

Contaminant Reduction List

On the following listed contaminants consult your factory representative. A proper before and after water test would give a more complete aspect of reductions.

Average Rejection 99%

Inorganic				
Aluminum	Beryllium	Cyanide	Mercury	Silver
Antimony	Cadmium	Fluoride	Nickel	Sodium
Arsenic	Chloride	Iron	Nitrate	Sulfate
Asbestos	Chromium	Lead	Nitrite	Zinc
Barium	Copper	Manganese	Selenium	
Organic				
Acrylamide	Diethylhexyladipate	Trans-1,2-Dichloroethylene	Monochlorobenzene	1,2,4 Trichlorobenzene
Benzene	Diethylhexylphthalate	1,2-Dichloropropane	Odor	1,1,1 Trichloroethane
Carbon Tetrachloride	p-Dichlorobenzene	Epichlorohydrin	PAH's	1,1,2 Trichloroethane
Color	o-Dichlorobenzene	Ethylbenzene	Styrene	Trichloroethylene
Corrosivity	1,2-Dichloroethane	Ethylene dichloride EDB	2,3,7,8-TCDD (Dioxin)	Tribromomethane
Dibromochloropropane	1,1-Dichloroethylene	Hexachlorobenzene	Tetrachloroethylene (PCE)	Vinyl Chloride
Dichloromethane	Cis-1,2-Dichloroethylene	Hexachlorocyclopentadiene	Toluene	Xylene
Pesticides				
Aldicarb	Aldicarb Sulfonide	Chlordane	Heptachlor epoxide	Methoxychlor
Aldicarb Sulfone	Carbofuran	Endrin	Lindane	Toxaphene
Herbicides				
Alachlor	Diquat	Glyphosate	Simazine	PCB's
Atrazine	Endosulf	Oxamyl (Vydate)	2,4-D Pentachlorophenol	
Dalapon	Endothal	Picloram	2,4,5-TP (Silvex)	
Radionuclides				
Alpha emitters	Beta-particle emitters	Radium 226	Radium 228	Uranium
Gases				
Radon	Methane	VOC	MTBE	
Bacteria				
All forms of bacteria are killed.				
Microbiological				
Total Coliform	Giardia lamblia	Legionella	Turbidity	

RO 1100 SPECS

Unit Weight: 283 lbs.

Shipping Weight: 340 lbs

Minimum Floor Area
Required: 50" W by 70"

Tank Size: 30" by 60"

Tank Volume: 375 gallons

System Size: Aprox. 38" by 70"

Production Rate: .751.25 gpm



Your Water Softener
and Purification
Specialists

283 Broadway, Orangeville
519.941.9120



RO 1100 Series



Whole house
reverse osmosis system

Pure water at every tap!



We Combine RO and Ozone to Produce Incredibly PURE WATER

RO: What is it?

The process of reverse Osmosis removes undesirable materials from water by using high water pressures to force water molecules through a semi-permeable membrane. The process is called Reverse Osmosis, because a concentrated water solution [raw] is forced under pressure to yield a diluted water solution [treated] for consumption. RO has been proven to be the most economical technology for desalination of water containing salts, it removes up to 90% of dissolved salts, heavy metals, pesticides, colloids, organic molecules down to a molecular weight of 100

(See list of contaminant reduction on back cover) Reverse Osmosis is the finest level offiltration available. In addition to the RO process, the RO -1100 utilizes Ozone to continually sanitize and neutralize the purified holding tanks water.

Ozone: What is it?

The Ozone generator in combination with an air pump, continuously aerates the water in your tank with tiny [O3] saturated bubbles, which oxidize and kill many of the impurities in your water. The ozone [O3] saturated bubbles also provide the pumping action that continuously circulates and filters the holding tanks water at a rate of about 10 gpm, processing over 14,000 gpd. The result is refreshing, delicious high quality, high purity water throughout your whole house, for all your water needs, including, laundry, drinking, showering, dish-washing. Cooking ect. This system typically cost 20-30 dollars per month to operate.

Ozone [O3] is one of natures basic elements, composed of oxygen [O2] with an extra oxygen atom attached. When oxygen [O2] in the air is exposed to high intensity ultraviolet rays, ozone is created. Ozone gets rid off impurities in the water by attaching its extra oxygen molecule to many pollutants in the water and oxidizing them.

After the impurities have been cleared away by the extra oxygen molecule on [O3] all that remains is oxygen [O2]. Additionally, high oxygen content in water helps to remove toxic gases such as Volatile Organic Compounds [VOC's], Radon, MTBE's and other harmful gases.

