

### FOREWORD

Thank you for choose automatic sealing machine developed and manufactured by our company.

Automatic sealing machine is a new generation sealing packaging machine designed based on the latest needs of the market. The mechanism is novel, the structure is simple, function is complete, it is a high degree of automation including conveying and sealing, which can greatly reduce the labor intensity of operators. It has the advantages of safety and reliability, easy operation, good looking and firm of fast sealing.

In order to help you use it properly, please read this instruction manual carefully before installation. It will help you to have a basic known of the machine including performance, structure, operation and maintenance, so that you can use the machine correctly to achieve the best performance, reduce faults and prolong service life.

#### **Special statement:**

1. The company reserves the right to interpret all the parameters and contents stated in the instructions;

2. The company reserves the right to make technical changes to the product without prior notice.

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### 1.Function and introduction

This machine is suitable for the sealing of plastic film, bag making, can be widely used in food, medicine, chemical and other industries.

Because the machine adopts electronic constant temperature control and stepless speed regulation transmission mechanism, it can seal the packaging bags of various materials. And also due to the small size, widely usage, and the sealing length is not limited, it can be combined with various packaging lines. It will be the best sealing equipment for factory and store batch product packaging.

Due to the simple electrical control, reasonable and refined mechanical transmission, the structure is very stable, the failure rate is extremely low, and the service life is longer. It can work continuously for a long time and can meet the needs of mass production. After the product is sealed and packaged by the machine, it has good appearance, dust proof, moisture proof, damage prevention, easy to handle and store. Greatly reduce product loss and have the advantage of packaging cost.

Voltage	110V or 220V 50~60HZ
Power	550W
Sealing speed(m/min)	0~16
Sealing width(mm)	6~12
Temperature range (°C)	0~300
Max single layer thickness(mm)	≤0.08
Max loading weight(Kg)	≤5
Machine dimension(LXWXH)mm	820×400×308
Net weight(Kg)	16

### 2.Main technical parameters

### 3.Main structure & working principle & adjustment method

3.1Main structure(Figure 1)









## (1)conveying part

**2**Rack and sealing part

**③Control part** 

## 3.2 Working principle

When the power is turned on, heating element generates heat, so that the upper and lower heating blocks are heated up sharply. When the temperature reaches the setting by the temperature controller, the sealing area of bag transferred to the feeding area. The bag sealing part is conveyed by the sealing tape to the upper and lower heating blocks (heating zone), and the plastic bag is softened by heat and then pressed and sealed by the pressing wheel, and it will be formed when convey to the two cooling blocks (cooling zone). Finally rolled by the embossing wheel, and the sealing area of the plastic bag is pressed out of stripes or netting (also can be coded).

3.3Main adjustment methods for each part

I Conveyor belt adjustment method(Figure 2) ①Lock adjustment knob ②support frame ③Lock knob ④Conveyor belt tension adjustment knob

**Conveyor belt tension adjustment:**When the conveyor belt is too loose or too tight, rotate the two "conveyor belt tension adjustment knobs ④" at the same time (tightening when left-handed, loosening left-handed) until the tension of the conveyor belt is appropriate.

Fine adjustment of the conveyor table front and back: When the conveyor table needs to be adjusted front or back, first loosen the "Adjustment Locking Knob ①" on both sides, then push or pull the table until the position is right, then lock the "Adjustment Locking Knob ①" on both sides.

Fine adjustment of the conveyor table up and down: When the transport table needs to be adjusted up and down, first loosen the "lock knob ③" on both sides, and then pull up or down the table until the position is right, then lock the "lock knob ③" on each side.

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II Adjustment method of sealing part(Figure 3)

Adjustment screw

②Cooling block

③Lifting piece

④heating block



**Pitch adjustment of heating block and cooling block:**Due to the different sealing material and thickness, each product sealing needs to adjust the distance between the upper and lower heating blocks and the cooling block. The specific method is as follows: the turn right adjustment screw (1) is used to increase the distance. Turn left adjustment screw (1) is to reduce the distance.

