

Upto 75%  
Made in India Parts

**PCB  
Drill / Route  
CNC Machine**



**60,000 RPM**



**High Speed Spindle**

Spindles from Indus Spindles, India rated for high speed operations - Process PCB Boards all day long.



**Innovative Materials**

World's first Composite Superstructure CNC with Lifetime Warranty on the material. No Sagging, hogging, rust or corrosion



**Manual Tool Change**

High Speed, manual tool change spindle allows you to run batch operations and reduced your overall cost of ownership

**Call / WhatsApp /  
Telegram**

**+91 90190 54837**



**Our Location**

Bangalore,  
Karnataka  
India



# Technical Specifications

Machine Type	3 Axis
Working Area X x Y	500 x 400 MM
Z Axis Travel	100 MM (Customizable)
Footprint - Machine	900 x 900 MM
Footprint - Control Box	610 x 450 MM
Chassis	Carbon Fiber / Fiber Glass Superstructure - Mounted on Mild Steel Base - Open Type
Controller Type	Arduino Controller - Machine can be operated through a USB connection with any Windows Laptop/Desktop with Windows 10 or 11. PC Optimization Settings and the following Open source Software will be provided as links to download and install. 1 - Converts Excellon & Gerber to GCODE. 2 - Runs the machine as per the GCODE
Max Travel Speed (X, Y & Z)	5 Meters / Minute
Spindle - Country of Origin	China
Spindle - Power	1.5 KW / 2 HP
Spindle - MAX RPM	60,000
Spindle - Tool Change type	MTC - Manual Tool Change
Spindle - Collet	3.175 MM - Push Button Tool Change
Spindle Maximum Run-out (Certified)	<10 Microns
Spindle Type	Water Cooled - Chiller and Recirculation system
Dill Holes Per Minute - Stepper	Between 30-40 - Depends on Spindle retract height & Movement between each hole.
Dill Holes Per Minute - Servo - Upgrade Required	Between 80-100 - Depends on spindle retract height and movement between each hole.
Applications	High power PCB, Analog PCB, Digital PCB
Drive - All Axis	Hiwin/THK/Other Rolled Ball Screw - 16 MM
Guides - All Axis	Hiwin/THK/Other 20 MM Linear Guide & Block

Drive Motors	NEMA 34 - Stepper Motor (Made in Japan)
Certified Repeat Positioning Accuracy	<50 Microns
Tested Repeat Positioning Accuracy	Between 15-25 Microns / 0.015 to 0.025 MM
Spindle Control	Automatic VFD Control through GCODE/MCODE
Stock / Material Fixturing Support	Aluminium Extruded T Slot Stock Mounting Profiles
Movement	Simultaneous 3 Axis Motion – Full Interpolation
Machine Movement Type	Moving Bed / Fixed Gantry System
Ship Configuration	Ships Fully Assembled with selected accessories
Warranty	1 Year Warranty – All Parts Covered
Extended Warranty	Optional - Up to 10 Additional Years. Available in increments of 1/2/3/4/5 Years
Maintenance Contracts	Optional - Up to 10 Additional Years. Available in increments of 1/2/3/4/5 Years
Superstructure Warranty	Lifetime Warranty on all composite parts installed on the machines. Warranty applicable under normal operating conditions.
Certification	ISO 9001 & CE Certified
CAM Support	Fully compliant with GCODE / MCODE (GRBL) - Solidworks, Catia, Fusion etc.
Tool Sensor	Non-Touch Bit Height Adjustment Sensor
Materials Supported	PCB (all types)
Calibrated By	All of our measurements are made with Mitutoyo calibrated instruments
Power Input	Single Phase Input – 220V / 110V
Current Requirement	16 Amp Plug Point Required

Bellow Implementation	Optional (Reduces Working Area by 12-15%)
Minimum Track Width	0.100 MM
Number of Layers Supported	Single / Dual Layer PCB
File Formats Supported	Excellon / GERBER / GCODE
Control PC	Optional - Laptop or Desktop with Monitor, Keyboard & Mouse - Original Windows 10/11
Software Provided	FlatCAM (Convert Excellon/Gerber to GCODE) & Gsender/UGS (Machine Control)
Spindle Cooling System	Water Cooled Spindle with Chiller and Recirculation System
Top Cover / Enclosure	Optional



