



PRECISION ABRASIVE WATERJET SYSTEMS

Equipment Specifications **80X Series**



OMAX® 80X JetMachining® Center

Machine Dimensions

Footprint (with controller)	265" x 152"	(6,731 mm x 3,861 mm)
Weight (tank empty)	9,000 lbs	(4,082 kg)
Height (with scissor plumbing)	144"	(3,658 mm)
Operating Weight	34,000 lbs	(15,422 kg)

Work Envelope

X-Y Cutting Travel	165" x 80"	(4,191 mm x 2,032 mm)
Table Size	180" x 89"	(4,572 mm x 2,261 mm)

Drive Description

- Closed loop, digital drives
- Brushless servo motors
- Intelli-TRAX Drive with linear encoder in X-axis
- Pre-loaded ball screw with recirculating ball bearings and hardened precision ground ways in Y-axis bridge
- Motor controlled precision Z-axis

OMAX® 80X-1 JetMachining® Center

Machine Dimensions

Footprint (with controller)	338" x 152"	(8,585 mm x 3,861 mm)
Weight (tank empty)	11,000 lbs	(4,990 kg)
Height (with scissor plumbing)	144"	(3,658 mm)
Operating Weight	44,000 lbs	(19,958 kg)

Work Envelope

X-Y Cutting Travel	240" x 80"	(6,096 mm x 2,032 mm)
Table Size	260" x 89"	(6,604 mm x 2,261 mm)

Drive Description

- Closed loop, digital drives
- Brushless servo motors
- Intelli-TRAX Drive with linear encoder in X-axis
- Pre-loaded ball screw with recirculating ball bearings and hardened precision ground ways in Y-axis bridge
- Motor controlled precision Z-axis

Standard Features

- OMAX Intelli-MAX® software offers higher average cutting speeds and greater precision with free upgrades for the life of the machine
- Programmable Motorized Z-Axis with precision OMAX MAXJET®5i Nozzle Assembly
- Ball screw drive inside the Y-axis bridge fully enclosed inside bellows*
- Intelli-TRAX™ traction drive inside the X-axis beams fully enclosed inside coated steel covers
- Scissor-style hard plumbing
- Component protection against water, dirt, and grit
- High efficiency direct drive pump systems available in 30, 40, 50, 60, 70, and 80 hp with pressures up to 55,000 psi and 60,000 psi
- Rapid Water Level Control for quiet and clean submerged cutting
- Bulk Abrasive Feed Assembly transports garnet from the assembly's large hopper into the small hopper located at the Z-axis
- Variable Speed SRS (VS-SRS) designed for tough industrial use (available as an option)
- Tilt-A-Jet® taper compensating abrasivejet cutting head (available as an option)
- Shipped as a completely pre-assembled and factory-tested system

Abrasivejet Benefits

- Machines a wide range of materials and thicknesses
- Does not create heat-affected zones or mechanical stresses
- Rapid setup, no tool changes required
- Minimal fixturing required
- Leaves behind a satin-smooth edge, reducing secondary operations
- No noxious gases, liquids or oils used in (or caused by) the machining process
- Completes most work below 80 dBA at 1 meter for submerged cutting
- Environmentally "green" system with quiet and clean operation, low electrical and abrasive consumption

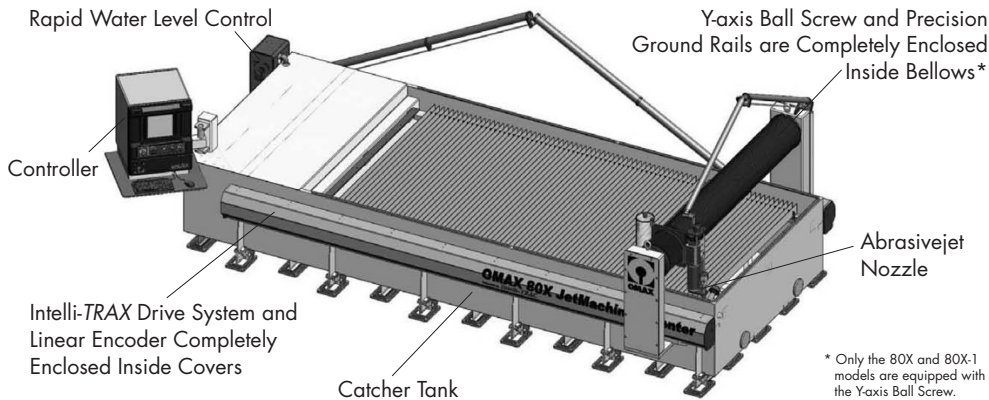
   Connect and follow OMAX for the latest news in waterjet technology.



