



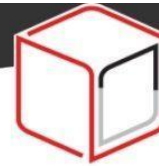
STEP VFFS + Multihead x10 System Complete (Operation Manual)



CE

48381210 Manual UK 270223
Copyright © Sal-Tech 2023





COMPANY INTRODUCTION

"We believe packaging solutions for our customers should be simple, easy to use, ergonomic and sustainable.

We offer a wide range of packaging products and solutions, and web design and engineer production lines specifically built to your needs.

Our motto is simple: Sal-Tech Easy Packaging makes your life simpler through engineering and good design, and your job less stressful. We Keep Things Together."

Gunnar Salbæk
Owner/CEO

About Sal-Tech Easy Packaging

Sal-Tech Easy Packaging offers a wide range of solutions for simple and reliable packaging of your products.

If it is a standard or a special solution that's needed for your assignment, we have a creative input to solve your needs, securing you an up-to-date packaging application.

Sal-Tech Easy Packaging is 100% owned by Gunnar Salbæk,

CVR no.: DK18429098 Salbæk Easy Packaging v/Gunnar Bjørn Salbæk.

Our team works together on a 100% virtual platform and therefore please forward all correspondence to support@sal-tech.com.

Bank connection: Nordea Denmark.



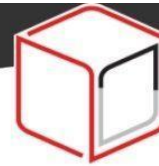


Table of Contents

I. Safety	4
II. Technology	7
III. Installation, Packing & Transportation	8
IV. Machine Description	10
V. Operation	13
VI. Equipment Protection	26
VII. Trouble Shooting & Maintenance	26
VIII. Electrical	28
IX. Annex	29





I. Safety

1.1 Safe announce

- (1) Strictly prohibits removing, damaging, changing or covering any warning signal and nameplate of this machine;
- (2) Strictly prohibits removing, damaging, changing any safety device of the machine;
- (3) Changing any part of the machine may cause the security accident. If necessary, please solicit our written agreement. We have no responsibility for any unauthorized changing.
- (4) Before using the machine, Please follow the manual's dictate as below:
 - Whether the machine is correctly fixed.
 - Whether every part is correctly adjust.
 - Check the power supply, and see whether surrounding is suitable.
 - Validate and confirm the guard and safety
 - Follow the manual to check the control system
- (5) When controlling the machine, please wear necessary protective equipment such as glove, work clothes and safety glasses.
- (6) When the machine is nonuse, please shut off all the power supply, compress air supply etc.
- (7) Often put lubricate oil on the drive part of the machine, and check it at some time.
- (8) The equipment is combined with touch screen and PLC, make sure the main electric box is clear and dry. Do not put any sundries in the control box for avoiding serious result.

1.2 Safety standard of the design and making

- 1) EN60204-1: <2000 mechanism safety> Mechanism electric fixtures. -First part: general specification
- 2) EN1672-2: <foodstuff processing machinery> the basic principle of design – Second part: sanitary requirements
- 3) EN415-3: <safety of packing machine> Third part: sculpt, packing and back seal packaging

1.3 Security and protective measures

The main potential source of danger and the safety defend measure are as follows:

- A. Film delivering device: potential enwinding damage. Safety defend measures:
 - a) This area has stationary shield;
 - b) Stop the machine before loading film;
 - c) Adding warning sign to warn people not to approach when the machine is working
- B. Electric control part: potential danger of tip-and-run;





the safety defend measure are as follows:

- a) All the electric power loop and control electric circuit must be fixed in electricity ark with interlock-function, and the ark should have lock, and the ark's defence system is made according to design standard.
- b) Electrocircuit all have creepage protect,over loading protect, over electric flow protect,earthing protect etc, all the DOS shell and machine shelf must link to protective electrocircuit;
- c) All the electrification equipment should have electric shock warning mark;

1.4 Control warning

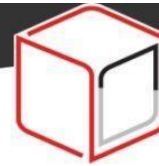
- 1) Close the door before the machine work to avoid any accident.
- 2) When the machine is running, forbid to touch the seal and machine accessory, or there will be injured.
- 3) Before the machine is running, make sure that can start up urgency stop, or there maybe some injured.
- 4) Forbid to touch the heater when heat up.

1.5 Control safety

1. Please abide the following proceeding strictly:

- ① . In order to keep the machine work on safe side and protect the controller's safety, make sure the controller is professional and trained.
- ② . Controller must have necessary personal protective equipment such as glove,work clothes and safety glasses.
- ③ . Keys of electric ark and control system must be kept by speciality person or controller who is familiar with the machine's control. Such keys must be unique. In case of missing, the backup key must kept by experienced person familiar with the machine. When maintaining, the electricity power must be cut off on "break off" and lock it;
- ④ . Check the cooling system,electrocircuit,air passage and the working situation of each part before start the machine, seeing if there is any leak,dilapidation,rupture and some other hidden trouble. If there is something abnormal, please ask some professional to check at once and make sure all hidden trouble is removed, then can run the machine.
- ⑤ . Control the machine according to the safety produce regulation, or will cause machine damage and personal injured.
- ⑥. Faulty operation will cause serious accident and loss of lives.
- ⑦ . When the machine is working, controller must be on duty and other people can't





approach the working area; when abnormality appear, such as abnormal noise, sudden halt and the crudy is instability, must stop the machine immediately and check.

2. Two ways of urgency stop:

- ①. press the power off button on the control board
- ②. press the urgency stop button

The machine is designed according to electric safety standard of IEC 60204; collocate of the power supply must accord fixing require; special notice, stop the machine and cut off the power supply before maintaining.

3. prevent the machining goods harming the controller

- ① . When laying processed film to import belt, the import belt must stop and then put the film on the import belt placidly and abut on the wheel so that the film can move steadily.
- ② . During the machining process, all people cannot approach the machine's back area.

