CLEVELAND
EQUIPMENT & MACHINERY COMPANY

CE-900-VS

Continuous Band Sealer

Operation Manual

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I. Preface

Thanks for choosing CE-900-VS Continuous Band Sealer which research and development, manufactured by our company. CE-900-VS Continuous Band Sealer is our new type sealing machine, which is newly designed based on many years experience of manufacturing sealing machine and the newest market demand. This Sealer is in the function on continuous carry, seal in one operation, and can reduce the labor intensity of operators. It has advantage of safe and easy operation, speedy heat seal and beauty & fastness seal.

To operate machine properly and utilize its value best, read this operational instruction carefully before utilization. This will help you to grasp the machine's basic mechanical principle, structure, operational process, and maintenance method. The malfunction will be reduced if you have proper operational method, and make the life of machine is prolonged.

II. Function Summary

This Sealer is suitable for sealing and making various plastic film bags, it widely used in the fields of food, medicine, chemical industry, daily expenses and so on.

Because of this sealer adopts electronic constant temperature control and infinite adjustable-speed drive mechanism, it can seal all kinds of different materials of plastic bags. Because of the machine is in small size, wide application, and the sealing length is not restricted, it can be used with many kinds of packing production line. It will be the best sealing equipment for factories and shops to pack batch products.

Due to the electrical control is simple and the mechanical transmission is reasonable and refined, thus structure performance is very stable, failure rate is extremely low, and lasts longer life. It can work continuously for a long time; can meet the demand of mass production. After the products are sealed by this machine, they will have good appearance, clean and tidy, dustproof, moisture proof, breakage-proof, and easy to carry and store. Greatly reduce product loss and packing cost.

III. Main Technical Parameters

Power supply		110/220V/50～60Hz
Power	Driving Power: (50W)	500W
	Heat seal power: 220Wx2	
Sealing speed（m/min）		0～12
Sealing Width（mm）		6～12
Temperature Range		0～300 ℃
Single layer film Max thickness (mm)		≤0.08
Conveyor max loading weight（Kg）		≤3
Machine Size（LxWxH）mm		800x400x305
Weight (Kg)		19

IV. Main Structure and Working Principle & Adjustment

1. Main Structure outside drawing（Figure 1）

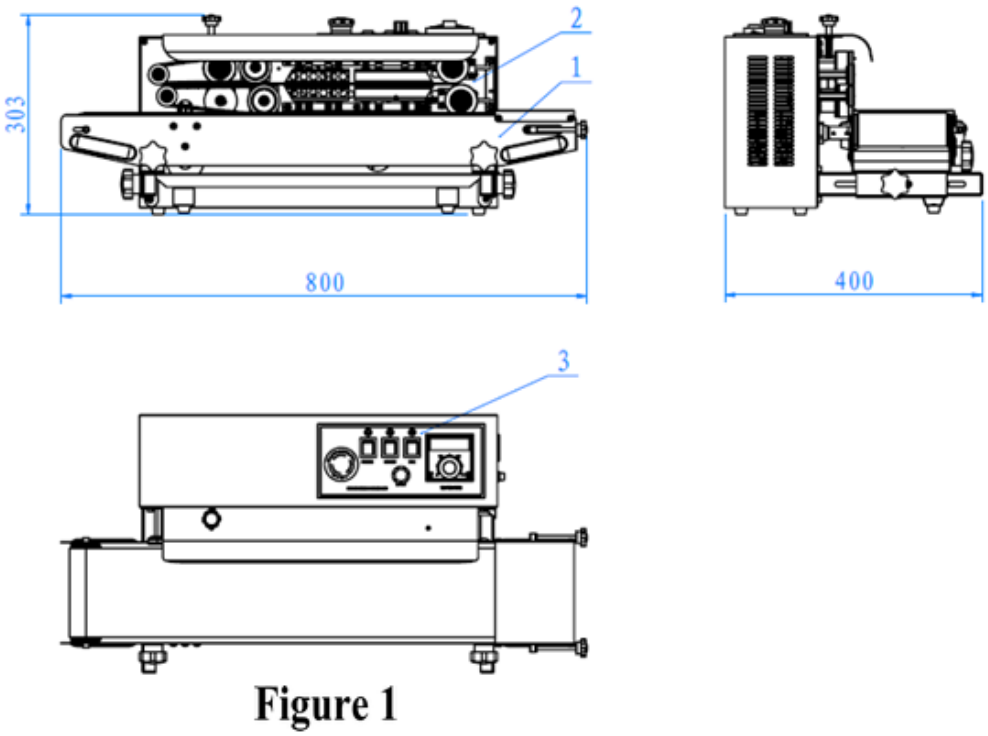


Figure 1

1. Conveyor part　　2. Machine frame and sealing parts　　3. Control parts

2. Working Principle

After being connected to the power supply, each device begins to work, the electro-thermal parts generate heat to heat up bottom and up heating block rapidly. When the temperature reaches at the setting temperature of temperature controller, putting the sealing part of plastic bag into the position between two sealing belts, then it conveys into the heating area which among bottom and up heating block, the plastic sealing part will be sealed by melt through heating and extruding by roller. Then it will convey into cooling area to get into form, to make plastic bag sealing parts with stripe or reticulate (or dates) by embossing wheel rolling.

