

Specification for Nylon triangle bag

An instruction manual

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Preface

Thank you very much for purchasing our automatic packaging machine. This operating manual mainly introduces the correct operation method and simple troubleshooting for the packaging machine. In order to use and maintain this machine better, please read this manual carefully before using it.

Precautions:

- 1,all the machines are assembled and adjusted before shipping. The user can do some part of the changes according to material and package properties of their own, to ensure that it meets the packing requirements. If you still have doubt after fully reading this manual, please feel free to contact our customer service department.
2. Please understand this manual may not totally applicable to the machine if partial improvement is made by the user.
3. The maintenance section is briefly described in this manual, only to ensure that the user can perform debugging and maintenance in accordance with this instruction. If there is a machine malfunction, and the manual is not able to help, please contact our customer service department at your earliest convenience.

Safety Precautions:

- 1, to prevent electric injury and ensure safety, please be sure to connect the ground cord.
2. When wiring, please note that the power change caused by the load change must not exceed $\pm 10\%$, that is, the machine be used only when the power supply voltage within the range of 200V~240V. Exceeding the range will affect the normal function of the machine.
3. The station must not use the same power supply with device that may emit noise.
4. Please mount the machine horizontally on a solid, vibration-free surface. Do not install the machine in a place that is unstable or shaking.
5. Please regularly clean and add lubricating oil to the machine and check if there are any loose parts in the machine to ensure it is well functioned.
6. Please clean the machine after using it.
7. In case of machine is used in the workplace with heavy dust, please clean inside of the ultrasonic controller and the electric control box regularly.

Warnings:

1. Do not use wet hands to operate buttons and switches.
2. The machinery should be placed in an environment away from the wet area, away from direct sunlight and high voltage power supply.
3. Do not connect the wires to hot appliances.
4. When you clean, check, or move the machine, be sure to turn off all power beforehand.
5. During the operation, it is forbidden to close your hand or object to the machine. Do not touch the moving part and the parts which are marked forbidden to touch, and do not place

your hand inside the safety cover.

6, during the operation, please pay attention whether the sound of the machine is in coordination, the machine must be stopped to check if having any abnormal sound.

Warning: Please obey the above safety rules to ensure safety. Accidents caused by improper operation are out of our responsibility range.

Our company also supplies packing machines of other specifications. Please contact us if you have any needs, and we will do our best to meet your requirements.

Due to the constant improvement made to the machines, please understand if there is no notification for modification. Welcome to consult our sales department or after-sales personnel at any time.

First Overview

XH-SJB series can automatically finish the complete process of bag-making, measuring, filling, sealing, cutting, counting and photoelectric tracing, etc. It adopts electronic scale measurement which is in accordance with the national measurement standard.

It features exquisite and favorable appearance and independent sealing. All the parts that touch the materials are made of stainless steel or corrosion-proof and poison-free plastic, which accords with the packing requirements for food and pharmaceutical industry. After decades of manufacturing and improvement, the function and performance are more stable and approaching perfect and are well-applied in the food, chemical, pharmaceutical and light industries.

I. Features:

1. Through the ultrasonic sealing and cutting, the machine can produce bags with beautiful appearance and strong sealing triangle and three-dimensional tea bags;
- 2, the use of automatic quantitative measurement method makes it easy to change

the filling process and ingredients during production;

3, the use of Omron PLC control and touch screen operation makes it more stable in performance, simpler in operation and more humane;

4, the use of SMC pneumatic components and Schneider electrical components extends the life of the machine;

5, the use of integrated design enables data replacing without stopping or shutting down the machine;

6, Electronic scale measurement or sliding cup measurement are optional according to the shape of the material.

7. Packaging capacity: 2000-3000 bags per hour.

8, by adding a label with thread, the machine can produce a simple tea bags with hanging line of label.

9, triangle three-dimensional bags and four-angle flat bag can be transformed only by one-button conversion;

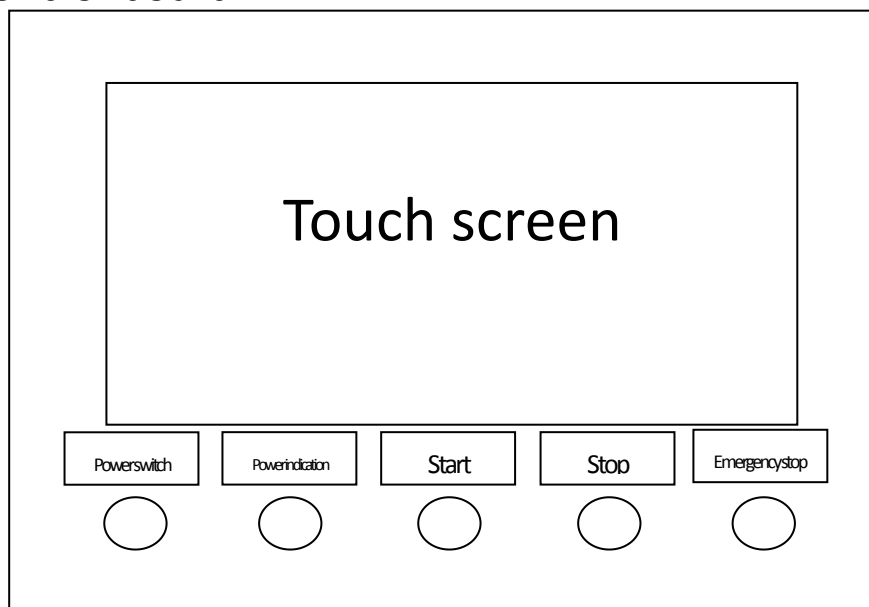
10. All accessible materials of the machine are made of SUS304 stainless steel to ensure the health and reliability.

