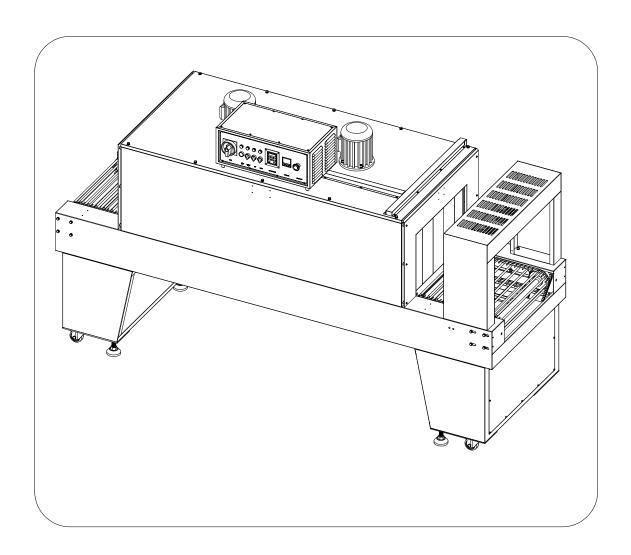
SM-SERIES CONSTANT TEMPERATURE SHRINK PACKAGER OPERATION AND MAINTENANCE MANUAL SM-6040S/SM-6040SM/SM-6040M/SM-6040



 $\ensuremath{\mathbb{X}}$ Please read this manual carefully before operation

XSorry for changing technical without else notice

Please notice as below sign when use this machine

POWER SUPPLY 380V/50-60Hz 3Ph.N 3PH 380V 50/60Hz

POWER SUPPLY 220V/50-60Hz 3Ph.N

3PH 220V 50/60Hz

! CAUTION ! HOT!

HOT

! NOTE !

LUBRICATION
CHAINS WEEKLY

Lubrication chains weekly



Conveyor Direction



It must be connected with the ground



Non professional maintain doesn"t open the door



It"s dangerous tomake your hands hurt or cut

Note:

2 voltaes are available for this machine, please connect the power supply as on faceplate.

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ONE. Foreword

1. Summary

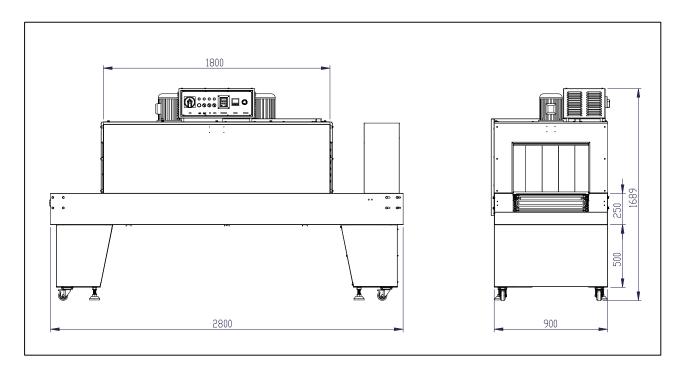
Thanks a lot for choosing our products ,this machine is a safe ,practical and high efficient constant temperature shrink packager.

- 2. Attention of this manual
- A. Please read this manual carefully before use the machine;
- B. Please operate the machine after have its knowledge expertly and related attention;
- C. Please keep this manual well as reference at any moment.;
- D. Hand this manual to direct user without fail:
- E. We keep the rights to modify this manual because of the machine function is improving and advancing continuously;
- F. Please contact us if having any good suggestion in this manual or our machines;
- 3. Safety attention
- A. Use equivalent breaker and wire apply to the machine's capacity ;circuit and units is easy damaged if adopts lower capacity breaker or thinner electrical wire;
- B. To ensure unable leak out when the machine pack liquid product ,it may cause damage on machine or get electric shock when pack imperfectly sealed liquid;
- C. Do not let the machine to touch plentiful vapour or it is not allow to use this machine in heavy humidity environment;
- D. Do not use or put the machine on dust occasion;
- E. Please do not touch the place where stick with hot caution sign ,it is dangerous in hot when the machine on running;

