
Rotary Premade-Bag Packaging Machine

OPERATION MANUAL

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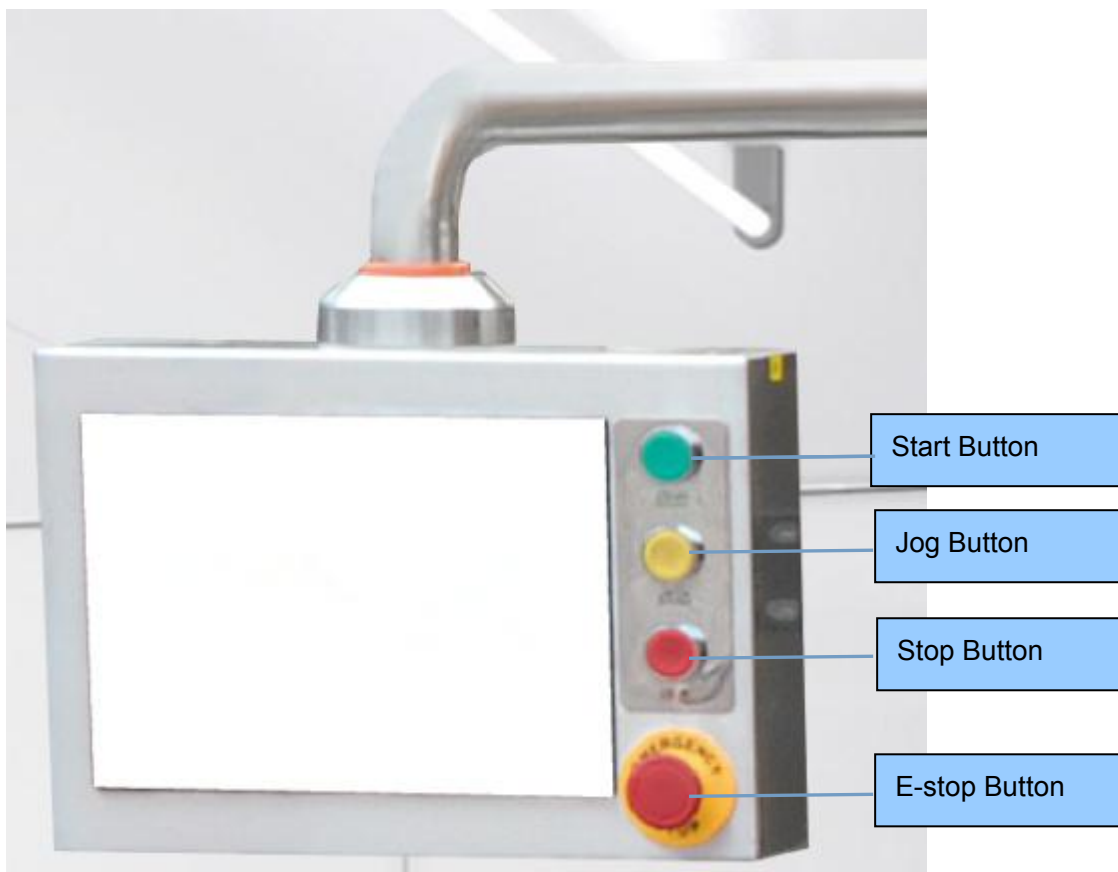
I. The Machine Features:



1. The machine is suitable for packing solid granules, powder, liquid & sauce, pickled vegetables and other kinds of food products, as well as the non-food packaging.
2. The machine can be connected with multi-head weigher, linear weigher, auger filler and liquid filler, thus forming an automatic packaging line.
3. Adopt multi-functional digital frequency to control speed and PLC program control system, which makes the operation more advanced, the adjustment and maintenance easier.
4. Touch-screen HMI makes the parameter setting more convenient and fast.
5. No bag automatic alarm and failure alarm displayed make the operation

and running more stable, the maintenance more convenient.

6. The main electrical components are adopted with international famous brands, and the quality is more stable and reliable.
7. The ribbon coder or ink-jet coder is optional according to user's requirement.
8. Sealing is strong and nice, upgrade your products.
9. No bag no fill no seal detection function, which greatly saves the packaging material cost.
10. Fast speed and pack perfect, which can greatly saves labor cost.
11. Operator panel instructions:





II. Technical Parameters:

No.	Item	Contents	Remark
1	Model	MR-200D	
2	Dimension	2600*1400*1800 (mm) (L,W,H)	Ref. attached drawings for specific size
3	Weight	1500kg	
4	Packing Speed	10-55 bags/min	Depended on the product and filling weight
5	Bag size	L: 100~300mm W: 100~200mm	
6	Sealing Type	Constant temperature heating, zig-zag shape sealing	
7	Power Source	380V 50Hz	Three-phase five-wire
8	Packing Material	Heat sealable film such as PA/PE, PET/PE, AL film	flat bags, stand-up bags, zipper bags, shaped bags, etc.
9	Main Motor Power	1.5KW	
	Horizontal Bag Feeding Motor Power	25W+3W+150W=178W	
	Finished Product Output Motor	90W	
10	Heating Power	1.2KW	
11	Total Power	3.0kw	

12	Air Pressure	0.45m ² /min	Working Pressure ≥0.5MPa
13	Vacuum Component	Vacuum Generator	ZH15D-02-03-03

Special Announcement:

- 1) The normal noise of machine during production is 70 DB.
- 2) Machine only works with the air from compressor, so no potential explosive gas. (excluding the special situations that needs air inflation)

III. Warning Marks:

Please carefully read the specification and the meaning of warning marks, do not operate hastily.


1. Warning Marks Explanation:

Attention: The signal words include **Danger**, **Warning**, and **Caution**.

Danger: means the urgent dangerous situation, if not avoided may cause death or heavy injury. This word only used in extreme case, and not for common use.

Warning: means the potential dangerous situation, if not avoided may cause death or heavy injury.

Caution: means the urgent dangerous situation, if not avoid may cause light injury. This word is for warning insecure operation.

- a. Electric control box as well as other dangerous electric control components (e.g. Breaker, Transformer etc.) or the place should mark with warning , and earth according to the practical situation.



- b. Stick the warning mark in dangerous heat sources for keeping away or avoiding touching. Temperature warning must be stuck in the place where temperature exceeds 65°C.



- c. Stick the danger mark in the shell of mechanical transmission parts to avoid the hurt by machine.



- d. Stick the warning mark in the place of rotating dangerous.



- e. Stick the warning mark in the entrance of earth wire, to ensure the well grounding when machine is working.



Outer protection



Inner protection

2. Location for warning marks:

- a. Rotating mark on the Plexiglas door around the machine



- b. Electricity mark on the electric box door



- c. Hot mark on the date coder



- d. Mark on the heat sealing clamps to avoid hurting hands



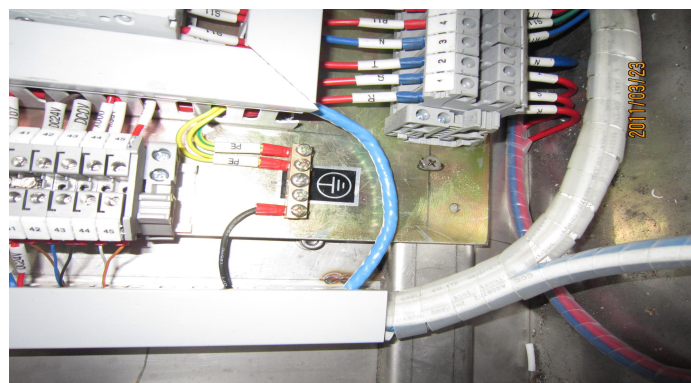
e. Hot mark on the cover of Heat sealing Box



