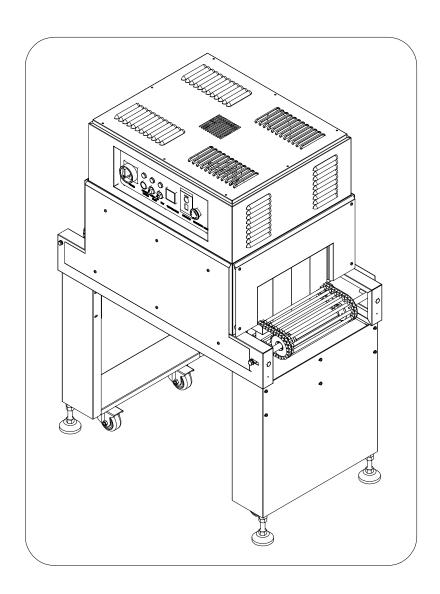
# SM-SERIES CONSTANT TEMPERATURE SHRINK PACKAGER OPERATION AND MAINTENANCE MANUAL SM-5030



\*\*Please read this manual carefully before operation
\*\*Sorry 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.

## **CONTENT**

ONE.Foreword	1
TWO. Crate size and surface dimension	3
THREE .Control Panel and name of each units	4
Four. Parts illuminate drawing	5
FIVE. Technical parameter diagram	11
SIX. Installation	12
SEVEN. Operate methods	13
EIGHT. Maintenace	14
NINE. Circuit diagram	15
TEN. Trouble shooting	16
ELEVEN. Packing list	17

#### **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;

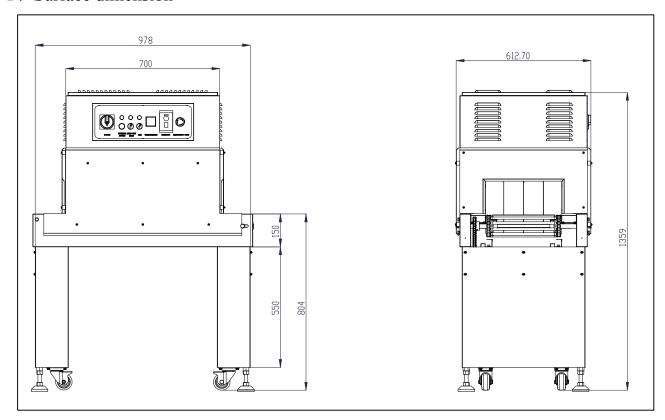
F. Cut off power when replace spare part and follow the correct process.

#### 4. Machine Function

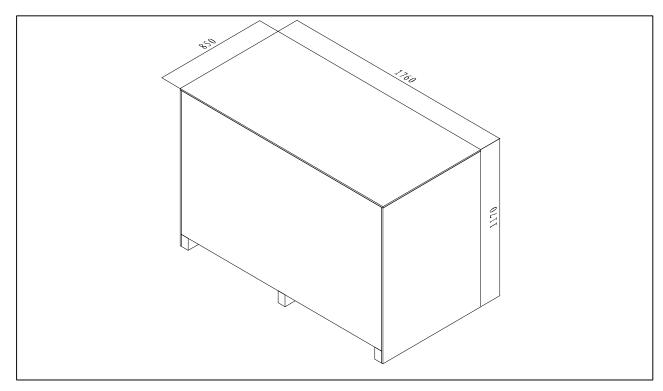
- A. It is suit to do surface packaging for food stuff, electronics, toy, bamboo and wooden appliance, hardware, cosmetic, medicine, book, electric appliance and so on; The package is characteristic with beautiful appearance, moisture proof and not easy broken, so it improve product's impress but in 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. Adopts stainless steel heating tube with long life time and high efficiency;
- D. The conveyer adopts new type roller that covered by silicon ,high temperature proof, wearable, non burn film and not change for long time use;
- E. Choose well-known electric units like switch and temperature controller etc., stable works and lower fault;
- F. Convey motor and blow motor are adopted from famous brand ,strong power and can bear long working time continuously;
- G. Heat up the oven after blower working ,the machine is furnished with pre-stop device which can prolong its life;
- H. The machine is applicable to PVC, PP, POF etc shrink film.

