Instruction Manual
Please read carefully and thoroughly this manual before starting to use this machine, and keep this manual in safe place for future reference
Please read carefully and thoroughly this manual before starting to use this machine,

# **Table of Content**

Foreword3
1. Safety Precautions
2. Machine description
2. 1. Machine application4
2. 2. Structural features
2. 3. Machine outline and names for each part
2. 4. Positions and names of adjusting components
2. 5. Technical specification
3. Installation
3. 1. Ground requirement5
3. 2. Environment Conditions
3. 3. Steps of installation7
3. 4. Switch on and test
4. Machine Adjustment
4. 1. Feeding mechanism
4. 2. Paper feeding mechanism
4. 3. Bag maker9
4. 4. Mid sealing mechanism 9
4. 5. End sealing mechanism
4. 6. Brush mechanism 12
5. Operation
5. 1. Human-machine interface
5. 2. Temperature control
5. 3. Color mark electric eye
5. 4. Start
5. 5. Stop23
6. Maintenance
6. 1. Per shift clean and maintenance
6. 2. Monthly clean and maintenance
6. 3. Biannual clean and maintenance
7. Resolving abnormalities
8. List of attached documents, fittings and tool26
9. Appendices
A. Electric schematic diagram
B. Electric wiring diagram
10. Appendix
A. Electrical schematic diagram
B. Electrical wiring diagram
C. Technical Specifications
D. Overall dimensions

# Foreword

Welcome to use automatic rotary type rotary pillow packing machine!

If it is the first time to use our pillow packing machine, please read carefully and thoroughly this "operation manual", it will help you to use and maintain the machine correctly, assure the safety of people and machine, full play the performance of the machine, reduce troubles and prolong the service life of the machine.

# 1. Safety Precautions

- 1) Never start the machine before make familiar with the correct operation methods and safety regulations.
- 2) Untrained and unauthorized persons are not allowed to operate this machine.
- 3) Carefully read this manual and understand all of the content and requirement in this manual before using the machine.
- 4) The machine can be operated only after it is completely installed and properly adjusted.
- 5) Before starting the machine, make sure there is no tool or any other object on top of the machine.
- 6) Before switch off the power, never touch the inside of the machine or the electric equipment.
- 7) Never leave the running machine unattended---operators should not leave the working scope of the machine during the machine is running.
- 8) When the machine is running, never touch the sealing wheel, sealing die and moving parts.
- 9) Electric control circuit must be checked and repaired by professional electricians.
- 10) Do not refit the machine, or install any device, tool or peripheral equipment to the machine without the permission of our company in order to avoid any danger.
- 11) If there is anything in the manual you cannot understand, or if you encounter any problem that cannot be solved with this manual, please contact our company or our sealer, never try to handle it yourself.
- 12) Do not use this machine in the environment other than the stipulated.

Warning: For your safety and the safety of the machine, do observe all above safety precautions, otherwise, this company will be free from any responsibility for any accident out of inobservance.

# 2. Machine Description

# 2. 1. Machine Application

This machine is designed for packing fixed shaped materials into pillow packages, suitable for packing all kinds of regular shaped solid products, including foodstuff, such as biscuits, breads, moon cakes, candies etc, commodities, industrial parts etc. For small pieces and separated articles, they should be put in to boxes or tied into blocks before this machine can be used to pack them, and this packing method is also applicable to pack other nonsolid products.

#### 2.2. Structural features

- 1) Dual frequency converter control, bag length is adjustable, no need to adjust idle running distance, adjustment can be make in one step, save time and film.
- 2) Text type human-machine interface, parameter setting is convenient and quick.
- 3) Problem self diagnose function, any trouble is clear at a glance.
- 4) Highly sensible photoelectric eye for color mark tracking, which makes sealing and cutting position more accurate.
- 5) Independent temperature PID control, more suitable for packing films of all kinds of materials.
- 6) Position fix stop function, free from cutter sticking and film waste.
- 7) Simple driving system, work is more reliable, and maintenance is more convenient.
- 8) All controls are carried out with software, it is convenient for function adjustment and upgrade, and it will never drop behind.

# 2.3. Machine outline and names for each part (see diagram 1)

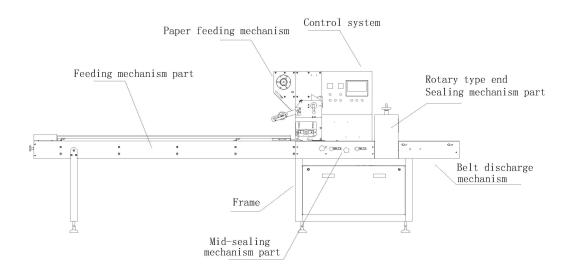


Diagram 1. Outline of Rotary type pillow packing machine and the components

2.4. Positions and names of the adjusting components (see diagram 2)

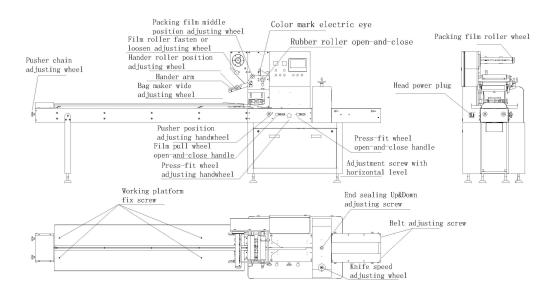
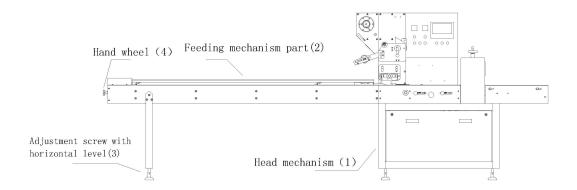


Diagram 2. Positions and names of the adjusting components for Rotary type pillow packing machine

# 3. Machine installation

# 3.1. Ground requirement

This machine should be installed on a flat and hard surface. Enough space should be kept around the machine for operation and maintenance (see diagram



3).

