# 7000 Series Router Reliable turnkey solutions for appropriately performance, and y





### THE ULTIMATE IN HEAVY-DUTY, HIGH-PERFORMANCE CNC ROUTING

#### **7000 SERIES ROUTER**

The MultiCam 7000 Series offers the ultimate in high-performance CNC machining. Choose from a broad range of standard table sizes and spindle configurations.

Designed for high-speed, heavy-duty routing, 7000 Series machines are easy to configure to meet demanding application requirements in the woodworking, plastics, and non-ferrous metal applications.

Heavy-duty plate frame construction coupled with a space-saving, moving gantry design make the 7000 Series a robust, commercial grade machine designed for today's competitive manufacturing environment.



FEATURES & SPECIFICATION GUIDE PERFORMANCE / EASE OF USE / PRODUCTIVITY

#### **FEATURES**

No machine offers more features than the innovative and versatile 7000 Series Router.



#### Gantry

#### **Engineered for Performance**

The gantry is welded, stress-relieved and precision machined steel plate up to .75" thick. Features include extensive perpendicular (90°) and diagonal (45°) internal ribbing running the length of the gantry to ensure a smooth, vibration-free cut.

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



#### **Working Surfaces**

#### Versatile, Effective, Multi-functional

The standard working surface is 1" thick 80-82 Durometer phenolic with a machined 1.5mm grid pattern utilizing .25" x .5" foam gasket tape. Phenolic makes an excellent work surface because of its dependable mechanical strength and dimensional stability.



#### **Gantry Supports**

#### **High Strength, Minimal Vibration**

The gantry supports are precision machined from cast iron tooling plate, using a 4-Axis horizontal machining center to guarantee perpendicularity. The cast iron support has inherent vibration dampening characteristics while giving rigid support to the gantry tube.



#### **Base Frame**

#### **Solid, Heavy-Duty Construction**

The base frame is a one-piece plate steel frame that is welded, stress-relieved, and precision machined. A one-piece contruction allows for a very accurate, rigid and smooth cutting system, while essentially removing the possibility for any after installation errors that could affect the performance and accuracy of the system.

#### **FEATURES**

No machine offers more features than the innovative and versatile 7000 Series Router.



#### Vacuum Pumps Optimum Performance

Standard vacuum pump options include an 20 HP positive displacement blower (425 CFM) or 33 HP (780 CFM), two stage regenerative blower. These heavy-duty pumps will maximize material hold down and are designed for optimal performance on a wide variety of materials. Other pump options are available.



#### Linear Bearings Fluid & Accurate

The 25mm linear bearing profile rails with stainless spring steel strip covers are standard in the Y & Z axes. 35mm linear bearings cover the X Axis.



#### EZ Control

#### Easy-To-Use

MultiCam's EZ Control is one of the most powerful yet easy-touse motion contol systems available on the market. It allows for multiple job reference positions as well as automatic Z surfacing, electronic depth safety system, proximity restart, and cut speed & spindle RPM override.



#### Digital Servo Drive System

#### **Smooth & Reliable**

Digital Servo drives and brushless digital AC servo motors form a digital vector servo drive system that is standard on all 7000 Series machines. This drive system integrates position, velocity, and torque loops seamlessly to provide uncompromised tracking accuracy, smoothness, and reliability.





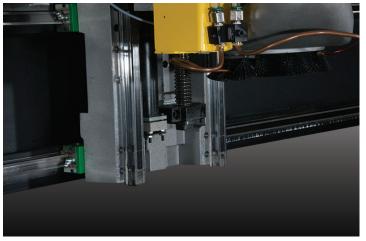
#### **Router Spindles**High Speed for Increased Productivity

The standard spindle is an air cooled, 13.3 HP HSD, 24,000RPM 100% Duty Cycle spindle Other available options include a 16 HP HSD spindle.



#### **Drive Assembly High Acceleration, Excellent Cut Quality**

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



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

The 7000 Series Ball Screw Assembly has an available 17" of stroke that is ideal when using specialty tools. It allows for the option of adding larger gantry clearance in the field. Gantry riser blocks are available to increase the throat of the machine by 4" or 8".



#### Safety Bumper Integrated Safety System

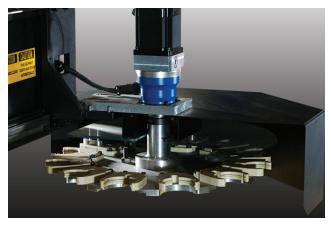
The safety bumper is an industrial grade, pressure-sensitive safety device designed to stop the machine when an object comes in contact with the safety bumper.

#### **OPTIONS**

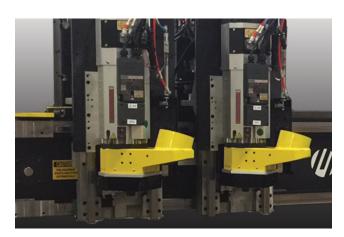
The 7000 Series provides a number of options to optimize your throughput and production capabilities.



MultiVision Digital Registration Flexible & Exact



**Automatic Tool Changer (ATC)**Optimized for Faster Throughput



**Dual Head** Increased Capabilites

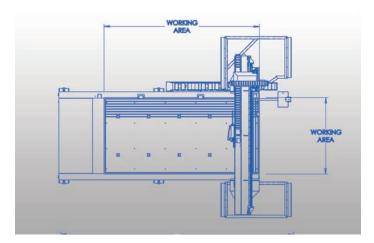


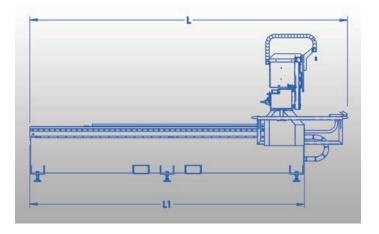
Tangential Knife
Versatility to Meet Demand

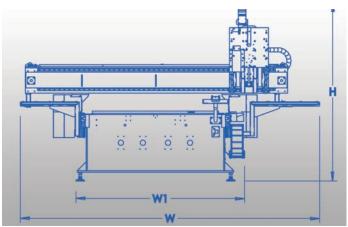
#### Other availabile options:

- Drill and Tap Spindles
- Z-Axis Dust Boot
- 20:1 Precision Gearbox Upgrade
- Motorized C-Axis for Aggregates
- Drill Bank

## SPECIFICATIONS Series Control of the control of the







Specifications	Inches	Metric	
Z-Axis Clearance	8″ *	203.2mm	
Z-Axis Travel	17″	431.8mm	
Reapeatability	+/-0.001	+/-0.001	
Slew	3500 IPM	88.9 MPM	
Drive System (X,Y)	Helical Rack	Helicəl Rəck	
Drive System (Z)	Ball Screw	Ball Screw	
Standard Work Surface	1" Phenolic	1" Phenolic	

\*Optional 12" or 16"

Model	L (in/mm)	L1 (in/ mm)	W (in/mm)	W1 (in/ mm)	H (in/ mm)	Working Area (in/mm)
7-204	184/4674	152/3861	99/2515	76/1930	86/2184	60.5 x 122 / 1537 x 3099
7-205	202/5131	170/4318	99/2515	76/1930	86/2184	60.5 x 145 / 1537 x 3683
7-304	184/4674	152/3861	119/3023	96/3023	86/2184	80 x 122 / 2032 x 3099
7-305	202/5131	170/4318	119/3023	96/3023	86/2184	80 x 145 / 2032 x 3683
7-306	232/5893	206/5232	143/3632	98/2489	86/2184	84 x 170 / 2134 x 4318

<sup>\*\*</sup>Other models available



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