

Micro Drum Screen

Product
Information



Hubert micro screen - potable water production & proces water recirculation

A Hubert horizontal rotary micro screen or micro strainer, is often used in places where high demands are required on the purity of process water. These filters can be found in (fresh) water intakes, acting as (fine) pre-filtration system being part of potable water production plants or production plants that consume a lot of process water.

In addition, this filter can be also applied for process water recirculation. The recovery of useful raw materials from process water, stricter discharge requirements, recycling of process water, etc. makes the use of these engineered filters increasingly interesting. Another application is pre-treatment of influent & effluent in a waste water treatment plant.

Flow rates can be up to 5000 m³/h per screen, depending on customer requirements and the local situation at the intake. Woven mesh with a diameter of about 11 up to 500 micron is used as filter medium. This type of filter is usually applied under free fall conditions. The efficiency and capacity of a microstrainer in a water intake, depends on several factors including the characteristics of the fine filtration mesh (fabric), rotation speed of the microscreen, the quality of the water to be purified and the amount of backwashing water.

Design & Construction

The Hubert micro screen system consist of a drum fitted along its outer circumference with screen panels. The drum is placed in a concrete pit or tanks and rotates on a stationary hollow shaft fitted with one or more funnel-shaped debris collectors. The feedstock of water enters the drum axially and flows radially through the mesh panels. The dirt particles remain trapped in the mesh.

As the drum rotates the row of sceen panels pass under a set of high pressure water jets at the top of the drum. The dirt particles are washed from the screen and discharged through the funnel-shaped debris collectors and the hollow shaft.

The "clean" side of the screen compartment is fitted with an overflow weir which enables the water inside the screening chamber to be kept at a constant level. This ensures that the largest possible screening area is constantly submerged resulting in a high yield of solids.

Fish Friendly - Fish recovery system

Als our microscreens can be provided with a fish recovery system that allows trapped fish to be removed in a gentle and effective way. These recovery systems are tailor-made for each project.

Features & Benefits

- Light, stable and robust construction
- Reliable
- Maintenance free
- Long lifetime (30 years or more)
- Resistant to abrasive water

Standard Dimensions & Materials

- Drum length up to 6 m
- Drum diameter from 0,7 up to 3,5 m
- Mesh opening from 11 to 500 micron
- Materials: (coated) carbon steel, stainless steel, (super) Duplex



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.

