

Edge Banding Machine with V-belt & Double Gluing Units

NB8PCHGM-PC

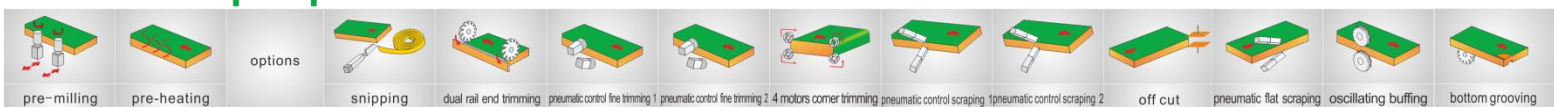
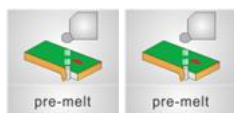
Nanxing Machinery
Guangdong China



The standard machine is one Pre-melt and one glue pot

Description

Full functional units including PC control, pre-milling, pre-heating, pre-melt, 2 sets 4 tapes changing system, dual rails for end trimming, auto tool adjustment by 2 fine trimming, 4 motors with tools for corner trimming, auto tool adjustment by 2 radius scraping, pneumatic flat scraping, oscillating buffing, bottom grooving; Panels are evenly pressed by V-belt to maximize stability. Large pre-melt tank allows sufficient glue for even fast continuous edge banding; With 2 glue units can change colors of glue faster, also auto edge tapes changing system can select any one fast from 4 thicknesses of edge tape;



Details

1. Machine body

- Heavy machine body is welded by robots with laser-cut steel plates, then through trimming of advanced CNC machine for metal work, hence enhance the stability and strength, and reduce the vibration in the process.
- Some casting parts used on the machine guarantees long service life without deforming.



2. 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.



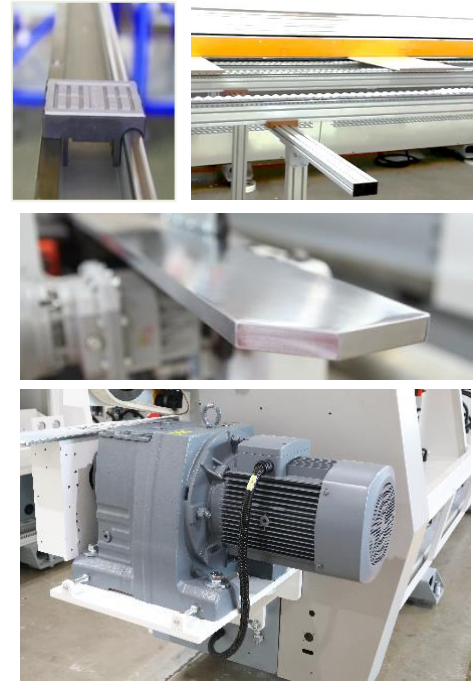
3. Quality control

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



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 motor makes variable frequency starting possible, very stable and equipped with braking system.



5. Top presser

- Reinforced with fiber in V-belt system to maximize stability. Heavy duty aluminum alloy for pressure beam with long service life but not deformation.
- 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 touch screen.



6. Cleaning and release agent

- Spraying before pre-milling and buffing unit make sure nice and clean finishing surface.



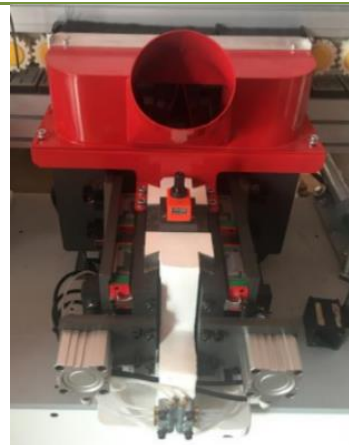
7. PC control

- PC control, Can identify label information;
- The label scanning can achieve:
 - Automatically switch to the edge tapes and glue pot ;
 - Automatically switch to the fine trimming and scraping;
 - Automatically switch to the height of pressure beam;
- The label Scanning or manually edit can achieve “one click to start” which can improve production efficiency and reduce errors.



