



Hydrotech™ Discfilters

Market leading microscreen filters

Hydrotech™ Discfilters

Hydrotech Discfilters are specially designed for suspended solids removal. The mechanical, self-cleaning filters uses a combination of high quality materials and patented processes, resulting in a product that no other filter on the market can match. Hydrotech Discfilters are high quality products with proven performance, minimum maintenance and the best economic value.



Main product series

HSF2600

The largest Hydrotech Discfilter offers the most cost effective solution per square meter foot print. The unit offers up to 15,2 square meter area per square meter foot print. To reduce overall project cost the HSF2600 frame version has been uniquely engineered to fit into shipping containers during freight.



Discs

12-30

Filtration area

91,2-228 m²

Maximum hydraulic capacity

1200 l/s

HSF2200 Compact series

The latest addition to the Hydrotech Discfilter family is the improved HSF2200 model. The HSF2200-C model has been developed based on feedback from our clients and reflects the actual market needs. The new model consists of the following advantages; self-cleaning nozzles, removed strainer, new bypass design and increased capacity. These features minimize the maintenance need, gives a smaller footprint and a lower OPEX/CAPEX cost.



Discs

1-12

Filtration area

11,2-33,6 m²

Maximum hydraulic capacity

450 l/s

HSF2200

The first HSF2200 edition was introduced in 1995 and revolutionized the discfilter market in municipal waste water treatment. The new product design was customized in order to minimize footprint and maximize cost effectiveness thus out-competing conventional filtration technologies. When introduced, the unit had a footprint of roughly 10% of conventional sand filter installations. The HSF2200 is today the most sold Hydrotech Discfilter unit in the municipal and industrial market and is installed in a vast amount of different applications worldwide.



