



## CNC Nesting Machine NCG2812E

Nanxing Machinery  
Guangdong China



### Description

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NCG2812E is a CNC machine made flexibly easy for sizing and drilling, it is usable for 4x8' and 4x9' panel. The machine has completed with drilling, grooving, cutting panel in line and shape. With this type of processing work can save space, labor force but without compromise in accuracy and efficiency.

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## Details

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### 1. Machine body

- Heavy duty bed structure machine body is welded with square tube and laser-cut steel plates by professional robots welding line, even welding marks and distance ensures high stability of body.
- Vibration and aging to release internal strength
- Parts and machine body are processing by advanced CNC machine for metal work, just one positioning to finish most processing work, hence guarantees processing accuracy and reduce the vibration in the process;



### 2. Quality control

- Advanced measuring equipment and strict QC system help to make sure the machines and parts are checked and certificated by very high standard.
- All the machines are delivered with Quality Certificate signed by QC specialist.



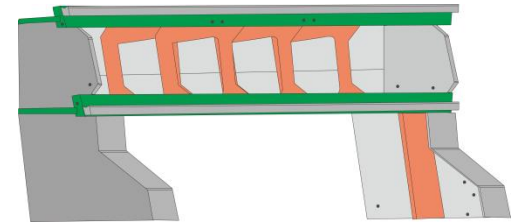
### 3. Professional assembly line

- Nanxing follow the SOP and set up the professional assembly lines. All the assembling is worked out by the experienced technicians that guarantee machine standardization and performance.



### 4. Gantry frame

- Gantry frame, reliable for high speed milling work and ensure high precision in the long term.
- Compact support ribs inside gantry ensure the higher strength and stability, that means higher machining quality and longer service life;
- All the machine bodies and gantries are through stress relief before installation.



### 5. Working table

- One-piece pressure plate is easy to install or change.  
2800\*1220mm to work with 4x8' and 4x9'
- Table has divided by **7 sections**; easy to control by valve based on processing requirement.
- The crisscrossed grooves on top side ensure uniform distribution vacuum of absorption zone. Table thickness is 32mm.



### 6. 1pc vacuum pump

- 1pcs 7.5kw vacuum pumps with suction flow rate **250m<sup>3</sup>/h**, pressure 0.5 kg/cm<sup>2</sup> for high-performance sorption on the table, thus small parts could be fixed on the table firmly.



## 7. Movement of each axis

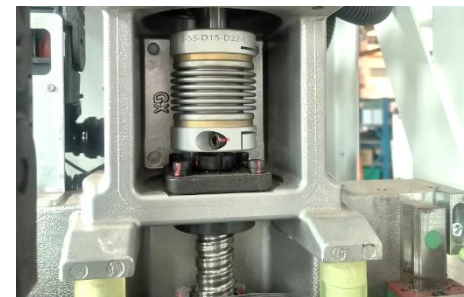
### X and Y direction

- Transmitted by high-stiffness inclined rack and pinion with large contact area, higher accuracy.
- 25mm guiding rail along X direction to ensure accurate and stable movement under high speed



### Z direction

- Ball screw gives the machine added precision in Z direction.



### Servo Motor

- The accurate movement of each axis is ensured by the high-power servo motors.  
Y axis: 1.3kw\*2; X axis: 0.85kw Z axis: 0.85kw
- Max travelling speed: X/Y/Z: 100/100/20m/min



## 8. Automatic greasing

- Grease main transmission components automatically so as to prevent machine components from aging thus reducing the maintenance work by operators.



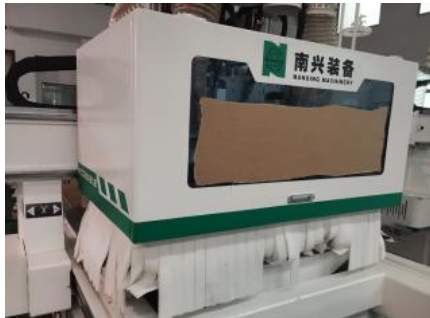
## 9. Side positioning cylinders

- 2 alignments on each side of Y direction, and each alignment raised automatically via two side positioning cylinders.



