

SOB001 Self-Cleaning Inline Filter



Rotorflush Self-cleaning
Inline Filter for Industrial
Wastewater applications.



GLACIER
FILTRATION

SOB001 Self-Cleaning Inline Filter

Manufactured by Rotorflush in the UK, the SOB001 is a tough Inline filter system designed to efficiently remove solids from industrial waste water.

There are considerable cost and energy savings to be gained from recycling industrial waste water and recovering energy.

The SOB001 is a fully automated, low-maintenance self-cleaning filter. The system automatically monitors temperature, flow rate, water pressure and the accumulation of waste material.

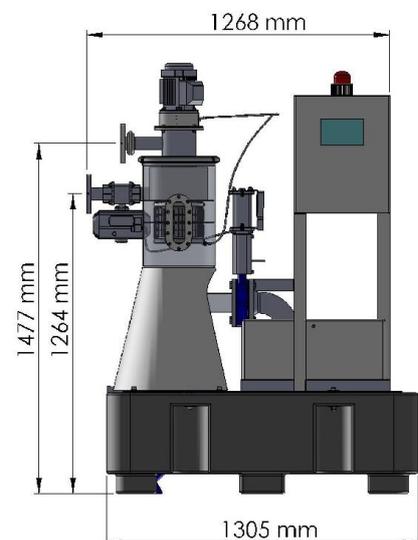
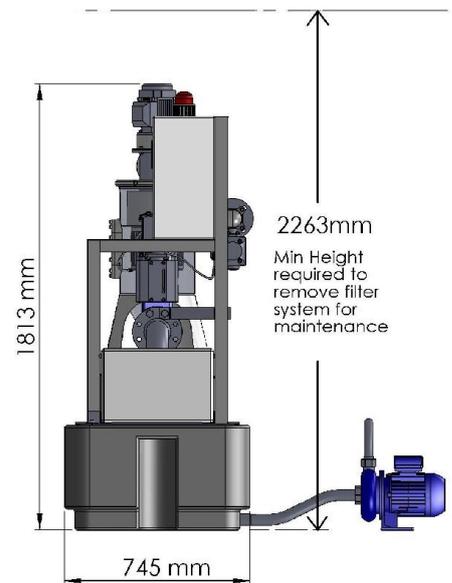
Touch screen controls make set up, operation and maintenance very easy. Water usage and disposal costs are reduced and productivity is not affected by stoppages – The SOB001 in-line filter provides continuous filtered supply even while purging.

The SOB001 can filter up to 20m³ per hour at up to 8 bar pressure.



Key Features

- Capacity up to 20 cubic meters per hour
- Pressure up to 8 bar (higher on request)
- Liquid temperatures to 80 degC
- Filtration 30 – 300 microns
- Ideal for removing lint and fibers
- Automatic pneumatic purge valve (compressed air)
- Single phase motor with variable speed drive
- All 316 Stainless Steel construction vessel and filter system
- Quick release lid and sight glass
- Solid waste handling
- Touch screen programmable controls
- Low maintenance, reduces water and disposal