4. Prevent electric damage



damage

- ① . Power on or running, don't open the cover board of each electric device, or maybe have an electric shock accident.
- ② . Line setting or checking: power off, use multimeter to check whether the line system have any problem.
- ③ . High voltage electrification goods, such as transformer,direct current power supply,electromotor etc, if the surface area is more than 50mm x 50 mm, they should be earthing into land respectively.
- ④. Placing line or checking work should be done by professional.
- ⑤. Exterior line setting should be done after the control ark is fixed.
- ⑥ . Do not damage the cable, any stress mustn't exist, check the cable frequently and change it when damaged.
- ⑦ . Power supply should be up to the mustard, please link to each end according to the technique document, or will have blow out or shatter.
- 8 . In the process of electrify or just cut off for a while, please do not touch any of electrical components, or will cause loss.

5. Identification record for machine's safety warning

Warning sign is set for devices such as electric cabinet and gear end, please strictly





obey

II. Technology

2.1 Structure and domination principle

This machine adopts touch screen to input parameter, combine with PLC and pneumatic function to control the machine. In the way of mechanical to make the seal system, drive by pneumatic to improve the speed and reduce the noise, use servo to carry film, respond to the high speed and quick positioning, apply for improve machine's working capability under rugged environment.

2.2 Factors influence machine's working

- (1) The seal knife joggle situation will affect the bagging seal quality.
- (2) Temperature will affect the bagging seal and appearance quality.
- (3) Packing film technological parameter will affect the bag's quality.

2.3 Specification

Model	STEP VFFS + Multihead x10 System Complete
Film width	140-420mm
Bag width	60-200mm
Bag length *1	50-250mm
Speed on PP *2	Up to 60bpm
Speed on PE *3	15-40bpm
Power supply	3KW-AC220V 50-60Hz
Air consumption	0.6m ³ /min, 0.6Mpa
Machine dimension	1420x1260x1380mm
Item Number	48381210

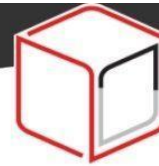
Remark:

- Note *1 On a single pull
- Note *2*3* Varies with the nature of product and filling range

III. Installation, Packing & Transportation

3.1 Machine's packing





A. Packing requirement

Use special packing film and wood to packing the machine, annex such as builtforpurpose tools, spare parts and catalog should use paper box or wooden box to pack, the whole machine use plywood to pack.

B. Packing notice

Notice that each part of the electric components' precision and appearance cannot be damage during packing.

3.2 Transportation of the machine

C. Safety of machine's transportation

Transportation include the transit of machine, annex etc. The carrier must not less than 20KN, the height is not less than 3m.



Notice: Abide the crane, truck's working criterion

D. Notice on packing and transportation



Notice: Please take care the following proceeding to avoid accident, injure and electric shock.

1. When the machine is transporting, please use the right lifter to avoid hurt;
2. The pile height of the packing boxes can be less than 2.3 meter;
3. Avoid strenuous vibration,extrusion,drench and corrade of the chemistry goods

E. Store

Put the machine in dry and ventilated place, machines out of use for a long time should be cleaned and the moving part should add lubricating oil and fat.


3.3 Installation of the machine


F. Preparation and check before installing:

1. Set a safety area not less than 4000mm(length)x4000(width), and at the same time prepare a truck(not less than 2t), clean cloth, amortize gasket and wood. Warning sign must set up defense fence or countercheck in the installing area, prevent irrelevant people to come in.
2. Unpacking and check: after the packing is open, first of all, check the machine's nameplate to confirm whether the model and product is match with the order form. At the same time, compare with the manual's limb, annex list and machine's whole drawing to check whether the machine is damaged during the transportation or missing any limb. After everything is all right, please sign and seal on the goods' confirm form. The form will take back by our company man or our agent.






 Notice: We take responsibility for the parts of the machine which is offered from our company and have a clear indication, the other things not give a clear indication is derelict of our duty! (The other special requirement bring forward from customer about offering other annex must give a clear indication in supply agreement.)

 Notice: Please check the coherence about the machine and annex is the same as the document information before sign and seal. We are derelict of duty on the disaccord after the signing and sealing.

- (1) Installing and store environmental condition:
The temperature should be 5°C~35°C(not freeze), relative humidity should be less than 90%RH, height above sea level should be ≤1000m. During the installing, considering that the magnetic field and electric field will cause some effect to the control system.
- (2) Installed power: voltage rating 220V AC ; single-phase; frequency : 50Hz.
- (3) Safe working area:
Length x width ≥ 4000mm×4000mm
- (4) Install and adjust:
 - Installing process:
Move the machine to the working area, and put the machine on the flat concrete floor, use the gradienter to adjust the base of every aspect and make it fix the level of the machine(special meter), it demand level error of the four angle ≤0.5mm. Take care that the machine's precision and appearance cannot be damaged during installing.
 - Means of adjusting:
Consult the machine's outside drawing, adjust the adjustable bolt, the way should be: loosen the adjustable bolt to install nut, then adjust every part to level and once more fasten.

 Notice: Not allow to put the branch legs into the dust, it will have some limit to the machine's thermal expansion.

