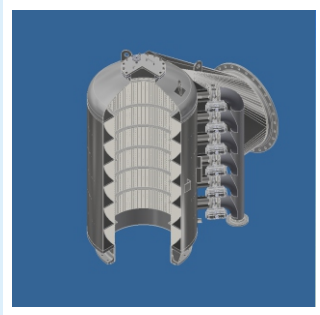


Mussel Filter

Product Information



A Hubert Mussel Filter protects heat exchangers & condensers

Our mussel filter offers adequate protection against *Dreissena Polymorpha*, the so called Zebra mussel, notorious for the enormous damage it can cause to your vital systems. In addition to mussels, the filter can also remove other crustaceans and water organisms.

Because the worldwide distribution of the zebra mussel continues to increase every year, it poses increasing problems for water intake systems.

Applications

A Hubert Mussel Filter is used in water intake systems for power plants, refineries and chemical companies, that use surface water as cooling water.

This filter protects your heat exchangers, condensers and pumps connected downstream against troublesome macrofouling issues.

Applications can also be found in closed-circle heating water systems where hot water is transported over long distances and which can cause all kinds of fouling problems at the start of the season or after repairs.

Features & Benefits

- The Hubert Mussel Filter guarantees a fault-free process. A major advantage is that the filter has no moving parts. The filter system does not contain flushing arms or no-return valves in the filter housing for cleaning the filter basket. This ensures that the plant is permanently assured of cooling water free of mussels or other crustaceans.
- The Hubert Mussel Filter is an engineered product, however Hubert supplies a standard range of filters with different sizes & capacities to suit your specific application.
- The Hubert Mussel Filter can be built into existing piping systems in both a horizontal and vertical position.
- Our Mussel Filter can be integrated (downstream) in a Hubert (sea) water intake system, which can include coarse screens, fine screens and stop logs.

Filter Design

The filter consists of a cylindrical housing made of carbon steel, in which a round filter basket is placed. This filter basket is made of so-called v-wire. A material with excellent filtration and release properties. Via the welded inlet, the water flows tangentially towards the filter medium, the water passes the filter radially, and leaves the basket axially.

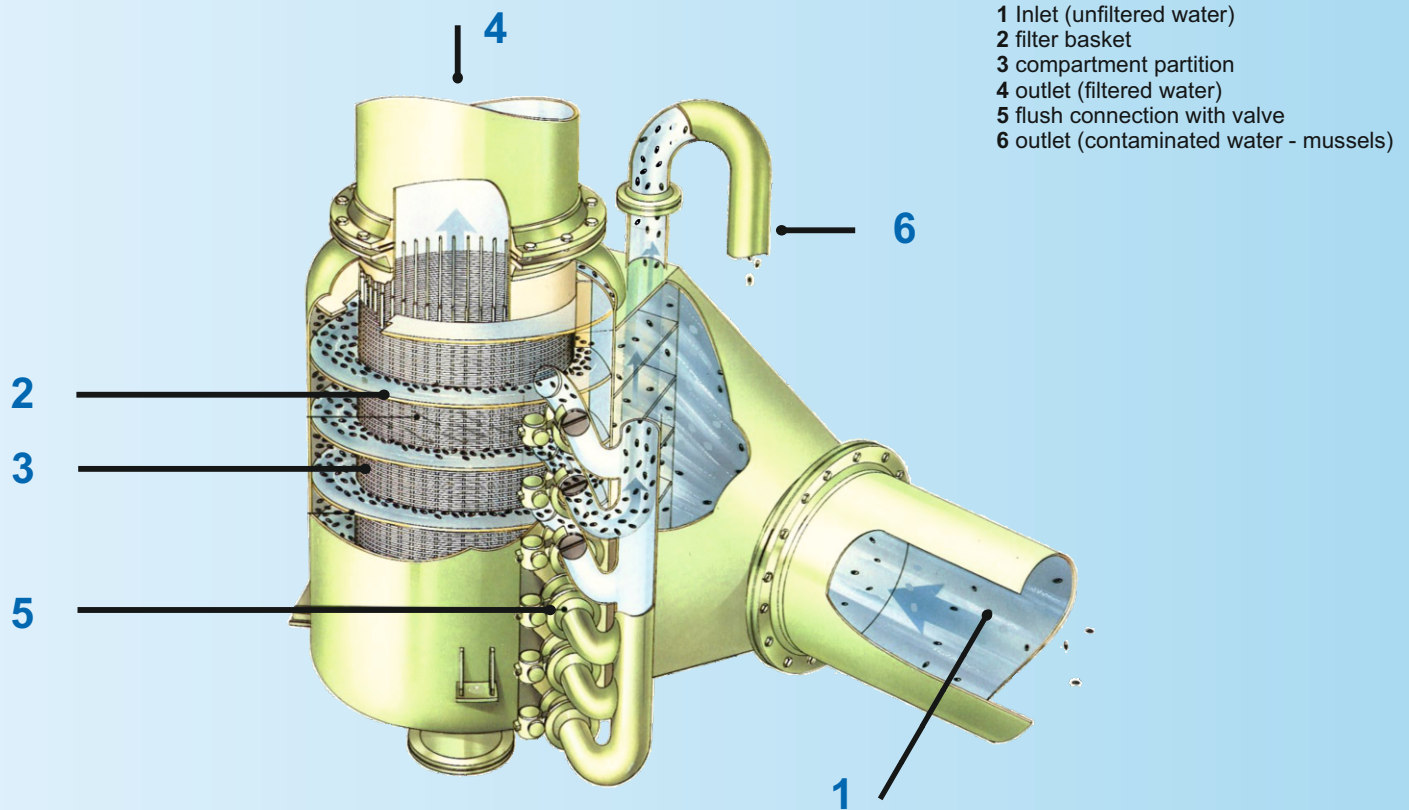
The space between the basket and the filter housing is partitioned into 2-10 compartments, each provided with a flushing connection with shut-off valve.