Second, parameters

- 1, sealing form: triangle bag, four corners package
- 2, measurement range: 0.5-15g (according to the material customization)
- 3, inner bag size: 120 film width: 50*48mm;
140 film width: 60*58mm;
160 film width: 70*68mm;
roll Film outside diameter: $\Phi 400$
Roll Film inside diameter $\phi 76$
- 4, production speed: 35-60 bags / minute
- 5, power: 0.9KW
- 6, voltage: single phase 220V 50/60HZ
- 7, weight: 600kg
8. Overall dimensions:1200*1620*2280 (length*width*height)
- 9, gas pressure: $\geq 0.6\text{Mpa}$

Third operation instructions

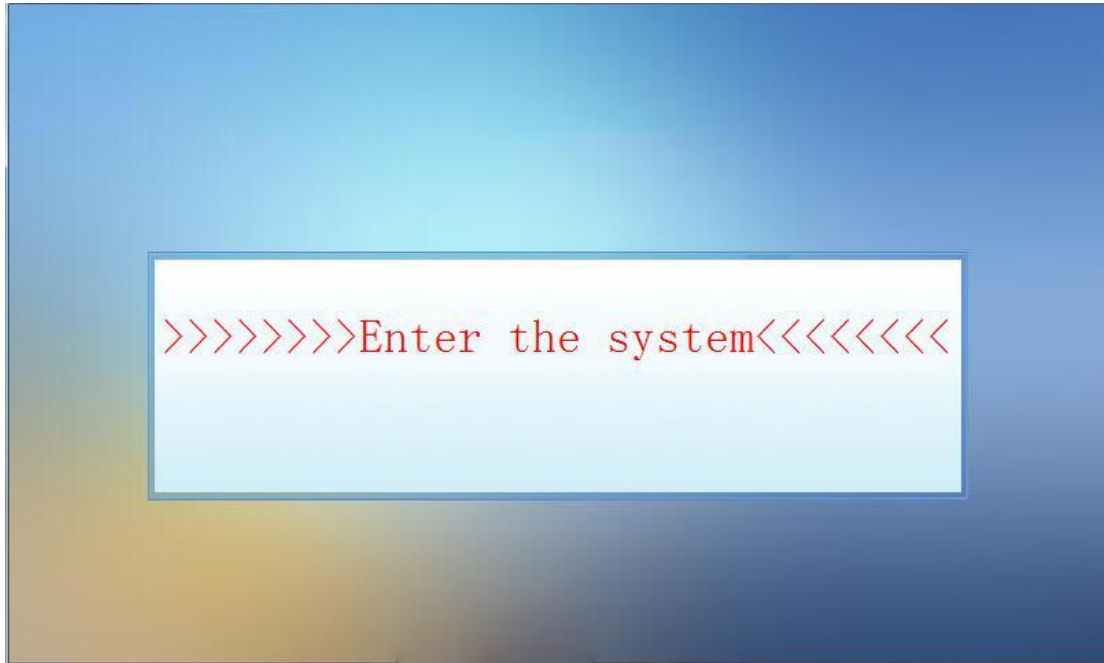
Electric control board



Touch screen

Switch ^ Power indicator, start, stop, emergency stop

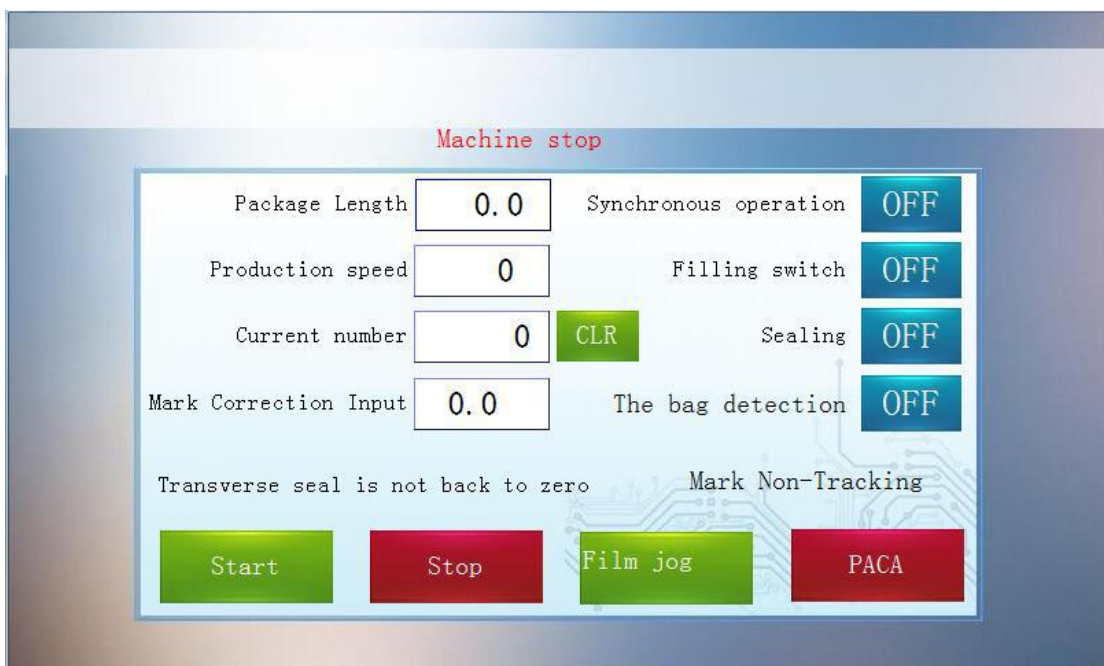
After the device is plugged in, turn the power switch, the display will show the following



Automatic Triangle bags Packing Machine

Touch the screen to enter the system

Touch anywhere on the screen to go to the following page



The following is an operation description of each parameter in the display (from left top to right bottom according to display position)

Machine stop

Machine stopped

it shows the current working status of the machine (machine running, machine stopped)

Package Length 0.0

Packing length

It is to be set according to the actual bag length for both fixed-length cutting or tracking cut, because of the roll film material is different, the set length will be a little different from the length of the finished product; after setting the length, an empty bag need to be made as testing and measured first, then adjustment of the set length need to be done to make sure the length of package is the same as the length of actual bag, later the production can be performed.

