

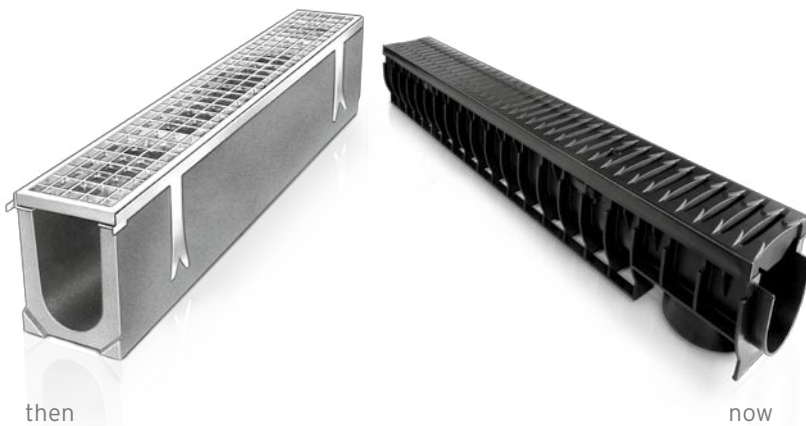
Invention is our passion.

Welcome to the innovative drainage specialist.



Invention means
also taking the long,
hard trail.





That, which started almost 50 years ago with a new innovative type of cement, has continued until now with our successful products.


Illustration: RECYFIX[®]PRO Channel with FIBRETEC Slotted grating (r.)
FASERFIX[®]Standard Channel with L-profile frame and mesh grating (l.)

It is a case of taking opportunities. Even if takes "a little more effort". Karl Hauger heard about the outstanding stability of a cement from Italy in 1963. It was said to have strength that was previously unheard of. He immediately jumped into his DKW Meisterklasse company car and headed to Livorno to pick up a sample for testing. In those days the roads were bad, and the car did not withstand the strenuous journey to Italy.

But in spite of this setback, Karl Hauger did not give up.

Following major engine damage, he purchased a used Moto Guzzi Cardellino in Italy for 320,- DM; leaving him just enough money to buy a tank full of fuel. Loaded with 25 kg of cement, he travelled over the Gotthard pass in three days back to Rastatt. Immediate tests with the new cement confirmed its revolutionary characteristics. This was the birth of the FASERFIX product line.

To the present day, the extremely high quality of HAURATON concrete products has been based on this cement, which was transported in such an adventurous way. This is why the Italian motor cycle deserves its place of honour in the HAURATON customer centre.

A black metal grate with water flowing through it, set against a background of a grassy field and a cliff under a blue sky. The grate is in the foreground, and the water is cascading down it. The background shows a green field, a sandy beach, and a cliff under a blue sky with some clouds. The text "Excellence is born from continued thinking." is overlaid on the image.

Excellence is born
from continued thinking.



Even when a product is successful, we continue to look and develop it further. This is how the unique injection moulded grating came to be - hydraulically optimised and completely corrosion-free.

Illustration: RECYFIX®PRO Channel with FIBRETEC Slotted grating

We were not content with what we had because we were aware that successful drainage starts with the grating. Our customers asked us time and time again for an efficient, corrosion-free complete system. So together our industrial designers, construction offices and the IKET institute for plastic engineering, we found a new material and created an unmistakable and extremely functional product.

Showing the rain the way to go, and getting it there quickly.

Development phases from drawing board to new high-tech product.



„Our product development is based on keeping in touch with our customers. They demanded an innovative idea that would solve the issue of corrosion once and for all. So we started to look for ideas.“

Dieter Bastian
Sales Director HAURATON

We focus on the market needs.

We listen to our customers carefully, because their suggestions are the basis for our developments. We have almost 200 sales employees who observe the trends on the European market on a daily basis. And as soon as we started to hear the demand for a corrosion-free grating with outstanding hydraulic performance with ever-increasing frequency, we started the research and development process.

The search for the right material.

We simply tested everything. In order to find the right material, comprehensive material comparisons and tests were performed. The best result was produced by a fibre-reinforced polyamide plastic: It proved to be stable, strong, resistant, long-lasting and environmentally friendly. We gave it the name FIBRETEC.

