OMAX Corporation

PRECISION ABRASIVE WATERJET SYSTEMS

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OMAX 5555 JetMachining Center

The fast, efficient, and precise 5555 JetMachining® Center provides top performance in waterjet machining of complex parts from many materials. From simple metals to complex composites, the 4′ 7″ square cutting area of the proven 5555 is ideal for rapid prototyping and just-in-time manufacturing of small to medium-sized parts. With simple fixturing and easy access to the cutting table, setup times are significantly reduced, increasing 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 OMAX MAXJET®5i Nozzle Assembly can boost cutting productivity and process efficiency
- Tilt-A-Jet® taper compensating abrasivejet cutting head (available as an option)
- Precision X-Y Axis rigidly mounted to the cutting table
- Pre-loaded linear bearings and precision ball screws
- Low maintenance, high reliability scissor-style hard plumbing
- Drive system sealed against water, dirt, and grit
- Easy operator access to the work area
- High efficiency Generation 4 EnduroMAX® pump systems available in 30, 40, or 50 hp with operating efficiencies up to 85%
- Robust and accurate design for tight tolerance cutting and reliable operation
- Optional Variable Speed Solids Removal System (VS-SRS) designed for tough industrial use increases uptime through automated solids removal
- 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
- EnduroMAX pump technology delivers the highest nozzle horsepower in the industry for faster and more efficient cutting
- Completes most work below 80 dBA
- Environmentally "green" system with quiet and clean operation with low electrical consumption
- Rapid Water Level Control for quiet and clean submerged cutting
- Highly robust and reliable pump design capable of over 1000 hours between maintenance
- Shipped as a completely pre-assembled and factory-tested system

2 limited YEAR warranty

OMAX TECHNOLOGY GUARANTEE

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

Specifications subject to change without notice.
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MADE IN THE USA

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MACHINE DIMENSIONS

Footprint (standard layout)	11′ 5″ x 8′ 9″ (3.48 m x 2.67 m)
Weight (tank empty)	6,220 lb (2,821 kg)
Height (with standard plumbing)	10′ 0″ (3.05 m)
Operating Weight	14,142 lb (6,415 kg)

WORK ENVELOPE

X-Y Cutting Travel*	4′ 7″ x 4′ 7″ (1.39 m x 1.39 m)
Z-Axis Travel (with Motorized Z Axis)*	8″ (203 mm)
Table Size	6′ 8″ x 5′ 5″ (2.03 m x 1.65 m)

DRIVE DESCRIPTION

- Closed loop, digital drives
- Brushless servo motors
- Pre-loaded ball screws, recirculating ball bearings
- Linear bearings with hardened, precision ground ways
- Cantilever Y-axis on bridge X-axis

STANDARD MODEL SPECIFICATIONS

Material Support Slats	4" x 1/8" Galvanized Steel
Maximum Supported Material Load	400 lbs/sq ft (1,953 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 (4.57 m/min)
Linear Axis Accuracy*	±0.001″ (±0.025 mm)
Linear Axis Repeatability*	±0.001″ (±0.025 mm)
Ballbar Circularity*	±0.0025″ (±0.064 mm)

OPTIONAL ACCESSORIES

- Tilt-A-Jet Cutting Head for taper compensation
- Variable Speed SRS (VS-SRS)
- Collision Sensing Terrain Follower
- OMAX Drill Head
- Precision Optical Locator (POL)
- Rotary Axis
- Water-only MAXJET 5 for cutting soft materials
- Bulk Abrasive Delivery System
- OMAX Mini MAXJET 5i Nozzle Assembly
- Manual Tilt Z
- Laminar Filter
- Waterjet Brick Kit
- Catcher Tank Armor Plating
- Material Holding Kit
- Laser Feature Finder

*Optional accessories may reduce cutting travel. Photos may show optional accessories. For a complete list of accessories, contact an OMAX sales representative. Accuracy specifications are at 72° F (22° C) 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.

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