

CNC

# 3000 Series Router

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



**MULTICAM**  
Complete CNC Solutions

# VERSATILE, FEATURE-RICH PRODUCTION ROUTING!

## 3000 SERIES ROUTER

The MultiCam® 3000 Series CNC Routers are loaded with standard features normally associated with more expensive machines. The automatic tool change (ATC) option gives the user maximum machining flexibility, and the all-steel, moving-gantry design allows the machining of large parts while maintaining a small, space-saving footprint.

Designed for a wide range of panel processing applications, the 3000 Series is the perfect solution for businesses looking for both value and high performance in a CNC router.



## FEATURES & SPECIFICATION GUIDE

PERFORMANCE / EASE OF USE / PRODUCTIVITY

# FEATURES

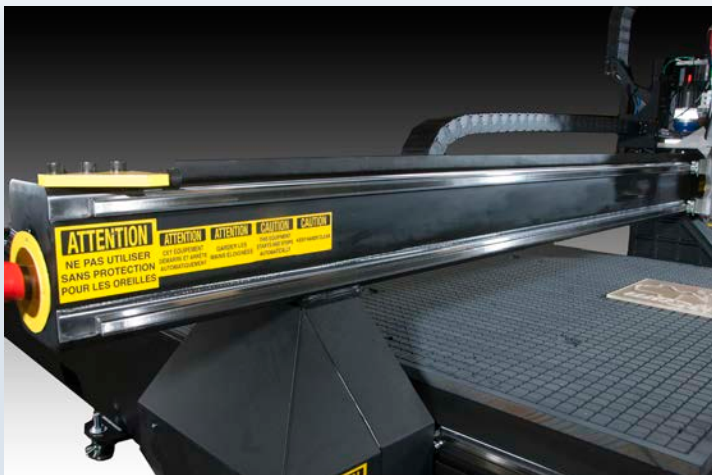
No machine offers more features than the innovative and versatile 3000 Series Router



## Spindle

### Durable & Powerful

With a wide variety of spindle options readily available, the 3000 Series can be personalized to suit your business needs. Whether you're cutting thin or thick materials, the spindle allows for seamless cutting capabilities.



## Gantry

### Engineered for Performance

Made of a 3/8" thick steel tube, the gantry is welded, stress relieved and precision machined to provide a smooth, vibration-free cut.

Y axis features 25-mm linear rails, AC brushless servos, precision planetary gearboxes, rack and pinion.



## Base Frame

### Rigid for Optimum Performance

The MultiCam 3000 Series base is a rigid, all-steel plate frame that is welded, stress relieved, and precision machined. This type of construction allows for a very accurate and smooth cutting system while greatly reducing installation time greatly. It also essentially removes the possibility for installation errors that could affect the performance and accuracy of the system.



## Working Surface

### Maximum Material Hold

The standard working surface is 1" thick 80-82 Durometer phenolic with a machined grid pattern utilizing .500" x .250" foam gasket tape. Phenolic makes an excellent work surface because of its dependable mechanical strength and dimensional stability. In addition, phenolic has low-moisture absorption, resists heat, and wear and is easy to repair as needed.

# FEATURES

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## Drive Assembly

### High Acceleration, Excellent Cut Quality

High-torque, brushless digital AC servo motors coupled with zero backlash Alpha gearboxes drive both the X and Y axes. This results in high acceleration capability of the gantry as well as an excellent cut quality.



## 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 cut speed & spindle RPM override.



## Digital Servo Drive System

### Smooth & Accurate

Digital Servo drives and brush-less digital AC servo motors form a digital vector servo drive system that is standard on all MultiCam 3000 Series Routers. This drive system integrates position, velocity, and torque loops seamlessly to provide uncompromised tracking accuracy, smoothness, and reliability.



## Gantry Supports

### High Strength, Minimal Vibration

In conjunction with the wide X-Axis bearing spacing, cast-iron gantry supports help dampen possible vibration and give the structural tube gantry an extremely rigid support.



### Linear Bearings **Fluid & Accurate**

The 25mm linear bearing profile rails with stainless spring steel strip covers are standard in the X,Y, and Z axes. This allows for high rigidity and top-load capacities in all load directions, a high torque-load capacity, and low noise level for ideal running characteristics.



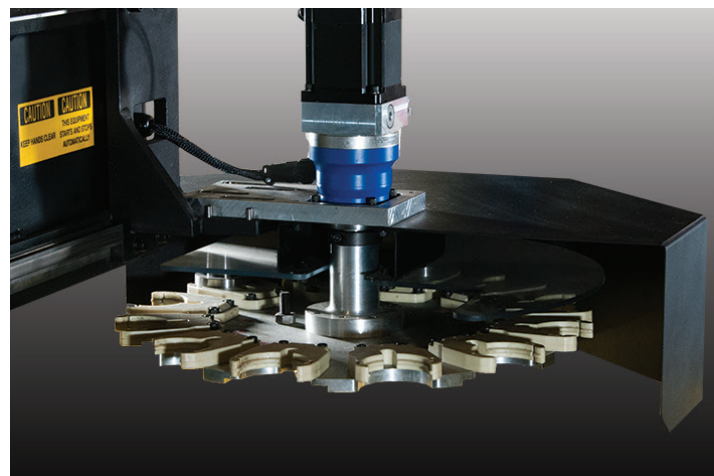
### Z-Screw Assembly **Precise & Robust**

The 3000 Series ball screw assembly has 12" of Z stroke to handle a wide variety of tolling. Precision dual angular contact ball bearings support the 12mm ball screw in a steel housing. The top of the screw is mounted to a spring-actuated fail-safe brake system. Gantry riser blocks are available to increase the throat of the machine by 4".