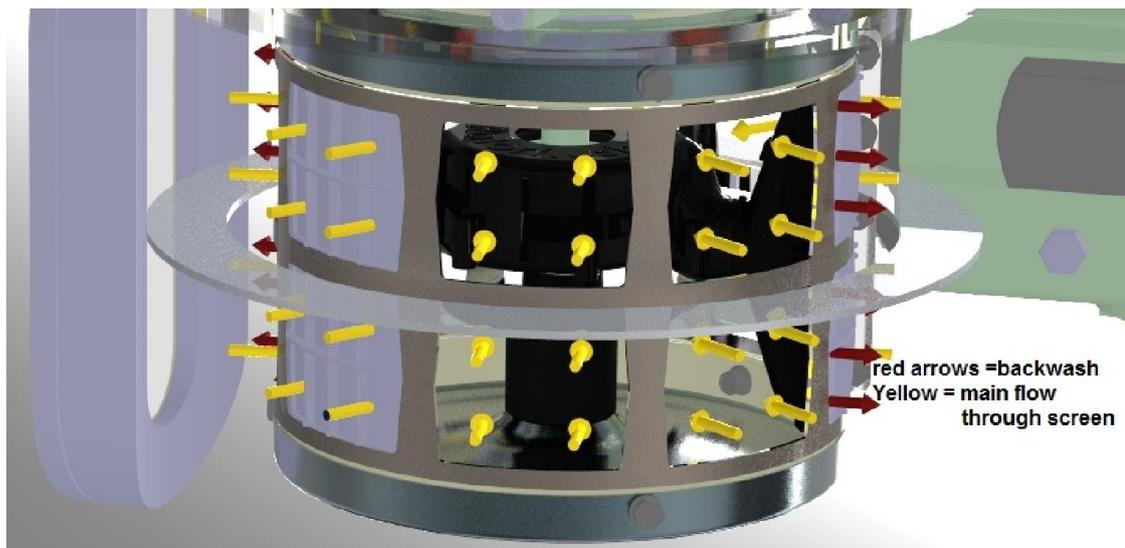
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Fully Automated Self-Cleaning Inline Filter System

The SOB001 Self-Cleaning Inline Filter System is a fully automated and very efficient means of removing particulate and suspended solids from industrial wastewater. It has been developed to meet the increasing demand for effective trouble-free filtration in industrial processes across a wide range of industrial sectors.

Originally developed as a hot water filtration system for commercial laundries, the SOB001 is very efficient at removing lint, fibers and other solids from industrial wastewater and can filter down to 30 microns if required.

An integral component is the unique Rotorflush self-cleaning filter which removes particulate and suspended solids in dirty water at up to 350 litres per minute. The self-cleaning mechanism keeps the filter screen clear for a continuous supply of re-usable filtered waste water. The automatic purge clears away accumulated debris as it builds up while providing an uninterrupted output of filtered water for re-use or disposal.



The SOB001 Inline Filter System is a truly industrial product: its body and stand are 316 Stainless Steel, as is the light filter cage. A light and powerful 0.37kW ABB motor drives the self-cleaning filter and all the peripheral equipment – valves, actuators and electronics are designed for durability.

This over-engineering means the SOB001 Inline Filter System is as reliable as it is robust.

Touch screen programmable controls automatically monitor temperature, flow rate, water pressure and the pressure differential across the filter and the accumulation of waste material.

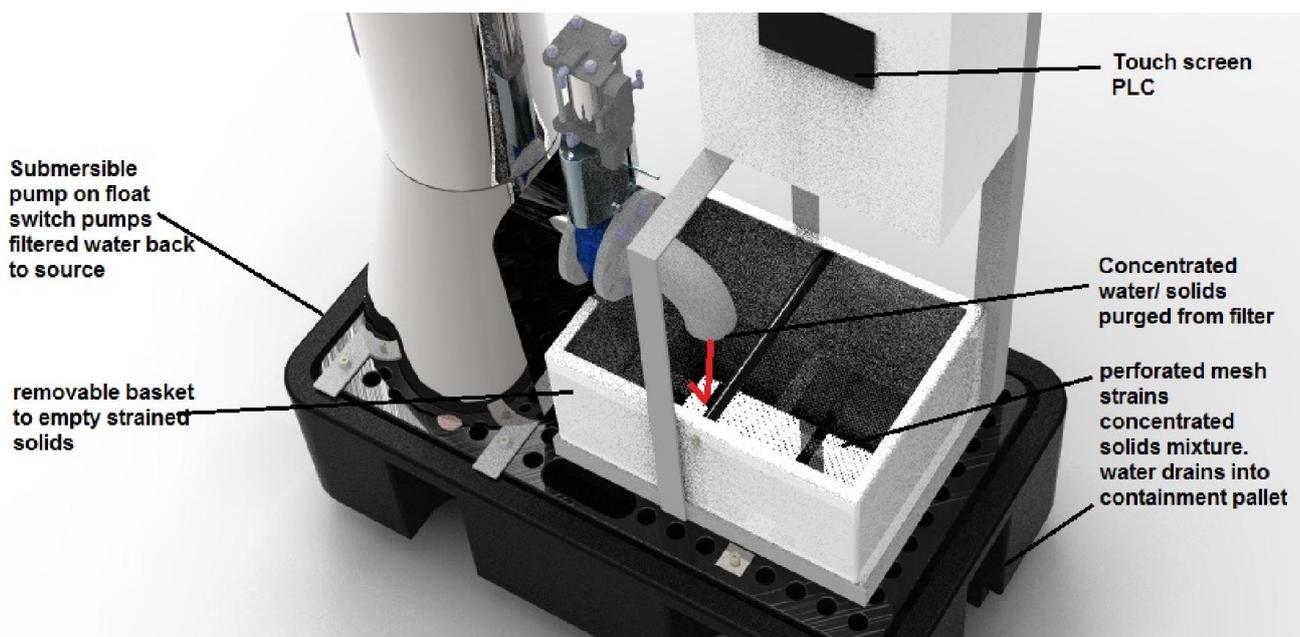
Maintenance is simple and controls can be set to suit your particular application.