3. Adjustment Methods of Each Component

A. Adjustment method of Conveyor part （Figure 2）

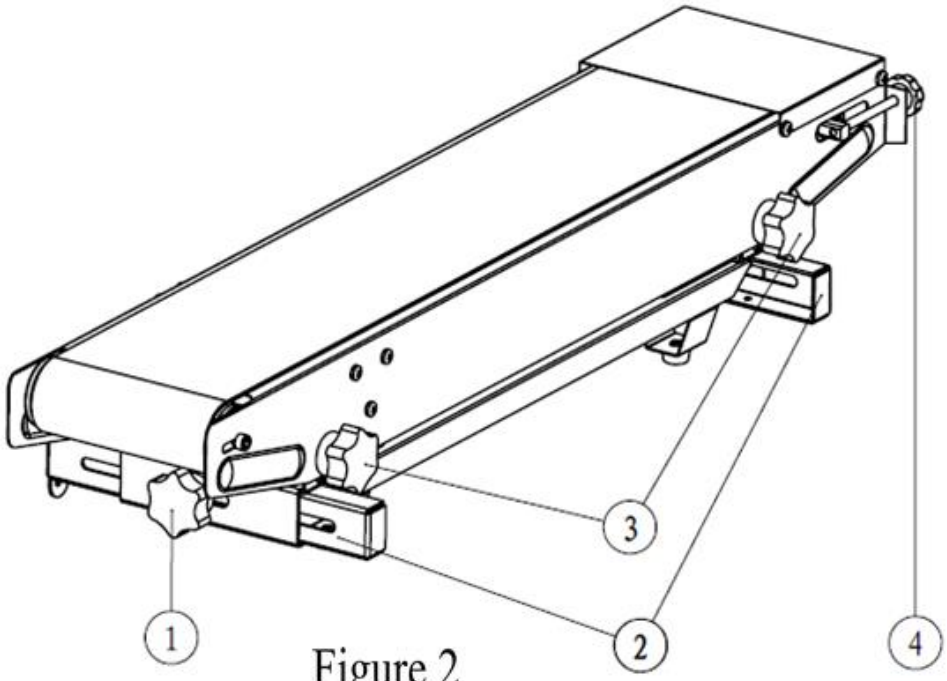


Figure 2

①. Adjusting fasten knob ②. foot stool

③. Fasten knob ④. Conveyor belt tension wheel adjustment screw

Conveyor belt tension adjustment: when the conveyor belt is too loose or too tight, adjusting conveyor belt tension wheel adjustment screw ④ of two sides (right rotation is to be tight, left rotation is to be loose), until the tightness of conveyor belt is appropriate.

Conveyor worktable front and back fine adjustment: when the conveyor worktable needs front and back adjustment，first to loosen adjustment fasten knob ① of both sides，then push or pull the worktable, tighten the two sides adjustment fasten knob ① until the position is suitable.

Conveyor worktable up and down fine adjustment: when the conveyor worktable needs up and down adjustment, first to loosen two sides fasten knob ③, then pull the worktable up or down, tighten the two sides fasten knob ③ until the position is suitable.