IV. Machine Description

1. General configuration specification:



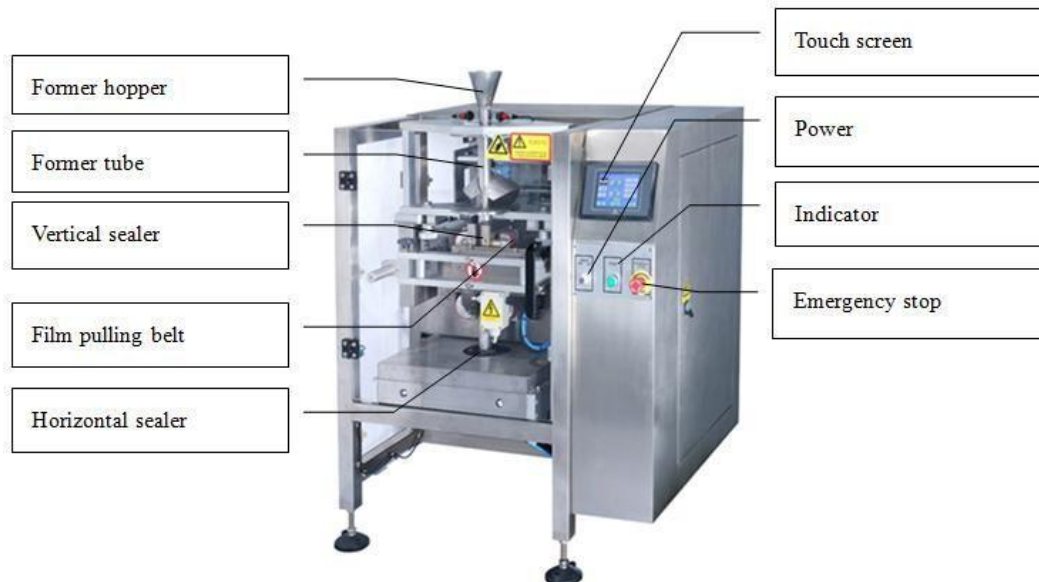
The packaging machine consists of control system, former system, sealing system, print system, film roller system, etc.

2. Optional annex configuration specification

- A. Can choose four-head-weigher or ten-head-weigher: implement high precision.
- B. Can choose measuring cup to implement positive-displacement computation.
- C. Vibration material feeder: material conveyor, sending material automatically.

3. Appearance and description of the main components

(1) Outside drawing of the machine

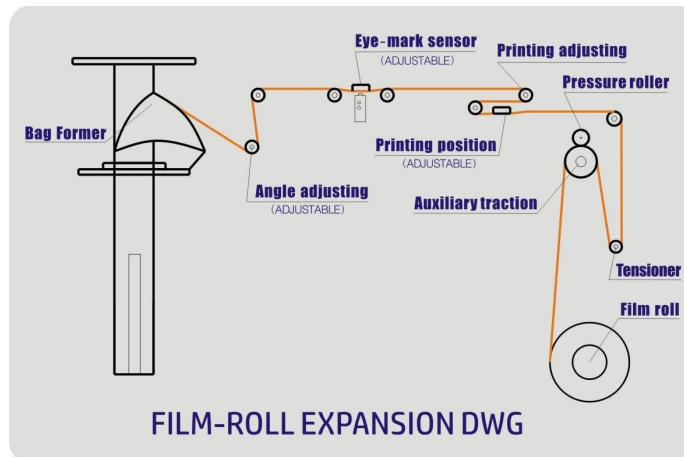
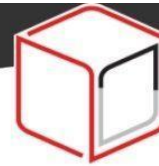


(2) Main components

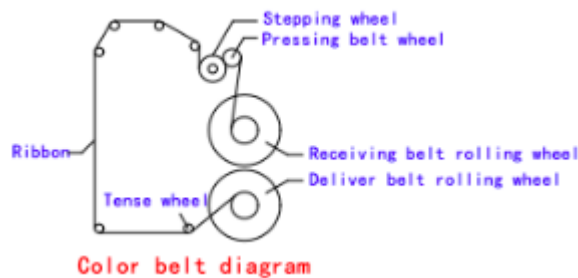
1) Film shelf

main function: install packing film, and pull the film into the former.

Film former: cut the film head into triangularity, and as the following chart to pull the film through each film roller, then insert to former, if have to install the second film, just make the film's ending part to connect with the second film's front end, then use tape supported adhesive to make them stick together and pull joining part into the former.



2. Printer Function: use to print date of production, guarantee period, serial number etc. Fixing ribbon: change the color belt in the same way like the empty color belt as the following:



Exchange the words:

Push the handle inside(about 1.5-2mm),turn the handle 90-180 at the same time, turn off the hook head, pull out the mould, make the mould's fixed screw loosen, replace the moving character, then the level of the installment should be the same. Remember not to knock the moving character with the metal bar, in order to prevent damage it.

The adjustment of printing position:

Turn the side wheel, make sure the printing position, move the adjusting wheel front and back, make sure the vertical printing.



1) Eye mark sensor

Main functions: the eye mark sensor which we used was a kind of light electricity sensor, use for fixing the film eyes mark orientation and insuring sealing and cutting position.

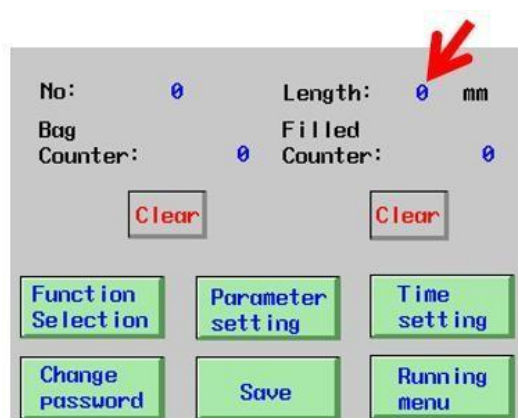
Operation steps of eye-mark sensor:

Step-1: Move the Eye-mark sensor frame, make the sensor head towards the eye-mark side.



Step-3: Setting Bag length

Setting bag length on the touch screen page “Products setting” (see below picture), set the bag length greater than or equal to the real bag length (distance between 2 eye-marks). For example, if the real bag length is 200mm, then set length on the touch screen to be 200mm or 250mm).



Step-3: Adjust eye-mark sensor

Move the sensor head to one of the eye-mark, turning the switch until the indicator light off. Then move the sensor head outside from the eye-mark, if the indicator light turns on, thus the eye-mark sensor is set success. Otherwise, turning the rotary switch until the indicator light turn on.

