable)
- D400 & F900 (EN 1433: 2002)
- Spheroidal ductile iron GJS 500-7 'EN1563' (KTL 'Cathodic Dip' Coated)

- Slot 14mm
- Slot 28mm

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.



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



Ports & Terminals - Landside

Drainage systems for environments that require safe, durable, practical and cost-effective solutions.

System Requirements

Port and terminal 'landside' areas typically include the following characteristics:

- Medium to ultra-heavy-duty loads (C250 - F900); depending on location (wheel, static, impact loads and dynamic forces). Channels at the base of ramps subject to high impact, so heavier load rating required (D400 & E600). Use by personnel and the general public is intensive, so medium-duty (C250) systems should be selected for pedestrian areas.
- Medium to high traffic flow; varied traffic patterns (frequency, speed, acceleration, braking, turning, angled approach). Channel installations in parking areas are subject to regular traffic with wheels turning on gratings, imposing dynamic forces.
- A variety of landside applications subject to varied wheel types and configurations (trolleys, small-wheel, solid tyre / pneumatic tyre, passenger and service vehicles with single-tyre / multi-tyre / single-axle / double-axle). High loads and dynamic forces imposed through front wheel configuration on forklift trucks and reach stackers.
- Public areas subject to constant use requiring surface drainage system design to be strong, durable, practical and functional for long-term high performance.
- Safe, secure environments for operational staff, passengers and other users is paramount. Systems require hydraulically efficient and user-friendly 'HeelSafe' gratings, monolithic design or 'tamper-free' security locking, and surface features that allow barrier-free access.
- Port and terminal infrastructure often includes multi-level spaces with complex structural designs. Shallow channel systems are often required for multi-storey parking areas, raised walkways, mezzanine floors etc.
- Coastal environments are extremely corrosive, requiring system design and materials to have a high-level of durability and corrosion resistance.
- Cost-effective installation and maintenance. Reliable system performance is required for 24/7 operations.

HAURATON systems meet and exceed requirements for a variety of 'landside' applications at ports and terminals, with a versatile range that provides total design flexibility.

Typical Applications

Applications in port and terminal 'landside' areas include:

- Marinas
- Public Spaces
- Terminal Buildings
- Access Roads
- Petrol Filling Stations
- Free Ports & Free Zones
- Hotels & Commercial Centres
- Warehouse, Distribution & Logistics Centres
- Parking Areas (Cars, Coaches, Lorries, Other)



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

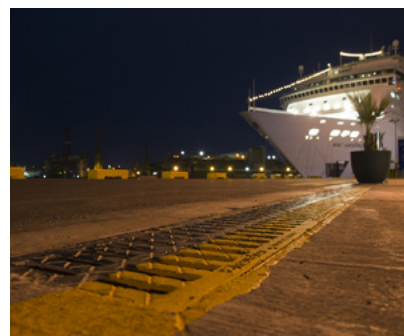
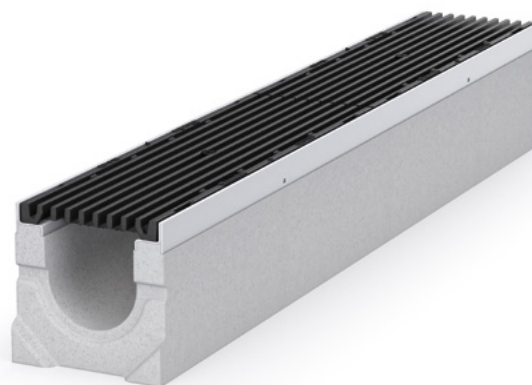
- Constant-depth (same channel depth)
- Built-in fall (150, 200, 300)
- Stepped-fall

Edge Detail

Two options:

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

*When gratings are fixed with locking bolts/bars, this system is especially resilient to dynamic forces caused by the turning/twisting action of wheels.



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®PLUS

A medium-duty system selected for use when durability and aesthetics are important project requirements.

RECYFIX®PLUS incorporates a neat and discreet steel edge-rail that accommodates all surface finishes and complements contemporary features in modern buildings and landscape design. This design feature also provides improved rigidity and protection at the channel edge.

RECYFIX®PLUS is fitted with a range of 'lay-on' gratings in a variety of materials, designs and loading options up to D400kN. Refer to product brochure for detailed information.

Key Features

Material

- Modified Polypropylene (PP) composite

Loading

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

Channel Widths

- 100, 150, 200 & 300 mm

Channel Lengths

- 1.0m & 500mm (selected depths)

Grating Options

- Lay-on design
- Load options ranging from A15 - D400 (EN 1433: 2002)
- Variety of grating designs and material's available
- Refer to product brochure

Channel Configuration

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

Edge Detail

- Steel edge-rail fitted

Two options:

- Galvanised steel (DX51D+Z275-MA-C)
- Austenitic stainless steel (AISI Grade 304; EN CNS 1.4301)
- Neat, discreet, rigid and aesthetic



RECYFIX®PRO

A medium-duty system with practical design suitable for a variety of applications up to D400 loading. When fitted with a composite grating, **RECYFIX®PRO** is fully corrosion resistant, non-conductive and anti-static; reducing long-term maintenance costs and avoiding expensive earthing works.

RECYFIX®PRO incorporates a discreet polypropylene edge-frame formed as part of the channel body structure, for improved rigidity and enhanced aesthetic appearance. The system is pre-assembled, lightweight and compact for quick and easy installation on site. Refer to product brochure for detailed information.