Control takes place with a PLC. Naturally, the control can be provided with communication ports for inclusion in middleware systems.



HUBERT

water treatment installations



Filter Operation

The contaminated water (1) enters the filter tangentially and flows around the filter basket (2) in each compartment (3).

The water radially leaves the compartment through the basket and is then transported further axially (4). The crustaceans (mussels) remain in the compartments.

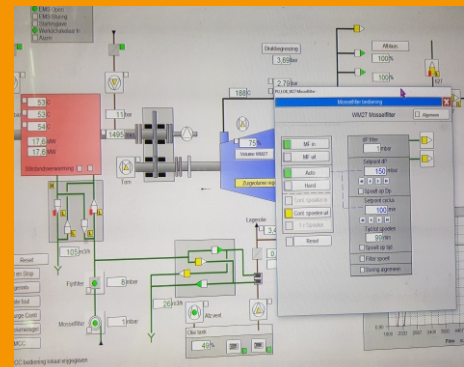
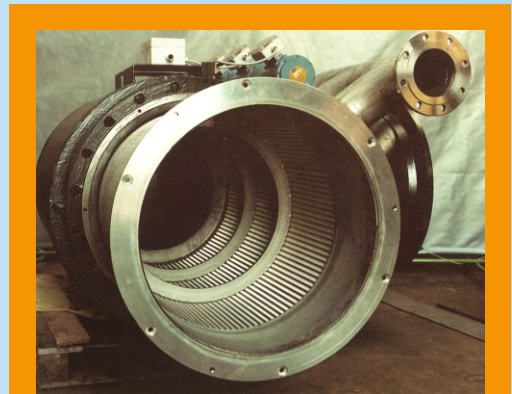
The degree of pollution can be determined by means of differential pressure measurement between inlet (1) and outlet (4). The flushing of the filter starts on the command of a preset pressure difference and takes place in sequence per compartment.

Each compartment has its own flushing connection with globe valve (5). Opening a flushing valve (5) increases the tangential flow rate around the filter basket. Due to the pressure reduction that thus arises in the compartment concerned, water (4) flows back from the basket into the compartment. In this way it discharges all contaminants from this particular compartment to the outside (6) via the flush valve.

The use of several compartments ensures that the pressure drop during flushing remains limited and the capacity only decreases with the amount of flushing water.

Hubert Mussel Filter Range

A Hubert Mussel Filter is an engineered product, customized to your application. We distinguish 4 standard designs: NW 300, NW 600, NW 800 and NW 1000, all available in both vertical and horizontal configurations. Capacity varies from 300 to 4500 m³ / h (nominal).



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Company Profile

Hubert, founded in 1880, has almost 150 years experience in design & engineering, in-house manufacturing, installation & service of equipment for water purification and water intake applications. Our engineered products and technical expertise have enabled Hubert to become a major player on the global markets for water treatment solutions. We focus on high quality equipment with a long service life.

Over the years we gained an extensive number of satisfied customers & project references all over the world. Our machinery is a crucial part of every production facility and usually continuous in operation. Our equipment has to operate efficiently and reliably in extreme (weather) conditions. Hubert's installed base comprise many thousands of installations that have recently commissioned or that have been in operation for many years.

Below you can find more information about our divisional structure. We will be happy to hear about your project!

Our Divisions

Water Intake Systems

Hubert is market leader in water intake screening systems, used for mechanically clean water extracted from the sea, rivers or lakes. These systems can be found in power stations, petrochemical plants & refineries, desalination plants, drinking water & irrigation plants and industrial production plants requiring a huge demand of process water.

We supply complete complete 'screening trains' including all additional equipment, like controls and cathodic protection. We design, engineering and manufacture our equipment in-house.

You will find our projects in both new construction (EPC) projects and renovation & optimization of existing water intakes.

Waste Water Treatment Machinery

Hubert supplies waste water treatment machinery & (sub)installations applied in municipal and industrial waste water treatment plants. Our installations are of high quality and offer a long service life.

Clients range from water boards and authorities in the public sector, to multinationals in many industries.

Service & After Sales

Keeping your machinery operational. This is the daily work of our Service & After Sales division which proves its importance by keeping Hubert installations operational anywhere in the world. Founded in 1880, the large amount of projects that Hubert has carried out over the years has resulted in a huge installed base of equipment. Many of these are still in operation! We supply parts but also provide optimization and renovation of your existing equipment.

High-Spec Steel Assemblies

Hubert has been supplying both components and assembled parts to the offshore industry and other applications within the shipping and dredging industry for many years. Complex machined welding constructions, (sub) assemblies and complete products are part of our program.

For this market we work according to customer (mechanical) specs. Our scope includes parts in single pieces, series as well as assembled products.

