

CNC

# APEX<sup>3R</sup>

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



**MULTICAM**  
Complete CNC Solutions

# INTRODUCING THE NEXT GENERATION OF CNC ROUTERS

## **APEX<sub>3R</sub>**

The Apex3R CNC Router is a next generation machine loaded with standard features normally associated with more expensive systems. The all-steel tube frame and moving gantry design allows for machining of large parts while maintaining a small, space-saving footprint.

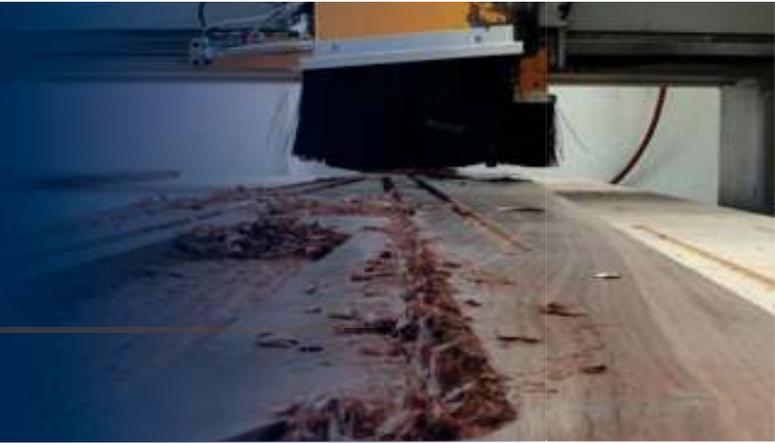
Designed for a wide range of applications, the Apex3R is the perfect solution for companies looking for both value and high performance in a CNC Router.



## **FEATURES & SPECIFICATION GUIDE** **PERFORMANCE / EASE OF USE / PRODUCTIVITY**

# PERFORMANCE

No machine offers more features than the innovative and versatile Apex3r CNC Router



## Gantry

### Custom Engineered for Maximum Rigidity

Made of 3/8" thick steel tube, the gantry is welded, stress relieved and precision machined.



## Gantry Supports

### High Strength, Minimal Vibration

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



## Base Frame

### Solid, Heavy-Duty Construction

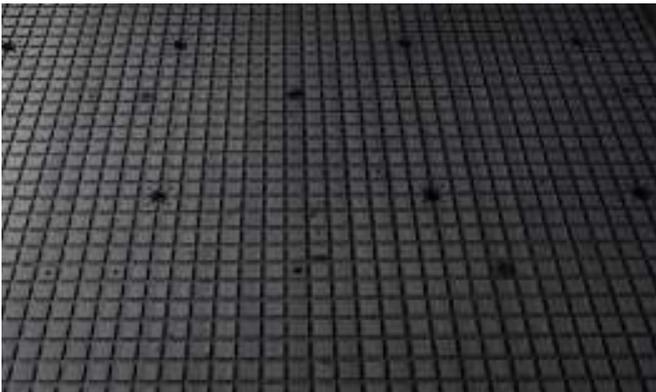
The Apex's base is a rigid 3/8" thick tube frame that is welded, stress relieved and precision machined. It provides a heavy and accurate platform that translates into gentle motion for clean, smooth cuts.



## Linear Bearings

### Smooth Motion, Minimal Friction

The linear bearing profile rails are designed to increase the longevity of your machine by constantly applying lubrication on all points of contact along the rail..



## Working Surfaces

### Versatile, Effective, Multi-functional

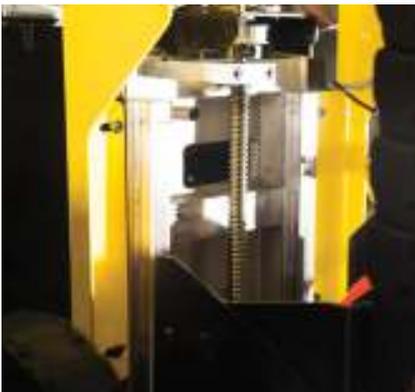
The standard working surface is 1" thick 80-82 Durometer phenolic with a machined 30mm grid pattern utilizing 25" x .25" foam gasket tape. Phenolic makes an excellent work surface because of its dependable mechanical strength and dimensional stability.



## EZ Control

### Powerful, Intuitive Control

MultiCam EZ Control provides all users, from novice to advanced, with the most powerful and easy-to-use control system available on the market today.



## Z-Screw Assembly

The Apex3R ball screw assembly has 12" of Z stroke to handle a wide variety of tooling. Precision dual angular contact ball bearings support the 12-mm ball screw within a steel housing.



## Linear ATC

### Automatic Tool Changer

The Apex3R offers a low cost alternative to automatic tool changing. It features a linear tool rack holder mounted at the end of the material process area.



## Digital Servo Drives

### Accurate & Reliable

Digital servo drives and brushless digital AC servo motors for a digital vector servo drive system that is standard on all Apex3R machines.

# SPECIFICATIONS

MultiCam's Apex3R Router makes it easy for you to get the most out of your machine.

