



CE-F400
LBar-Heat Tunnel Combination Sealer
Manual



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I. Forward

The CE-F400 LBar-Heat Tunnel Combination Sealer combines functionality of both a sealing machine and a shrink machine. At the same time, it makes big improvement on the basis of the old one. The outstanding characteristics of this machine lies in improvement of each performance of this machine, meanwhile, reducing its overall dimension. The function of sealing and shrinking are achieved on one machine, which shorten the packaging time and work efficient increased. This machine can run for a long time and improve the capacity of the sealing and shrinking. The operation is very simple and also the sealing and shrinking can be run separately. It is importance foundation for this machine that we always adopt refined parts, precision assembly technology and strict quality supervision. Hence it is spoken highly by customers and meet the demand of the big production.

This machine adopts simple control system and new structure to improve its performance. In order to help you use machine correctly and maintain it well, please read the operational instruction before installing and application. The operational instruction will be help you understand and get familiar with its performance, structure, operation and maintenance and make ensure optimal performance, reduce faults and prolong service-life.

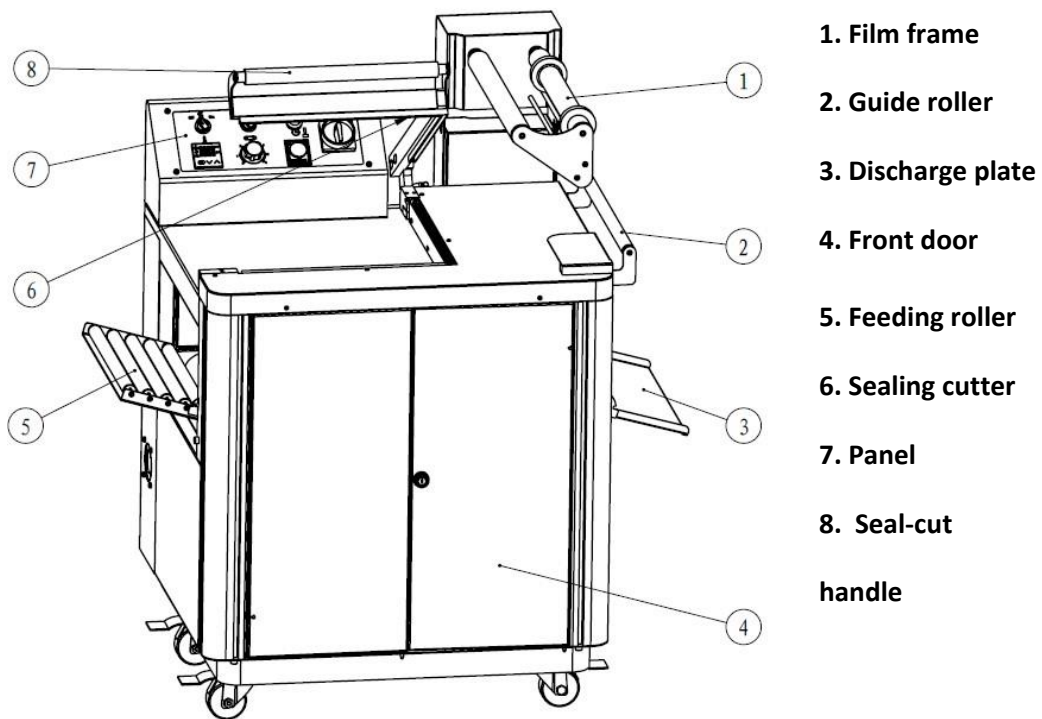
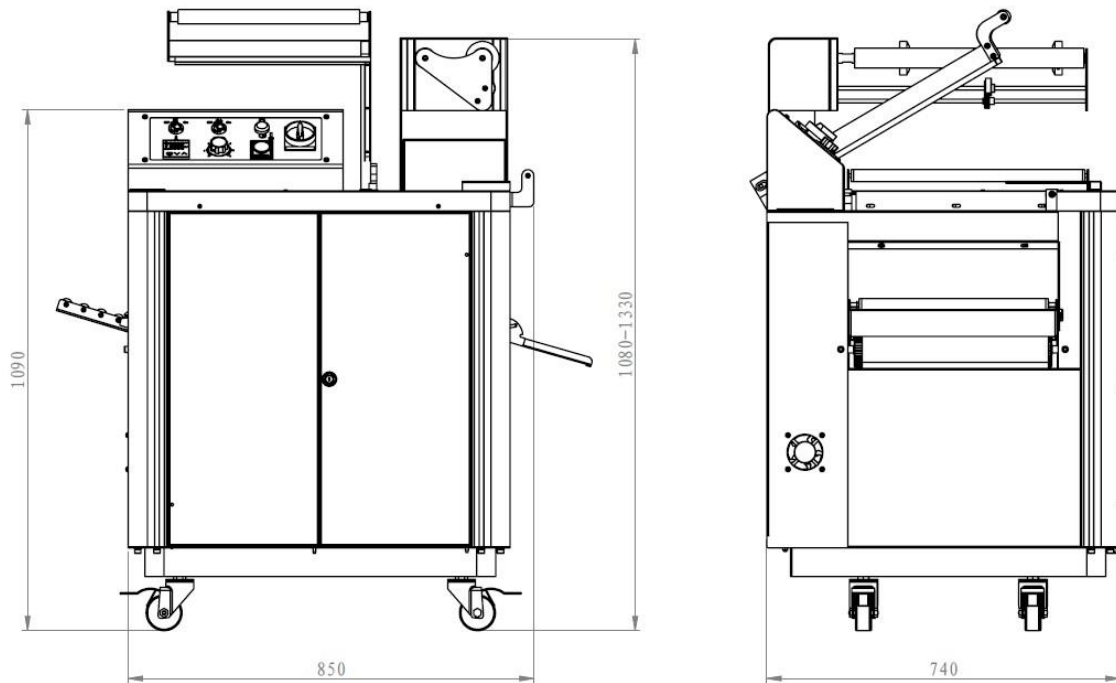
II. Function