1) Film pulling belt

Functions: the film is drawn by the belt friction; the belt friction can be adjusted by compressing air.

The frictional force can be adjusted by the air pressure.

Regulation: Pull out the switch handle of the pressure adjusting value, watching the indication of the barometer (about 2kg/cm²) to ensure the film is drawn as usual.

V. Operation

5.1 The operation board

Turn on the power and temperature control, then set the horizontal temperature to 100°C-180°C, vertical temperature to 90°C-160°C; (temperature setting depend on the film's depth and packing speed.).

Turn on the power, the screen will be shown as the follow:



English This key show the operation language of this machine.

Press **Enter** to access Main page..



5.1 Program selection and operation

Press Running Menu on Main page, the screen will show as below,



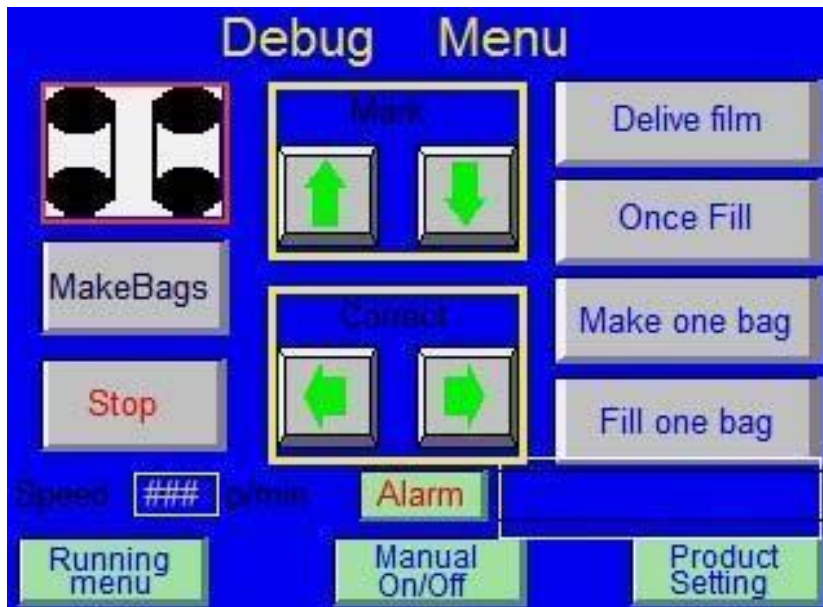
This is the main operation page when we running this machine. It displays when machine work normally.



Operate /Test	Means Machine operation states.
NO.	Show the product's Formula number.
Bag length	Show the bag length.
Alarm	Show the alarm information
Press roll	Touch the key, the belt will press the forming tuber; touch again, it will be separated with the forming tuber.
Error correct←	The fill mounting bracket move towards the left side. Then, the film on the left side is bigger than that on the right side.
Error correct→	The fill mounting bracket move towards the right side. Then, the film on the right side is bigger than that on the left side.
Eye mark↑	The eye mark sensor bracket will move backward, this adjustment is used to make the eye mark moved upward.
Eye mark↓	The eye mark sensor bracket will move forward. This adjustment is used to make the eye mark moved downward.
Fill bag	Connect with the Weigher and filling the bag.
Stop	Stop filling or making the bag.
Speed	Display the packaging speed.
Bag counter	Show how many bags have been made.
Filling counter	Show how many bags have been filled.
Main page	Touch the key, the screen goes to picture 1.
Debug Menu	Touch this key, the screen goes to picture 3.
Setting	Touch this key, the screen goes picture 4 .



Touch **Debug State** on picture 2, the screen shows as follows(picture 3):



Each key-press functions are as follow:

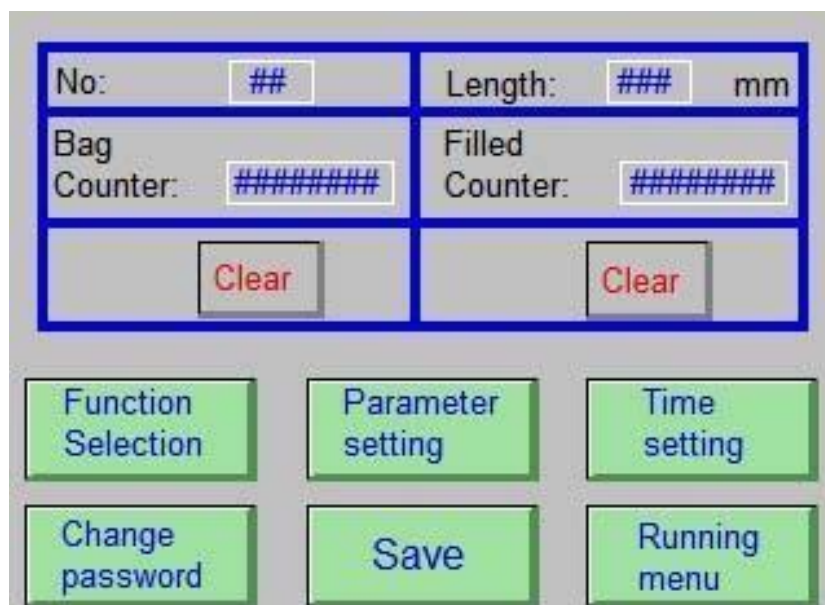
Press roll	Touch the key, the belt will press the forming tube; , touch again, it will be separated with the forming tuber.
Make bags	Making empty bags continuously.
Stop	Stop filling or making the bag.
Eye mark↑	The eye mark sensor bracket will move backward, this adjustment is used to make the eye mark moved upward.
Eye mark↓	The eye mark sensor bracket will move forward. This adjustment is used to make the eye mark moved downward.
Error correct←	The fill mounting bracket move towards the left side. Then, the film on the left side is bigger than that on the right side.
Error correct→	The fill mounting bracket move towards the right side. Then, the film on the right side is bigger than that on the left side.
Delive Film	Pulling film or stop pulling film..
Once fill	Filling one bag.
Make one bag	Making one empty bag.
Fill one bag	Completing the cycle of making one bag fill it with the product.
Speed	Showing the packaging speed.