Key Features

Material

- Modified Polypropylene (PP) composite

Loading

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

Channel Widths

- 100, 150, 200 & 300 mm

Channel Lengths

- 1.0m & 500mm (selected depths)

Grating Options

- Inlay design
- Load options ranging from A15 - D400 (EN 1433: 2002)
- Variety of grating designs and material's available
- Refer to product brochure

Channel Configuration

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

Edge Detail

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



RECYFIX®STANDARD

Lightweight, cost-effective and versatile, **RECYFIX®STANDARD** is perfect for areas subject to heavy pedestrian use and occasional traffic by medium load vehicles.

RECYFIX®STANDARD includes a visible edge detail for enhanced rigidity at the surface.

Available in nominal widths from 100mm to 300mm, and with a variety of 'lay-on' grating designs and materials, **RECYFIX®STANDARD** provides a practical and economic option for linear drainage. Refer to product brochure.

Key Features

Material

- Modified Polypropylene (PP) composite

Loading

- System load rated to C250 (EN 1433: 2002)

Channel Widths

- 100, 150, 200 & 300 mm

Channel Lengths

- 1.0m & 500mm (in some sizes)

Grating Options

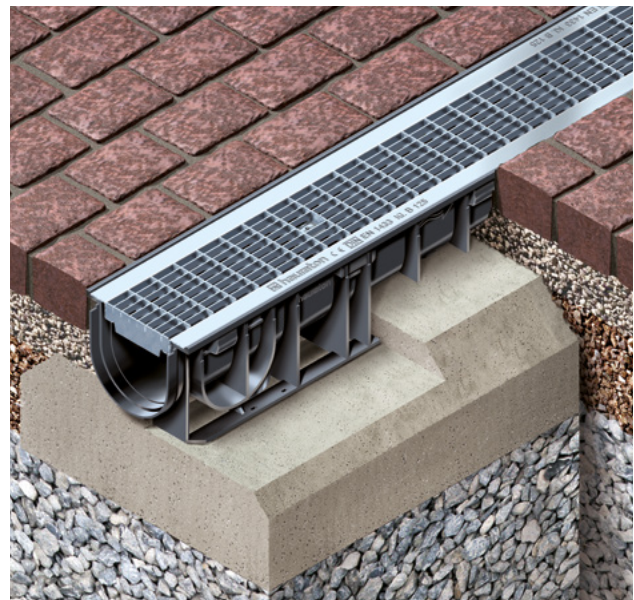
- Lay-on design
- Load options ranging from A15 - C250 (EN 1433: 2002)
- Variety of grating designs and material's available
- Refer to product brochure

Channel Configuration

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

Edge Detail

- Integral polypropylene edge (visible on the surface)



SLOTTED CHANNEL

SLOTTED CHANNEL achieves high standards in quality and design, combining both aesthetic appeal and practical performance. The discreet linear surface detail complements modern building architecture and external landscape design, achieving a simple, safe and durable installation.

With high intake capacity through the surface slot opening, **SLOTTED CHANNEL** provides efficient and effective drainage of surface water in locations around the world that experience the highest rainfall intensities. Test data available on request. The **SLOTTED CHANNEL** system includes an access cover accessory for quick, simple cleaning and maintenance. Refer to product brochure for detailed information.

Key Features

Material

- Modified Polypropylene (PP) composite
- Fibre-reinforced concrete

Loading

- Channel body load rated to D400 / E600 (EN 1433: 2002)

Channel Widths

- 100, 150 & 200 mm

Channel Heights

- Refer to Slotted Channel brochure
- Slotted channels can also be custom-made to suit most site requirements

Channel Lengths

- 1.0m & 500mm (selected depths)

Slotted Cover Options

- Load options ranging from A15 - E600 (EN 1433: 2002)
- A-symmetric cover design
- Slot height options of 105mm (UK)
- Slot height options of 105mm, 160mm & 200mm (international)
- Galvanised steel (DX51D Z275)
- Austenitic stainless steel (AISI Grade 304, 316, other)
- Refer to product brochure

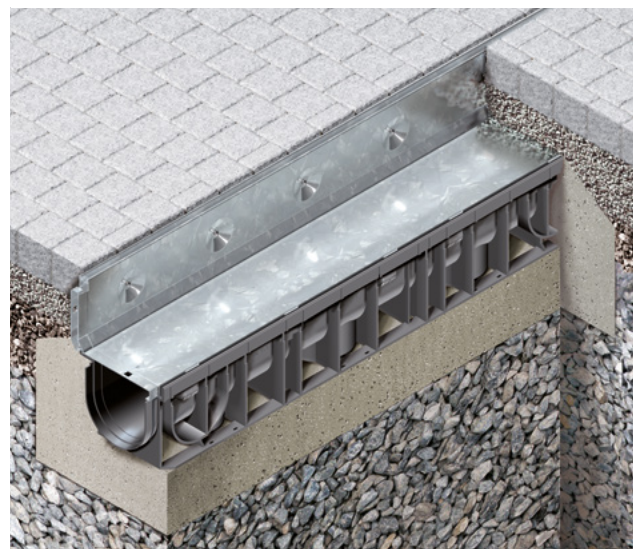
Channel Configuration

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

Edge Detail

- Slot width options in 10mm (UK)
- Slot width options in 10, 12, 14 & 18 mm (international)

