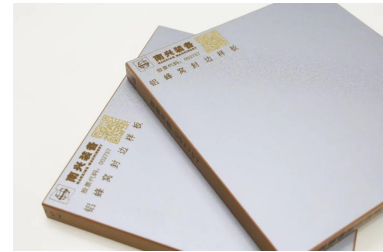


Edge Banding Machine NBF7PCG-PUR

(Steel beam, for aluminium honey comb board)

Nanxing Machinery

Guangdong China



Description

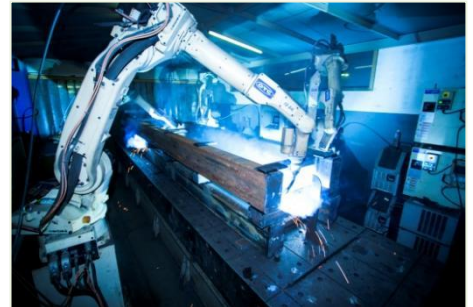
The machine offers superior edge banding solution for aluminium honeycomb board, 2 color PUR device makes it easy to switch between 2 PUR color, 2 sets special tape pressing units give PUR glue more support to stick on edge firmly;



Details

1. Machine body

- Features a heavy-duty integrated steel frame, processed through strict procedures such as robotic welding, natural aging, annealing, and shot peening to ensure long-term stability during use. It is precisely machined in one setup using a world-class five-axis machining center to guarantee processing accuracy.



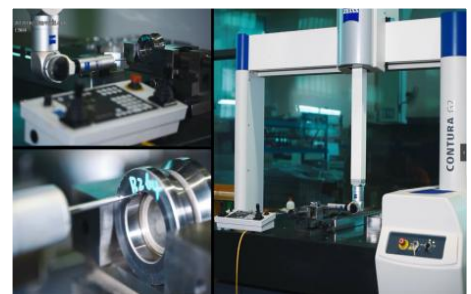
2. Professional assembly line

- Nanxing follows 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.



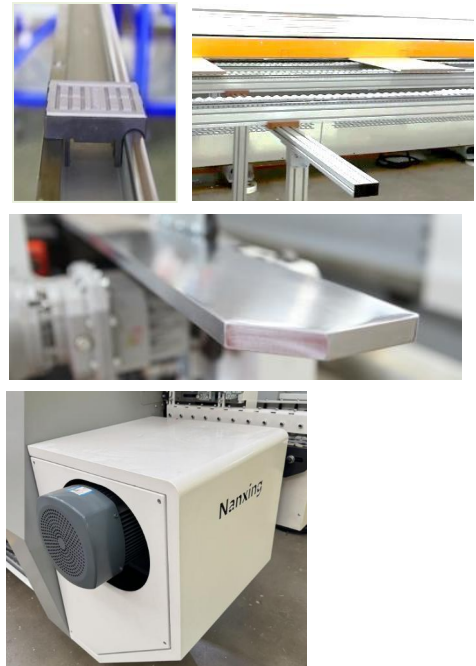
3. Quality control

- 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.



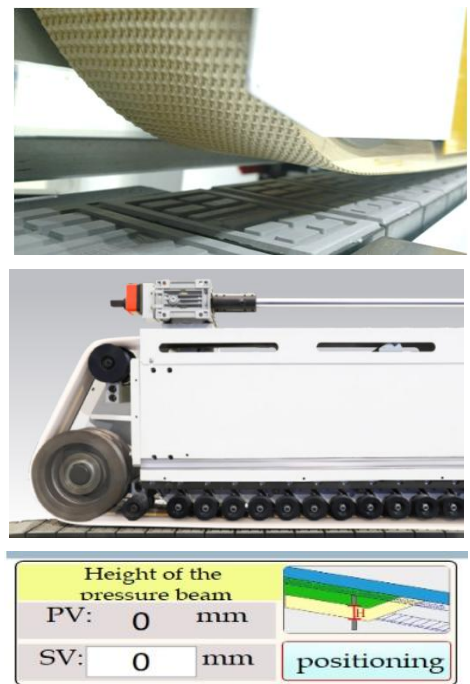
4. Conveyor

- Long straight semicircle guide rail is through hard treatment before installation, conveyor piece can perfectly contact with the guide rail, almost no gap;
- 2 sets of stretched support conveyor with compact rollers helps to support large work piece in the process which avoids the influence caused by unbalance of large work piece;
- Thick steel support plate of high rigidity and stability prevents the deformation, and offers extra stability during the banding work;
- The conveyor motor makes variable frequency starting possible, very stable and equipped with braking system. Easy to install or uninstall.



