# MONARCH PRECISION PLASMA CUTTING SYSTEM





The Vicon Monarch CNC plasma cutting machine is a robust, accurate, and versatile system designed for high-end precision cutting. Its dual precision worm gear drives with digital motors ensure precise movement of the aluminum tubular gantry, delivering superior edge quality and accurate parts. The machine supports multiple stations, including plasma torches, oxy torches, scribing tools, and drill heads, along with features like material stops, clean-out panels, and a status panel for optimal performance and reliability. With its sturdy I-beam construction, the Monarch excels in cutting sheet metal, thick plate, structural steel, I-beams, angle iron, channel, tubing, and fixturing, making it a leader in heavy-duty precision cutting solutions.

### **Machine Electronics and Motion Controller**

Solid-state controls and digital drives ensure fast, precise cutting. Proximity sensors protect the drive train, while CAT-5 cables enable reliable communication between the PC controller and servo drives.

### **Precision Cutting Torches**

Vicon experts guide you in selecting the right torch for your material, balancing cut quality, costs, and system needs. Options range from manual gas to automatic gas consoles for light to heavy materials.

## Electronic Torch Height Control & Collision Protection

The Vicon Monarch ensures precise cutting with your choice of electronic height control and protects your torch with a collision safety device.

### Automatic Controlled Multiple Zone Exhaust System

The automatic controlled multiple zone exhaust system effectively removes plasma fumes from CNC plasma machines by using linear exhaust plenums. It features machine-controlled exhaust damper valves that open during cutting, minimizing the air volume drawn. This zoning system enables the use of a smaller dust collection unit when integrated with a dust collection system.

### Vicon Fabrication Cutting Software

Vicon fabrication cutting software offers a userfriendly interface with features like shape libraries, Super Nest, DXF file import, and CAD sketch tools for maximum efficiency.

### **FEATURES & BENEFITS**

- Precision linear guiding on the X and Y axis enables superior clean edge quality through the use of a precision plasma power source
- Controlled exhaust zone minimize exhaust requirements
- Highly affordable for high quality, clean edge applications
- ➢ Heavy-duty one piece frame requires no assembly, reducing installation time unlike rail style machines
- Rigid, dual rack and pinion drives with digital motors produce precise movement of the "solid as a rock" gantry resulting in sharp corners and accurate parts
- Sharp, crisp gantry motion coupled with a rigid; heavy-duty table dependably maintains the tightest tolerances
- ▶ High-speed dual drives enable traversing speeds of more than 2,000 ipm
- State-of-the-Art proximity switches and customized table stops allow for easy diagnostics, trouble free operation, and optimum performance for the life of the machine