

Industrial Brackish Water Reverse Osmosis Systems

RO-500

SERIES

Capacity: 200,000 to 900,000 GPD

Pure Aqua's Reverse Osmosis Systems are capable of removing salts and other impurities such as bacteria, sugars, proteins, dyes and constituents with a molecular weight greater than 150-250 dalton.



Pure Aqua supplies a full line of standard and fully customizable Reverse Osmosis systems, all of which are engineered using advanced 3D computer modeling and process design software for accurate and customized solutions.

Standard Features

- Powder coated carbon steel frame
- 8" TFC spiral wound membranes
- Stainless steel multi-stage pump with TEFC motor
- FRP membrane housing
- 5 micron cartridge prefilter
- 460V/3Ph/60Hz power supply
- PLC based control panel
- Programmable time delay and set points
- Status indicators
- Motor starter
- NEMA 12 enclosure
- Low pressure switch
- High pressure switch
- Liquid filled pressure gauges
- Permeate conductivity monitor
- Permeate & concentrate flow meters

Available Options

- Remote monitor / control option
- Feed water conductivity monitor
- Membrane cleaning skid
- Automatic hourly flush
- Feed / Permeate blending
- Export crating
- 380-415V/3Ph/50Hz power supply
- 220V/3Ph/60Hz power supply
- Product tank level controller switch
- Feed pH controller with sensor
- Feed ORP controller with sensor
- Water and hour meters
- Chemical dosing systems
- Media and Iron prefiltration systems
- Ozonation and UV sterilization systems
- Water softeners
- Post deionization polishers

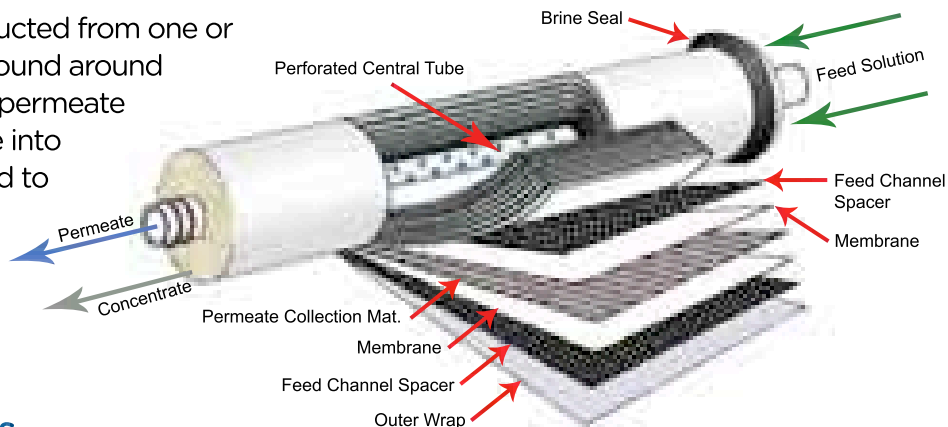
Industrial Brackish Water Reverse Osmosis Systems

Capacity: 200,000 to 900,000 GPD

RO-500

SERIES

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 80 psi
- Operating pressure: 150 to 250 psi
- Hydrogen Sulfide must be removed
- Turbidity should be removed
- Max. Iron content: 0.05 ppm
- Feed water TDS: 0-1,000 ppm
- Equipment upgrade for TDS over 5,000 ppm
- Hardness over 1 GPG requires antiscalant dosing
- pH tolerance range: 3-11
- Max. Silica Tolerance: 60 ppm @ 60% recovery
- Operate at higher TDS by lowering recovery

Model #	Permeate		Quantity of Membranes	Motor HP at 1000 ppm		Approx. Weight Lbs	Dimensions L"xW"xH"
	GPD	M3/D		60 Hz	50 Hz		
TW-200K-4780	200,000	758	28	30	40	4,500	350x72x80
TW-225K-5680	225,000	852	30	30	50	4,500	300x72x80
TW-270K-6680	270,000	1,023	36	40	60	4,900	300x72x80
TW-320K-7680	320,000	1,212	42	40	60	5,200	300x72x90
TW-360K-8680	360,000	1,364	48	50	100	5,750	300x72x90
TW-410K-9680	410,000	1,553	54	50	100	6,250	300x72x90
TW-450K-10680	450,000	1,705	60	60	100	7,500	300x72x90
TW-500K-11680	500,000	1,894	66	60	100	8,500	300x72x80
TW-550K-11780	550,000	2,083	77	60	100	8,750	350x72x90
TW-600K-13780	600,000	2,273	91	75	100	9,250	350x84x92
TW-700K-14780	700,000	2,652	98	100	2x100	9,650	350x84x94
TW-800K-16780	800,000	3,030	112	2X50	2x100	10,200	350x84x96
TW-900K-18780	900,000	3,409	126	2X50	2x100	10,650	350x84x98

Note: If the feed water TDS exceeds 1,000 ppm, the system model number changes to BW-XXXK-XXXX, and a suffix is added to the end of the model number: "-3" is added if the TDS is 3,000 ppm or less, and "-5" is added if the TDS is 5,000 ppm or less.

Example: Required system to produce 320,000 GPD with a feed water TDS of 5,000 ppm, the corresponding model number is: "BW-320K-7680-5".

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

 Pure Aqua, Inc. [®] Water Treatment and Reverse Osmosis Systems sales@pureaqua.com Tel: +1-714-432-9996 www.pureaqua.com Fax: +1-714-432-9898 Designed and Manufactured in Southern California, USA	  	Authorized Dealer:
	© 2011 Pure Aqua, Inc. All Rights Reserved. Specifications subject to change without notice.	