## Standard Features:

- MultiCam EZ Control® handheld operator interface
- EZ Suite® Software
- Heavy, all-steel tube frame construction
- High-speed 3-axis motion control system
- Unlimited file size transfer capabilities
- Standard Ethernet, Static or DHCP capable
- Brushless 3 phase servo motors coupled with digital AC servo drives
- Tool and Material Calibration
- 10:1 Precision Planetary Gearboxes

## Options:

- Linear automatic tool changer
- Automatic Material Surfacing Probe
- Automatic Tool Length Calibration Probe
- MultiCam CNC Dual Knife with optional cutting heads
- MultiVision™ Digital Registration System
- Coolant mist systems for non-ferrous metal cutting

## Specifications:

- Z-Axis Clearance: 6"; optional 8"
- Z-Axis Travel: 12"
- Slew (Diagonal): 2600 IPM
- Slew Acceleration: 42 in/sec<sup>2</sup>
- Feed (Linear): 12-1600 IPM
- Feed Acceleration: 30 in/sec<sup>2</sup>
- Drive System X&Y: Helical Rack and Pinion
- Drive System Z: 12mm Ball Screw
- Work Surface: 1" Phenolic

# SPECIFICATIONS

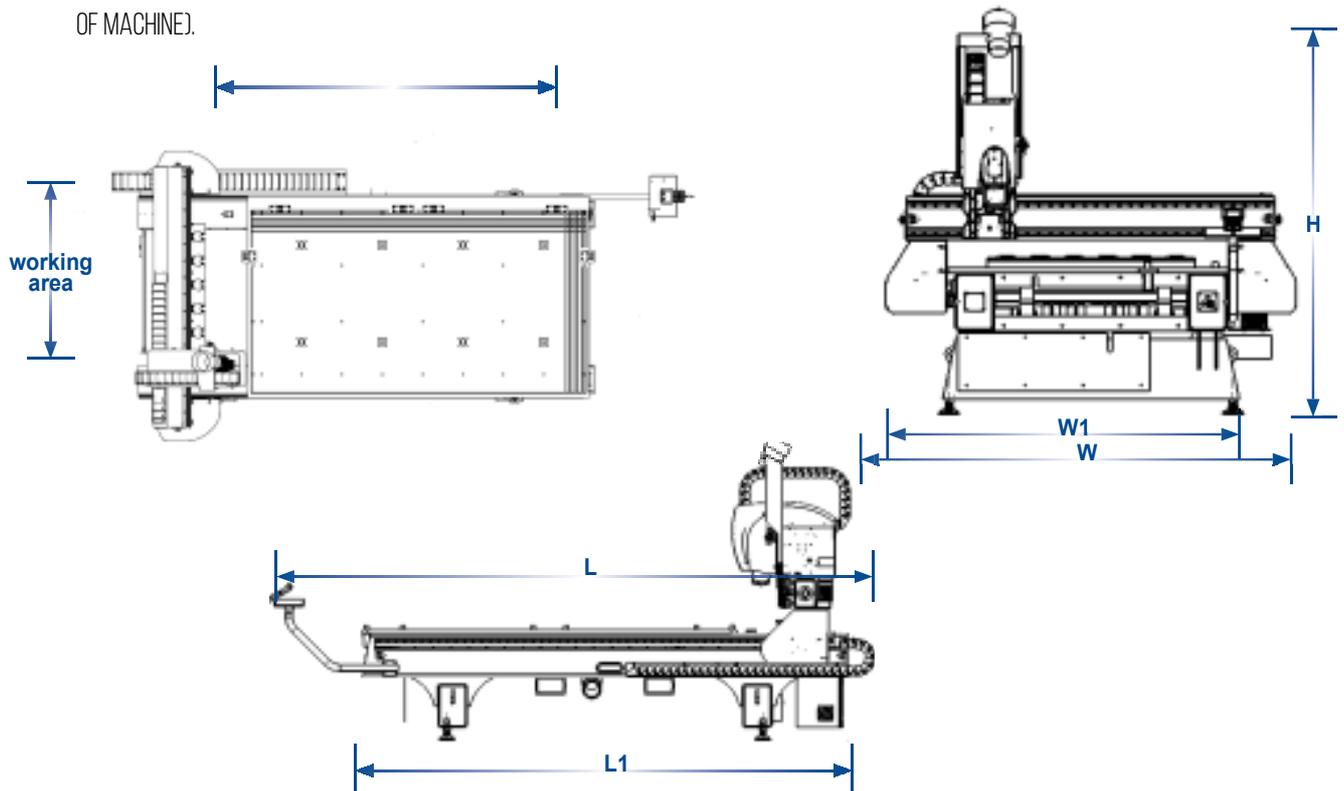
## WITHOUT KNIFE

MODEL	L	L1	W	W1	H	WORKING AREA (IN.)	WORKING AREA (MM)	WEIGHT (LBS.)
3-103-R	168	133.5	68	84.5	75	50"x100"	1356x2540	3150
3-204-R	186	154.5	94.5	78	75	60"x120"	1596x3073	3750
3-304-R	186	154.5	114.5	98	75	84"x120"	2106x3073	4350

## WITH KNIFE

MODEL	L	L1	W	W1	H	WORKING AREA (IN.)	WORKING AREA (MM)	WEIGHT (LBS.)
3-103-R	168	133.5	94	84.5	75	50"x100"	1356x2540	3150
3-204-R	186	154.5	99	78	75	60"x120"	1596x3073	3750
3-304-R	186	154.5	123	98	75	84"x120"	2106x3073	4400

ALL NUMBERS HAVE BEEN ROUNDED. "W" FOR KNIFE MACHINES IS END OF GANTRY TO END OF RISER COVER (MAXIMUM WIDTH OF MACHINE).





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