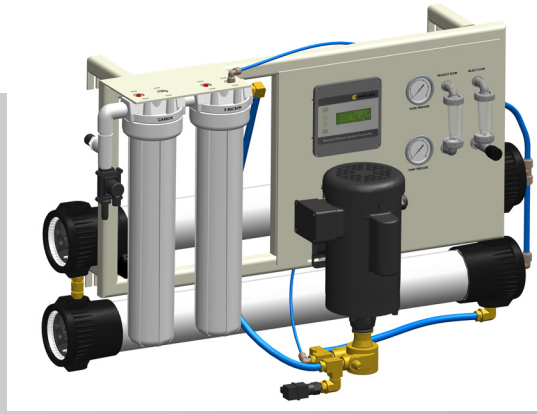




**OMAX®**

A Hypertherm Associates Brand

# Reverse Osmosis System



Water quality varies depending on location. In some areas, total dissolved solids (TDS) can be sustained at or below 250 parts per million (ppm), eliminating pre-treatment measures for effective abrasive waterjet operation. However, in areas where the TDS is in excess of 250 ppm, an OMAX Reverse Osmosis System can provide the assurance you need to supply clean, pure water to your high performance abrasive waterjet system. Optimized for waterjet applications and designed to fit between your incoming water supply and the abrasive waterjet pump, the OMAX Reverse Osmosis System works with both OMAX and MAXIEM JetMachining Centers.

## Features & benefits

- Two types of pre-treatment filters: 5-micron and carbon black
- Includes a digital total dissolved solids meter for quick visual review
- Time clock initiated water softener system capable of a 10 gpm flow rate with 45,000 grains removed
- Sturdy powder-coated steel frame designed for out of the way wall mounting
- Two 4" x 40" membranes capable of handling over 4,000 gallons per day at 77 ps
- Can remove up to 90% of total dissolved solids in water
- Protects OMAX and MAXIEM abrasive waterjet systems to maximize machine uptime
- Virtually hands-free operation
- Excess pure water output can be used for other equipment in a shop (such as EDM, etc.)
- Inexpensive monthly filter changes

## Specifications

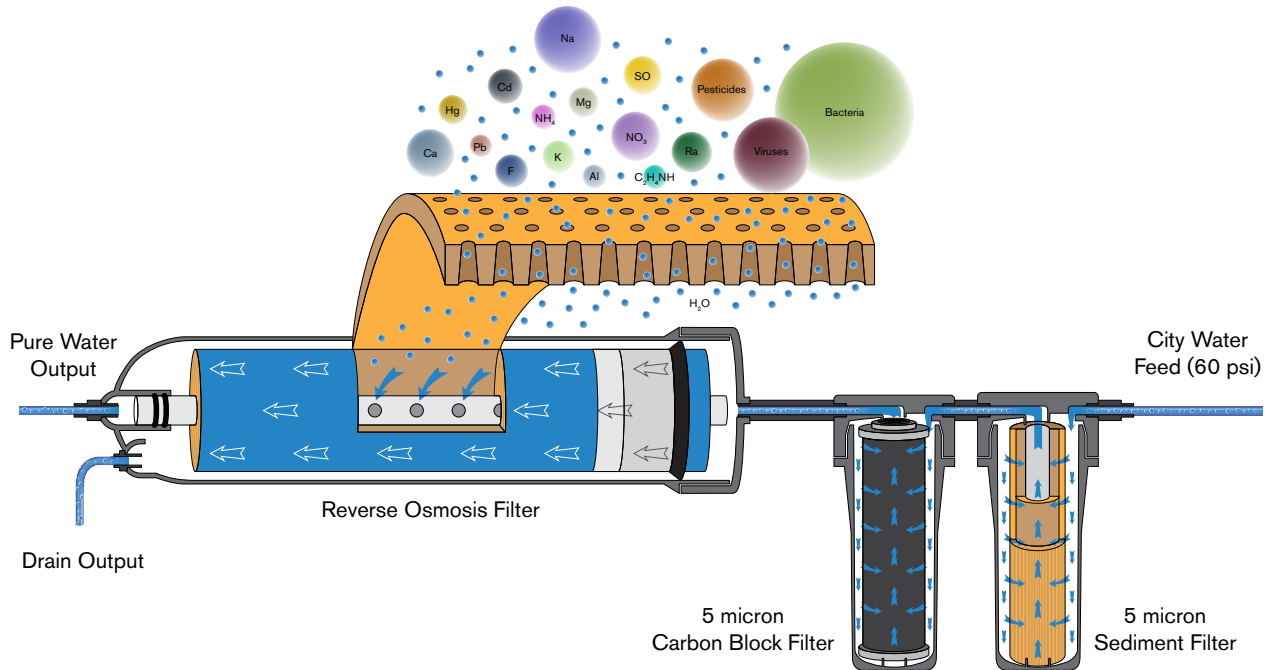
OMAX Reverse Osmosis System	
Power Requirements	110V, 60 Cycle, 10A
Dimensions	Overall: 18"H x 38"W x 6"D Resin Tank: 10" x 54" Brine Tank: 18" x 30"
Pre-Treatment Filters	20" 5-Micron, 20" Carbon Black
Membranes (4" x 40")	Max operating pressure: 125 psi Feed temperature: 95° Recommended pH: 6 to 12 Free chlorine tolerance: <0.1ppm Average rejection: 85% Reject Rate: 2.5 gpm Product Rate: 2.8 gpm Gallons per day: 4,032 (77 psi)
Water Softener	Type: Time clock initiated Grains Removed: 45,000 Flow Rate: 10 gpm Resin: 1.5 cubic feet total

## What is Reverse Osmosis

During natural osmosis, water flows from a less concentrated solution through a semi-permeable membrane to a more concentrated saline solution until concentrations on both sides of the membrane are equal.

Reverse osmosis uses external pressure to reverse this natural osmotic flow. As pressure is applied to the saline solution, water flows from a more concentrated saline solution through the semi-permeable membrane to produce output water that has a higher purity level.





## Reverse Osmosis Membrane

A reverse osmosis membrane has a thin microporous surface that rejects impurities, but allows water to pass through. Reverse osmosis is a percent rejection technology, and the membrane rejects 80-90% of inorganic solids. The purity of the product water depends on the purity of the inlet water, with the result being that the reverse osmosis product water has a much higher purity than the inlet feedwater.

## When to consider a water softener

In some locations you will find the hardness (calcium and magnesium) in your water to be high but the TDS to be below 250 ppm. In situations like this a water softener is recommended over the full OMAX Reverse Osmosis System. With a water softener you will gain many of the same benefits that the OMAX RO System provides, but at a lower cost.

## World-class service, support and innovation for advanced abrasive waterjet systems

OMAX, part of Hypertherm Associates, sets the standard for service and support in the waterjet machine tool industry. It starts with a rigorous certification program at OMAX in Kent, Washington where OMAX direct and distributor technicians are trained to install, operate and maintain OMAX abrasive waterjet systems. OMAX engineers continue to innovate technology for abrasive waterjet machining, from proven 4th generation pump designs to cutting edge drive systems with micron-level accuracy. Customers have a number of contact options to suit their schedules and needs, including an extensive library of online resources. With the largest abrasive waterjet support network in the world, OMAX continues to shape the future of waterjets.

To see how an OMAX abrasive waterjet system can save you time and money, call or visit our website and request a free part analysis today.



UL 508A, CAN/CSA C22.2 No. 14,  
CAN/CSA C22.2 No. 73  
ISO 9001:2015 Certified

For more information, visit: [www.omax.com](http://www.omax.com)

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