f. Crush Hazard Mark



g. Grounding Mark inside the Machine

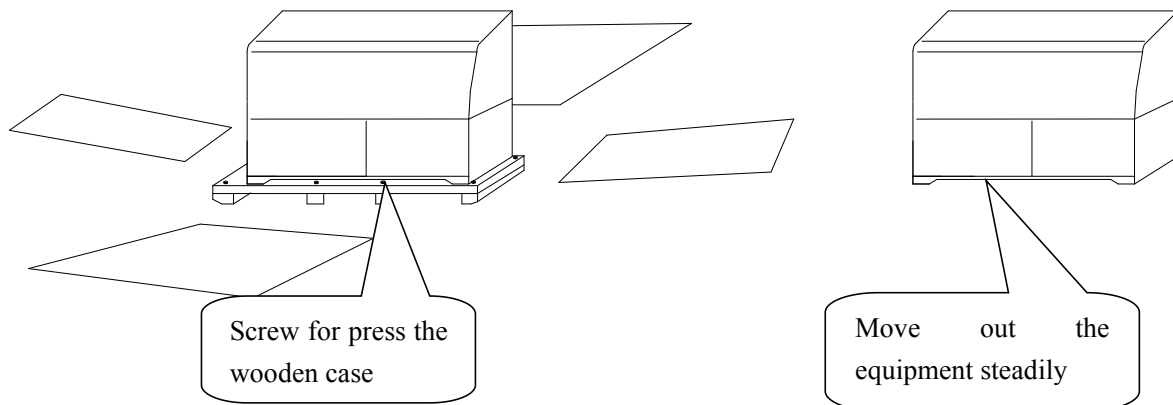


IV. Machine Transportation and Installation:

1. Machine Transportation:

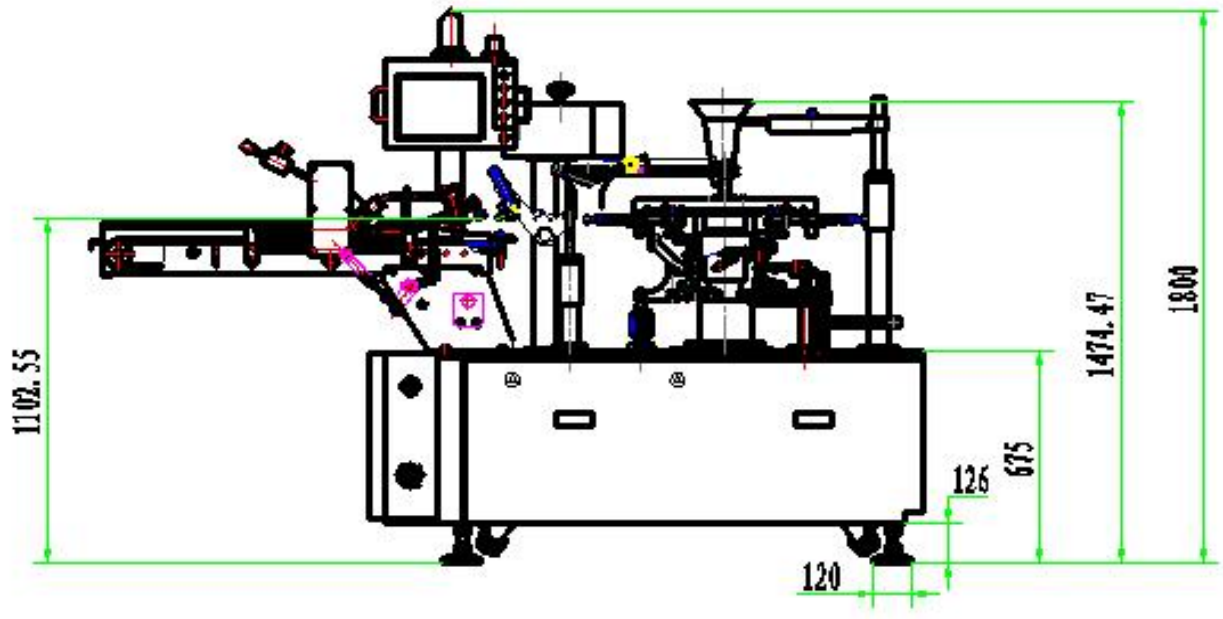
- a. Lift the machine steadily as per the directional signs outside the packing box when using the forklift to carry the equipment. Avoid overly leaned and laid across the land. Avoid collision or strong vibration when laying the equipment.
- b. Tighten the equipment to the wooden rack when leaving factory. Use the forklift or special tool to carry the equipment after opening the box.

Avoid lifting by wire cable so as not to damage guard of machine. After lifting, dismantle the binding bolt, remove the wooden rack, and install the equipment bedplate configured by production line, and then lay the equipment down steadily. As following:

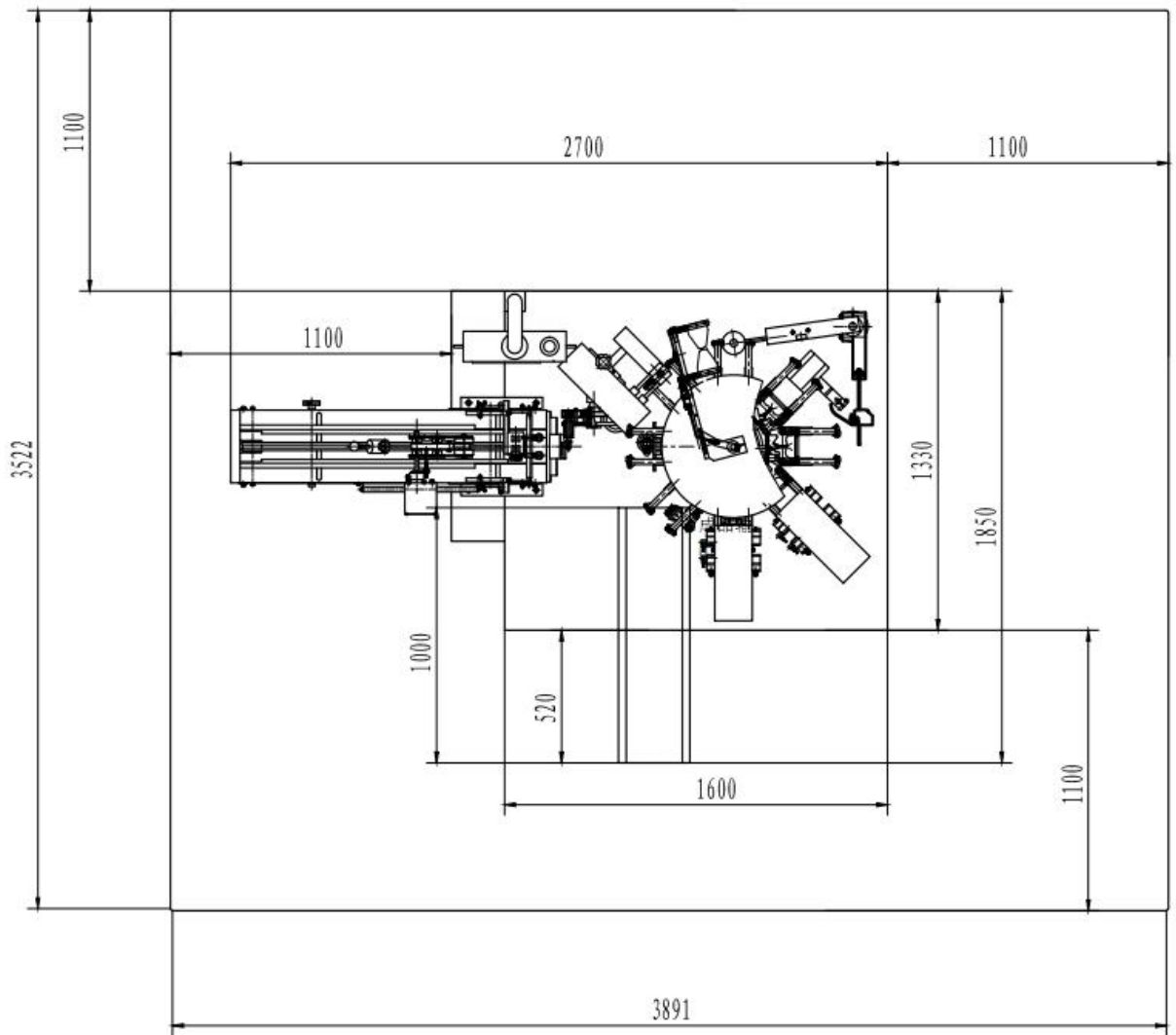


- c. After going into the workshop, please check if the machine accessories are complete according to the packaging list. If any bolt or other parts fallen in packing box, please collect for preparing installation. To check the appearance of all parts, if any abnormal, immediately inform the traffic department or our company, so as to deal with it properly.

2. Machine Installation:



(Fig.1)



(Fig.2)

a. Installation Condition Requirement:

Dry and clean compressed air $\geq 0.5\text{Mpa}$, $0.45\text{m}^2/\text{min}$; Humidity level of best working environment: 55%-65%.

The packing operation condition satisfies the environment requirement for different products, and meet the requirement of GMP.

b. Installation Method:

- 1) Open the package and check the machine. If normal, push it to the installation location. Shown in figure 2 work area map, to ensure that the surrounding space not less than 1100mm for machine operation and maintenance.
- 2) Adjust the feet to make the machine horizontal.
- 3) For the safe production, please access the ground wire as per the assigned place.
- 4) Connect the specified power supply and compressed air, then adjust the machine.

c. Preparation for the Machine Adjustment:

The machine has debugged already according to one of the samples from customer before leaving factory. The sample can be used for testing after the machine installation finished.

Make sure the connection circuit of power is correct and machine is installed as required, then arrange the suitable power voltage, connection location and suitable power switch (outside) etc. Please connect the power source and power switch with enough wire size ($\geq 2.5\text{mm}$), and pay

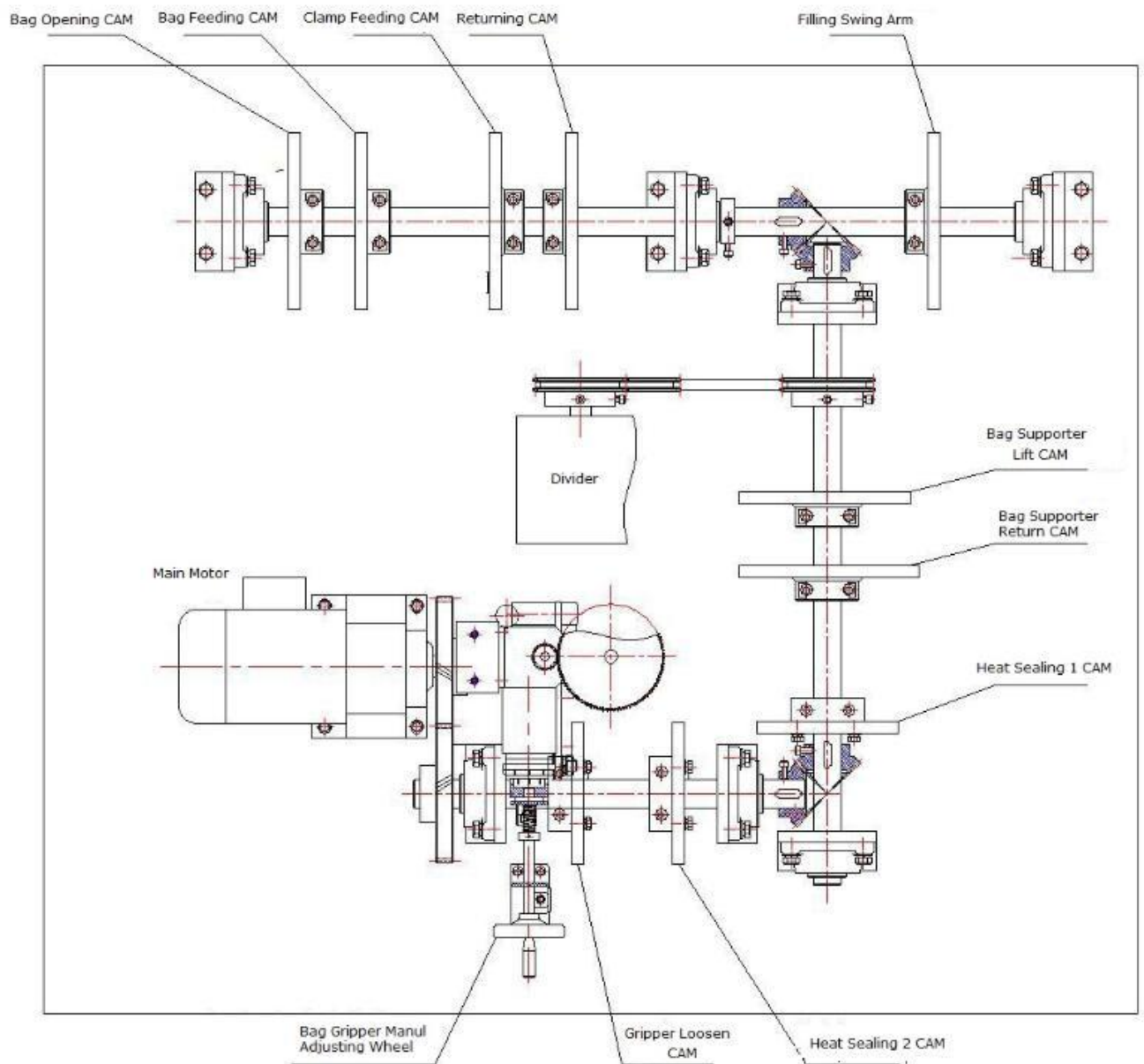
attention to the positive and negative direction of electric motor. Before turn on the power switch, check every parts of the machine if there is any looseness, dislocation and damage occurred during transportation, and whether the air pipe of each pneumatic component connected well. If there is any abnormal situation, please solve first. If everything is normal, please do the testing as per the following steps:

- 1) Connect the power and air source, turn on the power switch, set the parameters on the related pages of the touch screen. (About the operation and the setting of the operation panel parts, please see "operation panel instructions") ;
- 2) Put the bags on the bag magazine, and jog the machine one circle, set the low speed (e.g. 25 bags/min), then press "start" button, and watch the packing process and packing result carefully, please adjust it if any problems;
- 3) Increase the packing speed gradually, if no problem, produce normally.

Note:

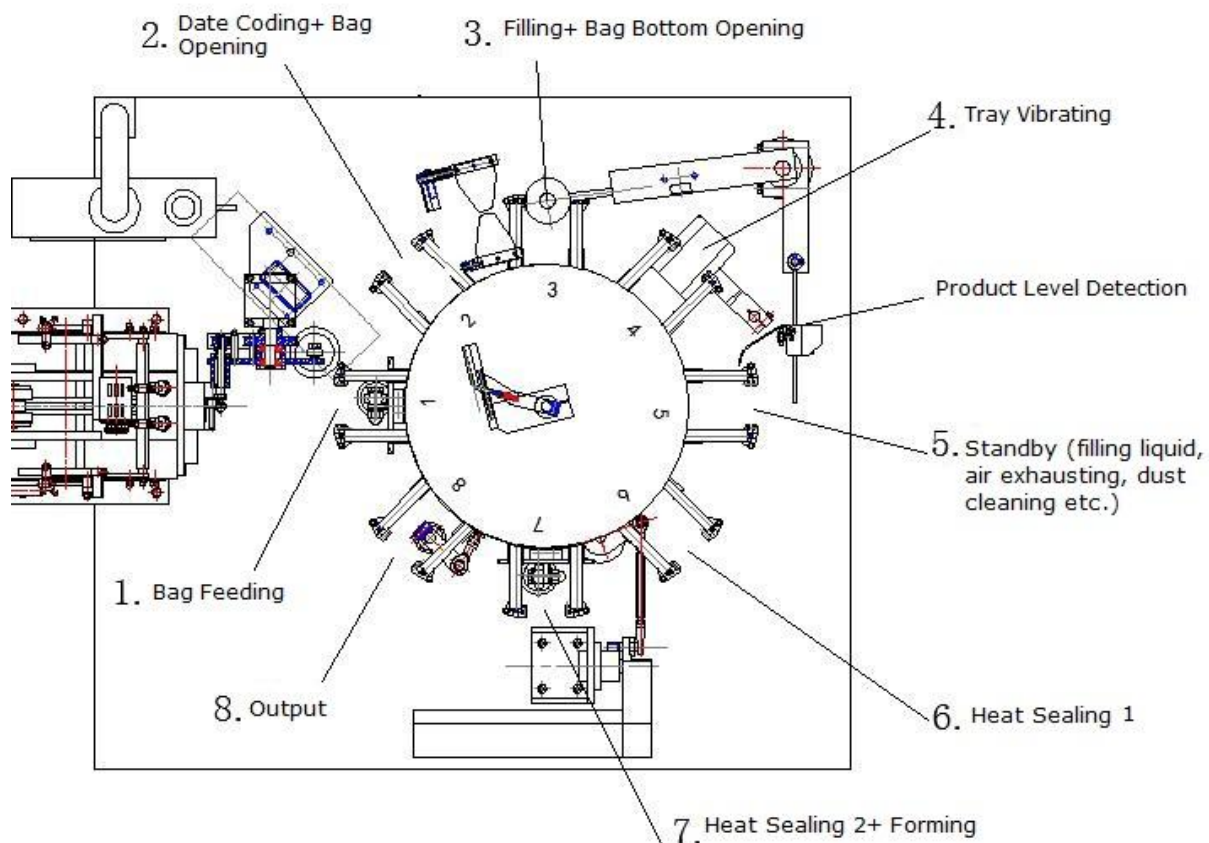
The highest packing speed of this machine is 55bags/min, but depended on the packing material, product features, and operator's proficiency, therefore the packing speed must be set according to the actual situation. Too fast speed will lower yield, accelerate machine wear, and shorten machine service life.

V. Transmission Schematic for Each Station:



(Fig.3) Transmission Schematic

Function of all stations



(Fig.4)

- | | |
|-----------|---|
| Station 1 | Bag Feeding |
| Station 2 | Date Coding + Bag Opening |
| Station 3 | Filling + Bag Bottom Opening |
| Station 4 | Tray Vibrating |
| Station 5 | Standby (can add functions of filling liquid, air exhausting, dust cleaning etc.) |
| Station 6 | Heat Sealing 1 |
| Station 7 | Heat Sealing 2 or Forming |
| Station 8 | Output |

Selecting the functions from Station 5- 8 according to product features and packaging bags is permissible.

VI. Starting up and Notes:

1.First, check whether the code ribbon, date of production (coding word), vacuum filter is clean.

2.Second, check whether the power supply, air pressure is normal.

3.Open the total power switch, enter into the operating menu, select the functions as your requirement, such as “ Bag Feeding, Bag Opening, Coding, Vibrating, Air Exhausting, Air Blowing, Vacuum Pump, Sealing” etc., do not need to open the functions that you don’t use.

4. Press “Jog” for long time to make machine run for one circle, check whether there is abnormality on stations or mechanical collision happens, if all is normal, then production can start.

5. The first 20 bags of product should check the following items, normal production can only do when all items are stably reach the requirement.

①Coding Date ②Accurate Weight (Volume) ③ Sealing is beautiful and strong

6. When machine runs for a period of time (about one hour), the operator need to clean the dust on the surface of machine by air gun.

7. Operator should clean the machine after work everyday. (do not swash it with water)

8. Notes for adjusting the machine:

① When start the machine, check whether the manual rocker on main motor has been taken down.

② Check whether there is something that hampers mechanical actions, thus avoiding the collision.

③Check whether the air pressure and vacuum degree is normal.

④ Strictly prohibit adjusting the mechanical parts when machine is in operation.

⑤ Stop the machine immediately if there is any abnormal noises.

VII Mechanical Action Adjustment and Maintenance

i Machine has been completely adjusted before delivery, here only means the adjustments for different bag width.

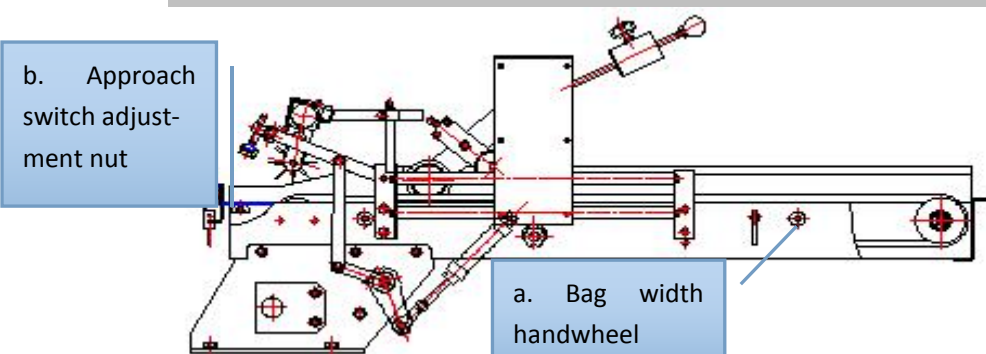
Station 1: two ways for bag feeding, one is up to down direction of bag feeding, the other is horizontal bag feeding.

A. Adjustment for up to down direction of bag feeding

a) Bag Magazine Adjustment: According to the bag width difference, equally adjust plate in two side of bag magazine. E.g. Change bag width from 150mm to 180mm, Account: $(180-150)/2=15\text{mm}$, so each side of plate move outward 15mm.

b) Bag gripper also moves outward 15mm.

B. Adjustment for horizontal bag feeding



(Fig.5)

a) Rotate the handwheel to left or right, thus adjust the plate of bag magazine to the suitable position.

b) If the detection of approach switch on bag feeding device is not so

effective, adjust the position of switch by loosening the butterfly nut, thus achieving the best detection effect.

Station 2: Date Coding + Bag Opening

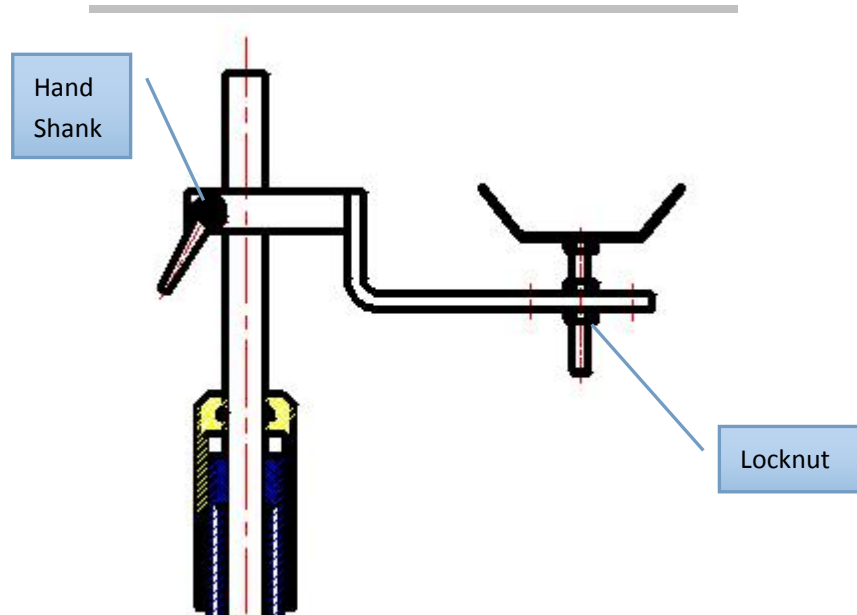
Date Coding: Adjust the height of mounting seat according to bag length.

