

# MultiCam<sup>®</sup>

## CNC Cutting Solutions

## MultiCam<sup>®</sup> V-Series Plasma Feature and Specification Guide



## Incredible Value and Performance!

The MultiCam<sup>®</sup> V-Series Plasma is designed for companies looking for maximum value in a CNC plasma machine. It's ideal for entry-level manufacturers and anyone on a budget.

Capable of cutting mild steel, stainless steel, aluminum and brass, we offer the V-Series Plasma in a variety of popular table formats. It comes standard with Hypertherm plasma cutting torch technology. The CNC EZ Control<sup>®</sup> system is extraordinarily easy to use.

Because it's a MultiCam, the V-Series Plasma also comes with the full support of the MultiCam Technology Center network. With over 70 locations worldwide, sales, service, support and training are always located nearby.



## V-SERIES PLASMA

### Applications:

- *Sheet Steel Fabrication*
- *Marine Fabrication*
- *Job Shops*
- *Oil Field Equipment*

*And More*

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All specifications subject to change.  
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*Innovation. Quality. Performance.*

# V-Series Plasma Specifications

The MultiCam V-Series Plasma offers a wide variety of standard features.

- The 2545 EZ Control features a four-axis motion control system complete with EZ Suite application software.
- MultiCam EZ G Code® programming software
- Standard Ethernet or RS232 direct connections
- Custom-engineered extruded-aluminum frame with steel leg supports for high strength and rigidity
- Automatic Torch Height (ATH)
- Powerful dual X-axis digital high-speed drive motors
- Integral V-cam roller bearings for maximum stiffness and contamination resistance
- Hypertherm PowerMax™ plasma torches



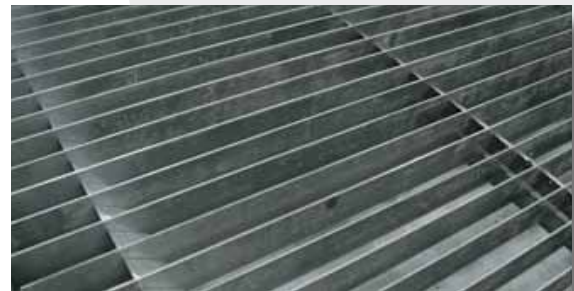
## Hand-Held Operator Interface

All MultiCam V-Series Plasma systems come standard with EZ Control, our easy-to-use hand-held operator interface. It features graphic icons for all machine functions. With a few minutes of training, any employee can operate a MultiCam V-Series Plasma.



## Standard Working Surface

Constructed from mild steel, the standard work surface forms a level slat table. Slats are 50 mm on center to provide maximum support and high-volume airflow. Our V-Series downdraft table comes with a high-volume, fume-extraction plenum and 12" diameter outlet.



## Base Frame

Legs are welded steel assemblies with heavy structural channel cross members. Stringers are fabricated from heavy-duty, aerospace-grade aluminum with precision-machined bearing datums. The base features an integrated dross pan/fume-extraction plenum and reinforced steel leg supports.



# V-Series Plasma Specifications

## Gantry

Custom-engineered and precision-machined, high-quality aluminum extrusion gives the gantry maximum stiffness. The extrusion's heavy wall thickness and 120-mm x 145-mm rectangular structure make the gantry extremely rigid.



## Gantry Supports

Cast-aluminum gantry supports house X-axis drive motors and bearings. Supports are machined on a four-axis horizontal machining center to ensure they are parallel and perpendicular. Castings provide extremely stable support for the gantry.



## Bearings

All axes feature self-contained integral V-cam roller bearings. This technology is ideal for plasma systems because it isolates bearings from the environment while the rolling contact between the wheel and track sweeps debris aside.



## Drive Motor System

Multicam selected extensively tested two-phase, digital, brushless, synchronous electric motors for the V-Series Plasma. Optimized inductance and resistance of the windings provide system smoothness. Integrated digital motor drives run these motors very efficiently.





# V-Series Plasma Specifications

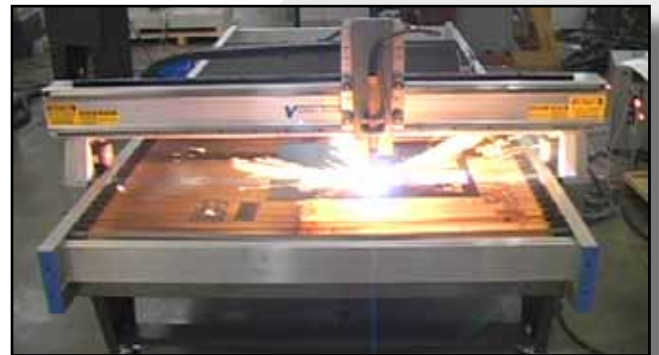
## Drive Transmission Assembly

Manufactured from aluminum castings, X-axis drive transmissions feature steel cable-reinforced urethane belt drives. A dual-bearing arbor with wide bearing separation for optimum stiffness supports the output pinions.



## Plasma Torches

MultiCam V-Series Plasma systems use Hypertherm PowerMax torches exclusively. PowerMax 65, 85 and 1650 torches provide wide cutting capacity on metals including aluminum and mild steel. Ask your MultiCam representative for additional details and capabilities of Hypertherm PowerMax torches.



## Automatic Torch Height (ATH) Control

Automatic Torch Height is standard on all V-Series Plasma systems. Because most competitive ATH systems are independent from the motion control system, they rely on a limited set of average parameters to control the torch height. But MultiCam systems are fully integrated with the control and adjust torch height automatically based on current cutting parameters. This allows the system to be extremely responsive when cutting a wide variety of metals.



