

LET'S START YOUR PRODUCT TO BE REALIZE.

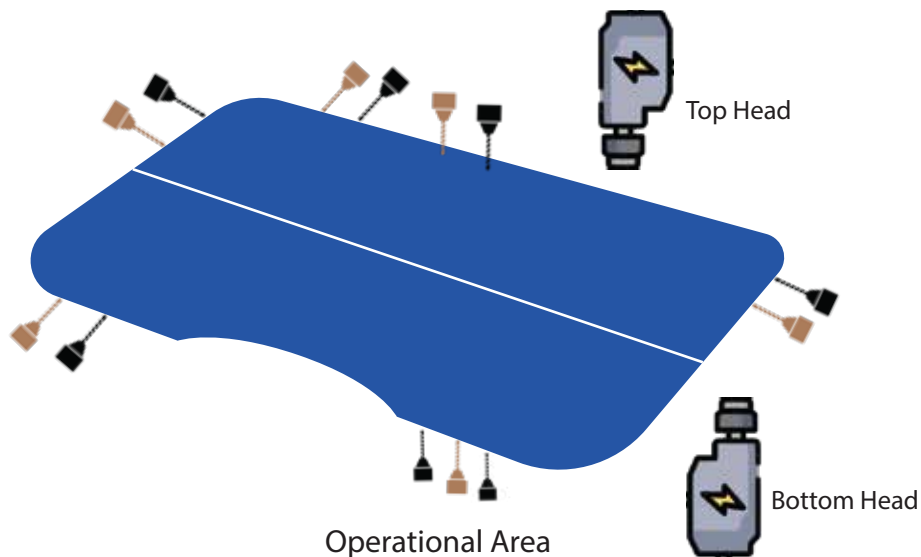
BEST AUTOMATIC SOLUTION FOR DRILLING

U
612K



**EXCELLENCE DRILLING WITH AN
AUTOMATION OBJECTIVE SOLUTION.**

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Enhanced processing capabilities include six-sided drilling, double-sided grooving, and milling with intelligent optimization of the processing path in the latest upgrade.

Salient Features

- ▶ Precise outer profiling of all four workpiece edges allows the complete formatting of the panels.
- ▶ The result are perfect formatted abd work pieces wih finished joined and profiled edges.
- ▶ 612K is implemented for mass production with accuracy.
- ▶ Easy on material and time saving for boring operation with affordable price.
- ▶ Unique flexibility and performance
- ▶ Short cycling times and extreme precision.
- ▶ Heavy duty structure for maximum machining quality.
- ▶ Use the capacity of a full -fladged CNC machining center that takes minimum floor space.
- ▶ User - Friendly & high productivity.

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Technical Specification

Model	U - 612K
Workpiece Length	80-3050 mm
Workpiece Width	30-1200 mm
Workpiece Thickness	10-60 mm
X - axis moving speed	150 m/min
Y - axis moving speed	100 m/min
Z - axis moving speed	45 m/min
Upper Drill Unit: Vertical Drilling	12 Nos
Upper Drill Unit: horizontal Drilling	8 Nos
Bottom Drill Unit	9 Nos
Drill Group Power	2 x 2.2 kw
Milling Spindle Speed	18000 r/min
Milling Spindle Power	2 x 3.5 kw
Total Power	17 kw
Working Pressure	6 - 8 bars
Approx Machine Weight	3500 kg

Machine Specification

Special Features

- ▶ The multi-axis CNC system is equipped with an advanced program specifically designed for optimal performance. During the processing of the workpiece, the feeding and drilling mechanisms are seamlessly synchronized to work together, A single operation can accomplish the drilling and milling of all the holes on the six sides and the double-sided slots, ensuring fast and efficient completion.
- ▶ Various cutters and drills can be used in conjunction with shaped processing slotting, milling, and cutting techniques to punch grooves, milling, and cut different holes and slots in the panel.
- ▶ This versatile method allows for 360-degree milling capabilities.
- ▶ The uppermost part operated using distinct sizes of drills to execute various types of holes, along with a single cutter for slotting.
- ▶ All the instruments installed are under complete PLC control.
- ▶ The high frequency spindle is equipped to perform various operations such as grooving, cutting, and area clearance.

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Machine Specification

- Each motion of a functioning operates on a ball screw drive.
- Seven axes are utilized for precise motion as opposed to the standard.
- The typical components consist of: **X** axis for vertical rotation. **Y** axis for horizontal rotation. **Z** axis for depth of the part.