Production speed 0

Production speed

This parameter shows the real-time production speed

Current number 0 CLR

Current output

This parameter is to show current output, press the clear key to clear the current output.

Mark Correction Input 0.0

Packaging correction input

The parameter is used together with the tracking mark and photoelectric compensator. When the position of the incision needs to be adjusted, enter the corresponding value in this parameter to change the position of the incision.

Transverse seal is not back to zero

horizontal seal not back to initial point

This parameter shows whether the current state of horizontal seal is at the initial point, if not, the machine will not start up.

Start

Start: Press this switch to run the machine

Stop

Stop : Press this switch to stop the machine

Film jog

Film pulley inching

Press this switch the film pulley starts rotation, release the switch the film pulley stop

Synchronous operation

OFF

Online operation

This function is used when there is an outer bag packaging machine working together.

Started, the inner bag and the outer bag are produced together, closed, they are produced separately.

Filling switch

OFF

weighing switch

The function is to control the start and off of the electronic scale.

Sealing

OFF

Sealing solenoid valve

The function is to control the open and close of the ultrasonic cutter blades.

The bag detection

OFF

Blanking detection

This function is used when there is an outer bag packaging machine working together. Started, only when the inner bag is detected to drop, the outer bag packing machine can work accordingly.

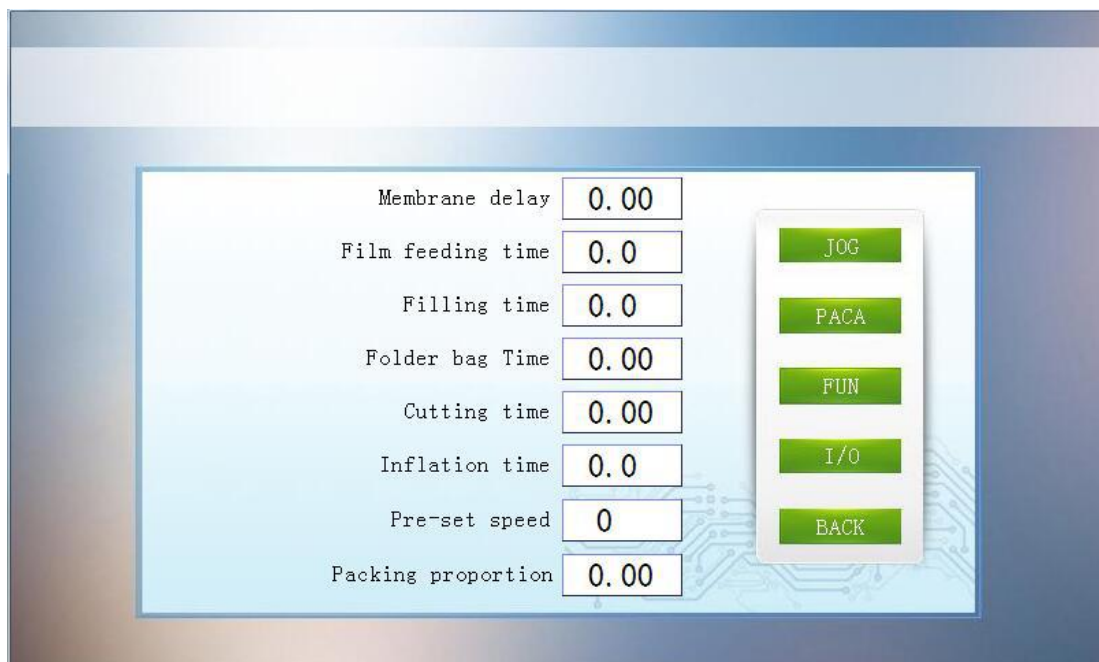
Mark Non-Tracking

No tacking mark

This parameter shows the current status of tracking mark (without tracking mark, dark color-code, light color code) to select the dark or light color code according to different color code.

PACA

If you want to adjust more parameters, press the parameter button and the following display appears



Membrane delay

0.00

film pulley delay time

This parameter is used to adjust the delay time of film pulley.

Film feeding time

Film feeding time

This parameter is to adjust the time of the film feeding, it adjusts the time interval between leaving proximity switch and stopping working.

Filling time

Blanking time

This parameter refers to the time required from the electronic scale to feed the inner bag. The lighter the material is, the longer the time it takes to feed it.

Folder bag Time

sealing Bag time

This parameter is to adjust the time of sealing bags, the bag can be cut only after the time is up.

Cutting time

Cutting time

This parameter adjusts the cutting time according to the speed of the horizontal seal cutting.

Inflation time

Blowing time

This parameter is applicable for corn fiber film, to adjust the length of blowing time, and to blow it during sealing to make it in form

Pre-set speed

Preset Speed

This parameter adjusts the host's production speed. For example, setting 50 means producing 50 packets per minute.