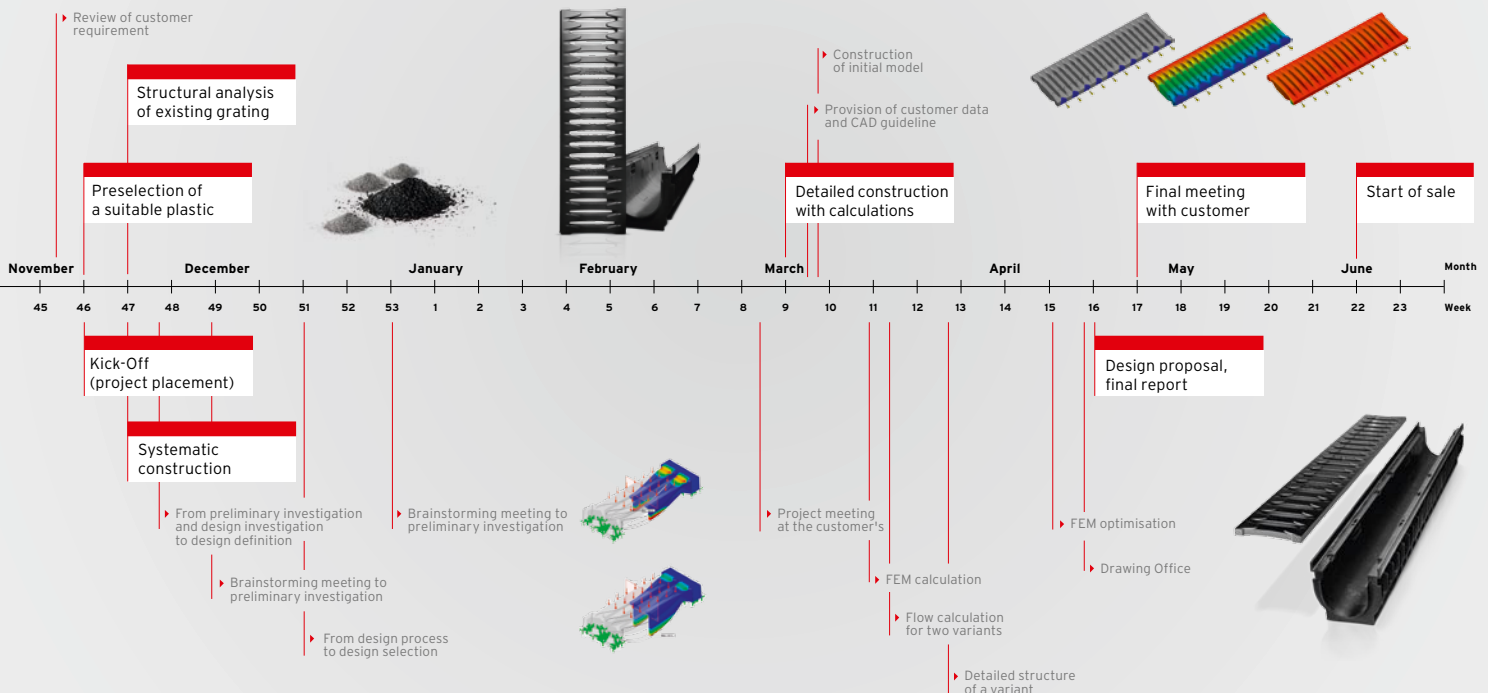
„New plastic variants were on the test stand time and time again – and finally something was created that even exceeded our requirements.“

Prof. Dr. Ing. Jürgen Gundrum
Manager STZ IKET



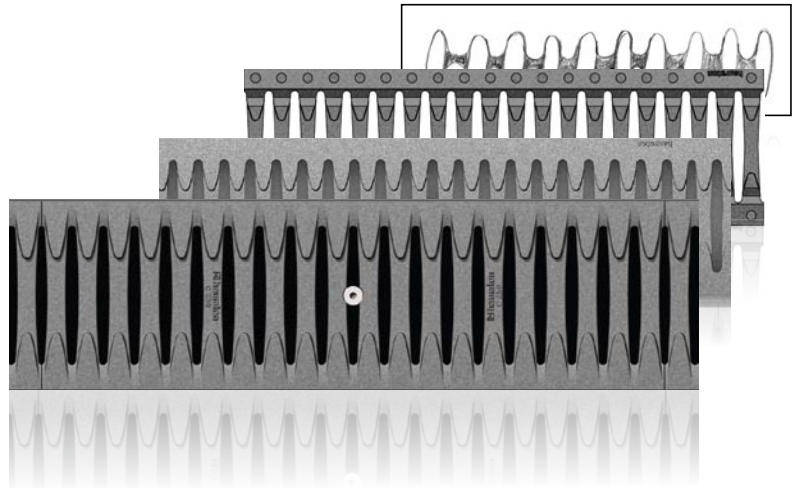
STZ Institute for plastic and processing technology - IKET

The development process.