## 10. 9kw main Spindle

- 9kw air cooling spindle: powerful, max rotating speed up to 24000rpm/min, can work with 50mm thick panel.
- Coupler type ISO30 making contact between tool holder and clamp closely, fix tightly, fast for ATC
- With cover



## 11. Automatic Line tool changer with 12 slots

- The automatic line tool change magazine with 12-slots suitable for complicated process requirements, no need to change tool manually offers maximum operation convenience, And shorter distance between main spindle and tool position, changing tool us faster.
- Type ISO30 ER32

**Tip:** Standard with two tool couplers.



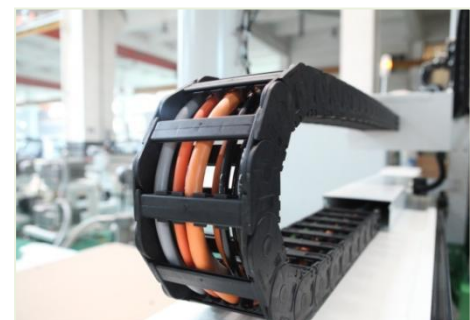
## 12. Start/Stop Button on gantry

- Additional buttons on side of gantry, easier operation for flip over panel in process for double side process



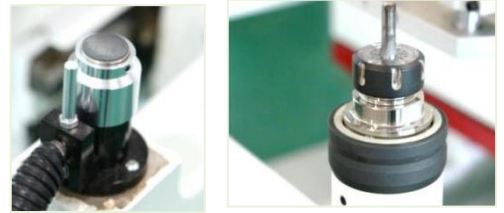
## 13. Tank cable chain

- High-quality chain in world famous brand, very wear proof and of longer service life, electric cables and tube can be protected well during high speed movement.

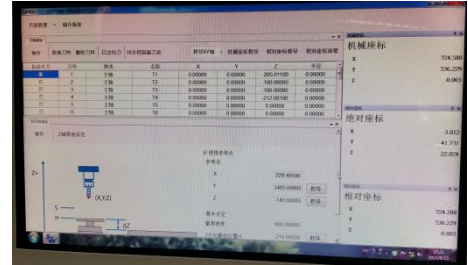


## 14. Tool setting gauge and locker

- Automatic tool setting is precise and fast which ensures machine continuous working without need of changing tool by hand, save time.



- Tool locker is used to put tool for the time being.



## 15. Hand controller

- Hand controller make commissioning more convenient.



## 16. Electric equipment

### Computer

- IPC with Windows operating system;
- DELL display;
- USB port, easy for remote assistance



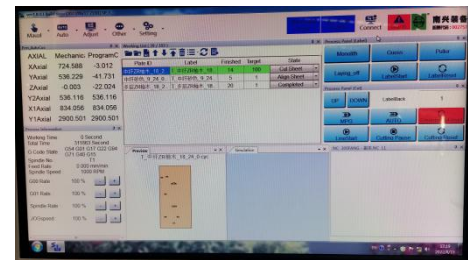
### Independent control cabinet

- Electric components are of high quality and famous brand. Equipped with air conditioner to control the operating temperature for highest performance.
- Door with sealing strip avoids dust and chips.



## 17. SYNTEC Control System

- Powerful SYNTEC control system provides stable performance, powerful functions and ease of use with friendly interface. Processing path is available at a glance (English and Chinese language are available)
- Open port equipped to link with various international nesting software making processing much optimized, under controlled, well managed, design intended, and data networking included for easy operation.



## 18. Pressure Roller



## 19. Air conditioner on control cabinet

Control the electrical cabinet temperature in proper status for longer service life which is especially suitable for high-temperature environment.



**Note\*** Machine Comes with PC and operate software, but without NACC optimizing software



## Technical Data

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<b>Control system</b>	SYNTEC	
<b>Working range</b>	X-axis: 2,800 mm	Y-axis: 1,220 mm
	Z-axis: 50 mm	
<b>Working table</b>	Size: 2,800×1,220 mm	Height: 950mm
<b>Max. traveling speed</b>	X-axis: 100 m/min	Y-axis: 100 m/min
	Z-axis: 20 m/min	
<b>Main spindle</b>	Quantity: 1	
	Power: 9 kW	Rotating speed: 24,000 rpm
	Tool holder type: ISO30	
<b>ATC</b>	Line tool changer with 12 slots	
<b>Vacuum pump</b>	Quantity: 1	
	Power: 7.5 kW	Suction flow rate: 250 m <sup>3</sup> /h
<b>Dust extraction</b>	Outlet: Φ150 mm*1 Φ125mm*1	Speed required: 28 m/s
<b>Air supply</b>	Air pressure required: 6~7 kg/cm <sup>2</sup>	
<b>Power supply</b>	Voltage: 415V	Frequency: 50 Hz
<b>Total power</b>	24 kW	
<b>Floor space</b>	L×W×H: 4,220×2,270×2,500 mm	
<b>Net weight</b>	2,500 kg	

*\*Thanks for the attention!*

*The company continuous to improve the product specifications and design details, the specifications are subject to change without notice. 221025*