

# **MICROMAX**



# **OMAX MicroMAX JetMachining Center**

The MicroMAX® JetMachining® Center is the ideal solution for ultra-precision abrasive waterjet machining. Utilizing advanced high precision linear encoders, innovative vibration isolation, and proven software control systems, the MicroMAX JetMachining Center is capable of a positioning accuracy of less than five microns while retaining all the advantages of abrasive waterjet machining. With the optional micro Tilt-A-Jet®, taper-free parts are possible, eliminating the need for secondary machining. The MicroMAX JetMachining Center can machine stainless steel, titanium, carbon fiber, PEEK, glass, nitinol, graphite, copper, composites, laminates, and more, with high precision and smooth finishing, for either prototyping or production.

# FEATURES & BENEFITS

- Very high precision with 0.1 micron linear optical encoder system
- Highly rigid structure with low mass bridges and carriages
- Optional micro Tilt-A-Jet for taper elimination
- Vibration isolation of table and gantries
- Motorized Z Axis for precision nozzle height positioning
- All components have matched thermal expansion
- Equipped with 7/15 Mini MAXJET® 5 Nozzle
- Revolutionary patent-pending process for fine abrasive feed rate
- Full enclosure with environmental controls

- Advanced pressure controls for piercing delicate materials
- Machines a wide range of materials with high accuracy
- No heat-affected zones or mechanical stresses
- Leaves behind a satin-smooth edge, reducing secondary operations
- Stiff construction greatly reduces vibration and increases accuracy
- Easily cut non-conductive and reflective materials
- Can machine hardened steel as easily as annealed steel
- Full enclosure provides quiet and clean operation below 80db







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#### **MACHINE DIMENSIONS**

Footprint	1,728 mm x 1,778 mm (68" x 70")
Weight (tank empty)	1,724 kg (3,800 lbs)
Height (with enclosure)	2,134 mm (84")
Operating Weight (with water in tank)	2,177 kg (4,800 lbs)

#### **WORK ENVELOPE**

X-Y Cutting Travel*	610 mm × 610 mm (24" × 24")	
Z-Axis Travel*	102 mm (4")	
Table Size	711 mm x 711 mm (28" x 28")	

# **DRIVE DESCRIPTION**

- Closed loop, digital drives
- Brushless servo motors
- Intelli-TRAX drive technology with linear encoders in X-Axis
- Precise Motorized Z-Axis



## STANDARD MODEL SPECIFICATIONS

Material Support Slats	102 mm x 3 mm (4" x 1/8") Galvanized Steel	
Maximum Supported Material Load	1,950 kg/sq meter (400 lbs/sq ft)	
Electrical Requirements	3-Phase, 380-480 VAC ±10%, 50-60 Hz	
Speed	2.5 m/min (100 ipm)	
Accuracy of Motion at 70° F	Ballbar Circularity (Over 12")	±15 microns (±0.0006")
	Repeatability	±2.5 microns (±0.0001")

# **OPTIONAL ACCESSORIES**

- Micro Tilt-A-Jet
- Catcher Tank Armor Plating
- Laser Feature Finder
- Laminar Filter
- Air & Water Conditioning Kit
- MAXJET 5i Nozzle Assembly
- Waterjet Brick Kit
- Material Holding Kit
- Water Recycling System
- Access Control Circuit Interface

<sup>\*</sup>Optional accessories may reduce travel. Photos may show optional accessories. For a complete list of accessories, contact an OMAX sales representative. Pumps are built to meet UL and CE specifications. Contact OMAX for detailed utility requirements.





## **ABOUT OMAX**

OMAX is the global total solutions provider in advanced abrasive waterjet systems. Our intuitive Intelli-MAX Software Suite simplifies programming and reduces setup times, increasing your productivity. 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. With the largest abrasive waterjet support network in the world, OMAX continues to shape the future of waterjets.

To see how a MicroMAX JetMachining Center can save you time and money, call or visit our website and request a free part analysis today.



WWW.OMAX.COM/COMPARE

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