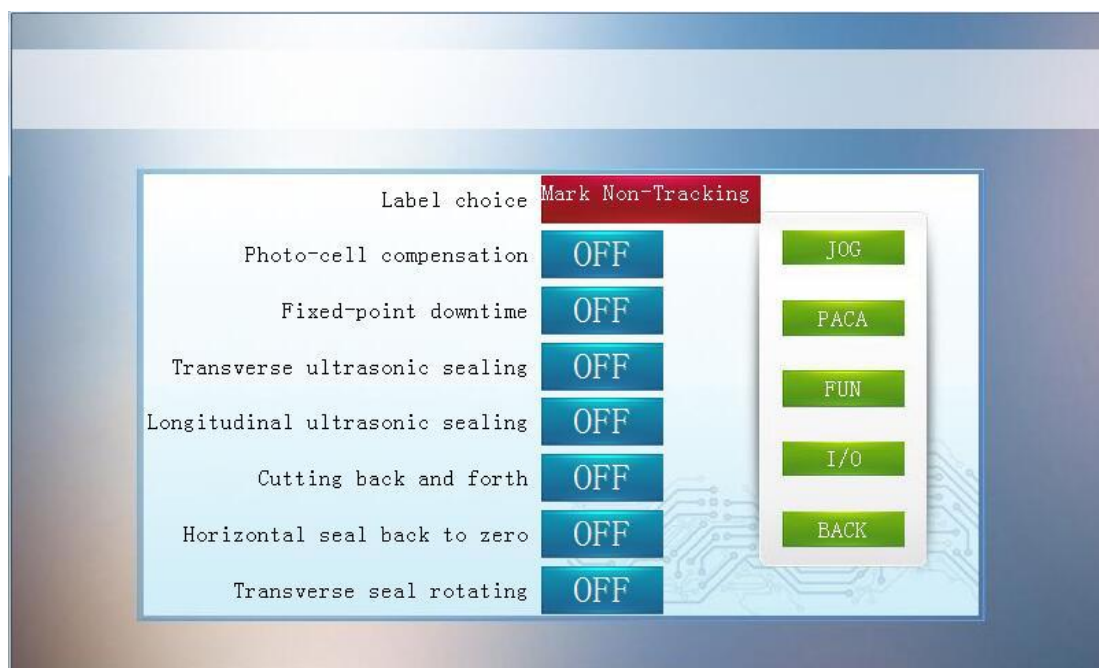
Packing proportion 0.00

Package length ratio

This parameter refers to the ratio between the length of outer bag and the set length.

FUN

If you want to adjust the function switch, press the function button and the following display appears



Label choice Mark Non-Tracking

Tacking mark selection

Tap the Unmarked button to select dark color-code, light color-code, or no tracking mark;

Photo-cell compensation OFF

photoelectric compensator

This function is used in conjunction with the packaging correction input to adjust the position of the inner pocket incision.

Fixed-point downtime

OFF

Stop at a fix point

Press the close button to select whether to stop at a fixed point, started, the machine stops at a specified position; closed, the machine stop at any position.

Transverse ultrasonic sealing

OFF

Horizontal seal ultrasonic

This function is to control the sealing and opening state of the Transverse ultrasonic wave

Longitudinal ultrasonic sealing

OFF

Vertical seal ultrasonic

This function is to control the sealing and opening state of Longitudinal ultrasonic wave

Cutting back and forth

OFF

Round-trip cut

This function is to control whether the horizontal seal cutting needs round-trip cut, it is applicable when the internal bag is not cut off.

Horizontal seal back to zero

OFF

Horizontal seal back to initial point

Tap the Close button and the turntable starts to return to the initial point.