# ***PCBMaker 5040 60K***

## ***3 AXIS PCB CNC***

# Highlights



HIWIN / THK  
16MM BALL SCREW  
20 MM LINEAR GUIDES

X & Y AXES  
NEMA 24 STEPPERS  
MADE IN INDIA

60,000 RPM SPINDLE

SINGLE PHASE INPUT  
REQUIRED



MACHINE CONTROL  
BOX

COMPONENTS INCLUDE -  
DRIVERS, POWER SUPPLY, VFD,  
SWITCHES, FAN, ETC.

CONTACTLESS  
TOOL HEIGHT  
SENSOR

EXTRUDED  
ALUMINIUM  
TSLOT PROFILES

PIONEERING COMPOSITE  
SUPERSTRUCTURE WITH  
LIFETIME WARRANTY

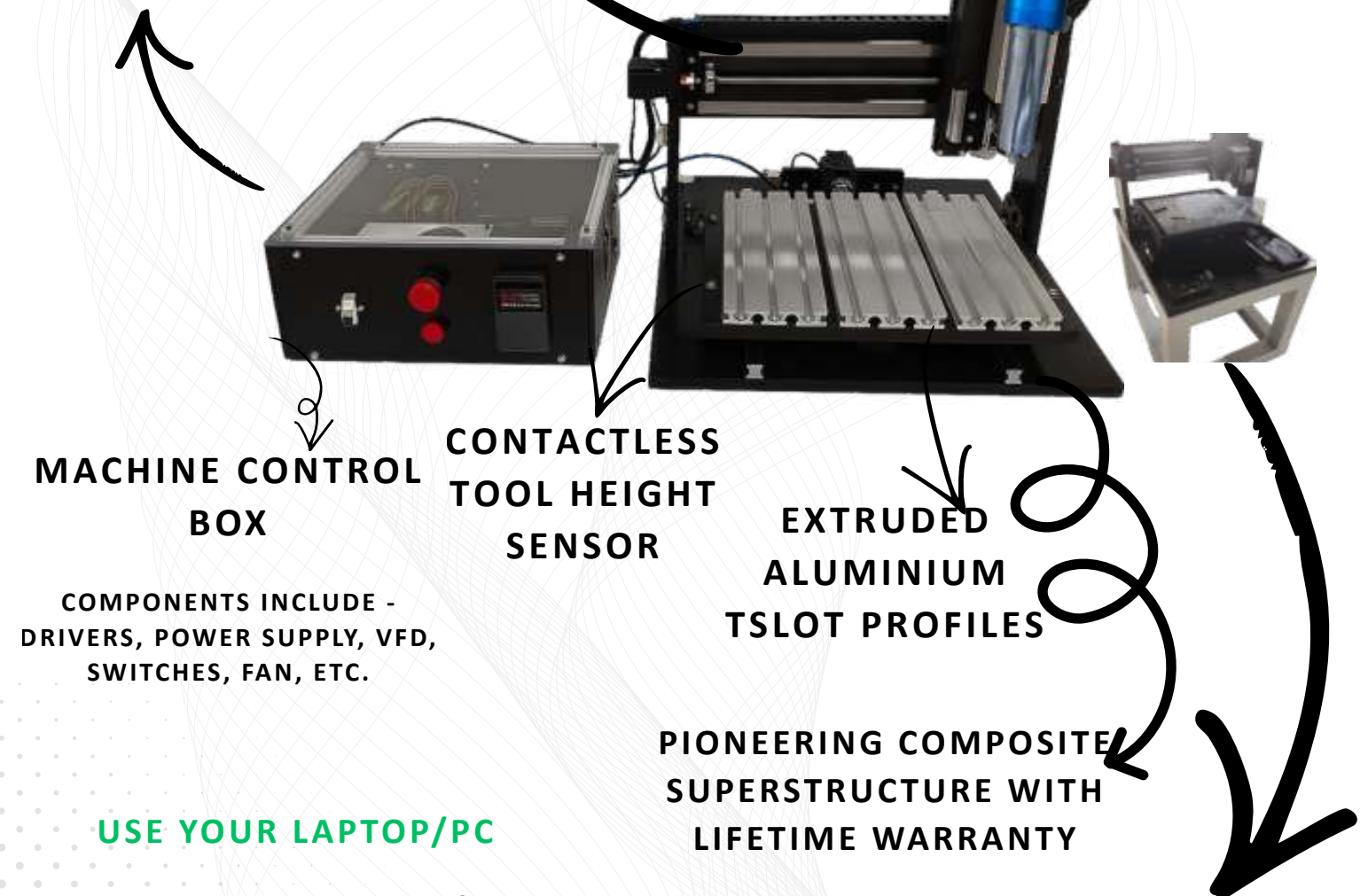