### Linear Tool Changer (Option) **Optimized for Faster Throughput**

This option offers a low-cost alternative to automatic tool changing. It features a linear tool rack and holder mounted at the end of the material process area.



### 12-Tool Rotary Tool Changer (Option) **Reduce Job Times & Setup Errors**

This options mounts on the end of the gantry that moves along the X-Axis. It is beneficial on dual zone pendulum processing configurations. This accessory accommodates tool changes without crossing zones during the idle cut zone loading process.

# OPTIONS

The 3000 Series Router provides a number of options to optimize your throughput and production capabilities.



## MultiVision Digital Registration **Flexible & Exact**

A combination of hardware and software make up the MultiVision system. This system helps visually recognize media registration marks and compensates for skew and image drift. This results in a correct and precise cut for both contoured and complex images.



## Bar-code Scanning Interface **Automatic File Setup**

Maximize your work-flow and reduce the risk of error by simply scanning a job order to automatically pull up a job file.



## 2D Rapid Shape Digitizer **Fast & Easy**

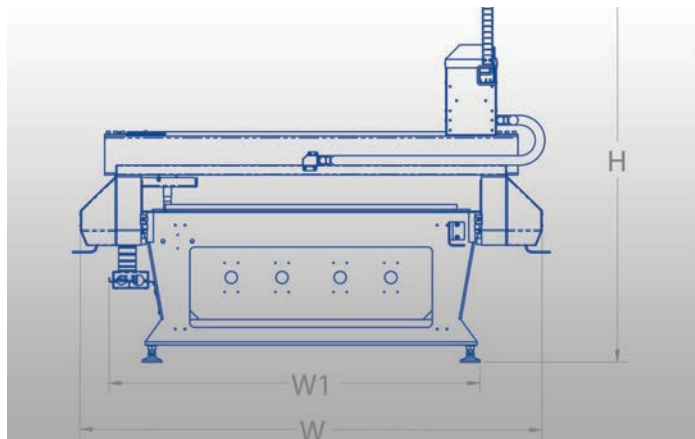
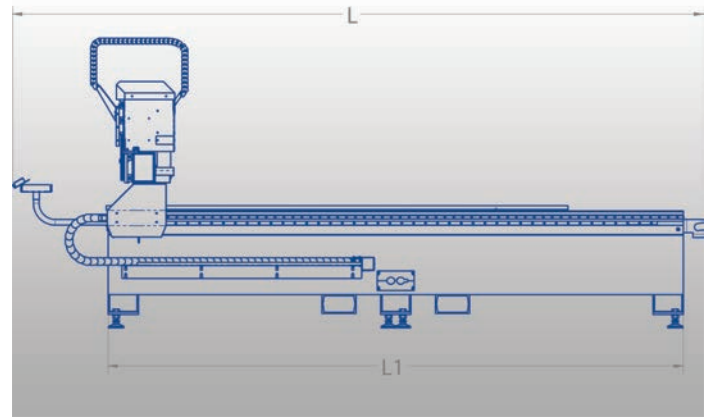
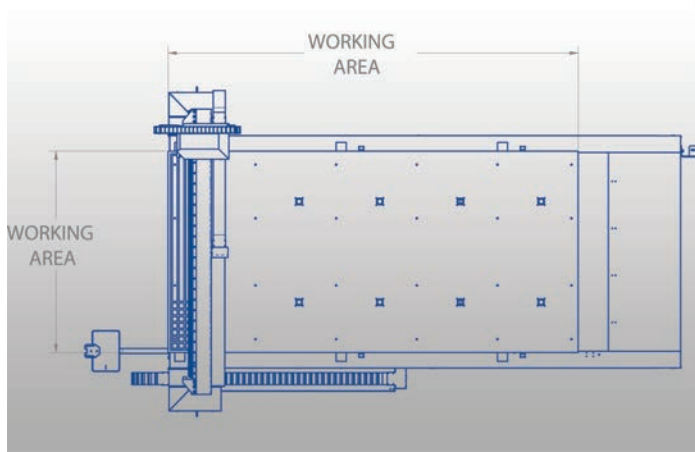
Quickly and easily scan two dimensional shapes in order to digitize them. This method helps by saving production time from manually tracing or drawing the part.



## Rotary Indexer **Expand Your Capabilities**

Generally for cylindrical shaped material, the lathe option allows the user to cut and shape three dimensional pieces like columns, pillars, and elongated shaped projects.

# SPECIFICATIONS



Specifications	Inches	Metric
Z-Axis Clearance	6"; Optional 10"	152mm; Optional 254mm
Z-Axis Travel	12"	304mm
Repeatability	+/-0.001	+/-0.0254
Cut Speed	1400 IPM	35.5 MPM
Rapid Traverse	2500 IPM	63.5 MPM
Drive System (X,Y)	Rack & Pinion	Rack & Pinion
Drive System (Z)	Ball Screw	Ball Screw

Model	L (in/mm)	L1 (in/mm)	W (in/mm)	W1 (in/mm)	H (in/mm)	Working Area (in/mm)
3-101	107/2717	<b>76/1930</b>	85/2159	<b>65/1651</b>	77/1956	50 x 50 / 1270 x 1270
3-202	117/2971	<b>86/2184</b>	95/2413	<b>75/1905</b>	77/1956	60.5 x 60 / 1524 x 1524
3-208	300/7613	<b>241/6121</b>	119.5/3035	<b>60/1524</b>	77/1956	60 x 241 / 1524 x 6121
3-307	253/6426	<b>194/4928</b>	183/4648	<b>80/2032</b>	77/1956	80 x 193 / 2032 x 4902
3-308	300/7613	<b>241/6121</b>	183/4648	<b>80/2032</b>	77/1956	80 x 241 / 2032 x 6121

\* Other sizes available



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