KAT Series Microcomputer Automatic Packaging Machine

Manual

Thank you for choosing Tianhe packaging machinery. This machine adopts the most advanced microcomputer control system, equipped with LCD screen, in English menu display, intelligent fault diagnosis and real-time display, simple in operation, stable in performance, easy to maintain, it is the ideal latest generation of automatic packaging machinery.

- **Important:** In order to increase machine efficiency and to avoid possible accidents, please be sure to read the manual carefully and ensure that you understand the contents of this manual before use the machine.
- **Important:** after opening the packing box should check the random parts and if the appearance of machine is intact, to check the parts please refer to the parts list, such as errors and omissions, or machine parts missing and appearance damaged, please contact us first.
- **Important:** after the machine installed, please use the standard required earth ground wire to connect with the machine so as to avoid electrical shock! ! !
- **Important:** during the machine debug or production, if the hands reach into vertical, horizontal sealing parts, feed plate or inside the main motor belt could cause serious accidents! ! ! Please note to follow the relevant operating procedures when operate the machine.
- **Important:** without our permission, Please do not modify the machine structure, the electrical part of machine is more complex, non-professionals for maintenance or replacement parts, may cause serious accidents. If your machine fails or if you have special requirements need to change the functional structure of the machine, please contact our service department or technical department.
- **Important:** Please keep this manual on the easily accessible place and Proper kept for future reference.

1. the main function

- 1.1 The system uses Chinese liquid crystal display, the operation is at a glance and easy to operate(such as packaging quantity, length, speed, work status, etc.).
- 1.2 coefficient setting, can display the bag length same as the actual bags length.
- 1.3 Packing speed : liquid crystal display 0-16 file adjustable (when the length at 200MM the maximum packing speed can even reach at 90 bags / minute).
- 1.4 Count Package 0-99 million bales, after machine shutdown still can remember the last number, also can count the total number, also can set the amount of packaging required and shut down automatically after the set amount.
- 1.5 vibration system use pulse control, there are 6 file of vibration size, it is adjustable, so more conducive to the material filling.
- 1.6 Main motor and paper pulling stepper motor can run by 'MOVE'.
- 1.7 can set photo sensor for length tracking, if photo sensor tracking is not accurate the machine will shut down automatically to avoid the waste of packaging bags, according to the facts can set 1-4 bags, and when the package does not exactly the machine will shut down automatically.
- 1.8 feed plate can be set to automatically shut down when the material is not enough for packing so as to avoid empty packing bag.
- 1.9 Intelligent fault diagnosis and fault location Chinese display, greatly reducing trouble shooting time

2. the properties and uses

This machine is made by referring to the most advanced foreign sample machine and make some appropriate improvement, using micro-computer for driving and stepper motor for bag length controlling, with the photo sensor tracking, accurate, automated bag making, measuring, filling, sealing and cutting processes. This machine equip with high precision automatic temperature meter for sealing temperature control.

The machine structure is advanced, stable, reliable, convenient in adjustment and simple in maintenance.

Machine is suitable for packaging of small granular material or other granular material which is suitable to measure with volume. Also suitable for measuring and packaging of powder material which is not easy to stick with like cereals, puff foods, sugar MSG, medicine, chemical raw materials, tea and other goods.

Model No.	Bag making size (MM)	Bag making form	Counting range (ML)	Capacity (pc/Min)	Power (KW)	Gross Weight (KG)	Outside dimensions (L×W×H)
KAT320A	L: 50-200 W: 50-140	Back seal	20-400	35-90	2. 2	330	650×900×1640
KAT320D	L: 50-200 W: 50-120	3-side saeling	5-100	35-90	2. 2	340	650×900×1640
KAT320C	L: 50-160 W: 50-120	4- side sealing	5-60	35-80	2.5	350	650×900×1640
KAT420A	L: 30-300 W: 40-190	Back sealing	60-500	30-60	2.5	370	1100×900×2050
KAT520A	L: 30-350 W: 50-250	Liquid single pc	200-1000	30-60	2.5	420	1100×900×2150
KAT320CY	L: (30-40) ×4 W: (30-50) ×4	Liquid 4 pcs	(30-45) ×4	(30-45) ×4	2	380	900×1200×2100
KAT320DR	L: 50-160 W: 50-80	3-side sealing (flat cutter)	5-80	35–60	2. 5	350	650×900×1665

3. Specifications and main technical parameters

Packaging materials: plastic film with polyethylene heat sealing layer, paper, aluminum and thin and so on.