Diagram 3. Feeding mechanism for model Rotary type pillow packing machine

#### 3.2. Environment conditions

- 1) Temperature: Normal environment temperature should be within  $5^{\circ}\text{C} \sim 40^{\circ}\text{C}$ .
- 2) Humidity: 30%~90%.
- 3) Keep away from gasoline, chemicals, acid and alkali materials, explosives, and combustibles.
- 4) Environment illumination: Above 300 LUX
- 5) Keep away from direct sunlight
- 6) Keep away from vibrating machines.
- 7) Avoid direct fan blowing.

# 3. 3. Steps of installation

- 1) The first step is to determine the installation position, refer to diagram 3. After the machine is set, take the worktable as the level reference to adjust the four level adjusting screws, set the main machine in a level position.
- 2) Install the feeding machine, fix it to the left side of the main machine with bolts, then adjust the two level adjusting screws of the feeding machine, set it in a level position. For the part connecting with the main machine, the bottom of the feeding chute and the main machine table should be aligned and kept in a same level.
- 3) Install the push finger chain. Loosen the left handwheel (see diagram 2) of the feeding machine,

and install and connect the push finger chain. Turn the handwheel to adjust the push finger chain to a proper tension.

4) Connect power supply line. This machine uses single-phase 220V, 50HZ power supply. Never connect to 380V or other unqualified power supply. Special attention must be paid to this requirement! In order to ensure safety, all wiring work should be carried out by qualified professional electricians. Connecting cable is attached to the machine. If you use your own power plug, 1.5m m² three core cable must be used, correctly connect the live wire(L), the zero wire (N), and the grounded wire (E).

# 3.4. Switch on the power and test run

- 1) Make sure that the power supply is correct (test L, N with a test pencil).
- 2) Connect all the circuit breakers in the control cabinet, check if all meters and power indicator lamps on the control panel are normal.
- 3) Press inching button, check if the machine can operate normally.
- 4) On the human –machine interface, set the packing speed to 40 packages per minute, then press the start button (green), run the machine normally for 3 to 5 minutes, after make sure the machine can operate normally, press the stop button (red). Now a correct installation is completed.

# 4. Machine Adjustment

# 4.1. Feeding mechanism

The feeding mechanism of this machine is equipped with a push finger chain, the tension of the chain is adjusted the two "push finger chain tension adjusting hand wheels" on the left end of the feeding mechanism. After the product to be packed is determined, adjust the width of the guide chute of the feeding mechanism to an extent so long as the product to be packed can pass through the guide chute smoothly.

#### 4.2. Paper feeding mechanism

# 1) Packing film circumambulating route

After the packing film roll installed on the automatic central aligning clamping roller, the film should circumambulate through certain route. The circumambulating route will be slightly different as whether a code printing machine is installed or not.

a) When the machine is equipped with a code printing machine, the circumambulating route should be arranged as shown in diagram 4.

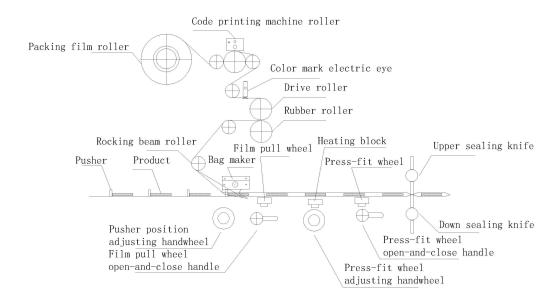


Diagram 4. The film circumambulating route when the machine is equipped with a code printing machine.

b). When the machine is not equipped with a code printing machine, the circumambulating route should be arranged as shown in diagram 5.

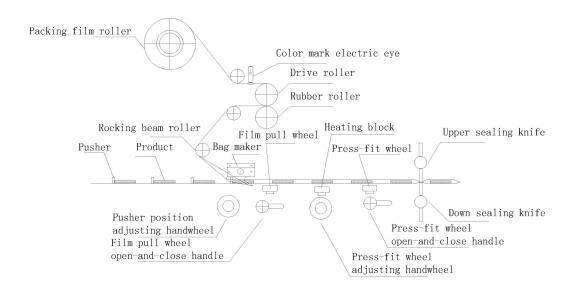


Diagram 5. The film circumambulating route when the machine is not equipped with a code printing machine. Regardless what circumambulating route is adopted, when the film enters the bag maker, open the mid-sealing open-and-close handle, make the paper pass through the paper pull wheel, mid-sealing heating board, press-fit wheel, then close the open-and-close handle, run the machine by inching, make the packing film pass through the end sealing knife, now the film installation is completed.

#### 2) Packing film tension and central aligning adjusting

When the packing film pass through the bag maker, if the tension of the packing film is uneven, i.e., loose in the middle and tight on both sides, or tight in the middle and loose on both sides, the paper transfer will become unsmooth, at this time, it needs to adjust the position of the swing roll (see diagram 2) or the angle of the swing link, this will change the relative position between the swing roll and the bag maker, thus the tension of the packing film will be adjusted to a even tension as required.

If the mid-sealing of the packed product is uneven, it needs to adjust the "packing film central aligning adjusting handwheel" (see diagram 2), until the two sides of the mid-sealing are lined up. Adjustment in each time should not be too large (the adjusted result will not be reflected immediately).

#### 4.3. Bag maker

Bag maker is bag folder that can adjust the width and packing film elevation.

The width of the bag maker can be adjusted through "bag maker width adjusting handwheel". The proper width of the bag maker should be the width of the packed product plus 5mm positive allowance.

To adjust the height of the bag maker, loose the fixing handwheel of the bag maker, move the bag maker up and down to adjust the height of the bag maker. The height of the bag maker should be the height of the product plus 5mm positive allowance. After adjustment, lock the fixing handwheel.

#### 4.4. Mid-sealing mechanism

Mid-sealing mechanism consists of a paper-pull wheel, heating block, press-fit wheel, open-and-close handwheel, press-fit wheel speed adjusting handwheel etc. When the packing film passes through the paper-pull wheel, heating block, press-fit wheel, if paper is laid up or strained, it should be adjusted with the "press-fit wheel speed adjusting handwheel".