## TWO. Crate size and surface dimension

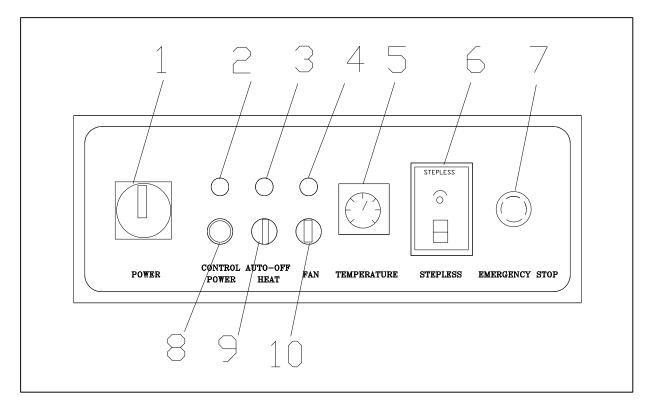
#### 1. Surface dimension



#### 2. Crate size



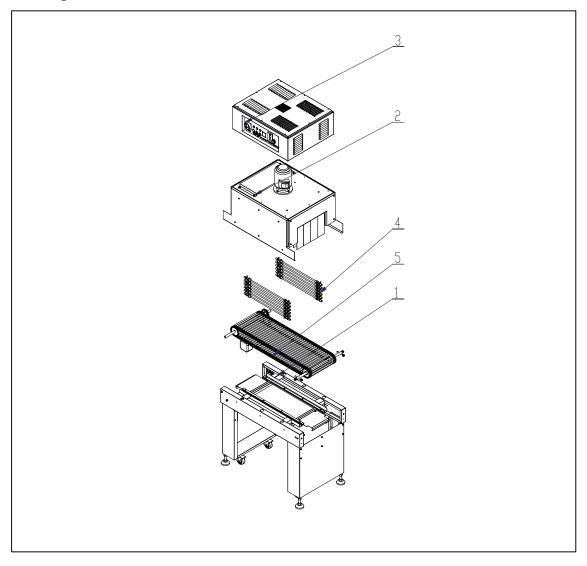
#### THREE. Control panel and name of each units



- 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;

