

# Global Rotator Delta

## Compound Skew Design Plasma Bevel Unit



### Overview:

The Delta Contour Plasma Bevel Unit is capable of accurately cutting bevel profiles (non-vertical) on nearly any contour. When the machine is programmed to cut at a bevel angle, the angle offset, angle compensation, and feedrate are controlled by the same NC part programs, while other parameters are input by a database. The system is used to create bevels for weld-preparation surfaces or for active cutting edges as used on earth engagement tools. Bevel and Land edge configurations can be created via multiple passes.

### Features and Benefits:

- AC drives for high performance.
- Programmable arc current, arc voltage, and bevel angle.
- C-axis rotation of +/- 460° at a rate of 50 RPM, reduces cut cycle time.
- Quick torch focal point adjustment for easy consumable changeover.
- Lateral and vertical torch “decoupler” collision detection to prevent torch damage in the event of a collision.
- Automatic torch height control by analog arc voltage with an accuracy of +/- .006 inches so part accuracy is maintained during bevel cutting.
- Resultant piece part bevel angles of +45 degrees through -45 degrees.
- Corner loops can be less than 0.394 inches (10mm) without requiring torch start/stop commands.
- Response time from 0 to 45 degrees is less than 2 seconds.
- Initial height sensing via torch tip contact eliminates offsets and reduces cycle time.
- Unique compound skew technology allows unit to be located away from cutting area to minimize potential damage.
- Vertical travel of 9.8” provides working on a wide range of part types.

### Application:

Available on the Titan II and MPC2000 machine models with HPR260 or HPR400 Plasma.

Recommended for V and Y bevels with minimal transitions and contours.

### System Description:

The bevel angle is derived automatically using a combination of A-axis and C-axis interpolation by the CNC using unique compound skew technology from Messer Cutting Systems. The C-axis may be programmed as a positioning axis or a coordinated motion in conjunction with the X/Y linear and circular motion. When operated in concert with X/Y motion, the C-axis maintains the bevel position tangent to the direction of travel.

**Messer Cutting Systems**  
*Your Productivity Process People®*

The descriptions, technical data, and illustrations contained in this document are provided for guidance purposes only and are non-binding. The manufacturer reserves the right to make alterations to products without notice.  
© 2009 Messer Cutting Systems Inc. 0209

**MESSER** 

Cutting Systems

Messer Cutting Systems, Inc.  
W141 N9427 Fountain Boulevard  
Menomonee Falls, WI 53051

Phone: 262-255-5520

E-mail: sales@messercutting.com

Fax: 262-255-5170

www.messercutting.com

OPTIONS

TABLES

CONTROLS

CUTTING MACHINES