

**STANDARD PLANTS****REVERSE OSMOSIS**

Esmil Process Systems offer a range of standard “skid mounted” Reverse Osmosis desalination systems for industrial applications. Designed to produce a clear, softened and low saline water, the permeate can be used for drinking water, boiler feed water or process water.

The units are designed for automatic, unattended operation - an integrated PLC operates the entire system. Shop-testing prior to shipment ensures “plug in and play” with minimal erection time. Esmil Process Systems are available for commissioning, supervision of erection and start-up.

**50 - 200 m<sup>3</sup>/d Membrane Systems****200 - 1200 m<sup>3</sup>/d Membrane Systems**

Similar plants are available for a wide range of process applications:

Beverage Manufacture  
Laundry and Washing Processes  
Textile Industry

## SPECIALISTS IN PROCESS WATER TREATMENT

STANDARD REVERSE OSMOSIS MEMBRANE SYSTEMS		
	50 – 200 m <sup>3</sup> /d Plants	200 – 1200 m <sup>3</sup> /d Plants
<b>Operating Parameters</b>	2 barg	2 barg
Inlet Pressure	12 – 15 barg	12 – 15 barg
Operating Pressure	4 – 29°C	4 – 29°C
Operating Temperature		
<b>Process Efficiency</b>	95 – 98%	95 – 98%
Salt Rejection	Removal of most colloids Removal of bacteria and viruses	Removal of most colloids Removal of bacteria and viruses
<b>Membrane Housing</b>	10 cm	20 cm
<b>Membrane Elements</b>	Spiral wound	Spiral wound
<b>Feed Pump</b>	Multi stage centrifugal pump S.S Shell and Housing	Multi stage centrifugal pump S.S Shell and Housing
<b>Standard Features</b>	High pressure St.St. pipework 5 micron pre-filter with SS housing Automatic inlet shut-off valve Automatic flush system Pressure gauges Digital permeate / concentrate flow meters Digital conductivity meter Integrated alarm system PLC control (optional)	High pressure St. St. pipework 5 micron pre-filter with SS housing Automatic inlet shut-off valve Automatic flush system Pressure gauges Digital permeate / concentrate flow meters Digital conductivity meter Integrated alarm system PLC control Modem control facilities
<b>Frame</b>	Epoxy coated carbon steel	Epoxy coated carbon steel