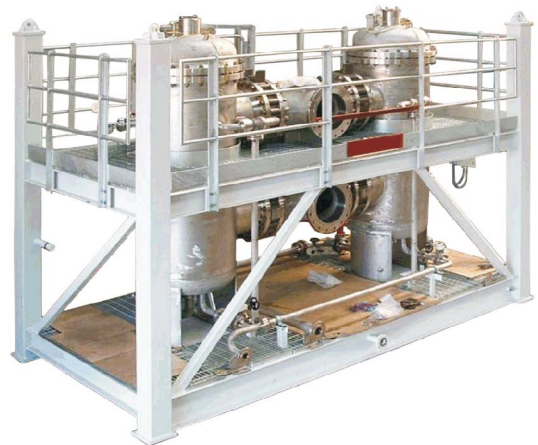


Sea water filter Automatic back flushable water filter

1. Introduction

The sea water filter is a back-flushing filter for the removal of solid contaminants from water and emulsions. Filtered residues are automatically discharged without interrupting the filtration process. The robust design of this filter ensures high functional reliability and minimum running costs.

The high precision needle-slot elements are made of stainless steel, Super Duplex or titanium and have a filtration range from 2000 micron to 50 micron. Filtered solids are systematically removed from the filter during back-flushing operation. Back-flushing is a very fast and highly effective user definable procedure as only a small part of the filtration area is cleaned at any one time.



2. Features

- Efficient filtration
- Effective back-flush
- Wide range of sizes / flow rates
- Space efficient
- Easy access and inspection / maintenance
- Available as a packed / automated system

4. Application

This filter is suitable for all types of water particle filtration as the main full flow filter or as a by-pass filter.

It is particularly suitable for the filtration of seawater for cooling engines, generators, heat exchanger and other special equipment that needs protection. Process and waste water from petrochemical and chemical plants can also be treated. This system may also treat process water for the oil and gas industry onshore or offshore for water inspection, sea water, produced oily water, HVAC cooling water and firewater where precise filtration is necessary, or an other applicable water filtration duty.

3. Advantages

- Compact and space saving design
- Very high flow rates - up to 10 000 m³/h per vessel
- High precision filtration – down to 50 µm
- Highly efficient back-flushing facility
- Uninterrupted forward flow
- Low running costs
- Manifold capability for increased volumes

5. System operation

The fluid to be filtered passes through the inlet into the bottom housing section. Half of the fluid enters the lower end of the filter elements. The other half of the fluid passes through the central riser, and enters the top end of the filter elements. Dirt particles are captured over the entire length of the filter elements from the inside to out.

Back-flushing is activated as a function of the differential pressure or a pre-set time, depending on the degree of contamination of the elements.

After one revolution of the flushing device the electronic control, switches the gear-motor off when the filter is clean. With centrifugal pumps or buffered systems there is little change in the flow rate at the filter outlet during the flushing period. The regulating valve in the back-flush line allows the back-flushing volume to be optimised, depending on the available pressure and type of contamination.