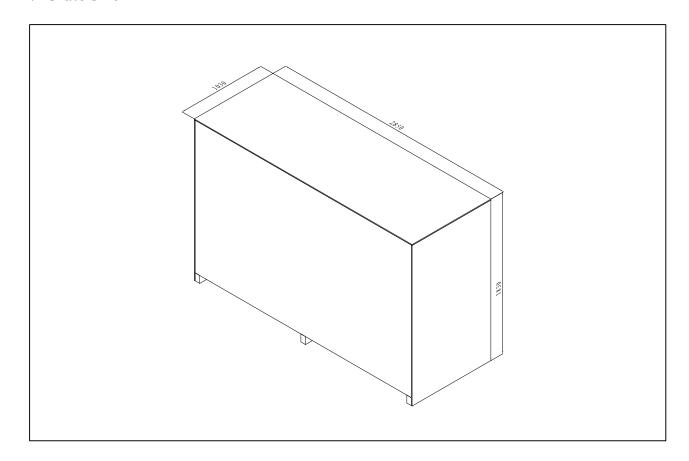
- F. Cut off power when replace spare part and follow the correct process.
- 4. Machine Function
- A. It is suit to do surface packaging for beverage, bamboo and wooden appliance, hardware. Plastic and so on; The package is characteristic with beautiful appearance, moistureproof and not easy broken, so it improve product's impress but in lower cost.
- B. Hang together advanced shrink blowing technology and made by improved but unique design ,the blowing is even and shrink effect is perfect;
- C. It is made of carbo steel or stainless steel with reasonable structure, long heating tunnel to ensure shrink effect;
- D. Adopts stainless steel heating tube with long life time and high efficiency;
- E. The conveyer adopts new type roller that covered by silicon ,high temperature proof, wearable, non burn film and not change for long time use; According to size of products it can be made at standard and dense rollers.
- F. Choose well-known electric units like switch and temperature controller etc., stable works and lower fault;
- G. Convey motor and blow motor are adopted from famous brand ,strong power and can bear long working time continuously;
- H. Heat up the oven after blower working ,the machine is furnished with pre-stop device which can prolong its life;
- I. The machine is applicable to PVC, PP, POF etc shrink film.

TWO. Crate size and surface dimension

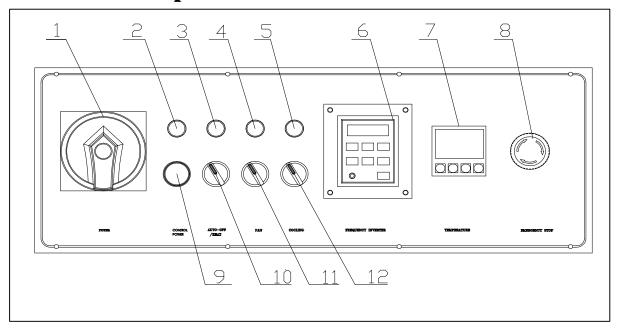
1. Surface dimension



2. Crate size



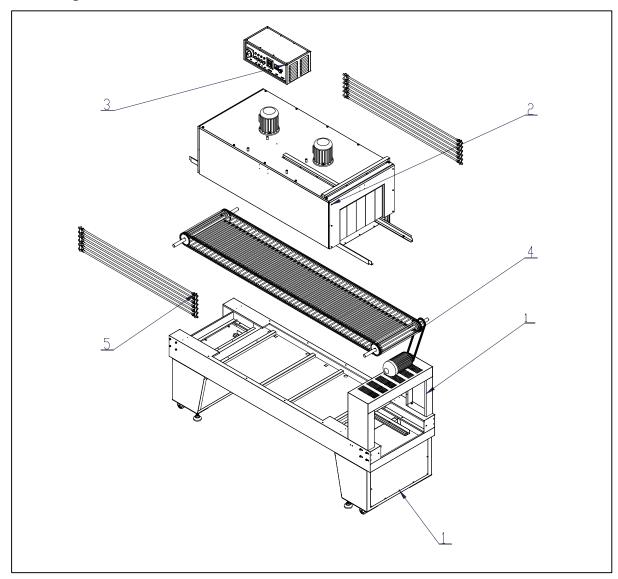
THREE. Control panel and name of each units