5. Top presser

- Fiber reinforced v-belt with groove on surface ensures smooth and stable conveying of workpiece but clean with no marks, resulting excellent edge banding quality.
- Pressure beam of heavy duty integrated steel structure, welded with machine body and rail together, boards' conveying straightness is better, enable pressure force to be allocated evenly from front to the end but without deformation. High stability and pressing accuracy even if in high speed and long time usage;
- The height of pressure beam is able to adjust by electronic regulator, its movement driven by asynchronous motor, controlled by encoder that is available to operate in PC.



6. Support columns

- With high rigidity and strength, pressure beam and the whole machine could be fixed and adjusted firmly.



7. Side assistance rollers

- Several groups of additional rollers to help to press the panel when trimming.



8. Spraying device (release agent)

- Spraying release agent on workpiece surface reduce the adhere of glue.



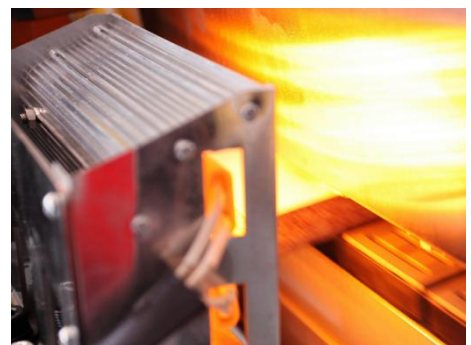
9. Pre-milling

- Pre-milling with diamond cutter $\varnothing 125^*H63^* \varnothing 30$ Z3+3 simply handle the work piece edge before gluing offers optimum basis of binding effect.
- Two motors controlled pneumatically, milling panel edge intermittent. $2 \times 3.7\text{kW}$ motors; 200Hz
Rotating speed: 12,000 rpm.



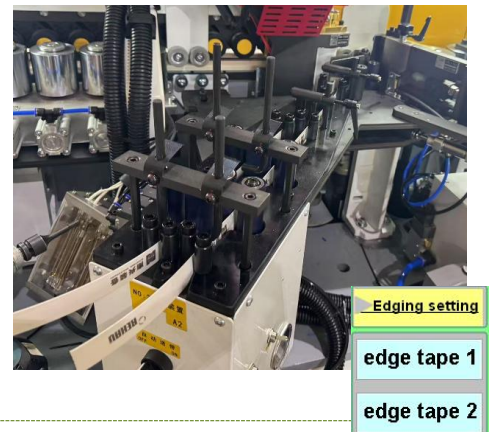
10. Pre-heating

- Warm the work piece edge, the glue could well melt during gluing, especially suitable for wet or cold zones.



11. Edge tape feeder by servo motor- 2 tape system

- Compared with traditional edge tape feeder, higher trimming precision controlled by servo motor, cost saving up to RMB 20-50K per each machine due to shorter hanging out of tape at two ends. Standard machine has edge tape detector.
- 2 tapes changing system make it easy to switch between two tapes, auto changing to next position if no tape in current storage that ensures the machine continuously working without stopping.



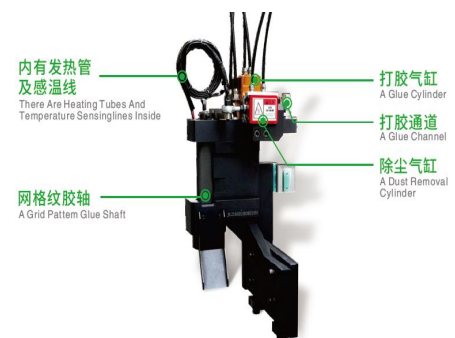
12. Snipping

- Air cylinder with electric control switch of snipping unit is capable of mass production requirements.



13. PUR gluing applicator

- The unique glue gate structure utilizes a diverting scraper principle, preventing wood chips from clogging the glue shaft and eliminating stroke limitations, resulting in even and stable adhesive application. The upper cover is made from a single piece of ductile iron, ensuring high precision with a multi-seal design to prevent glue leakage during high-temperature use.