The OMAX Technology Guarantee entitles you, as the original owner, to free OMAX software upgrades for the life of the machine.

80X Series

OMAX 80X Series JetMachining Centers



Options

- EnduroMAX™ Direct Drive Pump P3060V, P4060V, or P5060V
- DualPUMP Package (dual EnduroMAX option)
- Tilt-A-Jet Cutting Head for taper compensation
- Variable Speed SRS (VS-SRS)
- Collision Sensing Terrain Follower (CSTF)
- Z-axis Drill
- Precision Optical Locator (POL)
- Water-only MAXJET 5 for cutting soft materials
- OMAX MAXJET 5 MiniJet Nozzle Assembly
- Second MAXJET 5 with Motorized Z-Axis and all necessary hard plumbing (requires second Y-axis carriage)
- Manual Tilt Z
- Stone Cutting Kit
- Weir Tank
- Waterjet Brick Kit
- Catcher Tank Armor Plating
- Air & Water Conditioning Kit
- A-Jet™
- Terrain Follower/A-Jet
- Material Holding Kit
- Laser Feature Finder

* Only the 80X and 80X-1 models are equipped with the Y-axis Ball Screw.

OMAX® 80X-2 JetMachining® Center

Machine Dimensions

Footprint (with controller)	440" x 175"	(11,176 mm x 4,445 mm)
Weight (tank empty)	13,000 lbs	(5,897 kg)
Height (with scissor plumbing)	144"	(3,658 mm)
Operating Weight	54,000 lbs	(24,494 kg)

Work Envelope

X-Y Cutting Travel	320" x 80"	(8,128 mm x 2,032 mm)
Table Size	340" x 89"	(8,636 mm x 2,261 mm)

Drive Description

- Closed loop, digital drives
- Brushless servo motors
- Motor controlled precision Z-axis
- Intelli-TRAX Drive with linear encoder in X and Y-axis

* 80X-2 model equipped with Intelli-TRAX Drive System and linear encoder completely enclosed inside covers.

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)	
	<i>(Optional accessories may reduce travel. Contact OMAX for information.)</i>	
Electrical Requirements	3-Phase, 380-480 VAC ±10%, 50-60 Hz	
	<i>(Note: Contact OMAX for detailed utility requirements. Pumps are built to meet UL and CE specifications.)</i>	
Noise Level	Below 80 dBA at 1 meter for submerged cutting	
Accuracy of Motion at 70° F		
Ballbar Circularity (Over 12")		
At 180 inches per minute (4,572 mm/m)	±0.003"	(±0.076 mm)
Repeatability	±0.002"	(±0.051 mm)
Squareness	0.002" per ft	(0.17 mm/m)
Straightness	0.003" per ft	(0.25 mm/m)
Backlash	0.0007" maximum	(0.018 mm)

Note: Specifications subject to change without notice. Check for the latest version at www.omax.com.

About OMAX

OMAX has the industry leading patented abrasivejet controller with a built-in expert system. Our exclusive "Compute First-Move Later" motion control system automates most programming and tool setup work, virtually eliminating the need for extensive operator training. Plus, with free OMAX Intelli-MAX® Software upgrades for the life of the machine and our ongoing commitment to advance the efficiency of our technology and software, OMAX saves you time and money.

For information on what other OMAX products and accessories can do for you, call us today at 800-838-0343 or visit our website at www.omax.com.



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