- 1. Power switch: switch off / on main power supply;
- 2. Startup indicator: indicate control power switched on or not;
- 3. Heat indicator: indicate heating system work on or not;
- 4. Blow indicator: indicate blowing system work on or not;
- 5. Temperature controller: set up heating temperature;
- 6. Electrical speed controller: adjust the feed speed of conveyor belt;
- 7. Emergent stop: Cut off control power;
- 8. Startup switch: turn on control power;
- 9. Heating switch: Control heating system work on or not;
- 10. Blowing switch: Control blowing system work on or not;
- 11. Cooling switch: Control cooling system work on or not;

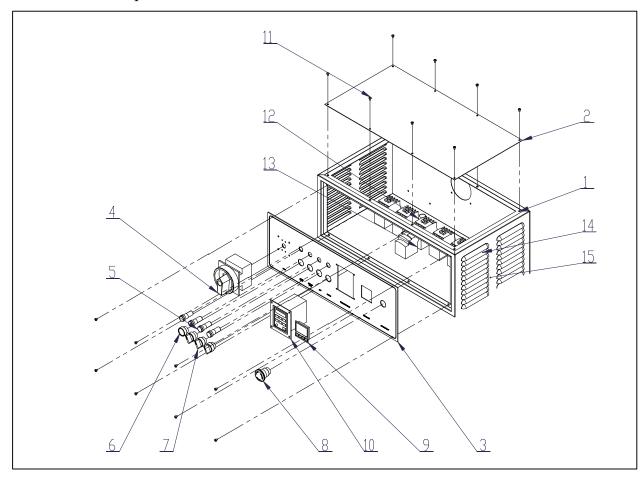
FOUR. Parts illuminate drawing

1. Drawing of main structure



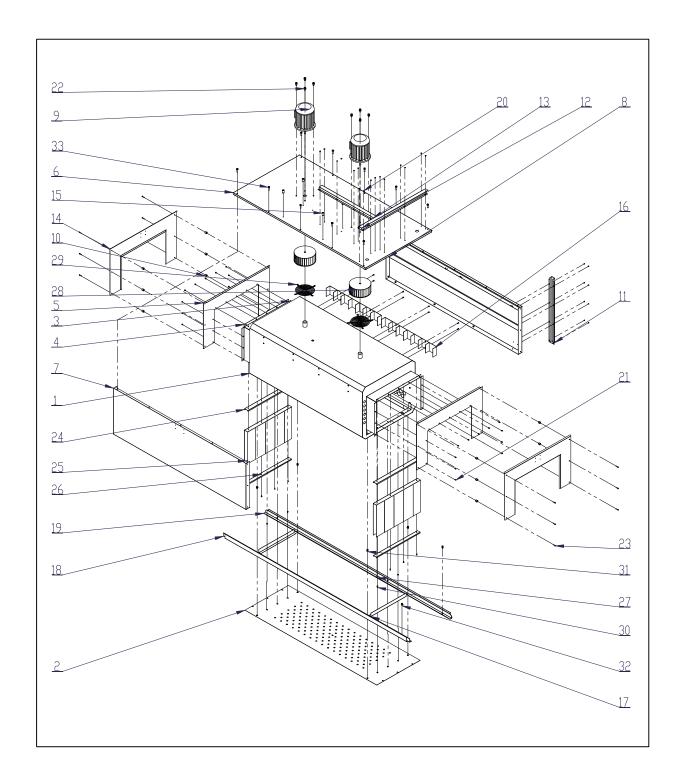
No.	Name	Qty
1	Foot support	1
2	Blowing system	1
3	Control box	1
4	Feeding system	1
5	Heating system	2