Thermal shrinking after sealing is one of the most advanced packing methods on the present market. It adopts wrapping the film outside of the goods, and then after heating, the film will be tightly shrunk on the goods, which fully display the appearance, improve the goods exhibit sell and increase the value of the goods. Meanwhile, the packed goods can be sealed well, moisture-proof and anti-dirty. It can protect the goods from external shocks with a buffer, especially for the some fragile. It can prevents fragile from splashing when packed fragile crushed. Besides, it can decrease the possibility of being demolished or stolen. To be simple, the machines pack the products with a layer of plastic film, which makes the packaging more beautiful and firm. It is widely used for packing boxes, toys, electronic bricks, books, magazine and so on.

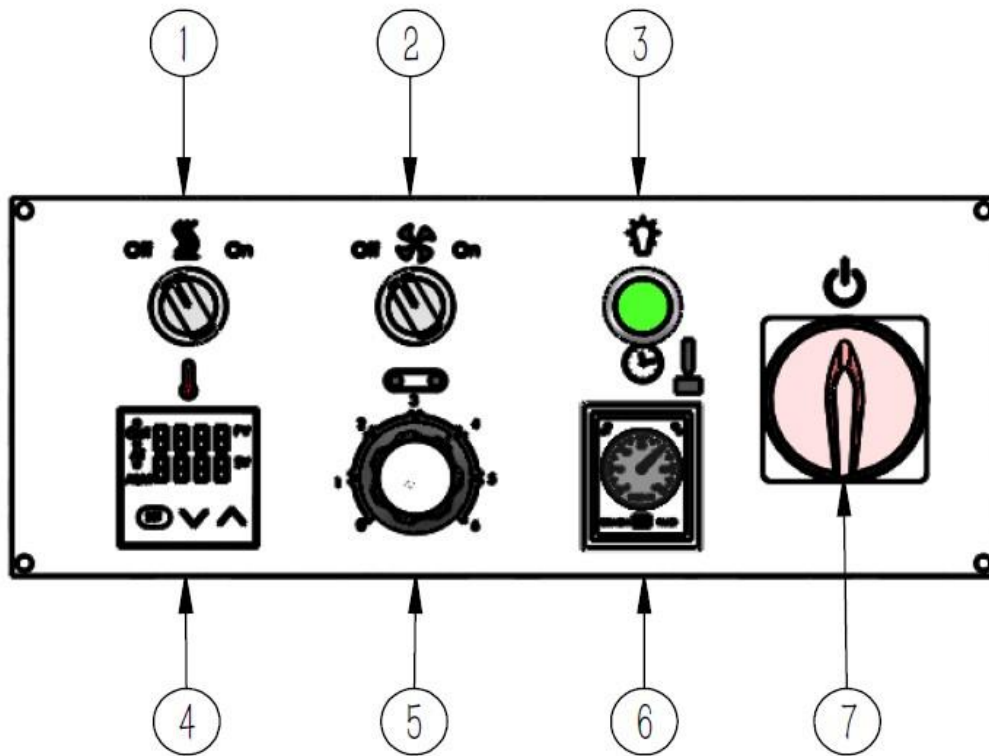
III. Main technical parameters

Model	FM400
voltage	AC220-240V/50-60Hz
Sealing time	0-3sec
Shrinking time	0-30sec
Capacity	500-800packs/hour
Thickness of the film	0.015-0.08mm
Fan power/rotate speed	180W/2800r
Power	4.5KW
Max. packing size	400×400×127mm or 15.74 x 15.74 x 5 inches
Machine size	1450 (L) x 700(W)x 1100 (H) mm or 57 x 27.5 x 39.37 inches
Machine weight	150kg

IV. Dimensions



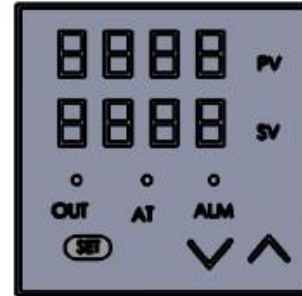
V. Panel function operation



- ① .heating switch : to control the heating in the tunnel. Open this switch after turn on the fan switch.
At this time, the temperature controller will show the temperature in the tunnel.
- ② .fan switch : To control the fan in the tunnel. Turn on the switch and then fan will recycle in the tunnel.
- ③ .power indicator : to show whether the power is connected or not;
when connected, the power indicator lights up.
- ④ . temp.controller : instrument to control temperature in tunnel
- ⑤ .knob for adjusting speed of conveyor : to conveyor the speed of the conveyor
- ⑥ .time relay for shrinking : to control the sealing time
- ⑦ power switch; to control the machine run or not

