



### Features

TH Series commercial reverse osmosis systems are designed to deliver 12,000 to 24,000 GPD (8-16 gpm).



- ABS control panel, NEMA 4X electrical enclosure, UL/CSA
- Microprocessor control: pre-treat lockout, low feed pressure, product tank full, high TDS
- Microprocessor monitoring: product TDS
- System status and warning lights
- Gauges: Vessel array in/out (2) and filter in/out (2). 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, on front panel
- Prefilter: Big Blue with 1.5" FPT ports for a 4.5" x 20", 10-micron element
- Pump: 304SS main pump wetted parts
- Frame: Powder coated steel construction on levelers
- Schedule 80 PVC plumbing and brass hose fittings
- TEFC Motor
- PVC Vessels
- Low energy membrane elements
- Flow monitoring for product, brine and recirculation

### System Options

- pH monitoring
- Pump: 316SS for high 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
- Frame casters
- 316 SS Vessels (300 psi rated)
- High rejection membrane elements

### Support Options

- Pre treatment
  - Chemical injection for chlorine removal, antiscalant
  - UV sterilization
  - MMF auto-backwash filtration
  - GACF auto-backwash filtration
  - Cartridge or bag filtration
  - Softener
- Buffer tank
- ORP meter for chlorine monitoring
- Boost pump
- Post treatment
  - Chemical injection for chlorine
  - UV sterilization
  - GACF auto-backwash filtration
  - Cartridge or bag filtration
  - pH control
- Product storage: atmospheric or pressure
- Pressurizer systems



### Performance Specifications

Product Rate	8 - 16 gpm (1.8 - 3.6 m <sup>3</sup> /h)
Rejection	95-98%
Recovery (without recycle)	30-65%
Design Temperature	68 °F (20°C)

### System Specifications

Membrane Type	Thin-film, spiral wound, low energy
Number of Membranes	6-12
Membrane element size	4" x 40"
Array	2x1 to 4x2
Number of pressure vessels	3-6 rated at 225 psi (15.5 bar)
Membranes per vessel	2
Size of pressure vessels	4"ID x 84"L (10 x 213 cm)
Pump	Goulds SVB (304 SS), vertical 1.25" pipe Victaulic-type inlet/outlet
Motor	3 to 7.5HP, TEFC
Electrical	High/low voltage, 50/60Hz, 3-phase
Overall Dimensions	95"W x 30"D x 46.5"H (241 x 76 x 118 cm)
Weight	450 to 750 lbs. (204 to 340 kg)

### Design Basis

Water pressure	Minimum 15 psi (1.03 bar)
Feed TDS	5,000 ppm max
Temperature range	±10°F(5.6°C) design temperature
Chlorine level	Dechlorination reqd. if >0.1 ppm
Turbidity	<1 NTU
SDI	3 max

