



PRECISION ABRASIVE WATERJET SYSTEMS



Equipment Specifications

80160

Standard Features

- X-Y table with motorized Z-Axis.
- Single MAXJET™ 5 nozzle including all necessary high-pressure plumbing.
- OMAX patented motion control system incorporating Windows XP software.
- 600 lb. abrasive hopper.
- Stainless steel covers for X-Axis components.
- Rapid water level control for submerged cutting.
- Ultra high pressure direct drive pump.
- Shipped as a complete tested assembly from factory.

Abrasivejet Benefits

- Machines a wide range of materials and thicknesses.
- Does not create heat affected zones or mechanical stresses.
- Rapid setup, no tool changes are required.
- Minimal fixturing required.
- Leaves behind a satin smooth edge thus reducing secondary operations.
- No noxious gases, liquids or oils are used in (or caused by) the machining process.
- Completes most work below 80 dBA for submerged cutting.

OMAX® 80160 JetMachining® Center

Large scale precision machining: For larger parts or multiple parts from large stock up to 6' x 12'.

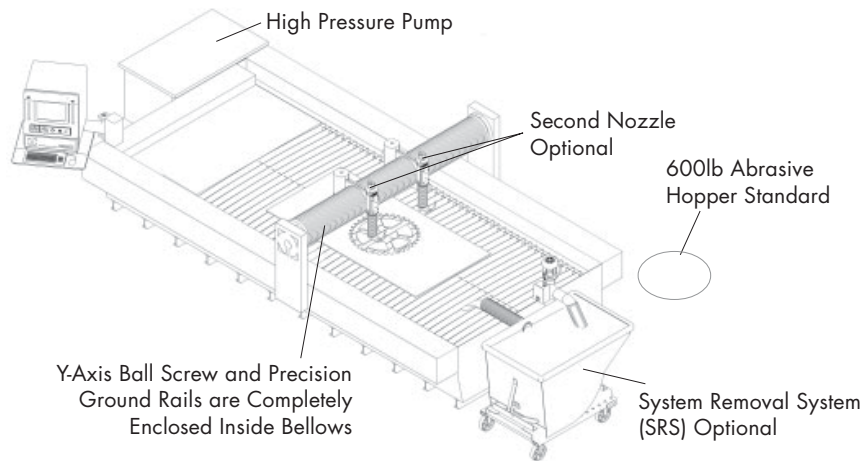
This model 80160 JetMachining Center cuts complex flat parts out of most materials including metal, plastic, glass, ceramics and composites directly from a CAD drawing or .DXF file. Extremely hard, reflective and nonconductive materials can also be cut, making it a valuable addition to existing shop capabilities. No tool changes or complex fixturing dramatically reduces setup times and the smooth finish often eliminates the need for secondary machining.

80160

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



OMAX 80160 JetMachining Center



Options

- Precision Optical Locator
- Second MAXJET 5 Nozzle Assembly with Motorized Z-Axis, and all necessary hardplumbing
- OMAX Solids Removal System (SRS)
- Tilt-A-Jet™ for taper-free parts

Machine Dimensions

Footprint	243" x 134"	(6170 mm x 3405 mm)
Footprint with optional SRS	288" x 134"	(7315 mm x 3405 mm)
Weight (tank empty)	10,000 lbs	(4500 kg)
Height	144"	3660 mm)
Operating Weight	35,000 lbs	(15900 kg)

Work Envelope

X-Y Travel	168" x 80"	(4267 mm x 2030 mm)
Table Size	174" x 91"	(4419 mm x 2311 mm)
Material Support Slats	4" x 1/8" Galvanized Steel	
Maximum Supported Material Load	250 lbs/sq. ft.	(1,200 kg/sq. meter)

(Optional accessories may reduce travel. Contact OMAX for information.)

Computer Control System

Hardware	Personal computer
Control Software	Integrated CAD/CAM system directly uses .DXF files

Drive Description

- Closed loop, digital drives
- Brushless servo motors
- Pre-loaded ballscrews with recirculating ball bearings and hardened precision ground ways
- Bridge style Y-Axis plus optional cutting head with adjustable Y-spacing
- Full Y-Axis travel for single-head operation
- Motor controlled precision Z-Axis

Accuracy of Motion at 70° F

Ball Bar Circularity (Over 12")		
At Max. Traverse Velocity	±0.003"	(0.08 mm)
Repeatability	±0.002"	(0.051 mm)
Squareness	0.002" per foot	(0.17 mm/m)
Straightness	0.003" per foot	(0.25 mm/m)
Backlash	0.0007" maximum	(0.018 mm)

Speed

- 180 inches per minute standard *(Speed can be increased if desired.)*

Electrical Requirements

- 220-240 VAC, 60 Hz/Single-Phase
- 440-500 VAC, 60 Hz/3-Phase
- 208-230 VAC, 60 Hz/3-Phase (step up transformer available as an option)
- International (CE): 220-240 VAC, 50 Hz/Single-Phase

Pump Options

- 20 horsepower, 40,000 psi
- 30 horsepower, 50,000 psi
- 40 horsepower, 55,000 psi

Noise Level

- Below 80 dBA for submerged cutting

Note: Specifications subject to change without notice.

About OMAX

OMAX has the industry leading patented abrasivejet controller with a built-in expert system. The OMAX Software makes it easy to machine precision parts as fast as possible at the lowest cost.

JetMachining is ideal for short-run part production, just-in-time manufacturing, tooling, and prototype part development. It requires no tool changes or complex fixturing, so you can reduce set-up times by at least 50%.

For more 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.



OMAX Corporation

21409 72nd Ave South, Kent, WA 98032
 253-872-2300 **tel** 253-872-6190 **fax**
 1-800-838-0343 **toll-free**
WWW.OMAX.COM website