# Commercial Reverse Osmosis Systems Capacity: 12,000 to 95,000 GPD

**RO-C-30** 

SERIES

Reverse Osmosis systems are capable of removing salts as well as other impurities such as bacteria, sugars, proteins, dyes and constituents having a molecular weight greater than 150-250 dalton.



#### **Standard Features**

- Powder coated carbon steel / SS frame
- 8" TFC spiral wound membranes
- Stainless steel multi-stage pump with TEFC motor
- FRP membrane housing
- 5 micron sediment prefilter
- 380V/3Ph/50Hz
- Microprocessor based control panel
- Programmable time delay and set points
- Status indicators
- Motor starter
- Low pressure switch
- · High pressure switch
- Liquid filled pressure gauges
- Permeate conductivity monitor
- Permeate & concentrate flow meters

### **Available Options**

- Feed water conductivity monitor
- · Membrane cleaning skid
- Automatic hourly flush
- Export crating
- 380-415V/3Ph/60Hz power supply
- 220V/3Ph/60Hz power supply
- Product tank level controller switch
- Feed pH monitor with sensor
- Feed ORP monitor with sensor
- Water and hour meters
- Chemical dosing systems
- Media and Iron prefiltration systems
- Ozonation and UV sterilization systems
- Water softeners
- Post deionization polishers
- Pre piped skid system

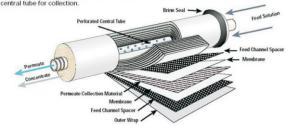


## Commercial Reverse Osmosis Systems Capacity: 12,000 to 95,000 GPD



The spiral membrane is constructed from one or more membrane envelopes wound around a perforated central tube. The permeate passes through the membrane into the envelope and spirals inward to the central tube for collection. The layers of the membrane envelope are detailed in the diagram to the right.

The spiral membrane is constructed of one or more membrane envelopes wound around a perforated central tube. The permeate passes through the membrane into the envelope and spirals inward to the central tube for collection.



The illustration above represents a simplified spiral-wound membrane element. Recovery ca

### **Operation Specifications**

Max. feed water temperature: 45<sup>°</sup>C

Feed water pressure: 20 to 80 psi

Operating pressure: 150-250 psi

· Hydrogen Sulfide must be removed

Turbidity should be removed

Max. Iron content: 0.05 ppm

Feed water TDS: 0-1,000 ppm

Equipment upgrade for TDS up to 5,000 ppm

· Hardness over 1 GPG requires water softener

• PH tolerance range: 3-11

Max. Silica tolerance: 60 ppm @60% recovery

Operate at high TDS by lowering recovery

Commerical Reverse Osmosis Systems									
	Model#	Permeate		Membranes		1000ppm Motor HP at 1000ppm		Dimensions	Approximate Weight
	Wodel #	GPD	M <sup>3</sup> /D	Array	Qty	60 Hz	50 Hz	L"xW"xH"	Lbs
	MW-12K-2180	12,000	45	1:1	2	3	3	79x72x50	1,200
	MW-18K-3180	18,000	68	1:1:1	3	5	5	79x72x60	1,400
	MW-24K-4180	24,000	91	2:1:1	4	5	5	79x72x80	1,600
	MW-31K-5180	31,000	117	2:2:1	5	7.5	5.5	79x72x90	1,800
	MW-37K-3280	37,000	140	1:1:1	6	7.5	7.5	118x72x60	1,600
	MW-50K-4280	50,000	189	2:1:1	8	10	7.5	118x72x80	1,800
	MW-63K-5280	63,000	238	2:2:1	10	10	10	118x72x90	2,000
	MW-76K-4380	76,000	287	2:1:1	12	15	15	158x72x80	2,000
	MW-95K-5380	95,000	359	3:2	15	15	15	158x72x90	2,300

Note: If the feed water TDS exceeds 1,000 ppm, the system model number changes to BW-XXXK-XXXX, and a suffx is added to the end of the model number: "3" is added if the TDS is 3,000 ppm or less, and "3" is added if the TDS is 3,000 ppm or less, and "43" is added if the TDS is 3,000 ppm or less. Example: Required system to produce 27,000 GPD with a feed water TDS of 5,000 ppm, the corresponding model number is: "BW-27K-6340-5"

We also supply: Custom Engineered Solutions, Multimedia Pretreatment, Activated Carbon Pretreatment, Water Conditioning, Chemical Dosing Systems, Ultraviolet (UV) Sterilizers and Ozonation Systems.

