



**OMAX®**

A Hypertherm Associates Brand

# OptiMAX 80X Series

## JetMachining Center



The pinnacle in high performance precision abrasive waterjet machining, the OMAX OptiMAX® JetMachining Center® is the culmination of three decades of engineering expertise and experience. With Industry leading cutting speeds and precision, the OptiMAX is the world's most accurate waterjet designed for maximum uptime in any manufacturing environment. The OptiMAX's environmentally friendly technology cuts more with less while the intelligent software maximizes overall productivity.

### EnduroMAX 5-Series pump innovation

Developed alongside the OptiMAX JetMachining Center, the next generation EnduroMAX® 5-Series pump is the most advanced direct drive pump with unparalleled levels of automation, long operating cycles and quick, easy maintenance, the EnduroMAX 5-Series is the best choice for ultra high pressure waterjet pumps that deliver the utmost efficiency with minimum downtime in order to maximize production.

### Available accessories

State of the art accessory options configure the OptiMAX to perform your jobs, your way. Customize your waterjet with options to enhance productivity such as multi-axis cutting, automated garnet removal, secondary operations assistance, and water recycling.

- Eliminate taper from cut parts with the TiltJET® Cutting Head
- Automate spent garnet removal with the Variable Speed Solids Removal System
- Maximize your production throughput with EnduroMAX 5-Series Pump options from 30 HP up to 50 HP
- Cut up to 60 degrees with the VersaJET® Cutting Head for bevel and angle cutting
- Rotary Axis for creating complex 3D parts and tube & pipe cutting
- Bridge Pendant for moving the cutting head and while standing next to the bridge

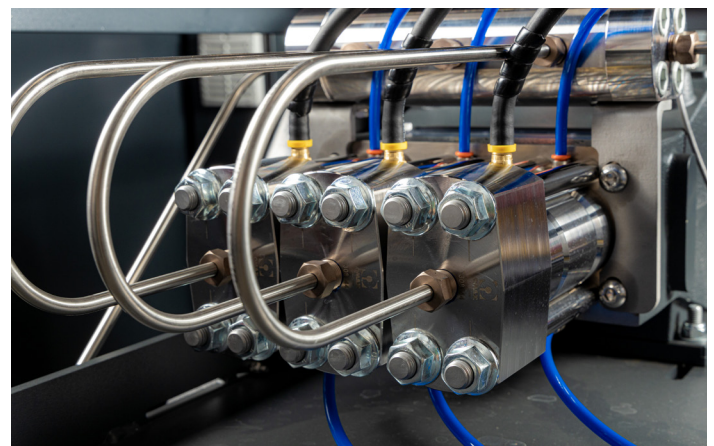
### Specifications

Machine dimensions	
Footprint (with controller)	80X: 26' 0" x 12' 11" (7.92 m x 3.94 m) 80X-1: 32' 8" x 13' 5" (9.94 m x 4.08 m)
Weight (tank empty)	80X: 9,150 lb (4,150 kg) 80X-1: 12,430 lb (5,638 kg)
Height	10' 0" (3.05 m)
Operating weight	80X: 49,575 lb (22,487 kg) 80X-1: 65,900 lb (29,892 kg)

Work envelope	
X-Y cutting travel*	80X: 13' 4" x 6' 8" (4.06 m x 2.03 m) 80X-1: 20' 0" x 6' 8" (6.09 m x 2.03 m)
Z-Axis travel (with motorized Z-Axis)*	12" (304 mm)
Table size	80X: 15' 1" x 7' 2" (4.60 m x 2.18 m) 80X-1: 21' 9" x 7' 2" (6.63 m x 2.18 m)

Standard model specifications	
Material support slats	4" x 1/8" (102 mm x 3.2 mm) galvanized steel
Maximum supported material load	400 lbs/sq ft (1,953 kg/sq meter)
Electrical requirements	3-Phase, 380-480 VAC $\pm$ 10%, 50-60 Hz
Noise level	Below 80 dBA at one meter for submerged cutting
Speed	350 in/min (8.89 m/min)
Linear positional accuracy*	$\pm$ 0.001" ( $\pm$ 0.025 mm)
Repeatability*	$\pm$ 0.001" ( $\pm$ 0.025 mm)
Ballbar circularity*	$\pm$ 0.003" ( $\pm$ 0.076 mm)

\*Optional accessories may reduce cutting travel. Accuracy specifications are at 72° F (22° C).



## Our software makes the difference

Maximize machine time and profit margins with software built specifically for waterjet machining.

90+ file types supported for easy integration into existing workflow, including image files

70+ Separate data monitoring points for maximum machine uptime

26% more speed and precision on advanced cutting optimizations

\$0 No subscription, software maintenance, or software support fees ever

## The IntelliMAX software suite

The IntelliMAX software suite includes LAYOUT, a full-featured CAD design program; MAKE, the highly powerful machine controller software; IntelliVISOR®, the comprehensive system monitoring package; and much more.

- Ease of use: with LAYOUT, the user, whether a novice or an expert, can quickly and easily create a part file. With one click, that part file can be converted into a tool path that is ready for machining.
- Built-in intelligence: In MAKE, detailed reporting provides highly precise estimates on cut times, allowing for accurate job costing.
- Advanced monitoring: Included with the IntelliVISOR system monitoring application, the operator can set up detailed maintenance reminders that minimize downtime and maximize production. Advanced notification features send alerts to email or a smartphone, keeping the operator aware of the machine operation at all times.

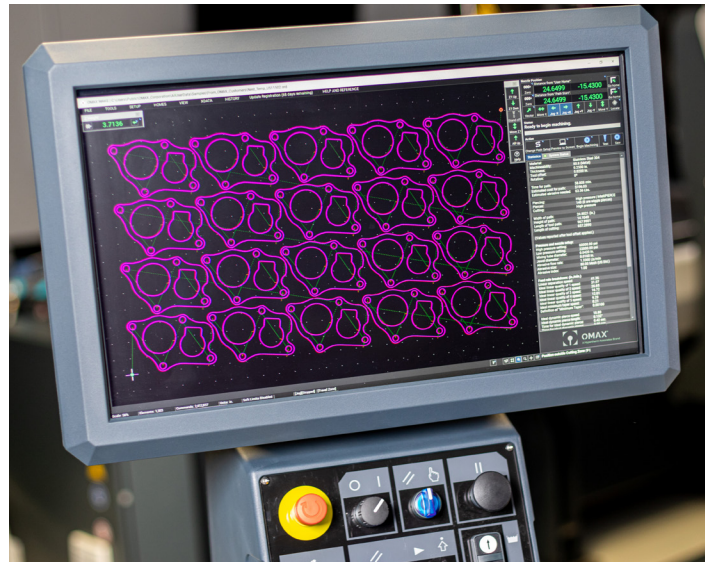


For more information, visit: [www.omas.com](http://www.omas.com)

Unless otherwise noted in the collateral, all trademarks are property of Hypertherm, Inc. and may be registered in the United States and/or other countries. All other trademarks are the properties of their respective owners.

Please visit [www.omas.com/patents](http://www.omas.com/patents) for more details about Hypertherm Associates patent numbers and types.

© 7/2025 Hypertherm, Inc. Revision 4  
MKT221



## 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.

As 100% Associate owners, we are all focused on delivering a superior customer experience.  
[www.hyperthermassociates.com/ownership](http://www.hyperthermassociates.com/ownership)

Environmental stewardship is one of Hypertherm Associates' core values. [www.hyperthermassociates.com/environment](http://www.hyperthermassociates.com/environment)

100% Associate-owned

