Containerized Reverse Osmosis Systems

10 ft, 20 ft and 40ft containers



Pure Aqua containerized reverse osmosis systems are self contained, turnkey units that can function on-the-go or as a permanent water treatment plant, able to start producing high-quality water in less than a day after arrival on-site. Pure Aqua containerized reverse osmosis systems are made to order, meaning that your containerized system will be specifically engineered to meet your water treatment requirements. Each containerized reverse osmosis system is engineered with high-quality components to handle all types of harsh conditions.



Pure Aqua supplies a full line of standard and fully customizable water treatment systems, all of which are engineered using advanced 3D computer modeling and process design software.



Brackish water reverse osmosis system

Integrated clean-in-place skid (CIP)

Standard Features

- 20 and 40ft standard shipping container
- Centralized external connections
- Interconnecting piping and wiring
- Overhead lighting
- 110V/460V/3Ph/60Hz power supply
- Pretreatment mounting and plumbing
- Centralized control panels
- Operations and maintenance manuals
- Full 3D/2D CAD drawings

Available Options

- 10ft non seaworthy container for small systems
- Air conditioning/heater unit
- Membrane clean-in-place skid (CIP)
- 380-415V/3Ph/50Hz or 220V/60Hz power supply
- Chemical dosing systems
- Media and Iron prefiltration systems
- Ozonation and UV sterilization systems
- Diamnod plate flooring
- Insulation for temperature control



Pre-filtration with interconnecting piping, wiring and backwash pump

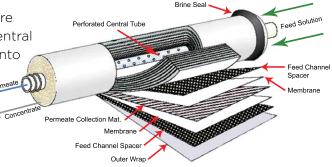
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Membrane Schematic Diagram

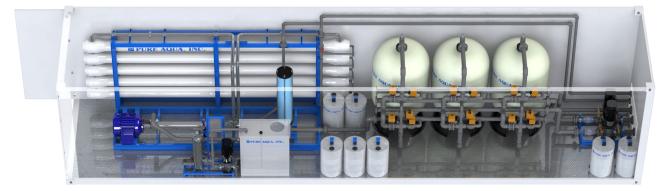
The spiral membrane is constructed from one or more membrane envelopes wound around a perforated central tube. The permeate passes through the membrane into the envelope and spirals inward to the central tube for collection. The layers of the membrane envelope are detailed in the diagram to the right.



Operation Specifications

- Max. feed water temperature: 42°C
- Feed water pressure: 20 to 60 psi
- Operating pressure: 150 to 1,000 psi
- Hydrogen Sulfide must be removed

- Feed water TDS: up to 45,000 ppm
- Turbidity must be removed
- Hardness over 1 GPG requires antiscalant dosing
- ♦ pH tolerance range: 3-11



Weights and Dimensions

Sea water containerized reverse osmosis system

Container Size	Non Insulated Container			Insulated Container	
	10 ft	20 ft	40 ft	20 ft	40 ft
External length (in.)	114	236	472	236	472
External width (in.)	94	94	94	94	94
External height (in.)	98	98	98	98	98
Internal length (in.)	110	228	472	216	452
Internal width (in.)	90	90	90	87	87
Internal height (in.)	101	101	101	98	98
Tare weight (lbs.)	3,200	4,800	7,300	6,500	9,400
Max gross weight tons	20	24	30	24	30
Access	1 double-door				

Pure Aqua also supplies: Multimedia Pretreatment, Activated Carbon Pretreatment, Water Conditioning, Chemical Dosing Systems, Ultraviolet (UV) Sterilizers and Ozonation Systems.

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