Transverse seal rotating

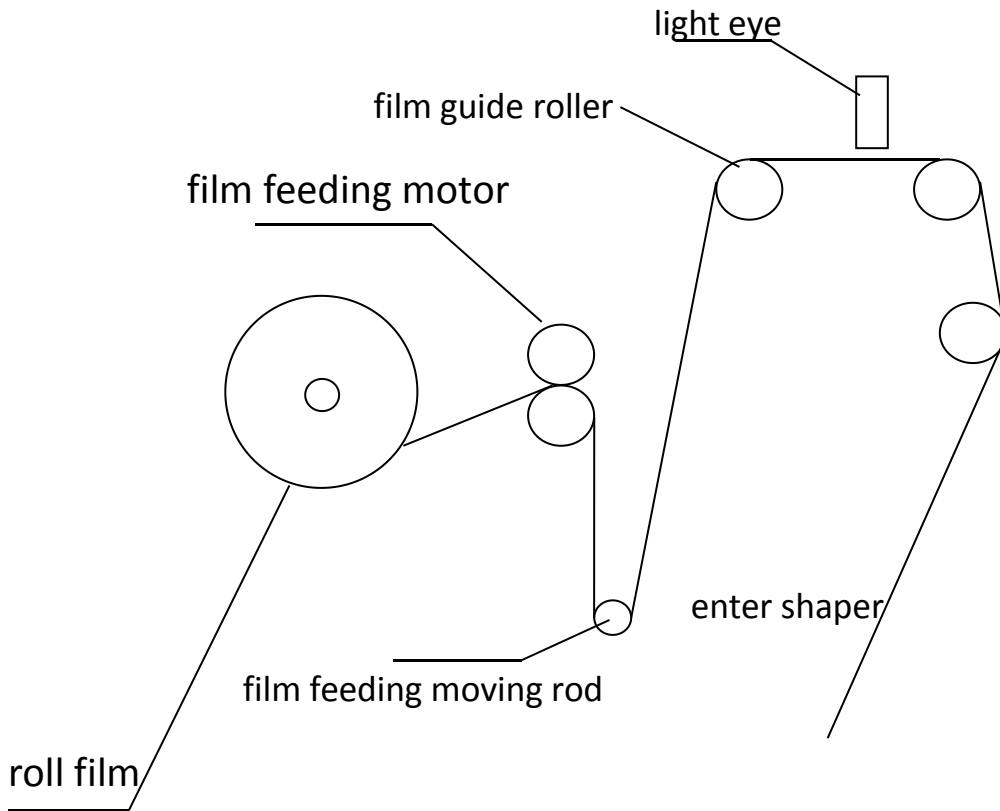
OFF

Horizontal seal rotating

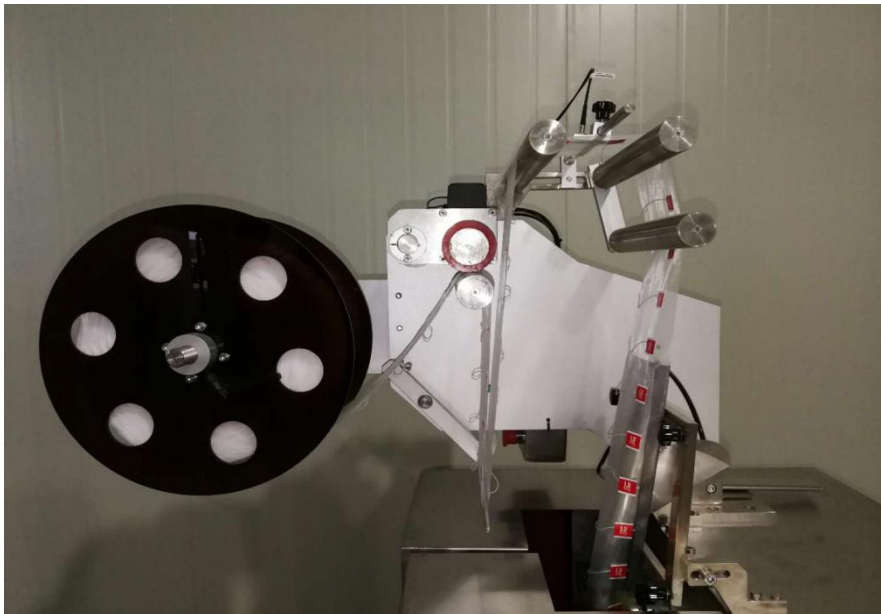
Click the close button to switch between the triangle bag and the corner bag.