B. Adjustment method of sealing parts（Figure 3）

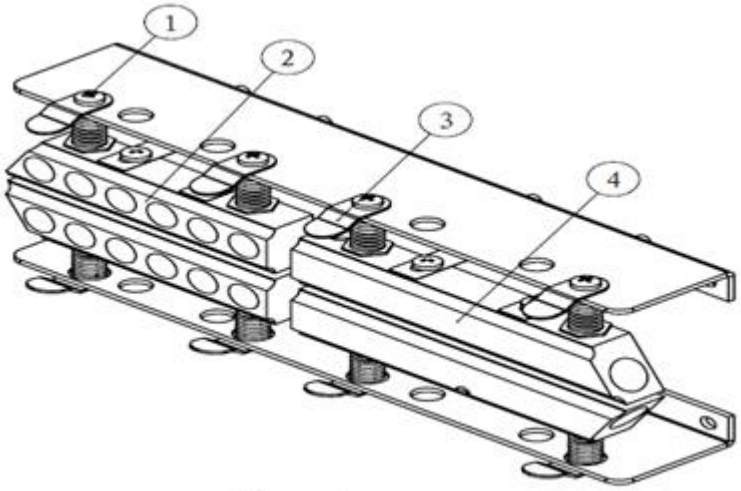


Figure 3

①. Adjustment screw

②. Cooling block

③. Lifting piece

④. Heating block

Distance adjustment of Up and down heating block & cooling block: because of different sealing material and thickness, each kind of product needs to adjust the distance between heating block and cooling bock. The method is described as follows: right-handed rotation adjustment screw ① can increase the distance between up and down heating blocks and cooling blocks, Left-handed rotation adjustment screw ① can decrease the distance between up and down heating blocks and cooling blocks.

Sealing belt replace method & adjustment: after the heating block cool down, take down the protective cover，rotating the lifting piece ③ into 90°which on the heating block and cooling block in Figure 3, then loose the embossing wheel and the spring of middle pressure wheel, take down the leading belt, then push driven wheel in the direction of the heating block, and take down the sealing belt and replace with new sealing belt. Finally adjust the position back of driven wheel, heating blocks, cooling blocks and embossing wheel.

C. Driven belt roller adjusting blocks (Figure 4)

①. Spring

②. driven belt wheel seat

③. driven wheel seat

④. Adjusting screw

⑤. Adjusting screw

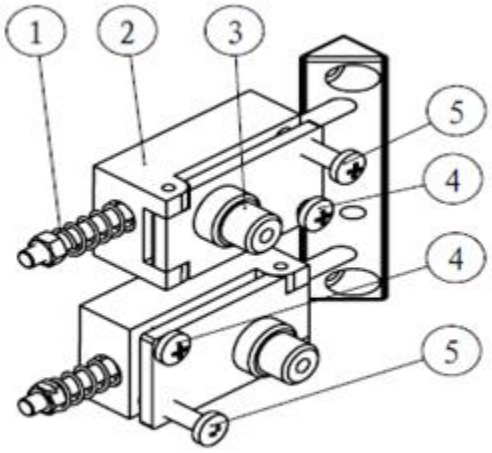
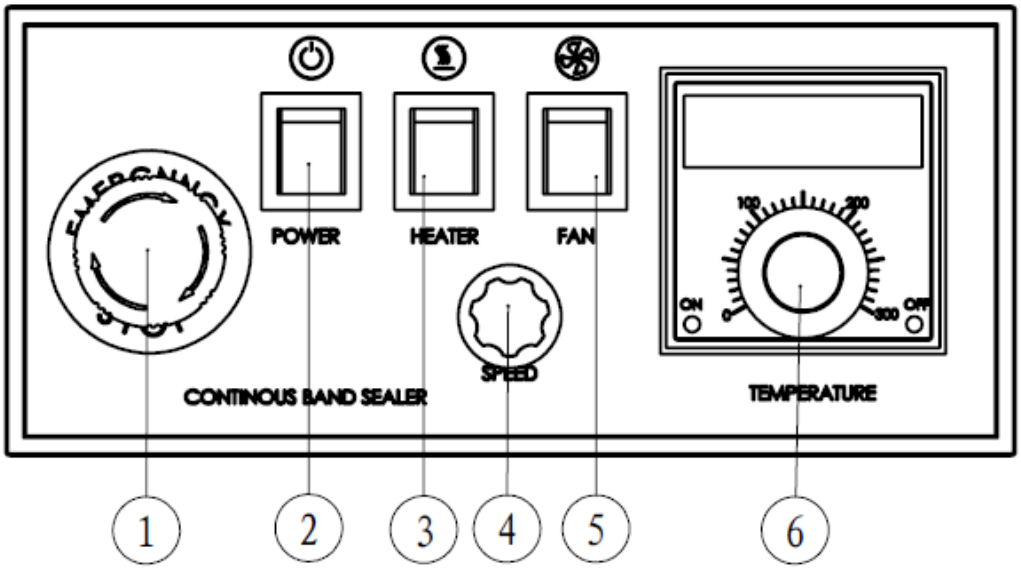


Figure 4

If the sealing belts have phenomenon of off tracking, it can be adjusted using the adjusting screw of driven belt wheel seat ②.

