CNC 6-Side Drilling Machine ND612DTS

(Top: 2 drilling block+grooving saw blade+5.5kw ATC6 main spindle)
Nanxing Machinery
Guangdong China

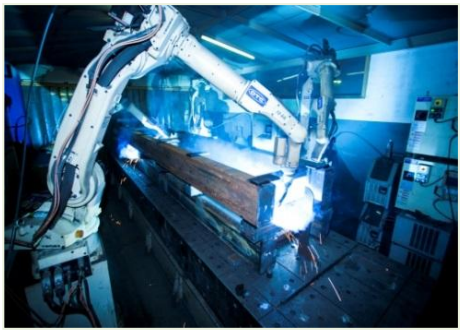
Invisible hardware

Description

- Nanxing has invested hundreds of millions for taking in 500 world best CNC and robot machines for metal works, making its production ranked No. 1 in the woodworking machinery industry. SOP professional assemble lines.
- Powerful SYNTECH CNC CONTROL SYSTEM equipped with specialist software to run for high process efficiency and easy operation, the fastest in the field.
- 2 top drilling blocks with drills Ver. 19×2 plus Horz. X direction 3×4 &Y 2×4，1 bottom drilling block with ver. 9. . Top and bottom have 5.5kw ATC spindle router of 6-slot. And independent saw
- Adapt 7 kinds of file format and common furniture design software.
- Customer Reference: **30+** countries; **2000+** machines

Details

1. Machine body

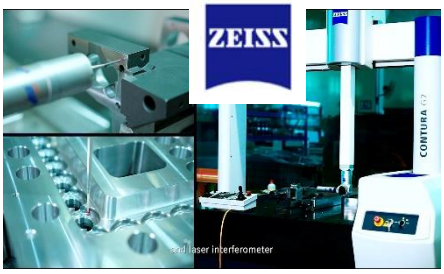


- Heavy duty machine body is welded with square tube and laser-cut steel plates, then through processing of advanced CNC machine for metal work, hence enhance the stability and strength, reduce the vibration in the process; Gantry and machine body have been designed as one organic structure of high rigidity; Machine is **very heavy duty**;

- Frame body pass the **heat treatment** and **vibration aging treatment** to guarantees the whole service life without deforming.

- After **sandblasting** and **painting**, the top-grade CNC metal processing machines are used to process the body and components to make sure perfect quality and detail.

2. Quality control



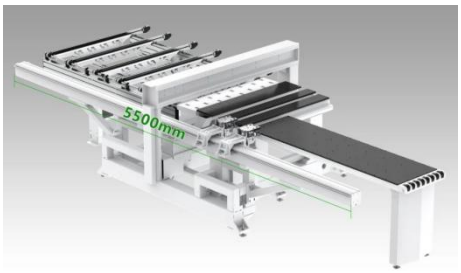
- Advanced measuring equipment and strict QC system also help to make sure the final machine we offer to our customers are of high quality;

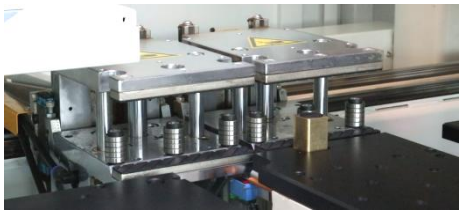
- All the machines are delivered with Quality Certificate signed by QC specialist.

3. Professional assembly line

- Assembly is final and important step for better machine performance. Nanxing's professional assembly lines from machine body to small electrical components were by experienced technicians that guarantee machine standardization and performance.

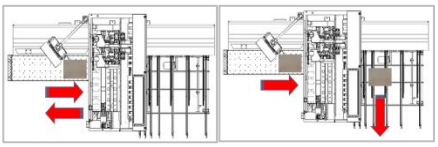
4. Long clamp beam & fast clamps

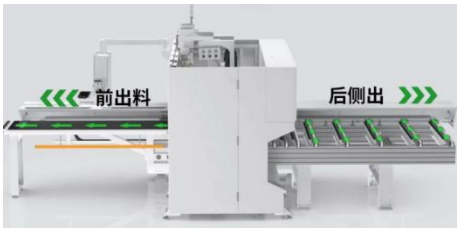




- The design of 5.5m longer high-rigidity clamp beam on two sides ensure stable and fast clamp moving with least vibration, and reduces the frequency of switching clamp during processing, thus higher efficiency.
- The movement of clamps is controlled by servo and along inclined rack&pinion for accuracy in process;
- Special air jet to remove the dust before clamping the board.