2. Instruction of parts on switchboard



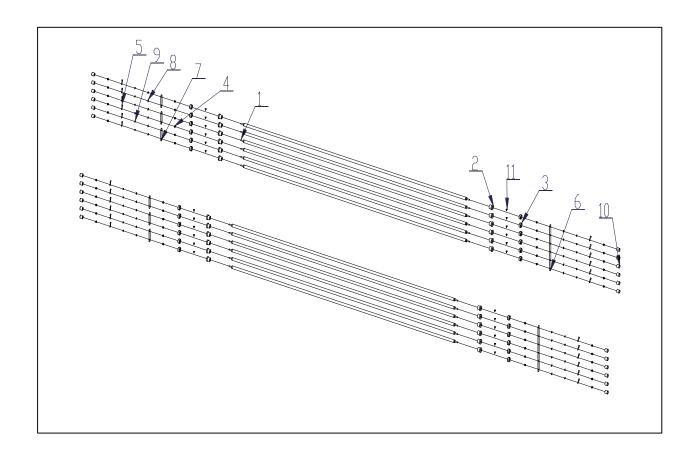
No.	Name	Qty	No	Name	Qty
1	Switch box	1	9	Temperature controller	1
2	Cover of Switch box	1	10	Speed controller	1
3	Switch box panel	1	11	AC electrical contactor	5
4	Power supply main switch	1	12	Heat relay	1
5	Indicator	4	13	Time relay	1
6	Startup button	1	14	Frequency inverter	1
7	Rotary switch	3	15	Breaker	1
8	Emergency stop	1			

3. Blowing system chart



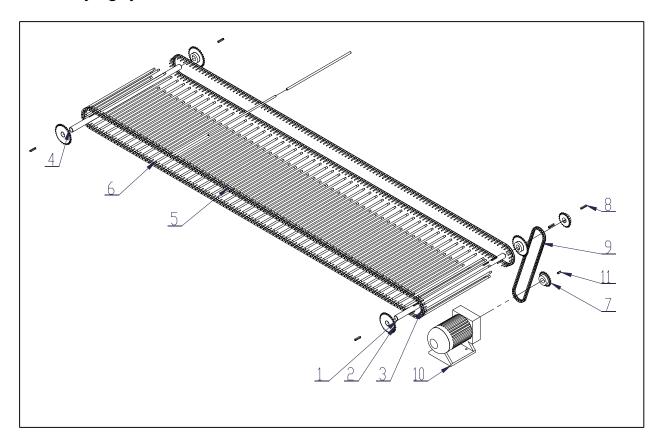
No.	Name	Qty
1	Oven inner shell welding part	
2	Under heat insulating board	1
3	Side board at left or right of blowing tunnel	2
4	Up board in blowing tunnel	1
5	Closing board at both sides of oven	2
6	Up board on out shell of oven	1
7	Side board at front of oven	1
8	Side board at behind of oven	1
9	Long axes "TECO" blowing motor 0.75KW	2
10	Heat insulating board gasket	12
11	Wire slot 1 at out shell of oven	1
12	Wire slot 1 at out shell of oven	1
13	Wire slot 1 at out shell of oven	1
14	Wire slot 1 at out shell of oven	2
15	Heat insulating gasket in control box	4
16	Wind board	4
17	Wind bar	2
18	Up support rail welding part 1	1
19	Up support rail welding part 2	1
20	GB CROSS SCREWSTYPE1 M4X6-6	24
21	GB CROSS SCREWSTYPE1 M5X8-8	77
22	Hexangular screw	8
23	GB_CROSS_SCREWS_TYPE1 M5X25-25	12
24	Clip slot of heat insulating curtain	2
25	Heat insulating curtain	2
26	Press board of heat insulating curtain	2
27	GB CROSS SCREWSTYPE1 M4X12-12	8
28	Fan wheel 7"	2
29	Fan convey	2
30	GB CROSS SCREWSTYPE1 M5X12-12	22
31	Hexangular screw M8X16	5
32	Hexangular screw M8X16	1
33	Hexangular screw M8X35	10

4. Heating system chart



No.	Name	Qty	No	Name	Qty
1	∮ 14 heating tube	12	7	Heating tube link board II	6
2	Porcelain set of heating tube	24	8	Gasket	24
3	Heating tube fix ring	24	9	GB FASTERNER WASHER SW 5	24
4	GB FASTENER NUT SNIC1 M5-N	24	10	porcelain top set of heating tube	24
5	Electrical wiring top	12	11	GB FASTERNER WASHER SMWC 5	12
6	Heating tube link board I	2			