. Operation of temperature controller

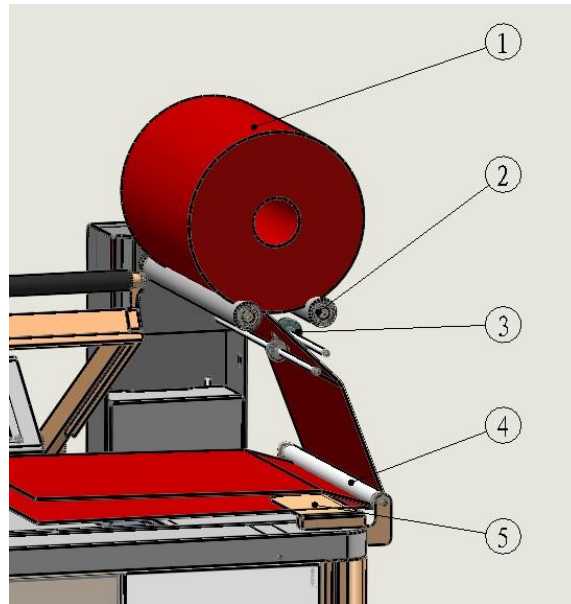
1. The display of this meter has 2 lines, The upper row of numbers in red shows the current actual temperature, and the bottom row of numbers in green shows the set temperature
2. Press the SET button, the green light flashes
3. Press ▲ to increase or press ▼ to decrease the temp. This temperature will be set according to the film, Usually set it at 170°C
4. After setting the temp., press down the SET button again.
5. It can be working after it shows normally



Notice: this temperature controller is intelligent type, the temperature control accuracy is very high, it improve the shrink effect, when operate, please be careful and do it softly

VI. Operational instruction

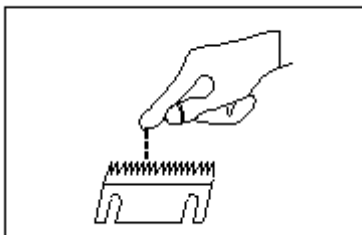
1. Place the machine on the flat. Check before starting up whether any accessories are loose or moved during in the shipment. If need, please adjust them to the right place. The machine should be operated and maintained by specially-assigned person who must know the operational procedure in order to make it works well, give full play to its efficiency and prolong its service life, avoiding damage to the machine.
2. Connect ground wire before operating and make sure its sound contact to ensure the safety of the operator.
3. Connect power according to the voltage specified on the machine. (Don't make mistakes)
4. Set temperature and sealing time according to the material and the thickness of the film.
5. Put the folded film on the two rollers and the open mouth should face to the operator (show as right picture) Pull out the film and go through the needle roller (3) and feeding roller (4). And then separate the film two layer and go through plate (5). The product can be put in the two layers of the film and then it begins to seal.



6. Put the sealed product into the feeding roller and then go through the shrink tunnel to finish shrinking.

Note :