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Stackable Solids

As an optional extra to the SOB Self-Cleaning Inline Filter, a basic dewatering system to allow solid waste material to be removed from the purge water for easy storage is available. Waste purge water can be recycled and re-used, making the system extremely water efficient.

As the SOB001 cleans and purges wastewater, removed solids are drained beneath the unit; wastewater is pumped back into the system and solids are mechanically removed for disposal later.



How it works

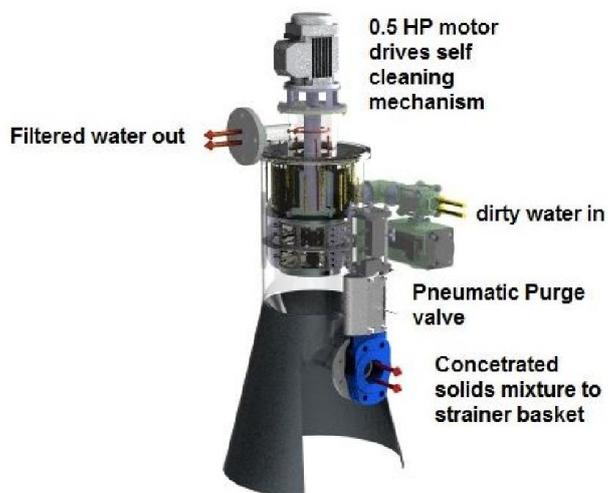
Dirty water is pumped under pressure into the inline filter vessel.

The variable speed motor controls the self-cleaning mechanism inside the pressure vessel – speed increases as the particulate builds up.