**Sealing tape replacement and adjustment method:**Sealing tape replacement method and adjustment after the heating block is cooled, remove the protective cover, rotate lifting piece<sup>(3)</sup> by 90°, the two heating block and cooling block upper parts are raised; loose the spring and the embossing wheel, then you can take off the guiding belt. Push the passive wheel seat toward the heating block, remove the sealing tape, replace the new sealing tape, and then return the passive wheel, heating block, cooling block, embossing wheel, etc. to the original position.

#### III Passive wheel adjustment method(Figure 4)

(1)spring

2 passive wheel seat

③adjustment screw

④Sealing tape tension adjustment screw



If the sealing tape has a running edge, it can be adjusted by the adjusting screw (3) on the passive wheel base (2).

### 4.Panel function description



1. Power switch: Controls the power of whole machine.

2. Heating switch: Controls the power of heating.

3. Fan switch: Controls the power of fan.

④.Speed control knob: control the speed of the conveyor motor.

(5). Temperature controller:control the heating temperature.

A. The value corresponding to the upper red pointer indicates the actual temperature, and the value corresponding to the lower red pointer indicates the set temperature.

B. Rotate the lower knob to adjust the set temperature, which is set according to factors such as film thickness.

(6). Emergency stop switch: In case of emergency, the machine stops running.

## 5. Instructions for use

1. The machine has been commissioned before packing. In order to make the machine work in the best condition, the machine's performance and service life must be fully utilized. The operator must be responsible for operation and maintenance. The operator must be familiar with the debugging skills and operating procedures of the machine. And master the operation principle before you can operate to avoid damage to the machine.

2. Place the machine on the flat ground and remove the outer packing. Before powering on the machine, check whether the parts of the machine are loose or displaced during transportation. If

any, adjust the parts in time. Manually rotate all rotating shafts to see whether they rotate flexibly, check whether all conductive leads are separated from the fixed clamps, and whether there are phenomena affecting normal operation such as rotation, sliding, lapping of lifting mechanism, friction, hook, etc.

3. Adjust the barrier between the upper and lower heating blocks and cooling blocks according to the material to be sealed. The gap between the two sealing strips is about the thickness of one layer of the packaging bag, which can ensure the sealing fastness and the definition of the embossing, also does not make the two ends of the sealing portion extend too long.

4. Adjust the transport table to the appropriate position according to your work needs.

5. Turn on the power supply to start the power switch. After the power indicator light is on, adjust the speed control knob to make the transmission parts run synchronously.

6. Fine-tune the embossing wheel adjustment knob to make the embossing wheel rotate, adjust to the appropriate pressure, and then fix the screw.

7. Turn on the heating switch. After the electronic temperature controller lights up in green, adjust the temperature controller to the required temperature according to the material and thickness of the packaging bag. When the heating block starts to warm up, it should be turned on at a low speed.

8. Determine whether to turn on the cooling fan for cooling according to the material and thickness of the packaging bag.

9. Align the sealing part of the packing bag and feed the bag into the feed port. When the sealing part is occluded by the sealing belt, the packing bag will automatically move forward. At this time, it is not necessary to push or block it, otherwise the sealing will be wrinkled or fail.

10. In case of dirt sticking to the sealing tape and heating block, stop the machine immediately and remove it. When the temperature is too high, do not directly remove it by hand to avoid scalding or crushing!

11. In order to improve the service life of the sealing tape, before preparing to shut down the machine, first adjust the adjusting knob on the temperature controller to the zero position and turn on the cooling fan. At this time, the sealing tape must operate normally and cannot stop running. After a period of time, make sure the temperature on the heating block is below 80 °C, then turn off the cooling fan and power switch.