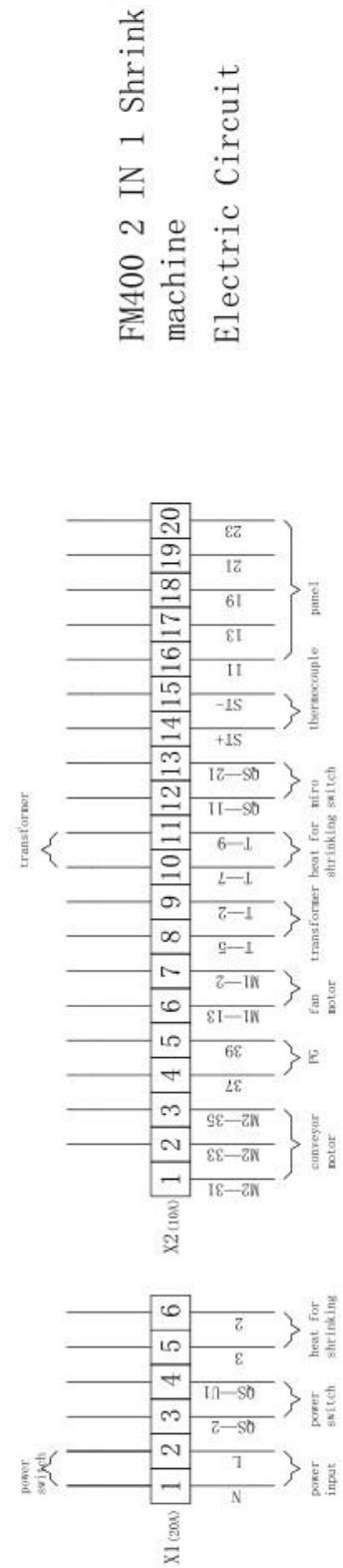
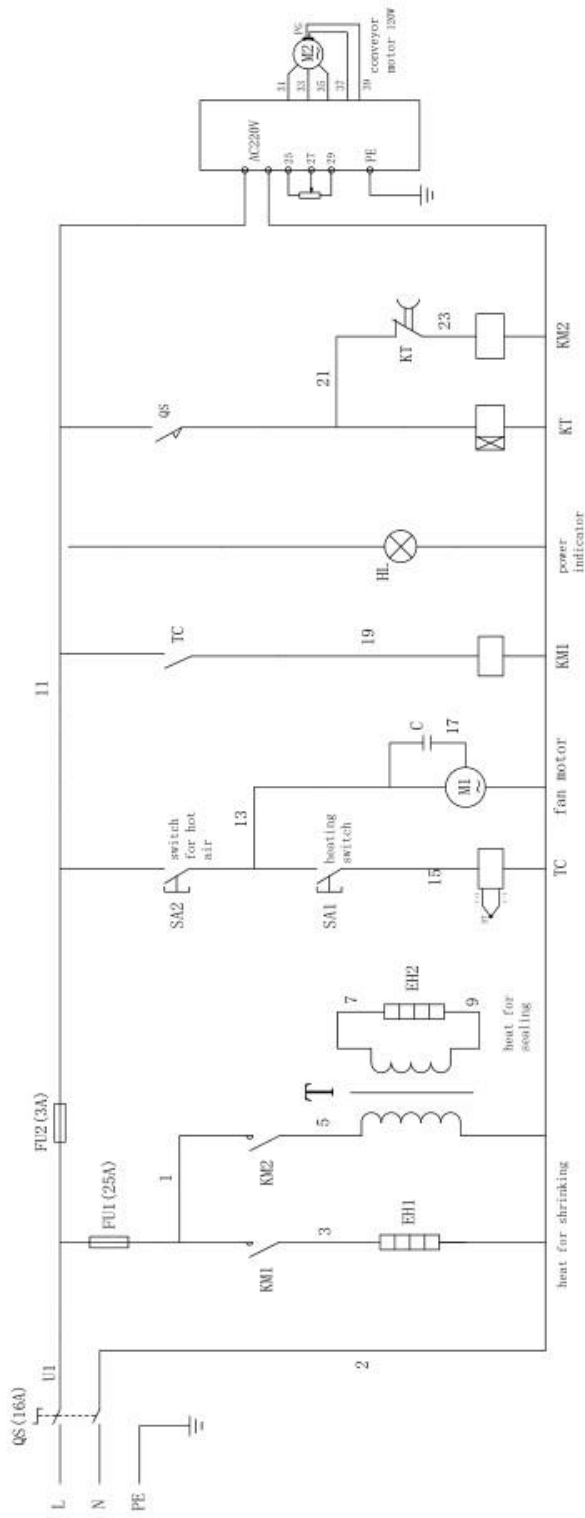
- a. Put the product into the film and go through to the sealing and cutting position. Please keep the distance between the cutter and product in 10mm~30mm to make enough film to shrink. Too much, the packing result will be bad; Too less, easy to break.
- b. Adjust the shrinking temperature or shrinking time till get perfect packing result.
- c. If there is much wrinkles in the packing process, that is because the temperature in the tunnel is too low or the speed of the conveyor is too fast. Please adjust the temperature higher or conveyor speed slower. Whereas if there is film damaged, that is because the temperature in the tunnel is too high or the speed of the conveyor is too slow. Please adjust according to the actual situation. Due to the containment relationship between temperature and speed, it will need adjust and test some times to reach the best effect.
- d. When there is an emergency happens, turn of f the power switch instantly and the machine will stop working.
- e. After finishing packaging, the temperature should be set under 50 °C and the fan motor should go on running 15 minutes. And then cut off all of the power. This operation will protect the heating parts and prolong its service life.