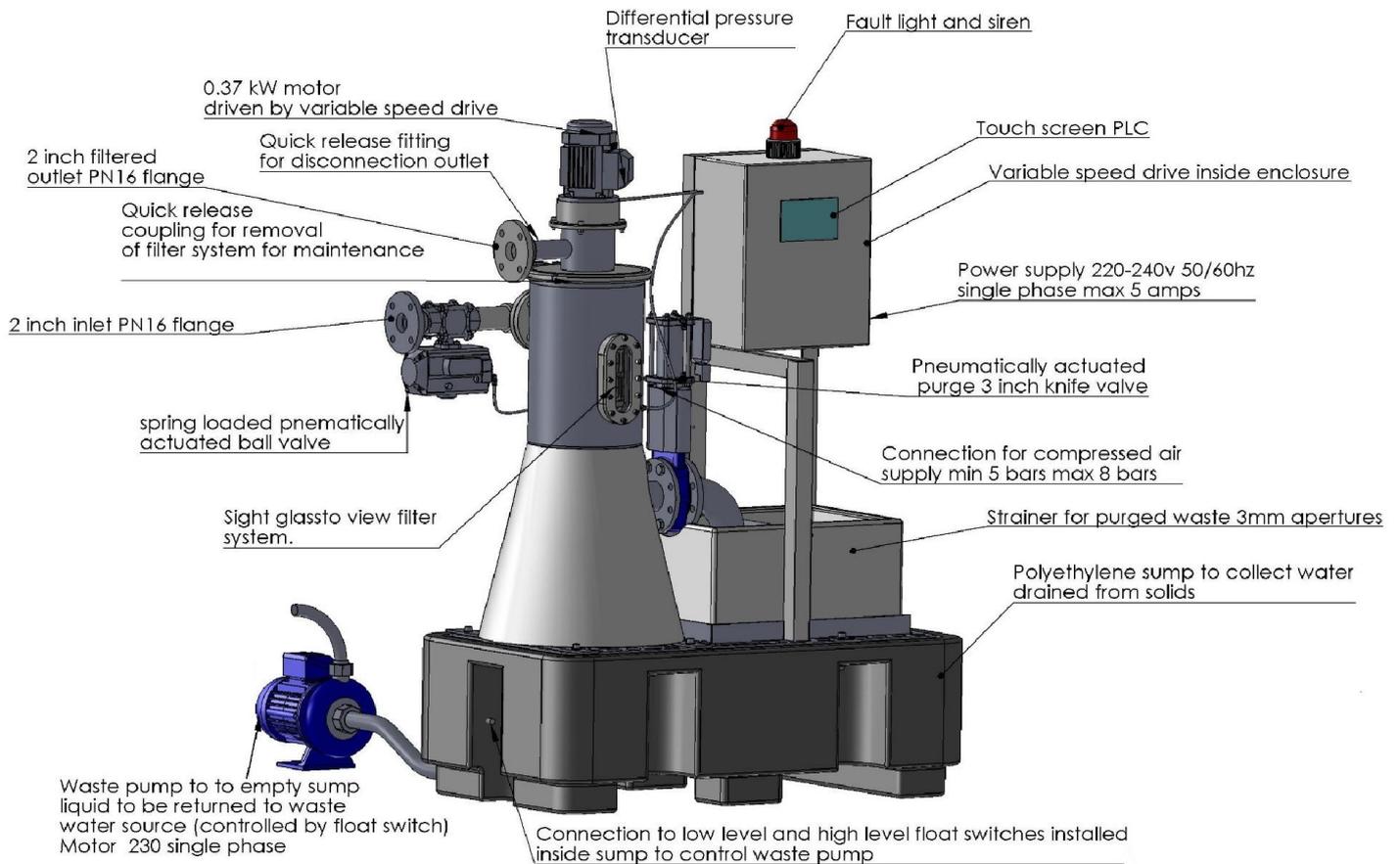
A pressure switch operated by the differential pressure across the filter opens the purge valve for a few seconds when the solids inside the filter pressure vessel begin to affect the filter.

The tank is purged, the pressure difference equalises and the purge valve closes.

Filtered water leaves the pressure vessel for re-use or disposal.



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Operational Features

The base and main vessel of the Rotorflush Inline Filter System are made of stainless steel; as are all connections and fittings.

The system includes a pneumatic knife valve for purging waste material. Purging is automatic: a differential pressure transducer controls the backwash motor speed.

Purging is activated by build of waste and/or a timer.

The Filter system is controlled via a touch screen PLC that displays:

- Differential pressure across the filter
- Motor speed
- Time elapsed since last purge
- Number of purges in the past 24 hour period
- On-screen warnings for blocked purge pipe and solids build up in the vessel

The screen allows users to set the interval between purges and the length of time the purge valve stays open.



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Features

Vessel	316 Stainless Steel
Quick Release lid	316 Stainless Steel
Filter screen area	525 cm ²
Screen sizes standard	30, 60, 115 & 300 micron
Self-cleaning filter rotor	Acetal
Rotary seal	Silicon Carbide
Rotor bearings sealed roller	316 Stainless Steel
Filter cage	316 Stainless Steel
Sight glass	Toughened Glass



The SOB001 Series are made on order and are modified to suit the final specification so customers can specify flange and valve sizes and may opt for other features such as timed or manual purges.