V. Panel Function Declaration

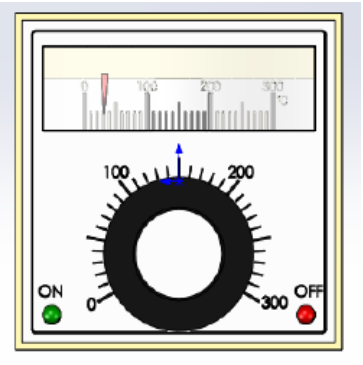


1. Urgent stop switch: under emergency status, disconnect the power supply.
2. Power switch: Control the whole machine on or off
3. Heating switch: control heating tube of heating block on or off
4. Speed adjustment knob: control the speed of conveyor motor
5. Fan switch: control cooling fan on or off
6. Temperature controller: adjust and control the temperature of heating block

Temperature controller setting methods:

A. Rotating the screw scale into needed working temperature

B. The temperature which display in the dial is the actual temperature of working.



If you order our band sealer with intelligent temperature controller, intelligent temperature controller setting methods:

A. Upper number display (red) is real temperature; bottom number display (green) is setting temperature

B. Press the button SET in lower left, at this moment the bottom number (green) turns into flashing.

C. Then press button ▲ increase or button ▼ decrease, to set the required temperature. This temperature should be set which is based on the thickness of plastic film, normally the temperature set as about 150℃.

D. When the temperature is set, must press the button SET again to return it back to normal status, then put into working.

VI. Direction for Using

1. This machine has finished debugging before leave the factory, to make the machine working under the best condition, giving full play to the efficiency and service life; it must be operated and maintained by specialist worker. The operator must be familiar with the whole machine debugging skills and operational procedures, and mastering the operation principle, so as not to damage the machine

2. Put the machine in flat floor, take away the outside wrappage, and well-ground connect. Before the machine is charged with electricity, all the parts should be checked without loosening, shifting, etc., it should be adjusted in time if have found. Rotating all spindles by man-made to see if they are turning free, checking all the electric conduction leading wires to see if they broke away from the retention clips, to see if they are lapping joint, grinding, hooking with rotation, slidable, lifting devices to impact regular work.

3. Based on sealing material, adjust the suitable distance between up and down heating block and cooling block. The gap between the two sealing belts is about one layer of thickness of the bag is the best, this can ensure the sealing fastness and clear embossing, and will not make the sealing parts extend too long.

4. Based on operation demand, adjusting the conveyor worktable into suitable position.

5. Connecting with power supply and turn on the power switch, after power indicator light on, adjusting Speed adjustment knob to make all transmission parts synchronous running.

6. Fine tuning the embossing wheel screw to make the embossing wheel running, until adjust into suitable pressure, fixing the limit screw.

7. Turn on the heating switch, after the digital temperature controller green light on, adjusting the needed temperature based on plastic bag material and thickness. When the heating block start to preheat, the machine should run slowly at the same time.

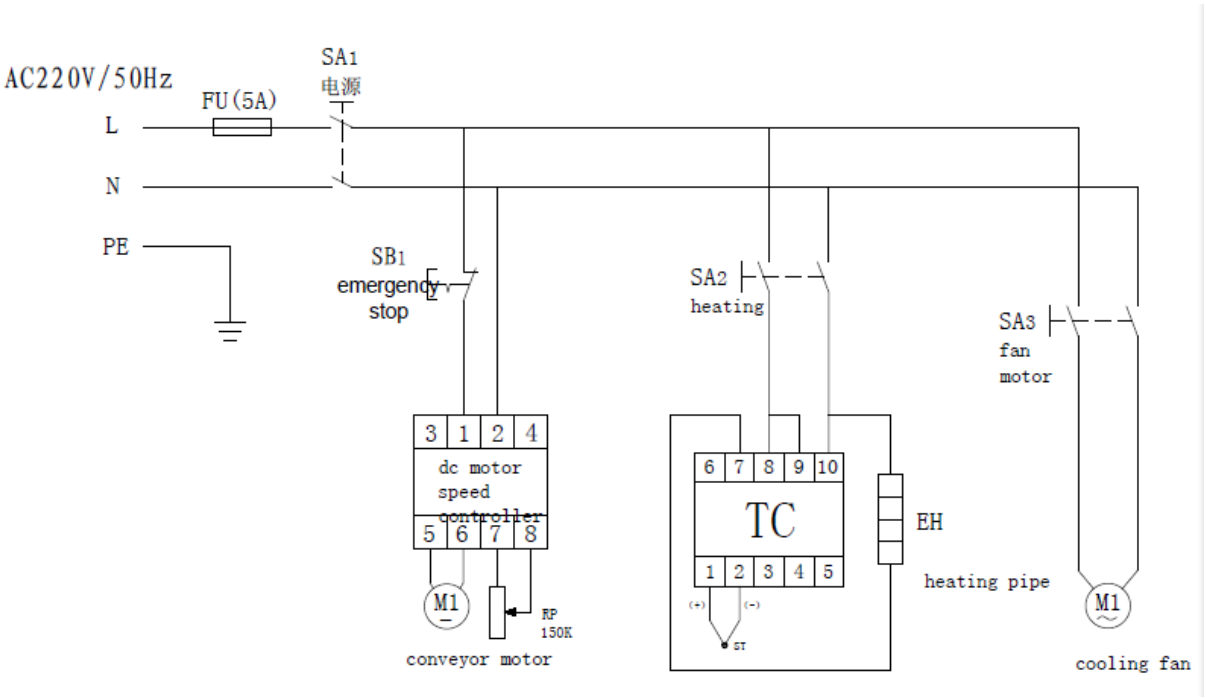
8. Based on plastic bag material and thickness to see if need to turn on the cooling fan.