Mid-sealing should result a tight sealing and clear lines, otherwise it should be adjusted, and following is the adjusting method:

- 1) Put two white papers, between which a carbon paper is sandwiched, onto the mid-sealing wheel and turn it one revolution, open the two white papers, the printed marks on the two white papers should be clear, it not, adjust the meshing position between the two wheels, check the printed marks again, until the printed marks are clear on the papers.
- 2) If the meshing is correct and the temperature is proper, but sealing quality is still undesirable, it needs to adjust the set screws to limit the meshing pressure of the sealing wheel, till the sealing becomes desirable.

The mid-sealing parts have been adjusted properly in the factory, so it is generally do not need to adjust.

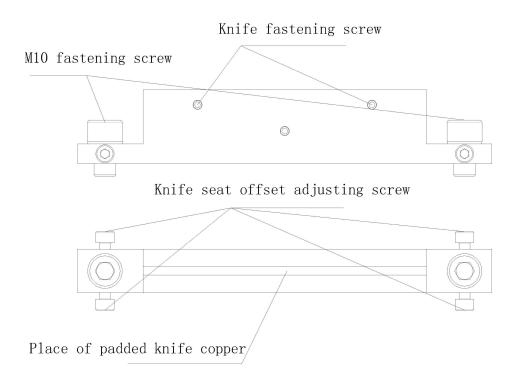
#### 4.5. End sealing mechanism (Rotary type)

#### 1) End sealing knife seat and cutter adjustment

The cutter seat have been adjusted, tested and inspected in a strict way and generally it does not need make further adjustment. In case adjustment is need, use two white papers, between which a carbon paper is sandwiched, to test and check if the pressed marks on the paper are even and clear, if they are clear, the cutter seat position is correct and no adjustment is required, if not, adjustment to the cutter seat is required, to adjust, loosen the screw M10 (not completely take off), then adjust the crossing adjusting screw to correct the position of the cutter seat, until proper result is reached. At last tighten the screw M10. Adjustment of the cutter seat can be carried out without heating.

The adjustment of the cutter is generally made by pacing copper sheets. The proper adjustment is that it adjust cut off the film without making much nose. If the cutter is unable to be adjusted

well, is must be replaced. Adjustment of the cutter must be carried out under heating (about 120°C). See diagram 6. Cutting seat diagram



#### 2) Adjusting the height of the end dealing knife holder

The height of the end dealing knife holder should be adjusted according to eh height of the packed product so as to make the meshing center of the sealing knife align with the height of the center of the packed articles, as shown in diagram 4 and 5. To adjust, loosen the four screws of the side board of the cutter holder, then adjust the up-and-down adjusting screw of the end sealing (the middle screw), making the distance between the meshing position of the upper and lower sealing knives and the working plane is about a half of the height of the packed product. After adjustment, don't forget to tight the four loosened screws before restart the machine again.

#### 3) Adjusting the end sealing knife speed

The speed of the end sealing knifes should be adjusted according to the different lengths of the packages. The speed should be adjusted so that the linear velocity of the end sealing knifes is equal to the speed of the packing film, there is no paper lay up and straining paper cutting at the cutter. If there is lay up, is means the knife speed is slow and it needs to increase the speed with the "end sealing knife adjusting handwheel" (see diagram 2); if the paper is strained, is means the knife speed is too high and it needs to decrease the speed with the "end sealing knife adjusting handwheel", until reach the synchronized speed.

# 4) Adjusting the cutting position of the end sealing knives

In this feeding machine, the linkage relationship between the between the push rod and the end sealing knives is different according to the lengths of the packages. The method and procedures for adjusting the synchronous relationship between the between the push finger and the end sealing knives are as following:

# (A) When color marks are printed on the film package:

- (1) When there is no product in packages, select "parameter setting" display and set the value of the "cutting position" with the human-machine interface so as to adjust the cutting position of the end sealing knives. (refer to section 5.1 for setting method), set the cutting position at the color mark.
- (2) Put 3 to 5 packed articles between the push fingers of the feeding mechanism, star the machine, when the packed articles reach 100mm away from the front of the end sealing, stop the machine.
- (3) Check to see if the packed articles are between the two color marks, and measure the deviation direction and amount and record them.
- (4) Take out the packed articles, adjust the push finger position with the "finger position adjusting handwheel" (the handwheel can be turned after it is pushed inward), so as to adjust the position of the packed articles.
- (5) Repeat steps 2 to 4, until the packed articles are just between the two color marks.
- (B) When there is no color mark on the film package:
  - (1) Put 3 to 5 packed articles between the push fingers of the feeding mechanism, star the machine, when the packed articles reach 100mm away from the front of the end sealing, stop the machine.
  - (2) Check visually to judge if the end sealing position is between the two packed articles and measure the deviation direction and amount and record them.
  - (3) Take out the packed articles, adjust the push finger position with the "finger position adjusting handwheel" (the handwheel can be turned after it is pushed inward), so as to adjust the position of the packed articles.
- (4) Repeat steps 1 to 3, until the packed articles are just between the two color marks.

#### 4.6. Brush mechanism

The main effect in this mechanism is to expels air in the packing bag, increasing the packing bag beautiful, at the same time benefit in trnsport. The pressure that brush add on the packing bag, with a packing film just stick to packing body is proper.

#### 5. Machine operation

- 1) Safety check: Check and make sure there is no foreign matter on the conveyor belt, working table, and end sealing knives, and there is no other person around the machine.
- 2) Switch on the power. Open the door of the cabinet and connect the main breaker, close the cabinet, check to see if all thermostats and power supply indicator lamp on the control board are normal, and see if the display of the human-machine interface is normal.

After safety check and the power supply is normal, carry out the following operation:

#### 5.1. Human-machine interface

The main parameters of this machine are set with the human-machine interface. After the power is switched on, the first page of the human-machine interface is displayed, as shown in diagram?

