



## Edge Banding Machine for Soft Forming

### NB875E

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### Description

Edge banding machine for soft forming. Full functional units including prefile milling, edge tapes grooving, pre-heating, pre-melt, tape gluing, soft forming press, dual rails for end trimming, rough trimming, fine trimming, corner trimming, scraping, flat scraping, buffing; Large pre-melt tank allows sufficient glue for even fast continuous edge banding, also three kinds of soft forming profiles can be selected as you want.

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 net weight up to **4,000kg- 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.



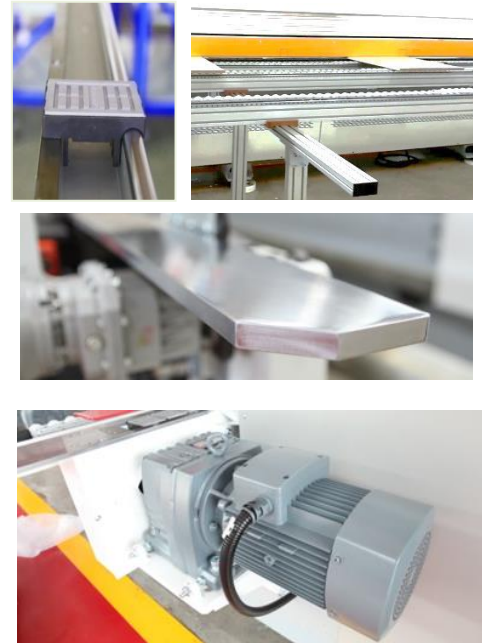
#### 3. Quality control

- 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;
- The conveyor motor makes variable frequency starting possible, very stable and equipped with braking system. Easy to install or uninstall.



#### 5. Top presser

- Aluminum pressure beam provides excellent stiffness and long service life.
- 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. Profile milling

- Profile milling with diamond cutter simply handle the work piece edge before gluing offers optimum basis of binding effect.
- Two motors controlled pneumatically





### 7. Pre-heating

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



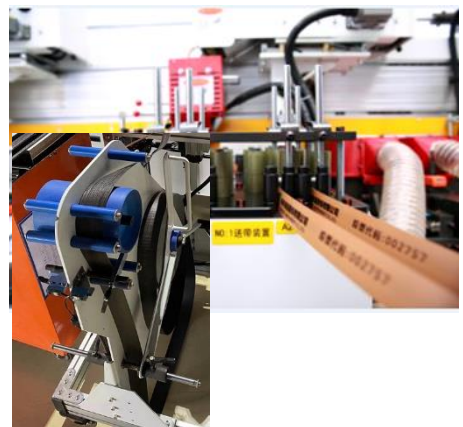
### 8. Edge tapes grooving

- Can use PVC, ABS, wooden sideband;
- Feeding tapes by servo, accurately, reduce to waste chip generation.



### 9. Edge tape feeder by servo motor

- 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.



### 10. Snipping

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



### 11. Gluing Quick-melt tank

- Quick-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
- Glue on edge tapes, which is suitable for different soft forming shapes.
- Liquid level sensor detector to control glue volume, prevent glue from spill.



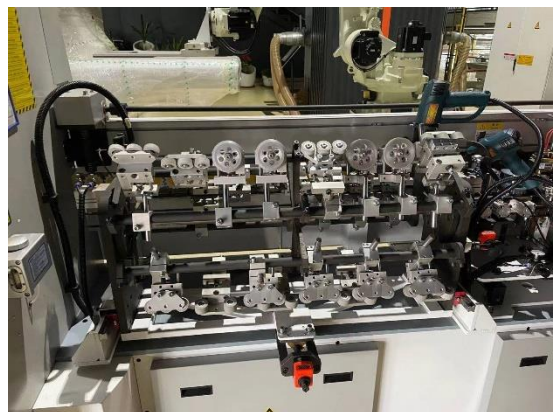
### 12. Pressure roller

- One pre-pressure roller with a diameter of 100mm plus 3 post rollers to press edge tape on panel surface firmly.



### 13. Soft forming device

- Three kinds of soft forming device to deal with different demand of process;



### 14. Lubrication system

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





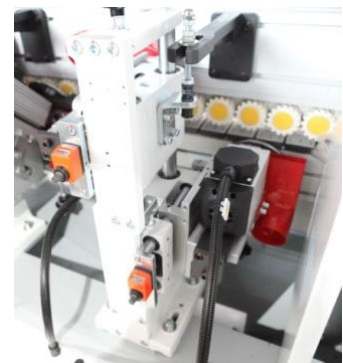
### 15. Dual rails for end trimming

- 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.
- 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.