5. Conveying system chart



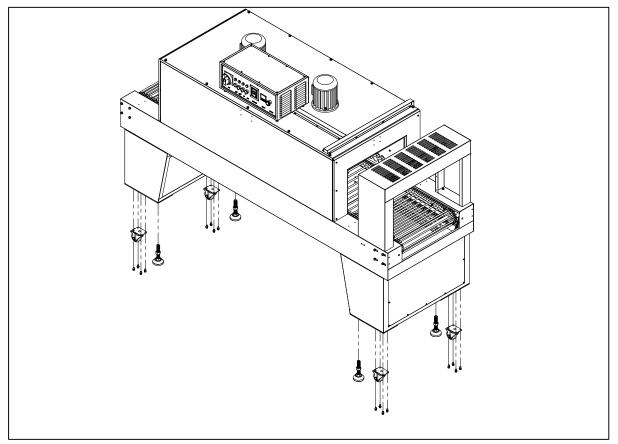
No.	Name	Qty	No.	Name	Qty
1	Convey drive axes	1	7	Chain 08B Z21 D30 L25	2
2	Rolling chain 08B Z30 D30 L25	4	8	GB CONNECTING PIECE KEYS CSK 8X45	5
3	Chain 08B	2	9	Motor chain	1
4	Convey driven axes	1	10	Convey motor	1
5	Convey roller	114	11	GB CONNECTING PIECE KEYS CSK 8X25	1
6	Heat-resistant silicon tube	114	12		

FIVE. Technical parameter diagram

Model SM-6040/SM-6040M		SM-6040S	
Power supply	3Ф 380V 50/60 3Ф 220V 50/60	3Ф 380V 50/60 3Ф 220V 50/60	
Power	24KW	16KW	
Oven entrance size	W600*H400	W600*H400	
Machine's dimension	L2820*W970*H1400	L2400*W900*H1400	
Work efficiency	2000-3000/h 2000-3000/h		
Weight	370kg	350kg	

SIX, Installation

- A. Open up top cover of wooden case and take away four side boards;
- B. Take out the four foot screw at bottom of machine;
- C. Carry out main machine's body and put it on ground smoothly;
- D. Take away the protect stretch film;
- E. To prevent convey roller fall down during the transportation ,we fixed pothook for the convey rollers at bottom before delivery ,it must be taken out before operate the machine ,otherwise it can not work;
- F. Adjust foot screw at bottom to make machine on flat ,and prevent glide when machine is running;
- G. Please connect electrical wire according to displayed voltage on name plate, notice: must be ground.



Installing sketch map

SEVEN. Operate methods

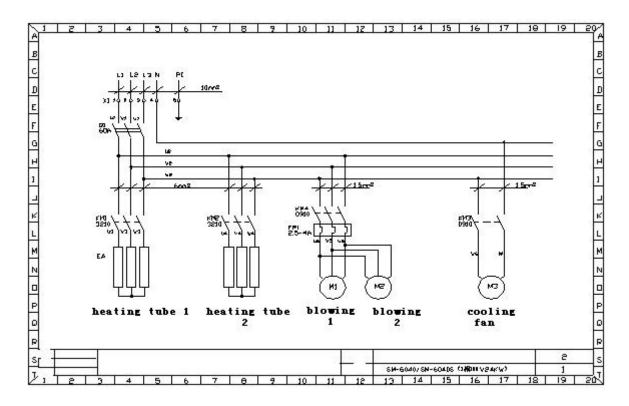
- A. Turn on main power switch and press startup button ,then turn on blower switch; check the direction of fan working ,anti-clock running is correct otherwise please exchange any two phase
- B. Switch on conveying switch at panel ,convey roller and related chain will move along with the operation; Convey speed can be adjusted by the knob at speed controller;
- C. Turn on heating switch at panel ,and turn the knob at temperature controller to set parameter from $150-170^{\circ}\text{C}$;
- D. After the temperature reached at preset date ,the heat indicator is off as well as heating tube will stop to heat up;
- E. Now the product can be put into tunnel for shrink wrapping;
- F. Please turn off heating switch before end of operation ,the blowing will shut off automatically till continuous run within pre-stop time;
- G. Turn off blowing switch after blower stop ,and then cut off main power supply switch.