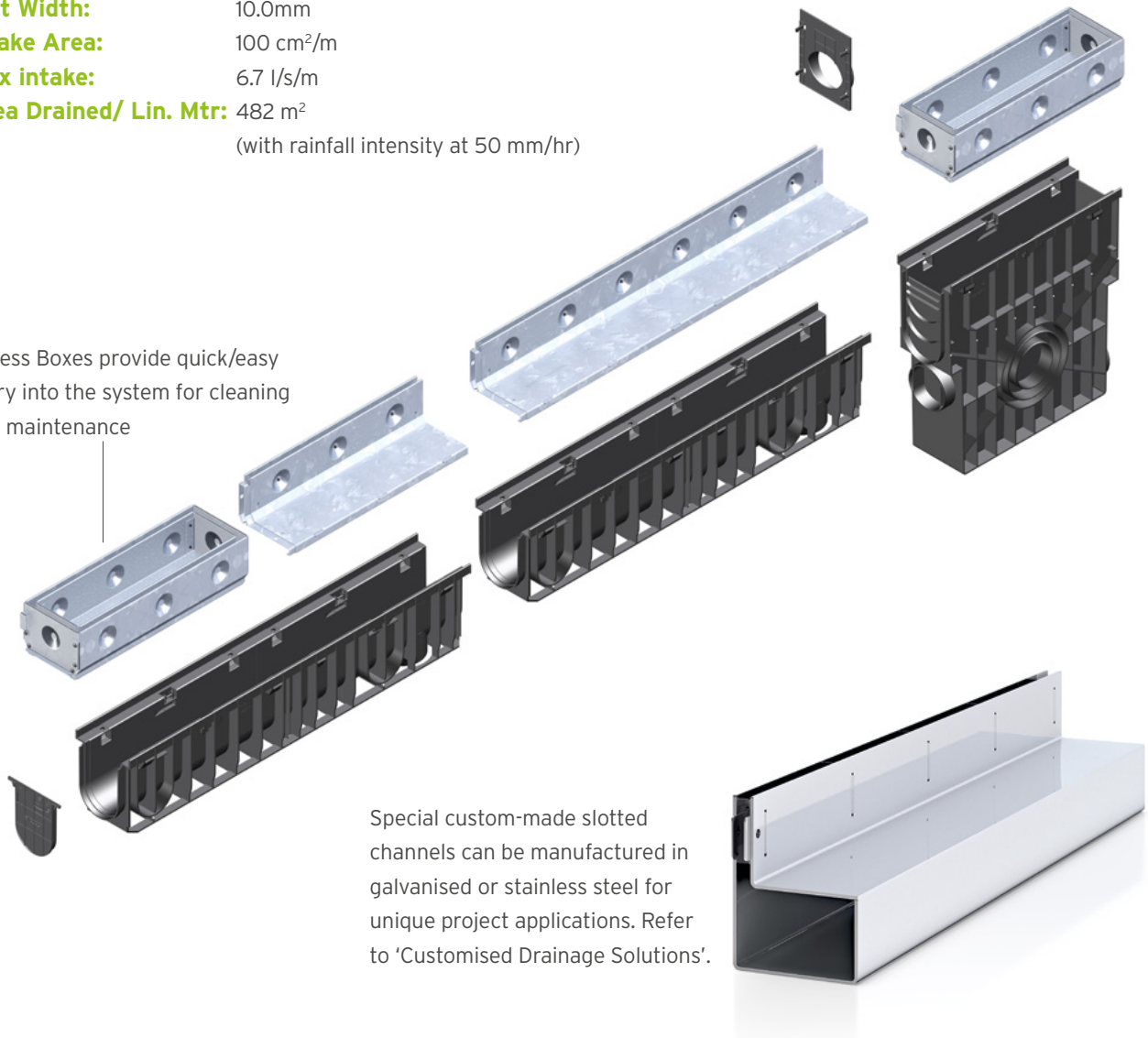
*The A-symmetric slotted cover can be used along building facades, walls and landscape features at ground level.



Further information regarding intake capacity is available on request.

Slot Width: 10.0mm
Intake Area: 100 cm²/m
Max intake: 6.7 l/s/m
Area Drained/ Lin. Mtr: 482 m²
 (with rainfall intensity at 50 mm/hr)

Access Boxes provide quick/easy entry into the system for cleaning and maintenance



SHALLOW CHANNELS

The core range of **RECYFIX®** and **FASERFIX®** grated channel systems (A15 - E600) are available in shallow channel options, with a variety of shallow depth dimensions no greater than 115mm deep (see below).

Shallow channel options are generally 100mm wide (other channel widths are available in reduced height dimensions). Shallow channels can be used in most applications where there is a depth restriction. When used in raised concrete structures, channels should be installed with sealed joints and above a Damp Proof Membrane (DPM). Refer to product brochure for detailed information.

Key Features

Material

- Modified Polypropylene (PP) composite
- Fibre-reinforced concrete

Loading

- Depends on system selected
- A15 - E600 (EN 1433: 2002)

Channel Widths

- 100 mm
- Shallow channels also available in wider sizes

Channel Heights

- **RECYFIX®STANDARD**: 60, 80 & 100 mm
- **RECYFIX®PRO**: 75, 95 & 115 mm
- **RECYFIX®PLUS**: 60, 80 & 100 mm
- **RECYFIX®NC**: 75 mm
- **FASERFIX®KS**: 80, 100 & 110 mm

