#### **TechCNC-4060 CNC Router**



The CNC routers are designed with robust engineering, suitable for light to medium-duty production tasks, prototyping, as well as engraving and cutting in wood, plastic, and non-ferrous metals, all at a competitive price.

**Light Assembly Needed:** Some simple assembly is needed for the legs.

**Distinctive Design:** Unlike conventional models that utilize aluminum profiles, the CNC features a gantry made from billet aluminum. This integrated design for its two primary components guarantees exceptional strength and longevity.

**High-Quality Components:** Each CNC router comes with a 3HP spindle, Leadshine motors, Delta VFD, premium electrical components, TBI ballscrews, and a MY-CNC controller, which is produced in Canada with custom interface.

You can anticipate a long lifespan and minimal maintenance with the our CNC machine.

#### **Description**

The spindle can reach speed of up to 24,000 RPM, with a feed rate reaching 250 IPM. This setup provides an excellent finish on your chosen material while reducing cutting time. Less cutting time enables quicker job completion, thereby increasing your output.

The TechCNC router features an ER20 collet spindle, accommodating tool shanks up to ½ inch wide. It is equipped with **Leadshine** stepper motors, **YAKO** stepper drivers, **Hiwin** linear rail guides, a fixed tool calibrator, a **3D touch** probe, **MQL** system and precision **TBI** ballscrews across all axes. This design makes the TechCNC a well-built and compact machine that produces outstanding cutting and engraving results.

#### **Product Feature**



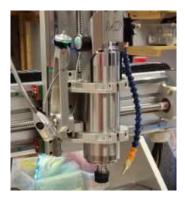
My CNC Controller is a multi-tasking and multi-platform CNC Control Software that is installed on Linux, and Embedded Linux Operating systems. MyCNC runs on Desktop PC. MyCNC features a simultaneous 4-axes motion control with S-curve speed profile for smooth machine motion, G-code with Macro Language extension support, built-in PLC controllers and a built-in PLC Builder IDE for flexible peripherals control. MyCNC supports special-purpose G/M codes for a wide range of applications also WiFi. Large G-code files of up to 1GB are also supported.



My CNC Custom interface. Our system features a user-friendly and easy-to-understand interface, designed to make your work simple and efficient. Whether you're a beginner or an expert, the intuitive layout ensures a smooth experience, helping you focus on the task at hand.



**The portal** is crafted using robust aluminum profiles, which are designed for strength and durability. These profiles are further enhanced with an anodized coating to provide additional protection and a sleek, professional appearance.



Water coolant spindle. We take pride in presenting a highly robust and reliable compact solution for this model. It features an ER20 collet size and is capable of reaching an impressive speed of 24,000 RPM.



**Delta VFD**. The VFD-EL series is multiple function new generation micro type AC drive. It has built in EMI filter, RFI switch, easy DC bus sharing for side-by-side installation, high precision current detection, overload protection, and a built In keypad



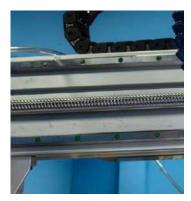
**LED Light Bar.** Brighten up your workspace with the LED light bar, ideal for dimly lit garages or any space requiring additional illumination.



**YAKO stepper drivers.** Ensure precise and reliable motion control for your CNC router, delivering smooth and accurate functionality.



**Fixed Tool Calibrator**. Achieve precise and consistent calibration for tools with the fixed tool calibrator, thoughtfully designed for accuracy and convenience.



**TBI Ballscrew.** High-quality ballscrews on all axes to ensure precision and accuracy.

**Hiwin Linear Guides.** High-quality Hiwin linear guides on all axes ensure smooth, precise, and reliable motion for optimal performance and accuracy.



Minimum Quantity Lubrication (MQL) system for CNC machines is a method of delivering a small, controlled amount of lubricant directly to the cutting tool and workpiece interface during machining operations. This system minimizes the use of coolant by replacing traditional flood cooling with a fine mist or aerosol of lubricant, ensuring efficient lubrication and cooling. There are several benefits such as applies lubrication exactly where it is needed, uses minimal lubricant, significantly reducing consumption and disposal requirements, decreases heat and friction, improving cutting tool performance and durability, Reduces mist and coolant splatter

### **Physical Features**

Specification	MM	Inch
Machining Bed Width/Length	400 x 600	15.7 x 23.6
Z Travel	150	6
Gantry Height Clearance Standard	130	5.1
Table Top	T-slot/vacuum table (optional)	T-slot/vacuum table (optional)
Auto Tool Touch off-Fixed Position	Included/With My CNC interface	Included/With My CNC interface
Machine Footprint	970 x 660 x 800	38.2 x 26 x 31.5
Electrical Cabinet Size	530 x 410 x 185	20.9 x 16.2 x 7.3
Net Weight	120 kg	264 lbs
Voltage	220V Single phase 60Hz/110V	220V Single phase 60Hz/110V with
	with transformer.	transformer.
Optional Voltage	208V three phase	208V three phase
Power Requirement	16 AMP	16 AMP

#### **Controller**

Specification	MM	Inch
Interface	MY CNC (custom)	MY CNC (custom)
Туре	Touch Screen	Touch Screen
Screen Size	15 in/38.1 cm	15 in/38.1 cm
Touch Screen	Yes	Yes
Operating System	Ubuntu 23.04	Ubuntu 23.04
Inputs	USB 3.0	USB 3.0
MPG Handwheel	Optional	Optional
Wifi File Transfer	Included	Included

### **Standard Spindle**

Specification	MM	Inch
Model	Hanqi 2.2 KW/3KW	Hanqi 2.2 KW/3KW

Max Speed	24000 RPM	24000 RPM
Collet Size	ER 20 ISO 20	ER 20 ISO 20
Variable Frequency Drive	Delta VFD	Delta VFD
Cooling System	Water coolant	Water coolant
Tool Change Type	Manual/ATC Optional	Manual/ATC Optional
Tool Holder Positions	Back on main frame (optional)	Back on main frame (optional)

# **Drive System**

Specification	MM	Inch
Stepper driver	YAKO	YAKO
Motor driver	Leadshine NEMA 57CM23-3A	Leadshine NEMA 57CM23-3A
Transmission	X and Y axis - TBI Ball Scew	X and Y axis - TBI Ball Scew Drive/Z
	Drive/Z axis - TBI Ball Screw	axis - TBI Ball Screw Drive/Hiwin
	Drive/Hiwin Linear Guid rails for	Linear Guid rails for all axes
	all axes	

# Speed

Specification	MM	Inch
Rapid Speed XY	6000 mm/min	250 IPM
Rapid Speed Z	4000 mm/min	150 IPM
Max Cutting Speed	6000 mm/min	250 IPM

## Accuracy

Specification	MM	Inch
Positioning	0.1	0.0039
Repositioning	0.05	0.0019