

CNC

3000 Series Plasma

Reliable turnkey solutions for any application requiring value, performance, and versatility.



MULTICAM
Complete CNC Solutions

HIGH PERFORMANCE... ...AFFORDABLE PRICE

3000 SERIES PLASMA

The MultiCam 3000 Series Plasma is the perfect choice for those looking for value and quality in a CNC Plasma Cutting System. The rigid, all-steel frame supports a variety of standard or high-definition plasma units and is combined with the industry's easiest to use operator interface, as well as the quality features and high level of service that comes with owning a MultiCam.

And because its a MultiCam, the 3000 Series also comes with the full support of the MultiCam Technology Center network, with locations worldwide. MultiCam Sales, service, support, and training are always located nearby.



FEATURES & SPECIFICATION GUIDE

PERFORMANCE / EASE OF USE / PRODUCTIVITY

FEATURES

MultiCam combines innovation, versatility, productivity, and process control, all in a workhorse package that has powerful, yet easy to use software to maximize your manufacturing potential.



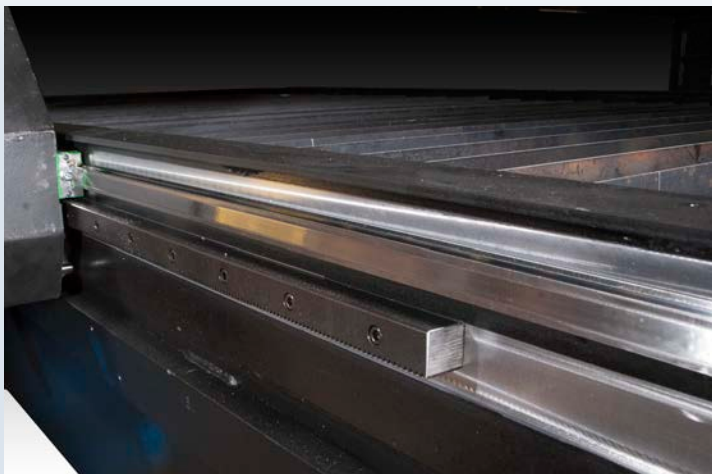
Gantry Engineered for Performance

The gantry is made of 3/8" thick steel tube that is welded, stress-relieved, and precision machined. The gantry has been designed to provide a smooth, vibration free cut.



Gantry Supports High Strength, Minimal Vibration

The 3000 Series gantry supports are manufactured from iron castings. This extremely rigid support of the cast iron components in conjunction with wide X-axis bearing spacing, help provide smooth motion and superior cut edge quality.



Linear Bearings Rigid & Smooth

The 25mm linear bearing profile rails with stainless spring steel strip covers are standard in the Y and Z axes. 35mm bearings are standard on the X axis. The bearings feature a high rigidity and top load capacities in all load directions, low noise level, and high-torque load capacity.

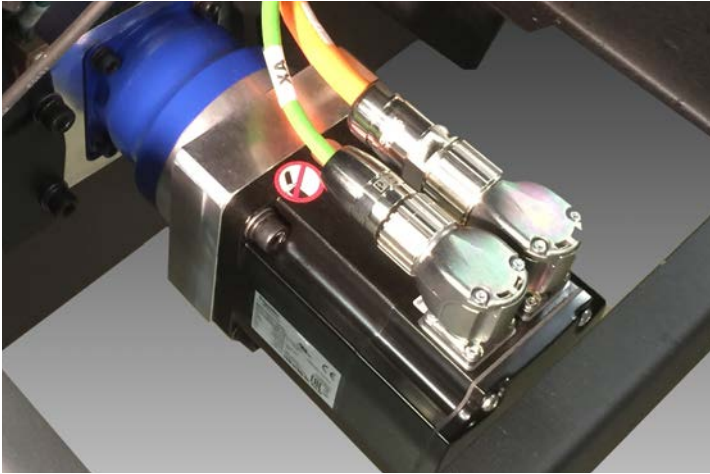


Working Surface Versatile & Effective

The standard work surface is constructed using mild steel to form a level, slat table. The slats are 50mm on center which provides maximum support even under the heaviest material. The slats are designed for high-volume air flow and have a center rib for additional strength.

FEATURES

No machine offers more features than the innovative and versatile 3000 Series Plasma.



Drive Motor System **Smooth & Accurate**

After extensive testing, MultiCam has found the Schneider Brushless AC Servo Motors to be the premier solution on the market today. Precision bearings both reduce viscous friction and motor noise at high speeds and help smooth motion.