*Overall height dimension provided

Channel Lengths

- 1.0m

Grating Options

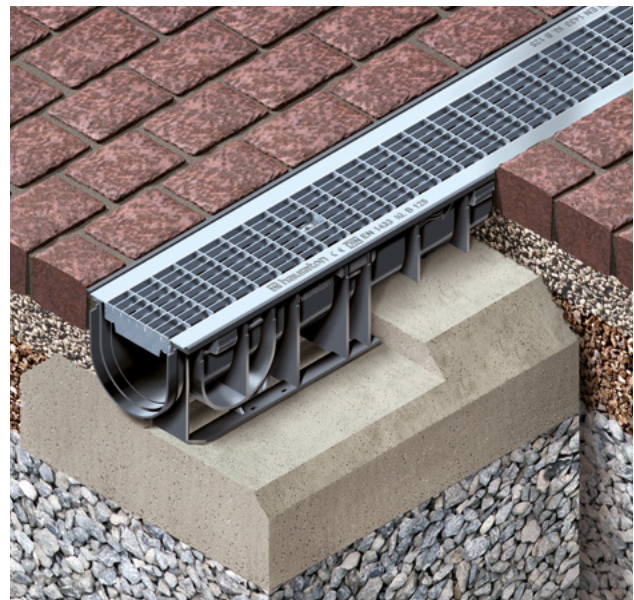
- Lay-on or inlay design
- Load options ranging from A15 - E600 (EN 1433: 2002)
- Variety of grating designs and material's available
- Refer to product brochure

Channel Configuration

- Constant-depth (same channel depth)

Edge Detail

- Integral polypropylene edge (visible on the surface)
- Galvanised steel S275J263+Z
- Stainless steel CNS 1.4301
- Neat, discreet, rigid and aesthetic

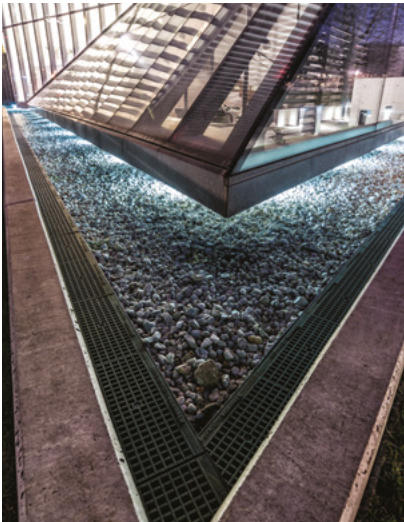


HAURATON CHANNELS

Appropriate channels from HAURATON's standard range of **RECYFIX®** and **FASERFIX®** linear drainage systems can be used for façade drainage at ground level if there are no depth restrictions on site.

Refer to the 'Public Realm & Shared Space' Product Selector for details of suitable systems.





HAURATON GRATINGS

HAURATON offers a variety of grating designs supplied as standard with the range of linear drainage systems, including mesh, slotted, longitudinal, perforated and HeelSafe. HAURATON also provides unique, innovative 'award-winning' designs such as GUGI-MESH and FIBRETEC gratings.

Grating materials include spheroidal ductile iron, galvanised steel, stainless steel and specialist composites such as 'glass-reinforced polyamide' (PA-GF). DECORATIVE and COLOURED gratings provide an extra dimension to the project design.

Durability

HAURATON gratings are designed for long-term durability and low maintenance.

Channel systems are often installed in corrosive environments.

FIBRETEC® and GUGI®MESH gratings are supplied in glass-reinforced polyamide (PA-GF), a high-performance composite that is highly corrosion resistant. Once in place, gratings will not corrode (no oxidation) and will maintain their aesthetic appearance for the projects life.

For extra durability and design flexibility, selected ductile iron gratings can be supplied with a galvanised coating.

Powder coatings can also be arranged on request to provide additional colour options and enhanced resistance (min. order quantity/extended lead time may apply).



KTL COATING

HAURATON provides selected ductile iron gratings with a 'KTL' coating.

The coating is applied to the grating using a 'cathodic dip' process.

Benefits

- High durability and weather resistance
- Protects against corrosion and oxidation
- High resistance to chemicals, acids, fuels and salts
- Complies with environmental standards
- No risk to users when applied (non-hazardous)
- Paintable

**If ductile iron gratings are preferred, specifiers are advised to select HAURATON gratings with a 'KTL' coating as standard, to maintain the aesthetic appeal of the installation.



York Station - 2007



York Station - 2017

York Railway Station, United Kingdom

RECYFIX®STANDARD system with Ductile Iron Slotted Gratings with 'KTL' coating applied.

The installation looks as good today as it did ten years ago.

Rusty Gratings!

Ductile iron gratings may be subject to oxidation (a natural process) when channels are installed in locations that may not be trafficked (or trafficked infrequently).

Water-based coatings provide only superficial and cosmetic protection, so oxidation may occur at some point in the future.



METROPOLIS GRATINGS

Inspired by Art Deco design for use on modern projects.

Compatible with **RECYFIX®PRO** and **FASERFIX®KS** systems



FIBRETEC GRATINGS

Bring colour, bring life to projects.

HAURATON's range of FIBRETEC gratings in Glass-Reinforced Polyamide composite combines superior performance with enhanced aesthetics, bringing longevity and life to projects.

