

Edge Banding Machine with V-Belt&Double Gluing Units

NB577DP-PUR

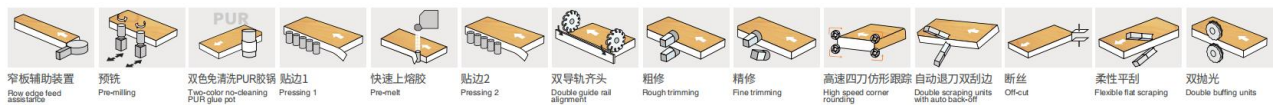
Nanxing Machinery
Guangdong China



Description

NB577DP-PUR features with PUR gluing system of 2-color PUR, and Pre-melter gluing system for EVA glue, easy and fast to switch between 2 kind of glue offers max convenience for furniture factories, Panels are evenly pressed by V-belt to maximize stability and avoid damage on sensitive material.

封边方向 →
Edge banding direction



Details

1. Machine body

- Heavy duty machine body is welded with thick 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; 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.



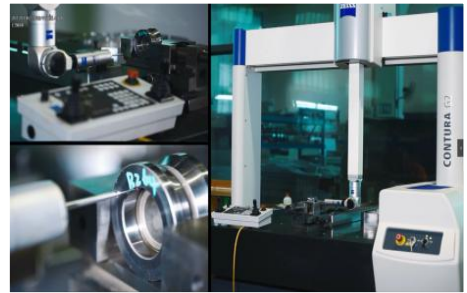
2. Professional assembly line

- 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.



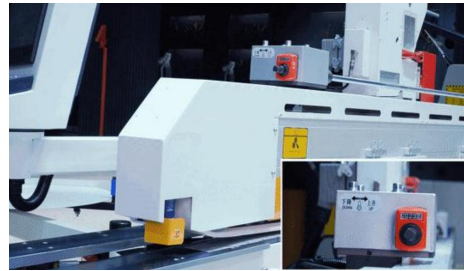
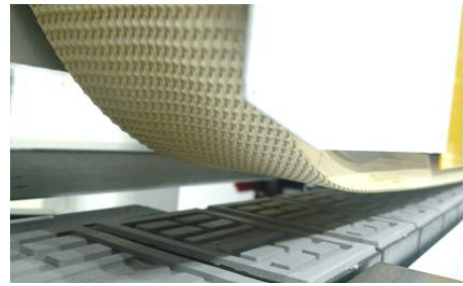
4. Conveyor

- 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;
- Infeed fence' position is easy to adjust.
- The conveyer 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 aluminum alloy in high stability enable pressure force to be allocated evenly from front to the end but without 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.
- Main processing units such as pre-milling, fine trimming and scraping units are specially configured additional rollers outside. Thus design makes it possible to process 200*40mm board (long edge)



6. Feeding assistance for narrow edge

- Machine is standard with sliding infeed device helps the infeed of narrow edge like min 40mm long end , make sure parts are fed properly.



7. Support columns

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



8. Spraying device (Release agent)

- Spray release agent before pre-milling prevent glue sticking on board.



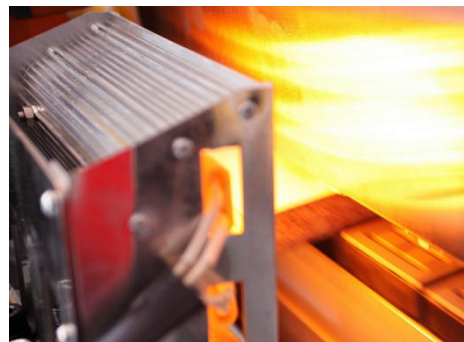
9. Pre-milling

- Double milling cutters are used to refine the wavy marks, burrs, or non-perpendicular caused by panel saws or cutting saws. This process ensures a better edge-banding effect, making the edge tape fit more tightly with the panel, significantly improving overall cohesion and aesthetics.
- Speed: 9000 r/min ; Power: 3.7 kW × 2 units
- 125×43×30 DKN8×3.3 Z3+3L/125×43×30 DKN8×3.3 Z3+3R



