



# **OMAX 60120 JetMachining Center**

The small-footprint bridge-style OMAX 60120 JetMachining Center is fast and accurate, ideal for a wide range of machining needs, with one of the lowest cost per part in the industry. The large table can cut stock up to 5' x 10', creating complex parts out of almost any material. Challenging hard, reflective, and nonconductive materials can also be cut, making the 60120 a valuable addition to existing shop capabilities. Accessories such as the Tilt-A-Jet® for taper-free edges, A-Jet® for 3D cutting, and the Rotary Axis for 6-Axis machining increase versatility. The easy-to-use Intelli-MAX Software and the 60120 take you quickly from idea to reality.

## **FEATURES**

- Fastest cutting speeds and best precision compared to any abrasive jet in the industry and is backed by our exclusive Intelli-MAX® Software with real world cutting data
- Programmable Motorized Z-Axis with a precision OMAX MAXJET®5i Nozzle Assembly can boost cutting productivity and process efficiency
- Tilt-A-jet taper compensating abrasive jet cutting head (available as an option)
- Patent-pending Intelli-TRAX® traction drive inside the X-Axis beams fully enclosed inside coated steel covers
- Scissor-style hard plumbing for low maintenance and high reliability
- Drive system sealed against water, dirt, and grit
- Highly efficient, industry-proven Generation 4 EnduroMAX® Pumps available up to 100 hp with operating efficiencies up to 90%
- 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
- Optional Variable Speed Solids Removal System (VS-SRS) designed for tough industrial use increases uptime through automated solids removal
- Shipped as a completely pre-assembled and factory-tested system

## BENEFITS

- Machines a wide range of materials and thicknesses, from metals to glass
- Does not create heat-affected zones or mechanical stresses
- $\bullet$  No tool changes and minimal fixturing reduces setup by 50% or more
- No additional water required for pump cooling
- $\bullet$  Small, efficient footprint for minimal floorspace utilization
- $\bullet$  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 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

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#### **MACHINE DIMENSIONS**

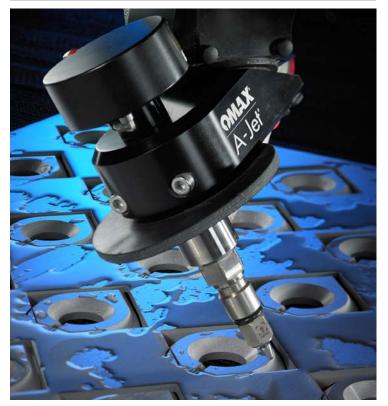
Footprint (with controller)	18'9" x 9'2" (5,715 mm x 2,794 mm)	
Weight (tank empty)	6,200 lb (2,818 kg)	
Height (with scissor plumbing)	9'7" (2921 mm)	
Operating Weight (with water in tank)	23,200 lb ( 10,545 kg)	

#### **WORK ENVELOPE**

X-Y Cutting Travel*	10'6" x 5'2" (3,200 mm x 1,575 mm)	
Z-Axis Travel*	8" (203mm)	
Table Size	12'0" x 6'5" (3,656 mm x 1,956 mm)	

## **DRIVE DESCRIPTION**

- Brushless servo motors
- Pre-loaded ball screw with recirculating ball bearings and hardened precision ground ways in Y-Axis
- Closed loop, digital drives
- Bridge-style Y-Axis
- Intelli-TRAX drive technology with precision 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	180 in/min (4,572 mm/min)		
Accuracy of Motion at 70° F	Ballbar Circularity (Over 12")	±0.003" (±0.076mm)	
	Repeatability	±0.002" (±0.051 mm)	

## **OPTIONAL ACCESSORIES**

- Tilt-A-Jet Cutting Head for taper compensation
- DualPUMP Package (redundant dual EnduroMAX option up to 100 hp)
- Variable Speed SRS (VS-SRS)
- Collision Sensing Terrain Follower
- Z-Axis Drill
- Precision Optical Locator (POL)
- Water-only MAXJET 5 for cutting soft materials
- OMAX Mini MAXJET 5i Nozzle Assembly
- A-Jet Angle Cutting Head
- Terrain Follower/A-Jet
- Rotary Axis

- Bridge Touch Screen
- Second MAXJET 5i with Motorized Z-Axis and all necessary hard plumbing (requires second Y-Axis carriage)
- Manual Tilt Z
- Laminar Filter
- Waterjet Brick Kit
- Catcher Tank Armor Plating
- Air and Water Conditioning Kit
- Collision Sensing Terrain Follower
- Material Holding Kit
- Laser Feature Finder

\*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 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.





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

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