Benefits

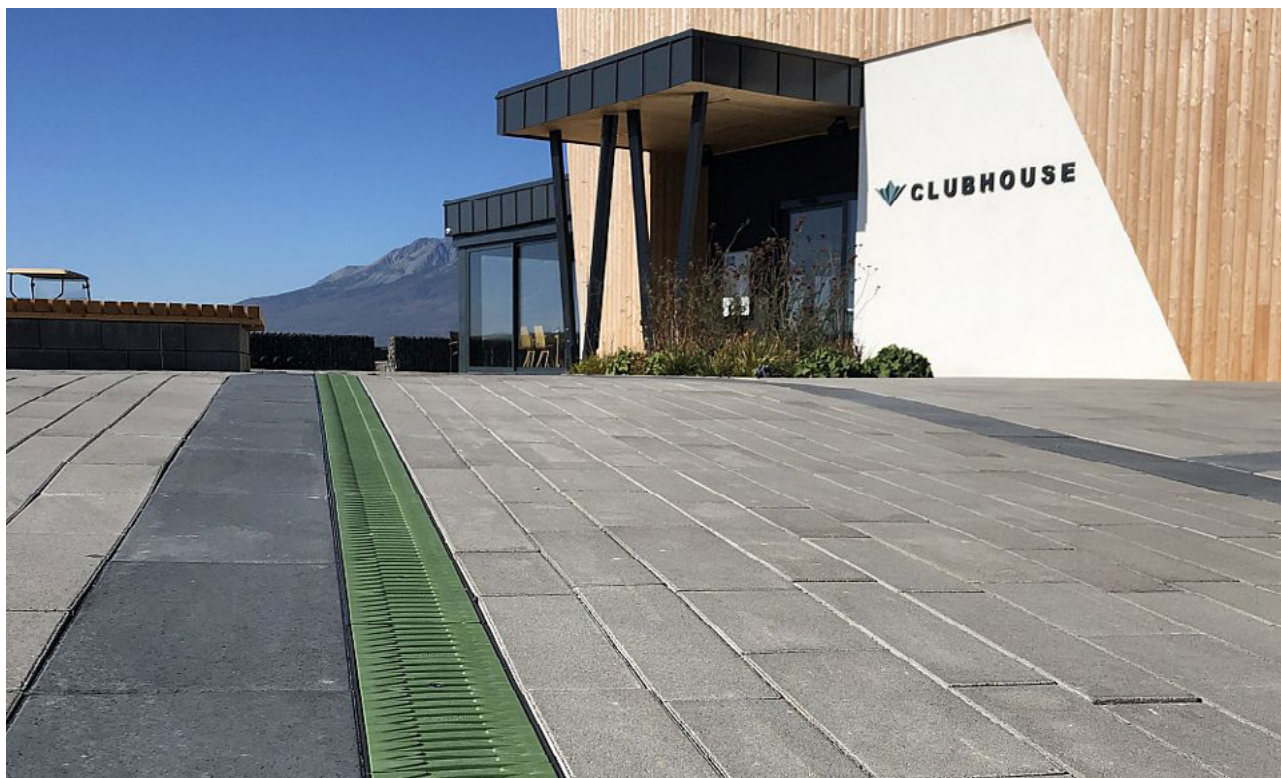
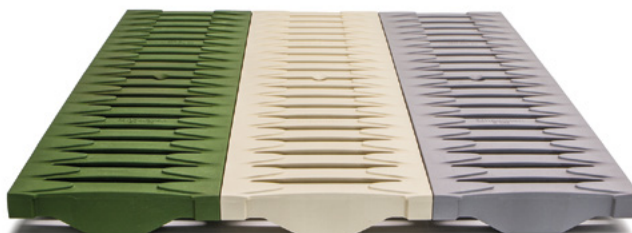
FIBRETEC gratings have the following benefits:

- UV stable
- HeelSafe (9mm opening)
- Corrosion resistant; no oxidation
- Anti-static and none conducting
- High resistance to chemicals, fuels, salts etc

*Compatible with **RECYFIX®PRO** and **FASERFIX®KS** systems

Readily available in standard colours:

- Fern
- Sand
- Stone
- Black



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)

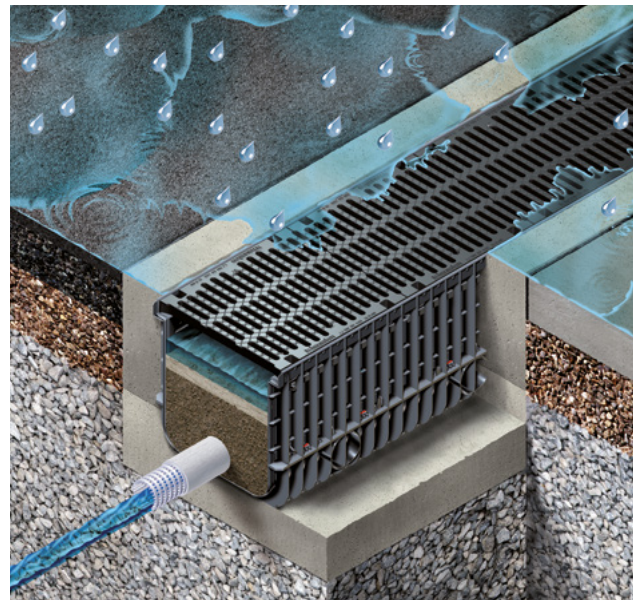
Channel Configuration

- Constant-depth (same channel depth)

Edge Detail

Three options:

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



AQUAFIX® SEPARATORS

HAURATON's range of advanced and efficient **AQUAFIX®** Separators reduce pollution for environmental protection by providing mechanical separation of contaminants (hydrocarbon compounds, light liquids, metals, fine particles, grease, fatty acids, other harmful elements) from surface water or effluents, achieving water cleansing efficiency up to 99.9%.

AQUAFIX® units help return clean water to the natural eco-system for sustainable preservation of vital resources. Contaminants are captured for onward disposal.