Packaging materials should be printed with photo sensor black marker at side, the width of mark not less than 5MM, length not less than 10MM, at the edge of packing film that printed with mark are not allowed to bring any other printed text or logo, in order to avoid malfunction of photo sensor tracking.

4. the main structure and working principle

The structure of machine is shown as Figure A, it formed by rack 1,transmit mechanism 2,horizontal seal 3,vertical seal 4,feeding device 5,film feeding mechanism6, electrical control boxes 7 and other components.

Diagram A is opening and closing handle for film pulling wheel; B is clutch operating lever for the turntable.

How it works: material is sent from hopper to turn plate , after measured from the adjustable measuring cup come into the cavity of bag former, after that it is sent to the bag that have finished vertical sealing and then machine will make the horizontal sealing for bagand cutting off, finally to get the finished products.

Electrical system please see electrical diagram, its operation can be achieved by the devices that installed in the electrical control box panel.

5, the operation and adjustment

(A) the preparation before use

- A1, the machine should wipe clean after unpacking, check whether there is any fasteners or wire is loosen, or any electrical components are damaged, meanwhile, for all moving parts should lubricate with lubricant (grease).
- A2, the machine should be well connected to grounded with single phase 220V, 50HZ power.
- A3, the width of packaging material should be same with width of bag forming device guide groove, the volume of packing object is depend on the size of cavity of measuring cup the suitable filling volume for packing object is subject to no more than 70% around of the packing bag cubage is ok. Thus can avoid any packing material to nip in the packing bag sealing part during production to effect the sealing quality.

(B) the operation and adjustment

- B1, connect the power cord, lose the automatic air switch, and open the power switch keys which is on the panel.
- B2, Set the temperature on the temperature meters for vertical sealing and horizontal sealing.
- B3,open the vertical sealing device, film pulling wheel and horizontal sealing device.
- B4, Pull packaging film through the guide roller to bag forming device and film pulling wheels

(see Figure III).

Figure 1, Outline structure of KAT-320



图一、KAT-320AK外形结构图



图二、KAT-320DK外形结构图

Figure 2, Outline structure of KAD-320



图二、KAT-320DK外形结构图



图三、穿膜示意图

1、包装膜; 2、5、导辊; 3、予拉辊; 4、光电眼; 5、成型器;

1. packing film 2,5, Guiding roller 3. Pre-pulling roller 4. Photo sensor 5. Forming machine

B5, Close the film pulling wheel, turn the film pulling wheel by hand, to make the packaging film come down smoothly.

B6, Put the packaging film into the place between photo sensor head and film guiding board, move the photo sensor to opposite at the color mark of wrapping paper.

B7, closed the material plate shutter (KAT-320A is no such device), adjust the feeding time. When the horizontal-seal board which had just closed, to fill the packaging object into bag is the best, if the cutting time is not accurate, can open turn plate clutch 2 (see Figure 4), the action is to achieve by the handle B in figure, and then use you hand to hold up the gear 3 which is connected with the hopper, then you can turn on the material plate, so that the material feeding time can match with the packaging process.

B8, Put the packaging material into the hopper and then follow to the turn plate, when the photo sensor check out that material in the turn plate is shortage the machine will control the vibration feeder to feed the material (KAT-320AY type no such devices), so that material come from hopper into the turn plate.

- B9 ,Adjust feeding cup capacity to conform the packaging requirements, this action is to achieve by turning the adjustment Nuts 1(see Figure 4)of the measuring cup
- B10, starting the main motor, the machine will make the operations of packaging and bag making

B11, check the sealing quality, then appropriately adjust the heat sealing temperature and sealing pressure.according to sealing quality

B12, adjustment of packaging speed: After starting the machine, clockwise turn the main motor pulley control loop can make the packing speed slow down, instead, anti-clockwise turn it will make the packing speed faster.