## Optional Plate Rider

MultiCam's optional plate rider with integrated ball bearings is ideal for cutting thin-gauge sheet metal. It attaches to the Automatic Torch Height assembly.



# V-Series Plasma Specifications

## Standard Features



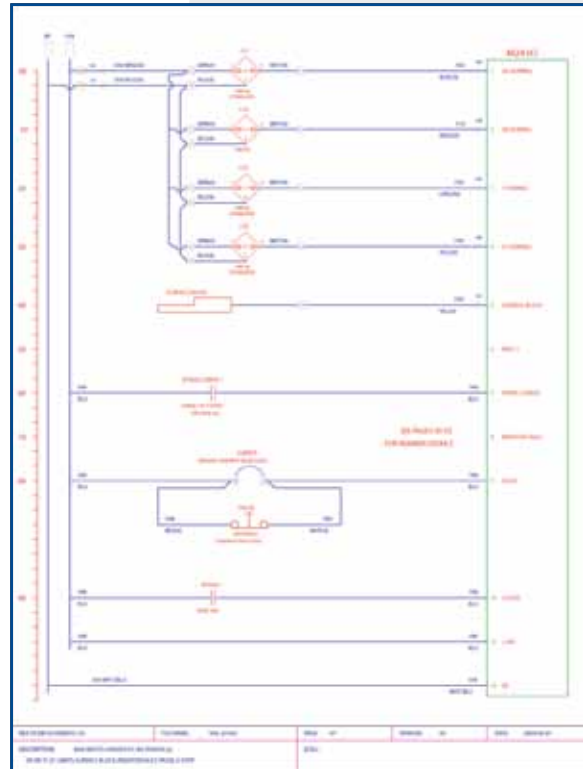
Leveling Feet



Tool Box

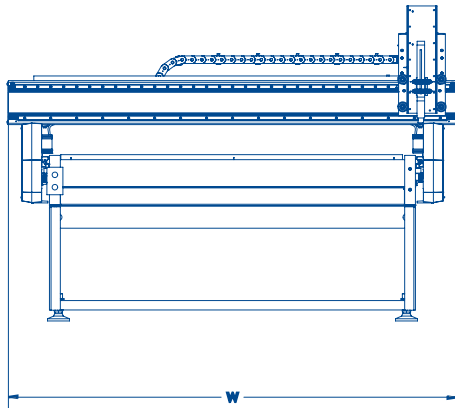
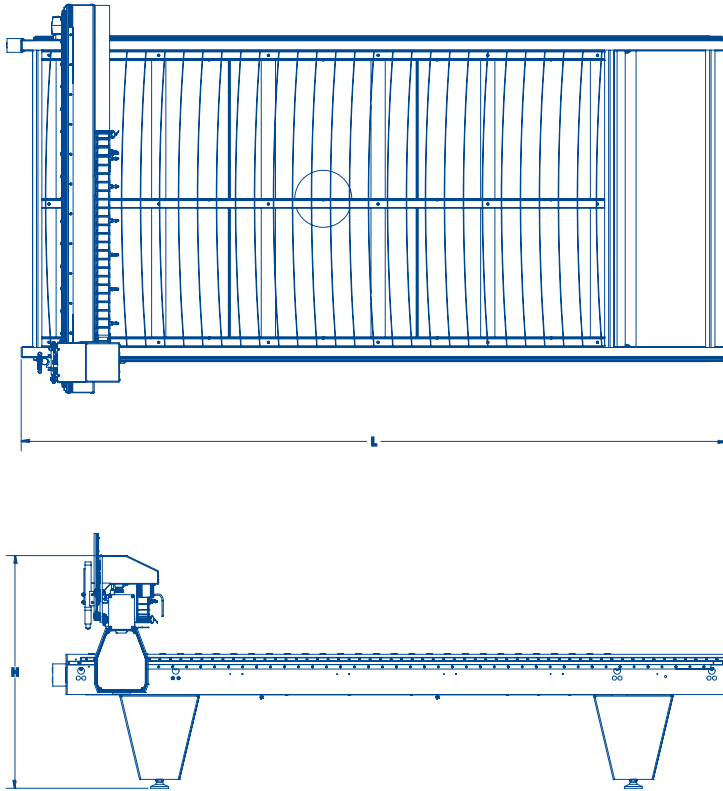


Operation Manual



Electrical Schematics

# V-Series Plasma Specifications



## V Series Specifications (Inches)

- Z-Axis Clearance: 2.6"
- Z-Axis Travel: 3.5"
- Repeatability: +/- 0.001"
- Cutting Speed: 800 IPM
- Rapid Traverse: 1200 IPM
- Drive System X, Y and Z Axes: Rack and Pinion
- Standard Work Surface: Steel Slat

## Size Chart (Inches)

MODEL	L	W	H	WORKING AREA
1-101P	75	70	53	50 x 50
1-103P	125	70	53	50 x 100
1-204P	149	82	53	60 x 120
1-304P	149	102	53	80 x 120

## V Series Specifications (Metric)

- Z-Axis Clearance: 66 mm
- Z-Axis Travel: 88.9 mm
- Repeatability: +/- 0.0254 mm
- Cutting Speed: 20.3 MPM
- Rapid Traverse: 30.5 MPM
- Drive System X, Y and Z Axes: Rack and Pinion
- Standard Work Surface: Steel Slat

## Size Chart (Metric)

MODEL	L	W	H	WORKING AREA
1-101P	1905	1778	1346	1270 x 1270
1-103P	3175	1778	1346	1270 x 2540
1-204P	3785	2083	1346	1524 x 3048
1-304P	3785	2591	1346	2133 x 3048