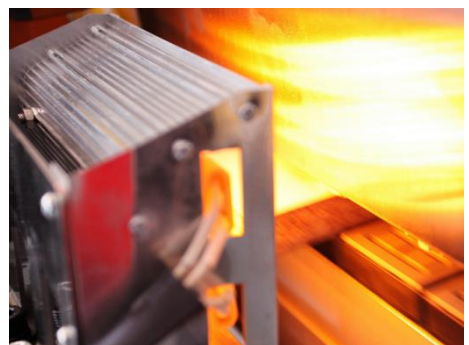
8. Pre-milling

- Pre-milling with diamond cutter $\varnothing 125 \times H35 \times \varnothing 30$ 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.
- Fully covered dust cover.



9. Pre-heating

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



10. Edge tape feeder by servo motor×2

- 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.



- Two sets of four tapes changing system make it easy to switch between two color glue, auto changing to next position if no tape in current storage that ensures the machine continuously working without stopping.



11. Snipping×2

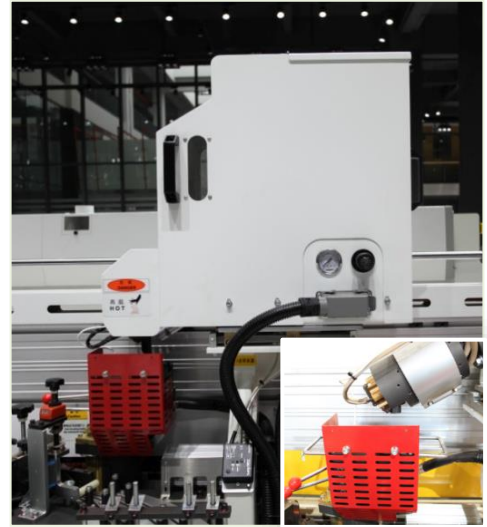
- Air cylinder with electric control switch of snipping unit is capable of mass production requirements.



12. Gluing

2*Quick-melt tank

- Heating up the glue by 2 sections reduces the heating time
- Glue particle dissolve device, the glue volume up to 820g~920g/min (parameter will change with different glue), when air pressure of pushing glue reaches 4 bar.
- Liquid level sensor detector to control glue volume, prevent glue from spill.
- Pre-melt gluing unit saving heating-up time, reducing the carbonization and vulcanization from burning up of glue resins, also binding better between tape and panel



13. Pressure roller×2

- 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.



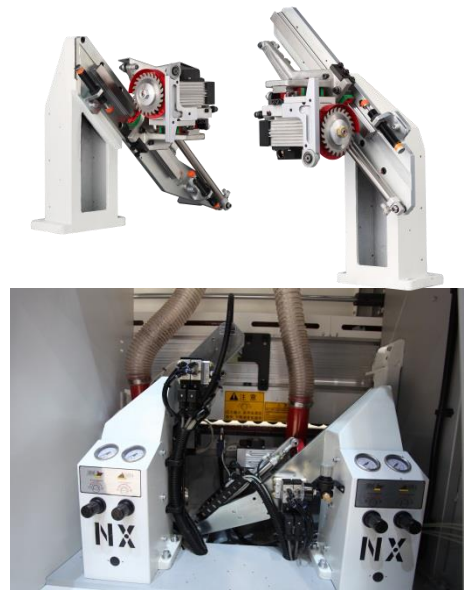
14. Lubrication system

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



15. 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.
- Split-type precision dual linear guide way structure at an angle of 45 degrees;
- 2 motors with power of 0.37kw, frequency of 200hz, rotating speed of 12000rpm/min;
- Min. panel interval 600mm on the basis of automatic air cylinder which can avoid stretch out or put away.
- Motor manual rotating device available to adjust angle.
- 2 saw webs has a specification of 115*2.6*22*24Z; With independent protective cover.