Bag Opening: generally speaking, it do not need to adjust. Note: The installment place for front and back suckers is a bit different according the the bag materials. Make the upside of suckers 1mm from the top of bag.

Station 3: Filling

Choose the suitable filling hopper according to the bag width, to make sure the hopper can enter into the bag mouth, the deepest position that the hopper can enter is about 10mm from the top of bag mouth.

Station 4: Tray Vibrating



(Fig.6)

Rotate the hand shank to completely loosen the bolt, and adjust the tray to the best position.

Station 5: Standby (can add functions of filling liquid, air exhausting, dust

cleaning etc.)

Station 6.7.8: Generally speaking, they have been completely adjusted before delivery and do not need to adjust again.

The installment of product level detection switch: Install it according to the bag height and product level. When bag holding the product comes into the station, the pressure from the product makes the detection plate left the switch, thus the indicator won't lights and then machine seals the bag. Empty bag cannot press (indicator lights), and the machine do not seal the bag.

ii Pneumatic Mechanical Stroke Adjustment

When the machine rotates one station, the parameter would show 360 degree (one circle). The main technical standard is to make each cylinder action as accurate as 0.02 seconds.

Each cylinder should act according to the center wheel movement, to assist the machine meet the requirement for each station.

E.g.

1. Bag feeding

The mechanical action requires to put bags neatly on the horizontal conveyor belt. Open "*bag distributing*" function on operation, delivery motor should send the bag. When the first bag touches the swinging rod on the proximity switch, the switch lights and the up & bottom delivery motor stop, and meanwhile the bag distributing arm down (bag distributing starting angle) to suck up the bag (suction vacuum: bag distributing vacuum starting angle). The bag feeding arm comes (controlled by bag feeding

CAM) to clamp the bag (bag feeding starting angle) and meanwhile the air suction closed (bag distributing vacuum close angle, time), send the bag to bag clamp (controlled by bag feeding CAM). When the bag clamp closed, the bag feeding arm loosen (bag feeding close angle, time).

2. Date Coding+ Bag Opening

Date Coding Printer: The most suitable position should be adjusted according to bag size. The fixation screw on printer column can adjust vertical position, and the screw on mounting seat can adjust horizontal position. The coding temperature is shown on the control box. Adjust positioning switch and coding temperature. When turnplate stops, coding printer immediately starts work (Coding Start Angle) (closed angle is generally 0.2 or 0.3 seconds).

Bag Opening: there are three pneumatic actions

When turnplate stops, suckers move toward to bag (controlled by bag opening CAM), bag opening suction synchronously begins to act (Start Angle for Bag Opening Vacuum). When the left and right bag grippers move close into middle, the suckers separate with each other (controlled by bag opening CAM), bag opening air blowing synchronously begins to act (Bag Opening Air Blowing Start Angle) .Close value is generally 180 degrees more than ON value. When the turnplate prepares to move, bag opening suction stops working (bag opening suction Close angle, time).

3. Filling

Immediately filling when bag is in position. Note: The filling signal is send by bag supporter signal, so the start angle of filling cannot be earlier than

the signal send by bag supporter, avoiding filling if there is no bag. If too late, filling will not do although the bag is in position. The close value generally is 0.3 seconds.(depends on product features)

iii Bag Clamps Adjustment: two methods

1. Adjust the width of bag clamps on the parameter setting of touch screen



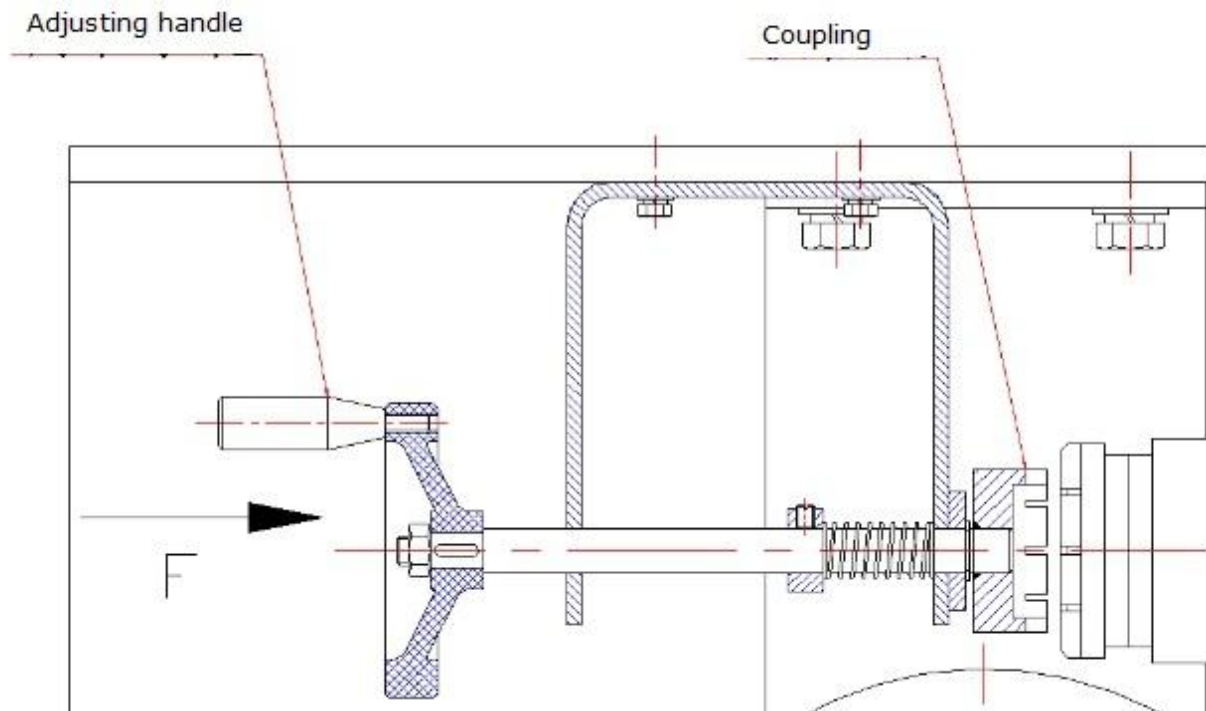
Fig.7

2. Manually turn the hand wheel to adjust the width of bag clamps



(Fig.8)

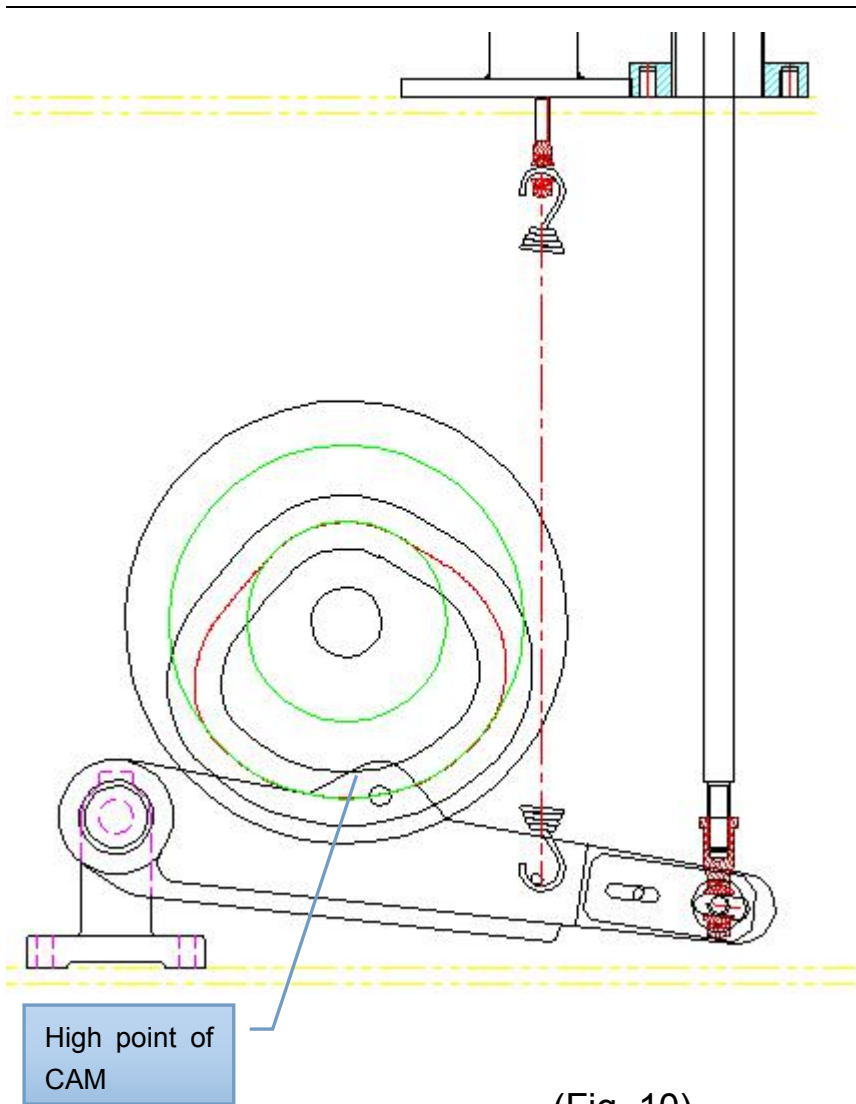
Operation Method: firstly open the door with the mark as Fig.8 shown, find the adjusting handle as Fig.9. Press the handle in F direction, then rotate it clockwise, the clamp would open, otherwise the clamp close.