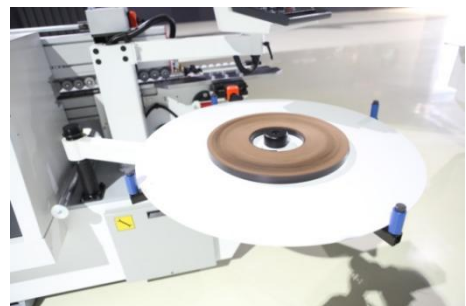
10. 2 sets of pre-heating

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



11. Coil tape bracket*2

- Big edge tape bracket is in proper height for smooth edge tape feeding and longer service life. Machine screen will appear alarm when edge tape is used up. Save waiting time.



12. Tape Snipping*2

- Snipping air cylinder with electric controlled switch to cut the edge tape properly.



13. Gluing 1: PUR gluing system with 2 color tank

- PUR gluing applicator cooperates with 2-color PUR heater offers max optimisms of PUR glue;
- Quick switch between 2 color glue
- Easy to use and maintenance



14. 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.
- Glue scraping configured on first 2 rollers, remove the glue stuck on roller.



15. Gluing 2: Pre-melter gluing system

- Pre-melt gluing system has a glue tank on top to offer proper glue volume according to processing, save heating-up time, and a small glue pot on bottom, thus reducing the carbonization and vulcanization from burning up of glue resins, keep glue always fresh.
- Liquid level sensor detection device controls the glue amount accurately so as to prevent overflow.
- Just one screw to release and install glue pot, 60mm high gluing roller, 50mm diameter gluing roller, more glue supplying suitable for mass production, long parts and least glue line.
- Separate glue temperature control



16. Auto glue pumping + 25kg glue basic

- Max 25kg capacity basin, glue would be pumped to pre-melt system's upper pot automatically as soon as lower than level sensor. Ease your job.



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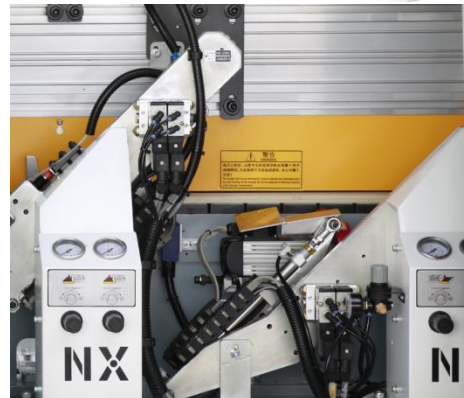
18. Auto lubrication system

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



19. Dual rails for end cutting

- 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.



20. 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.
- Diamond cutter $\varphi 56 \times \varphi 20 \times H14 \times 4Z$



21. Fine trimming

- Each set with 2 motors (power: 0.55kw; frequency: 200 Hz, rotating speed: 12000rpm/min).
- Diamond cutters.



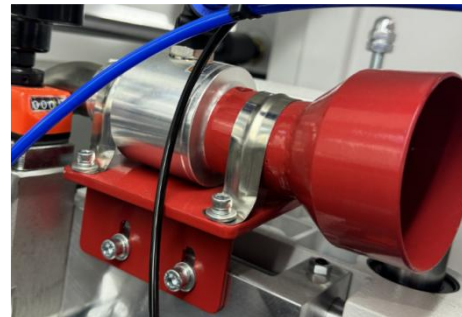
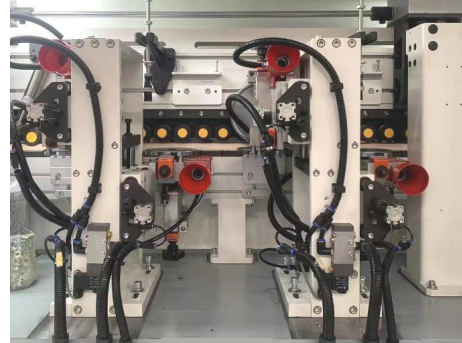
22. Corner rounding with 4 motors

- 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: 18000rpm/min).