14. 2-color PUR heater

- It allows for quick switching between two types of PUR adhesives, enhancing processing efficiency.
- The intelligent control touchscreen makes operation simple and convenient.
- The integrated aluminum alloy pressure plate ensures uniform heating, high-temperature durability, and resistance to deformation.
- It uses imported Teflon heating glue tubes, which are durable, flexible, and have better non-stick properties.



15. Pressure rollers

- One pre-pressure roller with a diameter of 100mm plus 6 post rollers to press edge tape on panel surface firmly. Pressure regulating valve 1.5~2.5 bar.



16. Belt tape presser

- The belt edge banding system ensures stable adhesion to the panel, preventing vertical movement. It increases the edge banding travel to guarantee sufficient bonding of PUR adhesive with the panel. The system features an adjustable speed drive, allowing the belt speed to match the panel speed, ensuring a secure fit between the edge band and the workpiece.



17. Auto lubrication system

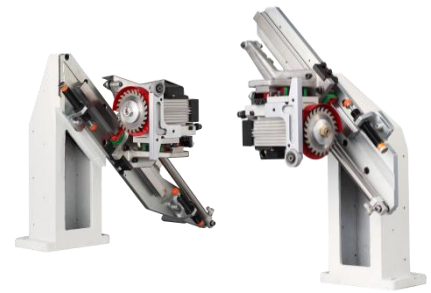
- Lubrication system could meet the requirement of daily maintenance of linear guide rail, easy operation and save the possible costs.





18. Dual rails for end trimming

- Dual rail end trimming unit: front & back tape trimmings by two separated cutters mounted on rails, no waiting from only one single rail, hence higher productivity and stability. Min. panel interval 300mm
- The angle 45 degrees is able to adjust due to motor manual rotating device.
- 2 motors with power of 0.37kw, frequency of 200hz, rotating speed of 12000rpm/min; 2 cutters have a specification of 115*2.6*22*24Z with independent protective cover.



19. Rough trimming

- Rough trimming unit with 2 powerful motors of world famous brand (power 0.75kw; frequency 200hz; rotating speed 1,2000rpm/min), 2 milling cutters with two stiff steel positioning guides;
- Independent cover keeps scraps from flying, and guiding to machine bottom.



20. Fine trimming units

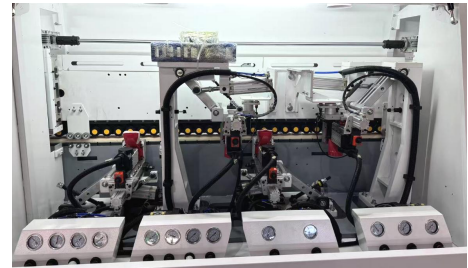
- 2 motors (power: 0.55kw; frequency: 200hz, rotating speed: 12000rpm/min). 2 fine trimming milling cutters (Standard: R1);





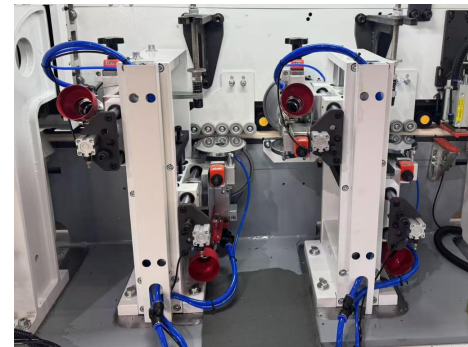
21. Corner trimming with 4 motors

- Designed to trim sharp corner on front, back and two straight edges so as to achieve R circular arc radius.
- Driven by 4 motors (power: 0.3kw; frequency: 200 Hz, rotating speed: 12000rpm/min).
- Planar linkage with 4 corner trimming tool R1 3Z
- Backward function to avoid waiting time of each processing;



22. Two sets of scraping units

- It is used to eliminate the ripple marks caused by the non-linear cutting process during edge trimming, making the upper and lower parts of the panel smoother and neater.
- Two sets of pneumatic retractable edge scrapers allow for quick switching between different thicknesses of edge banding and can also effectively remove film from panels, optimizing costs while saving setup time.
- Horizontal tracing arm enlarge contact surface for higher stability and better edge banding quality.



23. Off cut device

- Off cut device cleaning tape threads from scrapping, as to prevent any problem later during flat scraping and buffing.



24. Pneumatic flat scraping

- Remove extra glue line for perfect banding effect.