5. Feed-in&out table





- Can choose feed mode feed-in & out in front side or feed-in in front and feed-out in back.
- **Infeed table:** Floating table makes boards smoothly moving on table, avoid scratches on panel surface. Size 2000*615mm; Air blower: 1.1kw
- **Feed out table:** by crosswise belt table with brush at size of 2400mm*1630mm;The hairbrush and conveyor belt can offer very good protection to the surface.

6. Positioning

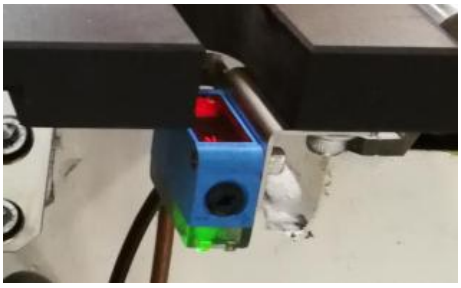
Side aligner

- Dual clampers cooperate well with auto side alignment to guarantee precision and stability in panel processing.

Support /press plates

- Top and bottom drilling blocks and main spindles have support plate to offer the board a support force when the other side is being processed to ensure accuracy in process.

7. Board length, width detector



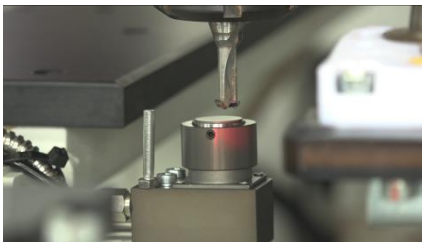
- Length, width, thickness have detector to ensure operator puts correct board.

8. 6 slots tool changer

- 6 slots Tool Magazine
- Tool Holder: ISO30 | Collet Specification: ER32
- Crescent Clamp Tool: (12.7*9.8*7*20). Front (top) Lamello.
- Alloy Saw Blade: (D63x5.0). Side grooving (3-sided grooving, excluding gripper side).
- Lamello Saw Blade: (φ100*7*22), side Lamello:

  (3-sided grooving, excluding gripper side).
- Straight Milling Cutter, front grooving.

9. Tool setting gauge



- Without need of setting tool tip by manual, by using tool setting gauge, main spindle can change tool automatically;

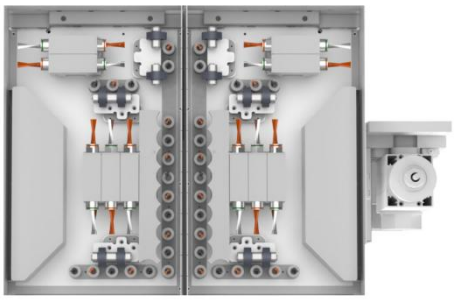
10. 5.5kw+3.5kw main spindle

Top main spindle:

- Tool type ER32, 5.5kw ATC spindle ISO30; 18000rpm/min
- 2-piece independent presser for better dust performance;

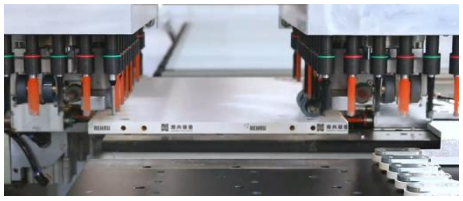
Bottom: 3.5kw main spindle (option one more spindle) ER25

11. Optimized drilling blocks layout +saw blade

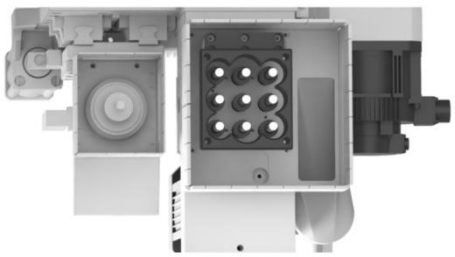


Top drilling block:

- 2 boring blocks 2.2kw,
- Optimized drilling blocks,more length-wise vertical drills,2 drilling blocks' vertical drills mini distance is 64mm, ideal for small board, increasing processing efficiency at lease by 30%;
- Vertical drills: 19+19
  Horizontal drills: 3*4 in X direction; 2*4 in Y direction.
  5000rmp rotating speed, hole edge is smoother, friendly for hinge hole.
- Optimal drill bit layout, fast mini-fix processing;
- Max drill bit diameter 35mm, spacing 32mm, holder diameter 10mm, length 70mm



- **Independent grooving saw:**
  1.7kw; Saw blade size:Φ100*Φ22*δ4 fixed in X direction.
- Processing range:50-700mm,the panel width cannot be less than 50mm; Processing depth: within 12mm;The groove width:4-8mm,when the groove width is 4mm,it can be done in one time, if the groove width is greater than 4mm,need to mill 2 times.



Bottom drilling block:

- 1.6kw 9 vertical drills
- Bracket rises to support boards when do top processing, prevent accuracy issue caused by board deform;
- Col-linear vertical drills of top and bottom drilling blocks, faster to drill through holes.

12. Min. processing part

- Drilling block design and software can do drilling for narrow parts
- Panel length: 200-3000mm
  Panel width 30-1200mm

13. Stack processing

- Support stacking processing if hole position is mirror
- Mirror grooving;

14. Invisible hardware

- Machine is configured with aggregate and tools to process Lamello groove and some invisible hardware processing.

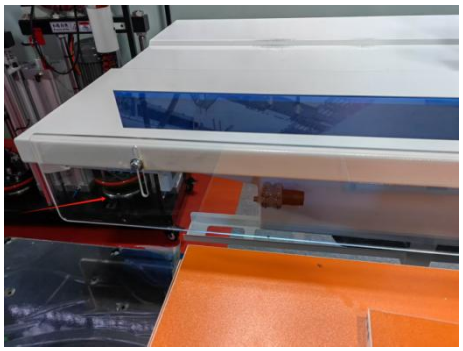
Invisible hardware

15. Side Grooving

- Side grooving by adding an saw blade head, suitable for light trough

16. Anti-handling device for infeed table

- The design of acrylic plate protects the operator's hand when put board;



17. Dust collection port

- Qty 3
- Φ200mm×2（top）、Φ125mm（bottom）
- Air speed：≥28m/min

18. Cable chain

- High-quality cable chain used to drag and protect electric wire and air tube during movement of each axis for longer service life.

19. Hand controller

- Hand controller makes commissioning more convenient.

20. Control system

- SYNTEC CNC control system and Operation Software, reliable and the process efficiency is 20%-25% faster

21. Industrial computer

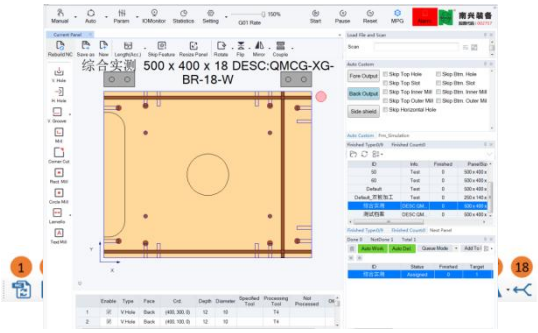
- Windows 10 operating system.
- All-in-one industrial computer

22. Excellent electrical components

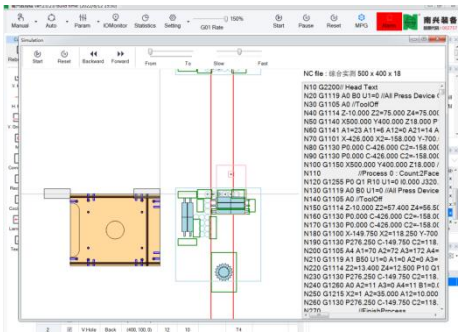
- Electrical parts and components are in reliable brand, standard and clean wiring connection make machine reliability and stability.

