

IW REVERSE OSMOSIS SYSTEM



A CUSTOM SOLUTION. A COMPLETE SOLUTION.

DESIGNED TO MEET THE NEEDS OF THE MOST DEMANDING INDUSTRIAL AND MUNICIPAL APPLICATIONS.

Available in a variety of configurations to cover flow requirements from 22 to 200 GPM with salinity levels up to 3000ppm of TDS. Using an innovative modular design, Culligan[®] is able to offer the highest quality construction and speedy delivery times at very competitive pricing.

Low-pressure membrane technology can remove over 99% of contaminants such as dissolved minerals, bacteria, and other impurities; producing water suitable for high-purity applications like boiler feed and ingredient water for food and beverage production.

All units are assembled and tested in Culligan's Commercial & Industrial facility in Libertyville, Illinois and shipped skid-mounted for simple installation and easy start-up.

TOTAL FLEXIBILITY

The IW's configurable design offers nearly a hundred different pre-engineered combinations of features to be built into a perfect RO application solution.

VALUES & BENEFITS

- The configurator tool can quickly create a RO solution tailored for maximum cost-effectiveness. No extra accessories and instrumentation to drive up project costs.
- The low-energy membranes on the IW require smaller pumps that save on operational costs.
- The Culligan[®] Global Electronics (GBE) system controllers used on the IW are familiar to hundreds of Culligan[®] Service Technicians around the world.
- Culligan[®] offers worldwide technical support for installations and start-ups.
- The IW is built in the USA with a quality guarantee by Culligan[®].

STANDARD FEATURES

- Mounted on a galvanized steel frame with anti-corrosion paint coating.
- Multi-stage high pressure pump with high grade AISI 316 Stainless Steel, dry running protection and low noise / high efficiency IE3 motor.
- Ultra-low pressure, high rejection 8" membranes.
- 5 micron pre-filtration with PVC housing.
- Culligan[®] Smart Controller automates operation with digital flow meters, pressure transducers and conductivity measurements along with other advanced functionality more commonly found in PLC controls.



OPTIONS & UPGRADES TO MAXIMIZE PERFORMANCE



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Advanced Instrumentation Options

Monitor every aspect of the units operation with advanced instrumentation.

- Conductivity *
- Inlet REDOX (ORP)
- Inlet and Product pH

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Integrated Permeate Flushing Tank Option

Extend the life of the membranes by flushing them with treated product water each time the unit shuts down or during alarm conditions. Permeate tank can be dual-purposed for use with the detachable CIP skid option.



3 Integrated Chemical Dosing Station prevent membrane scaling with antiscalant or remove chlorine with sodium bisulfite to protect RO membranes with the integrated dosing station. System has auto-start / stop, and tank level functionality.

Power & Control Options

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Standard Electrical Power Requirements are 460V, 3-ph, 60 Hz., 380-415V/50Hz. and 575V/60Hz. power options available

PLC options includes:

- A-B MicroLogix 1400
- Color touch screen display
- Ethernet communications
- Audible and graphic alarm
- A full suite of instrumentation

and controls to program and monitor



Inlet and product conductivity gauges are included standard with the GBE or PLC controls.

IW BASE SYSTEM SPECIFICATIONS

IW Reverse Osmosis System

MODEL	IW - 22	IW - 35	IW - 50	IW - 70	IW - 100	IW - 140	IW - 155	IW - 200
Designed Permeate Flow* (GPM)	22	35	53	70	100	141	158	200
Membrane Quantity	4	6	9	12	18	24	30	36
Vessels x Membranes per stage	1x4	1x3	1x3	2x6	2x6	3x6	3x6	4x6
		1x3	1x3					
			1x3		1x6	1x6	2x6	2x6
Pump Size (HP) 60Hz, SS Housing	7.5	7.5	15	20	20	30	30	40
Connections Feed Product Reject	1.5″ 1.5″ 1″	2″ 1.5″ 1″	2" 2" 1.5"	3″ 2″ 1.5″	3" 2.5" 2"	3" 3" 2"	3" 3" 2"	3" 3" 2"
Dimensions (in.) A x B x C	187 x 47 x 72	148 x 47 x 72	148 x 47 x 72	268 x 47 x 72	268 x 47 x 72	269 x 47 x 79	269 x 47 x 87	269 x 62 x 87
Weight (lbs)	1,400	1,550	2,000	2,800	3,000	3,500	4,000	5,000

* Flow based on 3 year old RO membranes operating at 75% recovery on properly pretreated feed water of 1500 ppm TDS as NaCl, 68°F (20°C), Silt Density Index (SDI) below 3, and supplying water to atmosphere. Productivity will vary depending on the actual feed water quality and temperature.

MATERIALS OF CONSTRUCTION

Frame	Epoxy painted galvanized steel
Membrane Elements	Hydranautics ESPA Max ultra low pressure, high rejection 8" membranes
Membrane Housing	FRP
Low Pressure Pipe	Schedule 80 PVC
High Pressure Pipe	Stainless Steel 316
Cartridge Filter Housing	PVC





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For over 80 years, Culligan[®] has made better water. Our global network, comprised of 800+ dealers and international licensees in over 90 countries, is dedicated to addressing your water-related problems. As a worldwide leader in water treatment, our sales representatives and service technicians are familiar with the local water conditions in your area. Being global and local position us to deliver customized solutions to commercial and industrial water issues that affect your business and your bottom line.

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