

4400L System

High Purity Water System

2,800 to 11,000 GPD Generation &
28,800 to 115,200 GPD Storage & Delivery

The 4400L is designed to produce up to 8 US gpm (30 lpm) at 41°F (5°C) of pure water to a storage and delivery system that can pump up to 80 US gpm (303 lpm) of high quality water to various point of use. The color touch HMI view coupled with an industrial PLC provides a robust control system for operator ease of use.



Operating Parameters

Reverse Osmosis System

- Feed Water: Potable Pretreated
- Feed Pressure Range: 40-80 psig (276-552 kPa)
- Operating Pressure: <150 psig (<1,034 kPa)
- Operating Temperature: 35-95°F (2-35°C)
- Production Design Temperature: 41°F (5°C)
- Recovery Range: 65-75%
- Nominal Rejection: 95-99%

Distribution System

- Pump Outlet Pressure: <100 psig (<690 kPa)
- Pump Flow Range: 20-80 gpm (76-303 lpm)

Typical Applications

- Commercial Applications
- Central Laboratory
- Boiler Feed Water
- Humidification Systems
- Process Ingredient Water
- Rinse Water
- Cosmetic Applications

Standard Features

- Single Skid Design to Minimize Site and Electrical Installation and Facilitate Startup

Reverse Osmosis System

- 1.0 Micron Graded Density Pre-Filter
- Automatic Inlet and Automatic Reject Flush Solenoid
- Multi-Stage 304SS Centrifugal Pump, TEFC
- 316 SS Product Divert Solenoids & Flow Control Valves
- Low Pressure and High Temperature Switches
- Feed and Product Conductivity Transmitters
- Product, Reject and Recycle Flow Rotameters
- Clean-in-Place Ports
- Feed, Pump, Outlet and Reject Pressure Gauges

Distribution System

- Cone Bottom Tank with Spray Ball
- Digital Tank Level Controller
- Multi-Stage 316 SS Centrifugal Pump, TEFC
- 0.2 Micron Vent Filter & 0.2 Micron Final Filter
- 316 SS Pressure Gauges
- Loop Return Product Conductivity Transmitter
- Sample, Isolation Valves & Pressure Control Valve
- 5.7" Color Touchscreen HMI and PLC
- PLC Data Logging and Remote Monitoring Capabilities
- Panel Main Power Disconnect
- Audible Alarm

Technical Data

Product Specifications			
4400L High Purity Water System			
Part Number	4400L 2 20*	4400L 4 50*	4400L 6 80*
Product Flow Rate at 41°F (5°C)	2.0 US gpm (7.6 lpm)	5.0 US gpm (18.9 lpm)	8 US gpm (30.3 lpm)
Distribution Flow	20.0 US gpm (75.7 lpm)	50.0 US gpm (189.3 lpm)	80 US gpm (302.8 lpm)
Approximate Dimensions	100" x 38" x 80" (2,540mm x 965mm x 2,032mm)		
Product Quality Water	Up to 18.1 meg-ohms-cm (up to 0.05 µS/cm)		
Main Power	460 or 575VAC / 3PH / 60HZ, 4 KW – 16 KW based on model		
Control Power	120VAC/1PH/60HZ, 0.2 KW – 1 KW based on model		
* Distribution flows can be matched with any number of RO membranes			

Standard Construction

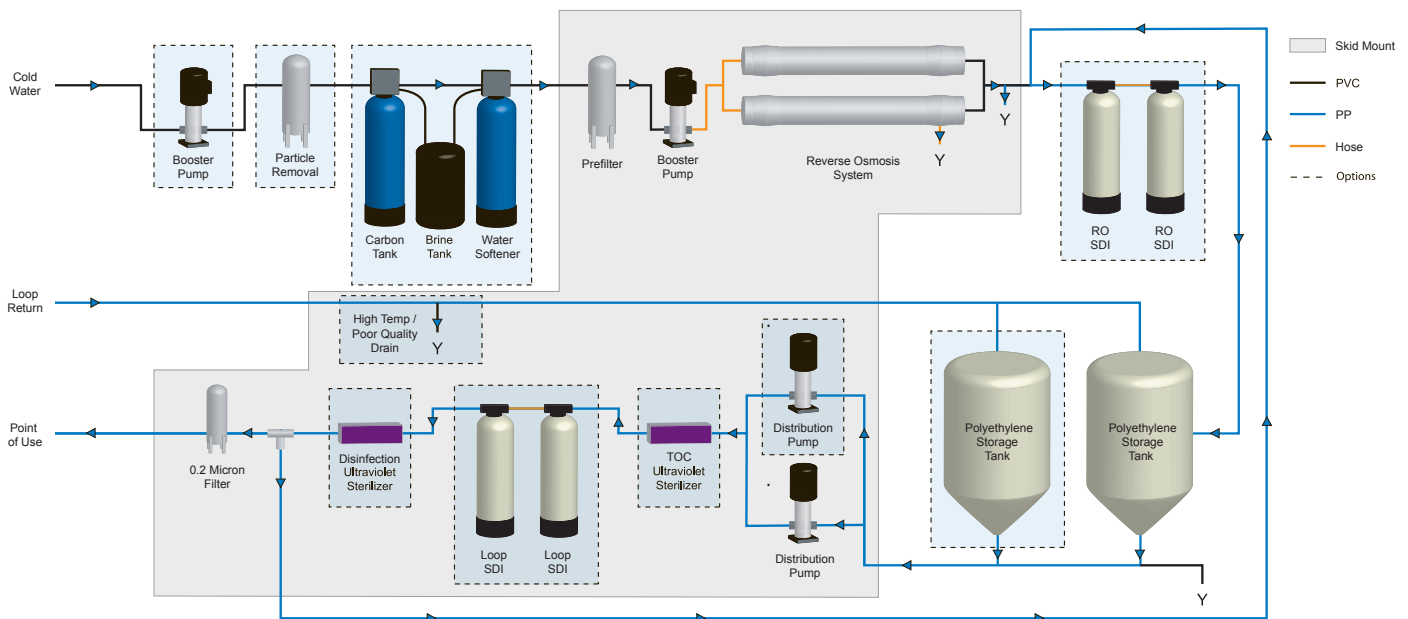
- Frame: Single Powder Coated Steel
- RO Membrane Elements: Composite Polyamide Low Energy
- RO Membrane Housing: Stainless Steel
- Low Pressure Piping: Sch 80 PVC / Reinforced Hose
- Pumps: Stainless Steel
- Control Enclosures: Separate High and Low Voltage Nema 4X
- Distribution Tank: High Density Polyethylene
- Distribution Piping: Pigmented Polypropylene

Available Options

- RO Product Service Exchange DI Slip Stream Polishing
- Loop Service Exchange DI Polishing
- Duplex Storage Tanks & Distribution Pumps
- Variable Speed Drive Distribution Pump(s)
- 185nm TOC Reduction Distribution Ultraviolet System¹
- 254nm Distribution Disinfection Ultraviolet System
- Ultraviolet Monitoring System
- Loop High Temperature / Poor Quality Flush Valve
- Control Panel Emergency Stop Circuit
- Waste Reclaim System
- Ethernet Communication Port

¹ Sized on 8% reduction per pass

Process Flow Diagram



4400L® is a registered trademark of Mar Cor Purification Inc., A Cantel Medical Company.



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