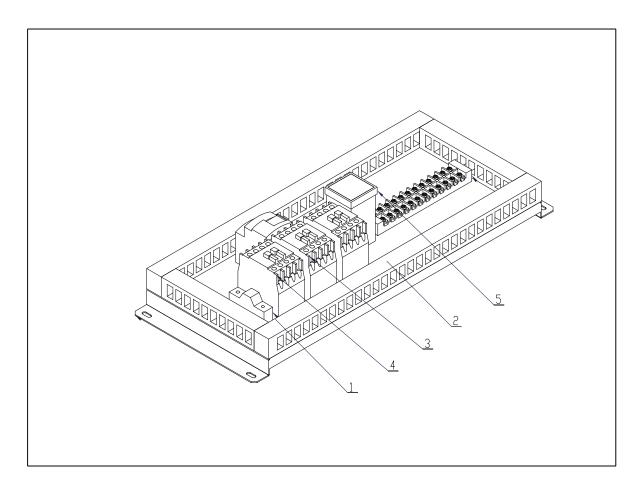
## FOUR. Parts illuminate drawing

#### 1. Drawing of main structure



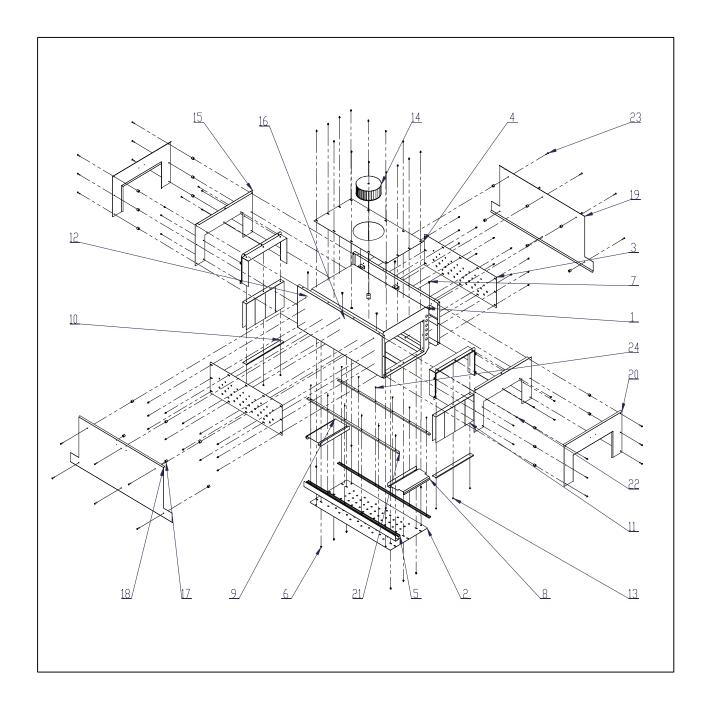
No.	Name	Qty
1	Foot support	1
2	Blowing system	1
3	Control box	1
4	Heating system	2
5	Feeding system	1

## 2. Instruction of parts on switchboard



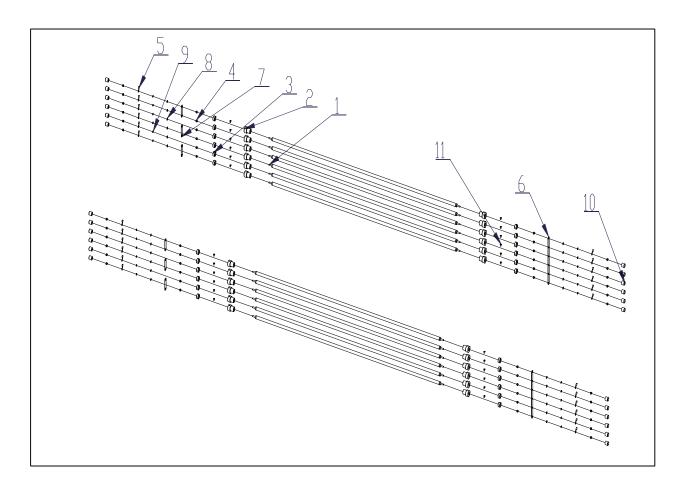
No.	Code	Name	Qty
1	QF1	Loop control breaker C32N1PC2A	1
2	КМЗ	Loop control contactor LC1-D0910	1
3	KM1	Blowing system contactor LC1-D0910	1
4	KM2	Heating system contactor LC1-D3210	1
5	KT1	Pre-stop time relay AH5B	1

### 3. Blowing system chart



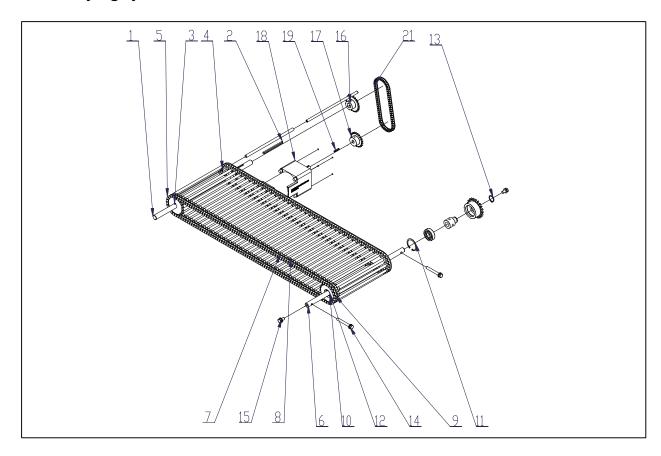
No.	Name	Qty
1	Oven inner shell welding part	1
2	Oven out shell	1
3	Inner fan turbo	1
4	Around board inside of the blowing channel	1
5	Heat tube support rack	2
6	Closing board at both sides of oven	2
7	Inner board at both sides of oven	2
8	Guide board at entrance of oven	2
9	Clip slot of heat insulating curtain	2
10	heat insulating curtain	2
11	Press board of heat insulating curtain	2
12	Heat insulating board gasket	20
13	Heat insulating board at left and right	2
14	Heat insulating board at front	1
15	Heat insulating board at behind	1
16	Motor 0.37KW	1
17	Fan wheel 7"	1
18	GB_CROSS_SCREWS_TYPE1 M5X25-25	20
19	GB_CROSS_SCREWS_TYPE1 M4X10-10	6
20	Inner hexangular knob M8X25	4
21	GB_CROSS_SCREWS_TYPE1 M4X8-8	78
22	Switchboard	1
23	GB_CROSS_SCREWS_TYPE1 M5X10-10	2
24	+ type head M5X10	4