## 6.Electrical Schematic



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## 7.Exploded view and name of each component

7.1 Rack section



NO	Name	Qty	Models and Specifications	Remark
1	Frame	1		
2	Shield	1		
3	Rubber washer	4		
4	Handle	2		
5	Emergency stop switch	1		
6	Speed control knob	1		
7	Switch	3	Red, green, yellow, each one pieces	
8	Temperature table	1	Installation hole 67x67	
9	Panel	1		
10	Back door	4		
11	Power socket (with safety)	2	Mounting hole spacing 36	

## 7.2 Conveying part



No	Part Name	Qty	Models and Specifications	Remark
1	Driving roller cover	2		
2	Deep groove ball bearing 6201	6	GB 276-94	
3	Bearing block	1		
4	Driving rolle	1		
5	T belt 120	1		
6	Driving pulley	1		
7	External Circlips 12	2	GB 894.1-86	
8	Bearing block(Large)	1		
9	Right circlip32	1	GB 893.1-86	
10	Conveyor belt	1	PVC,perimeter=1580 mm	
11	Conveying platform	1		
12	Conveyor plate	1		
13	Handle M6×70	2		
14	Driven roller mandrel	1		
15	Passive rolling washer	2		
16	Adjusting seat locking screw	2		
17	Passive roller	1		
18	Handle M8	4		
19	Locking screw sleeve	2		
20	Conveyor adjustment	2		
21	Supporting cross	1		
22	Supporting bar	1		
23	Conveyor adjustment screw	2		
24	Rubber foot pad	2		
25	Supporting cross	1		

## 7.3 Sealing part



No	Part Name	Qty	Models and Specifications	Remark
1	Panel	1		
2	External Circlips 12	3	GB 894.1-86	
3	Rubber wheel mandrel	1		
4	Transmission shaft	1		
5	Axle sleeve nut	1		
6	Guide wheel mandrel	2		
7	Spring for Embossing wheel	1		
8	Embossing wheel adjusting	1		
9	Drive shaft sleeve	1		
10	Circlip for hole 19	2	GB 893.1-86	
11	Deep groove ball bearing 626	2	GB 276-94	
12	Guide wheel	2		
13	Guide belt	2	Gear belt 410	
14	Rubber wheel	1		
15	Rubber wheel end cover	1		
16	<b>Embossing wheel</b>	1		
17	Driving wheel	2		
18	Cooling block (lower)	1		
19	Head support (lower)	1		
20	Heating pipe (220V220W)	2		
21	Pillar	4		

22	Heat insulation film	4		
23	Heating block (upper)	1		
24	Heating block (lower)	1		
25	Passive wheel	2		
26	Sealing belt 750	2		
27	Deep groove ball bearing 6201	10	GB 276-94	
28	Circlip for hole 32	4	GB 893.1-86	
29	Lower passive wheel base	1		
30	Inlet	1		
31	Baffle	1		
32	Spring adjusting screw	2		
33	Upper passive wheel base	1		
34	Passive wheel spring	2		
35	Lifting film	4		
36	Hot head bracket (upper)	1		
37	Spring piece	4		
38	Hot end adjusting spring	4		
39	Spring adjusting base	4		
40	Cooling block (upper)	1		
41	Drive bearing base	3		
42	Bearing spacer	3		
43	Drive wheel mandrel	2		
44	Handle M8×40	1		
45	Cooling fan	1		
46	Spring base of embossing wheel	1	Second Second	
47	Shield support	2		
48	Passive gear	3		
49	Rubber wheel bearing	1		
50	External Circlips 22	1	GB 894.1-86	
51	Plastic connecting plate (upper)	1		
52	Conversion gear	1	1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	
53	Gear idle	1		
54	External Circlips 20	1	GB 894.1-86	

55	Deep groove ball bearing 6004	1	GB 276-94	
56	Circlip for hole 42	1	GB 893.1-86	
57	Axle sleeve	1		
58	Plastic connecting plate	1		

## 7.4 Turbo integrated motor



No	Spare parts name	QTY	Remark
1	Turbo integrated motor	1	

## 7.5 Assembly schematic diagram of vertical sealing machine



1. frame and sealing components 2. Operation panel 3.M8 Nut handle 4. Vertical frame 5.conveyor 6.M8 Screw handle 7. Bevel gear converter

