

MF-1504AFX Automatic Doorway Line Edge Banding Machine

Operation Manual

Factory Number:

Shenyang Baoshan Woodworking Machinery Factory

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I Usage and Characteristics

This machine is mainly used for doorway lines made from various materials, such as solid wood doorway line, high density board doorway line and so on.

It features such characteristics as swift processing speed, good forming quality, solid paste and beautiful shape. Its processing speed can be up to 12 meters per minute, which can be completed by two operators, thus saving the labor cost to a large extent.

It uses the soundproof and dust collector with the compact body structure, reasonable layout and beautiful appearance, and automatically completes action of carrying from a single board, line delivery, slotting, melting, gluing, banding and

modelling. It has the doorway line edge banding machine, which is of highly automatic multifunction, high productivity, good modelling quality and stable performance.

II Instructure

This machine consists of the machine body, beam pressure device, conveyor belt transmission device, pallet device, melt adhesive device, sealing material banding and compression device, electrical control device, pressure control device.

III Major Parameter

Thickness of Wood Lines:	Thickness 3~6mm
	Height 0~45mm
Thickness of Workpiece:	12~40mm
Minimum Width of Workpiece:	65mm
Working Speed:	12-20m/min
Air Pressure:	0.5-0.8Mpa
Slotted Motor:	3.0KW
Modeling Motor:	7.5KW number: 2
Work Transmission Motor:	2.2KW 380V 1400RPM 50HZ
Plastic Box Heating:	2KW
Auxiliary Heating:	3KW number: 1
Machine Lighting and Others:	0.3KW
Plastic Box Motor:	0.37KW
Total Power:	30KW
Size of Machine:	4000×1100×1800mm (Length* Width* Height)
Weight of Machine:	1500Kg

IV Transportation and Installation

1. The machine can be transported via the forklift through the machine body. In the process of transportation, the balance of whole machine's weight and the paint of appearance should be paid enough attention. When storing the machine, please place the machine under the warm, dry environment and cover it with a plastic shade.

2. Check if the ground is strong and flat before installation. It would be better to put the machine on the concrete floor, in order to ensure the stability of the machine. Meanwhile, it is required that the lightness of the place is not lower than 500LUX, and there is enough space for installation, operation and maintenance.

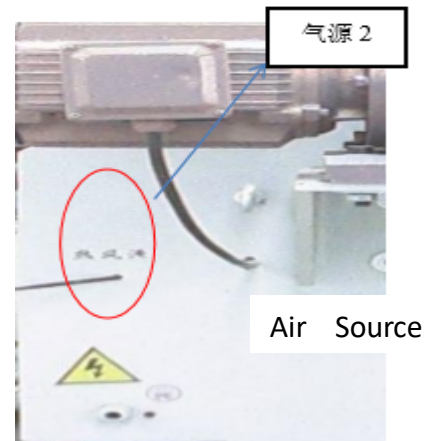
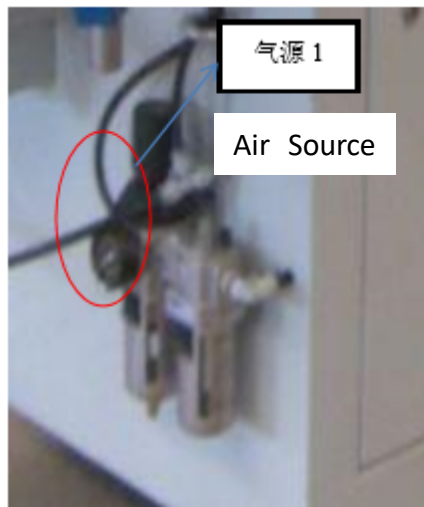
The procedures of installation are as follows:

1. Removing the package of the fixed parts of machine.

2. Putting the machine on the ground, and adjust it to the level.
3. Power connection. Under the rated voltage, the copper wire cannot be shorter than 4mm², and the electronic control air switch cannot be lower than 25A. It is a must to connect the ground so as to secure safety.
4. Gas source connection. Air pressure cannot be lower than 0.5 Mpa, air source from the same air inlet (Ö8)
5. Dust pipe connection. It needs to install the vacuum tube with the corresponding Outlet diameter.
6. Checking whether the voltage is normal. The compressed air should be guaranteed to be sufficient and dry.