25. Spraying device (Clean agent)

- Spray clean agent before buffing thus reduce possible glue line effectively.



26. 2 sets Oscillating Buffing

- Unique oscillating buffing offers higher performance and longer life time
- Driven by continuous current dynamo, more stably.
Motor: 0.37kw*2



27. Switch

- A switch enables the operator to stop or start the machine anytime during the process that provides the max. convenience to adjust or test the machine.
- Operation indicating light, the operation status of the machine is available at a glance.



28. Dust collector

- Independent suction hood ($\phi 125\text{mm}$) fully covered on processing units, totally 8 pcs dust collectors provides excellent working condition, prevent any influence caused by scraps for longer service life.



29. Safety device

Feeding protector and thickness detection

- Protector prevents any possible accidents and ensures safety of operators, automatic monitoring abnormal operation.
- Work piece thickness detection, if work piece thickness over the limited position, conveyor will stop at once to reduce machine damage.

Interval feeding detection system

- Keep work pieces in proper distance for max edge banding performance.

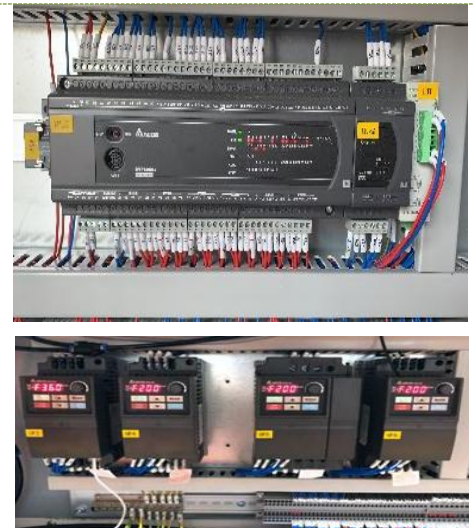
E-STOP

- To stop running at once, guarantee operator life safety.



30. Electric components

- PLC, input voltage 380v, 50Hz (Standard).
- The position can be calculated precisely by encoder
- Each processing unit is controlled and protected by independent frequency converter with motor braking function.
- Most of electric components of the machine adopted international brands for high quality and generality.
- Good documentation, each wire has a unique code label which offers max convenience for troubleshooting and online support.



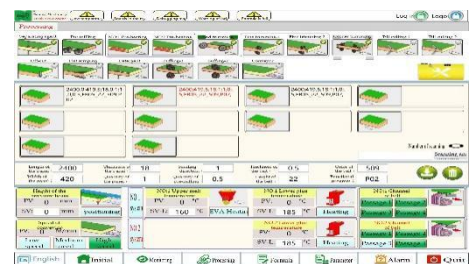
31. PC control

- PC control with Windows for infomatic production;



32. User-friendly interface

- Operation interface is intuitive and simple, available to control each component independently easy for testing and commission work.
- Up&down of pressure beam, edge tape changing, machine distance could be operated easily.
System languages: English, Chinese.



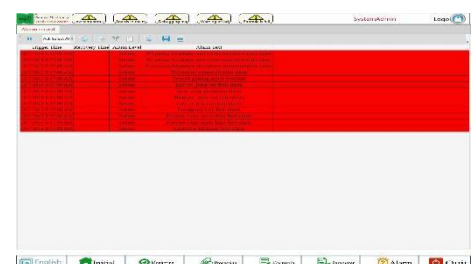
33. Production report

- Daily production included workpieces number and length is available at a glance.



34. Easy Trouble-shooting

- Alarm shows clear info, easier to find problem





Technical Data

Panel length:	≥120 mm ; ≥200 mm with corner rounding
Panel width:	≥80 mm
Panel thickness:	9-60 mm 9-22mm (aluminum honeycomb board)
Min. panel size	120×120mm; 200×50mm
Edge tape thickness:	0.4-3 mm 1-2mm (for aluminum honeycomb board)
Feeding speed:	12/16/20 m/min 12/16m/min (for aluminum honeycomb board)
Power supply:	415 V; 50 Hz
Air pressure required:	0.7MPa
Operation system	PC
Dust collector	Φ125mm×9
Total power:	30 kW
Approx. weight:	6,110 kg
Overall dimension:	11200×1050×1850mm

**Thanks for your attention!*

The company continuous to improve the product specifications and design details, the specifications are subject to change without notice. 250114