

Large CNC Router

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Cancam offer custom CNC routers which are engineered and built for high volume production applications... at an impressive price point. Key design features allow fast, accurate cutting with guaranteed reliability. These large format CNC routers are engineered and built for quicker tool changes with the carousel tool changer colocated with the spindle. Everything on this machine is designed and purpose built for heavy duty industrial routing including the larger servos, thicker steel frame along with the substantial linear guide components when compared to the C2. The CNC machine is designed for high production applications and can be manufactured up to 40' in length. These large format CNC router are suitable for cutting, routing, mould manufacturing, large or irregular substrates. Previously we have seen these large format CNC routers used for cutting huge sheets of aluminum for aero space, military applications, architectural objects, fiber glass cutting for industries such as bus and boat manufacturers. Unlike competitors who charge for upgraded components or add on accessories, CanCam has include a number of these as standard feature such as pneumatic solenoid-actuated vacuum zones, pop up location pins, easy sheet rollers, castors, a matrix vacuum table, helical rack and pinion motor mount, planetary gear vs. belt driven gantry, centralized lubrication along with two calibrators, one fixed and one mobile.

Description

This machine's rugged vibration-reducing design and durability allows the spindle to achieve speeds of up to 24000 RPM and IPM feed rate up to 1200. This ensures the finishing on the material of your choice will be perfect, with minimized cutting time. Minimized cutting time allows you to complete jobs faster thus maximizing your output.

The C3 series is designed to use the latest state of the art Masso controller. The Masso controller allows you to use both fixed and mobile auto tool touch offs, ensuring you save time when switching out tools at any point during the production.

The C3 series industrial CNC routers come with closed loop servos, linear guides, helical rack and pinion motor mounts along with planetary gear reducers making this machine a high quality build with tighter tolerances typically found in ball screw machines without compromising cutting speed.

The carbon alloy steel gantry and prestressed frame are nearly 1/2" thick along with the 1" milled gantry support posts that contribute to reducing vibration without compromising accuracy.

Flexibility in the product offering is available through increased gantry heights up to 15" clearance, variety of table top options.

This model is available in a variety of sizes ranging from 4' wide to 40' in length.

The combination of the engineering and quality components built into this design ensure that you get the 'Up in class, Down in price' that CanCam is committed to delivering to all its customers.

Product Feature



Carousel tool changer

-The carousel on the C3 series travels with the gantry enhancing the tool change speed by limiting the amount of travel required in the Y axis.



Pneumatic Solenoid actuated vacuum zones

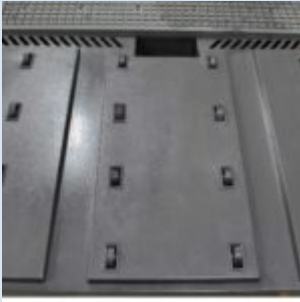
-Control isolated vacuum zone locations with the press of a button.



Two calibrators

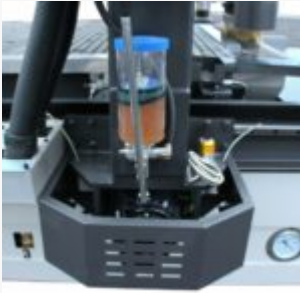
-A unique design feature, fixed and mobile calibration, is standard for all C series CanCam CNC machines.

Our C series equipment come with two calibrators to allow for oversized tool calibration, mobile calibration for odd sized materials and to any location you choose.



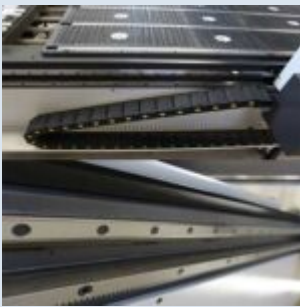
Easy sheet rollers

-Roll your sheets on with ease.



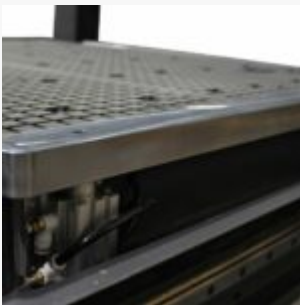
Integrated lubrication system

-Making maintenance simple and easy.



