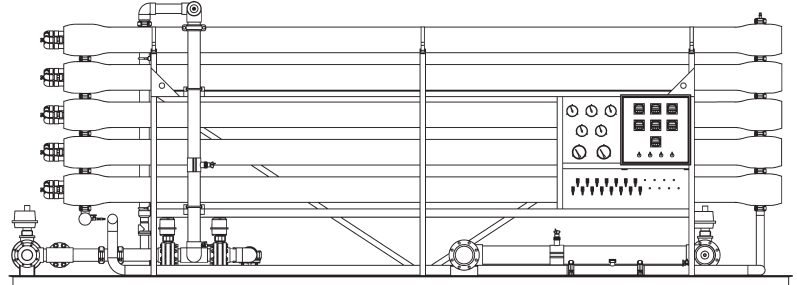


SPECIFICATION DATA SHEET

**450,000 US gallons per day
SWRO Membrane Module
Low Seawater TDS**



Description

The 450 Series Seawater Reverse Osmosis Membrane Module is available for low salinity seawater ranges:

- Low Salinity: 30,000 – 35,000 mg/l TDS

The product water from this system complies with World Health Organization (WHO) standards for potable water (<500 mg/l TDS). The equipment is offered as a base unit with customer-applied modifications (see www.desalt.net). Various options are available. Equipment is supplied tested and complete. Please see proposal package for detailed drawings and information.

Module Options:

- Air Bleeds
- Motorized Valves
- Cabinet Lamp
- Enclosure Heater
- Premium Instrument Package
- Duplex 2205 / Zeron® 100 Piping
- 316SS Pipe Coupling Hardware
- Customization available upon request

**TESTED
PREPACKAGED
WARRANTIED**

ARRANGEMENT	
Nominal Capacity (Usgpd / m3/d)	450,000 / 1,703
Frame Size	4
Maximum Length (in/cm)	286 / 726
Maximum Width (in/cm)	72 / 183
Maximum Height (in/cm)	103 / 262
Dry Weight (lbs/kg)	8,580 / 3,892
Flooded Weight (lbs/kg)	17,660 / 8,010
Feed Connection (in/mm)	6" / DN 150
Brine Connection (in/mm)	6" / DN 150
Product Connection (in/mm)	4" / DN 100
Vessels	19
Membranes	114
Type	Spiral
Energy Recovery Type	Turbine
Membrane Vessel Size	8"

DESIGN PARAMETERS	
Piping Materials	316SS, 2205, Zeron® 100
Hardware Materials	316SS
Skid Material	Structural Steel, Closed Full Seam Welded
Finishes	Blasted White, 12 mil Coal Tar Epoxy
Seawater TDS Range (mg/l)	30,000 – 35,000
Inlet SDI	< 5.0
Design Temperature (C)	25
Conversion (%)	45
Feed Flow (Usgpm / m3/hr)	694 / 158
Brine Flow (Usgpm / m3/hr)	382 / 86.6
Product Flow (Usgpm / m3/hr)	312 / 70.9
Design Fouling Factor (%)	70
Operating Pressure (nominal 3 yr)	900 psig / 62 bar