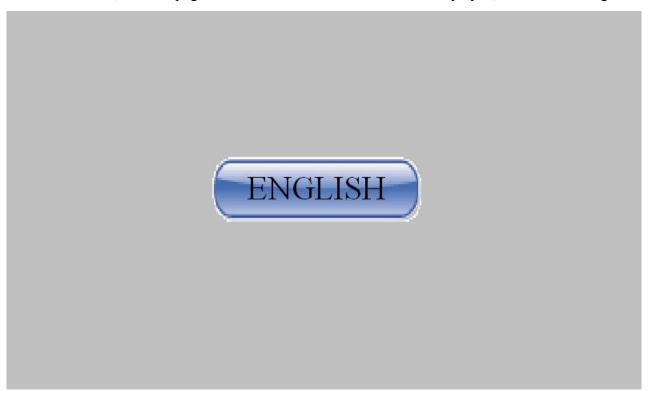


Diagram 7. The first page of the human-machine interface

2.Follow the description on the screen, press the touch key (ENGLISH), the human-machine interface will enters the next page, as shown in diagram 8.



.

# (A) Parameter setting

Follow the indication in the "main menu of the human-machine interface" (diagram 8), press (SETTING) key, it enters the "parameter setting" display, as shown in diagram 2.enter the values by following the descriptions on the screen, (speed)if the speed value excels the rated the speed of the machine, an error signal will be displayed and ask you to reset the value, until the set value is correct.(length) if value of package length excels the rated value of the machine, an error signal will be displayed and ask you to reset it, until the set value is correct.(Cut position)To confirm the input value, at first, set the parameter of the cutting position to "0", seal and cut the empty bags, measure the distance "L" between the cutting point and the color mark.Press (Back) key, return to the "main menu of the human-machine interface", as shown in diagram 9.

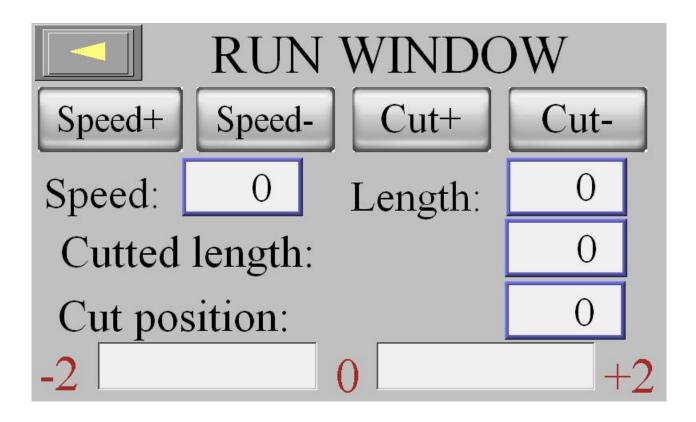


Diagram 9. The parameter setting display of the human-machine interface

(see diagram 10 (1) ), and then input the measured value "L" to the "cutting position" parameter.

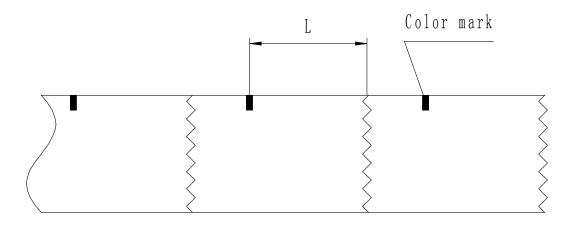


Diagram 10 (1) . Cutting position measuring

(B) Follow the indication in the "main menu of the human-machine interface" (diagram 8), press (COUNTER) key, it enters the "parameter setting" display, as shown in diagram 10.enter the values by following the descriptions on the screen

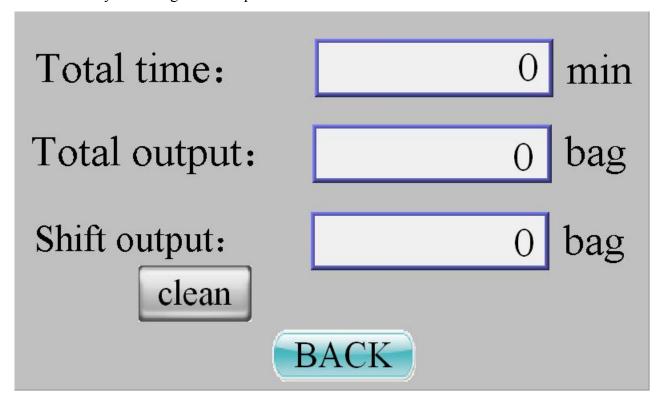


Diagram 10. Yield counting display

This display mainly record the accumulated working time, accumulated output and shift output, so as to facilitate production management for users. Shift output can be reset by pressing (CLR) key. Press (Back) key to return to the "main menu of the human-machine interface" (diagram 8).

# (C) Follow up method

Follow the indication in the "main menu of the human-machine interface" (diagram 1), press (FLLOW) key to enter into the "follow up method" display, as shown in diagram 11. Press (Back) key to return to the "main menu of the human-machine interface" (diagram 8).

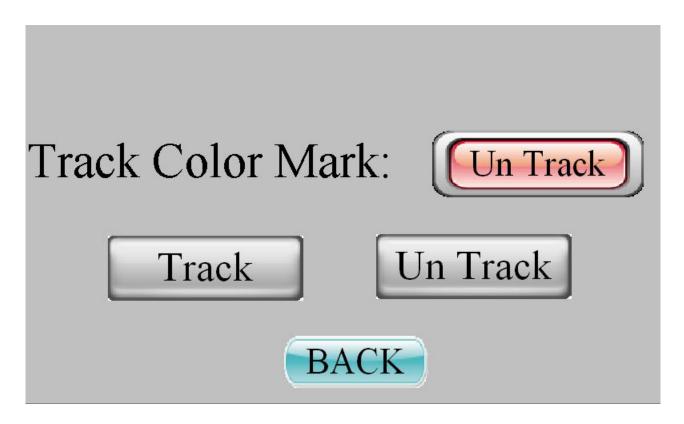


Diagram 11. Follow up method display

the machine will enter into "Follow up cutting" mode, the machine will enter into "Length set cutting" mode. For packages with color marks (i.e. for product to be followed up through color marks), "Follow up cutting" is used; for packages without color marks, "Length set cutting" mode" is used.