### 4. Heating system chart



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

## 5. Conveying system chart



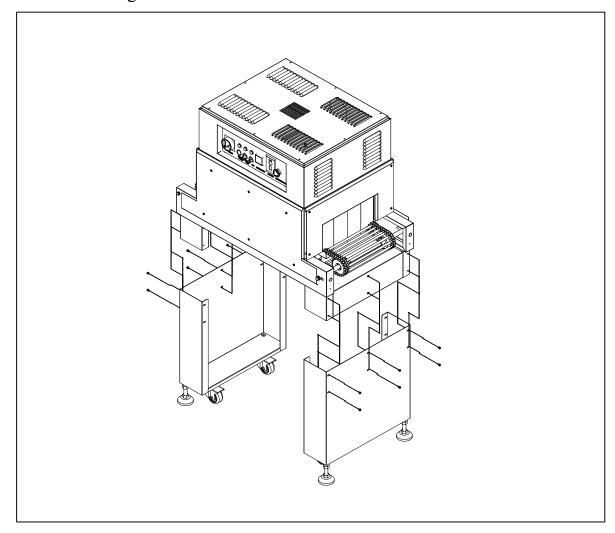
No.	Name	Qty	No	Name	Qty
1	Convey drive axes	1	12	Locate stop ring	2
2	GBCONNECTINGPIECE	1	13	JIS B 2804 HOLE USE 52	2
3	GBCONNECTINGPIEC KEYSCSK 6X70	1	14	Inner hexangular screw M10X80	2
4	08B-21 Chain wheel fitting part	2	15	Inner hexangular screw M10X20	2
5	08B Chain	2	16	06B-24 Chain wheel	1
6	Convey driven axes	1	17	CHAIN WHEEL ISO -21Z 06B-1-21SB40H25L12.0S	1
7	Convey roller	81	18	JWD motor 180W	1
8	Heat-resistant silicon tube	81	19	GBCONNECTINGPIECE KEYSCSK_C4X25	1
9	CHAIN WHEEL ISO -21Z 08B-1-21SB70H35L35.0N	2	20	Inner hexangular screw M6X20	4
10	ROLLING BEARINGS 6304 GB 276-94	2	21	06B Chain	1
11	JIS B 2804 HOLE USE 52	2			

## FIVE. Technical parameter diagram

Model	SM-4525	SM-5030
D 1	3Ф 380VAC 50/60	3Ф 380VAC 50/60
Power supply	3Ф 220VAC 50/60	3Ф 220VAC 50/60
Power	10KW	15KW
Oven entrance size	W450*H250	W500*H300
Machine's dimension	L1330*W750*H1380	L1620*W770*H1390
Work efficiency	2000-3000/h	2000-3000/h
Weight 185kg		220kg

#### SIX. Installation

- A. Open up top cover of wooden case and take away four side boards;
- B. Carry out main machine's body and put it on ground smoothly;
- C. Adjust foot screw at bottom to make machine on flat ,and prevent glide when machine is running;
- D. To facilitate for transportation before delivery ,the feet has been take out and put in carton ;therefore customer needs to open this carton and assembly it by screw;
- E. Please connect electrical wire according to displayed voltage on name plate, notice: must be ground.



