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

- Fastest cutting speeds and best precision compared to any abrasivejet in the industry and is backed by our exclusive IntelliMAX® Software with real world cutting data
- Programmable Motorized Z-Axis with a precision OMAX MAXJET®Si 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 90%
- Robust and accurate design for tight tolerance cutting and reliable operation
- Rapid Water Level Control for quiet and clean submerged cutting
- Bulk Abrasive Delivery System transports garnet from the assembly’s large hopper into the Zero Downtime Hopper located on the 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
- 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
- Highly robust and reliable pump design capable of over 1000 hours between maintenance
MACHINE DIMENSIONS

Footprint (with controller) 10’ 11” x 7’ 11” (3,327 mm x 2,413 mm)
Weight (tank empty) 6,291 lb (2,854 kg)
Height (with scissor plumbing) 9’ 10” (2,998 mm)
Operating Weight 13,000 lb (5,897 kg)

WORK ENVELOPE

XY Cutting Travel* 4’ 7” x 4’ 7” (1,397 mm x 1,397 mm)
Z-Axis Travel (with Motorized Z Axis)* 8” (203 mm)
Table Size 6’ 8” x 5’ 5” (2,032 mm x 1,650 mm)

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

<table>
<thead>
<tr>
<th>Material Support Slats</th>
<th>4” x 1/8” Galvanized Steel</th>
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<tbody>
<tr>
<td>Maximum Supported Material Load</td>
<td>400 lbs/sq ft (1,950 kg/sq meter)</td>
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<tr>
<td>Electrical Requirements</td>
<td>3-Phase, 380-480 VAC ±10%, 50-60 Hz</td>
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<tr>
<td>Noise Level</td>
<td>Below 80 dBA at one meter for submerged cutting</td>
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<tr>
<td>Speed</td>
<td>180 in/min (4,572 mm/min)</td>
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<tr>
<td>Accuracy of Motion at 70˚ F</td>
<td>Ballbar Circularity (Over 12”) ±0.003” (±0.076 mm), Repeatability ±0.002” (±0.051 mm)</td>
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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
- OMAX Mini MAXJET Si Nozzle Assembly
- Manual Tilt Z
- Laminar Filter
- Waterjet Brick Kit
- Catcher Tank Armor Plating
- 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 IntelliMAX 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.