

Sea Water Reverse Osmosis Systems

Halia™ SW



Halia™ brand Sea Water Reverse Osmosis systems from Haliant Technologies provide the right combination of value and features required for any desalination application. Every Halia™ R.O. system is manufactured from the highest quality components to the exacting standards of all Haliant Technologies equipment. Standard Halia™ R.O. models are available for any commercial application from 1,600 to over 150,000 GPD.

Halia™ brand Sea Water Reverse Osmosis systems are designed to produce potable permeate water from sea water of up to 50,000 ppm of TDS. Halia systems equipped with energy recovery systems as standard equipment are the most cost effective in the industry, capable of energy efficiencies below 3.0 kW-hrs/m³.



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Design Assumptions

- Feed Water of 36,000 mg/L TDS at 25 C, SDI < 3,
- Turbidity < 1
- 3rd year of operation allowing for Flux Decline and Salt Passage Increase
- Negligible permeate backpressure
- 99.5% Salt Rejection elements
- Flux, Minimum Brine Flow, and Recovery in accordance with membrane manufacturers recommendations

System Specifications

Standard Features

- High-Rejection Sea Water Membranes
- 316L Stainless Steel Valves, Pressure Gauges
- 904L Stainless Steel High-Pressure Piping*
- 60Hz/200V-460V, 3-phase motor*
- Automatic High and Low Feed Pressure Shut-off
- Permeate and Concentrate Flowmeters*
- 904L Stainless Steel Centrifugal Pump*
- Automatic Feed Water Shut-off Valve
- 5-micron Sediment Prefilter
- Fiberglass Pressure Vessels
- Prefilter Pressure Gauges
- Automatic Permeate Flush*
- Energy Recovery System*
- Stainless Steel Frame

Optional Features

- Chemical Dosing System
- Clean-in-Place System
- TDS, pH, Temperature, Turbidity Instruments
- PLC Control
- Special Color or Private Label
- 50Hz Motor
- Crating

* Standard Feature of HALIA-SW-5 and larger units, optional on HALIA-1 through HALIA-SW-4 systems

MODEL	SYSTEM CONFIGURATION											
	PRODUCTION		RECOVERY	NUMBER AND SIZE	MOTOR		APPROXIMATE SHIPPING DIMENSIONS			APPROXIMATE SKID DIMENSIONS		
	GPD	m3/D	(%)	ELEMENTS	60Hz (HP)	50Hz (KW)	(L x W x H) (inches)	(L x W x H) (cm)	WEIGHT (lbs/Kg)	(L x W x H) (inches)	(L x W x H) (cm)	WEIGHT (lbs/Kg)
HALIA-SW-1	1,600	6	20	1 (4")	3	2.2	32 x 26 x 57	81 x 66 x 145	125/57	26 x 20 x 50	66 x 51 x 127	110/50
HALIA-SW-2	3,200	12	20	5 (4")	9.5	7	38 x 26 x 57	97 x 66 x 145	190/86	32 x 20 x 50	81 x 51 x 127	175/80
HALIA-SW-3	4,800	18	30	7 (4")	11	8	120 x 40 x 72	315 x 102 x 183	1300/591	108 x 32 x 60	274 x 66 x 152	1000/455
HALIA-SW-4	6,400	24	35	10 (4")	11	8	120 x 40 x 72	315 x 102 x 183	1500/545	108 x 32 x 60	274 x 66 x 152	1200/545
HALIA-SW-5	7,200	30	20	2 (8")	10.5	9.1	156 x 60 x 72	396 x 152 x 183	1800/682	144 x 48 x 60	366 x 122 x 152	1500/682
HALIA-SW-10	14,400	50	20	4 (8")	12.5	12.5	156 x 60 x 72	396 x 152 x 183	2100/955	144 x 48 x 60	366 x 122 x 152	1800/818
HALIA-SW-15	21,600	80	27	6 (8")	14.5	13.1	180 x 60 x 72	457 x 152 x 183	2600/1182	168 x 48 x 60	427 x 122 x 152	2200/1000
HALIA-SW-20	28,800	110	33	8 (8")	19.5	15.1	228 x 60 x 72	579 x 152 x 183	3100/1409	216 x 48 x 60	549 x 122 x 152	2700/1227
HALIA-SW-25	36,000	130	38	10 (8")	24	21.6	276 x 60 x 72	701 x 152 x 183	3600/1636	264 x 48 x 60	671 x 122 x 152	3200/1455
HALIA-SW-30	43,200	170	36	12 (8")	34	25.0	228 x 60 x 72	579 x 152 x 183	4050/1841	216 x 48 x 60	549 x 122 x 152	3650/1659
HALIA-SW-45	64,800	250	42	18 (8")	50	44.0	300 x 60 x 72	762 x 152 x 183	4800/2182	288 x 48 x 60	732 x 122 x 152	4300/1955
HALIA-SW-60	86,400	330	40	24 (8")	60.5	47.5	300 x 72 x 72	762 x 183 x 183	5500/2500	288 x 60 x 60	732 x 152 x 152	4950/2250
HALIA-SW-75	10,800	410	40	30 (8")	67.5	55.0	300 x 72 x 84	762 x 183 x 213	6150/2795	288 x 60 x 72	732 x 152 x 183	5650/2568
HALIA-SW-90	129,600	490	42	36 (8")	77.5	69.5	300 x 84 x 84	762 x 183 x 213	7000/3182	288 x 72 x 72	732 x 183 x 183	6450/2932
HALIA-SW-110	158,400	600	40	42 (8")	92.5	73.0	300 x 84 x 84	762 x 183 x 213	7800/3545	288 x 72 x 72	732 x 183 x 183	7250/3295



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