



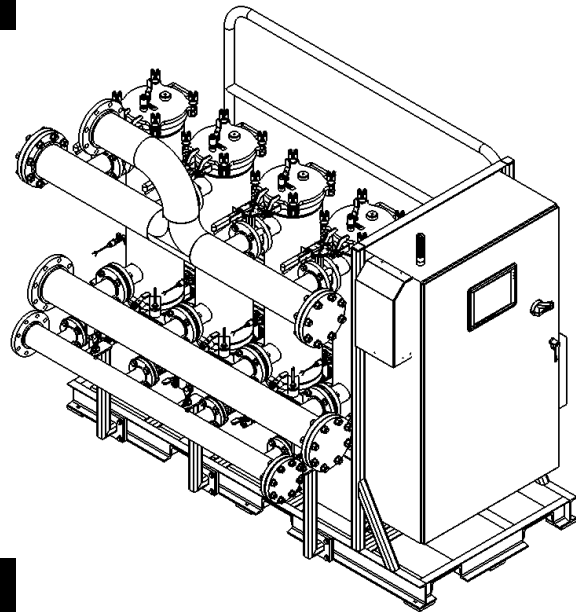
# T1000-QDP

## Quadplex Model T1000 w/ Skid LIQUID/SOLID SEPARATOR FILTER

V 1.5

### PRODUCT DESCRIPTION

The T1000-QDP is a liquid/solid separator and automatic self-cleaning filter system designed to remove Ultra High and Variable Total Suspended Solids (TSS) from a fluid stream. 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.

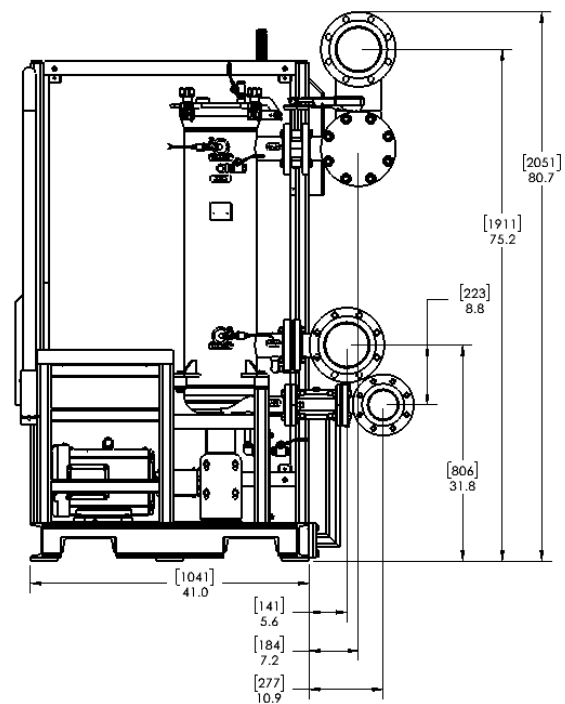


### APPLICATIONS

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

### TECHNICAL SPECIFICATION

Inlet:	6" Class 150 ANSI Flange
Filtered Outlet:	6" Class 150 ANSI Flange
Purge Outlet:	4" Class 150 ANSI Flange
Max Flow:	4360 m <sup>3</sup> /day (800 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)
Power Requirement:	3-Ph, 230, 40A (460VAC optional)
Purge Valve:	Pneumatic Pinch Valve
Air Requirement:	30 psi above media pressu
Max Air Pressure:	90 psi



## 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. The control system will monitor the solids build up in the housing and open the purge valve when necessary. The unit will include a 5 psi cracking pressure check valve on the filtered outlet and a pinch valve on the purge outlet. Operating pressure in the 5 to 20 psi range is optimal, though the unit is capable of operating at 150 psi.



Brush

### 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	400 [90.8]
SWT1000-FE-GG	20	532 [120.8]
SWT1000-FE-YY	25	660 [149.9]
SWT1000-FE-RR	50	800 [181.7]

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.



Filter Screen