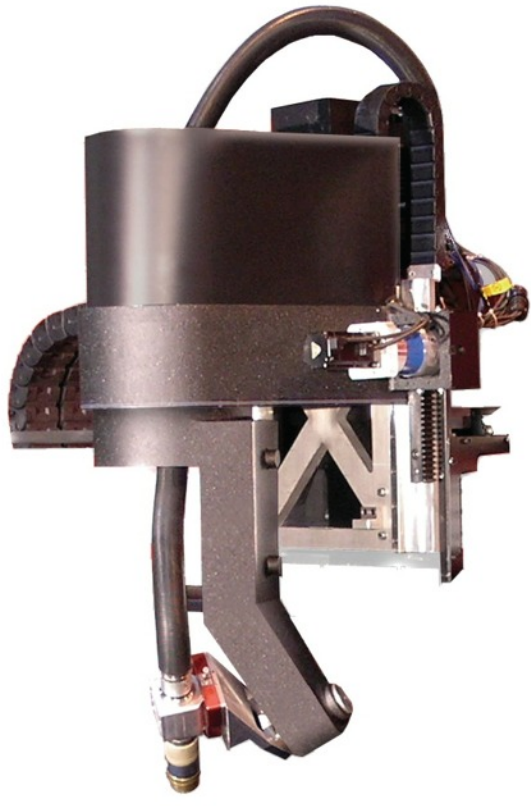


3D-LT Bevel Head



Fully automatic plasma beveling in simplified design

The 3D-LT Bevel Head offers fully automatic plasma beveling in a simplified design. The "Patent Pending" 3D-LT Bevel Head uses a unique drive system and sensor ring design to provide unlimited head rotation, without electrical slip rings, while providing remote mounting of servo motors and sensor components. This design provides tilt and rotation movements about the plasma focal point, with two axis transformations, to provide more intuitive movements and a theoretical reductions in bevel angle error.

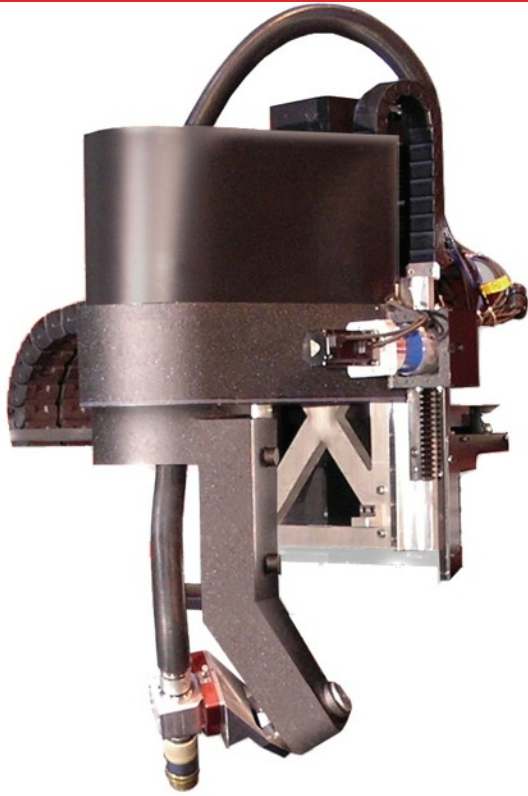


Mastergraph Millennium with
3D-LT Bevel Head

Features & Benefits

- **Initial Height Sensor**
Has a fully integrated initial height sensing using ohmic contact
- **Real time arc voltage height control**
With arc voltage tracking within 0.1 arc volts
- **Automatic kerf detection technology**
Eliminates the need to lock out the height control when crossing the kerf or cornering
- **Height Control Process**
Real time monitoring of height control process parameters
- **Fully enclosed cable carrier**
Protects plasma cables, hoses and wiring
- **Manual positioning capabilities** for lift, tilt, and rotate axis





360° Continuous Rotation

Specifications

Contour Cutting-Capable of Beveling angles to:	+50° to -50°
Rotation	Continuous
Tilt Speed	20 RPM
Rotation Speed	60 RPM
Height Control	Sensor THC
Compatible Machine(s)	Versagraph Millennium or Mastergraph Series
Plasma System	High-Density Plasma System (rated for bevel cutting mild steel 1/4" to 2" thick)
Bevel Types	X, Y, V, & K



Versagraph Millennium

Accuracy Height Control	± .004 inches
Accuracy Tilt	± 0.5°
Accuracy Rotation	± 0.5°
Overall Accuracy	± 0.5°
Repeatability	± 0.25°

The tilt axis is capable of producing +/- 50 degree bevel angles at a speed of 20 RPM. The rotation axis can continually rotate at a speed of 60 RPM. The speed and smoothness of the coordinated motion can produce high quality beveled holes and small corner loops, to minimize material waste.

Standard features included with the 3D-LT Bevel Head include, fully integrated height control, automatic kerf detection and torch collision protection.

This design will accommodate multiple plasma manufacturers and can be installed on Mastergraph and Versagraph machine models.

 **Koike Aronson Inc.**

P.O. Box 307, Arcade, New York 14009
Phone (585) 492-2400 Fax (585) 457-3517

www.koike.com