16. Two sets of fine trimming units with auto tool adjustment

Fine trimming 1

- Motor: 1.1kw*2
- Frequency: 200Hz;
- Rotating speed: 12000rpm/min
- Circular arc radius R2 4Z



Fine trimming 2

- Motor: 0.5kw*2
- Frequency: 200Hz;
- Rotating speed: 12000rpm/min
- Circular arc radius R1 6Z



17. Corner trimming

- 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 R2 3Z



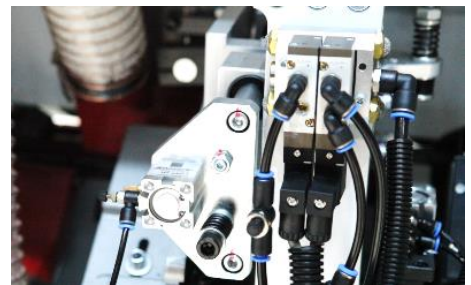
18. Two sets of scraping units with auto tool adjustment

- Two sets scraping units with scraping cutter in different circular arc radius. (One set with R2, the other with R1), air-cylinder wheel position adjustment, available to switch via key according to tape thickness.
- Electric pneumatic controlled blowing air device.



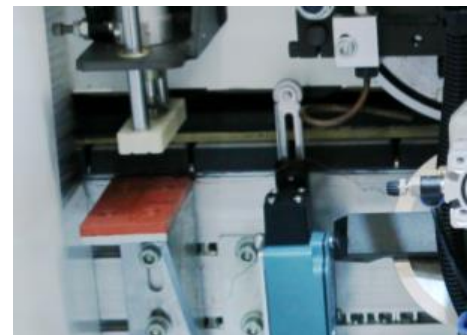
19. Adjustable for different thickness by cylinders

- Fast switch between thin tape and thick tape due to adjustable 2 sets of each fine trimming units and scraping units, resulting shorter setting up time, stable quality, max convenience and higher productivity.



20. Off cut device

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



21. Pneumatic flat scraping



22. One set of oscillating Buffing

- One set of Unique oscillating buffing more effective, preventing high wear & tear, offering longer life time
- Driven by continuous current dynamo, more stably. Motor: 0.37kw



23. Grooving device (bottom)

- Grooving on panel bottom saves other processing steps.
- Independent suction extraction.



24. 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.



25. Indicating light

- Operation indicating light, the operation status of the machine is available at a glance.



26. Dust collection

- Independent suction hood ($\varphi 125\text{mm}$) fully covered on processing units, totally 9pcs dust collectors provides excellent working condition, prevent any influence caused by scraps for longer service life.



27. Electrical components

- Input voltage, 3-380v, 50hz; Frequency converter with motor braking function; Phase sequence protector
- All the electrical components of facilities confirm to relevant national standard.
- Permitting to be operated under the temperature of 0-40°C.



28. Energy saving

- Stand-by mode automatically turned on when machine stop working for a certain period (according to setting time); then glue temperature lower down to prevent carbonization, so as rotating of glue roller in order to save energy



29. PUR system(option)

- Capacity: 2.5KG
Dimensions: 1040*550*1250mm
Max. dispensing pressure: <math><5\text{kg}/\text{cm}^2</math>
Total power: 3.5kw



Technical Data

Panel length:	≥120 mm
Panel width:	≥80 mm
Panel thickness:	10-60 mm
Min. panel size	120×120mm; 200×80mm(long side)
Edge tape thickness:	0.4-3 mm
Feeding speed:	16-26 m/min (Speed with corner, 20-22m/ min)
Power supply:	380 V; 50 Hz
Air pressure required:	0.7MPa
Operation system	7" touch screen
Dust collector	Φ125mm×9
Control mode	Encoder
Total power:	42 kW
Approx. weight:	6,110 kg
Overall dimension:	11,200*1,450*1,650 mm

**Thanks for your attention!*

The company continuous to improve the product specifications and design details, the specifications are subject to change without notice. 200616