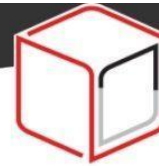
Alarm	Show the alarm information
Running menu	Come back to the menu as the following picture 2.
Product Setting	You can see the screen as the following picture 4.

Product Setting Touch this switch to the screen for setting product parameter (picture 4).



After input the password and enter, the screen will be shown as the follow (picture 5):





After enter this screen, select the product NO first (between 1 to 49), it will be kept even you start again.

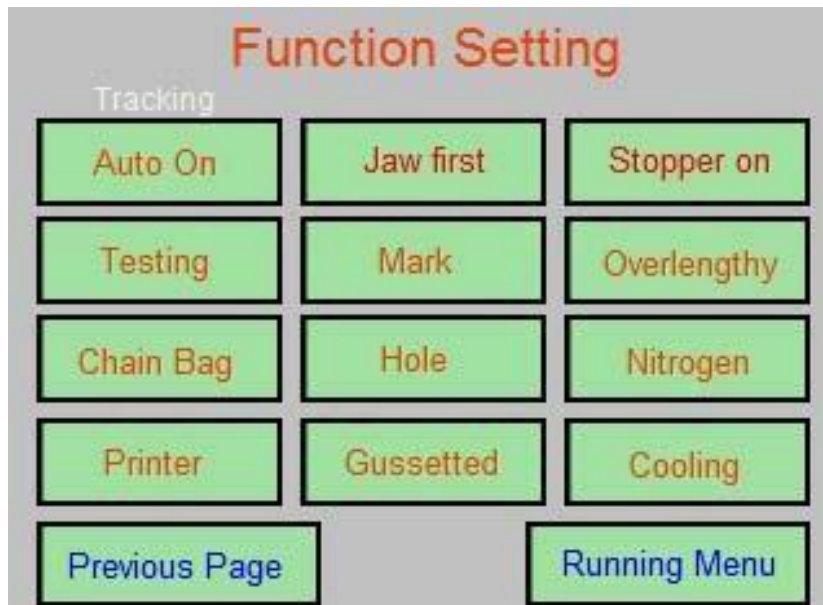
The functions are as follows:

NO.	Select the Formula number which you have saved.
Length	It will automatically pack that product according to the specifications saved earlier.
Connect bag counter	Setting connect bag you want to count.
Clear	For resetting the bag counter or filling counter.
Function setting	The screen will show as the picture 6.
Parameter setting	The screen will show as the picture 7.
Time setting	The screen will show as the picture 8.
Change password	It can change the password.
Save	Save the parameter you keyed in. (save every time after you change the data.)
Running menu	Come back to the menu as the following picture 2.

Notice: Due to the skid of the pulling belt, there may be some difference between the setting data and the actual length of the bag, so it need to set the modify length of the bag.



After picture 5 press **Function Setting** select , the screen will show as follow(picture 6):



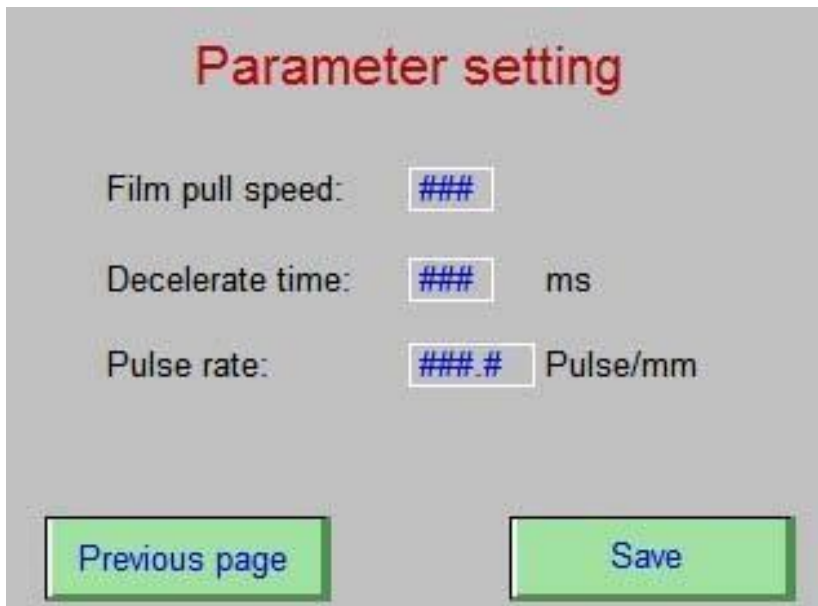
The functions are as follows:

Tracking Auto Off/On	Turn on/off the Auto Tracking device (Notes: Can be activated when Auto Tracking device fixed)		
Pull First	When the machine re-starts working after stopping, it will Pull film as the first step		
Jaw First	When the machine re-starts working after stopping, it will close the Horizontal Sealing Jaws as the first step		
Stopper Off/On	Turn on/ off the Material Stopper (Notes: Can be activated when Material Stopper fixed)		
Operate/Test	Touch this key select either operate or testing.	Operate	When alarm occurs, the machine will stop in that situation.
		Test	When alarm occurs, the machine keep on working..o
Mark	Bag length according to the distance of Eye-mark spots in the film (Notes: The set value should be longer than distance between two Eye-mark spots)		
Length	The bag length according to input setting		
Normal bag	Pull film once and make one bag.		
Over Length	Pull film more than once but make one bag.		
Single bag	Make a clear cut off in each bag		
Chain Bag	Make bags like a string. (Notes: Can be activated when Chain bag fixed)		



Hole/ No Hole	Select to punch a Hanger Hole or not (Notes: Can be activated when Hole Punch Device fixed)
Nitrogen/ No Nitrogen	Select to fill Nitrogen/Air into bags or not (Notes: Can be activated when Nitrogen/Air Flush Device fixed)
Printer/ No Printer	Turn on/Off the Hot stamping Printer
Pillow bag/Gusseted	Select to make pillow bag or Gusseted bag. (Notes: Can be activated when Gusseted device fixed)
Cooling/ No Cooling	Turn on/off the cooling device
Running menu	Come back to the menu as the following picture 2.
Previous page	The screen goes back to Pic. 5

Touch **Parameter Setting** switch on the pic.5 to the screen for setting parameters (picture 7).