V Use of Edge Banding Machine

1. The air source of edge banding machine must use two independent air sources (directly lead two air sources from the air compressor), thus avoiding other air pressure to be too low because of the auxiliary heating. Connect two independent air sources respectively with the air inlets of edge banding machine (as the Figure shows)



2. Connect the power; reset the emergency button, and open the power switch.
3. Set the temperature, operate and adjust according to the temperature required by hot melt adhesives, workpieces and edge bondage materials.

4. Start the feeding device, and confirm that the motor is rotating in the positive direction and the clockwise rotation of feed sprocket wheels is forward, otherwise, you should stop operating immediately. After pulling down the gate, you should change the place of any two of the three phases and then start, until the rotation direction of sprocket wheels meets the requirement.

5. 15 minutes after the temperature reaches the set one, the switch can be pressed to start feeding. Then it is necessary to let the machine idle away for 3~5 minutes, after which the hot melt adhesives will automatically cycle, thus making the adhesion much better.

To start the device, do the following procedures on the operating panel: a. Press the cutter switch to start the cutter motor;

b. Press the glue button to start the gluing motor.

c. Press the auxiliary heating switch to start the auxiliary heating device, and successively press the feeding, slotted, glue, modelling 1, 2, and chamfering button on the control panel.

6. Install the moldings, open the reversing valve, and the cylinder in Figure two will open, then place the moldings into the woodwork groove, which pushes the moldings to the front stop block, finally close the reversing valve.



Figure 2

7. Install the inlet board.
8. Attention: The auxiliary heating must be turned off at the machine's non-operating state.
9. Observe whether the machine is well functioning: and whether every part's barometer meets the standard.

Feed Cylinder: 0.3-0.4Mpa

Open Inner Slot Pressure: 0.3-0.4Mpa

Open Air Pressure: 0.3-0.4Mpa

Pressure of Upper Cylinder: 0.3-0.4Mpa

Pressure of Initial Cylinder: 0.1Mpa

Outside Repair Pressure: 0.3-0.5Mpa

Delivery Cylinder 1 Air Pressure: 0.35-0.45Mpa

Delivery Cylinder 2 Air Pressure: 0.1-0.2Mpa

Pressure of Large Clamping Roller : 0.1-0.2Mpa

Small Clamping Roller: 0.1-0.3Mpa

Upper Head Pressure 0.25-0.35Mpa

Pressure of safety valve is equal to upper head pressure

Front Lower Head Pressure: 0.1-0.2Mpa

Back Lower Head Pressure: 0.1-0.2Mpa

Trimming Pressure: 0.1-0.15Mpa

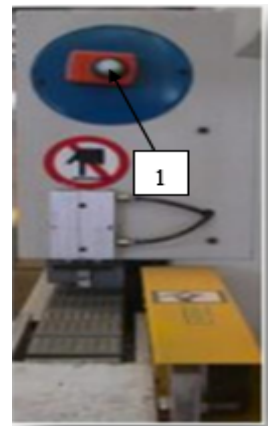
Feeding Cylinder: 0.35-0.45Mpa

Correcting Cylinder: 0.1-0.3Mpa

Pressure of Upper Pressure Material: 0.1-0.3Mpa

Shaping 1、2、3:0.3-0.5Mpa

10. Press the automatic start button on the panel, and start working.



VI Adjustment of Edge Banding Machine

1. Feeding Beam Pressure Device Adjustment

The methods of adjustment are as follows:

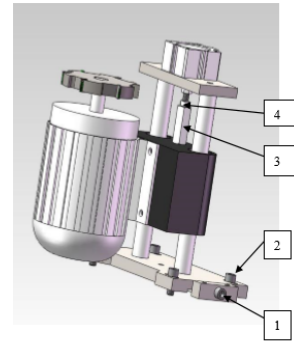
Rotate the lifting shaft 1 with a spanner to make the digital reading coincide with the thickness of workpieces.

2. Milling Cutter Adjustment

According to the different depth of slot groove, the adjustment of milling cutter can be achieved through adjusting the height and position of it.