### 16. Rough trimming

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



### 17. Fine trimming

- 2 motors (power: 0.55kw; frequency: 200hz, rotating speed: 12000rpm/min). 2 fine trimming milling cutters (Standard: R1.5);
- Positioning device with high stiffness and independent cover on cutters for longer service life.





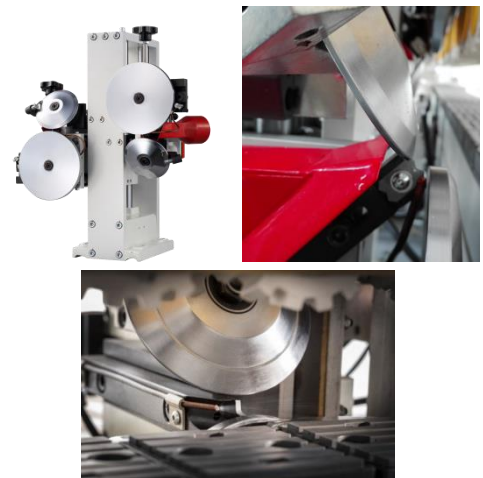
### 18. Corner trimming

- Designed to trim sharp corner on front, back and two straight edges so as to achieve R circular arc radius.
- Driven by 2 motors (power: 0.3kw; frequency: 200 Hz, rotating speed: 12000rpm/min).
- Planar linkage with 4 corner trimming tools R1.5 3Z
- Rotating angle is adjusted automatic with an electric sensor.



### 19. Scraping

- Scraping the edge by R1.5 cutters (Standard), making edge banding more beautiful.
- Air blowing device blowing toward the scraping cutters on upside and underside for cleaning the scraps on cutter surface and cooling.



### 20. Pneumatic flat scraping

- Remove extra glue line for perfect banding effect.



### 21. Buffing

- Buffing by dual screen cloth structure is the last step to make perfect edge banding to make the edge shining, more stable.



## 22. Support column

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



## 23. 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.



## 24. Dust collection

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



## 25. 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

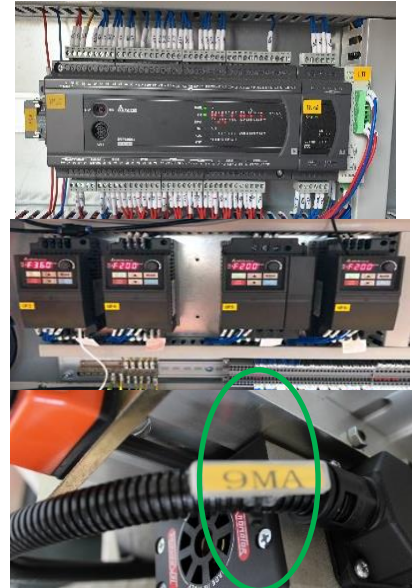
To stop running at once, guarantee operator life safety.





## 26. Electric components

- PLC control, input voltage, 3-380v, 50Hz (Standard).  
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.



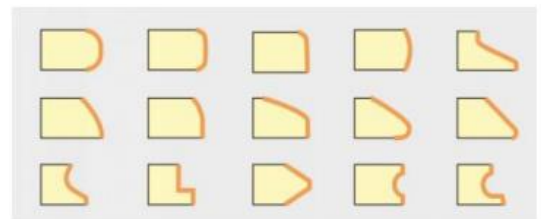
## 27. Control system

- PLC overall equipment control;
- PC interface;
- All kinds of safety protection reminders.



## 28. Soft forming shapes

- Three kinds of soft forming shapes can be selected.





## Technical Data

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<b>Panel length:</b>	≥150 mm
<b>Panel width:</b>	≥120 mm
<b>Panel thickness:</b>	9-60 mm (Straight side) 18-25 mm (Soft forming)
<b>Min. panel size</b>	≥150X120 mm (Straight side) ≥200X120 mm (Soft forming)
<b>Edge tape thickness:</b>	0.5-0.8 mm (Soft forming) 0.6-2 mm (Straight side, straight and inclined)
<b>Angle of inclination:</b>	0-60 degree (Soft forming)
<b>Feeding speed:</b>	12-16 m/min
<b>Power supply:</b>	380 V; 50 Hz
<b>Air pressure required:</b>	0.7MPa
<b>Operation system</b>	7" touch screen
<b>Dust collector</b>	Φ125mm×5
<b>Control mode</b>	Encoder; PC
<b>Total power:</b>	36 Kw
<b>Approx. weight:</b>	4,000 kg
<b>Overall dimension:</b>	9,400*1,050*1,900 mm

*\*Thanks for your attention!*

*The company continuous to improve the product specifications and design details, the specifications are subject to change without notice. 200416*