## 7.6 Assembly schematic diagram of vertical frame



1.left bracket 2. Rubber feet 3. Connection bracket 4. right bracket

## 8.Common troubleshooting

Phenomenon	Reason	Method
Sealing deviation	The drive wheel and the passive wheel are not parallel	Adjust the two screws on the passive wheel until they are no longer biased
Sealing tape easy break	<ol> <li>The seal is too tight.</li> <li>The seal belt runs off.</li> <li>The seal has a crease.</li> <li>The surface of the sealing tape has an adhesive film or other dirt.</li> <li>The sealing tape is easy to burn.</li> </ol>	<ol> <li>Adjust the longitudinal adjustment screw of the passive wheel seat so that the sealing tape is not too tight and not too loose.</li> <li>Refer to the above item.</li> <li>Adjust or replace without creases.</li> <li>Remove the adherends and dirt on the sealing tape on the surface of the sealing tape in time.</li> <li>Adjust the gap between the heating blocks, or adjust to the appropriate temperature due to excessive temperature.</li> </ol>
Embossing not clear	<ol> <li>The embossing wheel is worn</li> <li>The pressure spring of the embossing wheel seat is not pressed</li> </ol>	<ol> <li>Replace the embossing wheel.</li> <li>Adjust the compression spring of the embossing wheel base</li> </ol>

There is resistance when the sealing tape is transported	The gap between the heating block or the cooling block is too small and the friction is too large	Adjust the heating block or the cooling block to make the gap moderate. Under normal circumstances, the gap between the two pockets is about the thickness of one layer of packaging, which can ensure the sealing fastness and the embossing clarity, and does not extend the ends of the sealing part
The bag is blocked or turned at the end of the running to the intermediate press wheel or embossing wheel	The intermediate press wheel or embossing wheel is pressed too tightly	<ol> <li>The pressure of the press wheel or embossing wheel should be adjusted properly. The gap between the two sealing tapes is about the thickness of one layer of the packaging bag, which can ensure the sealing fastness and the embossing clarity without causing</li> <li>Both ends of the sealing part are extended too long.</li> <li>After adjusting the gap, adjust the limit screw.</li> </ol>
Conveyor belt deviation	The active roller shaft is not parallel to the passive roller shaft	Adjust the two conveyor belt tension adjustment knobs of the passive roller shaft (rear shaft) of the conveyor to ensure that the two axes are parallel and ensure that the conveyor belt is not too loose or too tight.
Conveyor belt and sealing tape are not synchronized	Conveyor belt is not tensioned	<ol> <li>Tighten the active roller and intermediate shaft conveyors so that they are completely in contact with the rollers.</li> <li>Tighten the conveyor belt properly</li> </ol>

### 9.Maintenance

(1) To keep the body clean, the electrical part should be kept dry and ventilated.
 (2) Before the machine is repaired, the main power source and air source must be turned off.
 When repairing, it should be repaired by professional staff or notified by the company.
 (3) The warranty period of this machine is one year, that is, the machine fails due to quality problems within one year. The company carries out maintenance free of charge. Due to improper operation or other natural disasters and force majeure, the company will charge part of the maintenance fee and replace the parts. Charges are based on their price.
 (4) During the period beyond the warranty period, the company will continue to carry out maintenance work, but need to collect the cost of the work as appropriate.
 (5) When the user repairs itself, the company provides external parts service.
 (6) For a long time stop, the power switch must be turned off.

(7). It is necessary to check whether the screws of the moving parts are loose before going to work every day.

Warn: When debugging the machine, no part of the body can be placed in the

movable position of the machine to avoid burns or bruises!

#### (8).Maintenance records and feedback

Thank you for purchase automatic sealing machine produced by our company. Because of your correct choice, to make you have a safe, practical and efficient sealing and packaging machine, I hope you become a Long-term customers of our company, and we kindly hope you can inform us any advice or problem during you using our machine, we will take it seriously and reply in time, I sincerely thank you!

## **Quality Certificate**

This product has passed the inspection and is approved.

Product name: Automatic plastic bag sealing machine

Model number:FR-

Serial number:

Quantity:

Date of manufacture:

Inspector:

Main Management Stamp:

	No	Name	Specification	Unit	Qty	Remark
	1	Teflon tape	750*15	pcs	2	
	2	Power cord		pcs	1	
FR-	3	Coding letter box		Set	1	
	4	Screwdriver	3MM	pcs	1	
	5	Fuse	Φ5*20/10A	pcs	2	
	6	Manual book		pcs	1	
	7	Inlet connector		pcs	1	

# Packing list