# (D) Inflating setting (option)

Follow the indication in the "main menu of the human-machine interface" (diagram 1), press (INFLATE) key to enter into the "Inflating setting" display, as shown in diagram 12. Press (Back) key to return to the "main menu of the human-machine interface" (diagram 8).

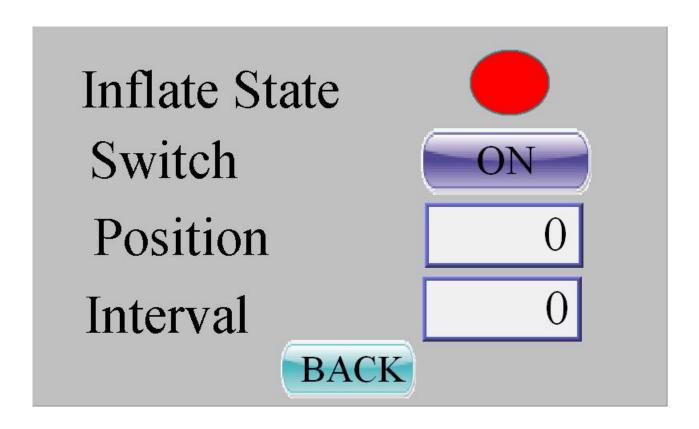


Diagram 12. Inflating display

- 1) Setting inflating delay: Follow the indication in the "inflating setting" display(diagram 5), enter into the "inflating delay" setting display ,input the value by following the indication on the screen. The input value should be decided by inflating effect.
- 2) Setting inflating time: Follow the indication in the "inflating setting" display (diagram 5), enter into the "inflating time" setting display ,input the value by following the indication on the screen. The input value should be decided by inflating effect.

Diagram 18. Single action display

This display is used for single action operation:

- a) Paper feed system moves forward and backward
- b) End sealing system moves forward and backward
- c) Mid-sealing system opens and closes

# (F) Quantity packing

This machine contain fixed quantity packing function. When to open the fixed quantity packing and set up the fixed packing quantity, this time, start the packing machine, It normal wouks. When the quantity of packing arrives the packing number set up, the packing machine stops

automatically. Such, can then the convenience calculates to handle the finished

product of packing.

After shutting down midway, start the packing machine again, this time, the fixed quantity packing starts calculating from the zero.

Follow the indication in the "main menu of the human-machine interface" (diagram 1), press (QUANTITY) key to enter into the "Quantity setting" display, as shown in diagram 6. Press (Back) key to return to the "main menu of the human-machine interface" (diagram 1).

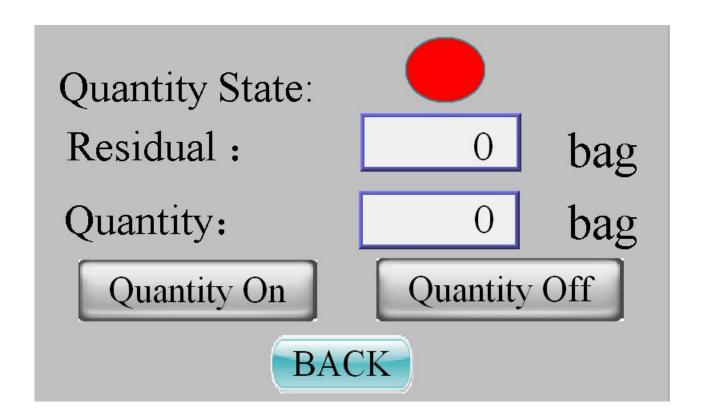


Diagram 13. Quantity display

open the "quantity function", close the "quantity function", enter into the "quantity range" display, as shown in diagram 13. input the value of the quantity range in accordance with the description in the human-machine interface.

(G) Manual operation

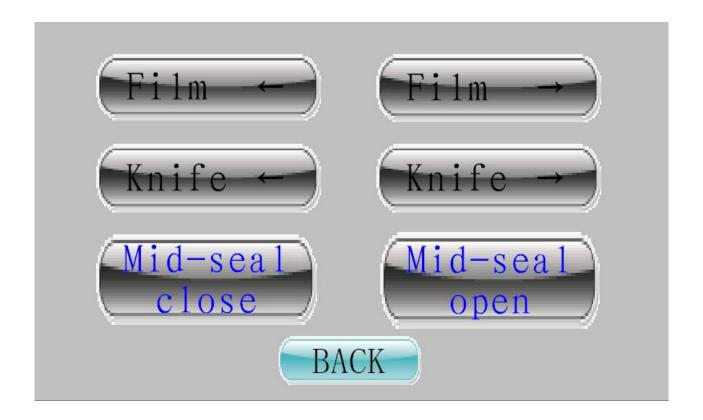


Diagram 14

This interface is mainly used for separate operation (this function is more for debugging, please use with caution):

- a) Film feeding system forward and backward.
- b) End sealing system forward and reverse.
- c) Middle sealing open and closed.
  - (H) Optional features
- (1) .Anti cutting material setting

Touch "PROTECT ON" and the machine will be in a "Anti cutting" mode of operation. First adjust the material level, and then inching the machine, inching the knife in the middle of the two materials,then touch "range determination" to determine the anti-cut position, touch the "protection range" behind the figure, the greater the figure, the greater the scope of protection, The easier it is to make alarm. It is generally set to 20. The material is detected within the protection range. The packing machine will alarm and shut down. Refer to the sketch of anti-cutting (Diagram 15,16). After changing the level, you need to reset it.