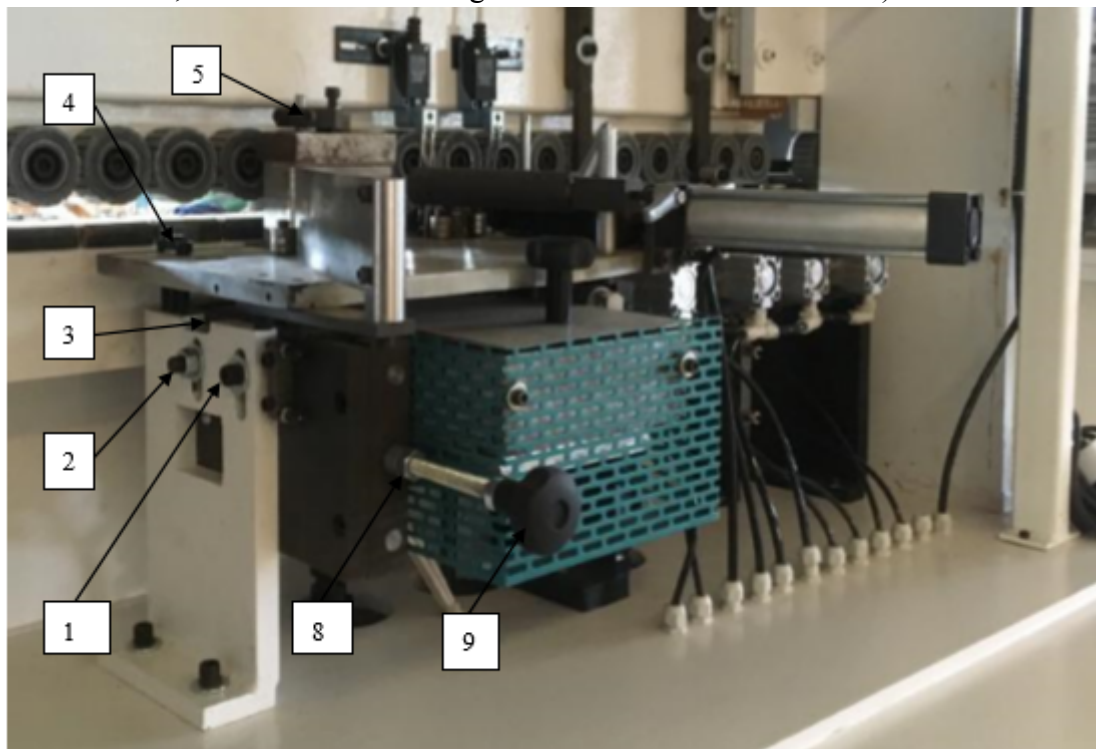
To adjust the front and rear position of milling cutter, you need to loose bolt 1, and then rotate the bolt 2, so that you accomplish the adjustment of milling cutter's position.

To adjust the height of milling cutter, at first, you should loose screw nut 4, rotate hex bolt 3, thus finishing the adjustment of milling cutter's height.



3. Glue-spread Quantity Adjustment

The quantity of glue can be adjusted based on the difference of workpiece's material and the divergence of the edge's material and depth. Rotating the screw 5 can get the desired amount of glue. (the quantity of glue will become smaller in the clockwise rotation, and it will become larger in the anticlockwise rotation)