9. Making the plastic bag alignment of sealing parts and lay down, putting the plastic bag into feed inlet, when the bag sealing part is occlusion by sealing belts, the plastic bag will move forward automatically. At this moment, please do not push or block at random, otherwise the sealing parts will be crumpled or faulted.

10. When you find the sealing belts and heating block are adhered with garbage, stop running machine to clean at once. Please do not touch them directly by hands when the temperature is high, so as not to scald or bruised.

To enhance the useful life of sealing belts, first to adjust the temperature into zero before turning off the machine. Then turn on the cooling fan, the sealing belts should be normal running at the same time, cannot stop. After a period, to ensure the temperature of the heating block is under 80 ℃, then can turn off the cooling fan and the power switch.

VII. Electrical Schematic Diagram



VIII. Parts Exploded Views & Names

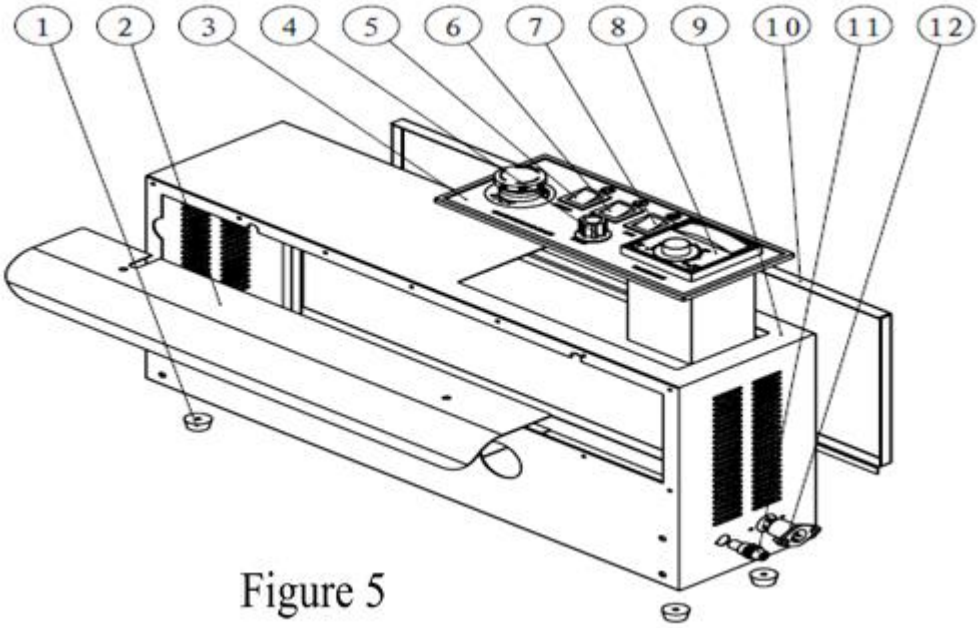


Figure 5

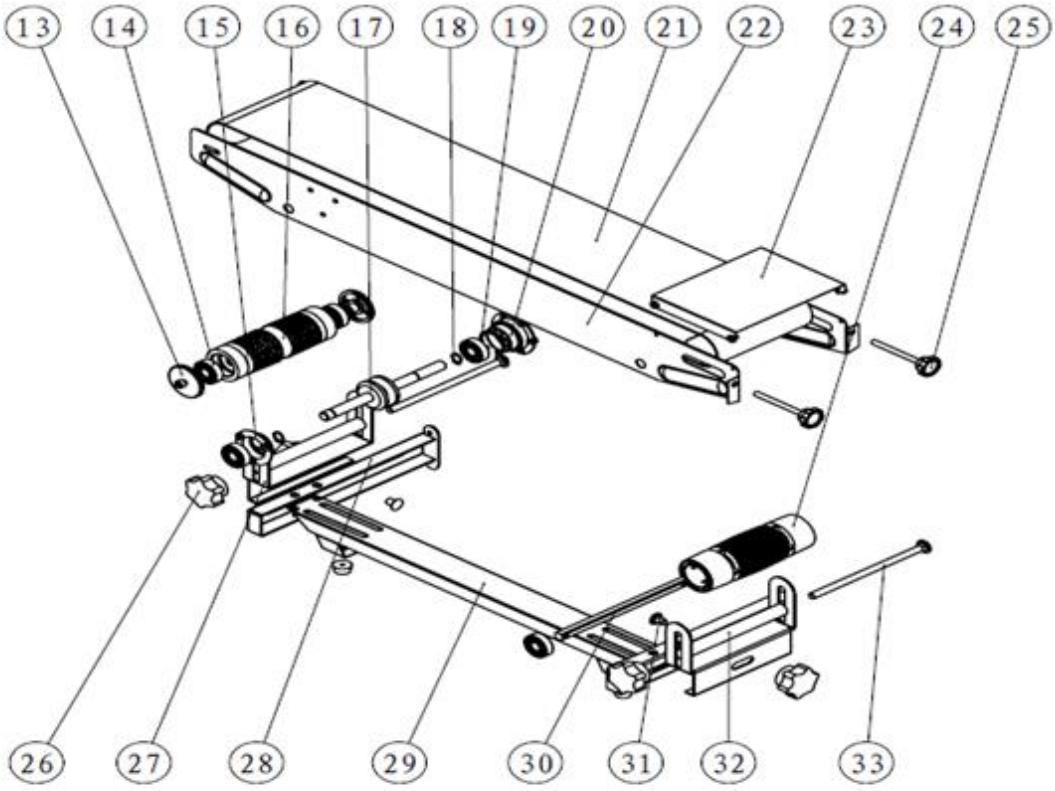


Figure 6

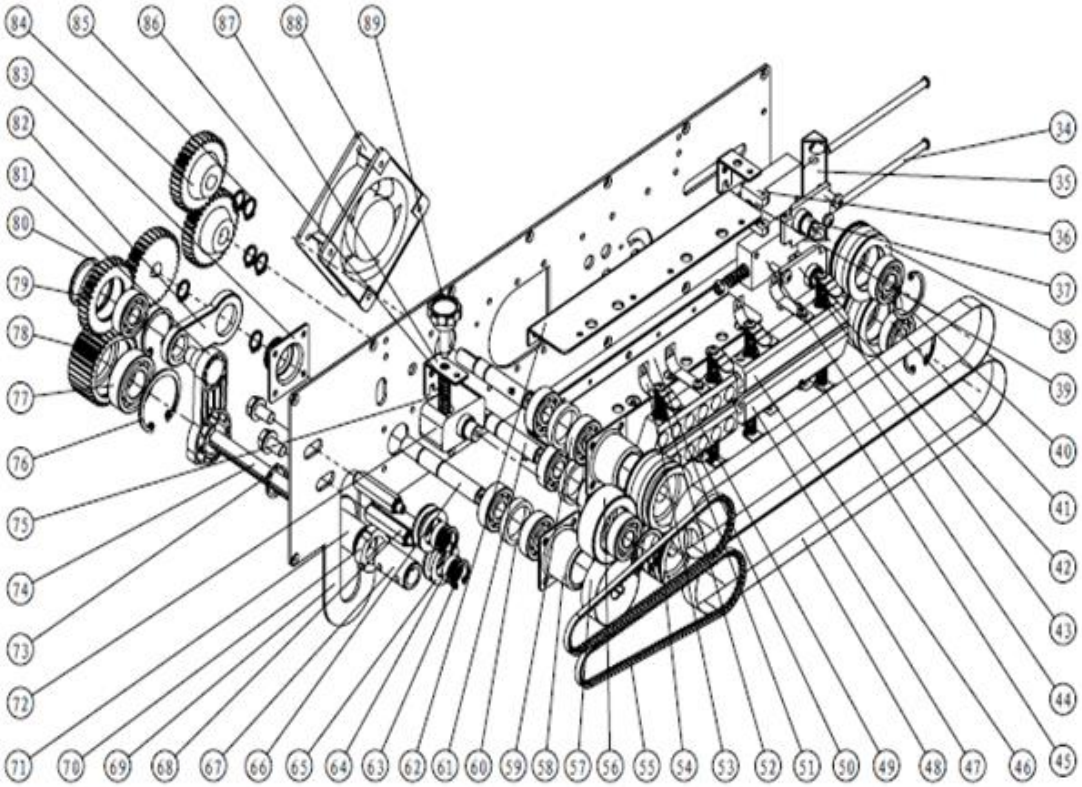


Figure 7

