OMAX Rotary Axis

The Rotary Axis is a robust, water resistant submersible rotary head that allows the abrasive waterjet to cut 6-axis* paths to create complex 3D shapes in tube, pipe, and bar stock. Constant rotational control allows for continuous cutting around a shape. Advanced software features in the Intelli-MAX Software Suite grant the ability to cut complex shapes and angles when used in conjunction with the A-Jet® articulated cutting head. Precision indexed rotations offer accurate cutting of multi-faceted shapes and other geometric-shaped materials. The Rotary Axis can be mounted on any OMAX JetMachining® Center, significantly expanding the cutting capabilities.

*6-axis cutting requires AJet or Tilt-A-Jet®

FEATURES & BENEFITS

- Fully submersible rotary head
- Multiple mounting features on output shaft including external and internal threads, flanges, and locating shoulders
- Powered by OMAX common table control
- Flexible positioning of the mounting and supports
- Easy maintenance with external grease fittings
- Built-in water drip sensor, warning lights, and shutdown
- Incremental or coordinated continuous rotation
- Rapid height adjustment wheel on High Torque Rotary Axis
- Provides the ability for submerged cutting, leading to a cleaner and quieter process
- Robust standard ACME and metric threads allow customers to adapt custom work holding fixtures
- Can be relocated at various positions of the table, permitting sheet cutting and rotary cutting without removing the rotary head
- Combines precision of abrasive waterjet and rotary head technologies
- Opens up more design capabilities
- No heat-affected zones when cutting metal materials
When used with the A-Jet, fishmouth intersections, saddle cuts, and countersunk holes can be cut along the circumference of pipes.

The Rotary Axis can handle small and large diameter tube and pipe with high precision, as well as nonmetal tubing.

Programming for Rotary Axis cutting is simple, with advanced tools built into the Intelli-MAX Software Suite.

### CAPABILITIES

- 10,000 steps per revolution standard
- Maximum radial load at end of output shaft 391 lbf (1.74kN)
- Maximum radial load 12” from end of shaft 67 lbf (0.289kN)
- Maximum radial load 24” from end of shaft 36 lbf (0.164kN)
- On larger format machines, maximum diameter 24” (cannot exceed load or torque limit)
- 0.01 degree of repeatability: at 1” diameter = 0.0001”; at 10” diameter = 0.0008”
- XYZ and A axes with standard motorized Z; XYZ, A, TX, and TY with TiltA-Jet or A-Jet cutting head

### OPTIONS

<table>
<thead>
<tr>
<th>STANDARD ROTARY AXIS</th>
<th>HIGH TORQUE ROTARY AXIS</th>
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<tbody>
<tr>
<td>11 ft-lb (15N*m)</td>
<td>190 ft-lb (258N*m)</td>
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<tr>
<td>constant torque</td>
<td>constant torque</td>
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<tr>
<td>No additional utility requirements</td>
<td>220VAC required</td>
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### REQUIRED COMPONENTS & ACCESSORIES

- 9-Axis controller back panel design for installation
- OMAX Intelli-MAX 18 Software Suite or later
- Universal Adapter Flange Blank
- Rotary Alignment Kit
- Rotary Chuck Assembly

Contact your OMAX Sales representative for more information.