(Fig.9)

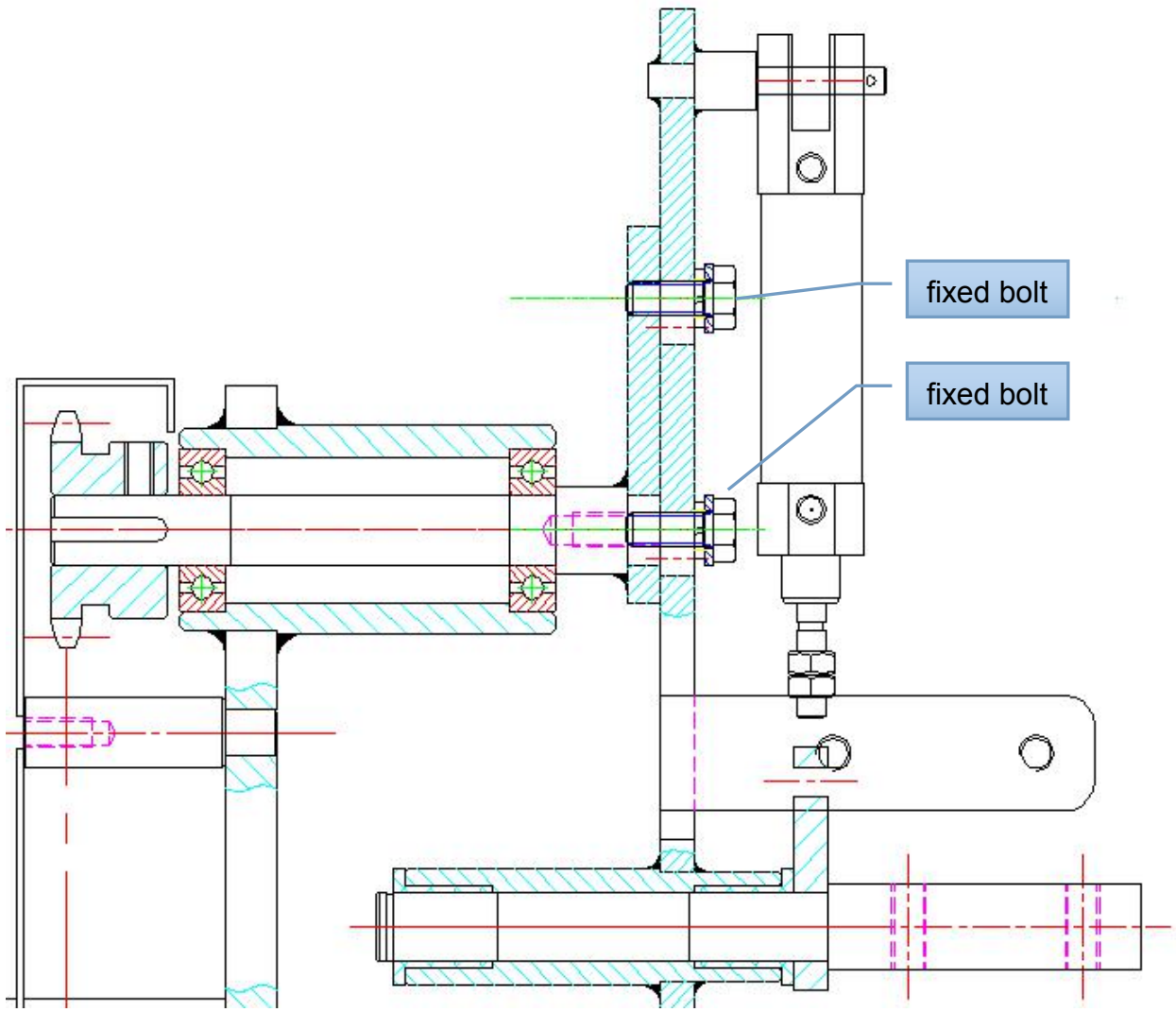
iv Bag Taken and Feeding Adjustment

1. Bag feeding CAM has been adjusted before delivery. In case of any unexpected shift happens during using the machine, please adjust the suitable angle according to the highest point of the CAM and the position of horizontal bag taken, then lock CAM .

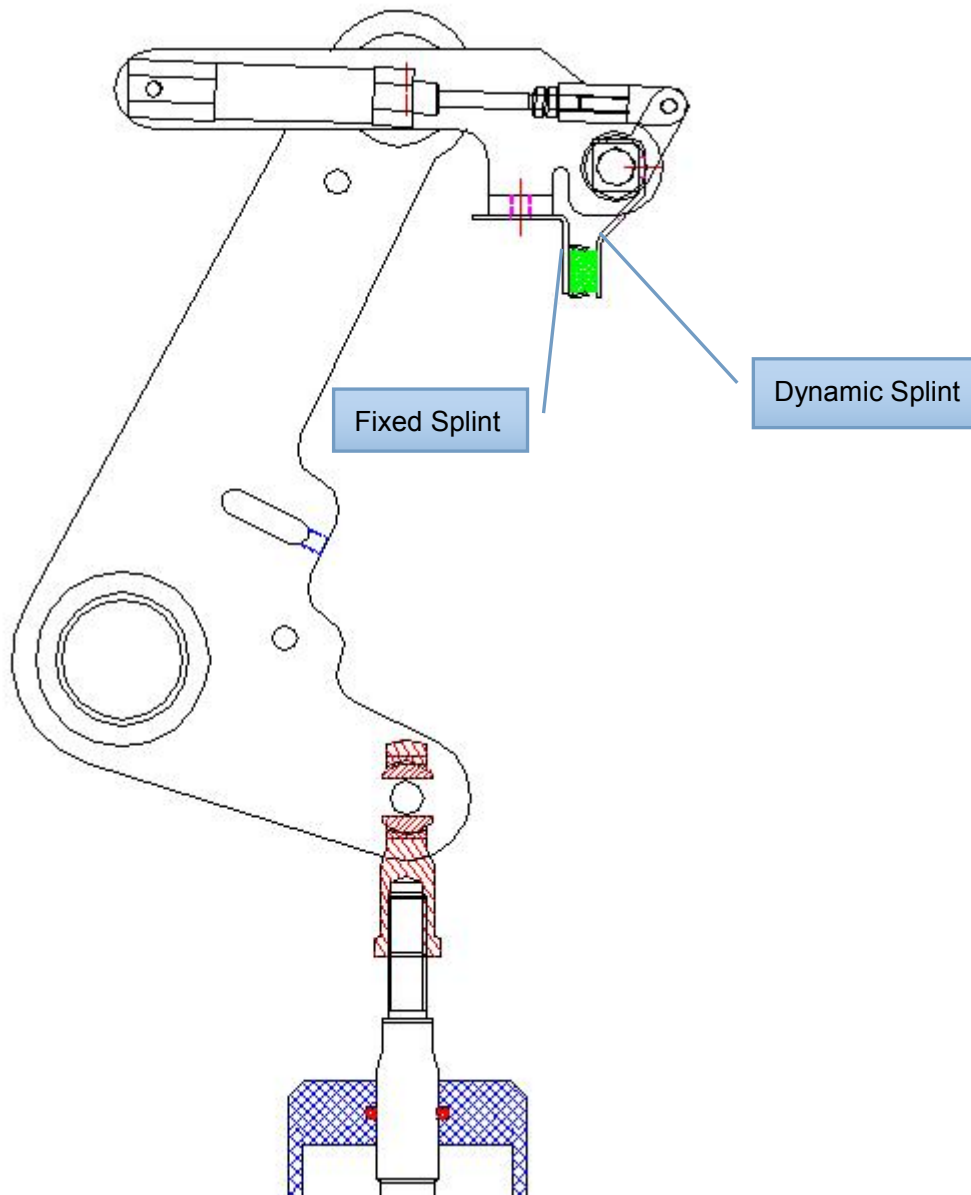


(Fig. 10)

2. When the position of swing arm for bag feeding is not ideal, loosen the fixed bolt to adjust until it reaches the most appropriate location.



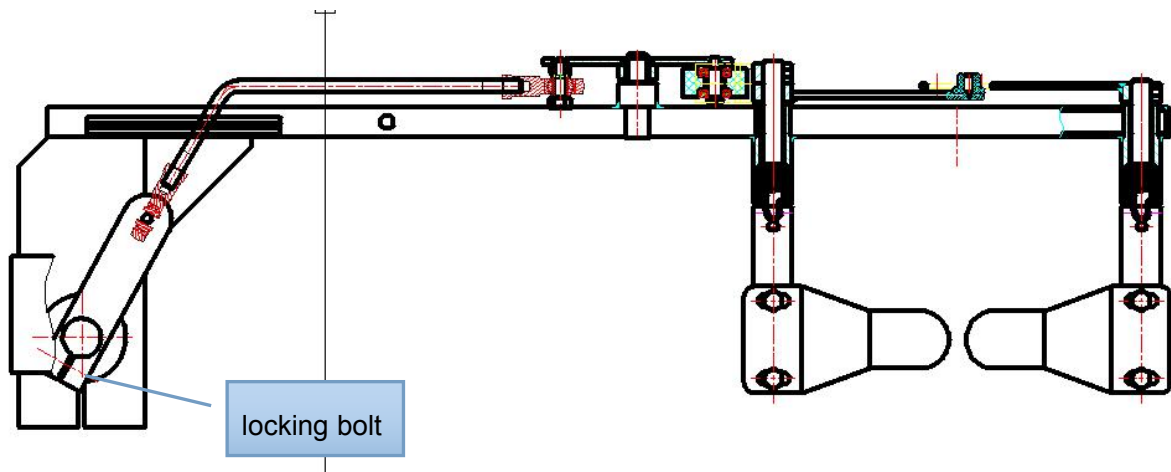
(Fig. 11)



(Fig. 12)

3. Adjust the relative position of splint and bag: loosen the locking bolt for dynamic splint and fixed splint as shown in Fig.12 until it reaches to appropriate position, then lock the bolt.