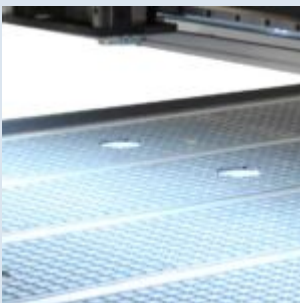
Low maintenance

-The sealed motion components, enclosed cable carrier, linear rail covers, spindle cover and side gantry covers on the CNC router are designed to limit exposure to dust and debris. Minimizing the need for maintenance and frequent cleaning.



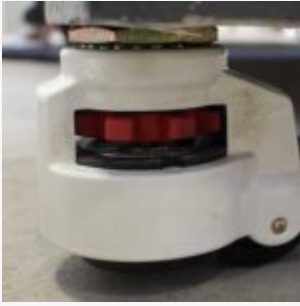
Pop up location pins

-Pneumatic pins to assist you with your workpiece alignment.



LED lights

-Bringing all your projects to light before they leave the table. Allowing for inspection of your work as it is being machined.



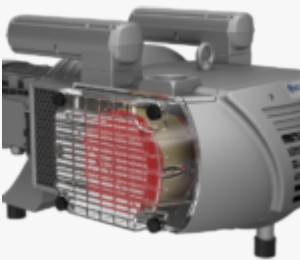
Castors for ease of mobility

-With a light push you can reposition your CNC router where needed.



Quick release tool holder

-For a quick swap to a new tool, press the button and the tool pop out.



Three Phase Vacuum Pump

Three phase vacuum pumps can be more efficient on electrical consumption in comparison to single phase. The main benefit from the use of a three phase vacuum pump such as Becker is the additional holding pressure measured in Hg sealed vacuum, which means millimeters of mercury.

A three phase vacuum has the potential capability to hold down some material/substrate more effectively with less slippage for this reason. This product requires for you to have 208-600v three phase power available at your location.



Coolubricator JR™

lubrication system's durable, 16 oz. (0.5 L) vented reservoir.

The Coolubricator JR™ combines lubricant and air in a co-axial nozzle tip. The oil mist lubrication system keeps atomization and distribution of the liquid consistent regardless of the hose length. Plastic 12 in. nozzle is coupled with 5 ft. Co-Axial hose. A heavy-duty magnetic base at the hose/nozzle connection of the oil mist lubrication system makes it easier to relocate and position the nozzle at the friction points.

Typically used for the machining non ferrous metals to prevent welding and increase tool longevity.



The 9 watt laser diode is 445 nm

An accessorial add on of a diode laser is useful for a variety of cuts or engravings.

Fast and easy engraving on polished and anodized aluminum, steel, stainless steel without engraving paste, copper & brass.

Laser engraving on plywood or balsamic birch, leather, glass, acrylic, stone, plastics.



Donek Tools D1 Drag Knife

The Donek Tools Drag Knife for CNC routers can be used to cut almost anything you would cut with a utility knife, but with the speed and precision of a CNC router. The Donek Drag Knife fits into your CNC router or spindle collet, making it a universal fit for almost any CNC router available. The tools were designed to use a utility knife blade (which can be purchased at just about any hardware store) which dramatically reduces the cost of consumable blades. Fits in 1/2in Collet.

Common materials that are used with this tool are wood veneer for inlay/marquetry artwork, leather, carbon fiber pre-preg laminates for aerospace, military, and automotive components, cardboard for custom packaging, and much more.



Donek Creasing Attachment

Donek CNC router creasing attachment can be used to crease cardboard, foam and similar materials.

- Fits on all Donek Tools Drag Knives except the 1/2" knife (D2 or D4 recommended)
- Can be used with a 28mm Olfa (TM) or Fiskars (TM) rotary cutting wheel
- Tool Offset 0.800in (20.3mm)
- Minimum cut radius: dependent on software



Mill Foam Matt

Mill foam mat is ideal for wood, plastics or aluminum that is uneven or wavy. The purpose of this product is to assist in creating a vacuum seal between your spoilboard and the workpiece.

This product is made in Germany and can be used for a long period of time if you do not cut all the way through it. Please note the milling foam matt is sold in 60x12" width x length at a 3mm thickness.



Vortec Mini Cold Air Gun

Cold Air Guns use vortex tube technology and filtered compressed air to produce sub-freezing air as low as -30 deg F for numerous industrial spot cooling applications. With no moving parts to wear out, Cold Air Guns require no electricity at the target, just a compressed air source.

Cold Air Guns are most often used for cooling of metal parts such as your cutting tool when machining to prevent welding and tool wear.



