

MAXIEM 2040

JetMachining Center



Fast, smooth, and accurate, the MAXIEM[®] JetMachining Center[®] is ideal for the ambitious shop where new challenges are a permanent driving force. The MAXIEM waterjet system was developed, tested, and built in keeping with the OMAX philosophy to deliver superior performance, expanded versatility, and high productivity at an affordable price. Your MAXIEM can become even more individual thanks to a diverse selection of options, yet remains easy to use for any level of operator. However you customize your MAXIEM, remember that there are no limits to its potential.

Direct drive pump innovation

The advanced direct drive pump paired with the MAXIEM JetMachining Center delivers the most horsepower to the nozzle. With 1000 hours between maintenance cycles, OMAX direct drive pumps are the best choice for reliable and robust ultra high pressure waterjet cutting.

A system designed for your needs

Whether you need a small machine for rapid prototyping, or a large system capable of working with standard sheet and plate sizes for full-scale production, the MAXIEM JetMachining Center is customizable to fit your needs. Regardless of system size, every MAXIEM machine brings the same great performance and high reliability, maximizing your potential.

Innovative IntelliTRAX drive system

The ultimate in durable high-precision motion control, the OMAX IntelliTRAX[®] drive system used on the MAXIEM JetMachining Center incorporates a magnetic linear encoder and an electronic drive control for precise positioning. With a location resolution of one micron, the IntelliTRAX system provides extremely accurate positioning with an innovative feedback/feed-forward control loop. All combined makes IntelliTRAX the ideal motion control system for abrasive waterjets.

Specifications

Machine dimensions	
Footprint (with controller)	21' 9" x 12' 11" (6.63 m x 3.94 m)
Weight (tank empty)	8,500 lbs (3,856 kg)
Height	8' 10" (2.69 m)
Operating weight	28,283 lbs (12,829 kg)

Work envelope	
X-Y cutting travel*	13' 10" x 6' 7" (4.21 m x 2.00 m)
Z-Axis travel (with motorized Z-Axis)*	12" (304 mm)
Table size	16' 1" x 7' 0" (4.90 m x 2.13 m)

Standard model specifications	
Material support slats	4" x 14 gauge (102 mm x 2 mm) galvanized steel
Maximum supported material load	300 lbs/sq ft (1,465 kg/sq meter)
Electrical requirements	3-Phase, 380-480 VAC ±10%, 50-60 Hz
Noise level	Below 80 dBA at one meter for submerged cutting
Speed	500 in/min (12.70 m/min)
Linear positional accuracy*	±0.003" (±0.076 mm)
Repeatability*	±0.001" (±0.025 mm)
Ballbar circularity*	±0.005" (±0.127 mm)

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





IntelliMAX Software Suite

For over 20 years, OMAX has invested extensive research and development to provide the most advanced abrasive waterjet software possible. Through software enhancements, your MAXIEM JetMachining Center is capable of advanced 5-axis machining in virtually any material, from aluminum and steel to carbon fiber, titanium, copper, glass, composites, and more.

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.

Available accessories

- A-Jet® for bevel cutting up to 60° and advanced taper removal for perfectly square part edges
- Terrain Follower automatically adjusts to accommodate uneven part surfaces. Collision sensing capability is available with Programmable Z cutting heads.
- Rapid water level control for clean and quiet submerged cutting
- Variable Speed Solids Removal System (VS-SRS) for automated solids removal from the catcher tank
- Bulk abrasive delivery hoppers to minimize production downtime

Optional accessories may reduce cutting travel. Photos may show optional accessories. For a complete list of accessories, contact an OMAX sales representative.

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.



For more information, visit: www.omax.com

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