USE YOUR LAPTOP/PC

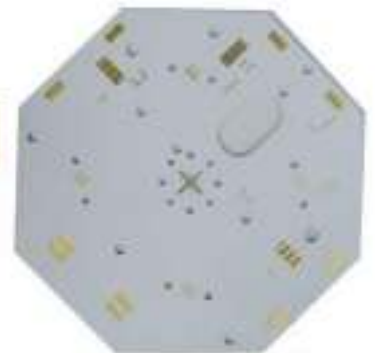
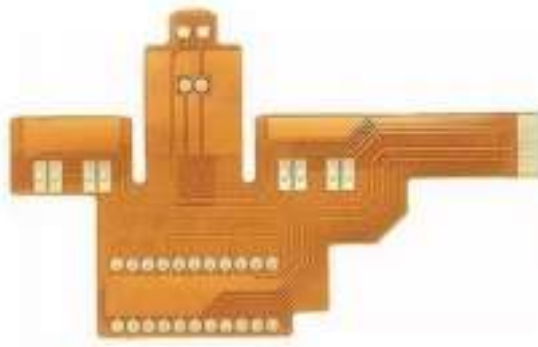
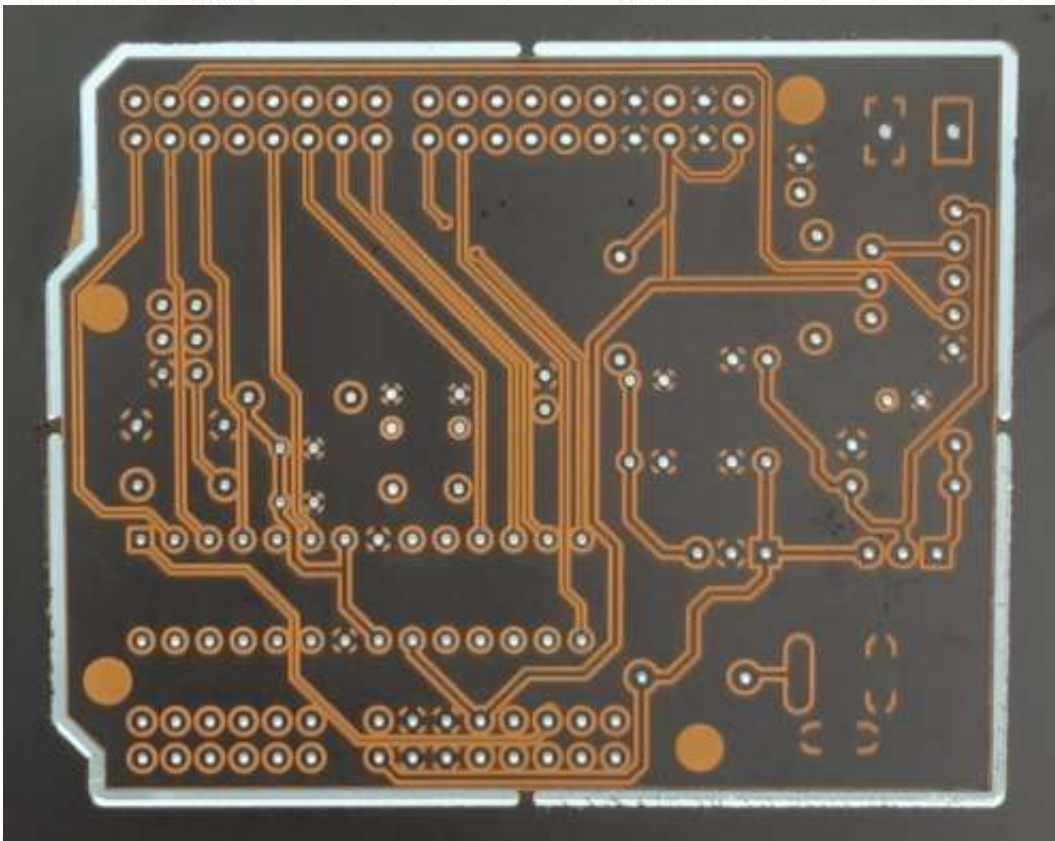
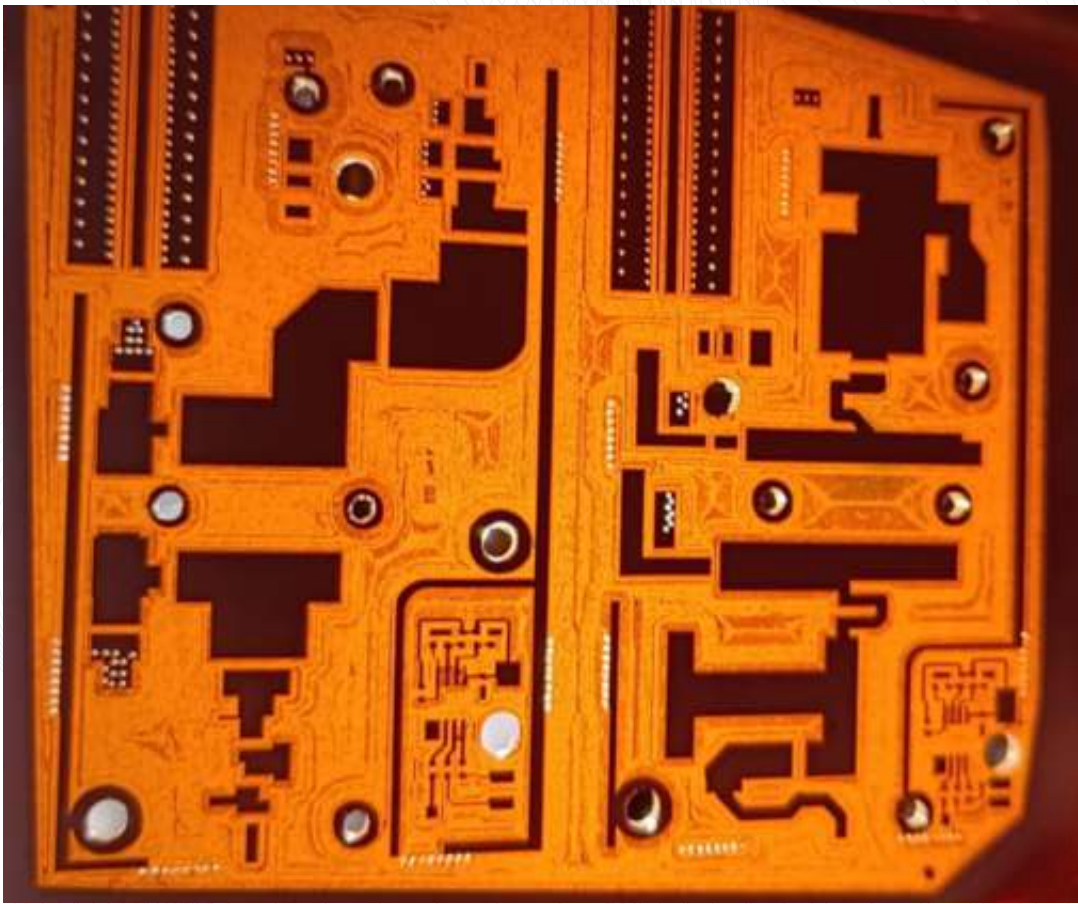
REQUIRES A USB 2.0 PORT &  
OPEN SOURCE SOFTWARES