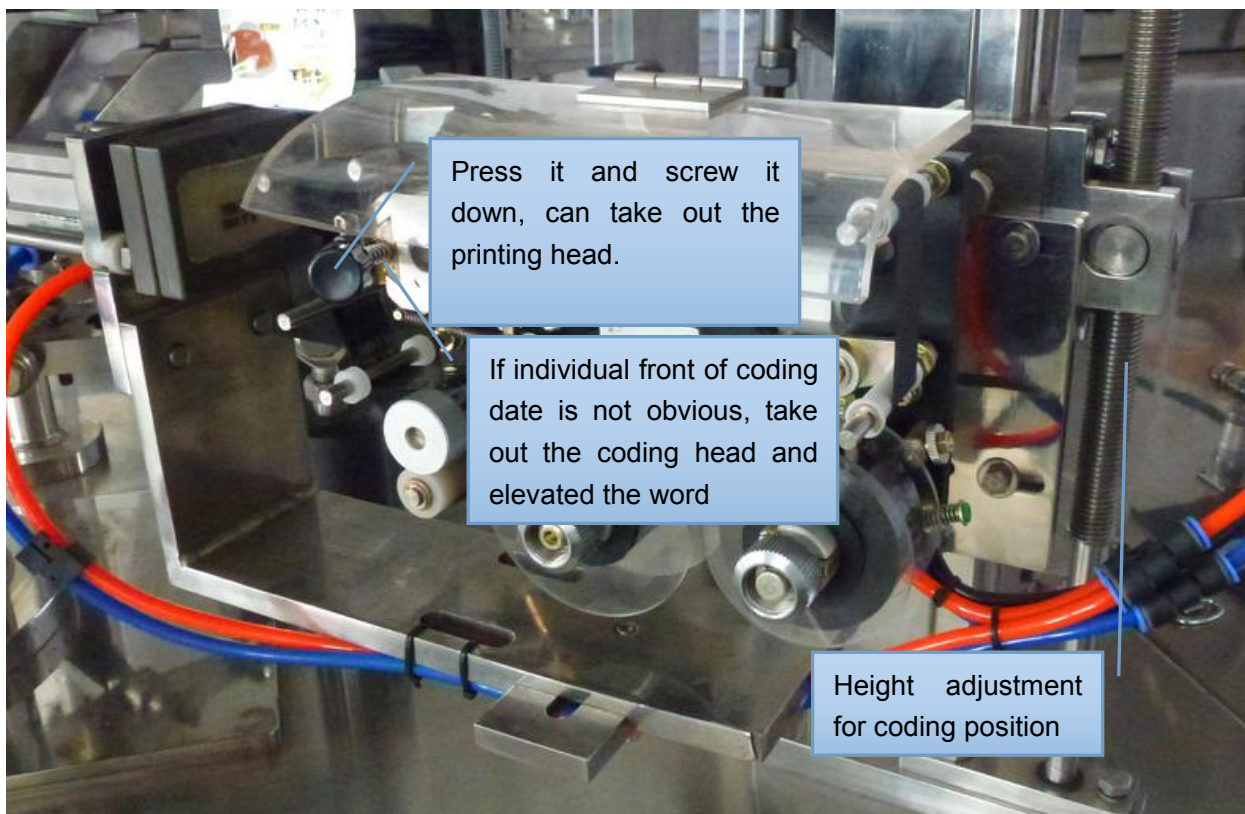
v Bag Opener Adjustment:



(Fig. 13)

Loosen the locking bolt as shown above according to the bag opening station, and then turn the swing arm of bag opener to the bag open angle and lay it down, use the driven fork to lock the dial wheel to suitable position and lock swing arm for bag opener.

vi Coding Adjustment :



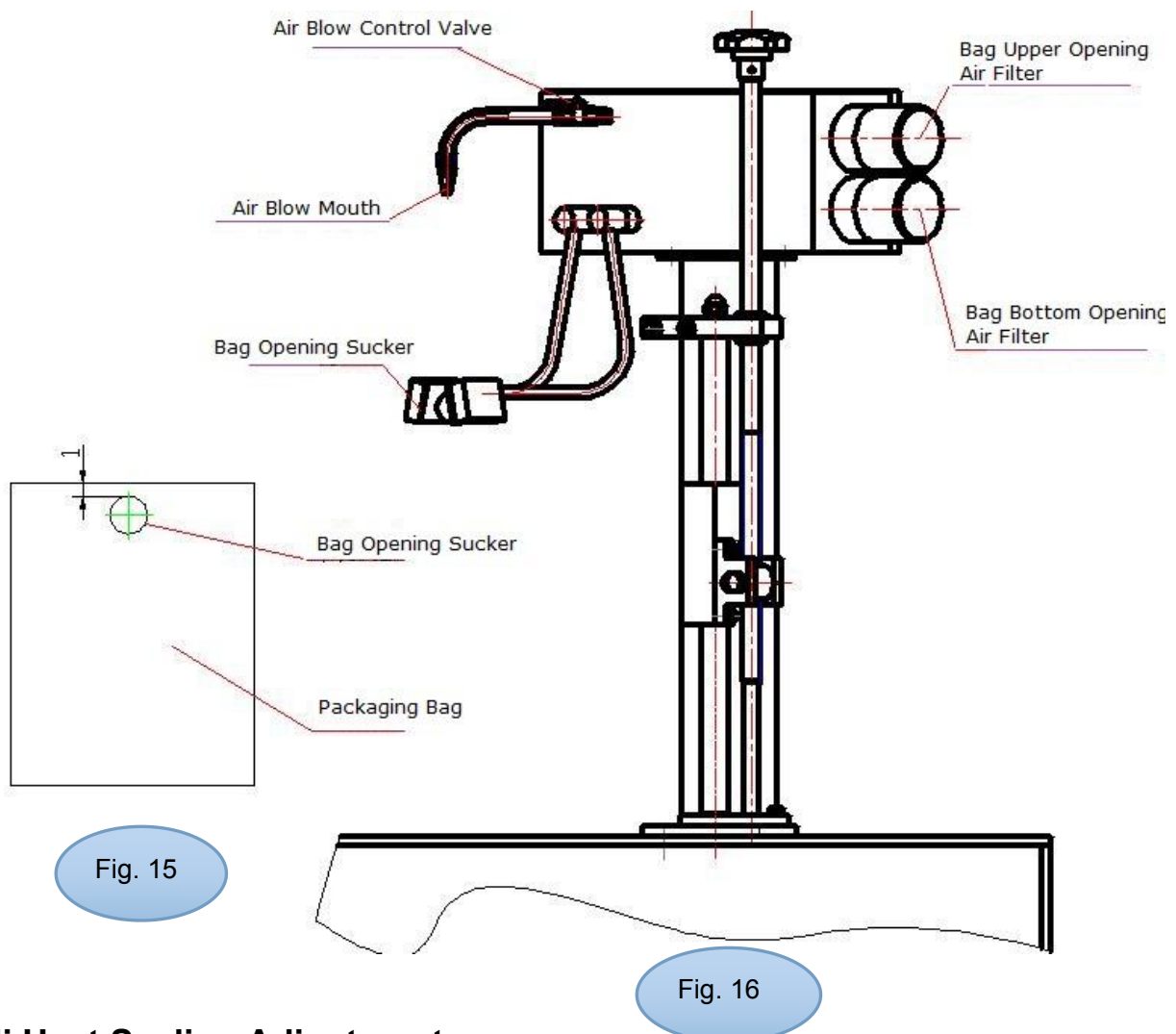
(Fig. 14)

a. According to the height of bag and coding position(as shown on Fig.14), lock the fixing screw in the locking bed.

b. According the coding position, loose the locking bolt in the fixing plate. Adjust it to the suitable place then lock.

vii Bag Opening Adjustment:

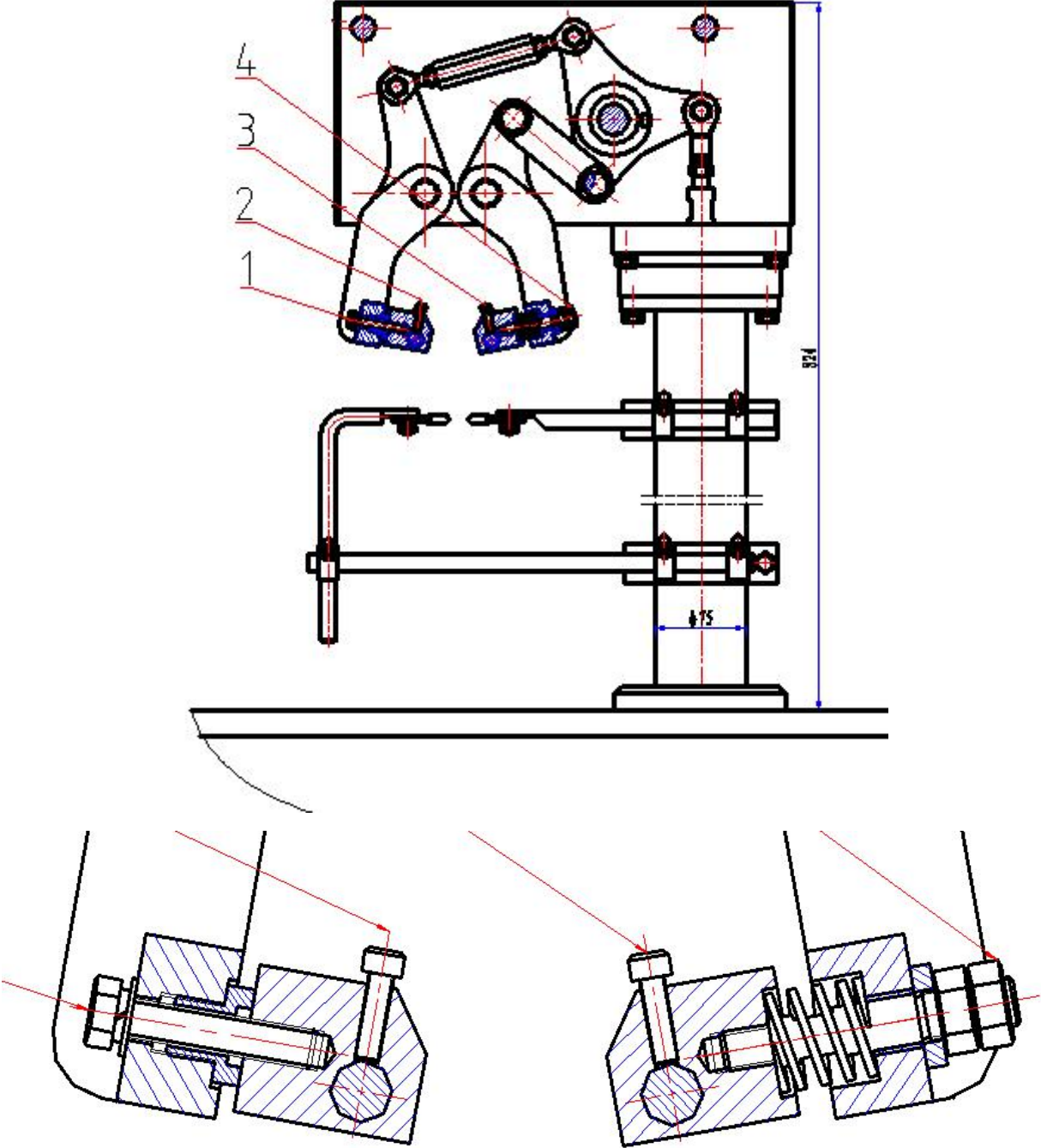
1. The position adjustment for bag opening sucker is shown in figure 15. Adjusting the edge of sucker 1 mm to bag upside is the best. Fig. 16: in the process of opening bag, don't make sucker tightly touch bag, but gently. After complete adjustment, tighten each adjusting bolt.



viii Heat Sealing Adjustment

1. The part of heat sealing has finished debugging before delivery. If

customer need to change the seal bar due to production requirements, loosen the fasteners on position 1, 2, 3, 4 shown below, and put on new seal bar , then tighten the bolt and nut.