EZ Control **Easy-To-Use**

MultiCam's EZ Control is one of the most powerful yet easy-to-use motion control systems available on the market. It allows for multiple job reference positions as well as automatic Z surfacing, proximity restart, and integrated material library of cutting parameters for all plasma cutting units.



Digital Servo Drive System **Seamless & Reliable**

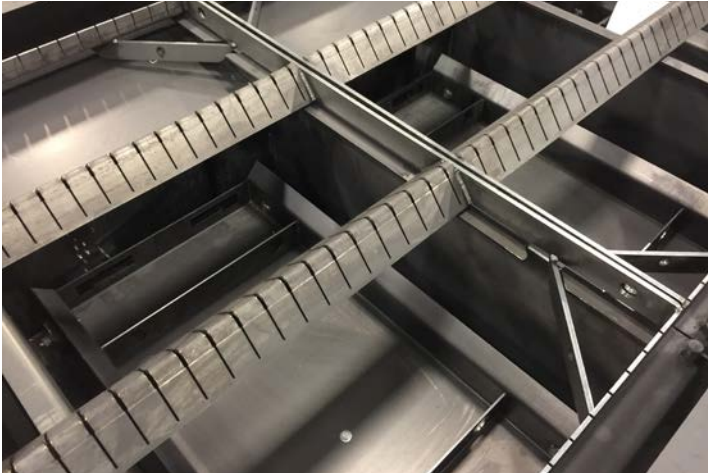
Schneider digital servo drives are high-bandwidth, digital vector servo drive systems and are standard on all 3000 Series machines. These drives seamlessly integrate position, velocity, and torque loops to provide uncompromised tracking accuracy, smoothness, and reliability.



Plasma Torches **Versatility & Power**

The 3000 Series Plasma exclusively uses Hypertherm units from the PowerMax to the new XPR 300! Cut anything from gauge to 2" Mild Steel. Ask your MultiCam distributor for additional details and capabilities of the Hypertherm torches.

OPTIONAL FEATURES



Zoned Down Draft Table **Fume Extraction**

For maximum results, MultiCam focuses the fume extraction in the cutting area. Pneumatic control of plenum zones is integrated directly into the MultiCam controller. This allows us to focus the fume evacuation where the cutting is located by automatically opening and closing ports or zones.



Dross Trays **Easy & Quick**

Removable dross trays make it possible to easily retrieve small parts that fall into the cutting table. The dross trays are supported by 6 industrial roller tracks. Each roller has the capacity of supporting up to 1,800 lbs. and enables the dross trays to roll smoothly in and out of the cutting table.



Quick-Stop Crash Protection **Protect Your Investment**

The quick-stop crash protection torch holder makes changing consumables a snap, and protects your investment from serious damage. During the cut process it is possible for small parts to tilt up. If the torch hits one of these obstacles, the torch releases, protecting itself from significant injury.

ADVANCED FEATURES

AUTO REFERENCE VOLTAGE

Most systems have the user manually enter in a reference voltage for the torch height. The MultiCam system automatically samples the voltage at the beginning of each program and sets this value for you. This gives you a better cut, longer consumable life, and reduces the chance for error. Why is this important? Many parameters can affect the torch height voltage. When cutting faster or slower the book value of the torch height voltage will change. It is nearly impossible for the end user to guess the correct voltage. MultiCam eliminates this guess work by automating the process.

