

# GLOBAL ROTATOR DELTA<sup>e</sup>

Compound Skew Designed  
Plasma Bevel Unit

## PRODUCT

Messer Cutting Systems **Global Rotator Delta<sup>e</sup>** can accurately cut bevel profiles (non-vertical) on almost any contour. When programmed to cut at bevel angle, the angle offset, compensation and feed rate is 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 like 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 adjusts for easy consumable changeover.
- + Lateral and vertical torch "decoupler" collision detection prevents torch damage in the event of a collision.
- + Automatic torch height is controlled by an analog arc voltage with an accuracy of +/- .006 inches so part accuracy is maintained during bevel cutting.
- + Maximum bevel angle +45° to -45°.
- + Types of bevels, K, V, X, Y, I.
- + Corner loops can be less than 0.394 inches (10mm) without requiring torch start/stop commands.
- + Response time from 0 to 45° is less than two seconds.



- + Initial height sensing from 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 cutting for a wide range of part types.

### 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 with X/Y motion, the C-Axis maintains the bevel position tangent to the direction of travel.

### APPLICATION

Available on the MetalMaster Xcel, Titan III, MPC2000, MPC2000 MC and TMC4500 DB machine models.

Scan to  
watch video