Key Features

Material

Separators are available in:

- Steel
- Concrete
- Polyethylene (PE)
- Polypropylene (PP)

Capacities

- Systems customised to suit project needs
- AQUAFIX®SKG Coalescence Separators in steel (multiple bypasses fitted) can accommodate flow rates over 4000 lit / sec

System Design

- Corrosion resistant
- Durable, high quality materials
- Modular design for flexibility
- Advanced and innovative systems
- Modern coalescence separation technology
- Simple, practical design for ease of maintenance

Treatment Efficiency

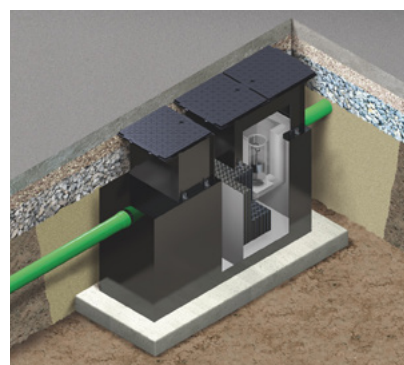
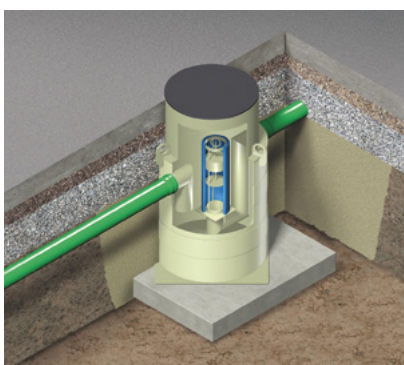
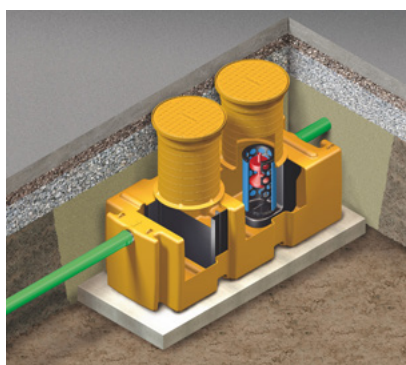
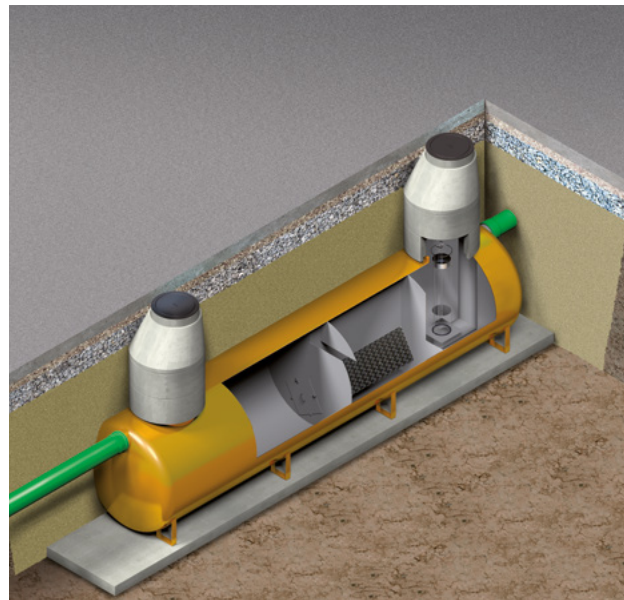
- Water cleansing efficiency up to 99.9%.
- Ultra-efficient separation and treatment process

Standards

- Systems comply with all recognised standards and regulations

Applications

- | | |
|-----------------|------------------------------------|
| ■ Airports | ■ Industrial Plants |
| ■ Ports | ■ Vehicle Washing Facilities |
| ■ Highways | ■ Warehouse & Logistics Centres |
| ■ Factories | ■ Service Stations & Fuel Stations |
| ■ Parking Areas | ■ Service Yards & Industrial Areas |



Design Software

Hydraulic Design Software

HAURATON provides a comprehensive design service, which is free of charge.

Our channel drainage configurations are designed and sized using '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 30 years with total reliability.

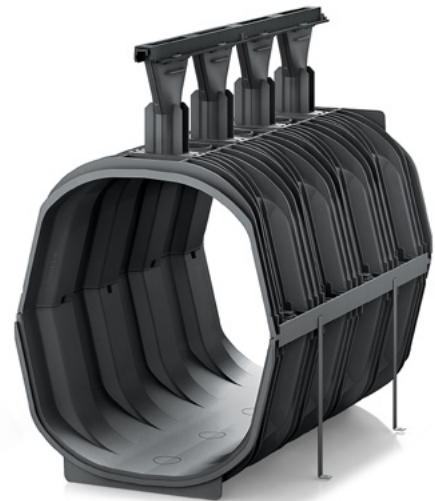
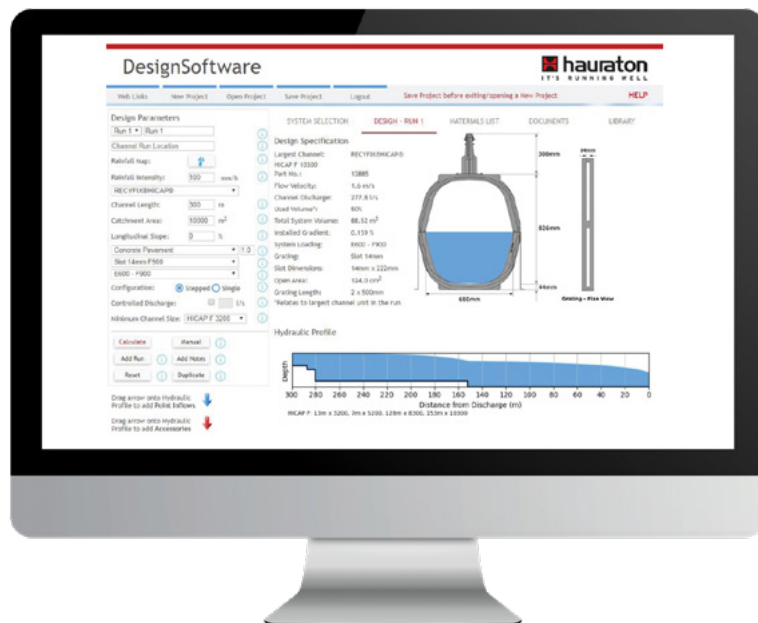
HAURATON DesignSoftware

User-friendly and free-of-charge, our web-based application 'DesignSoftware' provides construction industry professionals with quick, simple hydraulic analysis, channel sizing, project design and product specification for the company's core range of surface drainage systems (for landscape, commercial and civils projects) whilst working on their own desk-top and lap-top computers.