#### **SEVEN.** Operate methods

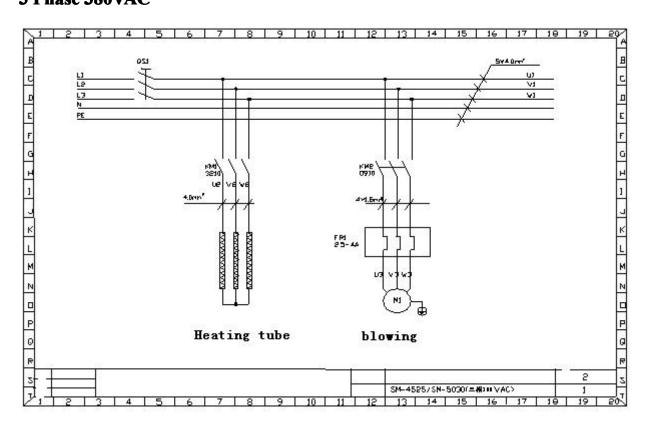
- A. Turn on main power switch and press startup button, then turn on blower switch;
- B. It must turn on blower first and then heat up. (SM-5030 has two blowing motors)
- C. Switch on electrical speed controller at panel ,convey roller and related chain will move along with the operation; Convey speed can be adjusted by the knob at speed controller;
- D. Turn on heating switch at panel ,and turn the knob at temperature controller to set parameter from  $150-170^{\circ}\text{C}$ ;
- E. After the temperature reached at preset date ,the heat indicator is off as well as heating tube will stop to heat up;
- 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.

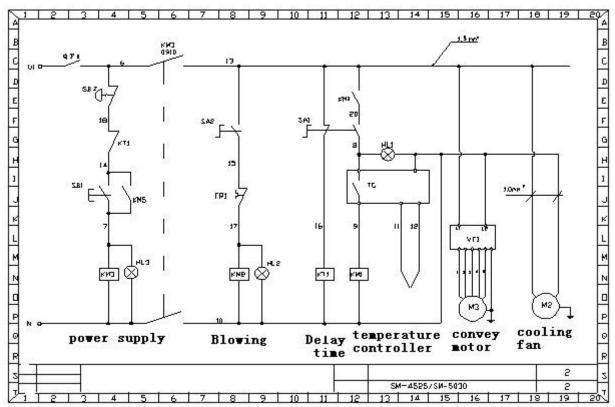
#### EIGHT, Maintenance

- 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.

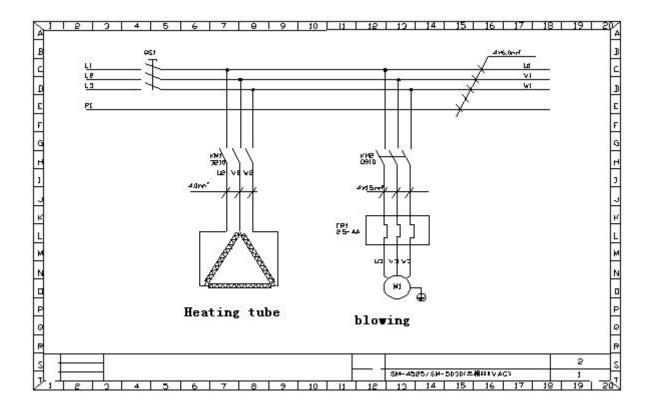
### NINE, Circuit diagram

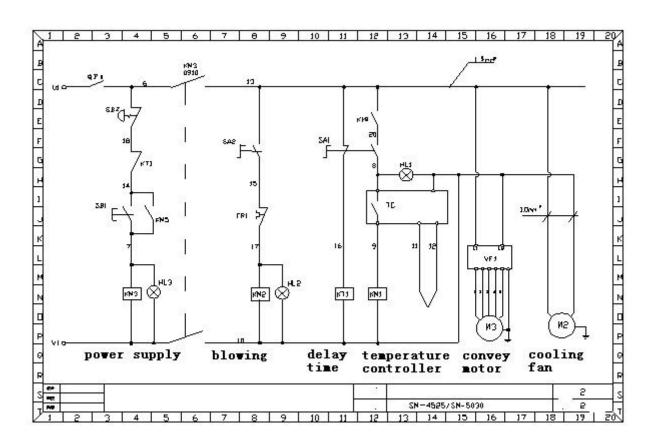
#### 3 Phase 380VAC





#### 3 phase 220VAC





## TEN. Trouble shooting

Failure status	Reason	Solution
	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	Add 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

## **ELEVEN.** Packing list

No.	Name	Specification	Qty
1	Main		1 unit
2	'十' Screw driver	150mm	1 pc
3	Manua1		1 pc
4			