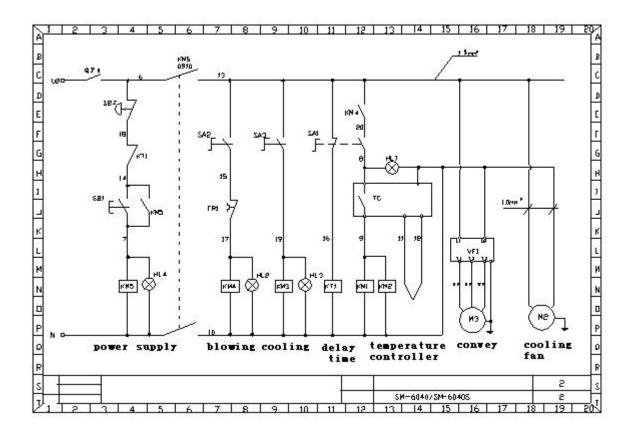
EIGHT, Maintenance

- A. Clean away the leftover and dust on convey roller after finishing work;
- B. Check lubricant in the gearbox of convey motor termly;
- C. To do a general inspection for machine's whole performance month open the switch box to clear dust or sundries;
- D. Refill lubricant timely for chain and other run parts.

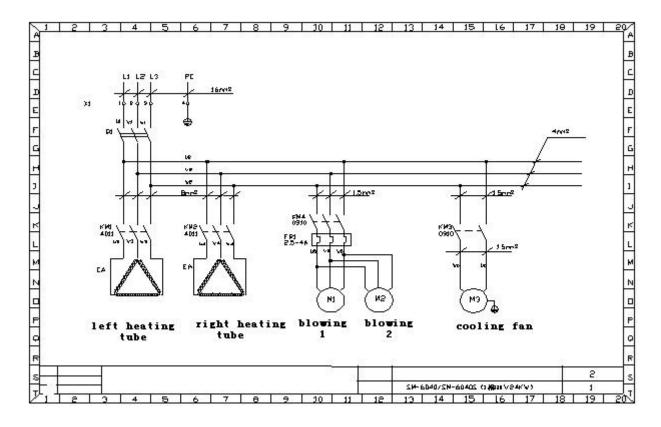
NINE, Circuit diagram

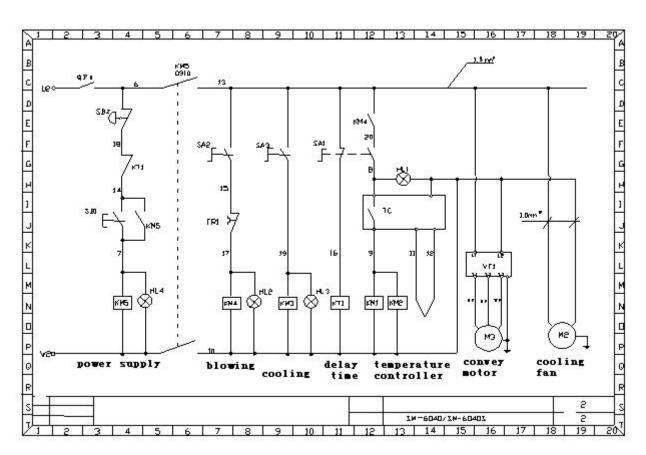
1.Three phase 380V 50/60Hz





2.Three phase 220V 50/60Hz





TEN. Trouble shooting

Failure status	Reason	Solution	
	Direction of fan is wrong	Exchange any two phase	
D 11:1 6 4	Temperature is too lower or higher	Adjust temperature	
Bad shrink effect	Conveyor belt is run too fast	Adjust convey speed	
	Convey roller is not working	Refill lubricant	
Noise is too big	Lack lubricant	Refill lubricant	
Heater is not controlled	Temperature controller is broken	Replace temperature controller	
	Input voltage is abnormal	Check input voltage	
No or lower temperature	Power connect wire loose	Check power connect wire	
after heat up	Heating tube is burned out	Replace heating tube	
	Heating switch is broken	Replace heating switch	
Pop stop	Breaker is jump up	Check circuit and then turn on breaker again	

ELEVEN. Packing list

No.	Name	Specification	Qty
1	Main machine		1unit
2	'十'Screw driver		1pcs
3	Manual		1pcs
4	Movable spanner		1pcs
5	Breaker	C32N1PC2A	1pcs