23. 2 sets of scraping units with pneumatic moving back function

- Two sets scraping units with scraping cutter in different circular arc radius. (One set with R1.5, the other with R1), making edge banding more beautiful.
- One set of scraping cutters move backwards by cylinder if changing to the other tape thickness, set-up time tends to zero.
- Air blowing device blowing toward the scraping cutters on upside and underside for cleaning the scraps on cutter surface and cooling.
- A vacuum generator is applied on dust outlet helps the tape extracts fast.



24. Off cut device

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



25. Pneumatic flat scraping

- Remove extra glue line for perfect banding effect.



26. Clean agent sprayer

- Clean Agent to clean edge before buffing.



27. Two sets of oscillating Buffing

- 2 sets of buffing units to match 2 glue color, one is for EVA glue, the other is for pur glue, avoid dirty.
- Buffing by dual screen cloth structure is the last step to make perfect edge banding to make the edge shining, more stable.
- 1400 r/min 0.37kW×2



28. Dust collector

- Independent suction hood (φ125mm) fully covered on processing units, provides excellent working condition, prevent any influence caused by scraps for longer service life.



29. Remote switch and indicator light

- A remote 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.



30. Safety device

Feed Baffle:

- Used to limit the spacing between boards and protect the normal operation of various workpieces.
- It provides over-thickness protection for workpieces; if the board exceeds the current thickness, the conveyor belt will stop.

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.



31. Cover door and dust collector

- Machine is fully covered and fits sound-absorbing cotton to reduce noise.



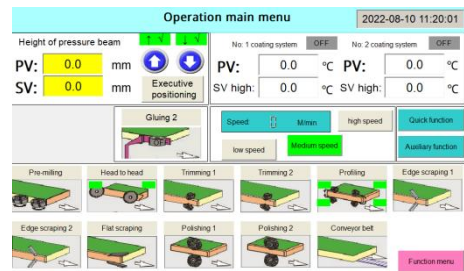
32. Control system

- 10" touch screen. Operation interface is intuitive and simple, available to control each component independently easy for testing and commission work.
- System languages: English, simplified Chinese, and traditional Chinese.



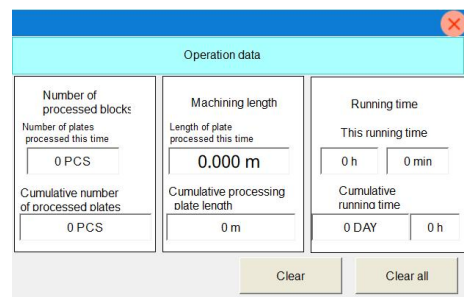
33. Operation interface

- Stand-by mode automatically turned on when machine stops working for a certain period (according to setting time) in order to save energy. Only one click to re-start production.
- Energy saving mode
- One-click Selection, quick start/stop.



34. Production report

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



35. Electric equipment

- PLC control, 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.



Technical Data

Panel length:	≥120 mm ≥200mm with corner rounding
Panel width:	Long edge ≥40 mm; Short edge ≥60 mm
Panel thickness:	9-60 mm
Min. panel size	120×60mm (4 side edge banding) 200×40mm (long side edge banding)
Edge tape thickness:	0.4-3 mm
Feeding speed:	18/22/26 m/min; (22m/min with corner rounding)
Power supply:	380 V; 50 Hz
Air pressure required:	0.7MPa
Total power:	34 Kw
Approx. weight:	4,620 kg
Overall dimension:	11,750*1,450*1,850 mm

**Thanks for your attention!*

The company continuous to improve the product specifications and design details, the specifications are subject to change without notice. 241205