B13, When package is complete and shutdown, the first is to open hopper clutch 2, and then turn off the motor and general switch, keep to clean the machine often.

6. Maintenance

6.1, Should maintain all moving parts regularly, should lubricate (lubrication oil or grease) for these parts if necessary. for gear, the oil level should be kept, if the level is less should be coupled with G-N680W Worm Gear Oil, after the new machines run 150-400 hours should replace oil, and replaced once after every 4000 hours.

Figure 4, Guide for adjustment of measuring cup



图四、量杯调整示意图

1、量杯调整螺母;2、转盘离合器;3、落料调整齿轮;4、纵封凸轮;
 5、偏心轮;6、袋长凸轮;7、计数凸轮;8、破拱凸轮;9、打印凸轮。

1. adjusting nut of measuring cup 2.clutch of turn plate 3.Adjusting gear of material feeding 4.Cam for vertical sealing 5.Eccentric wheel 6.Cam for bag length 7.Cam for counting 8. Cam for broken arch 9.Cam for Printing

- 6.2,Please note to that sound of machine running should be coordinated, once occur any voice is with abnormal noise, should immediately shutdown the machine and check it.
- 6.3, electrical failure, should invite an professional technical personnel who own electronic circuit experience to maintain it.
- 6.4, Often keep the cutter to be charp, if found any cutting place of packing bag is not good, should replace the blade.

7, spare parts list:

2 pcs
2 pcs
2 pcs
2 pcs
1 set
1 set
2 pcs
2 pcs
2 pcs

Indirect Packing Machine Controller Instruction manual

Guangdong shantou RUBBUR mechatronics technology Co., LTD

I Main Features

- 1 Control 2 step-motors or servo-motors simultaneously.
- 2 Controlled by single proximity switch without velometer,

Dividing cut, aeration and vibration, feeding is not controlled By proximity switch.

- 3 Stop at the traverse seal opening position.
- 4 Various fault display.
- 5 Various auto-stop alarming functions.

II Technique Specification

- 1 Packing rate: 10-130bag/min.
- 2 Bag length: 10-400mm/bag.
- 3 Proximity Switch: 12-30vDC NPN normal open.
- 4 Photo-electricity eye: 12-30vDC NPN normal open .
- 5 Driver: 400pulse/circle.
- 6 Step-motor: 4.2N.m 4A 0.9/1.8 step angle.
- 7 Output interface: 12vDC input solid state relay.
- 8 Effective cam length of the proximity switch: 10-20mm.
- 9 The color tag width of the packaging film: 1.5-20mm.

III Adjustment

1 Cam position

Power on-push the start button to start up the machine-stop the machine after running three circles. If the position of traverse seal is not at the open position, turn the cam position until at the open position.

2 Coefficient adjustment

Set the packaging film-power on-photo electric eye off-set bag length at 100-start up the machine-running for more than 3circles-measure the bag moving distance. Adjust the coefficient to 100mm.

IV Start Up

1 Set the packaging film-power on-set the temperature of the traverse and vertical seal, and set the length of the bag. Only when the temperature is stable, then take the next step.

2 If there is no photo electric eye, close the eye switch, turn to step 4. If there is a photo electric eye, open its switch, adjust it and push button to measure the length automatically, push start-up button, then follow step.

3 After running for more than 3circles, measure the bag length and adjust the length to the required one.

4 Open the required functions switches, adjust the output positions. The start-up process complete.

V **Operation Instructions**(the workflow chart of page18-19for reference)

1 main interface (interface A):

(1) When the photo electric eye open or closed and the main machine is started-up and display "length A", press "A" for length setting .When the photo electric eye is open and the main

machine is stopped and display "length measure A", press "A", the computer measure the length automatically.

(2) when indicating "step B", when the main machine is stopped, press B to start the step motor, press B for zero clearance.

(3) when the photo electric eye is closed, indicating "photo electric eye C", press "C" to interface G to set the photo electric eye. When the photo eye is open and indicating "cursor alignment C", press C to set the cursor position and the photo electric eye.