4. Gluing Shaft Adjustment

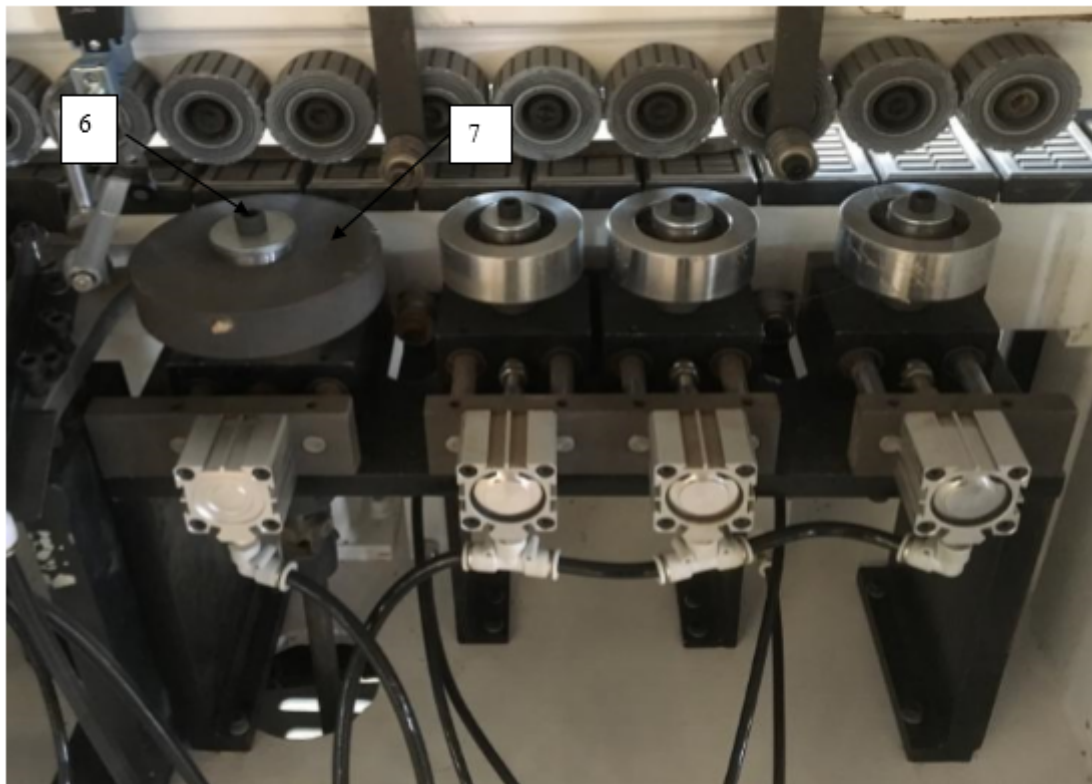
(1)、Vertical adjustment of gluing shaft: loosening the screw 1 to rotate it, then you can change the angle of glue shaft. You can keep on doing that until the glue shaft is parallel to the glued surface of workpiece.

(2)、Positioning adjustment of the gluing shaft: loosen the screw nut 8, rotate the screw bar 10, and the gluing shaft can be moved to and fro. When the workpiece have a connection with the gluing shaft, it bounces back 0.5-1mm should be set as the standard.

(3)、Height adjustment of the gluing shaft: loosening the screw nut 2 and the bolt 1 and rotating the bolt 3 can adjust the up and down height of the gluing shaft. Moreover, the height should cooperate with the layering machine.

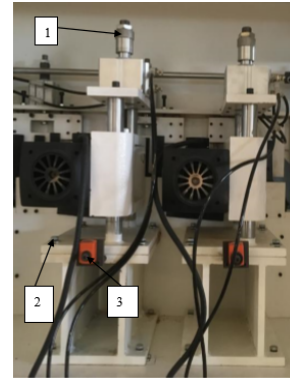
5. Layering Roll Adjustment

After adjusting the height of gluing shaft, you need to adjust the height of layering roll as well. First, you need to loosen the bolt 6, and then put gaskets respectively under the three layering rolls to adjust the height.



5. Modelling Adjustment

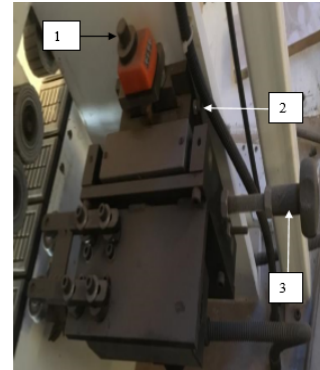
If it is necessary to adjust the modelling depth, you can rotate the vertical adjustment screw nut 1 to a suitable position according to the practical necessity.



If it is necessary to adjust the position of modelling, you can loosen the base retaining bolt, and then rotate it to adjust the screw nut according to the practical need.