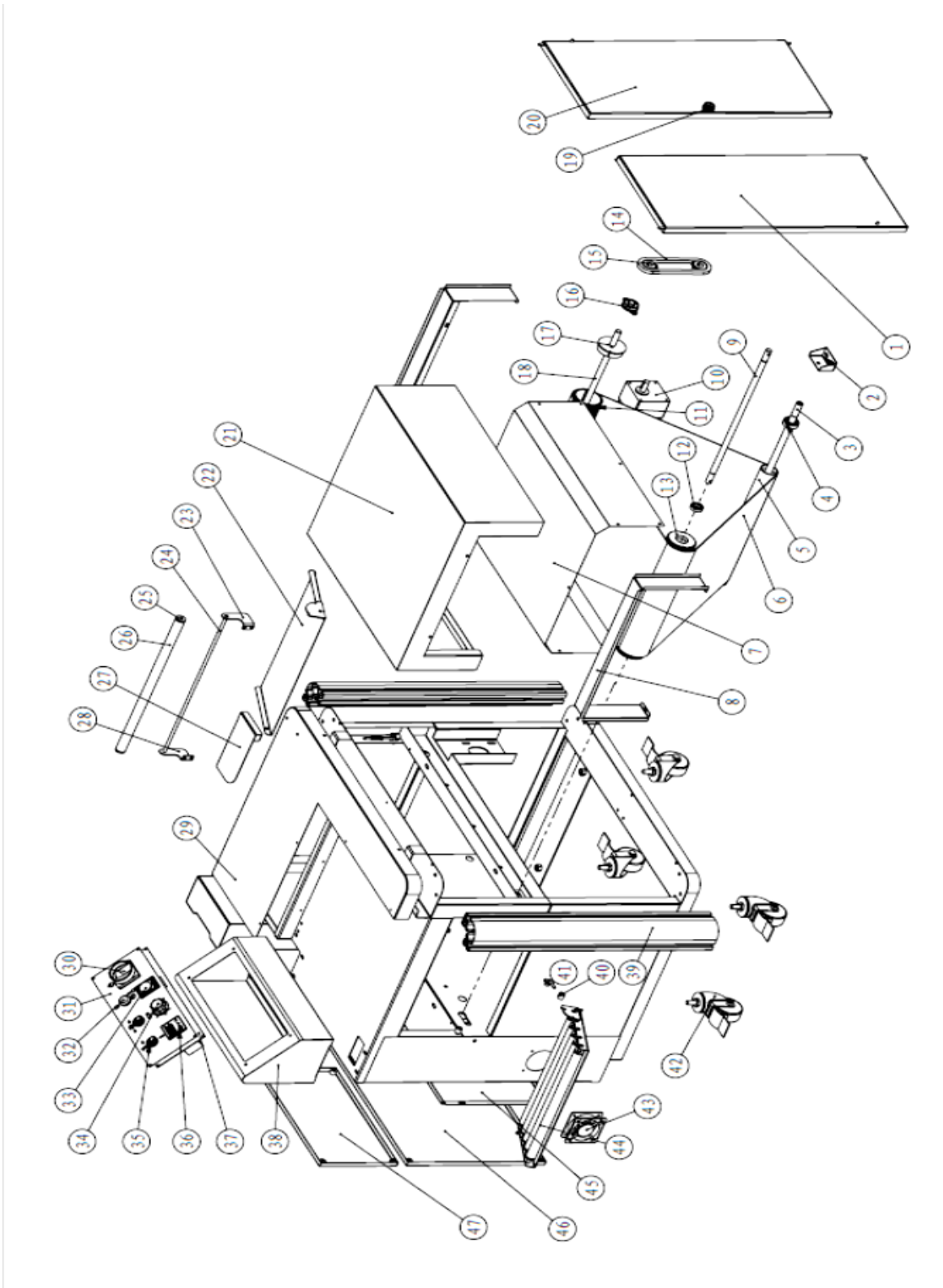
Warning!!! Do not touch the cutter and put your hands in the shrink tunnel, or you will be in danger of being cut and scalding.