Discs

1-24

Filtration area

5,6-134,4 m²

Maximum hydraulic capacity

450 l/s

1F Discfilter with tank



2F Discfilter without tank

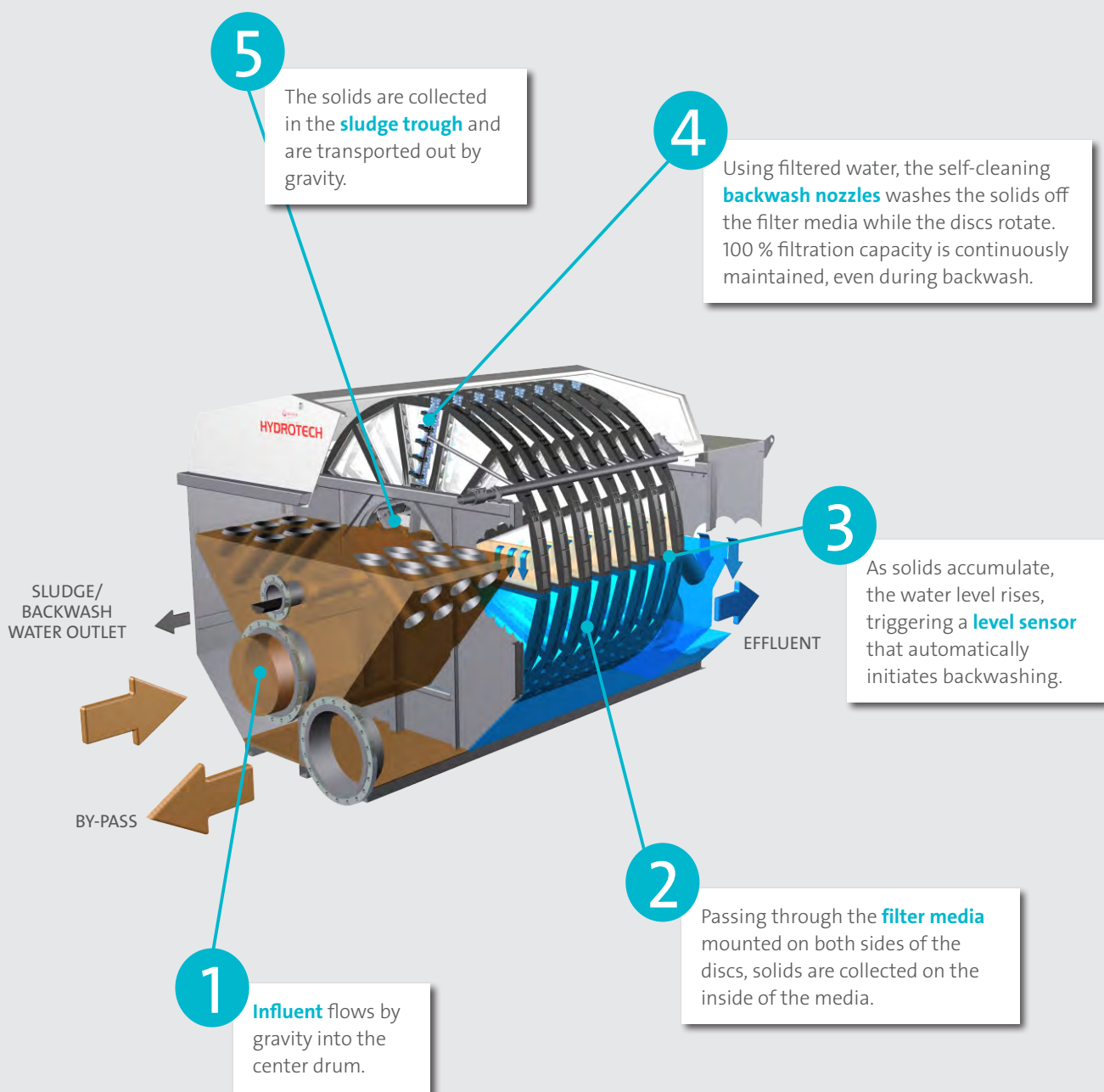


Two configurations

The filters are available in two configurations, with tank for pipe connections and without tank for concrete channels.

The highest level of filtration efficiency

How it works



Minimum maintenance

The superior design of the Hydrotech Discfilter minimizes the need for maintenance and the maintenance that is needed is easy to perform. The filter panel's patented design facilitates replacement without the need for specialized service or system downtime. No tools are required for inspection or replacement of the nozzles and there's no need to drain the tank prior to inspection and maintenance.



Simple and efficient

The backwash spray header is retractable for a safe and quick maintenance.



User friendly

Regular maintenance can safely be performed during operation due to the partially submerged Hydrotech Discfilter.

No special tools required

Patented design allows for individual filter panel replacement.



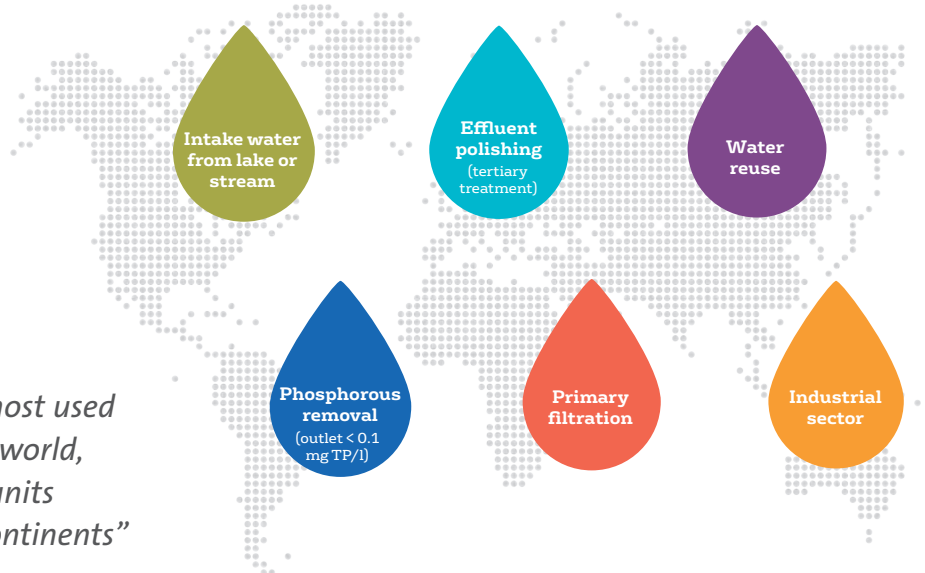
Easy access

All maintenance parts can be replaced with easy access from the walkway.