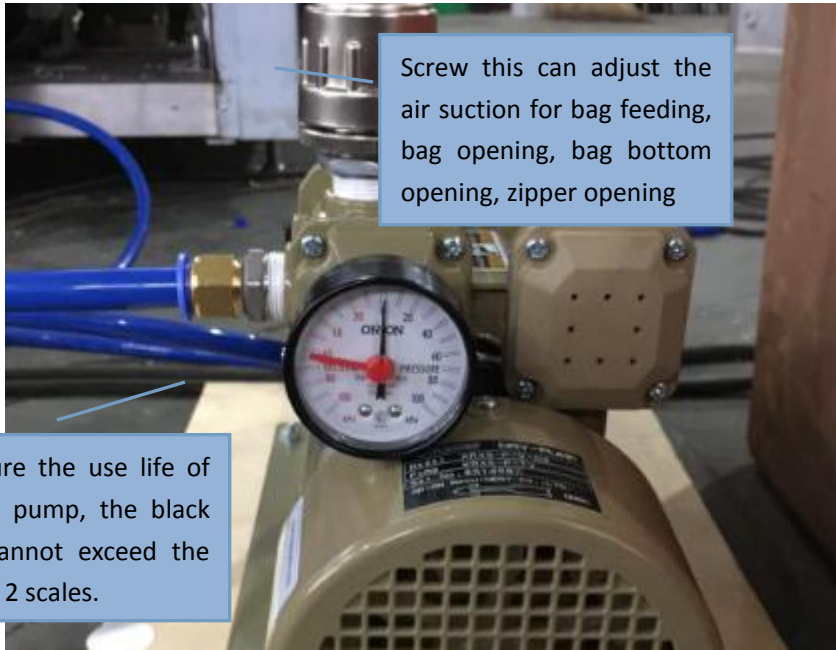
(Fig.17)



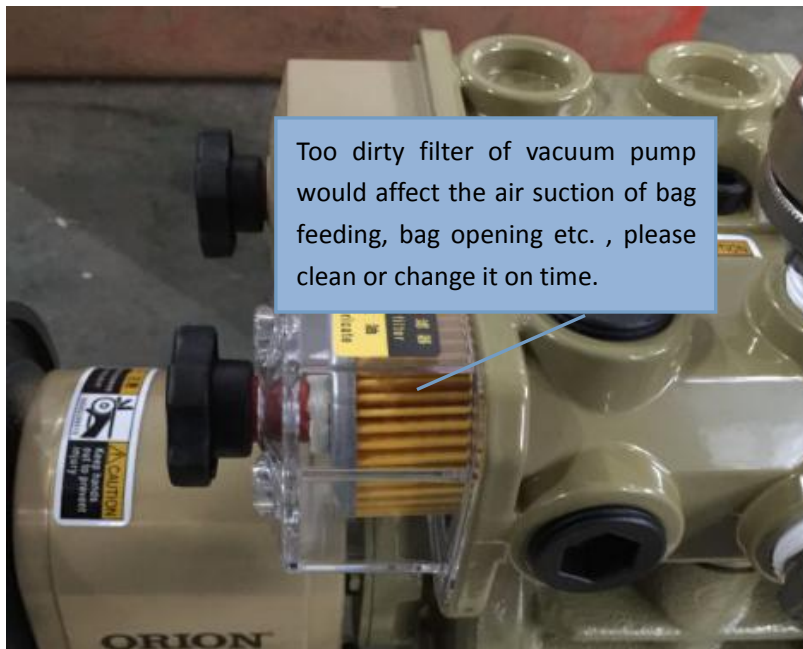
(Fig.18)

ix Pneumatic System:

- 1) Vacuum pump adjusts the air pressure



(Fig.19)



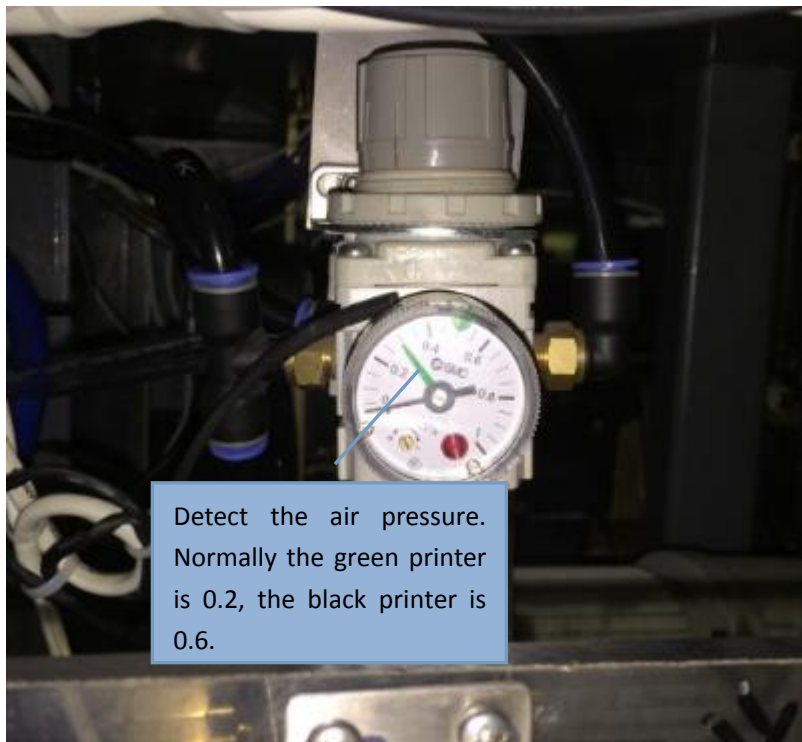
(Fig.20)

2) Use the valve to drain when there is water in the air filter.



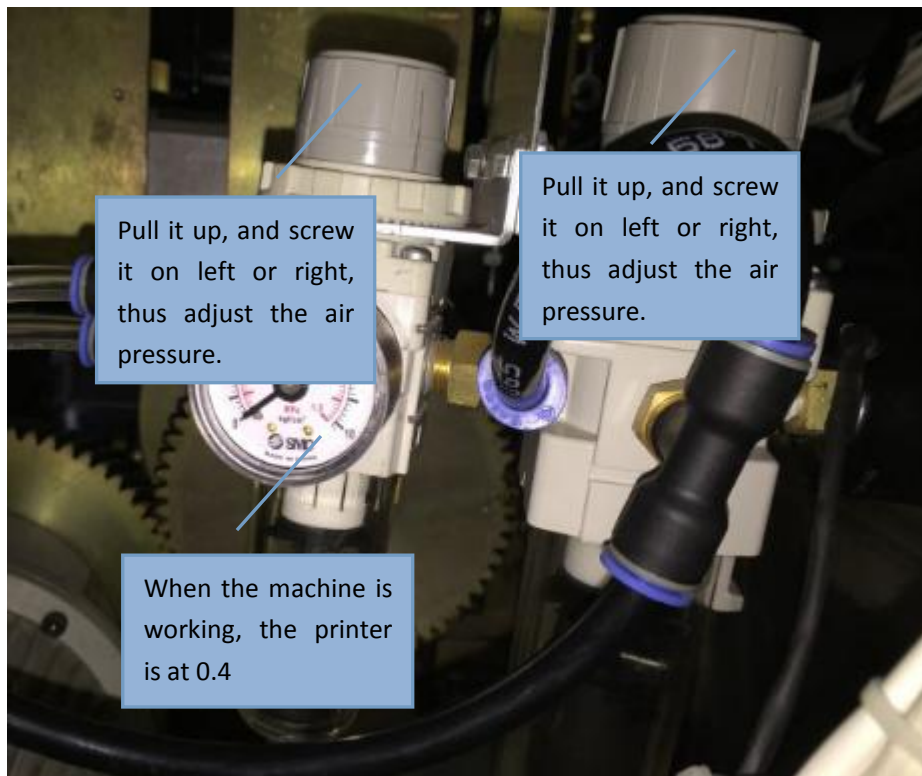
(Fig.21)

3) Adjust the pressure switch on the air filter, which lowest pressure is 0.2Mpa. When the pressure is lower than 0.2Mpa, the machine will stop and alarm.



(Fig.22)

4) The pressure of air supply for the machine is usually set on 0.5Mpa by reducing valve (regulator handle).



(Fig.23)

5) Cut over the air supply is carried out by vent valve.

