

# T1000-OEM

Model T1000 OEM Filter

LIQUID/SOLID SEPARATOR FILTER

V 1.5

## PRODUCT DESCRIPTION

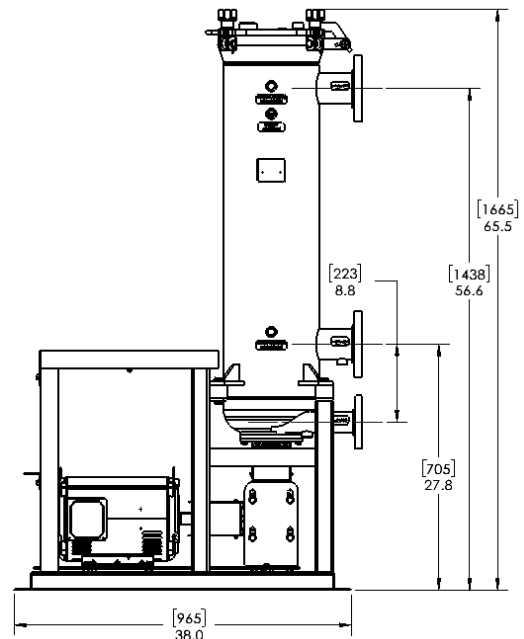
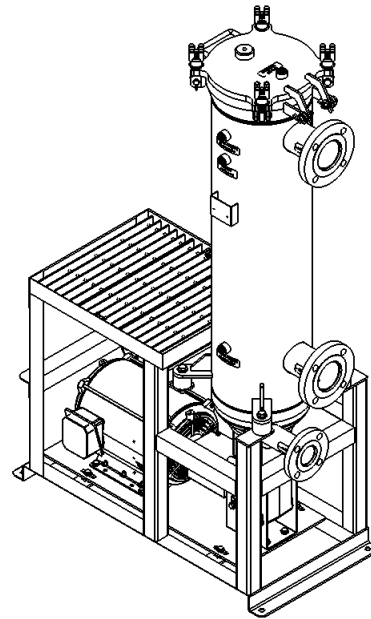
The T1000-OEM is a liquid/solid separator and automatic self-cleaning filter designed to remove Ultra High and Variable Total Suspended Solids (TSS) from a fluid stream for Industrial Applications. Each filter unit contains a motor-driven, spiral-shaped brush that continuously cleans collected debris from inside the filter element. Solids collect at the bottom of the filter housing to be expelled through an automatic purge valve or a continuous concentrate stream. The system does not require high pressures to operate and performs at very low differential pressure. No backwash, cross flow or booster pumps required.

## APPLICATIONS

Recycled Secondary Wastewater, Protection of Monitoring Equipment, Nozzle Protection, Bearing and Seal Protection, Wastewater, Recycled Water, TSS and BOD Reduction

## TECHNICAL SPECIFICATION

Inlet:	3" Class 150 ANSI Flange
Filtered Outlet:	3" Class 150 ANSI Flange
Purge Outlet:	2" Class 150 ANSI Flange
Max Flow:	1090 m <sup>3</sup> /day (200 gpm)
Filtration Rating:	15 - 100 micron
Max TSS:	15,000 ppm
Max Operating Press:	10.3 bar (150 psi) @70°F
Min Operating Press:	0.35 bar (5 psi)
Max Temp:	90°C (190°F)
Head Loss:	<0.1 bar (2 psi)
Drive Motor:	5 hp, 3-Ph, 230/460VAC



## MATERIALS OF CONSTRUCTION

Wetted Components: 304 SS, Nylon 6.12  
Elastomers: Buna-N, EPDM or Viton  
Filter Elements: 316 SS

## PERFORMANCE SPECIFICATION

The spiral shaped brush is designed to rotate continuously, so there is always less than 1 psi head loss across the filter screen. Flow through the filter unit is limited by both solids loading and hydraulic loading on the screen. Flow rates listed below assume a viscosity of 1.0 cP and TSS up to 1000 mg/l. A control system can be purchased which will monitor the solids build up in the housing and open the purge valve when necessary. The unit should be plumbed with a 5psi cracking pressure check valve on the effluent. Operating pressure in the 5 to 20 psi range is optimal, though the unit is capable of operating at 150 psi.

### Flow Rates for TSS up to 1000 ppm

Filter Screen	Nominal Filtration Rating (microns)	Max Flow Rate (gpm, [m <sup>3</sup> /hr])
SWT1000-FE-BB	15	100 [22.7]
SWT1000-FE-GG	20	133 [30.2]
SWT1000-FE-YY	25	165 [37.5]
SWT1000-FE-RR	50	200 [45.4]

Note: The higher the solids, the higher the perceived apparent viscosity. At TSS above 1000 ppm, lower flow rates are required to avoid fouling of the filter screen.



Brush



Filter Screen