#### PRECISION ABRASIVE WATERJET SYSTEMS



# **160X SERIES**



# **OMAX 160X Series JetMachining Center**

Abrasive waterjet machining takes on a new dimension with the OMAX® 160X JetMachining® Center. The newly developed modular 160X Series ensures that, when it comes to cutting area and performance, you get more of both. The modular design tailors the 160X to your specific space requirements, while the exceptional drive system maximizes performance: Intelli-TRAX® drive technology, an innovative system designed for the abrasive waterjet environment, is durable, reliable, and precise. Features such as EnduroMAX® technology and Intelli-MAX® software, along with optional accessories such as the multi-axis A-Jet® and the DualBRIDGE system, all are designed to deliver lower operating costs and increased profits with the 160X JetMachining Center.

## FEATURES & BENEFITS

- Fastest cutting speeds and best precision compared to any abrasivejet in the industry
- Backed by our exclusive Intelli-MAX Software with real world cutting data
- Programmable Motorized Z-Axis with a precision OMAX MAXJET®5i Nozzle Assembly boosts cutting productivity and process efficiency
- Increase machining capacity with optional DualBRIDGE system
- Low maintenance, high reliability scissor-style hard plumbing
- Drive system sealed against water, dirt, and grit
- High efficiency EnduroMAX pump systems available up to 100 hp with operating efficiencies up to 85%
- Rapid Water Level Control for quiet and clean submerged cutting
- Bulk Abrasive Feed Assembly transports garnet from the assembly's large hopper into the Zero Downtime Hopper located at the Motorized Z-Axis
- Factory-tested for quality and precision
- Does not create heat-affected zones or mechanical stresses

- Optional 5th Generation 100 hp pump with Enduro/MAX technology delivers exeptional power and the smoothest jet stream
- Machines a wide range of materials and thicknesses, from metals and composites to glass and plastics
- No additional water required for pump cooling
- Efficient footprint for optimum floorspace utilization
- Leaves behind a satin-smooth edge, reducing secondary operations
- No noxious gases, liquid and oils used in, or caused by, the machining process
- EnduroMAX pump technology delivers the highest Jet Power in the industry for faster and more efficient cutting
- Completes most work below 80 dBA
- Environmentally "green" system with quiet and clean operation with low electrical consumption
- High reliability pump design capable of over 1,000 hours between maintenance intervals
- No tool changes and minimal fixturing reduces setup by 50% or more









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#### **MACHINE DIMENSIONS**

Footprint (with controller)	29' 4" x 21' 8" to 56' 0" x 21' 8" (8,941 mm x 6,604 mm to 17,069 mm x 6,604 mm)
Weight (tank empty)	21,000 lbs to 51,000 lbs (9,525 kg to 23,133 kg)
Height	11' 0" to 14'0" (3,353 mm to 4,267 mm)
Operating Weight	83,000 lbs to 199,000 lbs (37,648 kg to 90,265 kg)

#### **WORK ENVELOPE**

X-Y Cutting Travel*	20' 0" x 13' 4" to 46' 8" x 13' 4" (6,096 mm x 4,064 mm to 14,224 mm x 4,064 mm)
Z-Axis Travel (with Motorized Z-Axis)*	8" (203 mm)
Table Size	21' 7" x 14' 9" to 48' 6" x 14' 9" (6,579 mm x 4,496 mm to 14,783 mm x 4,496 mm)

### **DRIVE DESCRIPTION**

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



160X/S X-Y Cutting Travel: 13'4" x 20'0"



160X X-Y Cutting Travel: 13'4" x 26'8"



160X-2 X-Y Cutting Travel: 13'4" x 40'0"

160X-1 Cutting Travel: 13'4" x 33'4"



160X-3 X-Y Cutting Travel: 13'4" x 46'8"

#### STANDARD MODEL SPECIFICATIONS

Material Support Slats	4" x 1/8" Galvanized Steel
Maximum Supported Material Load	400 lbs/sq ft (1,950 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	350 in/min (8,890 mm/min)
Accuracy	±0.001" (±0.025 mm)
Repeatability	±0.001" (±0.025 mm)
Ballbar Circularity	±0.005" (±0.127 mm)

#### **OPTIONAL ACCESSORIES**

- DualBRIDGE for twice the cutting performance
- 100 hp Pump with EnduroMAX Technology
- OMAX Mini MAXIET 5i Nozzle
- OMAX Drill Head
- Collision Sensing Terrain Follower
- Water-only MAXJET 5 for cutting soft materials
- Precision Optical Locator (POL)
- Laser Feature Finder

- Tilt-A-Jet® Cutting Head for taper compensation
- Rotary Axis
- A-Jet Articulated Cutting Head
- Variable Speed SRS (VS-SRS)
- Large Solids Removal System
- Manual Tilt Z-Axis
- Laminar Filter
- Waterjet Brick Kit
- Catcher Tank Armor Plating
- Material Holding Kit

\*Optional accessories may reduce travel. Images 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 5th 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 an OMAX 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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