(4) when the feeding switch is closed and display "bag moving D", press "D" for bag moving. When the feeding switch is open and display "feeding D", press "D" as short cut key for feeding.

2 Dividing cut settings: press "S" from interface A to interface B, press "A" from interface B to C, press "A" to set, press "B" to increase the value, press "C" to reduce, and "S" to exit the setting. When the dividing cut value=10,the cutting knife operate every ten bags, when the dividing cut value=00,the cutting knife doesn't work.

3 Aeration settings: press "S" from interface to interface B, press "A" from

interface B to C, press "B" to set, press "B" to increase the value, press "C" to reduce, and "S" to exit the setting. When the aeration value=3, the aeration time will last 3 units angles, when the aeration value=0, the aeration doesn't work. When the aeration position is on the interface E, it is the start angle of the aeration.

4 Fore-Vibration settings: press "S" from interface A to interface B, press "A" from interface B to C, press "C" to open or close the switch.

5 Back-Vibration settings: press "S" from interface A to interface B, press "A" from interface B to C, press "D" to open or close the switch.

6 Temperature settings: press "S" from interface A to interface B, press "B" from interface B to D, press "S" to open or close temperature controller.

7 Quantity limit-machine Stop: press "S" from interface A to interface B, press "B" from interface B to D, press "B" to the setting. Press "A" for figure shift, press "B" to add and press "C" to reduce.

8 Material lack-machine stop: press "S" from interface A to interface B, press "B" from interface B to D, press "C" to the setting, press "A" for figure shift, press "B" to add and press "C" to reduce.

9 Photo electric eye: press "S" from interface A to interface B, press "B" from interface B to D, press "D" to interface G to the eye setting. Can also press the short cut key "C" from the main interface to the interface G, press "B" to open or close the photo electric eye. When we don't use the photo electric eye, the switch should be closed.

10 Position system: press "S" from interface A to interface B, press "C" from interface B to E, press "A" to the pin setting, press pin(C-B-A-C)to the interface E, press "A" to film-drawing setting, press "A" for figure shift, press "B" to add the value, press "C" to reduce, press "S" to back or exit the setting.

11 Fore-Vibration position: press "S" from interface A to interface B, press "C" from interface B to E, press "B" to the pin setting, press pin(C-B-A-C)to the interface E, press "B" to the setting, press "A" for figure shift, press "B" to add the value, press "C" to reduce, press "S" to exit the setting. press "S" to back or exit the setting.

12 Aeration position: press "S" from interface A to interface B, press "C" from interface B to E, press "C" to the pin setting, press pin(C-B-A-C)to the interface E, press "C" to the setting, press "A" for figure shift, press "B" to add the value, press "C" to reduce.

13 System settings: press "S" from interface A to interface B, press "C" from interface B to E, press "D" to the pin setting, press pin (C-B-A-C)to the interface E, press "D" to the interface H to set all the system data, such as Chinese/English shift and Factory set.

14 Chinese/English: press "S" from interface A to interface B, press "C" from interface B to E, press "D" to the pin setting, press pin(C-B-A-C)to the interface E, press "D" to the interface H, press "A" for Chinese/English shift.

15 Sealing time: press "S" from interface A to interface B, press "C" from interface B to E, press "D" to the pin setting, press pin(C-B-A-C)to the interface E, press "D" to the interface H, press "B" to the interface I, and press "A" to the Into the sealing time Settings. press "A" for figure shift, press "B" to add the value, press "C" to reduce (it works only when all the bag-making patterns are pneumatic).

16 Triangle bag settings: press "S" from interface A to interface B, press "C" from interface B to E, press "D" to the pin setting, press pin(C-B-A-C)to the interface E, press "D" to the interface H, press "B" to the interface I, and press "B" to the setting of triangle bag. Then press B to open or close the switch.

17 Unilateral seal: press "S" from interface A to interface B, press "C" from interface B to E, press "D" to the pin setting, press pin(C-B-A-C)to the interface E, press "D" to the interface H, press "B" to the interface I, and press "C" to the setting, press C to open or close the switch.

18 First one bag: press "S" from interface A to interface B, press "C" from interface B to E, press "D" to the pin setting, press pin(C-B-A-C)to the interface E, press "D" to the interface H, press "B" to the interface I, and press "D" to the setting, press D to open or close the switch.

