

# Triangularwave Technologies, Inc.

## *Reverse Osmosis: Sea water RO Desalination*

### Drinking Water from Sea Water

The RO filtration system is ideal for use on board boats, yachts and vessels of all types. Compact and dependable, this sea water desalination system is able to provide up to 100 GPD (400 LPD) of drinking water from sea water source.

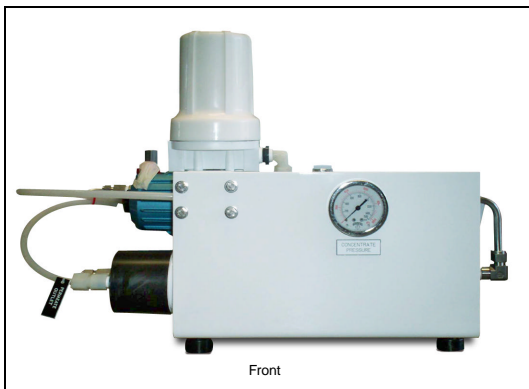
This system may be used as a stand alone unit or in combination with with TWT deposit control and/or ultra violet disinfection systems to provide an extra measure of protection by killing all potentially harmful bacterial and viral pathogens which may be present in the water. Rugged and well constructed, the SWRO-100 will ensure many years of dependable service.

#### Principles of Reverse Osmosis

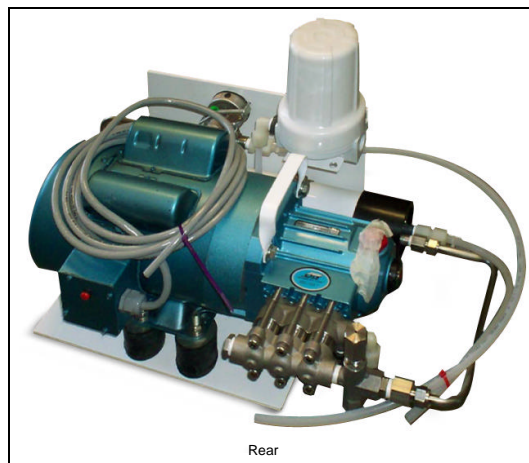
RO systems employ thin film composite membrane elements for superior performance. To simply describe the process, pump pressure is used to supply source water to reverse osmosis membranes. These special membranes allow only high quality water to permeate them. In turn, they reject metals, salts, ionic and organic impurities that are processed to waste. Suspended solids are removed by pre-filters, which are standard components on all RO systems.

#### System location

The RO system should be located on a level surface in an area sheltered from sun, wind and rain. The temperature in this area should be maintained, and should not fall below 35°F, If these limits are exceeded, damage to components may result and the warranty may be considered void. It is important to allow sufficient space around the unit(s) so maintenance can easily be performed.



Front



Rear

#### The TWT-SWRO-100 Reverse Osmosis System

##### Specifications

- Output max. 100 gallons per day
- For Feed Water Containing up to 36,000 mg/L TDS (36,000 ppm) at 25 C, SDI < 3
- 316L Stainless Steel Pump
- 24 Volt DC Motor (1 HP), Running at 1800 RPM
- High Rejection Sea Water Membrane
- Flow Meter Installed on the Permeate Line
- 5 Micron Sediment Pre-Filter
- Frame: Bent aluminum panel, with anti-vibration support
- Motor: 120 or 220V 50/60 Hz, 1Ph, 1.0 HP, 1470 RPM (60 Hz) or 1450 RPM (50 Hz)
- Pump: Cat 2SF15 (brass ) or 2SF15SELL (316SS-optional)
- Membrane: FILMTEC or SIMILAR 2.5"D x 14"L
- Pressure Vessel: Own Manufacturing (OSMO-2514-1000)
- Flowmeter: 0 to .25 GPM (or 0 to 15 GPH), Acrylic Block (optional)

RO systems are shipped with easy to follow application, installation and maintenance manual.

***DON'T WAIT...Contact us today for a free consultation! A luxury you CAN afford***

And for information on what TWT system will meet your specific application needs cost effectively!