VII. Electric circuit diagram

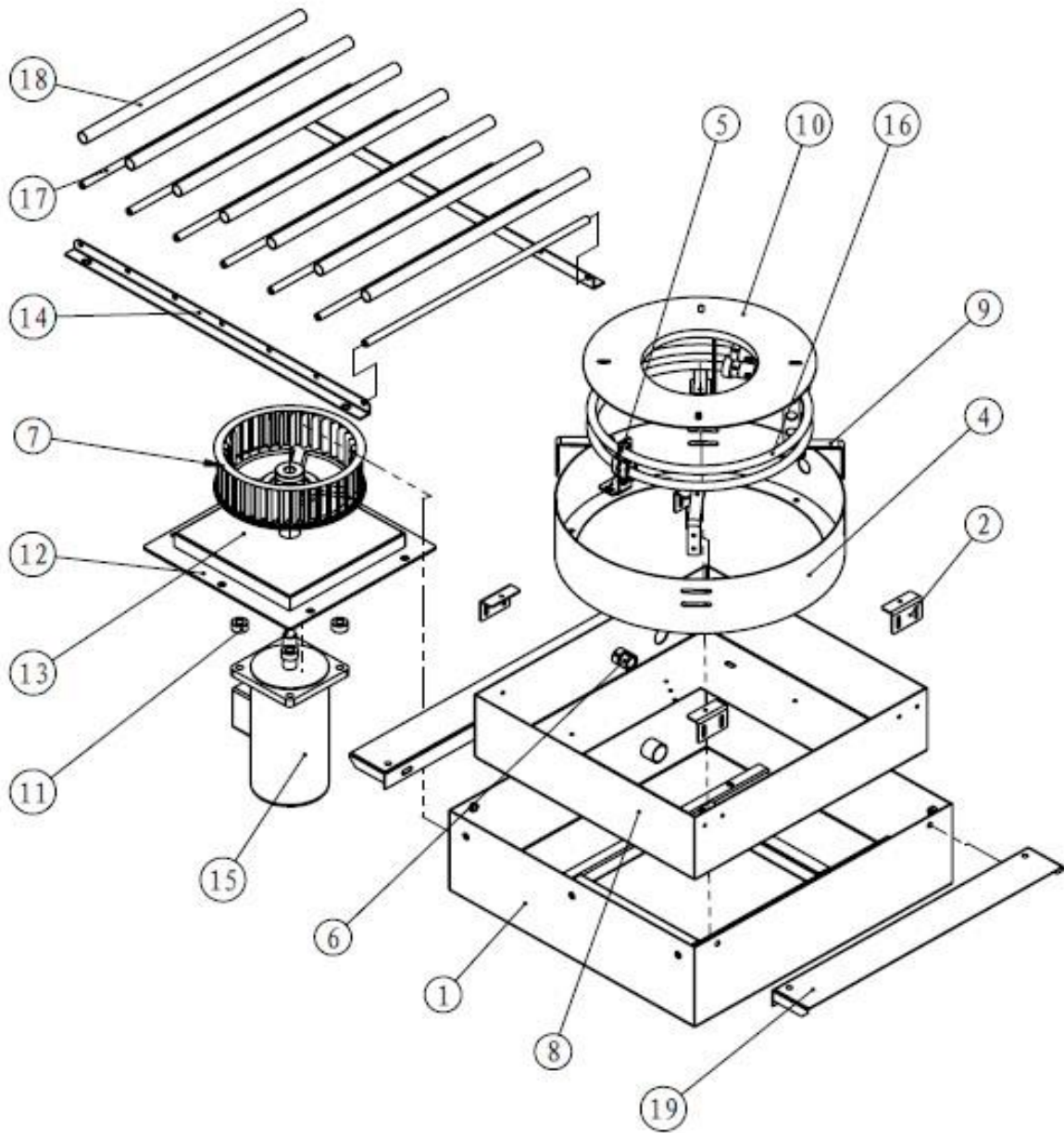


VIII. Parts Diagrams

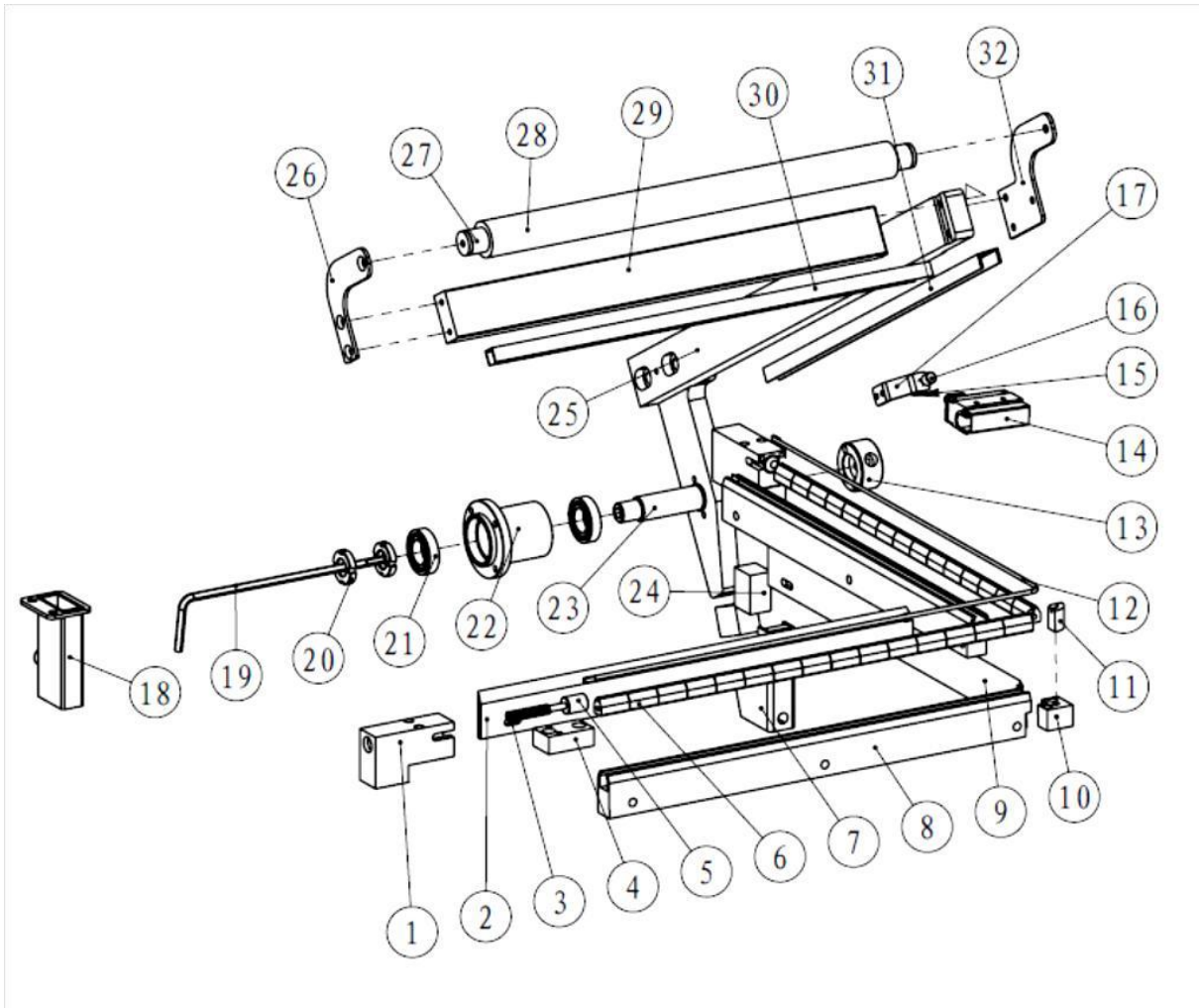


No.	Part dwg no.	name	qty	remark
1	007V	Left front door	1	
1	001V	Frame	1	
2	032V	Holder	1	
3	016V	Passive sprocket shaft	1	
4	GB 276-94	Deep groove ball bearing 6203	2	
5	031V	Tension pulley	1	
6	conveyor		1	
7	117V	Inner cover board	1	
8	119V	cover	2	
9	030V	Tension pulley shaft	1	
10	Gear motor		1	
11	015V	roller	2	
12	GB 276-94	Deep groove ball bearing 6002	2	
13	0118V	Shaft seat of roller	2	
14		chain	1	
15	0245V	Passive roller	2	
16	K002	Mounted bearings	2	
17	0113V	Connected pad	2	
18	014V	Driving roller shaft	1	
19		Door lock 407-1big	1	
20	003V	Right front door	1	
21	118V	Cover for shrink tunnel	1	