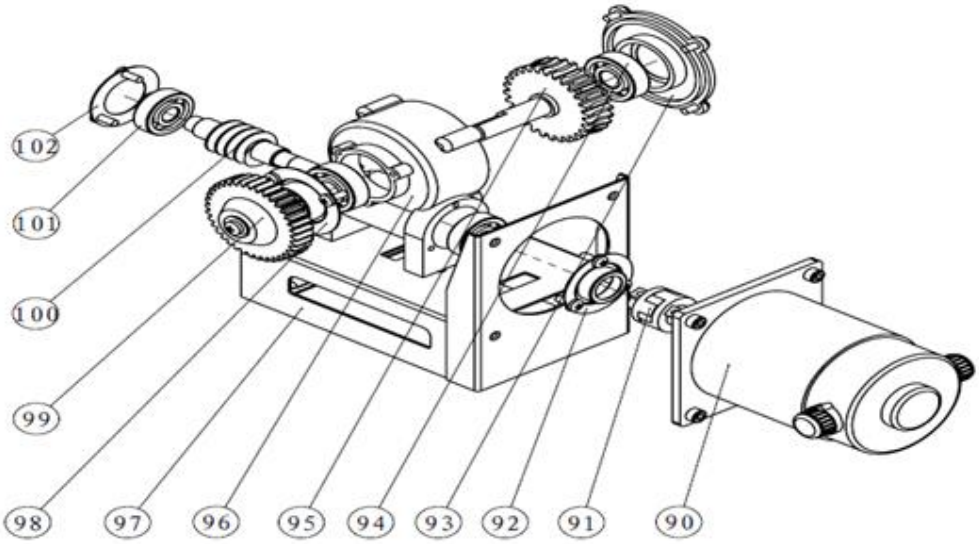


Figure 8

NO.	Parts Name	Qty	Specification	Remark
1	rubber foot	6		
2	panel	1		
3	switch（yellow）	1		
4	switch（red）	1		
5	speed adjusting knob	1		
6	small switch（green）	1		
7	temperature controller	1	installation hole：67x67	
8	Protective cover	1		
9	back cover plate	1		
10	machine body	1		
11	Fuse seat	1	15A125VAC	
12	power socket (round type)	1		
13	driving roller head cover	2	ABS	
14	deep groove ball bearing	6	6201ZZ	
15	bearing block	1		
16	driving roller	1		
17	rubber wheel with axle	1		
18	snap spring for axle	2	Φ12	
19	snap spring for hole	1	Φ32	

NO.	Parts Name	Qty	Specification	Remark
20	bearing block (big)	1		
21	conveyor belt	1	perimeter=1510mm	
22	conveyor stand	1		
23	conveyor platen	1		
24	driven roller	1		
25	roller adjusting screw	2		
26	fasten knob	4		
27	conveyor stand adjustment seat	2		
28	support horizontal rail	2		
29	support horizontal bar	1		
30	driven roller spindle	1		
31	conveyor stand adjustment screw	2		
32	fasten screw sleeve pipe	2		
33	adjustment seat fasten screw	2		
34	spring adjustment screw	2		
35	plastic small triangle	1		
36	Up driven wheel seat	1		