6. Chamfering Device Adjustment

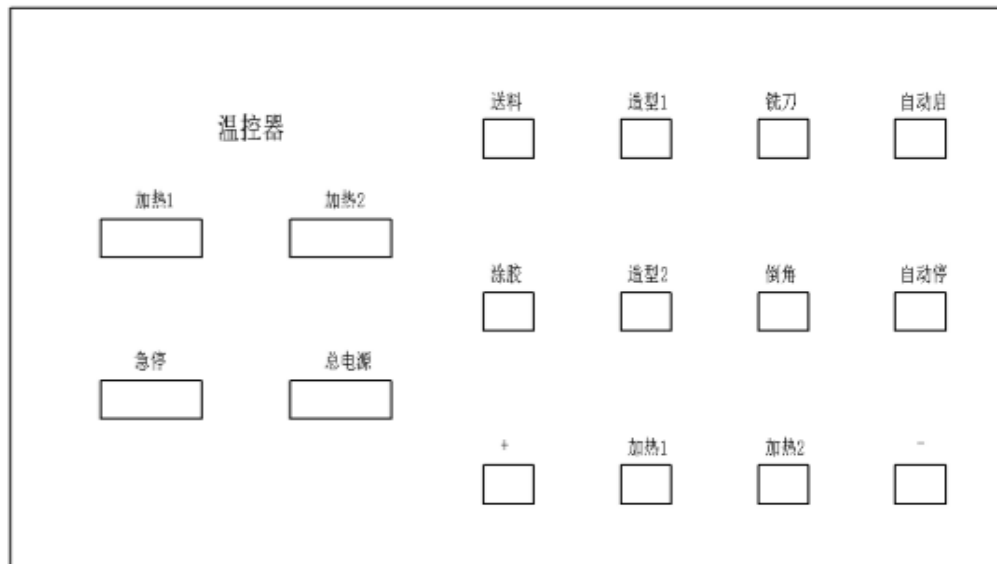
If you need to adjust the chamfer horizontal position, it is indispensable to rotate the screw 3 and adjust it to a suitable position.



If you need to adjust the chamfer vertical position, the first thing you need to do is open the locking bolt 2, rotate the lead screw and adjust it to a suitable position, then lock the bolt 2.

VII Operation Panel

1. Successively Press the control button of the function you desire, and the device will work properly.



2. Time Adjustment of Edge Banding:

Press the (+) button, the edge banding time will be longer and the length of edge banding will increase as well; otherwise, they will decrease. The length of edge banding can be adjusted based on the actual requirement.

VIII Lubrication and Maintenance

1. The reducer should be filled with gear oil and be replaced on time. After the first phase of 500 hours, you should substitute the new oil and clean out the inside greasy dirt. The second phase includes 1000 hours, and the third phase 2000 hours. Since then, you should change the oil every 2000 hours and check the oil level frequently so that the oil level can stay at the middle of oil level indicator.

2. The oil-water separator consists of oil filters and water. Oil filters should be filled with P100 pneumatic oil, and the oil refueling is supposed to take the scale on oil filter labels as the standard (when the oil is lower than the label's "MIN O" scale). Please remember that the water in water-filter cannot be higher than the highest scale on the water filter labels (that is, the MAX DRAIN LEVEL. If it is above that, the water needs to be released immediately.)

3. Every working for 40 hours, the interface between the beam pressure slider, chrome-plating guide rod and adjusting screw should be filled with lubricant once a time.

4. Clearing the gearbox and injecting lubricant into it once every two weeks (8 hours a day).

5. Clearing the driving chain and injecting lubricant into it once every two weeks (8 hours a day).

6. Clearing the whole machine once a day (after the cooling of adhesive box)

IX Safe Operation Procedures

a. Operators should read the operation manual about this machine carefully.

b. Operators should receive proper professional trainings to operator this machine.

c. In the process of machine working, operators are strictly prohibited from leaving the job.

d. Operators are not allowed to touch the running rails and moving parts.

e. Paying attention to check the machine frequently, if you find it abnormally running, it is necessary to immediately repair it. Before repairing, please make sure that the power has been turned off and the warning signs reading "the machine is under repair, please do not close the switch", then you can make repairs.

The equipment is in a continuous technical innovation, please forgive us that if there are minor changes we will not make otherwise notification!

X Electrical Control Schematic Diagram (Attached)

