

Features

PST, Inc. P-TP Series industrial reverse osmosis systems are designed to deliver 24,000 to 300,000 GPD (16-208 gpm).



100,000 GPD System

- ABS control panel, NEMA 4X electrical enclosure, UL/CSA.
- Microprocessor control: pre-treat lockout, low feed pressure, product tank full, high TDS.
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- Microprocessor monitoring: product TDS.
- System status and warning lights.
- Gauges: Vessel array in/out and filter in/out. SS gauges with bronze internals, glycerin filled and mounted on front panel.
- Valves: 316SS brine and recirculation valves, globe-type, mounted in the last vessel brine line.
- Pre-filter: PP or SS bag or multi-cartridge depending on system size.
- Pump: 316SS main pump wetted parts.
- Frame: Powder coated steel construction on levelers.
- Schedule 80 PVC plumbing.
- Flow monitoring for product, brine and recirculation.

System Options

- Feed pH, TDS and temperature monitoring.
- Pump: high pressure for TDS feed streams >5000 ppm.
- Gauges: 316SS case and internals, glycerine-filled.
- Flushing systems: high flow feed water or product water replacement of brine.
- Blending system: filtered feed water into product stream.
- Filters: SS (304 or 316) feed water filter housing for bags or multiple 5-30 micron, 2.5" cartridges.
- Frame casters.

Support Options



260,000 GPD System

- Pre treatment:
 - Chemical injection for chlorine removal, antiscalant, and Coagulant.
 - UV sterilization.
 - GACF auto-backwash filtration.
 - Cartridge or bag filtration.
 - Softener.
 - Clarifier or centrifuge separators.
- Buffer tank.
- ORP meter for chlorine monitoring.
- Boost pump.
- Post treatment:
 - Chemical injection for chlorine.
 - UV sterilization.
 - GAC auto-backwash filtration.
 - Cartridge or bag filtration.
 - pH control.
- Product storage: atmospheric or pressure.
- Pressurized systems.

Performance Specifications

Product Rate	16 – 208 GPM
Rejection	95 – 98%
Recovery	Up to 90%
Design Temperature	68° F (20° C)

System Specifications

Membrane Type	Thin-film, spiral wound, low energy
Number of Membranes	4 40
Membrane Element Size	8" x 40"
Array	2 x 0 to 5 x 3 x 2
Number of Pressure Vessels	2 - 10 rated at 300 PSI
Elements Per Vessel	2 - 4
Size of Pressure Vessels	8" ID x 98.5" to 218.5"
Pumps	Grundfos CRN (316SS), Vertical Victaulic or Flange Type Inlet / Outlet
Motor	7.5 to 30HP, TEFC
Electrical	High / Low Voltage, 50/60Hz, 3-Phase
Overall Dimensions	110" to 230" L x 36" to 56"D x 65"H
Weight	1200 to 3500 lbs

Design Basis

Water Pressure	Minimum 30 PSI
TDS	5,000 ppm Max
Temperature Range	±10° F Design Temperature
Chlorine Level	0 ppm
Turbidity	<1 NTU
SDI	3 Max
Capacity Basis	24 hours / Day