HAURATON 'DesignSoftware' provides engineers with the flexibility to create their own drainage designs, with just three clicks to a hydraulic calculation.

Follow the link below to register and use the software:

<https://hydraulicdesign.hauraton.com/register/>



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

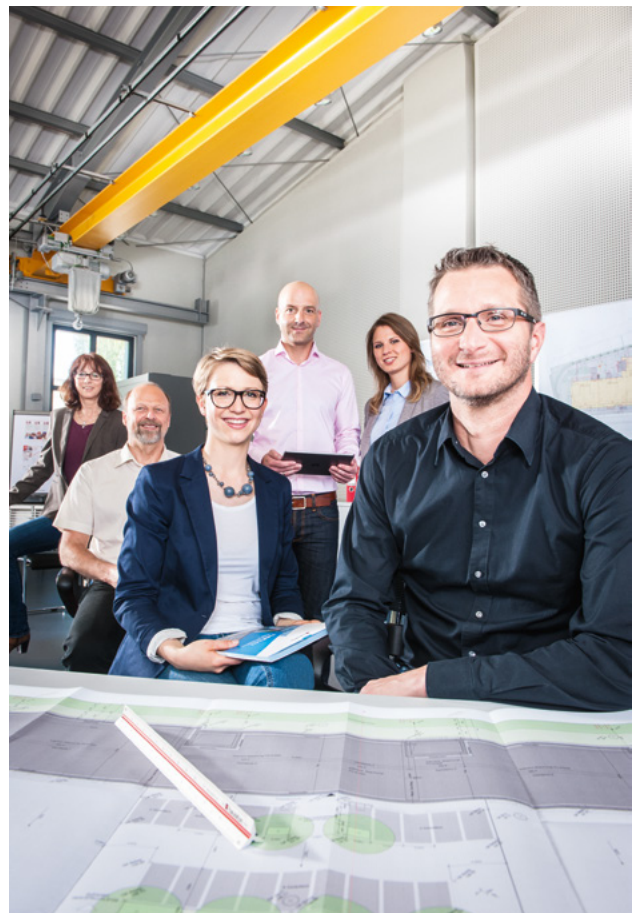
HAURATON offers a comprehensive design service for all product ranges. This is available free of charge and without obligation.

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.



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.



Port & Terminal Project List

HAURATON drainage systems have been used on the following projects and more...

Europe

AV Dawson Inland Container Port, UK
Bulkhaul Inland Container Port, UK
Hartlepool Docks (PD Ports), UK
Hull Docks (PD Ports), UK
Immingham Docks (PD Ports), UK
Southampton Port, UK
Teeside Container Terminal, Middlesbrough, UK
Neptune Yard Docks, Wallsend, Newcastle, UK
Berth 7, London Gateway, UK
Portbury Docks, Bristol, UK
Grangemouth Docks, Scotland
Rosyth Docks (MOD), Scotland
Dublin Port, Ireland
Jubilee Quay, East Quay & Greenwell Quay, Port of
Sunderland, UK
SNOP IAMP (International Advanced Manufacturing Park),
Port of Sunderland, UK
Seaforth Docks, Peel Ports, Liverpool, UK
Port of Blyth, UK

Container Terminal, Port Burgas, Bulgaria
Port of Lom, Bulgaria

Marina Frapa, Rogoznica, Croatia
Terminal Gaženica, Zadar, Croatia
Gaženica Port Parking Area, Croatia
ACI Marina Dubrovnik, Croatia

Prag Marina, Prague, Czech Republic

Muuga Port, Estonia

Island La Reunion Fishing Basin, France
Nantes Port, France
Port Bonneuil-sur-Marne, Paris, France
Independent Harbour of Paris, France
Port de Plaisance Sables d'Olonne, France
Port de La Rague Canne Mandelieu, France
Port de Saint Malo, France
Port de Javel, Paris, France
Port Méthanier, Dunkerque, France
Port de la Cabaude, Sables d'Olonne, France
Port de Bercy, Paris, France
Port Tourrettes, Monaco, France
Naval Port, Toulon, France
Port de Concarneau, France
Polder de Brest, France
Port du Vivier, France

Europe

Port de Plaisance, St Malo, France
Port de Marseille, France
Port de Sainte Maxime, France
Port de Commerce, Metz, France
Port de Gennevilliers, France
Port de Commerce, Blainville, France
Port de Commerce, Sète, France
Port Maritime, Port la Nouvelle, France

City Port, Senftenberg, Germany
Herne Container Terminal, Germany
Nuremberg Port, Germany
Ramstein Container Terminal, Germany
Rhine Harbour, Andernach, Germany
BASF Container Terminals: KVT 1, KVT 2 & KVT 3,
Ludwigshafen, Germany
Container Terminal, Wolfsburg, Germany