Fourth: adjustments

- 1 drawing film schematic diagram refer 4-1

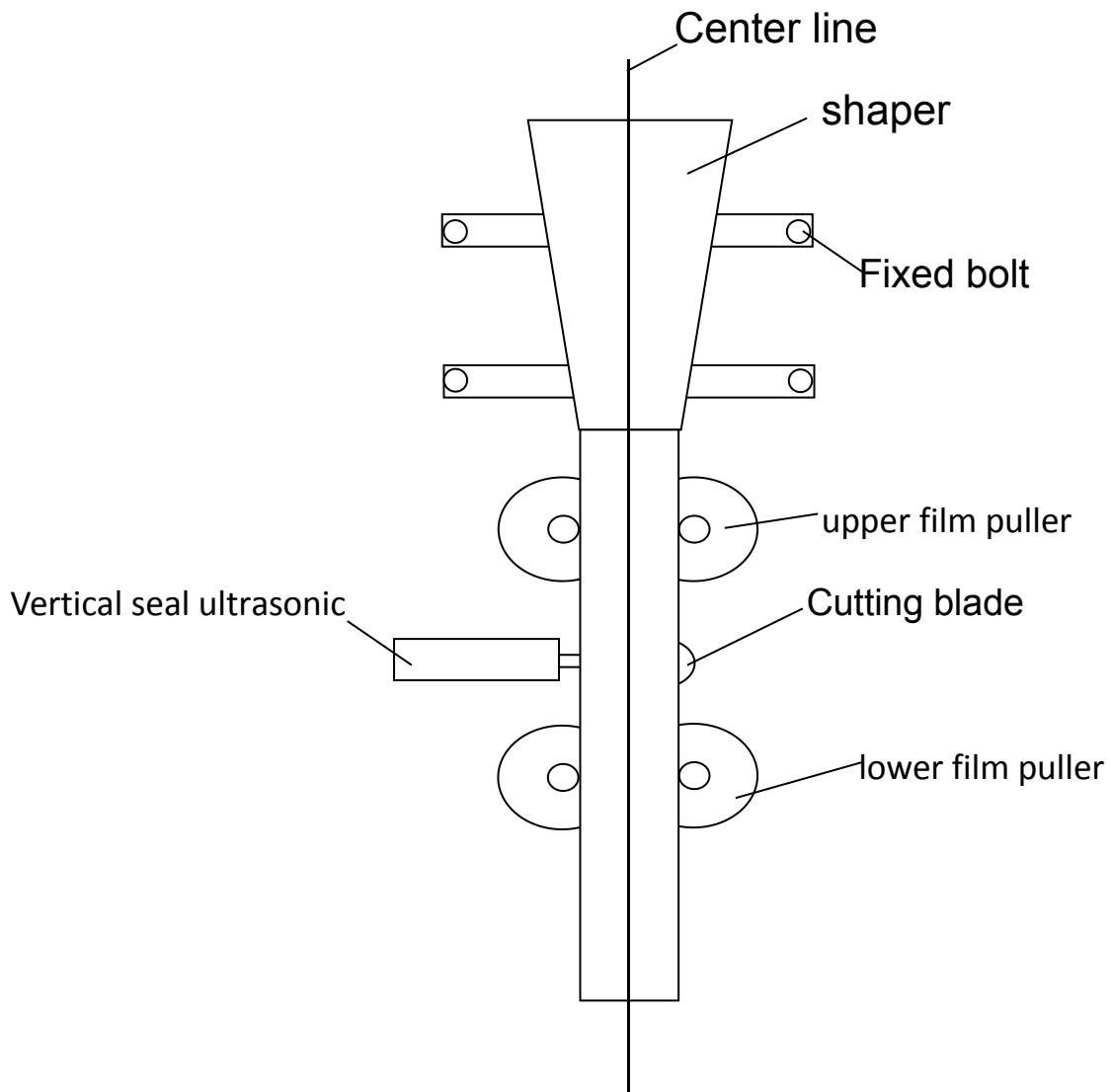


refer 4-1

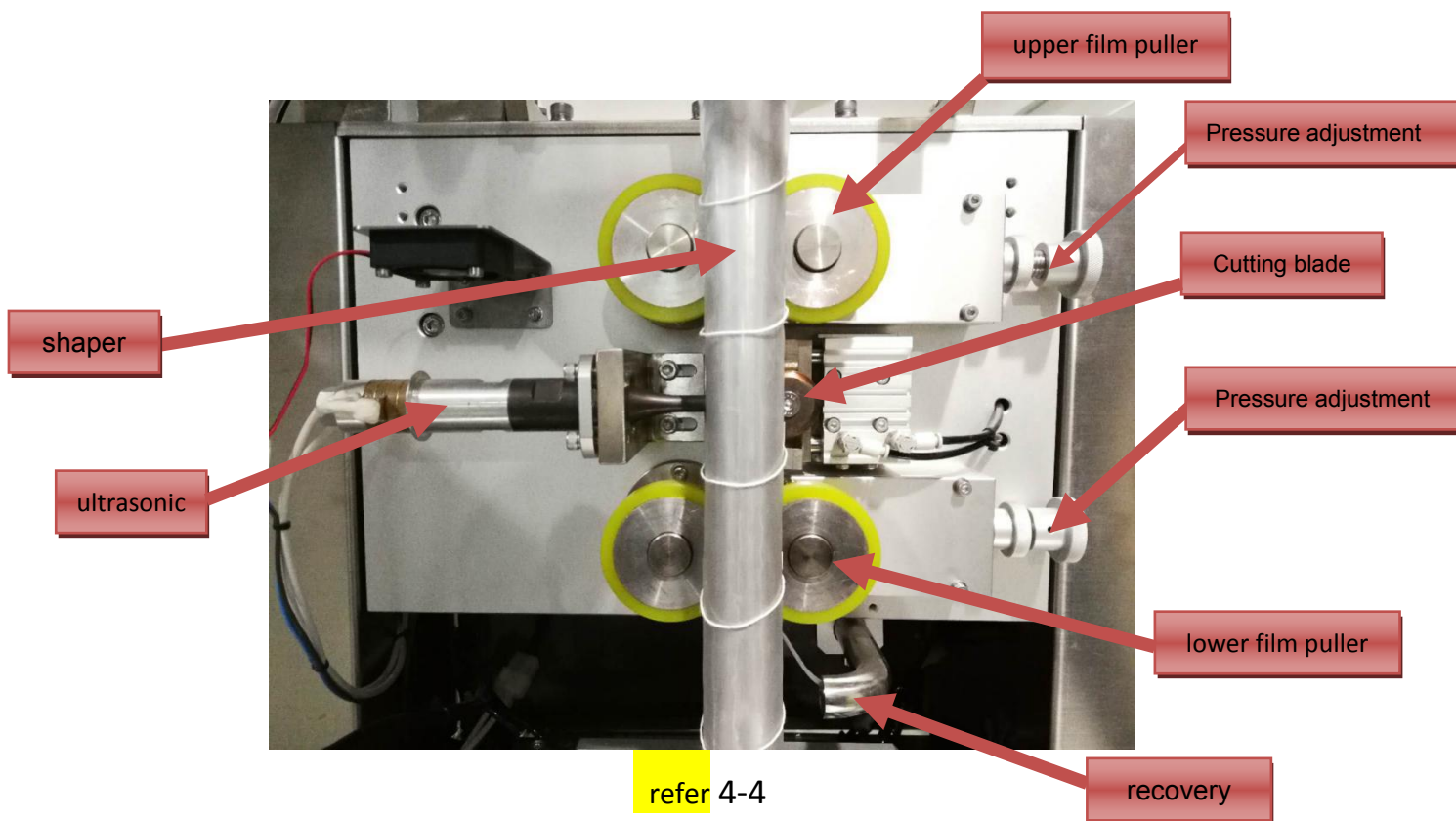


refer 4-2

2. adjustment of the shaper refer4-3



refer 4-3



2. After the nylon film is folded through the shaper, it goes through the top film pulley (the upper film puller pressure is small), it is sealed by vertical seal ultrasonic wave, then it enters the lower film pulley (the lower film pulley pressure is slightly larger) and completes the vertical seal and bag forming. It is an important link to complete the process of bag making. The proper position of Bag-former should be in center, level and straight. After the test bag is made, release the adjusting bolt, move the shaper to the best position, then tighten the adjusting screw. The front and rear positions of the shaper should make the molded bags aligned on the both sides of the traction rollers, the edge of the vertical seal should be about 1mm wider than the Pulling Wheel. If the bag is misaligned after sealing, the shaper should be moved horizontally to the side of which is misaligned more and adjust it until both film align.

3. Cutting pressure adjustment

Adjust the horizontal and vertical seal pressure gauges,

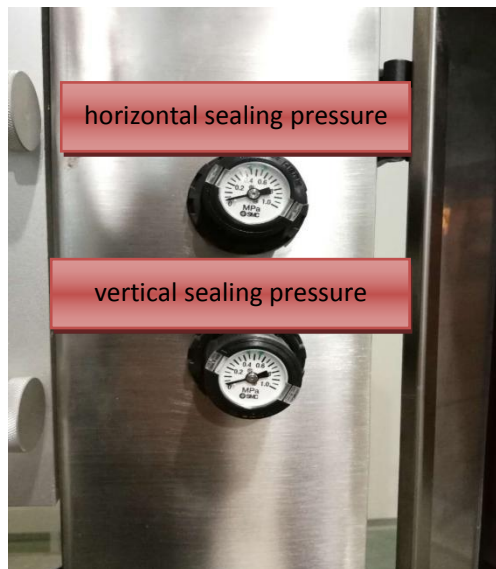
adjusting the pressure gauge should be careful, if the pressure is too small, it will cause a bad seal, and not able to cut it off

horizontal and vertical sealing pressure adjustments are as follows:

horizontal sealing pressure: 0.2 ~ 0.4MPa

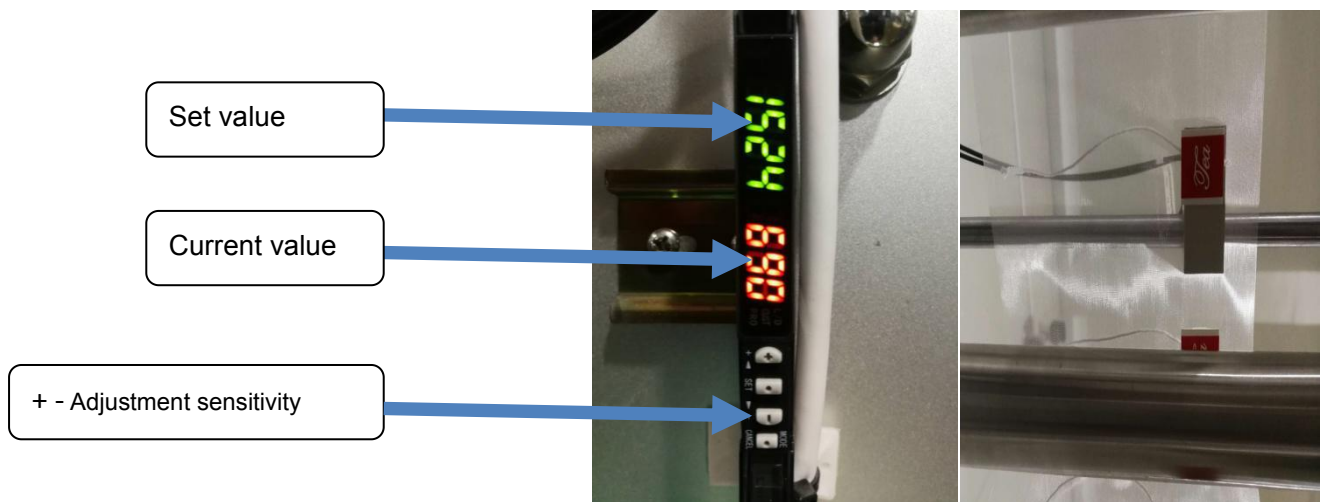
vertical sealing pressure: 0.3 ~ 0.5MPa

Refer to Figure 4-5



refer 4-5

4. Adjustment of photoelectric detection position

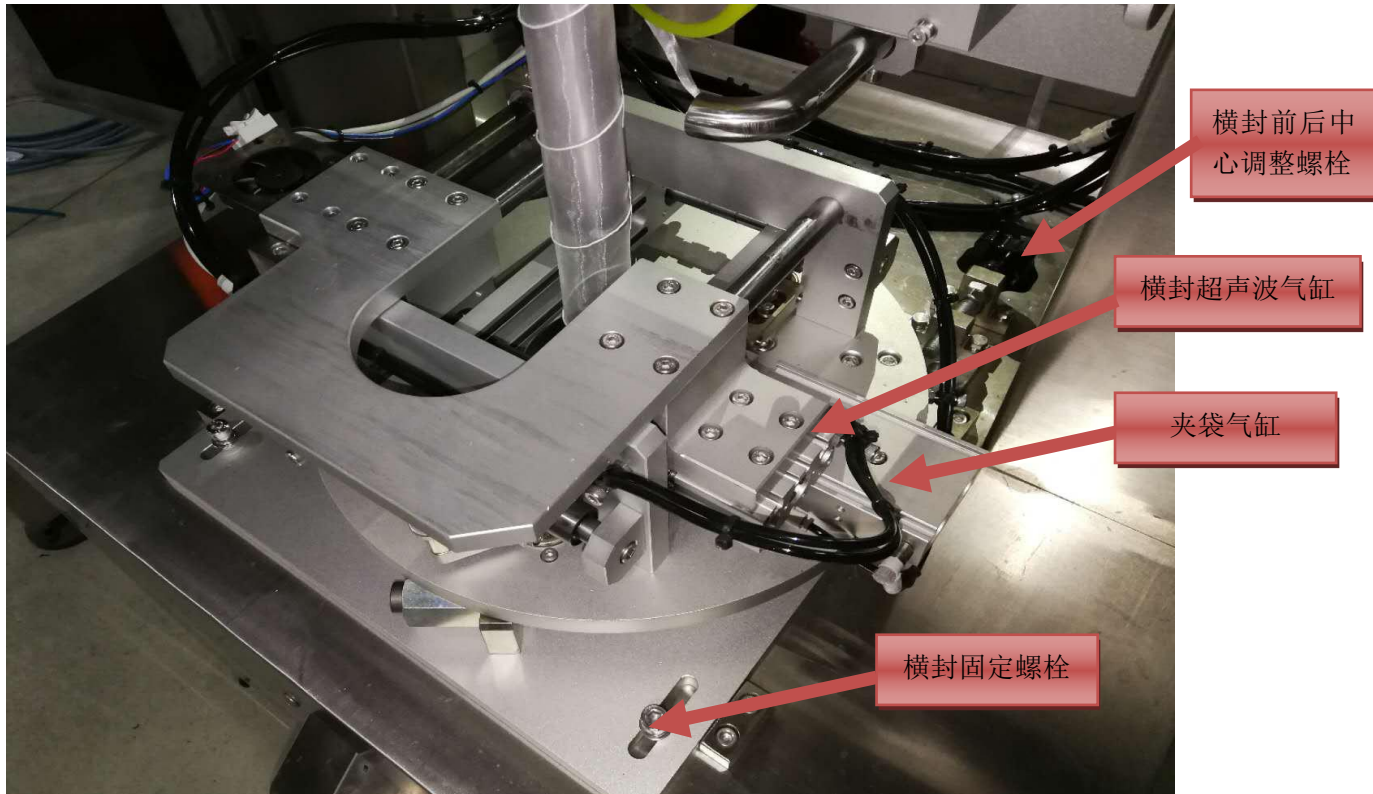


refer 4-6

In order to ensure that the distance between the photoelectric eye detection points and the horizontal sealing center is the integer multiple of the bag length, that is, while the photoelectric eye shoot the mark, it should also be aligned with packaging film, the distance between the mirror head and the packing film is about 5-20mm, to make sure the light point detecting the label while the packaging film is moving. If Photoelectric eye detect the label, photoelectric eye action indicator should be changed, when the label is detected, the indicator light is on the bright side, and vice versa. By adjusting the position of photoelectric moving rod, the cutting position can be removed before or after the color mark. If it needs to be cut in advance, loosen the fixed screw, move back the whole photoelectric seat (the optoelectronic head is moved backward), then lock and fix the screw. and the optoelectronic head should be moved forward if the lag seal is needed. For example the picture 4-6, the fiber head detects the label and the current value is larger than the set value. When setting the detection value, the fiber head should be aligned with the label and the packaging film respectively. This action can be repeated several times, the two sets of different data will be obtained, and the average value of the two sets of data is a set value. When the color is different between the packaging film and the label varies, the photoelectric head needs to repeat the above actions to adjust its sensitivity so as to avoid any malfunction.