Wide range of applications

Thanks to innovations and high skilled engineering, Hydrotech are the global leader in microscreen filters. The Hydrotech Discfilters are used in various applications within both the municipal and industrial markets.



“Hydrotech filters are the most used microscreen filters in the world, with more than 9500 units in over 50 countries and 6 continents”



Marquette-Lez-Lille
Lille Metropolis Urban
Community, France

Bundling VWT's state of the art technologies this resulted in the world's most compact and efficient Hydrotech Discfilter system. AnoxKaldnes™ Hybas™ in combination with 8 Hydrotech Discfilters provides a low Capex and Opex.



Haram Cooling Tower
Mekkah, KSA

Holy Haram is the heart of Mekkah with a large cooling water demand. With a capacity of 30 000m³/day, 6 Hydrotech Discfilters provides make-up water for the cooling tower process.



Baix Llobregat
Barcelona, Spain

The combination of Actiflo® with Hydrotech Discfilters ensures a 80%-reduction of the area required compared to other solutions of similar capacity and load. It also enables the plant to deal with very heavy hydraulic loads and substances.

RYA WWTP

The world's largest Indoor
Hydrotech Discfilter reference



The client

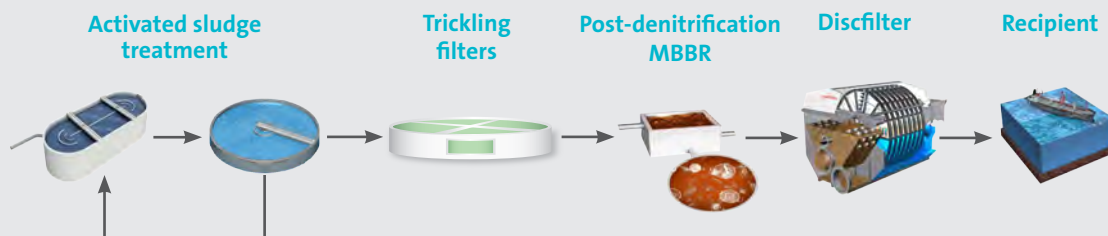
The RYA wastewater treatment plant run by GRYAAB AB is located in Gothenburg, Sweden. The plant serves about 650,000 PE, which makes it one of the largest treatment plants in Scandinavia.

Having to comply with stricter discharge limits but with very limited space, Gryaab selected Hydrotech Discfilters for biomass separation from the new post-denitrifying AnoxKaldnes™ MBBR.

The solution

After screening, grit removal and primary clarification water is treated in the activated sludge plant with possibilities for pre-denitrification and simultaneous precipitation.

Trickling filters are utilized for nitrification and the newly installed AnoxKaldnes™ MBBR for nitrogen removal in a postdenitrification process. Water is finally treated in the Hydrotech Discfilter plant before being released into the recipient.



Design data

Design flow:	8m ³ /s (900 m ³ /h per filter)
Pore opening:	15µm
Filter type:	HSF2220-2F
No of filters:	32

Discharge limits

BOD:	< 10 mg/L
TN:	< 10 mg/L
TP:	< 0.3 mg/L

Benefits

By installing Hydrotech Discfilters the new discharge limit of 0,3 mg TP/l is achieved without the need for co-precipitation. The suspended solids concentration out of the filters are continuously kept below 5 mg/l.

The Hydrotech Discfilters have been consistently meeting the effluent requirements since their start-up in 2010. During the first year of operation less than 0.1 % of the filter panels were exchanged.



Resourcing the world

HYDROTECH



HDF Drumfilters. Pure filtration.

HDF

500 -
2000

Pure performance



**Where water needs to be
as pure as it can be.**

Over 5,500 Hydrotech Drumfilters have
been installed worldwide

Hydrotech Drumfilter - Best filtration performance from an economic, mechanical filter

The Hydrotech Drumfilter is a mechanical, self-cleaning filter specially designed for high performance in systems where it is essential to prevent particles from fragmenting.

The Drumfilter uses a unique design of filter panels that ensures careful handling of solids, which is essential in achieving the high filtration efficiency required in many applications. Our Drumfilters are specially designed for the high standards of filtration demanded in industries such as aquaculture, swimming pools and industrial applications such as food processing.