22	005V	Right guide board	1	
23	011V	Left holder	1	
24	013V	shaft	1	
25	027V	Choke plug	2	
26	012V	Guide roller	1	
27	008V	Board for separate film	1	
28	009V	Right holder	1	
29	006V	Upper cover plate	1	
30		Load break switch	1	

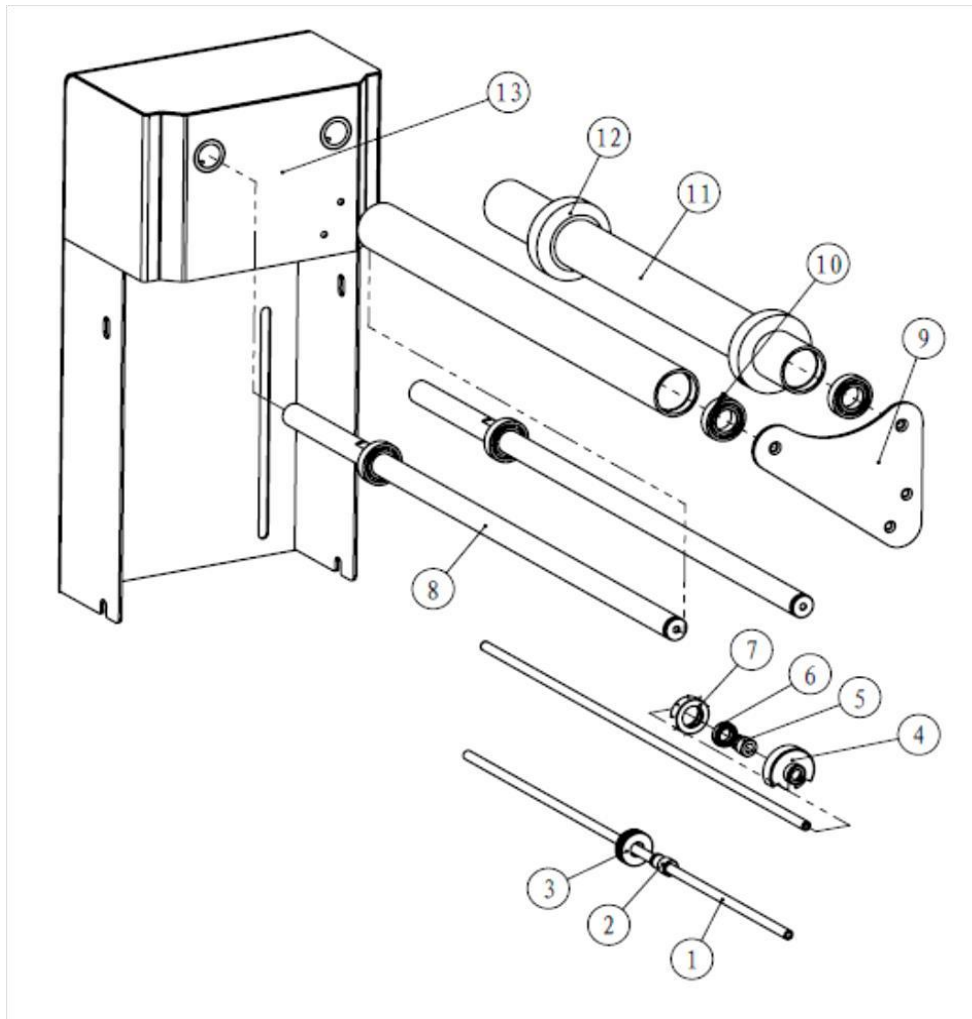
No.	Part dwg no.	name	qty	remark
31	019V	Electrical panel	1	
32		Switch ϕ 22green	1	
33		Time-delay relay 6.0	1	
34		Speed control knob ϕ 44	1	
35		Transition switch ϕ 22	2	
36		Temp.controller	1	
37	018V	panel	1	
38	004V	Electrical box	1	
39	002V	Stand column	2	
40	033V	Spacer bush	2	
41	028V	Push plate	2	
42		truckle	4	
43	Cooling fan		1	
44	1	Transitional roller	1	
45	010V	Electrical installation plate	1	
46	020V	Right rear cover	1	
47	021V	Right rear cover	1	