Rotary Lathe 1 Piece

The one piece CNC router rotary lathe is extremely robust and heavy duty.

This rotary lathe is typically use with a masso controller to utilize the interpolating 4 axis feature. You can use a lathe to shape, engrave or mill wood, plastics and the like.



Two piece rotary lathe

The two piece CNC router rotary lathe is meant for a light for medium duty workload.

This rotary lathe is typically use with a masso controller to utilize the interpolating 4 axis feature. You can use a lathe to shape, engrave or mill wood, plastics and the like.



Hold Down Pressure Rollers

2 fully automated rollers on each side of the cutting spindle envelope, which engage the sheet material to maintain firm contact with the router's table. The hold down pressure rollers are ideal for holding down warped stock, multiple stacked material, or when machining narrow, low surface area parts. Each roller offers full, independent control over regulating holding pressure, It is important to note that the rollers are designed to supplement (not replace) the standard vacuum holding, creating optimal performance and maximum speed without moving parts.



Masso Controller

Our highly recommended robust CNC controller solution that is guaranteed to deliver a fun and productive experience. This controller is a stand alone solution and does not require a computer to run. The Masso controller features Wifi, interpolating axis, touch screen, dual screen positioning and ease of control.

Physical Features

Specification	MM	INCH
Machining Bed Width/Length	Up to 8x40 Feet	Up to 8x40 Feet
Z Travel	254 mm or 355 mm	10in or 14in
Gantry Height Clearance Standard	207 mm or 304 mm	8in or 12in
Gantry Height Clearance Option	N/A	N/A
Table Top	Multiple zone T-Slot/Vacuum Combo Table	Multiple zone T-Slot/Vacuum Combo Table
Location Pins	Included	Included
Centralized Lubrication	Included	Included
Leveling Castors	Included	Included

Specification	MM	INCH
Auto Tool Touch off-Mobile	Included	Included
Auto Tool Touch off-Fixed Position	Included	Included
Machine Footprint	N/A	N/A
Electrical Cabinet Size	762mm x 610mm x 1016mm	30in x 24in x 40in
Net Weight	N/A	N/A
Gross Weight	N/A	N/A

Power

Specification	MM	INCH
Voltage	220V Single phase 60Hz	220V Single phase 60Hz
Optional Voltage	208V three phase	208V three phase
Rated Power Requirement with vacuum pump	60 AMP	60 AMP
Power Requirement without vacuum pump	20 AMP	20 AMP

Controller

Specification	MM	INCH
Interface	MASSO G3 Touch	MASSO G3 Touch
Type	Industrial capacitive touch	Industrial capacitive touch
Screen Size	15 inch LED	15 inch LED
Touch Screen	Included	Included
Operating System	Dedicated	Dedicated
Inputs	USB	USB
MPG Handwheel	Included	Included
Wifi	Included	Included
Controller Upgrade Option	N/A	N/A

Standard Spindle

Specification	MM	INCH
Model	Generic	Generic
Power	4.5 KW / 6 HP	4.5 KW / 6 HP
Max Speed	18000 RPM	18000 RPM
Collet Size	ER 32 ISO 30	ER 32 ISO 30
Spindle Upgrades	6 KW / 8 HP, 9.0 KW / 12 HP (ER32 ISO 30)	6 KW / 8 HP, 9.0 KW / 12 HP (ER32 ISO 30)
Variable Frequency Drive	N/A	N/A
Cooling System	Air Cooled	Air Cooled
Tool Change Type	Automatic	Automatic
Tool Holder Positions	8	8

Drive System

Specification	MM	INCH
Motor	Leadshine 7 Series	Leadshine 7 Series
Type	Servo	Servo
Transmission	X and Y axis - Helical Rack and Pinion Drive/Z axis - TBI Ball Screw /PMI Linear Guide rails for all axes	X and Y axis - Helical Rack and Pinion Drive/Z axis - TBI Ball Screw /PMI Linear Guide rails for all axes

Speed

Specification	MM	INCH
Rapid Speed XY	1200 IPM	1200 IPM
Rapid Speed Z	400 IPM	400 IPM
Max Cutting Speed	1000 IPM	1000 IPM

Tool Calibrator

Specification	MM	INCH
Fixed Position	Included	Included
Portable	Included	Included

Accuracy

Specification	MM	INCH
Positioning	0.05 mm	0.0020 in
Repositioning	0.05 mm	0.0020 in