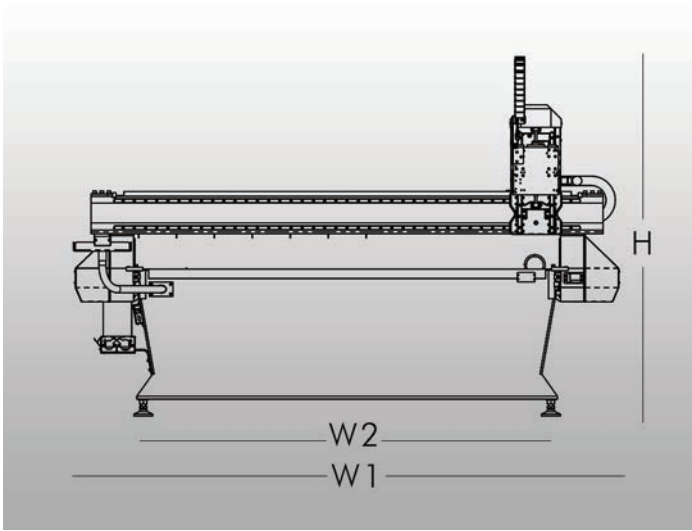
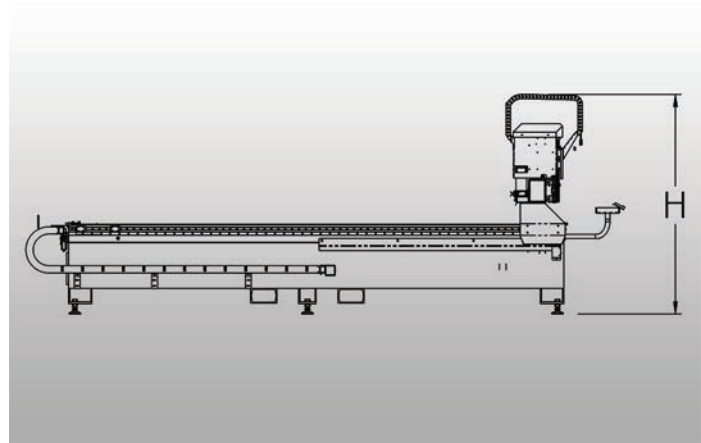
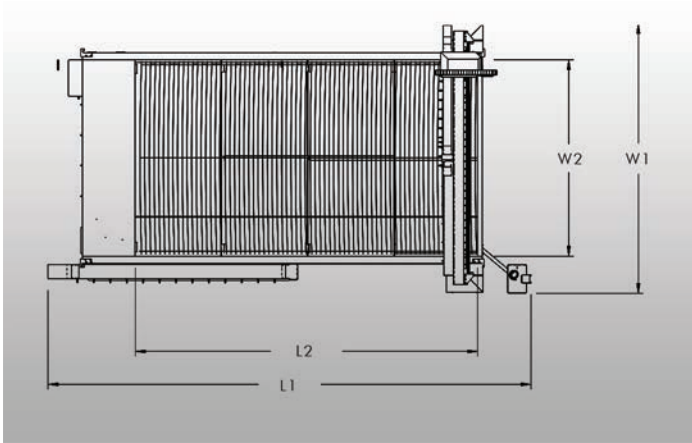
ADVANCED KERF CROSSING

EZ Control automatically samples the torch height voltage at 500 times per second. The data is fed into a series of algorithms. Most of the algorithms are designed to adjust the smoothness and sensitivity of the torch height control. This is done by averaging the data over varying periods of time. When the voltage drastically changes the controller locks out torch height control.

These drastic changes in voltage are usually caused by cutting back over the kerf. Normally this occurs at the end of the cut when the lead out crosses over the lead in. Systems that do not properly adjust to kerf crossing can dip the torch at the end of the cut or even crash the torch into the material. This can cause the part to be destroyed or not properly cut out. EZ Control Advanced Kerf Crossing detects these changes in voltage and instantaneously locks out the torch height control. Once the voltage stabilizes, torch height control will resume.

- High Speed Z-Axis for excellent Z tracking response.
- Two process surface detection. Smooth and accurate Arc Voltage Height Control.
 - 1.) Extremely responsive Ohmic sensor for high speed surface sensing. This keeps from bending material and giving a false material surface.
 - 2.) Z -load sensor. If the Ohmic sensor fails to read the surface, the backup sensor will read the movement in the Z-axis when the torch makes contact with the material surface.
- 25 mm Z-axis linear bearing rails for rigid, smooth, accurate motion.

SPECIFICATIONS



Specifications	Inches	Metric
Z-Axis Clearance	4"	114.3mm
Z-Axis Travel	6"	152.3mm
Repeatability	+/-0.001"	+/-0.0254mm
Cut Speed	1000 IPM	20.3 MPM
Rapid Traverse	1800 IPM	25.4 MPM
Drive System (X,Y)	Rack & Pinion	Rack & Pinion
Drive System (Z)	Lead Screw	Lead Screw

Model	L1 (in./mm)	L2 (in./mm)	W1 (in./mm)	W2 (in./mm)	H	Working Area (in./mm/)	Weight (lbs.)
3-204P	184/4674	130/3302	95/2413	74/1880	60/1524	60x120/1524x2048	5150
3-205P	206/5232	154/3912	95/2413	74/1880	60/1524	60x144/1524x3657	5450
3-305P*	205/5232	154/3912	114/2896	93/2362	60/1524	80x144/2032x3557	6600

* Add 11"/280mm to W1 for optional dual Z axis. Add 36"/915mm to W1 for optional cantilever tube cutting gantry.

**Other table sizes available.



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