

Industrial Sea Water RO Systems

Capacity: 8,000 to 660,000 GPD

SWI

SERIES

Pure Aqua's sea water reverse osmosis systems are capable of removing salts as well as other impurities such as bacteria, sugars, proteins, dyes and constituents that have a molecular weight greater than 150-250 Daltons.



SW-224K-8780

Pure Aqua supplies a full line of standard and customizable sea water 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 steel frame
- Heavy duty 5 micron cartridge prefilter
- Sea water resistant SS pump
- Microprocessor/PLC based control panel & VFD
- Glycerin-filled 316 SS pressure gauges
- Product & reject flow meters
- TFC spiral wound membranes
- FRP membrane housings
- 460V/3ph/60Hz power requirement
- Low & high pressure switches
- Permeate TDS monitor
- Stainless steel high pressure piping
- Stainless steel throttling valve for reject stream
- Automatic feed shut off valve
- Energy recovery on 64K GPD and larger

Available Options

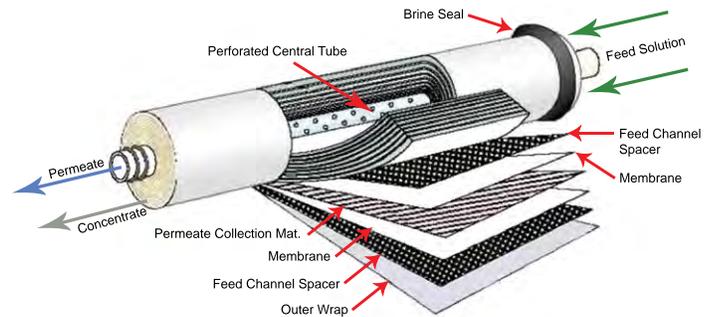
- Feed and re-pressurization pumps
- 380-415V/3ph/50Hz power requirement
- Remote monitoring
- Product tank level switch
- pH controller with sensor
- ORP controller with sensor
- Cleaning skid
- 50 micron bag filter for open intake
- Carbon prefilter
- Multimedia prefilter
- Post UV sterilizer
- Custom designed units
- Export crating
- Chemical dosing units
- Containerized RO systems

Industrial Sea Water RO Systems

Capacity: 8,000 to 660,000 GPD



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: 40 to 80 psi
- Operating pressure: 700 to 1,000 psi
- H₂S, turbidity and organics must be removed
- Max. iron content: 0.05 ppm
- Feed water TDS: 10,000-42,000 ppm
- Equipment upgrade for TDS up to 50,000 ppm
- Antiscalant dosing is required
- pH tolerance range: 3-11
- Biological or organic content must be removed

Model #	Permeate Flow Rate		Qty. of 8" Membranes (Single Stage)	Motor HP at 42,000 ppm		Approx. Weight (lbs)	Dimensions L"xW"xH"
	GPD	M ³ /D		60Hz	50Hz		
SW-8K-1280	8,000	30	2	15	15	2,600	120x42x72
SW-12K-1380	12,000	45	3	20	25	2,650	160x42x72
SW-16K-1480	16,000	61	4	25	30	2,700	195x60x72
SW-24K-2380	24,000	91	6	40	45	3,200	160x60x72
SW-32K-2480	32,000	121	8	60	65	4,200	195x72x72
SW-48K-2680	48,000	182	12	75	80	5,600	280x72x72
SW-64K-4480	64,000	242	16	60	65	6,500	195x72x72
SW-72K-3680	72,000	273	18	60	65	12,000	280x72x80
SW-96K-4680	96,000	363	24	85	100	13,000	280x72x80
SW-112K-4780	112,000	424	28	100	110	14,000	350x72x80
SW-136K-5680	136,000	515	30	110	120	15,000	280x72x80
SW-168K-6780	168,000	636	42	120	130	16,000	350x72x80
SW-196K-7780	196,000	742	49	130	150	16,500	350x72x80
SW-224K-8780	224,000	848	56	160	175	17,000	350x72x79
SW-252K-9780	252,000	954	63	175	190	18,000	350x72x79
SW-280K-10780	280,000	1,060	70	190	190	19,000	350x72x79
SW-317K-12780	317,000	1,200	84	190	290	20,000	350x85x80
SW-420K-15780	420,000	1,590	105	290	320	21,200	350x85x80
SW-500K-18780	500,000	1,893	126	320	320	22,000	350x85x81
SW-660K-18880	660,000	2,500	144	350	350	27,000	395x85x81

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

© 2016 Pure Aqua, Inc. All right reserved. Specifications subject to change without notice.