

D-11 miniTron

D-11 1x1' Desktop CNC Router



The D Series CNC routers are robustly engineered and built for light to medium duty production applications, prototyping, non ferrous metal engraving and cutting... at an impressive price point. With the D-11 no assembly required, simply plug and play. All of the desktop cnc routers are outfitted with a 3HP spindle, smart servo motors, quality electrical components, TBI ballscrews. You can expect a long service life with low maintenance from the D series.

Description

The spindle speeds can be used up to 24000 RPM and IPM feed rate up to 192IPM. This ensures the finishing on the material of your choice will be ideal, with minimized cutting time. Minimized cutting time allows you to complete jobs faster thus maximizing your output.

The D-11 desktop cnc router is equipped with an ER 20 collet spindle which will allow you use up ½ wide tool shanks. Yako stepper motors, linear rail guides, tool calibrator precision ballscrews on all axis making this machine a very robustly built compact machine that will deliver great cutting and engraving results.

Product Feature



3HP air cooled spindle

Definetly oversized for this little machine. We are proud to offer a very robust and reliable compact solution for this model.



Delta VFD

A staple namebrand in the mechatronics industry. We choose Delta VFD for the reliability of their spindle drive.



LED light

Light it up! If you need to... we have seen some dark garages :).



T-slot table

Durable extruded aluminum T-slot table to assist in your workholding requirements.



Yako stepper motors

A popular and reliable stepper motor solution that generates reproducible results.



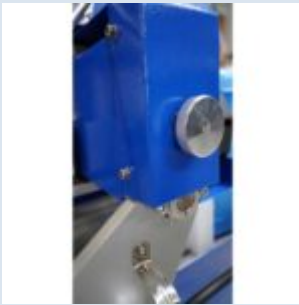
Detachable electrical cabinet

Plug and play or move away if you need to. The cabinet and machine are two separate items and can be unplugged for ease of mobility.



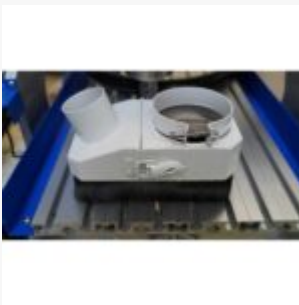
Tool calibrator

A manual tool calibrator is included to assist with fine tool calibration.



Manual fine adjustment

All three axes are outfitted with a fine tuning adjustment dial should you need to hone in on a location manually with care.



Easy clip dust boot

A dust boot that does not interfere with tool changes making it quicker to swap tools.



Coolubricator JR™ lets you lubricate machines throughout your shop

This portable lubricator moves from machine to machine without production delays. Hand-carry this versatile lubricator from one scheduled cutting or machining equipment to the next. A heavy-duty magnet lets you install it with minimal downtime.

This system produces a continuous output of precisely metered lubricants. Air-driven, positive-displacement pumps precisely meter each drop of lubricant at .03 cc/stroke. The 100-million cycle pulse generator allows for automatic, infinite repeat cycling of the metering pump. This ensures that a continuous, external film of lubricant is applied to the tool-work interface.

Lets operator easily control atomization of the spray by adjusting air, pulse per minute and liquid metering.

Adjusts output from 4-200 injection cycles per minute with 0.1 to 3.0 drops of lubricant per cycle. A durable, vented 16 oz. reservoir on the CNC mister holds more than 14,400 drops of lubricant.

Dispenses any highly refined lubricant including Unist's high-efficiency Coolube{rr} from the oil mist 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.



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

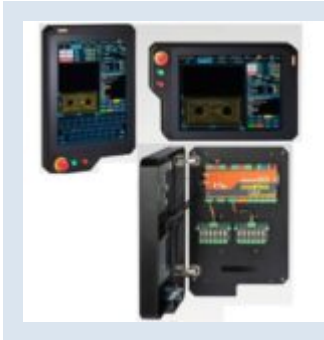


Two piece rotary lathe

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.



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	300mm x 400mm	12in x 16in
Z Travel	60mm	2.3622in
Gantry Height Clearance Standard	150mm	5.90 in
Gantry Height Clearance Option	N/A	N/A
Table Top	Aluminum Extruded T-Slot	Aluminum Extruded T-Slot
Location Pins	N/A	N/A
Centralized Lubrication	N/A	N/A
Leveling Castors	N/A	N/A
Auto Tool Touch off-Mobile	Included	Included
Auto Tool Touch off-Fixed Position	Yes/With Masso	Yes/With Masso
Machine Footprint	675 mm x 500 mm x 250 mm	26.5in x 19.7in x 9.85in
Electrical Cabinet Size	685mm x 585mm x 280mm	27in x 23in x 11in
Net Weight	72.5 kg	160 lbs
Gross Weight	100 kg	220 lbs

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	N/A	N/A
Power Requirement without vacuum pump	16 AMP	16 AMP

Controller

Specification	MM	INCH
Interface	NK105 G3	NK105 G3
Type	Handheld DSP	Handheld DSP
Screen Size	4 in/10.16cm	4 in/10.16cm
Touch Screen	No	No
Operating System	Dedicated	Dedicated
Inputs	USB	USB
MPG Handwheel	N/A	N/A
Wifi	Available	Available
Controller Upgrade Option	MASSO	MASSO

Standard Spindle

Specification	MM	INCH
Model	Generic	Generic
Power	2.2KW/3HP	2.2KW/3HP
Max Speed	24000 RPM	24000 RPM
Collet Size	ER 20 ISO 20	ER 20 ISO 20
Spindle Upgrades	N/A	N/A

Specification	MM	INCH
Variable Frequency Drive	Delta VFD B - 22E21VFD022E21A	Delta VFD B - 22E21VFD022E21A
Cooling System	Air Cooled	Air Cooled
Tool Change Type	Manual	Manual
Tool Holder Positions	N/A	N/A

Drive System

Specification	MM	INCH
Motor	ACT	ACT
Type	NEMA 23 Stepper Motor	NEMA 23 Stepper Motor
Transmission	X Y - TBI Ball Screw Drive/Z - TBI Ball Screw Drive/Round Linear Guide rails for all axes	X Y - TBI Ball Screw Drive/Z - TBI Ball Screw Drive/Round Linear Guide rails for all axes

Speed

Specification	MM	INCH
Rapid Speed XY	192 IPM	192 IPM
Rapid Speed Z	78 IPM	78 IPM
Max Cutting Speed	192 IPM	192 IPM

Tool Calibrator

Specification	MM	INCH
Fixed Position	Available	Available
Portable	Included	Included

Accuracy

Specification	MM	INCH
Positioning	0.2 mm	0.0079 in
Repositioning	0.05 mm	0.0020 in