A more efficient way to purer water

The Hydrotech Drumfilter is a high performance mechanical and self-cleaning filter. The filter works without pressure and is robustly designed with few moving parts to ensure long life and low maintenance costs.

By removing fine particles before they are dissolved, the filter reduces the risk of harmful bi-products contaminating the water.

Unique, modular Construction

Hydrotech's patented filter panels greatly simplify both the replacement and change out of the filter opening size. The drum is constructed in sections, each with up to 5 filter panels depending on diameter. This facilitates maintenance and makes it easy to adapt the filter to your flow capacity and filtration performance requirements.

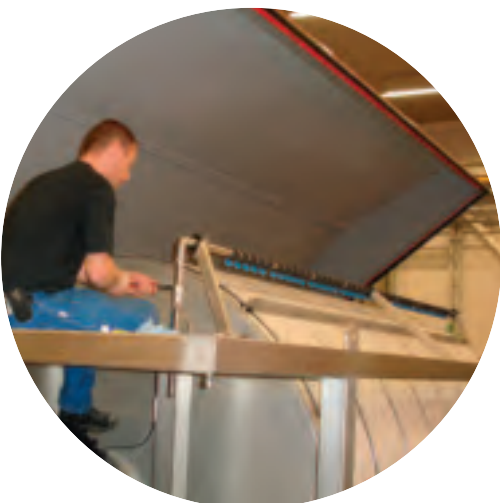
The drum and tank are made of stainless (AISI304) or acid-proof steel (AISI316L). Choose from special alloys such as GRP (Glass fiber Reinforced Plastic) or duplex steel for use in extremely corrosive surroundings.

Bearing wheels, main shaft bearing and filter panels are made from resistant plastics. The filter cloth is made of polyester or stainless steel.

The Drumfilter can be automatically controlled. Hydrotech Intelligent Filtration™ controls ensure economic use of power and water.

Benefit from these advantages:

- Save energy through less operation of the drum and backwash pump.
- Better economy and less carbon footprint than comparable systems.
- Self-cleaning – saving on operation and maintenance costs.
- Patented filter panels simplify replacement and change out of the filter opening size for easier service and maintenance.
- Panels can be adapted to actual need of flow requirement.
- Drumfilters can easily be transported in containers.
- Produced in stainless steel, special alloys or GRP (Glassfiber Reinforced Plastic). Components adapted for the most corrosive surroundings.



The efficient, reliable way to purer water



Microscreening – The efficient, reliable way to purer water

Microscreening is an efficient and reliable technique for separation of particles from all kinds of liquids. The Hydrotech Drumfilter is a mechanical and self-cleaning filter specially designed to achieve high performance in systems where it is essential to prevent the particles from fragmentation.

The filter works without pressure and is robustly designed with few moving parts to ensure long life and low maintenance costs.

Documentation

Hydrotech conforms to the ISO9001:2008 management system and all Hydrotech filters are CE marked and delivered with O&M manuals in accordance with international standards. Hydrotech still services the first models of drumfilters delivered in the 1980s. Upgraded computer systems keep track of all filters produced by Hydrotech. A photo and serial number files always identify the filter. This system ensures that we always deliver the correct spare parts.

Hydrotech Drumfilter is specially designed for filtering water in the following applications:

- Aquaculture - perfect for fish farming systems where it is essential to prevent the particles from fragmentation. This is especially important in recirculated systems and in open systems for intake and outlet water.
- Filtering intake water from streams and lakes for municipal and industrial water supply systems
- Swimming pools
- Aquarium life support systems and zoo applications
- Effluent polishing
- Industrial applications
- Intake water
- Wastewater treatment
- Food processing
- Filtering transport water in plastic industries and purification of scrubber water in power plants.

The highest levels of filtration efficiency

The liquid is filtered through the periphery of the drum and particles are carefully separated from the liquid through the special cell structure of the filter panels. As the filter cloth starts to clog with solids, the automatic system will start the rotation of the drum and initiate the backwash. Separated solids are rinsed off the filter cloth into the solids collection trough and then discharged.

The unique design of the patented filter panels prevents fragmentation through careful handling of the solids. This high filtration efficiency is essential in many applications.