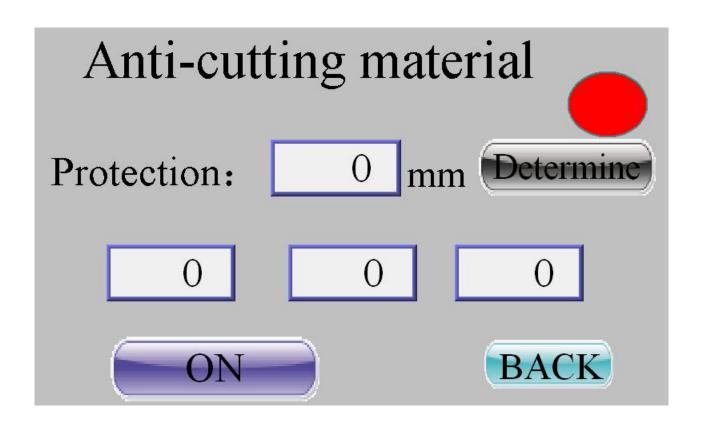


Diagram 15

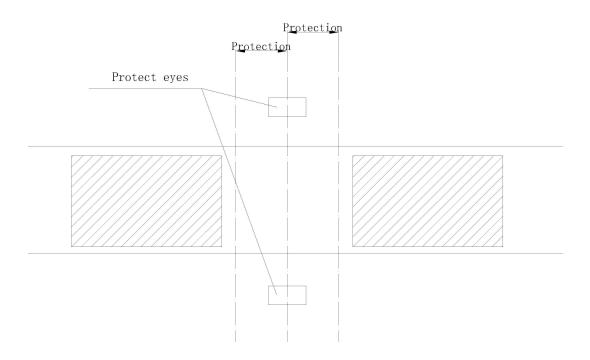


Diagram 16

#### (2) .Empty bag shutdown

Touch "Off Empty bag shutdown", the machine will be in normal working mode

Touch "Open Bag Stop" and the machine will be in the "Empty Bag Shutdown" mode of operation. Touch the

figure after the "empty bags" to enter the setting figure. When the setting figure is greater than 1, the sensor will not turn on when the quantity of the packaged product reaches the set figure. When the setting figure is greater than 1, a warning message will be displayed and shut down. After the shutdown switch is turned on, when the sensor is turned on, the packaging machine starts up. When the number of empty bag stops is set to 0, the sensor turns on and detects that the packaged product is stopped after running a bag.

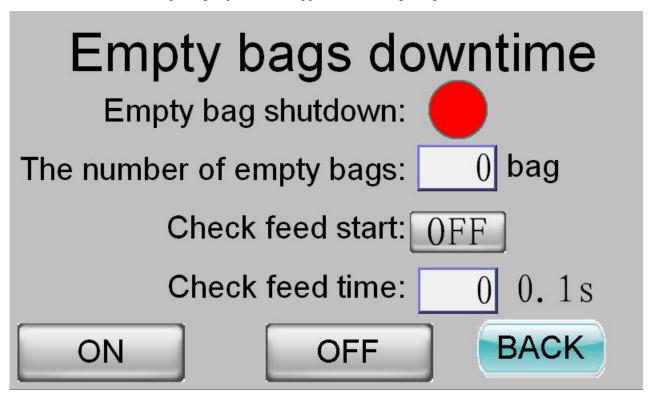
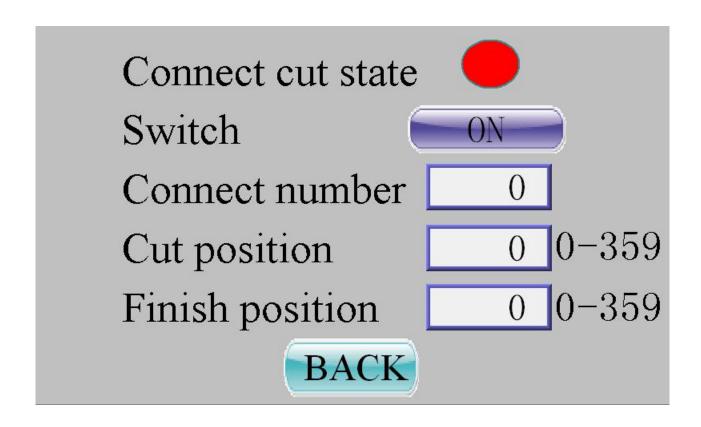


Diagram 17

#### (3) Continuous cutting mode

Touch the button on the back of the parcel switch "Off", the machine will be in normal working mode

Touching the button on the back of the bale switch "ON", the machine will be in the "Continuous cutting" mode of operation. Touch the number of "number of packets" behind, enter the set figure, when the number of packages reaches the set figure, start the "packet cut off" function. Touch the figure behind the "cutting position" and enter the set figure. When the end seal encoder reaches the set figure, the cylinder is cut off. Touch the figure after the "end of cut" and input the set figure. When the end seal encoder reaches the set figure, cut off the cylinder and rise. See Diagram 18



# Diagram 18

#### (4) Cutting material stop automatic

0-59, 60-79,80-200 for the speed, the latter figure for the encoder response time. When in the cutting material stop mode is cutting the product and not to stop running, reduce the set figure of velocity judgment time and inverter torque P007 to 1, make it cutting the product then the packing machine will shut down. When the speed is too low, the alarm encoder will error, please increase the speed set figure to determine the time, the best speed for the effect of 40-80,0-59 speed is generally set 18,60-79 speed is generally set 12,0- 59 speed generally set 8.

