

ECOSOFT MO-4 INDUSTRIAL REVERSE OSMOSIS SYSTEM

PURPOSE. Ecosoft MO-4 is an industrial reverse osmosis system for purification of brackish water. Ecosoft RO systems feature simple and efficient design for high recovery low energy operation.



MAIN SPECIFICATIONS:	
Nominal capacity ¹	4 m ³ /h
Normal recovery rate ¹	75%
Electrical requirements	400 V, 50 Hz (3 phase)
Power requirements	4 kW
Membrane elements	Dow Filmtec™ 4 pcs
Crate dimensions (Height × Width × Depth)	2.2×3.1×1.3 m
¹ At 15°C, 2000 ppm feed water, ±10%	

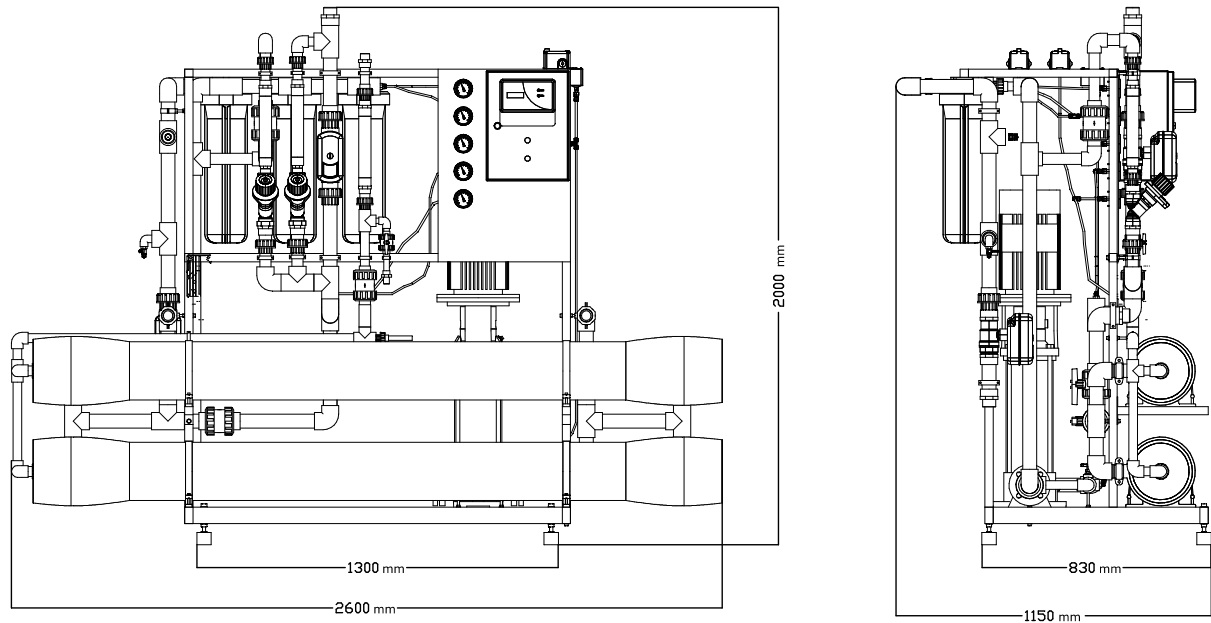
KEY ASSETS.

- Energy efficiency with Dow Filmtec™ XLE membranes and Grundfos pump
- Reliable performance with quality components and engineering
- Individual project evaluation per request
- CE label for electrical safety compliance
- ISO 9001 certified factory

Purified water is used in most sectors of industry. Main applications of Ecosoft RO systems include:

Semiconductor manufacturing	Steam boilers	Textile industry
Pharmaceutical manufacturing	Heat and cooling circuits	Fish farms
Chemical manufacturing	Agriculture	Utility water treatment
Food processing	Insulation glazing	Laundry and car wash
Galvanic and electroplating works	Desalination	Drinking water bottling

DIMENSIONS¹.



¹ Above dimensions are not binding and may vary within 30 mm

MAIN EQUIPMENT.

• DOW Filmtec™ XLE membranes	• Sediment pre-filters
• Grundfos CR pump	• 3 pressure switches
• Danfoss motorized valves	• Float switch
• Honeywell regulating valves	• Conductivity probe
• Ecosoft RO controller	• Anti-vibration pressure gauges and rotameters
• Praher and John Guest pipe, fitting, and valves	• Powder coated steel frame

OPTIONS.

Special purpose DOW Filmtec™ membranes	— For problem water with high nitrate, ammonium, TDS, TOC or other water quality issues
EMEC dosing pump	— For hard water or other water quality issues
Permeate rinse	— Prolongs membrane life and extends runtime before membrane clean (CIP)
Raw water blending	— Corrects purified water analysis and increases total flow rate

EXTENDED SPECIFICATIONS.

Pump power		4 kW
Inlet pressure of water ¹		2...4 bar
Operating pressure		7...10 bar
Maximum pressure		14 bar
Influent flow rate during service		5...8 m ³ /h
Influent flow rate during rinse		8...10 m ³ /h
Connection port sizes:	— feed water	DN40
	— permeate	DN25
	— concentrate	DN40
Dimensions (Height x Width x Depth)	— product	2.0×2.6×1.15 m
	— crate	2.2×3.1×1.3 m
Weight	— product	500 kg
	— cargo	660 kg

¹ stable pressure (±0.5 bar) within specified limits is required for sustainable operation

FEED WATER REQUIREMENTS.

1	Total Dissolved Solids	< 3000 mg/L (ppm)
2	Hardness ²	< 150 mg/L CaCO ₃ (ppm CaCO ₃)
3	Iron	< 0.1 mg/L (ppm)
4	Manganese	< 0.05 mg/L (ppm)
5	Hydrogen Sulfide	none
6	Silica ²	< 20
7	Chlorine	< 0.1 mg/L (ppm)
8	Silt Density Index	< 5 mg/L (ppm)

² Higher values can be treated with antiscalant