



REVERSE OSMOSIS (RO)

Industrial 72 - 2400 M³/Day

OVERVIEW

Enviro Concepts Reverse Osmosis (RO) systems are engineered to economically filter water from waste, surface, stored or ground water by membrane filtration. It removes dissolved minerals, bacteria, particles, and organic impurities.

Each RO system is pre-engineered, pre-assembled and factory tested ensuring reliable operation and minimising site installation and start-up time.

Using proven, reliable components, our low energy Thin Film Composite (TFC) RO membranes ensure reliable operation and efficient water purification for water treatment in a wide range of applications.

APPLICATIONS

FEATURES

- Brackish Water TFC Membranes
- FRP RO Pressure Vessels
- High Pressure Stainless Steel Pipe
- Vertical Multistage Feed Pump
- Electrical Control Panel
- 5µm Safety Cartridge Guard Filters
- Manual & Electrical Solenoid Control Valve
- Pressure Gauges, Flow Meters
- Permeate Conductivity Meter
- Containerised or Skid Mounted

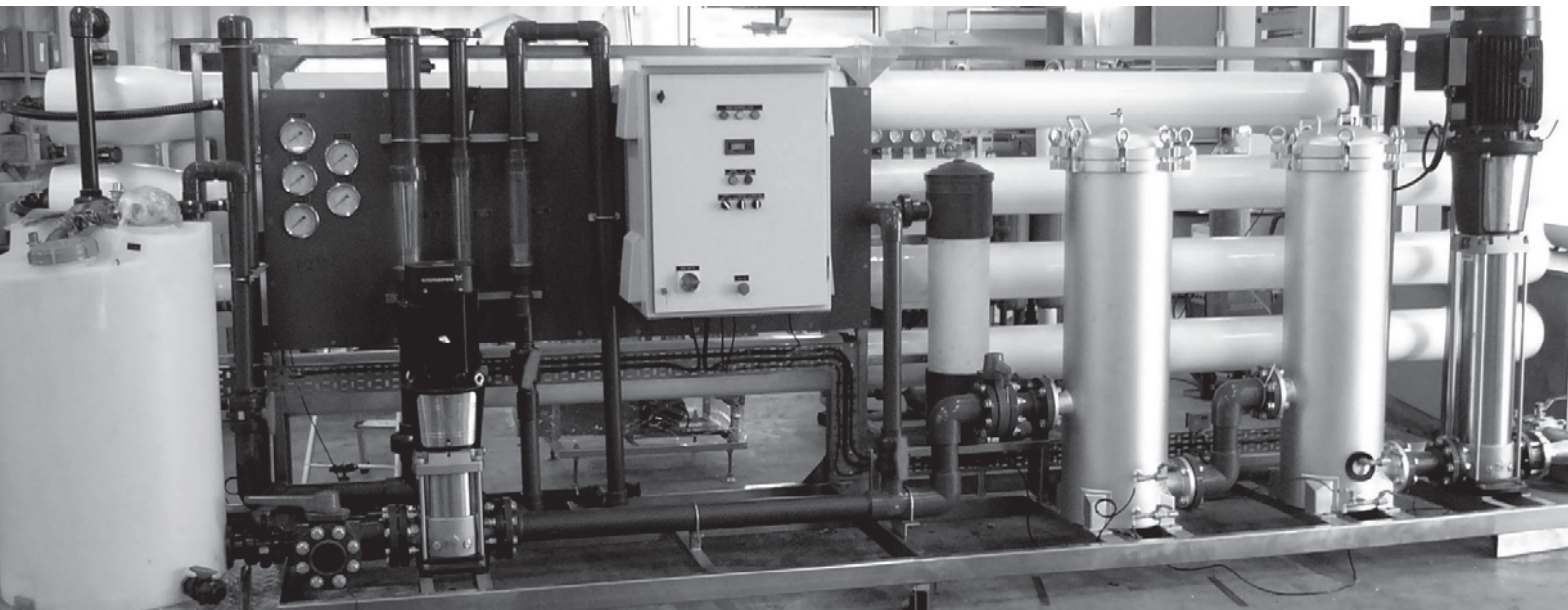
- Industrial Wash Effluent Treatment
- Storm and Ground Water Treatment
- Mine Accommodation Potable Water Treatment
- Restaurants and Hotels
- Wash Effluent Treatment for Vehicle Wash
- Heavy Vehicle Washdowns
- Logistics and Hire Companies
- Quarantine & Weed/Seed Hygiene
- Energy Suppliers, Resource Industry
- Brackish Water Treatment
- Spot Free Rinse
- Recycled Water Treatment

OPERATING LIMITS

| | |
|-------------------------|---------------------------------|
| Feed Water Source: | Surface, Ground |
| Recovery: | 70-90% |
| Operating Temperature: | < 45 deg C |
| Operating Pressure: | < 20 Bar |
| Max. SDI (15min): | < 5.0 |
| pH Range: | 3 - 10 |
| Feed Max. Turbidity: | < 1.0 NTU |
| Chlorine Concentration: | < 0.1 ppm |
| Power Supply: | 230-450V, 3 Phases, 50/60 Hz |
| Power Consumption: | 4-140 kW |

MEMBRANE SPECIFICATIONS

| | |
|-------------------------|-------------------------------|
| Membrane Type: | Thin Film Composite (TFC) |
| Material: | Polyamide (PA) |
| Charge: | Negative |
| Configuration: | Spiral Wound, FRP Wrapping |
| Membrane Size: | Diameter 8" x Length 40" |
| Effective Area: | 400 sq-ft/membrane |
| Flow Rate: | 0.8-1.0 m3/hr/membrane |
| Nominal Salt Rejection: | 99.75% |



| Model No. | Clean Water Output | | Membrane Elements | Line Sizes (mm) | | | Approx. System Dimensions (mm) | | | Approx. Weight (KG) |
|-------------|--------------------|-------|-------------------|-----------------|---------|--------|--------------------------------|--------|--------|---------------------|
| | LPM | m³/hr | | Inlet | Product | Reject | Length | Depth | Height | |
| RO 4.2.8 | 50 | 3 | 4 | 50 | 38 | 38 | 3500 | 1100 | 1900 | 600 |
| RO 9.3.8 | 80 | 5 | 9 | 50 | 38 | 38 | 4000 | 1100 | 1900 | 900 |
| RO 15.3.8 | 160 | 10 | 15 | 80 | 50 | 50 | 4000 | 1100 | 2000 | 1200 |
| RO 30.6.8 | 330 | 20 | 30 | 100 | 80 | 50 | 5500 | 1500 | 2000 | 1800 |
| RO 40.8.8 | 500 | 30 | 40 | 100 | 80 | 50 | 7000 | 1500 | 2200 | 2500 |
| RO 55.11.8 | 660 | 40 | 55 | 150 | 100 | 80 | custom | custom | custom | 3300 |
| RO 70.14.18 | 830 | 50 | 70 | 150 | 100 | 80 | custom | custom | custom | 5000 |
| RO 140.28.8 | 1,600 | 100 | 140 | 150 | 100 | 80 | custom | custom | custom | 10000 |