The current figure of the knife is normally 360 (plus or minus 5). If it is more or less than 360 (plus or minus 5), check the encoder mechanism or replace the encoder

The current figure of the film is normally twice the bag length (plus or minus 5). If the length is more or less than twice the bag length (plus or minus 5), check the encoder mechanism or replace the encoder, See Diagram 19

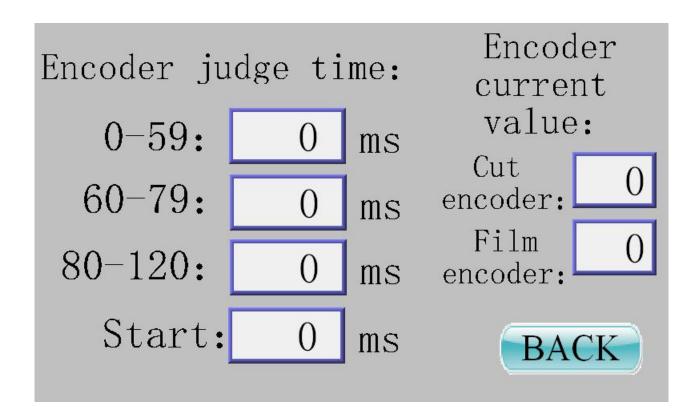


Diagram 19

# 5.2. Temperature control

This machine has two sets of temperature control systems, which control the "mid-sealing temperature" and the "end-sealing temperature" respectively. The temperature setting value for each set of temperature control system is determined according to the packing speed, the thickness of the packing film, and the environment temperature. The optimum temperature setting value should have a result that there is no leakage and burnt wrinkle for both mid-sealing and end-sealing. The operation method for thermostat is described in the thermostat instruction manual attached to the machine.

#### 5.3. Color mark magic eye

Magic eye is required for products to which following up is needed. After the packing film is installed, adjust the position of the magic eye; along the light beam emitted from the magic eye with to the place where color marks pass by, as shown in Diagram 20.

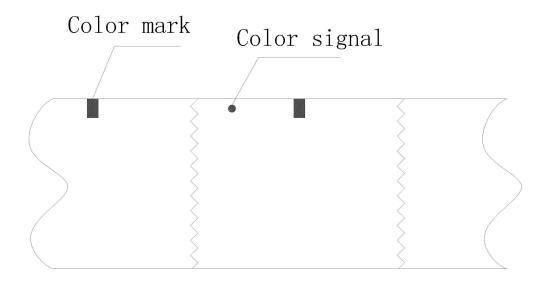


Diagram 20.

The sensitivity of the color mark magic eye has been adjusted properly in factory. If further adjustment is needed, follow the magic eye instruction manual attached to the machine.

#### 5.4. Start

#### 1) Inching

Press and hold the inching button (black), the machine will run in speed of 30 packages per minutes, when the key is released, the machine will stop immediately.

#### 2) Continuous running

Press the start button (green), the machine will run continuously with the set speed until the stop button (red) or emergency stop button (mushroom shaped) is pressed.

#### 5.5. Stop

#### 1) Normal stop

Press the stop button (red), the machine will stop with the end-sealing knife in the level position.

#### 2) Emergency stop

Press the emergency stop button (mushroom shaped), the machine will stop immediately, to restart the machine, the reset button must be pressed.

#### 6. Maintenance

### 6.1. Shift cleaning and maintenance

1) Before cleaning the machine, cut off the power supply to the machine so as to ensure the

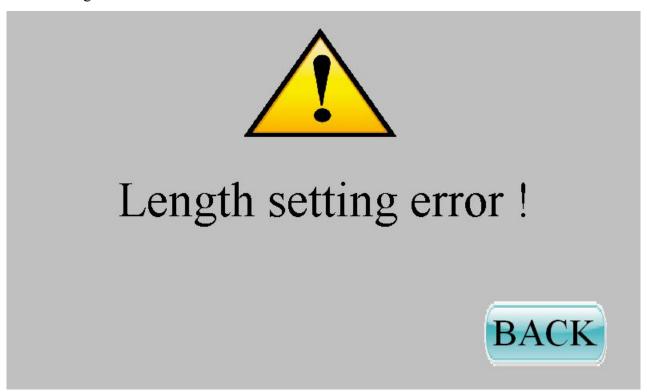
safety of people and the machine.

- 2) Clean the working table and the surface of the machine with a clean and moistened cloth.
- 3) Clean off the film scraps stuck to the feeding mechanism, mid-sealing mechanism and the end-sealing mechanism with compressed air.
- 4) Clean off the film scraps stuck to the end-sealing knife with a steel wire brush.

# 6.2. Monthly check and maintenance

- 1) Add lubricating oil to the meshing gears of the drive system and the chains of the chain wheel, a thin layer of lubricating oil is enough. It is not allowed to add lubricating oil to the synchronous belt of the machine and the flat conveyor belt.
- 2) Add lubricating oil to the end-sealing bearing.
- 3) Check the tension of the drive chain and belt, retighten if necessary.
- 4) Check all the screws and nuts, if there is any for loose screw or nut, retighten it.
- 5) Check carbon deposit, clean if necessary.
- 6.3. Biannual check and maintenance
  - 1) Check the wearing condition of the drive belt and the flat conveyor belt, replace if necessary.
  - 2) Check all the wearing parts, replace the worn parts in time.
  - 3) Check the wearing condition of the drive parts, replace if necessary.
  - 4) Check the electric wiring and tighten if necessary. Clean the dust from the electric elements with compressed air.

# 7. Resolving abnormalities



#### Alarm reason:

- 1. Setting bag length figure is longer than the longest bag length
- 2. Setting bag length figure is less than the shortest bag length The solution: reset the bag length



# Speed setting error!



# Alarm reason:

- 1. Setting speed figure is greater than the maximum speed
- 2. Setting speed figure is less than the minimum speed The solution: reset speed



#### Alarm reasons:

- 1. Check whether the packaging film have been deviation
- 2. Check the sensor electric eye have been adjust well
- 3. Check the sensor electric eye be damage
- 4. Check PLC input point damage