„Good design is functional – together we have produced a new, unmistakable design that has significantly improved the hydraulic characteristics. Our design concept and the material allow us to create a shape that gives the product its uniqueness by means of its clarity, functionality, innovation and not least its emotional impression.“

Dipl. Designer Christoph Winkler
Director, reform design Stuttgart



„The structure of the underside of the grating was decisive for stability, and we worked on it for a long time.“

Prof. Dr. Ing. Bernhard Rief
STZ IKET



STZ Institute for plastic and processing technology - IKET

The material had been found, now the search for the best possible design for the new grating was on.

This was not a single process, but one with several phases with the involvement of our Research & Development, Marketing, Sales and Logistics Departments. The perfect shape was developed in various workshops. Our employees were extremely creative, and different surface structures were designed and discussed in collaboration with well-known design agency **reform design** from Stuttgart. The technical design took place at the same time in order to obtain the load-bearing capacity stipulated in DIN EN 1433. The tests that followed produced a clear result with regard to appearance and functionality: "teeth" on the top significantly increased hydraulic performance, and a special honeycomb structure on the underside provided adequate stability. Following several more feedback cycles with the customers, the new unmistakable HAURATON design was born.



HAURATON FIBRETEC®
The details are decisive.
The prototype.

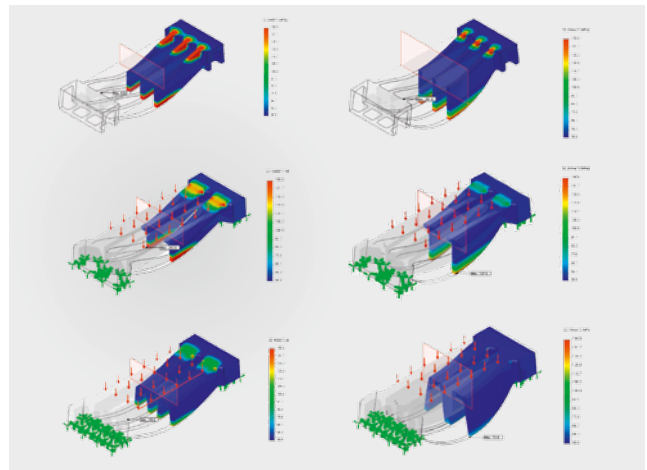


FEM analysis

The Finite Element Method (FEM) is a modern calculation method that is widespread in the field of engineering. This numeric procedure shows which structures (that are simulated on the computer) come closest to having the required characteristics. We have used the FEM method in the construction of the new cover in order to discover the best shape and surface structure with regard to load-bearing capacity.

*"How many direct gatings?
The results of the mould
flow study showed us the
best design for the injection
moulding tool."*