Touch **Time Setting** switch on picture. 5 to the screen for setting time of various output: (picture 8)

End seal time:	<input type="text" value="###"/>	S
Vertical seal time:	<input type="text" value="###"/>	S
Printer delay:	<input type="text" value="###"/>	S
Printer time:	<input type="text" value="###"/>	S
Cutting delay :	<input type="text" value="###"/>	S
Cutting time :	<input type="text" value="###"/>	S

Main Page	Running Menu	Previous page	Next page
-----------	--------------	---------------	-----------

Touch **Next Page** on picture. 8, the screen shows as follows:(picture 9)

End Seal Delay:	<input type="text" value="###"/>	S
Make Bag Delay:	<input type="text" value="###"/>	S
Space Time:	<input type="text" value="###"/>	S
Fill Delay:	<input type="text" value="###"/>	S

Main Page	Running Menu	Previous page	Next page
-----------	--------------	---------------	-----------



Touch **Next Page** on picture.9, the screen shows as follows:(picture 10)

No Film Time:	<input type="text" value="###"/>	S
Cooling delay:	<input type="text" value="###"/>	S
Cooling time:	<input type="text" value="###"/>	S
Fill nitrogen delay:	<input type="text" value="###"/>	S
Fill nitrogen time:	<input type="text" value="###"/>	S

Main Page	Running Menu	Previous page	Next page
-----------	--------------	---------------	-----------

Touch **Next Page** on picture.10, the screen shows as follows:(picture 11)
Notice: Setting time of various output.

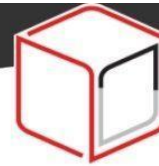
Gussetted delay:	<input type="text" value="###"/>	S
Gussetted time:	<input type="text" value="###"/>	S
Hole delay:	<input type="text" value="###"/>	S
Hole time:	<input type="text" value="###"/>	S
Chain of bags:	<input type="text" value="##"/>	

Main Page	Running menu	Previous page	Setting
-----------	--------------	---------------	---------



(The various time settings are set according to your product requirement and speed, there is no deterministic value.)





End seal:	0.5-0.9S
Vertical seal:	0.5-0.9S
Cutting delay:	0.20-0.40S
Cutting time:	0.20S
Fill nitrogen delay:	0.14-0.20S
fill nitrogen:	0.10-0.18S
Press Film	Touch this key, the belt will press the forming tuber, touch again, it will be separated with the forming tuber.
End seal	Touch the key, the horizontal seal jaw will close, touch again the jaw will open.
Vertical seal	Touch this key, the vertical seal jaw will close, touch again the jaw will open.
Film pull	Touch this key, the film pull system will run; touch again, the system will stop.
Gusset	Touch this key, the gusseted plates on both sides of the bag will move and insert into the bag for gusset.
Long Cutter	Touch this key, the cutting knife will protrude to cut position; touch again, the cutting knife will reverse back into the end seal jaws.
Printer	Touch this key, the machine will give a signal to the printer for printing.
Cooling	Touch this key, the horizontal seal will blow air.
Short Cutter	Touch this key, make a unclear cut between the chain bags.

Manual On/off

Touch picture.1, the screen shows as follows:(picture 12)

The screen can be used to test the accuracy and the correctness of the various output operation.

Further, it can be used when cleaning the cutter.

Functions are as follows:

5.3 The safety check of debugging

- Check whether all the snails are fastening, whether adding lubricating oil, whether the electric power is correct.
- Check whether the air supplier has connected to the entrance of triplet microtubules.

5.4 The process and description of debugging

- Mount the film roll, frap the film roll, cut the film end to triangularity and put the film through each roller, then insert it into the former.
- Close the door, of electricity box and the defend door, turn on the electric power, set the





- end seal temperature controller on 100°C-180°C, vertical end seal temperature controller on 90°C-160°C (The temperature is decided by the thickness of film and material.)
- e) When temperature reach the set point, make vertical and end seal action by manual drive to make certain whether the temperature is suitable, and set precedence relationship on time.
 - f) Input parameter, adjust the length of the bag and color mark, test every function and try to run the machine by making bags continually.
 - g) After making bags continually at good state, it can be connected with the Weigher and try to produce.

5.5 Safety of debugging

- h) During debugging, do not put the hand to the sealing jaw.
- i) The testing man should wear heat protective gloves when testing the sealing roller, in order to prevent getting burnt.
- j) When pulling belt is moving, do not touch by hands.
- k) Judgment of the testing: whether has abnormal noise, whether the pulling film belt is fit according to the former, whether the bag is symmetry by both sides.