37	Up driven wheel seat(up)	1		

NO.	Parts Name	Qty	Specification	Remark
38	Driven wheel	2		
39	driven wheel seat spring	2		
40	block spring for hole use	3	ϕ32	
41	deep groove ball bearing	3	6201ZZ	
42	down driven wheel seat(up)	1		
43	heating head adjustment spring	8		
44	down driven wheel seat(down)	1		
45	lifting piece	8		
46	Heating block(up)	1		
47	Heating block(down)	1		
48	sealing belt	2		
49	cooling block(down)	1		
50	cooling block(up)	1		
51	Heating head holder(down)	1		
52	Spring adjustment seat	8		
53	leaf spring	8		
54	driving wheel	2		
55	leading belt	2		

NO.	Parts Name	Qty	Specification	Remark
56	embossing wheel	1		
57	rubber wheel	1		
58	transmission bearing seat	3		
59	deep groove ball spring	7	6201ZZ	
60	bearing seat space bush	3		
61	driving wheel spindle	2		
62	Heating head holder(up)	1		
63	block spring for hole use	2	ϕ19	
64	deep groove ball spring	2	626ZZ	
65	guide wheel	2		
66	driving wheel spindle	1		
67	driving sleeve	1		
68	guide wheel spindle	2		
69	panel	1		
70	axle sleeve nut	1		
71	axle sleeve	1		
72	embossing wheel adjustment seat	1		
73	axle snap spring	1	ϕ20	
74	drive axle	1		