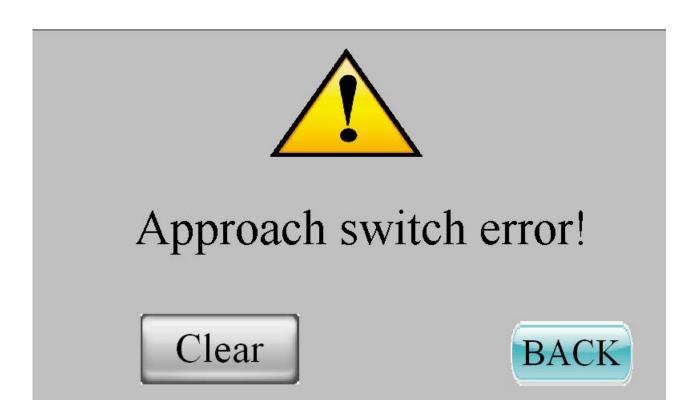
#### Solution:

- 1. See if there is no running film in the packing film, running the film to re wear a good film, the film is biased on the adjustment of the middle hand wheel
- 2. Adjust the electric eye whether a color, a signal
- 3. Replace the magic eye
- 2. Replace PLC



Tracking mode alarm reasons:

- 1. Bag length setting incorrectly
- 2. The encoder damaged or there is a problem with the encoder mechanism
- 3. Electrical eye did not detect the color code or electric eye damage Solution:
- 1. Reset the bag length figure
- 2. Check whether the encoder is normal or check the connection of the encoder mechanism is normal, Check the screen of Cutting Stop Mode to see the film is twice the length of the bag
- 3. Check the electric eye is detected color, whether there is a signal (to see PLC input XO whether there is a signal)



#### Alarm reasons:

- 1. Knife ratio parameters setting with the mechanical structure does not match the gear ratio
- 2. Knife seat proximity switch damaged or dislocated
- 3. The machine speed is too slow or not running smoothly

#### Solution:

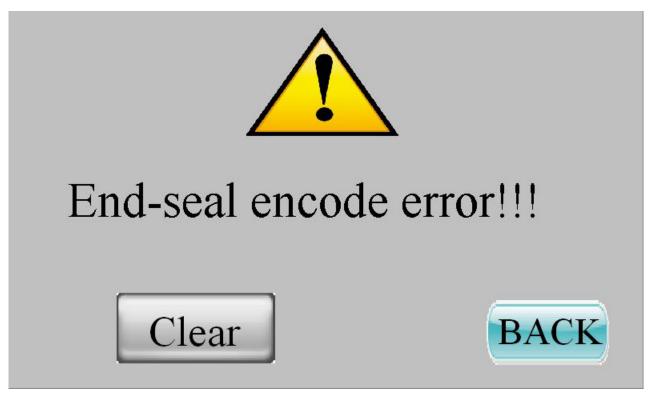
- 1. Consult with factory
- 2. Check whether the knife near the switch is working properly, whether there is a signal (to see whether the PLC input signal X1), check the knife near the switch position is normal
- 3. Increase the speed of the machine and check if there is any place where the machine has a greater resistance





Alarm reasons: Cutting off the location setting is too large

Solution: Reset the cutting position parameters

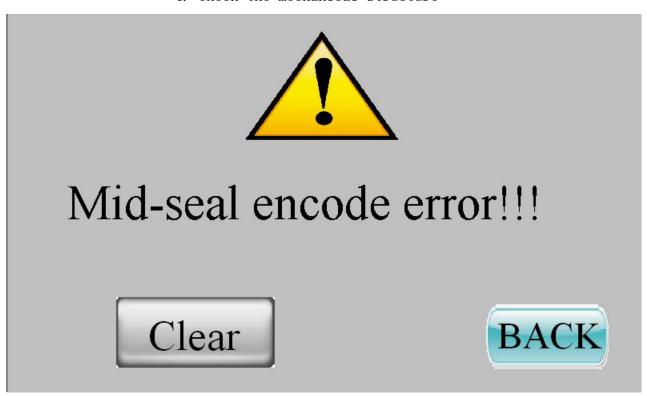


Alarm reasons:

- 1. Knife seal encoder is damaged (please check whether the figure of knives is 360)
  - 2. Knife seal encoder mechanism problems
  - 3. Cut material shut down parameter setting is abnormal
- 4. Mechanical failure (such as the knife stuck to the product, cutter misplaced, pushing finger abnormalities)

#### The solution:

- 1. Replace the encoder
  - 2. Check the knife encoder drive for any problems
  - 3. Change the material cutting parameters
  - 4. Check the mechanical structure



#### Alarm reasons:

- 1. Middle seal encoder is damaged
  - 2. Problems in the closure of the encoder mechanism

#### The solution:

- 1. Press the encoder belt in the closure, see PLC input X4 flashing, or replace the encoder
  - 2. Check the closure of the encoder mechanism

Problems	Possible causes	Remedies
Cutting position is deviated	1. Color mark follow up is not	1. Change follow up method into "follow up
from the color marks	used	cut" in the follow up method display of
	2. The film color mark is weak.	the human-machine interface.

	3. Film is slipping.	2. Refer to the magic eye instruction
		manual attached to adjust the sensitivity
		of the magic eye.
		3. Adjust the tension of the rubber roller or
		the degree of tightness of the brake.
The cutter cut on products	1. The push rod and the cutter are	1. Refer to section 4.6.4 about push finger
	asynchronous.	position.
	2. The height of the cutter seat	2. Adjust he height of the end-sealing parts,
	is improper.	adjust the sealing knife meshing center to
	3. Packing speed is too high.	the half of the product height.
		3. Decrease the packing speed.
Burnt wrinkle appear on the	1. Temperature is too high.	1. Bring down the temperature.
seal	2. Speed is too low.	2. Increase the speed
	3. The thermal endurance of the	3. Replace with better film
	film's outer layer is poor.	
Sealing is loose or missed	1. Temperature is too low.	1. Increase the temperature.
	2. Speed is too high.	2. Decrease the speed
	3. The thermal endurance of the	3. Replace with better film.
	film's inner layer is poor.	
Thermostat does not control	1. Heating element is damaged	1. Replace the heating element.
temperature	2. Solid state relay is burnt.	2. Replace the solid state relay
	3. Thermocouple is damaged	3. Replace the thermocouple
	4.Temperature control meter	4. Replace the thermostat
	is damaged	