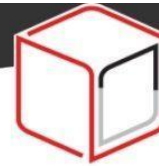
5.6 Operation

- 1) Operation safety: close all the door of the electric box, and close the defend door then can run the machine.
- 2) Operation of the machine: turn on the electric power, when the screen shows language selection, choose the suitable language to run the menu, touch the filling bag key can operate the machine.
- 3) Baiting and lay off:
If the material's lay off time is not right, the material will plug up in the feeder. The solution is as follows:
 - a. First, adjust the photo sensor induction switch of the main motor on the turnplate.
 - If lay off too early, the induction plate moves forward.(anti clockwise)
 - If lay off too late, the induction plate moves backward.(clockwise)
 - b. Change the time of the delay pulling belt to adjust the falling time of the material, and change the context of the horizontal seal's switching.
- 4) During packaging, when weigher puts material into the packing machine, it sends a packaging signal to the packing machine. When the packing machine receives the signal, the film-pull motor will work at once, send out the film and then the vertical seal, horizontal seal and cutter work at the same time. One signal can make one bag.
- 5) Urgency shut off can do when you press the urgency stop key, and everything would stop at once, if you want to start again, you must restore the urgency stop switch.
- 6) Tailoff: when the work are finished, pack all the material in the feeder, and then stop the machine, at last turn off the main power supply.

5.7 Check:

After work, check whether the sealing jaw is clean, whether the railing screw is loosen, whether the horizontal seal pole has enough lubricating oil, whether all the equipment is at good state, whether the triplet has oil, whether the bleeder valve can drain





VI. Equipment Protection

6.1 Guidelines of maintenance

Check if any part is exceptional, keep the surface of the machine clean and maintain timely.

6.2 Equipment protection

- (1) Check the surface of the oil in the gas supply oil tank that whether it has keep above 1/3, if less than 1/3, it should pour in 20# pure oil to cover 1/2 of the oil tank.
- (2) Every day before work, adding 20# oil into the oil cup, which is on the horizontal seal shelf.
- (3) Each time after work, clean all the equipment, the surface which has dust must blow clean by compress air; the material attached to the horizontal roller and cutter must be cleaned up by copper brush. Take out all the packing film before ring out.
- (4) Check the screw to see whether has loosen.
- (5) A thorough cleaning-up must be made with the machine, cut off the power if the machine will stop for a long time. When start again, check again before use.

6.3 lubricating oil: 20# pure machine oil

6.4 Lubricating and description of the machine

- (1) The horizontal seal roller must have first-rate lubricating to ensure the machine runs in gear, reduce abrasion and ensure the machine's life-span.
- (2) Make sure the electromagnetism valve is lubricate, ensure the oil in the oil tank is enough, if the valve is not in good state, the whole machine will not be in effective situation.

VII. Trouble Shooting and Maintenance

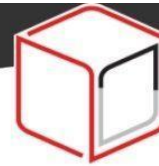
7.1 Safety of the maintain:

Cut off the power supply and pull out the connector plugs when maintaining.

7.2 Avoid scald when maintain the seal jaw.

7.3 Turn off all the air supply to avoid hurt.





Exception class	Cause	Solution
Press the touching key and the machine doesn't work.	Check whether there is alarm.	Eliminate the alarm.
Switch of creepage break down.	Equipment such as heated patch maybe creepage.	Check all the equipment one by one.
The figures of the temperature meter jump repeatedly.	Thermocouple is loosen or damaged.	Fasten or change the thermocouple.
The sealing roller is not hot.	<ul style="list-style-type: none">■ The open circuit protector is cut off.■ Heated patch is burnout.■ Temperature control meter is burnout.	<ul style="list-style-type: none">■ Check to eliminate short circuit, and combine again.■ Change the heated patch■ Change the temperature control meter
Temperature is well-balanced when stop, but falling continually when boot-strap.	<ul style="list-style-type: none">■ Voltage low, the power of the heated patch minish.■ The power of the heated patch is too low.■ Packaging speed is too fast.	<ul style="list-style-type: none">■ Reduce the packing speed or add voltage stabilizer.■ Change high-power heated patch.■ Reduce packing speed.
Gas leak of the sealing bag	<ul style="list-style-type: none">■ The temperature is not high enough.■ The pressure is not enough.■ Too short time for sealing.■ The forward and backward horizontal roller is not sealing well.	<ul style="list-style-type: none">■ Raise the temperature properly.■ Augment air pressure in specialized range.■ Increase the parameter of sealing time■ Adjust the forward and backward horizontal seal jaw in parallel.
Cannot control cutting point or cutting half bag	<ul style="list-style-type: none">■ Film edge has cockled or light path problem to cause wrong photoelectricity action.■ The flexibility of the eye sensor is not adjust well.■ The bag's length setting is not long enough that to cause making bag in different length.	<ul style="list-style-type: none">■ Change the packing film.■ Adjust flexibility of the photoelectricity■ Increase bag length setting.





- The adjustment of vibrator amplitude: The sizes of vibrator amplitude can affect the conveying capacity and packaging speed of conveyor. The bigger the amplitude is, the greater the upgrading volume is. Customers can adjust the amplitude according to their demand. Operation methods: start the manual function of conveyor, then open distribution box (as the arrow place in Chart 20), rotate around the regulating gear of voltage regulator to change the vibrator amplitude, and then press on the inching switch. Repeat this operation till satisfy.
- The adjustment of conveying speed: the conveying speed affects the packaging speed. The conveying speed can be set up according to their requirement. The specific operation methods as following: start the manual function, open the distribution box, and rotate the regulating gear of frequency converter (as the arrowhead in Chart 4), then press the inching switch, change the conveying speed. As usual, we propose the frequency converter $\leq 50\text{Hz}$.

VIII. Electrical

8.1 z frequency 220V/50Hz alternating current

8.2 Installation of Electric equipment :

- a. Fix creepage switch before installing the machine.
- b. The electrical wire is big enough for power supply.
- c. The personnel must have vocational training.

8.3 circumstance for electric equipment:

The place should not have etchant gas, atom and vibration, the temperature should be 5-35°C no frost, humidity should be less than 90%RH, no condensation, height above sea level should be less than 1000m.

8.4 Description of safety device of electric and interlock equipment:

Close the defend door before the machine starts up, if the door is unlock , the machine can't start-up. Generally, close and lock the door, if the air pressure can't reach a certain degree, the machine can't start-up either.