NO.	Parts Name	Qty	Specification	Remark
75	embossing wheel seat spring	1		
76	snap spring for hole	1	ϕ42	
77	deep groove ball bearing	1	6004ZZ	
78	carrier gear	1		
79	convert gear	1		
80	snap spring for hole	2	ϕ32	
81	plastic junction plate	1		
82	plastic junction plate(up)	1		
83	rubber wheel holder	1		
84	driven gear	3		
85	axle snap spring	6	ϕ12	
86	embossing wheel spring seat	1		
87	protective cover support	2		
88	cooling fan	1	80×80mmAC220	
89	embossing wheel adjustment screw	1		
90	reduction gearbox motor	1	ZYT6-01	
91	coupling	2		
92	bearing small cover	1		
93	worm gear box cover	1		

NO.	Parts Name	Qty	Specification	Remark
94	deep groove ball bearing	2	6201ZZ	
95	worm gear	1		
96	machine body	1		
97	motor seat	1		
98	bearing middle cover	1		
99	driving gear	1		
100	worm	1	45#	
101	deep groove ball bearing	2		
102	worm gear box small cover	1		

IX. Trouble Shooting of Common Fault

Faults	Causes	Troubleshooting
off tracking of sealing	Driving wheel and driven wheel are unparallel	adjust the two screw of driven wheel, until they are not off tracking
Sealing belts break easily	1. Sealing belts is too tight 2. Sealing belts is off tracking 3. Sealing belts has folding mark 4. Sealing belts are adhered with film or other dirt 5. Sealing belts is easy to melt	1. Adjusting the longitudinal adjusting screw of driven wheel seat, making the sealing belt is not too tight, also cannot be too loose 2. Refer to above method 3. Adjust or change, the sealing belts cannot have folding mark. 4. Clear away the adhesive materials and dirt on the surface of sealing belts in time 5. Adjust the distance between the heating blocks, or it caused by high temperature, adjust into suitable temperature.
embossing is not clear	1. Embossing wheel has worn already 2. Embossing wheel seat pressure spring is not impacted	1. Change embossing wheel 2. Adjust the embossing wheel seat pressure spring
Sealing belts have resistance during transporting	The distance between heating blocks or cooling blocks are too small, friction is too big	Adjust the gap between heating blocks or heating blocks into suitable space. Normally the gap between the two sealing belts is about one layer thickness of the bag; this can ensure the sealing fastness and clear embossing, and will not make the sealing parts extend too long.
Plastic bag has block or bend over phenomenon when it runs into middle clamping wheel or embossing wheel	middle clamping wheel or embossing wheel pressed too tight	1. Adjust the middle clamping wheel or embossing wheel into suitable pressure, make the gap between the two sealing belts is about one layer thickness of the bag; this can ensure the sealing fastness and clear embossing, and will not make the

Faults	Causes	Troubleshooting
		sealing parts extend too long. 2. After adjust the gap, adjust limit screw
Off tracking of conveyor belts	Driving roller shaft and driven roller shaft are not parallel	Adjust the driven roller shaft two conveyor tensioning adjustable knobs of conveyor table, to ensure the two shafts parallel, at the same time to make sure the conveyor tensioning is not too loose or tight.
Conveyor belt and sealing belt out of sync	Conveyor is not tensioning	1. Properly tension driving roller shaft and Intermediate shaft conveyor belt, to make it entirely touch with idler wheel 2. Properly tighten conveyor belt

X. Maintenance

1. Keep the machine body clean and tidy, electrical parts should keep dry, ventilation
2. Before repairing the machine, must turn off the power. When start to repair, it should be repaired by professional or informed our factory for help.
3. This machine has one year warranty, namely the machine malfunctions due to quality problems within one year, Our Company will be free of charge for repair. Or because of the improper operation, other natural disasters or force majeure cause faults, our company will charge you for the maintenance; replacement parts fee will charge according to its value.
4. Exceed warranty time, our company will keep on maintenance work, but it needs to charge you proper cost.
5. When the user repair by him, our company can sell parts.
6. Stop working for a long time, must turn off the power.
7. User should check all moving parts screw is loose or not before working every day.

Special note: Before debugging the machine, do not put any parts of your body in the removable parts of machine, to prevent scalding or bruising injury!

XI. Standard Accessories

Coding	Model	No.	Parts name	Specification	Unit	Qty
05980004	FR900	1	feed port	feed port	pcs	1
		2	Sealing belt	750*15	pcs	8
		3	leading belt	perimeter 420	pcs	2
		4	Fuse	ϕ5*20/3A	pcs	2
		5	Manual book		pcs	1
		6	Test pen	3inch	pcs	1
		7	screw driver	cross (4inch)(6*100)(big)	pcs	1
		8	Letter	2*4*15(box)	box	1
		9	Power cable	3*0.3*1.5 meter	pcs	1
		10	toothed belt	perimeter 410	pcs	1
		12	spanner		pcs	1