Dipl. Ing. Karl Radimersky
Chief Construction HAURATON



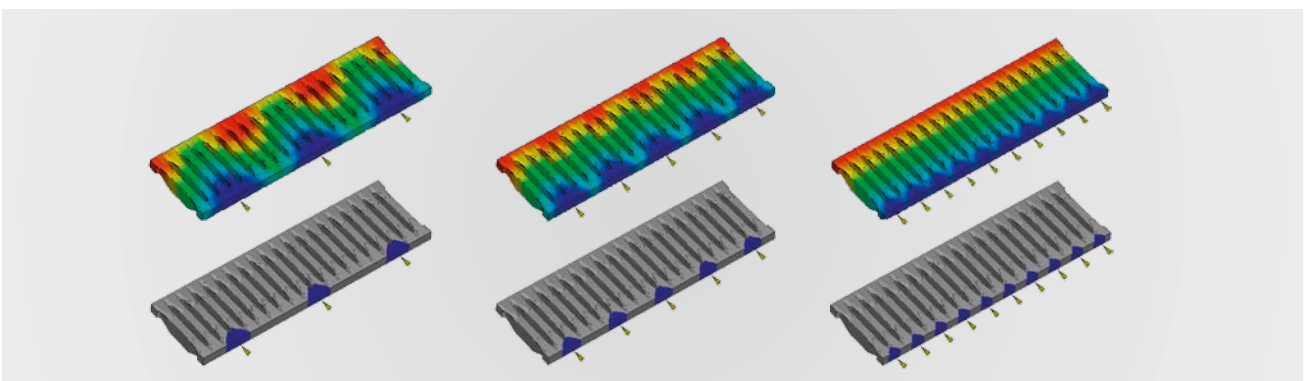
Mould flow study

The mould flow study is a typical computer-simulated process in injection moulding technology. The aim of this study is to discover what the optimum design of an injection moulding tool for the new cover should look like. We chose a tool with 10 gates in order to achieve the best possible product quality.

3 direct gatings

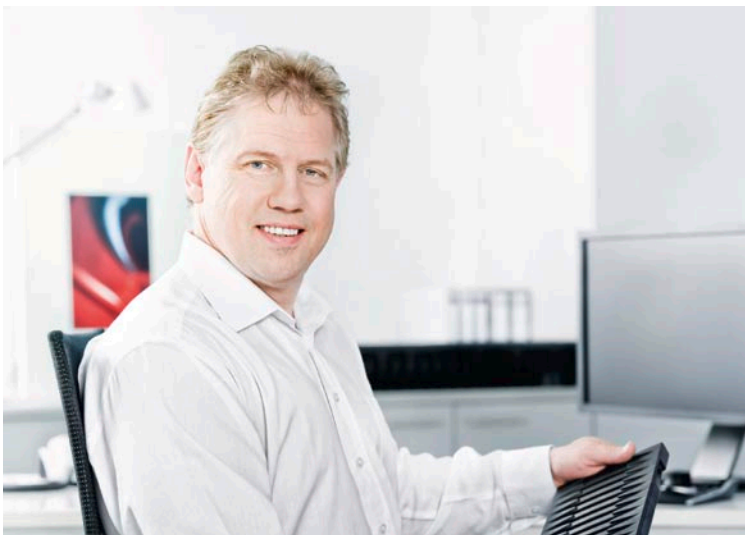
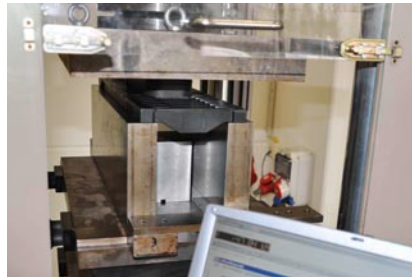
5 direct gatings

10 direct gatings



HAURATON FIBRETEC®

Many series of tests
with the prototypes.



"It was not until the stress tests and hydraulic tests that it was ensured that 100% of the required functions and parameters were actually being achieved."

Dr. Bernd Schiller
Head of Research & Development HAURATON



Into the cold water. The investigations at the HAURATON Hydraulic Centre in Budapest and the load tests that followed have clearly confirmed the strengths of the new grating. Many hydraulic tests were performed to determine the best design for the inlet radii. At the same time, load tests were performed in order to ensure that the finished product met the stringent requirements of DIN EN 1433.



HAURATON FIBRETEC®

Significantly improved
hydraulic performance.

"Many people have contributed to this fascinating product. Internal and external resources were used to find the optimum solution."

Marcus Reuter
Managing Director HAURATON

Finally ready for the market. Corrosion-free, hydraulically optimised and visually appealing - after a development time of less than one year, the new FIBRETEC grating is ready for the market and an absolute highlight with regard to design and functionality. "We are proud", says Marcus Reuter, "of having met all customer requirements with regard to safety and durability without exception." Total freedom from corrosion has opened up many new deployment possibilities - for the particular requirements of garden construction and landscaping.

Recognising and taking opportunities together.

Sandra Kraus

Logistics Department,
with HAURATON since 2005

"When new products are being considered at HAURATON, it is important to involve all areas of the company. My job was to optimise the product with regard to our logistical processes."

Frank Opfermann

Sales Manager,
with HAURATON since 1990

"During the development of the FIBRETEC grating, the main focus was always on the requirements of the market and the needs of our customers."



