

# **OMAX 80X Series JetMachining Center**

The OMAX 80X Series is a robust and reliable abrasive waterjet system available in several length variants designed for your specific needs. The bridge-style 80X Series is ideal for cutting larger or multiple part projects in a variety of materials. The 80X Series employs the innovative patented Intelli-TRAX® linear drive technology designed exclusively for the abrasive waterjet environment, ensuring superior accuracy and high durability for greater productivity and profitability.

# FEATURES & BENEFITS

- Fastest cutting speeds and best precision compared to any abrasivejet in the industry and is backed by our exclusive Intelli-MAX® Software with real world cutting data
- Programmable Motorized Z-Axis with a precision MAXJET® 5i Nozzle Assembly can boost 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 Generation 4 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
- Shipped pre-assembled and factory-tested

- Machines a wide range of materials and thicknesses, from metals and composites to glass and plastics
- Does not create heat-affected zones or mechanical stresses
- No tool changes and minimal fixturing reduces setup by 50% or more
- No additional water required for pump cooling
- Small, efficient footprint for minimal 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
- Enduro/MAX pump technology delivers the highest nozzle horsepower in the industry for faster and more efficient cutting
- Completes most work below 80 dBA at one meter for submerged cutting
- Environmentally "green" system with quiet and clean operation with low electrical consumption
- Highly robust and reliable pump design capable of over 1000 hours between maintenance







# **80X SERIES**

#### MACHINE DIMENSIONS

Footprint (with controller)	22'1" x 12'8" to 35'0" x 15'0" (6,731 mm x 3,861 mm to 10,668 mm x 4,572 mm)
Weight (tank empty)	9,000 lbs to 13,000 lbs (4,082 kg to 5,897 kg)
Height (with scissor plumbing)	12'0" (3,658 mm)
Operating Weight	34,000 lbs to 54,000 lbs (15,422 kg to 24,494 kg)

#### **WORK ENVELOPE**

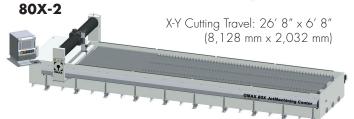
X-Y Cutting Travel*	13'4" x 6'8" to 26'8" x 6'8" (4,064 mm x 2,032 mm to 8,128 mm x 2,032 mm)
Z-Axis Travel*	8" (203mm)
Table Size	15'0" x 7'5" to 28'3" x 7'5" (4,572 mm x 2,261 mm to 14,783 mm x 2,261 mm)

## **DRIVE DESCRIPTION**

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







#### 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 (80X & 80X-1) (80X-2)	180 in/min (4,572 mm/min) 350 in/min (8,890 mm/min)
Linear Positional Accuracy	±0.001" (±0.025 mm)
Repeatability	±0.001" (±0.025 mm)
Ballbar Circularity	±0.003" (±0.127 mm)

#### **OPTIONAL ACCESSORIES**

- Tilt-A-Jet® Cutting Head
- Variable Speed SRS (VS-SRS)
- Collision Sensing Terrain Follower (with Tilt-A-Jet only)
- Z-Axis Drill
- Precision Optical Locator (POL)
- Water-only MAXJET 5 for cutting soft materials
- OMAX Mini MAXJET 5i Nozzle Assembly
- DualBRIDGE second bridge
- Manual Tilt Z

- Second MAXJET 5i with Motorized Z-Axis (requires second Y-Axis carriage)
- Laminar Filter
- Large Solids Removal System
- Waterjet Brick Kit
- Rotary Axis
- Air and Water Conditioning Kit
- A-Jet<sup>®</sup>
- Terrain Follower/A-Jet
- Material Holding Kit
- Laser Feature Finder

## **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 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 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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Kent, WA 98032

**OMAX CORPORATION** 21409 72nd Avenue South

TEL 1-253-872-2300 / 1-800-838-0343 FAX 1-253-872-6190



<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.