

ECOSOFT MO-30 INDUSTRIAL REVERSE OSMOSIS SYSTEM

PURPOSE. Ecosoft MO-30 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	30 m ³ /h
Normal recovery rate ¹	75%
Electrical requirements	400 V, 50 Hz (3 phase)
Power requirements	18.5 kW
Membrane elements	Dow Filmtec™ 30 pcs
Dimensions (Width × Depth × Height)	7.5×2.2×2.2 m
¹ At 15°C, 2000 ppm feed water, ±10%	

KEY ASSETS.
<ul style="list-style-type: none"> • 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:

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

MAIN EQUIPMENT.

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|---|---|
| • 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.

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|--|---|
| 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.

Inlet pressure of water ¹	2...4 bar
Operating pressure	7...10 bar
Maximum pressure	14 bar
Influent flow rate during service	40...60 m ³ /h
Influent flow rate during rinse	40...60 m ³ /h
Connection port sizes:	— feed water DN80 — permeate DN80 — concentrate DN80
Dimensions (Width x Depth x Height)	7.5x2.2x2.2 m
Weight	1800 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