Karl Radimersky

Chief Construction,
with HAURATON since 1999

"The employees in the construction department were involved from the first artist's impression to mould construction, tool construction and finally to the end product itself. More than 100 construction drawings were created for the channel and the grating - no-one can imagine how complicated that is."

Dr. Bernd Schiller

Head of Research and Development,
with HAURATON since 2008

"As simple as the product looks, the development thereof is much more complex than you think. My job is to bring company internal and external know-how together and co-ordinate the entire development process."

Matthias Bodemer

Marketing Services Manager,
with HAURATON since 1998

"As well as the technical and functional aspects, each HAURATON product must also meet aesthetic and visual requirements and radiate high quality. This has succeeded perfectly with the new Slotted grating made from FIBRETEC."



**Yas Marina Circuit,
Abu Dhabi**
Drained with
RECYFIX®HICAP® Channels

**St.-Stephans-Basilika,
Budapest**
Drained with
RECYFIX®PLUS Channels

**Das Auge („The Eye“),
Darmstadt**
Rainwater seepage with
DRAINFIX®BLOC

**easyCredit stadium,
Nürnberg**
Drained with
SPORTFIX®Channels



CIVILS

Formula 1 track in Abu Dhabi - RECYFIX®HICAP® Type G on the grid

The starter's flag went down for the first time at the end of 2009 for the futuristic Yas Marina formula 1 circuit in Abu Dhabi. A challenge to architects, planners and the construction material. HAURATON supplied more than 20 km of drainage channels for the 170 hectare site. The extremely hard-wearing RECYFIX HICAP type G was used for surface drainage, since the channels have to withstand the vehicles' high speeds of up to 320 km/h and therefore indescribable force.

AQUA

Das Auge („The Eye“) in Darmstadt, Germany - modern office architecture with DRAINFIX®BLOC

There is an architecturally interesting administration building on the site of the Rhein-Main technology centre in Darmstadt. The project name of "The Eye" reflects the shape of the building, whose layout is based on a human eye. A modern and lasting architecture such as this requires contemporary and ecological drainage concepts, which is why the extremely compact DRAINFIX BLOC seepage system from HAURATON was used. The rainwater is led back to the groundwater, which permanently relieves the strain on the sewage system.

LANDSCAPING

St. Stephens Basilica, Hungary - the tourist attraction with RECYFIX®PLUS Channels

There is room for 8500 people in the famous St. Stephens Basilica. Since its inauguration in 1905, it has been the biggest church in Budapest and one of the main tourist attractions, with an appropriate number of visitors. HAURATON drainage keeps the feet of the visitors dry at all times outside the Basilica. The municipal authorities decided to use RECYFIX PLUS Channels with GUGI - Ductile iron mesh gratings on historical St. Stephens Square.

SPORT

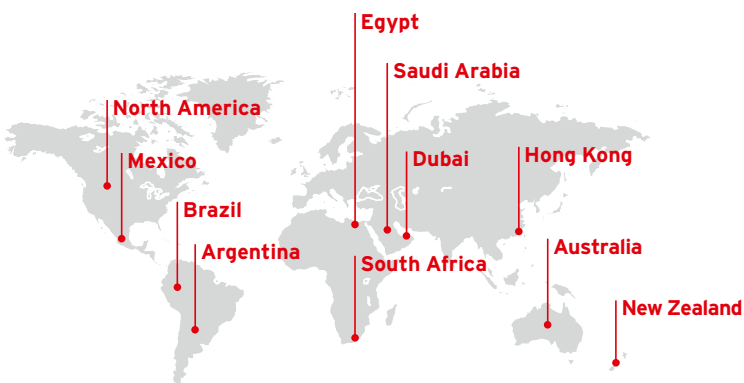
easyCredit Stadium, Nürnberg, Germany - quickly renovated with SPORTFIX®Channels

This renovation of this modern sports arena has increased its capacity. In order to make additional room for the fans, the stand of the easyCredit stadium has been raised and extended, and the interior has been lowered by 1.30 metres. Since the stadium is not just used for football matches but also for athletics, HAURATON SPORTFIX Channels were chosen for the drainage. This means that the arena can be quickly and flexibly transformed from a football stadium into an athletics stadium. Only the plastic covers need to be removed and replaced, which is child's play.

HAURATON Branches



HAURATON worldwide





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