Flexible, modular design

The modular design incorporates 5 different drum diameters from 0.5 m to 2.0 m with filter areas from 0.35 m² for the HDF501 to 22.5 m² for the HDF 2010. In total there are 20 different drum filter sizes depending upon requirements. The standard modular filter panel measures 1.2 x 0.4 m.

Available with two different drive systems

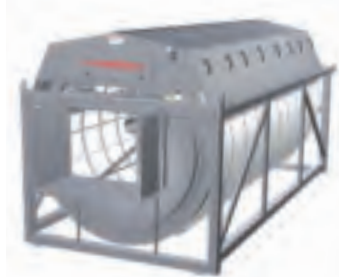
The Hydrotech Drumfilter is available in two drive system versions; direct drive and chain transmission. The direct drive is used on the two smallest drum sizes with 0.5 and 0.8 m drum diameter. On the chain transmission, Hydrotech has an option to deliver with maintenance free plastic chains.



Type 1, Tank



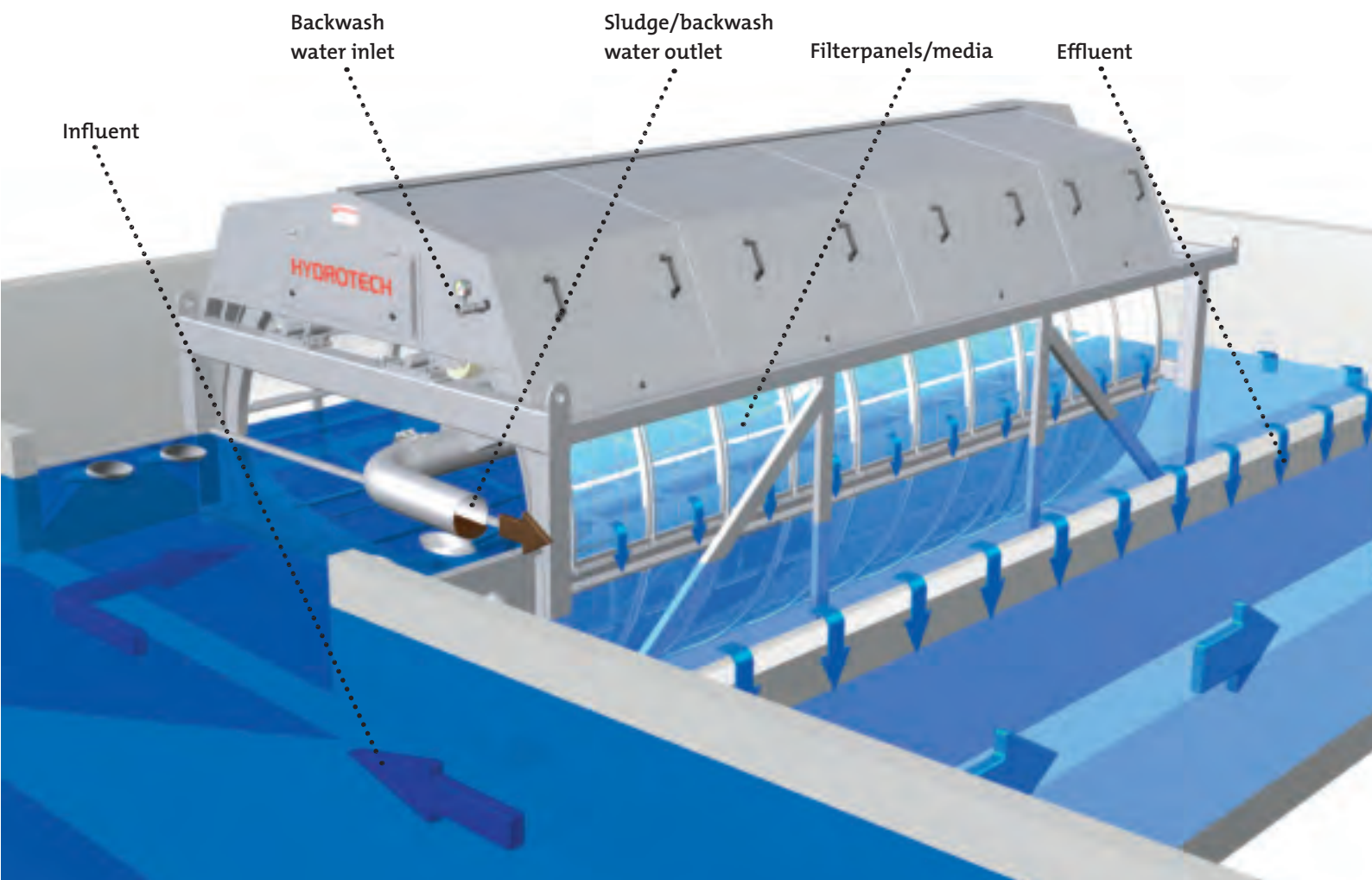
Type 2H, Open inlet



Type 2F, Open inlet
(incl. connection for inlet channel)



Type 2, Wing walls



Hydrotech

Providing purer water

Pure innovation

Pure performance

Pure savings

Pure reliability

Swedish based Hydrotech is the market leader in microscreening technologies. Microscreening is used as a technique for removing particles from all types of liquid flows. Since its start in 1984, the company has manufactured and delivered around 7,000 microscreening filters worldwide.

Hydrotech recently completed the world's largest installation anywhere in the world, at Gryaab in Gothenburg Sweden.



Hydrotech is 100% focused on filter development and production. Our close co-operation with universities and institutions helps drive forward technological advancements in the area of water filtration.

We are part of Veolia Water Solutions & Technologies, one of the world's leading companies in the area of water purification. The group has more than 338,000 employees worldwide.



