

CNC MACHINE HB621J

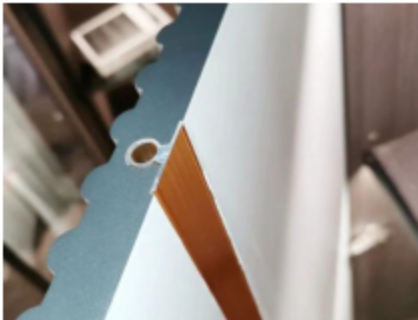


CNC BORING MACHINE(six-sided) HB621JH6X



(Pic for reference only)

For Process

		
Light cable groove and LED strip groove process	Straightener slot process	Lamello (connector) slot process
		
Invisible handle groove process	Concealed hinge groove process(optional K)	Top-and-bottom hinge groove process(optional K)

Technical data

Basic parameters	Size	5900x2960x2500mm
	Weight	2900kg
	Total power	27.8kw
	Dust extraction port	Up:φ200mm*2 Down:φ150mm
Milling spindle	Spindle motor power	Up:6kw*1ATC Down:6kw*2
	Spindle rotation speed	18000rpm
Max. positioning speed	X axis	130m/min
	Y axis	100m/min
	Z axis	30m/min
	A axis	60m/min
	U axis	130m/min
	V axis	100m/min
	W axis	30m/min
Boring unit	Up vertical drilling head	10*2
	Up horizontal drilling head	X:(2+2)x2 Y:2x2
	Down vertical drilling head	9
Panel size	Min. width	30mm
	Max. width	1200mm
	Min. length	70mm
	Max. length	3300mm
	Min. thickness	9mm
	Max. thickness	55mm
Dual-Drill Simultaneous Machining	Vertical drill min. processing size	64mm
	Horizontal drill X-direction min. processing size	128mm
	Horizontal drill Y-direction min. processing size	188mm

Technical info

- Six-tool linear automatic tool-changing spindle, enables machining processes including profiling, wiring channels, LED strip grooves, top/bottom hinge mortises, and Lamello joints.
- The drill head is arranged to a compact and reasonable structure. The wooden plug holes and glue plug holes in any position of the plate can use two drills at the same time, which is better than the L-type common structure.
- In middle of the upper drilling head, there is an additional dust port to solve the dust problem on the plate surface.
- The feeding gripper adopts a unique design. With hole in the middle, so the small plate in the gripper position can be punched nearby. Single clip hand with four positioning column, so processing small plate is more stable.
- The booster pump only supplies gas to the drill head independently, so the hole depth is more stable and guaranteed.
- Intelligent up positioning device. When there is arc-shaped, fan-shaped plate, positioning will not be affected. Rectangular plate can achieve the intelligent center function of diagonal line deviation.
- Vertical drilling with four drill bits in a square, it can simultaneously drill adjacent large and small hole process.
- Super large pressure-stabilized gas storage tank. It makes the working pressure stabler.
- Intelligent side aligner system.
- It adopts precision gear rack transmission. The rack precision is DIN6, and it is ground by a precision grinder. High precision, no special refueling and maintenance are required.
- Slotting up and down simultaneously.
- Two panels mirrored processing.
- Supporting DXF file from CAD software.
- Panel size can be read automatically. Docking order production software, displaying the information of the thickness of the four-sided edges, are convenient for placing panel.
- Supporting simulation function, it can check the processing action in advance to avoid wrong processing.
- The processed and waiting-to-processing files are displayed separately, which is convenient to check whether the processing is missing.

Description

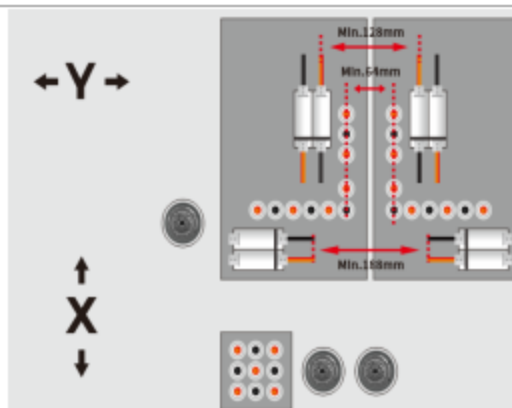
Drill bank layout

Upper unit: 2 sets of drill head, 1 set of ATC spindle

Down unit: 1 set of drill head, 2 sets of milling cutter

Upper drill bank: (10 vertical bits, 6 horizontal bits)*2

Down drill bank: 9 vertical bits



Six tool magazine



Two bottom spindles

Two spindles down for different milling cutters.

Avoid tool changing for different milling process.



Double linkage gripper

Two grippers are controlled by servo and the positioning is accurate. When the gripper moves quickly, the lower gripper plate sinks to avoid touching the panel.

The gripper has blowing function, which can blow off the dust on the gripper and avoid pinching the panel.



