C1-23OT 2×3' Open Top CNC Router

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C1-23OT is an open top manual tool change CNC router. The machine has integrated drawers to house the control hardware that's typically in a separate control enclosure so offers a very compact neat footprint. This ""one-box" design also allows the machine to be moved on levelling castors by a single user. An optional steel safety enclosure, covering the whole working area of the machine, protects users and reduces airborne dust and machine noise.

Product Feature



Coolubricator JR™

Lubrication system's durable, 16 oz. (0.5 L) vented reservoir. The Coolubricator $JR^{\text{\tiny TM}}$ 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 maching 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 routerss 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.

- \bullet Fits on all Donek Tools Drag Knives except the 1/2" knife (D2 or D4 recommended)
- \bullet 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 wavey. 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 60×12 " width x length at a 3mm thickness.



Single Phase Vacuum Pump

Single phase vacuum pumps work for majority of our clients end use application.

They are more accessible when comparing to three phase powr as all residential and most commercial locations have 220v single phase (eg. Your oven, dryer run on this). The main benefit from the use of a single phase vacuum pump such as Blackbox vacuum pump system is the sufficient holding pressure for most applications which is measured in Hg sealed vacuum, which means millimeters of mercury. It is also important to note that this particular single phase solution has a much higher CFM rating, "cubic feet per minute" air flow.



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 utlize 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 utlize the interpolating 4 axis feature. You can use a lathe to shape, engrave or mill wood, plastics and the like.



Masso Controller

Our highly recommended robust CNC controller solution that is guaranteed to deliver a fun and productive experience. This controller is astand 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	915mm x 610mm x 205mm	36in x 24in x 8in
Z Travel	200mm	7.9in
Gantry Height Clearance Standard	203mm	8in
Gantry Height Clearance Option	12"	12"
Table Top	2 zone T-slot/Vacuum Table	2 zone T-slot/Vacuum Table
Location Pins	N/A	N/A
Centralized Lubrication	Included	Included
Leveleing Castors	Included	Included
Auto Tool Touch off-Mobile	Included	Included
Auto Tool Touch off-Fixed Position	Included	Included
Machine Footprint	1841mm x 1500mm x 1879.6mm	72in x 59in x 74in
Electrical Cabinet Size	Enclosed	Enclosed
Net Weight	950 lbs/430 kg	950 lbs/430 kg
Gross Weight	1250 lbs/577 kg	1250 lbs/577 kg

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	40 AMP	40 AMP
Power Requirement without vacuum pump	20 AMP	20 AMP

Controller

Specification	MM	INCH
Interface	MASSO G3 Touch	MASSO G3 Touch
Туре	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	2.2 KW / 3 HP	2.2 KW / 3 HP
Max Speed	18000 RPM	18000 RPM
Collet Size	ER 20 ISO 20	ER 20 ISO 20
Spindle Upgrades	N/A	N/A
Variable Frequency Drive	Fuling VFD - DBZ200	Fuling VFD - DBZ200
Cooling System	Air Cooled	Air Cooled
Tool Change Type	Manual	Manual
Tool Holder Positions	N/A	N/A

Drive System

Specification	MM	INCH
Motor	Leadshine 758S	Leadshine 758S
Туре	Hybrid Servo	Hybrid Servo
Transmission	X and Y axis - TBI Ball Screw/Z axis - TBI Ball Screw/PMI Linear Guide rails for all axes	X and Y axis - TBI Ball Screw/Z axis - TBI Ball Screw/PMI Linear Guide rails for all axes

Speed

Specification	MM	INCH
Rapid Speed XY	400 IPM	400 IPM
Rapid Speed Z	200 IPM	200 IPM
Max Cutting Speed	400 IPM	400 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