5.horizontal seal adjustment

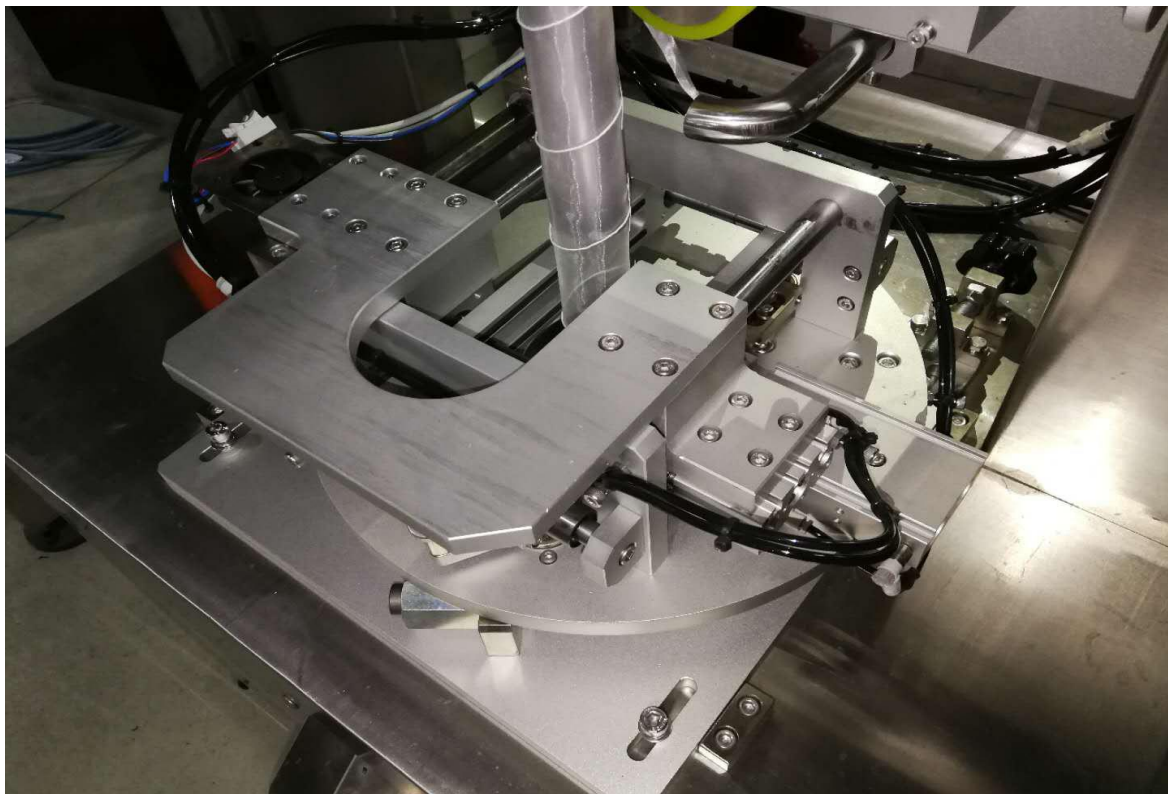
Ultrasonic tool heads and cutting blades should be aligned



refer 4-7

6. vertical seal adjustment

Ultrasonic tool heads and cutting blades should be aligned



refer 4-8

sixth: malfunction and reasons

Fault	Reason	Solution
film breaks	<ol style="list-style-type: none"> 1. the film itself has a flaw 2. breakdown or poor connection of the film-supply engine 3. proximity switch damaged 	<ol style="list-style-type: none"> 1. get rid of the flaw part 2. repair the connection of the engine 3. change the switch
sealing track is not straight	<ol style="list-style-type: none"> 1. the wrong position of the shaper 	<ol style="list-style-type: none"> 1, re-adjust the position of the shaper
the bag is not cut completely	<ol style="list-style-type: none"> 1. The position of the cutter is not centered. 2. The cutting edge becomes blunt. 3. Too little pressure 4. Ultrasonic failure 5. The cutting time is too short 	<ol style="list-style-type: none"> 1. Adjust the position of cutting tool. 2. Turn the edge or replace the cutter. 3. Adjust the cutter pressure or check the inlet pressure 4. Adjust the ultrasonic wave or replace it 5. Adjust cutting time
Turntable does not rotate	<ol style="list-style-type: none"> 1. The horizontal seal rotation function is not turned on. 2. breakdown 3. Servo fault . 	<ol style="list-style-type: none"> 1. Turn on the transverse seal rotation function. 2. Check the circuit . 3. Check the servo display code.
The film pulling motor does not move or shake	<ol style="list-style-type: none"> 1. The pressure adjusting bolts are too tight. 2. breakdown 3. Drive alarm 	<ol style="list-style-type: none"> 1. Loosen the adjusting bolts. 2. Check the circuit 3. Restart the power or replace the drive and motor
the film-supply engine does not move or stop	<ol style="list-style-type: none"> 1. the film-supply control stick is stuck 2. film-supply proximity switch does not work 3. capacitor broken 	<ol style="list-style-type: none"> 1. adjust the stick 2. change the proximity switch 3. change the capacitor
color code positioning does not work	<ol style="list-style-type: none"> 1. wrong parameter for the bag length (usually the actual bag length is shorter) 2. the wheels are worn and less friction 	<ol style="list-style-type: none"> 1. increase the parameter for the bag length, to make it a little longer than the expected bag length 2. change the wheels
bags are stuck above the cutter	<ol style="list-style-type: none"> 1. too early bag-pulling time 2. wrong position of the upper bag-blocking board 	<ol style="list-style-type: none"> 1. readjust the bag pulling time 2. adjust the upper bag-blocking board

seventh: accessories and tools

Name	Specification	Quantity
Hexagon socket	Set	1
cutting sheet	Blade	2
open spanner;	Set	1
20g weights	Piece	1
crewdriver	Piece	2

1. Electronic scale specification
2. Photoelectric switch (light eye) specification