

# Reverse Osmosis Systems



The **Reverse Osmosis (RO)** process uses a semi-permeable membrane to separate and remove Total Dissolved Solids (TDS), organics and submicron colloidal matter from the water. A high pressure RO pump is used to force raw water through the multi-layered membrane, leaving the impurities behind (concentrate) while creating pure water (permeate). Pre-treating the raw water with filtration and/or softening before the RO is commonly required. Reverse Osmosis is capable of removing 95 – 99% of the TDS from raw water.

As we remain **Committed to Innovation, WaterSoft** provides the design and engineering support to ensure the most effective treatment solution for each installation. For a stand-alone installation on a new construction project, replacing existing equipment or integrating new equipment into an existing process, we have the proper system and equipment options available to meet your need.

## Standard Features

- Pre-Packaged Assembled Plug'n'Play Install
- Powder-Coated/Epoxy Steel Frame
- Small Footprint per Daily Gallon Capacity
- 304/316\* Stainless Steel Multi-Stage Pump
- PVC Pressure Vessels
- High Rejection TFC Cold Water Membranes
- 5 Micron Sediment Pre-Filter
- Low Pressure Switch
- Permeate/Concentrate Pressure Gauge & Control Valve Package with Flow Meters
- Concentrate Recycle Valve & Flow Meter
- Low Pressure with Inlet Solenoid
- \* - 316 thru 8K gpd; 304 at 10K gpd & Larger

## Options

- Digital TDS Monitor/Controller
- RP or Stainless Steel Pressure Vessels
- Pump Discharge Pressure Gauge
- Automatic Fast Flush
- Atmospheric Storage Tank with Floats
- Pressurized Storage (3 tank sizes)
- Atmospheric Storage with Dispenser
- Brackish Water/Sea Water Applications System thru 400 gpm

## Typical Use:

- Restaurants
- Hospitals/Labs
- Industrial Processes
- Manufacturing
- Whole House
- Livestock
- Nursing Home/ Assisted Living
- Laundry Facilities
- Car Washes
- Convenience Stores

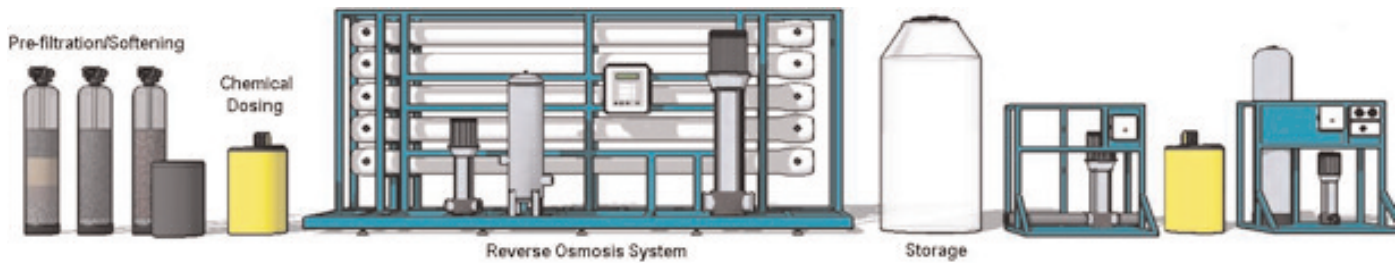


**WaterSoft Inc.**

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# Product Specifications



Model Numbers		GPD Production - 1000 TDS/°F			Inlet FPT	Outlet FPT	Motor	Voltage*	Membrane	Qty	Dimensions
Standard	Deluxe	77°F	60°F	45°F							
N/A	LP-500	525	410	326	3/4"	3/8"	1/4	115	2.5"X21"	1	46"X20"X13"
EPRO-600	EPRO-600DX	600	468	372	1/2"	1/2"	1/3	115	2.5"X40"	1	53"X17"X20"
EPRO-1200	EPRO-1200DX	1,200	936	744	1/2"	1/2"	1/2	115	2.5"X40"	2	53"X17"X24"
EPRO-1500	EPRO-1500DX	1,500	1,170	930	3/4"	1/2"	1	230	4"X40"	1	53"X20"X26"
EPRO-3000	EPRO-3000DX	3,000	2,340	1,860	3/4"	1/2"	1	230	4"X40"	2	53"X20"X26"
EPRO-4500	EPRO-4500DX	4,500	3,510	2,790	3/4"	1/2"	1.5	230	4"X40"	3	53"X20"X26"
EPRO-6000	EPRO-6000DX	6,000	4,680	3,720	3/4"	3/4"	3	230	4"X40"	4	53"X20"X26"
EPRO-8000	EPRO-8000DX	8,000	6,240	4,960	3/4"	3/4"	3	230	4"X40"	5	53"X20"X26"
EPRO-10000	EPRO-10000DX	10,000	7,800	6,200	1.5"	1"	3	230	4"X40"	6	48"X64"X26"
N/A	EPRO-11500DX	11,500	8,970	7,130	1.5"	1"	5	230	4"X40"	7	48"X64"X37"
N/A	EPRO-13000DX	13,000	10,140	8,060	1.5"	1"	5	230	4"X40"	8	48"X64"X37"
N/A	EPRO-14500DX	14,500	11,310	8,990	1.5"	1"	5	230	4"X40"	9	48"X64"X37"
N/A	EPRO-16000DX	16,000	12,480	9,920	1.5"	1"	5	230	4"X40"	10	48"X64"X37"
N/A	EPRO-17500DX	17,500	13,650	10,850	1.5"	1"	5	230	4"X40"	11	48"X64"X37"
N/A	EPRO-19000DX	19,000	14,820	11,780	1.5"	1"	7.5	230	4"X40"	12	48"X64"X37"
N/A	EPRO-20500DX	20,500	15,990	12,710	1.5"	1"	7.5	230	4"X40"	13	48"X64"X37"
N/A	EPRO-21500DX	21,500	16,770	13,330	1.5"	1"	7.5	230	4"X40"	14	48"X64"X37"

\* - volt and phase options available

## Model Selection Criteria

1. Type of raw water – Tap/Well Water (up to 2,000 TDS), Brackish Water (up to 10,000), Sea Water
2. Quality of Product Water Required – High Purity, Potable, Process (define target TDS/conductivity)
3. Volume of Product Water Required – gallons per day or gallons per minute
4. Installation Environment – atmospheric storage, re-pressurization, pressurized storage, custom

## System Operation Parameters

Complete water analysis required for model and option selection

- System rated capacity above based on feed water with 1,000 TDS and temperature of 77°F
- Inlet feed water pressure a minimum of 50 psi at 120% treated water flow rate demand
- 110-220VAC/ 60Hz /1Ph electrics up to 6,000 gpd; 230-460VAC/60Hz/3Ph for 10,000 gpd and larger
- Non-detectable levels of oxidizing disinfectants (chlorine, etc.) and hydrogen sulfide
- Ensure sufficient space available for removing/replacing membranes; refilling chemical solution tanks

## Design Advantages

1. Single Power Point for RO Machines
2. Skid Envelope Protects Major Components
3. Simple-to-operate Controls for all System Functions
4. Easy Startup, Commissioning & Maintenance
5. Configured by Our Application Engineers to Meet Your Specific Requirements (You Don't Buy What You Don't Need)
6. Components Integrated into a Simple to Install and Operate Unit
7. Solid Hydraulic Design Protects Your Investment
8. All RO Units are Tested Prior to Shipment

## Committed to Innovation

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