Verbrugge Terminals, Terneuzen, The Netherlands

Container Terminal, Cervignano del Friuli (UD), Italy
Container Terminal Interporto Civitavecchia (RM), Italy
Container Terminal Interporto Marche, Jesi (AN), Italy
Salerno Port, Italy
Molo Santa Lucia, Palermo, Italy
Ortona Port, Chieti, Italy
Livorno Port, Livorno, Italy
Container Terminal, Segrate, Milan, Italy
Container Terminal, Gioia Tauro, Italy
Fincantieri, Palermo, Italy
Gioia Tauro Port, Italy
Port of Napoli (Naples), Italy
Port of Monfalcone, Italy
Port of Manfredonia, Italy

Cruise Ship Terminal, Valletta, Malta

Quay 12, Ventspils Port, Latvia

Multimodal Railway Container Terminal, Kaunas, Lithuania

Marina, Elblag, Poland
Sea Port, Gdansk, Poland (multiple projects)
Sea Port, Gdynia, Poland (multiple projects)
Scout Waterside, Kołobrzeg, Poland
Sea Port, Swinoujscie, Poland
Sea Port, Szczecin, Poland (multiple projects)

Container Terminal, Agigiea, Constanta, Romania
Container Terminal CSCT, Agigiea South Port, Romania

Port & Terminal Project List

Europe

KRONOSPAN Warehouse, Port of Agigiea, Constanta, Romania

Container Terminal KIA Slovakia, Zilina, Slovakia

SPS Logistic centre, Budimir, Slovakia

SPS Logistic centre, Strecno, Slovakia

Port of Koper, Slovenia

Milšped Multimodal Logistic Terminal, Niš, Serbia

Russia

Seaport 'Ustj Luga', Saint-Petersburg, Russia

Asia

Marine and Heavy Engineering, Johor Bahru, Malaysia

Kuantan Port, Kuantan, Malaysia

Australia & New Zealand

Pedestrian Area, Darling Harbour, Sydney

Fergusson Wharf, Auckland, New Zealand

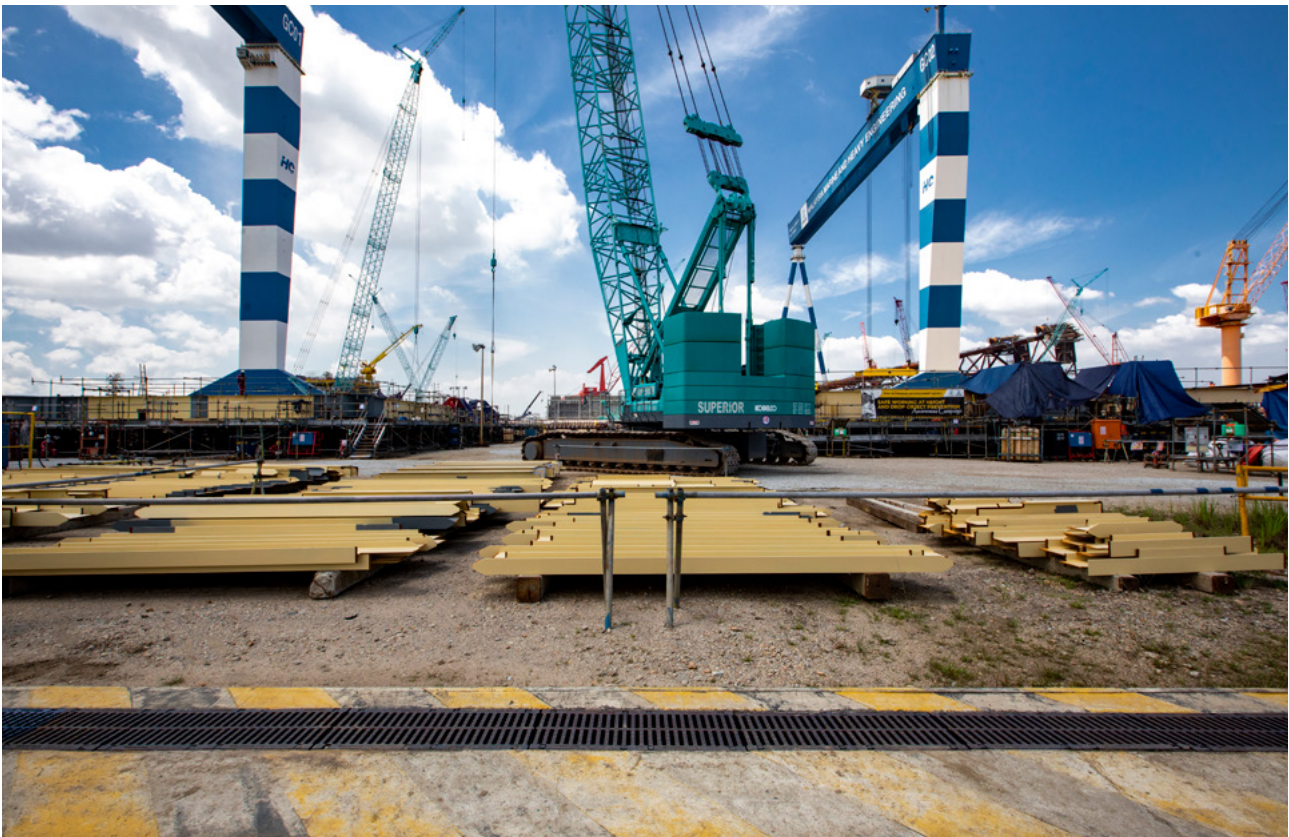
Canada

Terminal Viau, Montreal Port, Canada

South America

Lazaro Cardenas Port, Mexico





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