We offer Discfilters, Drumfilters and Beltfilters for water filtration. Waterworks, process plants and sewage treatment plants are just some of the areas using Hydrotech's water purification filters.



By building machines with a larger capacity that take up a smaller area, our filters reduce the total installation costs and more water can be filtrated using fewer machines. Our filters also filter during the backwash cycle and are self-cleaning.

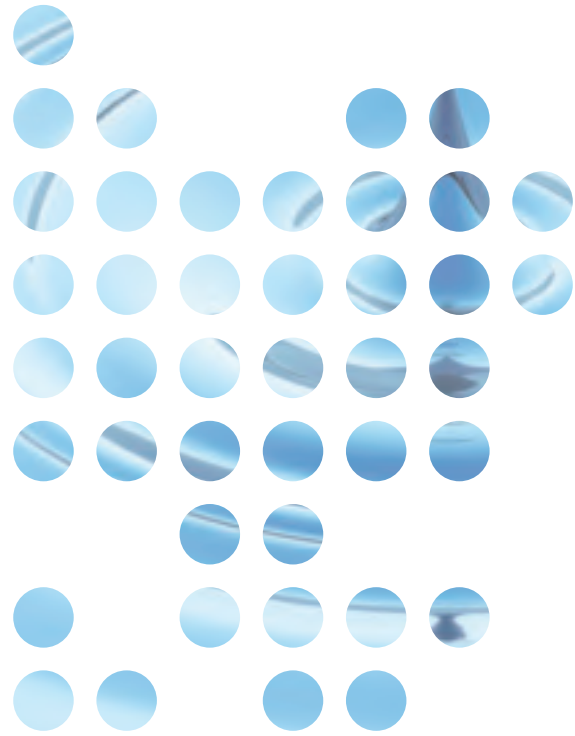
We have researched into how to reduce the carbon footprint of our water treatment processes to make them as sustainable as possible. We consider the emissions related to the materials we use, including construction as well as emissions from operations over a period of 25 years. From this we can calculate how best to reduce carbon footprint to provide our customers with the most environmentally friendly water treatment solution possible.

We always strive to offer a microscreen filter that is more cost efficient than competing systems and with a smaller carbon footprint.



Our filters are built on a proven modular build-on-demand system with short lead-times. We offer a turn-key operation that is easy to transport and assemble in-situ, meaning our filters can be operational extremely quickly. Using mechanical parts and patented processes we have managed to reduce maintenance to an absolute minimum, ensuring a quick return on investment. Our company and its processes are certified according to ISO 9001:2008, assuring the quality you would expect from us.

With over 25 years of offering service to satisfied customers we will gladly supply testimonials from satisfied customers around the world.



HYDROTECH

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