No.	Part dwg no.	name	qty	remark
1	101V	Cover of heating box	1	
2	102V	Right angle connection plate	4	
3	103V	Mesh of heating box	1	
4	104V	Fan shroud	1	
5	105V	Connection plate	3	
6	106V	Fixed ring of heating tube	10	
7	107V	Fan impeller	1	
8	108V	Inner box of heating box	1	
9	109V	Holder of ventilation door	4	
10	111V	Up plate of heating tube	1	
11	112V	pad	4	
12	113V	Motor installation board	1	
13	114V	cover	1	
14	115V	Leading bar	2	
15	116V	motor	1	
16	Circular heating tube assembly	Heating pipe assembly	2	
17	121V	shaft	7	
18	120V	roller	7	
19	110V	baffle	2	
20	123V	fixing ring of thermocouple	1	



No.	Part dwg.no.	name	qty	remark
1	312V	joint seat of heating element	2	
2	306V	Guard plate1	1	
3	0119V	Spring of heating element	2	
4	313V	Link block	2	
5	0117V	Heating element jointer	2	
6	304V	Element seat	30	
7	301V	Back pad block	1	
8	305V	Element locating block	2	
9	316V	Guard plate2	1	
10	309V	Pad block	1	
11	308V	Element seat	1	
12	320V	Sealing wire	1	
13	0109V	Locating block of torsional spring		
14	SD7310	Micro switch	1	
15	0107V	locknut	1	1
16	0312V	Switch adjusting screw	1	
17	0106V	Adjust seat for switch	1	
18	311V	Adjust seat for torsional spring	1	
19	318V	Torsional spring	1	
20	M16X1.5-N	Circular nut	2	
21	GB 276-94	shaft 16002	2	
22	319V	Fix seat	1	
23	302V	Swinging holder	1	
24	0115V	Back pad block	2	
25	310V	Vertical sealing cutting seat	1	
26	307V	Left side plate	1	
27	303V	Handle spindle	1	
28	315V	Taper knob	1	
29	314V	Horizontal cutting seat	1	
30	322V	U-slot	1	
31	321V	U-slot	1	
32	317V	Right side plate	1	



No.	Part dwg.no.	name	qty	remark
1	205V	Roller shaft of separated roller	2	
2	0412V	Core tube of pressing roller	1	
3	0410V	Pressing roller	1	
4	0409V	Needle wheel cover	1	
5	0411V	Needle wheel cover	1	
6	GB 276-94	Shaft 61801	1	
7	0408V	Needle wheel	1	
8	203V	Holder haft from film frame	2	
9	204V	plate	1	
10	GB 276-94	bearing 16002	4	
11	201V	Roller for putting film	2	
12	206V	Baffle ring	2	
13	202V	Film frame	1	

IX. Troubleshooting

Fault	Reason	Solution
Can't seal and cut	Cutter broken	replace
	Heating transformer burned	replace
	Time relay for sealing and cutting damaged	repalce
Bad sealing and cutting effect	Surface of the sealing and cutting is uneven	Clean the cutter slot or replace a new cutter
	Sealing time is not correct	reset
	Poor connection of heating cutter wires	Check and repairer
No heating in the shrink tunnel	Did not open the power switch of the heating tube	connect
	Temp.controller damaged	replace
	Ac contactor damaged	repacle
Too slow temperature in the shrink tunnel	Up and down temperature knob are not on the right place	readjust
	Solid booster damaged	replace
	Too low power voltage	Check and input the power
	1 phase of 3 phase power is opened circuit	Check and repair
	Part of heaters damaged	Check and replace
	Temperature is set too low	reset
Sudden shutdown	Power loose or fuse burned	Check and replace

X. Operational Notes

1. The consumption power is big for this machine, so the input power should be bigger than the rate power shown on the sign.
2. When the machine is working, do not touch the sealing and cutting set or use other object to touch. If not, you will be in danger of scalding and the object will be damaged. Because the temperature of the sealing and cutting set and other heating part is very high.
3. Please adjust the sealing and cutting time in proper position according to your film. Do not too long. It is enough when the film can be cut off, or the sealing and cutting set will be easy burned.
4. After finishing the work of sealing and cutting, the press frame will bounce up. Do not get close to the press frame, or you will be in risk of injured.
5. When in the sealing and cutting, there appears red and smoke, please cut off the power quickly. Return to work after get repaired.
6. If you only want sealing and cutting, please close the switch of heating for shrinking and fan motor and conveyor; if you only want to shrink, please do not press the pressing frame

XI. Maintenance

1. Keep the machine clean and keep the electric parts dry and ventilated,
2. Clean the sealing and cutting set clean with wire brush after work
3. Add lubricant into moving parts often
4. If you find the Teflon tape is burned, please replace the new one to protect the sealing and cutting and the silicon rubber.
5. Cut off the power before making any repairs.
6. Must cut off power switch if machine stop for a long time.
7. Must check every parts and screw if they are loosen or not every day.

XII. Accessories

1	Teflon tape	0.13*10*5	pcs	1
2	Screw driver	cross(4'')(6*100)(size)	pcs	1
3	electroprobe	3'' size	pcs	1
4	heating element	0.5*3 (2in i)	pcs	1
5	Internal hexagonal wrench	2.0 ; 2.5 ; 3 ; 4 ; 5 ; 6	pcs	1
6	Wire brush		pcs	1
7	Tool box		pcs	1
8	Sponge bar		pcs	1