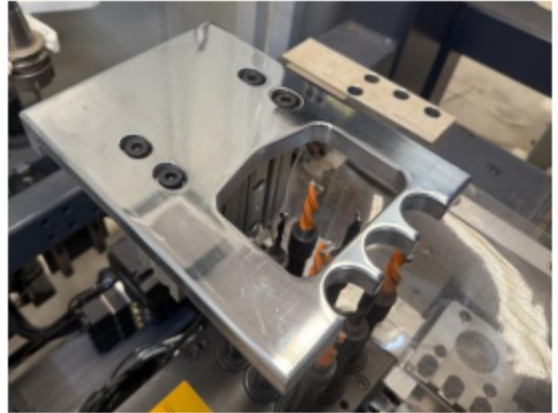
Intelligent upper positioning device+Intelligent side support

Equipped with diagonal centering positioning, the positioning of circular arc workpieces and banana-shaped workpieces is not affected. Automatically measures panel width and corrects placement errors in a timely manner.



Independent floating support

Floating support ensures even pressure, improving machining accuracy.



Stabilizing Components

Pressure-Stabilizing Air Tank: Ensures consistent working pressure.



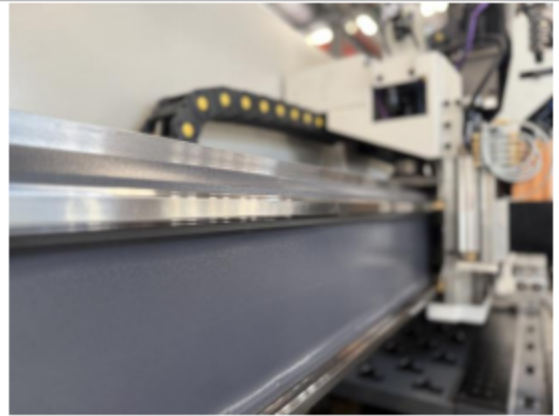
Compressed Air Booster

Maintains stable pressure for precise drilling depth.



High-precision steel dust-proof guide rail

German ROST brand;
Dual metal dust-proof scraper slides, steel belt dust-proof high-precision guide rail; prevents dust accumulation in screw holes covered by plastic caps, thereby extending the service life of the slides.



High precision rack

High-hardness alloy steel, high load capacity, smooth running, and low noise.



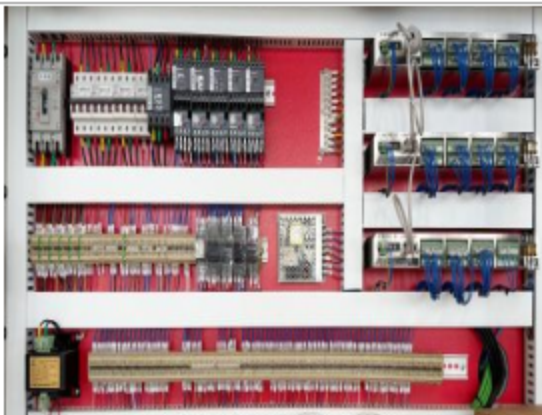
Automatic lubrication system

Adjustable automatic lubrication, it extends the service life of equipment.



Electric control system

The low-voltage electrical equipment is selected from famous brand, which has strong anti-interference ability and ensures smoother and stabler operation of the equipment.

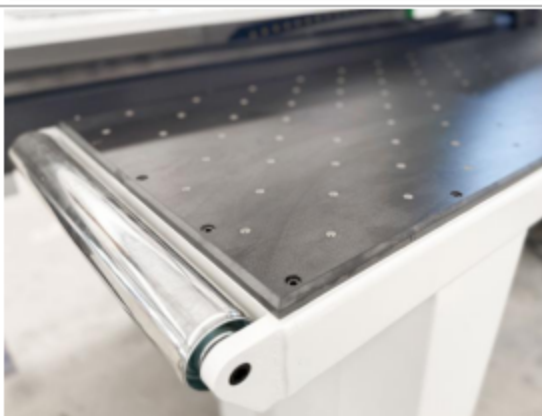


Servo control system

High-performance bus servo drive, with absolute value motor, it has strong anti-interference ability. There is no need to go back to base point, which avoids the precision error caused by interference of base point switch.



Air floating loading table

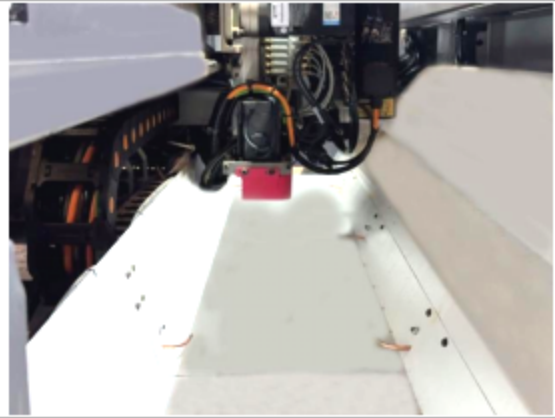


Scan to process



Dust collection channel

Equipped with a blowing function, it quickly collects wood shavings, dust, and other debris from the bottom of the equipment and directs them to the vacuum inlet.



Motorized unloading table