19 Stop position settings: press "S" from interface A to interface B ,press "C" from interface B to E, press "D" to the pin setting, press pin(C-B-A-C)to the interface E, press "D" to the interface H, press "B" to the interface I, and press "C" to the setting, press A to increase or reduce the data. Press "S" to back.

20 Stop position settings: press "S" from interface A to interface B, press "C" from interface B to E, press "D" to the pin setting, press pin (C-B-A-C)to the interface E, press "D" to the interface H, press "C" to the interface I, press "C" to the setting, press "B" to increase the data, and press "C" to reduce.

21 Coefficient settings: press "S" from interface A to interface B, press "C" from interface B to E, press "D" to the pin setting, press pin(C-B-A-C)to the interface E, press "D" to the interface H, press "B" to the interface I, press "C" to the setting, press "B" to increase the data, and press "C" to reduce, press "A" for figure shift, press "S" to exit. The fact bag moving length can be adjusted to equal to the set length.

22 Screw feeding settings: press "S" from interface A to interface B, press "C" from interface B to E, press "D" to the pin setting, press pin(C-B-A-C)to the interface E, press "D" to the interface H, press "D" to open or close the switch, press "S" to exit.

23 Bag length settings: press "S" from interface A to interface B, press "D" from interface B to F, press "A" to the setting, press "A" for figure shift, press "B" to add the value, press "C" to reduce, press "S" to exit the setting.

24 Bag rate settings: press "S" from interface A to interface B, press "D" from interface B to F, press "B" to the setting, press "B" to add the value, press "C" to reduce, press "S" to exit the setting.

25 Feeding weight settings: press "S" from interface A to interface B, press "D" from interface B to F, press "C" to the setting, press "B" to add the value, press "C"

to reduce, press "S" to exit the setting.

26 Feeding rate settings: press "S" from interface A to interface B, press "D" from interface B to F, press "D" to the setting, press "B" to add the value, press "C" to reduce, press "S" to exit the setting.

27 Photo electric eye-machine stop: press "S" from interface A to interface B, press "B" from interface B to D, press "D" to interface G, press "C" to the setting. Can also press the short cut key "C" from the main interface to the interface G, press "B" to add the value, press "C" to reduce, press "S" to exit. When the value=1, the machine stop automatically at 1 bag fault stop; when the value=2 the machine successively stops(the photo electric eye must be on).Also available from the main interface G, according to "C" to enter the settings, press "B" key data increases, according to "C" key data reduction.

28 Film lack-machine stop: press "S" from interface A to interface B, press "B" from interface B to D, press "D" to interface G, press "D" to the setting. Can also press the short cut key "C" from the main interface to the interface G Press "B" to add the value, press "C" to reduce. When the value=2, the machine stop automatically when the film transmitting proximity switch doesn't work during the continuous two bags and when the value=0 the machine automatically stops without any film. Also available from the main interface G, according to "D" to enter the settings, press "B" key data increases, according to "C" key data reduction.

VI Fault clearing

- (1) Fault description
- 1, The actual moving bag length different from the setting value.
- 2, The actual lengths are not the same.
- 3, The deviation of the photo electric eye is great.
- 4, The motor of the film-drawing doesn't work.
- 5, Some abnormal bags during the operation.
- 6, Abnormal screw operation, step-motor lose the step sound.
- 7, That screw doesn't work, the step-motor doesn't work.
- 8, Automatically stop and indicate "proximity switch".
- 9, The main machine doesn't run when press the start-up switch. And the computer indicates "proximity switch".

10, After starting the host, according to the "start/stop" button, the host can not be stopped.

- (2)Fault causes
- A: gear ratio is different; B: the deviation of the film-drawing wheel. dimension; C: the subdivision value of the driver is wrong.
- 2, A: film-drawing wheel is slipping; B: film-drawing wheel is jamming; C: closed vertical temperature is too high, not adjusting well.
- 3, A: film-drawing wheel is slipping; B: wrong setting of the length; C: light

sensitivity of eyes did not adjust well; D: closed vertical temperature is too high, not adjusting well.