23. User-friendly operation

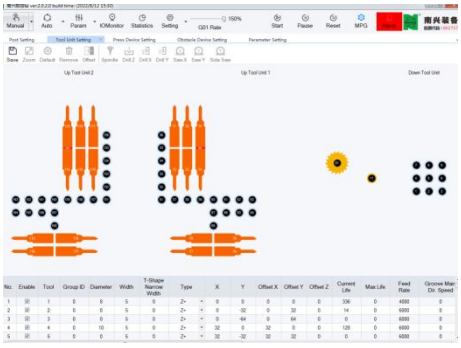
- Control interface is modern and friendly,
- Manual programming interface is easy to operate, functions are available at a glance like horizontal hole, vertical hole, grooving, flip, mirror, rotate etc.



- Simulation function

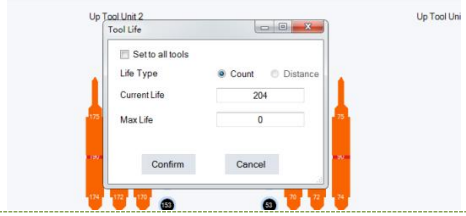


- Easy tools setting;



- Statistics function, production capacity is available at a glance

- Set tool life, software will remind when tool is time to change for smart tool management



24. Bar-code reader

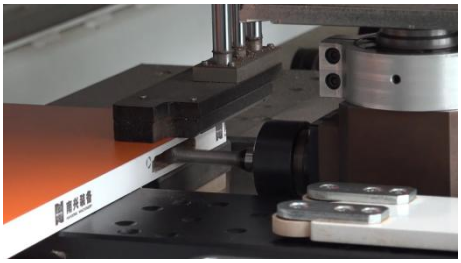
- Read the panel processing information generated by furniture making software, machine will recall corresponding program to process automatically by scanning the Bar code info.

25. File format support.

- Open port to interface with furniture design software, support the file format:
  MPR, DXF, BAN, BPP, PDX; XML; XXL.

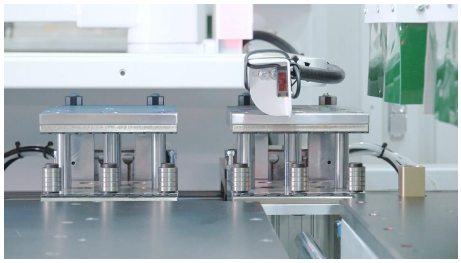
26. Side routing-One head aggregate

- By using optional fixed aggregate, machine can process Pivot Hinge groove



27. Board thickness sensor

- Board thickness sensor to avoid the possible influence caused by putting wrong thick board



28. Air jet for Gripper

Technical Data

Total power	25.63KW	
Machine size	6, 150 * 3,010 * 2,320 mm	
Power supply	415V/50Hz	
Air supply	0.6-0.7MPa	
Total weight	3,850Kg	
Control system	Brand	SYNTEC
Panel size	Length	200-3,000mm
	Width	30-1,200mm
	Thickness	10-60mm
Max. traveling speed	（X /U）axis	135m/min
	Y axis	75m/min
	Z axis	30m/min
Transmission mode	X axis	Rack and pinion
	Y axis	Rack and pinion
	Z axis	Ball screw rod
Boring blocks	Boring block qty	Top 2; Bottom 1
	Vert. drills qty (top)	19*2
	Horiz. drills qty (top)	X: 3×4 + Y: 2×4
	Vert. drills qty (Bottom)	9
	Max drill diameter	Φ35mm
	Drill spacing	32mm
	Rotation speed	5000rpm
	Shank diameter	Φ10mm
Main spindle	qty	Top tool ER32 holder ISO30 ; Bottom tool collet ER25
	power	5.5kw*1 ; 3.5kw×1 max.18000rpm

Saw blade	Power	1.7kw
	Size	Φ100*Φ22*δ4
	Processing range	50-700mm
Dust collector	qty	2
	diameter	Top 200mm×2 Lower 125mm×1
	speed	≥28m/min

**Thanks for the attention!*

The company continuous to improve the product specifications and design details, the specifications are subject to change without notice. 250719