OTHER CONTROLLERS ALSO AVAILABLE

BUILT ON A TATA STEEL  
MILD STEEL BED.  
INCLUDES A CHILLER FOR  
SPINDLE COOLING

OTHER CONTROLLER OPTIONS ALSO AVAILABLE





# ACCESSORIES INCLUDED WITH THE MACHINE

## Cutting Bits

### PCB Drilling Bits - Collection

- Drill Dia 0.3MM to 1.2 MM
- Shaft Dia - 3.175 MM

### PCB Engraving Bits - 2 Pcs

- 0.1 MM Tip
- Shaft Dia - 3.175 MM
- Angle - 30 Degrees

### Endmill - Routing Operations - 1 Pcs

- 2 MM Dia Flat End Corn EndMill

## Others

-- T Nuts (For Securing the Material) - 10 Pcs

-- Spanner Compatible with spindle Nut

-- Connector Cable - 1 Piece

-- Stock Mounting Bolts & Nuts - 8 Pcs

-- Composite Stock Holders - 4 Pcs

- Machine is shipped fully built in a plug & play condition
- Installation is not required - If requested additional costs will apply
- If shipped with a control pc, it is shipped fully configured in plug & play condition

# SERVOS



Made in USA | Comprehensive 3 Years Warranty

# ENCLOSURES



# CLAMPING



**OPTIONS,  
UPGRADES &  
ACCESSORIES**

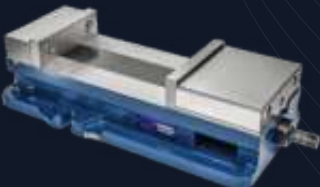
# OTHER ACCESSORIES



Probes

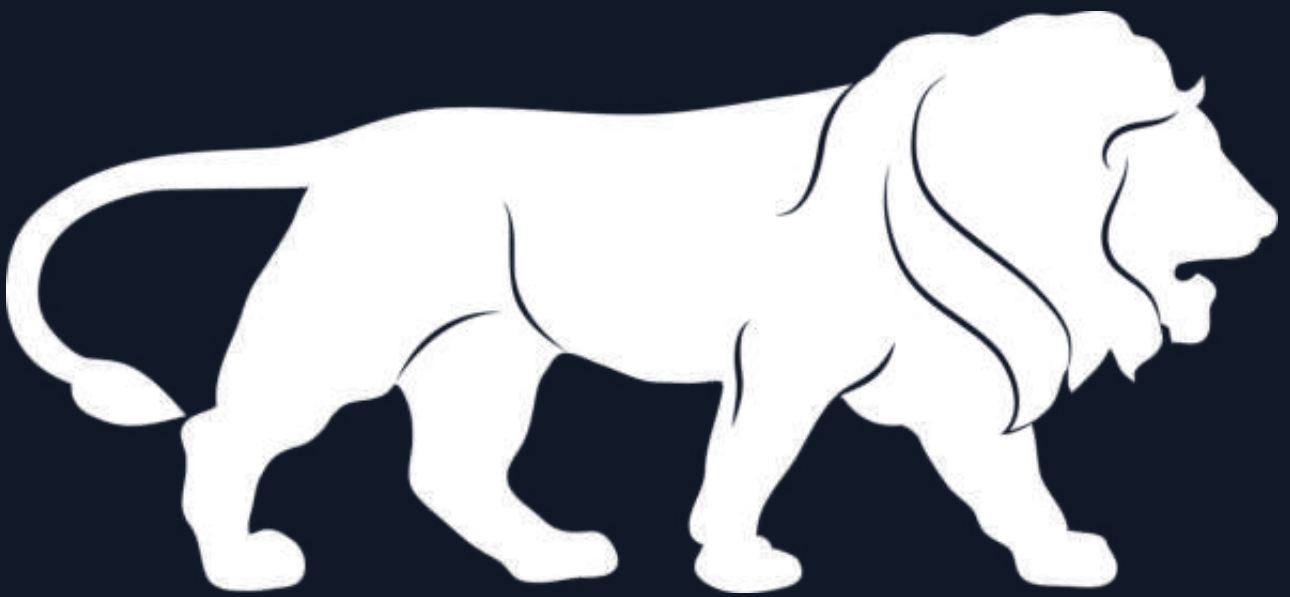


Flood Cooling



Bellows

PROUDLY  
MADE IN INDIA



ENGINEER BEAUTIFUL