4, A: no power of the driver; B: no pulse signal; C: the driver is broken.

5, A: cam switches and close to the gap is too large; B: close to a bad switch ;C: light eyes are not normal.

6, A: the step-motor lose steps; B: the motor lack phase.

7, A: the feeding switch is not open; B: no power of the driver; C: no pulse signal; D: the driver is broken.

8, When start-up, there is no proximity switch signal.

9, Something wrong with the main machine lines.

10, Close to switch did not work.

(3) Fault clearing

1, A: the subdividing value=2; B: adjust the coefficient.

2, A: check the resistance force caused by film-guiding roller and former; B: adjust the pressure of the film-drawing wheel; C: adjust the vertical seal temperature.

3, A: film-drawing wheel skipping, fault 2 for reference; B: adjust the bag length, stop the machine, press "length measure"; C: adjust the temperature of the vertical seal.

4, A: check the power; B: check the pulse signal; C: change the driver.

5, A: adjust the gap between the proximity and the cam; B: change the proximity switch; C: adjust the photo electric eye.

6,A: lower the feeding rate; B: check the lead line of the motor; C: check the driver.7,A: both the feeding switches of the interface A and F should be open; B C D same as the fault 5.

8,A:the main machine doesn't work: check the main machine; B: the proximity switch is broken; C: the sensitive time of the proximity switch is too short, lengthen the cam.

9, Check the contactor, if the contactor doesn't work if press the start-up button, there is something wrong with the line connected the computer and the contactor. Otherwise, there will be some powder on the line between the contactor and motor.

10, Check the proximity switch.

VI The analysis of the accessories.

1 The analysis of the position proximity switch.

A If the left down point of the interface A indicates there is no proximity switch, stop the machine and use the metals to touch the front of the proximity switch and check whether the indicator light of the proximity switch is twinkling, and check whether the indicator light of the proximity switch on the controller L2 is twinkling. <1> If the indicator light of the proximity switch isn't twinkling, the proximity switch is broken.

<2>If the indicator light of the proximity switch is twinkling but the controller L2 is not twinkling, the line between the proximity switch and the controller is not connected well.

<3>If the indicator light of the proximity switch is twinkling and the controller L2 twinkling, the gap between the proximity switch and the cam is too large and the inner contact point of the proximity switch is not triggered entirely.

2 Send close to the membrane switch and send the film to determine the electrical and analysis.

B If the left down point of the interface A indicates there is no film transmitting or the motor of the film transmitting doesn't run, stop the machine and check if there is any film. Use the metals to touch the front of the proximity switch and check whether the indicator light of the proximity switch is twinkling, and check whether the indicator light of the proximity switch of the film transmitting on the controller L1 is twinkling.

<1>If the proximity switch indicator light is not twinkling, the proximity switch is broken..

<2>The indicator light of the proximity switch is twinkling but the controller L1 is not twinkling, the line between the proximity switch and controller is not connected well.

<3>The indicator light of the proximity and of the controller L1 are twinkling, the film transmitting motor is broken or the relay of the solid plate is broken.

3 The analysis of the photo electric eye.

C If the fault of the photo electric eye display at the left down point of the interface A, use dark items to touch the bright point from the photo electric eye to check C 1,check whether the indicator light of the front of the eye is twinkling or not,

and check whether the photo electric eye indicator light on the controller C3 is twinkling.

<1>If the eye indicator light is not twinkling, the sensitivity of the eye is not adjusted well or the eye is broken.

<2>If the eye indicator light is twinkling but the controller is not twinkling, the line between the eye and the controller is not connected well, or the shift switch of the dark color band and the light color band is not set well.

<3>If the eye indicator light and the controller L3 are twinkling, and when the machine is started-up there is vibration between the eye and the film, the film is not good.

4 The analysis of back-vibration photo electric switch an the back-vibrator.

D If the left down point of the interface A indicates the back-vibration doesn't work because of material lack, use items to touch the front of the photo electric eye switch. Check whether the indicator light of the back of the photo electric switch is twinkling and check if the back-vibration indicator of the controller L4 and the solid plate is twinkling.

