



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, Chandler Systems** 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.



Chandler Systems

710 Orange Street, Ashland, OH 44805

Toll Free: 1-888-363-9434 Phone: 419-281-6829 Fax: 419-281-2375 www.csih2o.com

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

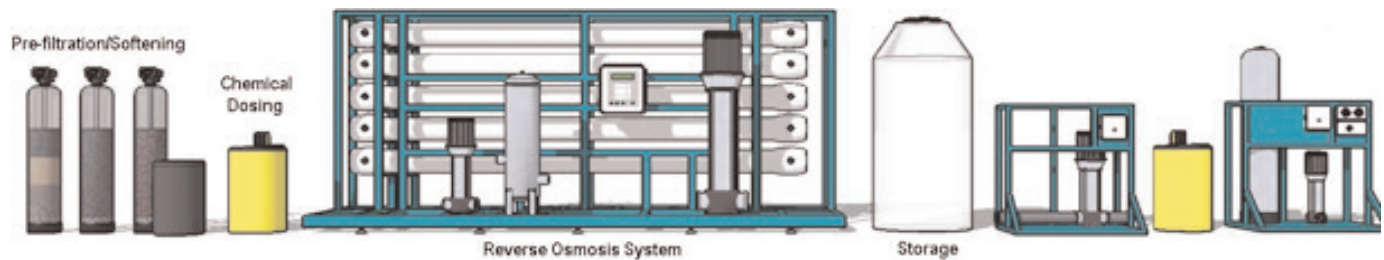
Options

- 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

Product Specifications



Model Numbers		GPD Production - 1000 TDS/°F			Inlet FPT	Outlet FPT	Motor HP	Volt*	Membrane Size	Qty	Dimension s HxWxL - inches
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

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