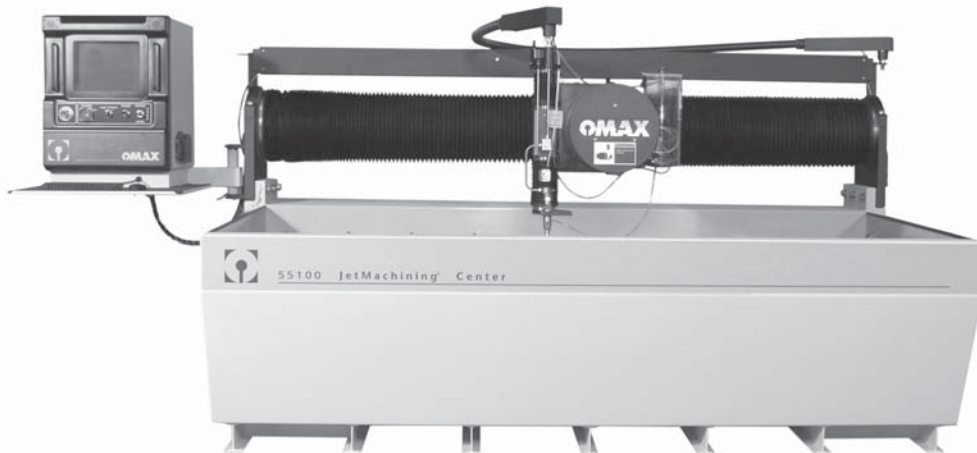




PRECISION ABRASIVE WATERJET SYSTEMS

Equipment Specifications

55100



OMAX® 55100 JetMachining® Center

Precision machining workhorse: From prototypes to production runs in sizes up to 4' x 8'.

The Model 55100 JetMachining Center cuts complex flat parts out of materials including metal, plastic, glass, ceramic and composites directly from a CAD drawing or .DXF file. JetMachining is ideal for short-run part production, just-in-time manufacturing, tooling and prototype part development. No tool changes or complex fixturing reduces setup times by at least 50%.

55100

Standard Features

- Patented "Compute First-Move Later" motion control system including CAD/CAM software with online help.
- X-Y table with motorized Z-Axis.
- Pre-loaded linear bearings and precision ball screws.
- Complete component protection against water, dirt, and grit.
- Rapid water level control for submerged cutting.
- Durable abrasive feed system with precision OMAX MAXJET® 5 Nozzle Assembly.
- Ultra-high pressure direct drive pump.
- Hard plumbing.
- 600 lb abrasive delivery system.
- Vibration-free motion through use of patented shear damper.

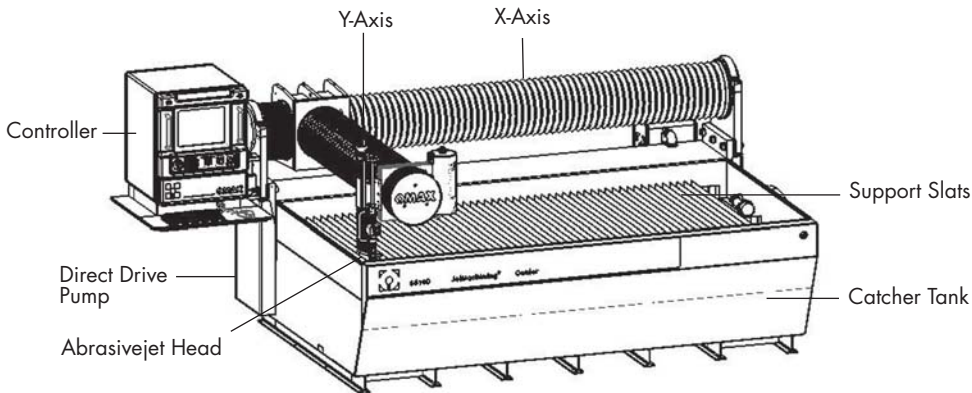
Abrasivejet Benefits

- 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, 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.

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



OMAX 55100 JetMachining Center



Optional Accessories

- Precision Optical Locator
- Solids Removal System (SRS)
- Water-only MAXJET 5 for cutting soft materials
- OMAX MAXJET 5 MiniJet Nozzle Assembly
- Waterjet Brick for cutting thin materials
- Tilt-A-Jet® for taper-free parts
- Weir Tank
- Z-Axis Drill
- Manual Tilt Z
- Terrain Follower
- Stainless Steel Frame Cover Kit

Machine Dimensions

Footprint	182" x 104"	(4623 mm x 2642 mm)
Weight	8000 lb	(3629 kg)
Height	76"	(1930 mm)
Operating Weight (with water in tank)	22,000 lb	(10,000 kg)

Work Envelope

X-Y Travel	100" x 55"	(2540 mm x 1397 mm)
Table Size	126" x 65"	(3200 mm x 1650 mm)

(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 ball screws, recirculating balls
- Linear bearings with hardened, precision ground ways
- Cantilever Y-Axis on bridge X-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 ft	(0.17 mm/m)
Straightness	0.003" per ft	(0.25 mm/m)
Backlash	0.0007" max.	(0.018 mm)

Speed

- 180 inches per minute standard (4572 mm/min)

Electrical Requirements

- 3-Phase, 380-480 VAC ±10%, 50-60 Hz
- (Note: Contact OMAX for detailed utility requirements. Pumps are built to meet UL and CE specifications.)

Pump Options

- 30 horsepower optional; 50,000 psi
- 40 horsepower optional; 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 setup 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.



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