<1>If the indicator light of the material inspector switch is not twinkling, the photo electric switch is broken.

<2>If the material inspector indicator light is twinkling and the controller L4 is not twinkling, the line between the photo electric switch and the controller is not

connected well.

<3>If the material inspector indicator light is twinkling and the controller L4 is twinkling but the indicator light of the solid plate is not twinkling, there is no signal output from the controller or the force of the back-vibration is too weak.

<4>If the material inspector indicator light is twinkling and the controller L4 is twinkling but the indicator light of the solid plate is not twinkling, the force of the back-vibration is too weak or the back-vibration winding is broken.

5 The analysis of the temperature controller.

E Both the indicator lights of the temperature are not on or one is on but the other is off:

<1>When both the lights are not on, check whether the temperature controller switch is open or not on the interface D, check if the temperature controller indicator lights on the solid plate is on. If both the temperature controller switch and the indicator lights are on, the guard pipe or the line between the solid and the temperature controller is are broken.

<2>If one light on and the other off, the temperature controller is broken.

6 The analysis of inadequate aeration and the aeration solenoid valve.

<1>When the machine is started check the aeration switch and the aeration amount of the interface C, and check whether the aeration indicator light on the solid plate is on or not. If the aeration switch is on, the aeration amount is adjusted to the most, and the indicator light of the solid plate is not on, the lines between the aeration solenoid valve and the controller is not connected well or the guard pipe is broken. <2>When the aeration switch is on, adjust the air amount to the most, the indicator light of the solid plate is on, the aeration solenoid is broken or the air adjust valve is not set well, or the air pressure is not enough in the air compressor.

7 The dividing cut doesn't work the analysis of that if the time is too short and the dividing cut solenoid valve.

<1>When the machine is started, check the control interface C, check if the dividing cut switch is on, the amount of the cut is right, and check whether the dividing cut indicator light is twinkling or not. If the light is not twinkling, the line between the controller and the solid plate is not connected will or the guard pipe is broken. It the indicator light is twinkling, the dividing cut solenoid valve is broken or the line connecting the solid plate and the solenoid valve is broken, or there is not air pressure to the dividing cut cylinder.

<2>the cut time is too short, set the dividing cut position of interface I to 1.

8 The fore-vibration doesn't work, the vibration force is too weak and the position is not right. The analysis of the vibration winding.

<1>when the machine is started, check the controller interface C, check if the switch is on. Adjust the vibration force at the back of the controller, check whether the fore-vibration indicator light is twinkling or not.

<2>On the controller interface C ,open the fore-vibration switch and adjust the vibration fort to the highest, if the indicator of the solid plate is not twinkling, the line between the controller and the solid plate is broken or the guard pipe is broken.

<3>If the fore-vibration indicator lights of the solid are twinkling, the fore-vibration winding is broken of guard pipe is broken.

<4>Fore-vibration time is not right, adjust the data of the interface F to change the vibration position.

9. If the screw feeding doesn't work, analyze the driver of the screw feeding.

<1>When the power of the main machine is on, check the feeding driver's power. If the indicator light is on, the power is not connected or the driver is broken.

<2>If the main machine is started, the feeding motor doesn't run, check the interface G of the controller, check if the screw feeding switch is open and if the feeding switch of interface A is on, and check if the indicator light of the solid plate H2 is twinkling. If the indicator light of the solid plate H2 is not twinkling when all the feeding switches are on, there is no output signals from the controller. If the indicator light is twinkling but the feeding motor is not running, the driver is broken or the line between the motor and drive is not connected well.

10、 The analysis of the false operation of the triangle bag and the solenoid valve.
<1>The triangle bags seal air at the same time or a pair don't work, or both pair don't work. Check if the triangle bag function of the interface J is on, if the film-drawing

position is set to big, if the film-drawing speed if too slow, or if the lines of the solid+,11and 12 are connected well.

<2> When the machine is open, check if the indicator light of the solid plate H1 and H2 rotates and if they are normal. If they are abnormal, the value of the controller are not set right or the line of +, I1 and I2 are not connected well. If the indicator lights of the solid are twinkling abnormal, the solenoid value is broken or the pressure is not stable.