- The intelligent self-check feature ensures that the panel's length is automatically verified, thereby preventing any errors that may arise from borrowing the panel or the processing unit.
- The sensor has the ability to detect the panel's dimensions in order to prevent any misguidance and ensure quality.



- Online access allows for the convenient and flexible servicing of machines,
- The online platform simplifies the setup procedure and ensures it is efficient.



- you can freely choose a variety of ways such as Front loading, back unloading.
- Rear unloading features can be incorporated into the Function for an additional fee.



- Advanced software integration technology.
- It is possible to establish a connection with other devices to facilitate online digital production.

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Processing Types



Groovin On top and
Bottom side



Different types of
cuts on edges



Layer Hole



Hinge Hole



Different types of
cuts on edges



Through Slot

Processing Principles

- ▶ The processing of nearby processing: automatically use the tool head closest to the hole in the magazine or processing, reducing the waiting time for tool change.
- ▶ Double Sided Alternate grooving at the same time; Synchronous alternate grooving on the upper and lower sides greatly improves production efficiency.

Humanized Function

- ▶ No need reset the origin: The origin position adopts absolute memory positioning, which reduces the repeated return of the machine due to stop and saves waiting time.
- ▶ Processing historical data storage: the system can store historical processing data without resetting, simpler operation and higher efficiency.
- ▶ Hole position continuous processing: continuous scanning, continuous Processing, no need to wait, higher efficiency.

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Machine Specification



Double Gripper

- ▶ The double gripping hands automatically clamp the Panel for feeding into the machine, enhancing drilling accuracy by automatically adjusting the side positioning. Additionally, the system can detect the width of the plate to prevent any errors during processing.



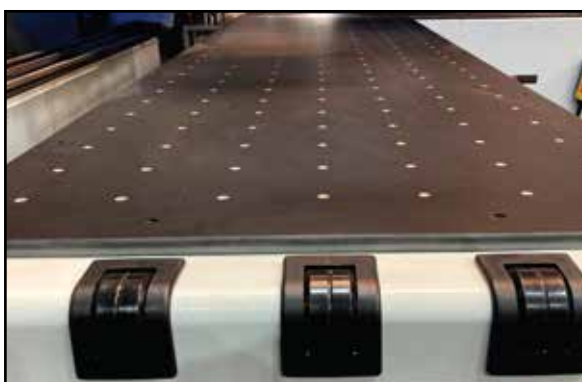
Servo Motor

- ▶ Capable of precise positioning at a high level of accuracy
- ▶ Servo provides optimal gripper control.
- ▶ Gripping speed of motor is reach up to 80m/min (Approx)
- ▶ It has effectively served the purpose of delivering swift and accurate positioning.
- ▶ All the instruments installed are under complete PLC control.



Controller Display

- ▶ The Machine comes with complete PLC-controlled capabilities.
- ▶ control system incorporates a user-friendly Windows-based interface, allowing for seamless interaction between man and machine. With the ability to import drilling data using CAD software, the system ensures efficient and convenient operations.
- ▶ It seamlessly integrates with the user's production design management software, eliminating the need for manual input of drilling hole data. By utilizing scan codes, the system enables fast processing, automatically loading processing graphics files and generating processing programs.



Air Floatation Table

- ▶ A robust and durable table facilitates the automatic feeding of panels for front Loading.
- ▶ It functioned the easy movement of the panel through automatic lifting.
- ▶ Process the material without any scratches and perform seamless task.
- ▶ Capable of efficiently handling large and lengthy panels due to its significant strength.
- ▶ Fitted with a roller for effortless lifting of various types of panels.

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Machine Specification



Precision linear guide Rail

- ▶ Crafted to be resistant to dust and free from blockages
- ▶ The rail has been extended to accommodate extensive usage.



Optical fiber sensor

- ▶ It's used for precise detection and placement of panel
- ▶ The sensor is capable of detecting the dimensions of the panel.
- ▶ It ensures that the panel and the drill bag remain properly aligned.
- ▶ Equipped with a function that effectively prevents Accidents.



Barcode Scanner

- ▶ Equipped with Barcode scanner for automatic calling of particular program for particular panel
- ▶ Will reduce the error while operating with quantity production
- ▶ Can be integrate to any software.



WOODWORKING MACHINERY
MANUFACTURING

We would love to
hear from you!

CONTACT US

HEADQUARTER

3/c. shiv estate, opp. radhika society,
near baroda expressway, NH-8,
Ahmedabad - 382 445

CONTACT NUMBER

+91-99255 19009

+91-96620 29892