8.5 Servicing and safety notice of the electric equipment:

When maintaining: Turn off the power supply, and unplug the connector plugs. Maintaining personnel must have vocational training.

8.6 Safety handle of the electric

- a) Not allow to change the circuit optionally, the personnel must have vocational training.
- b) Not allow to alter the PLC program, if have to alter must ask for permission from the manufacturer first.





- c) Not allow to alter the protective switch in the electric box, should never change the big one for the small.

8.7 Convey, transit and store

- a. You should never take the equipment apart, all the equipment in the electric box can't be extrusion during conveying.
- b. During carrying, You must make the electric part keep balance, reduce the vibration as less as possible, and can't put any outside force stress on it.
- c. The place for placement must be unknit, no water and should keep off from the sun.

IX. Annex

9.1 Standard warning parts

No.	Article	Q'ty	Remark
1	Regular Heater (End seal)	4 pcs	
2	Regular Heater (Vertical)	2(1) pcs	
3	Cutting knife	1 pcs	T-shaped, Zigzag
4	Film pulling belt	2 pcs	T10
5	Printing tapes	2rolls	Black, 35mm
6	Printing letters	1 box	A~Z
7	Printing digitals & symbols	1 box	0~9, "/", "- "etc
8	Warning parts of printer	1 pcs	
9	Protective tube	2 pcs	0.5A/20A
10	Thermocouple	1 pcs	

Common tools

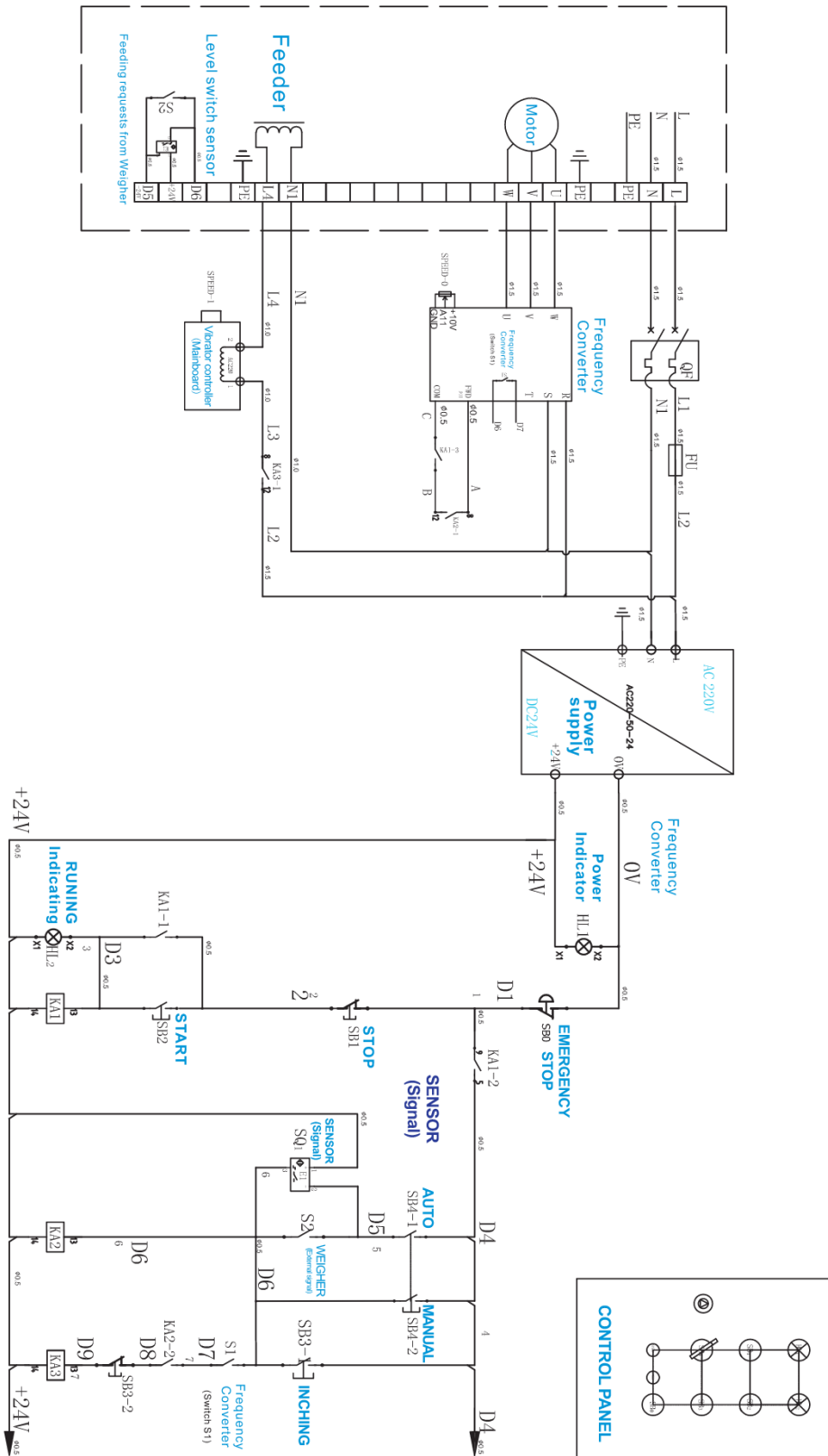
1	Hexagon ring spanner	1	
2	Spanner wrench	1	
3	Phillips screwdriver	1	
4	Slotted screwdriver	1	
5	Copper brush	1	

Standard documents

1	User manual	1	
2	Packing list	1	
3	Other requested documents	1	



9.2 Electric wiring diagram





CONTACT US FOR MORE INFORMATION

Denmark: +45 7027 2220
USA: +1 310 773 3423
Spain: +34 699 900 987
Hongkong: +852 8170 1025
Sweden: +46 31 799 5398
Italy: +39 351 988 0682
Philippines: +63 916 777 5299