A Winning Combination

The RO-1100 is a complete system to purify, sanitize and areate water for residential or commercial use. The storage tank holds approximately 375 gallons in reserve and can produce up to 2000 gallons of pure water daily.

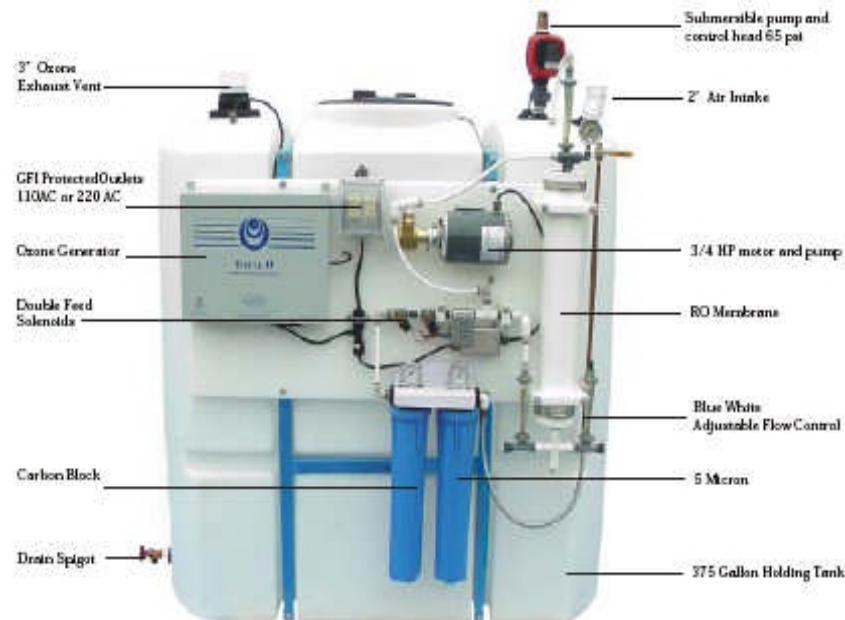
The average family of 4 use approximately 300 gallons per day. A built in pump re-pressurizes the product water to 60 psi for great pressure, and flow rates up to 20 gpm. In addition to the use of Ro & Ozone to process the water, an external fan draws air from outside to create a vacuum inside the tank removing any unwanted gasses.

Because of the lifting action of the ozone bubbler moving 10 gpm, other contaminants that the RO cannot remove are brought to the surface and the exhaust fan removes the unwanted contaminants. A specialized magnet working in conjunction with the ozone and air movement allows the neutralization of the pure water with typical pH levels around 7.0. this process make the water non-aggressive and protects the plumbing system from corrosion damage. This is a very simple and economical way to produce very pure water. With our RO-1100 we have made:

Whole House Reverse Osmosis both easy and affordable!



Model RO-1100



System features, components may appear different or vary due to your water characteristics.

Each unit is manufactured accordingly. We strive to offer the best quality components and improvements and may make changes providing a better overall system.

Standard Features:

- Thin film composite membranes
- PVC membrane housing
- Powder coated steel frame
- Inlet and outlet pre-filter gauges
- Liquid-filled system pressure gauge
- Adjustable waste / recycle valves
- High - pressure nylon tubing
- High - pressure John Guest fittings
- Low-pressure switch
- 2 feedwater inlet solenoid valves
- 1/2 hp 50/60 Hz motor
- Rotary vane pump
- 20" 5 micron sediment pre-filter
- 20" carbon block pre-filter
- Salt rejection 95-99%

Feed Water Parameters:

- Temperature 85°F maximum
- Pressure 40-80 psi maximum
- TDS 2000 ppm maximum - If higher, consult factory
- Iron tolerance 0.1 ppm maximum
- Hydrogen sulfide must be removed
- Turbidity should be removed
- Hardness over 10gpg should be softened
- Silica tolerance cannot be higher than 125ppm in the concentrate stream. Antiscalant should be considered for any levels over 75 ppm.

Operating Parameters:

- Operating pressure 200 psi maximum
- Water recovery is adjustable and suggested to be set at 15% and can not exceed 50%
- pH range 3-11
- Flow rates are determined by the membrane manufacturer's testing criteria of 1500 ppm NaCl solution, 77 F water temperature, 225 psi at 10-15% recovery. Actual flow rates may vary depending on the pre-treatment used, water conditions, system size, membrane array and applied pressure.

Example of vent Pipe installation



The exhaust fan creates a vacuum to pull radon and other toxic gasses off the water and from the water storage container