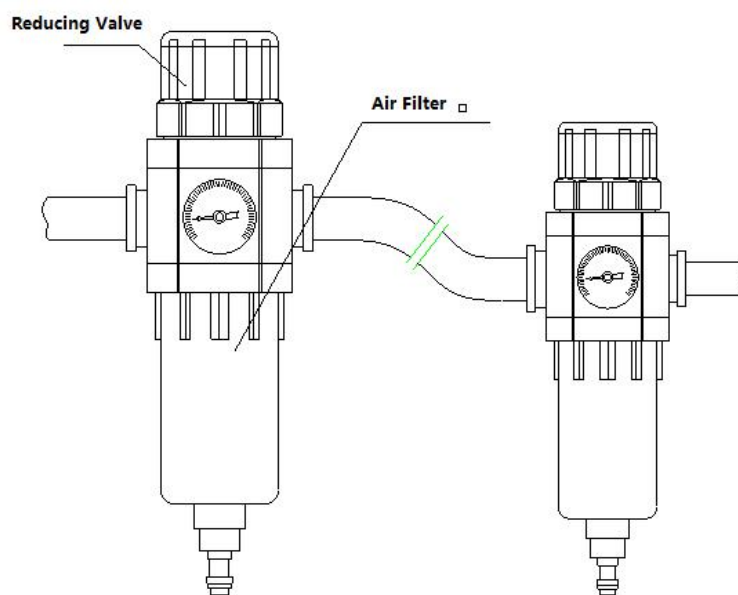


Fig. 24 Air Filter and Control System

VIII. Touch-screen Setting

i 【Startup Screen】

After connecting the power, turn on the power switch, about 20 seconds later, show the 【Startup Screen】 Fig.25



Fig.25

ii 【Main Menu Screen】



Fig.26

- a. Click on the options dialog bar, enter into the corresponding screen;
- b. Click "Back", return to the **【Systems Selection Screen】** ;
- c. Click the "Adjusting Menu", show **【Password keypad】** Fig. 27;

First choose the Adjusting Menu in Fig.26.

iii **【Password Screen】 , 【Number Keypad Screen】**



Fig. 27

iv **【Adjusting Menu Screen】**

1. **【Parameter Set 1-5】**and **【Sealing Parameter】**-- click "Back" to return to main menu, click "PageUp" to return to the last page, click "PageDown" to return to the next page. "Jog"--Same function as the button in **【Operation Menu Screen】** .
2. The system setting password:123456
3. Click the "x" on the top-right corner of password keypad can close this screen.
4. Usage of **【Password Keypad Screen】** : Input the numbers, click "ENT" to confirm. (Note: *CLR*--Clean, *Enter*--Confirm, fail to input if the number beyond the range)



Fig.28 【Operating Menu】

2. In 【Operating Menu】 Fig.28, the user can click the detection switch in 【function select】 Fig. 29 to set as you required.



Fig.29 【function select】

3. 【Parameter Set 1-5】

The parameters in 【Parameter Set 1-5】 and 【Temp. Parameter】 are already set by the manufacturer during the machine producing, so no need to set these parameters during normal production. Only adjust them when maintaining. (Please kindly store the parameters set.)

The method for inputting parameter setting in form: click on the "digital display" part in the form (note: show zero when there is no input), pop a digital keyboard to input the parameters.

Click the “Jog” when setting parameters is finished, to check whether each action is OK.



Fig.30 【Parameter Set 1】



Fig.31 【Parameter Set 2】



Fig.32 【Parameter Set 3】

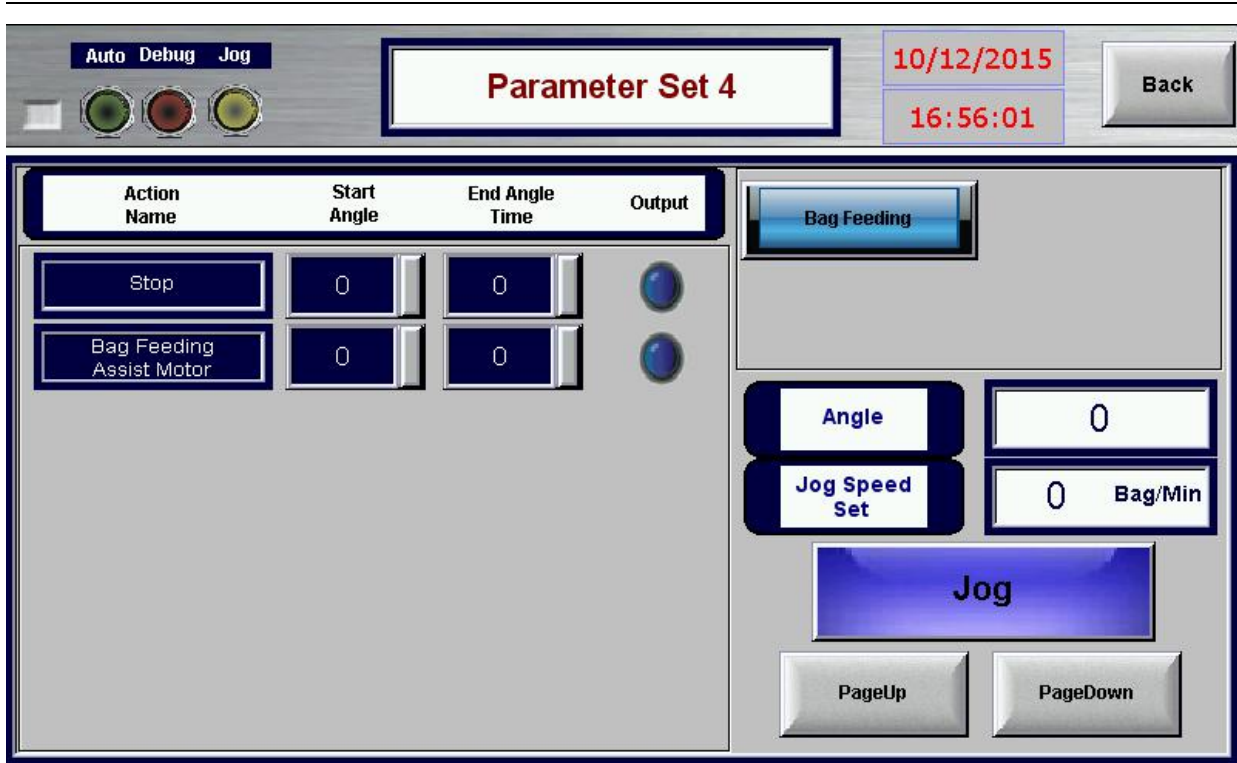


Fig.33 【Parameter Set 4】



Fig.34 【Parameter Set 5】

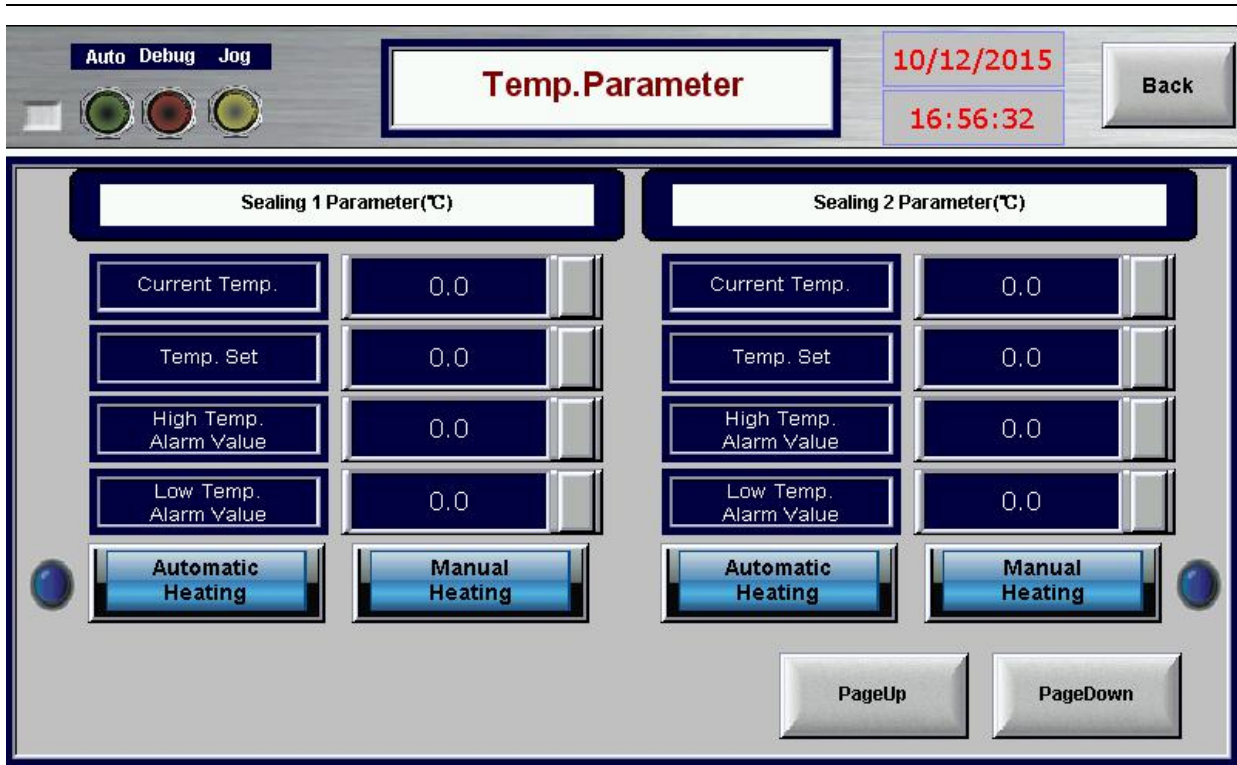


Fig.35 【Temp. Parameter】



Fig.36 【Parameter Group Save】

The machine can store packing parameters of four bag specifications for standby.

E.g. Bag A Parameter: bag clamp position, date coding, bag opening+ air blowing, heat sealing 1 (temperature), heat sealing 2 (temperature).

When you finished manufacture product of Bag B, and want to manufacture product of Bag A again. You can enter into 【Parameter Group Save】 and press “*Bag A Parameter*” . The program would automatically adjust machine according to bag A parameter, thus efficiently help the operator do the adjusting work.

Parameter Setting Direction:

The controller decomposes a station of packaging machine to 360 operating angles, when the machine working continuously, the working angle changes repeatedly at the range of 0-359. For example, setting “on” value of “*bag-feeding suction*” , the value must be adjusted to the time when the suction cups clamp the bags, and at the range of 0-359 . Setting “close” time of “*bag-feeding suction*” , the value must be adjusted to the time when the suction cups loose the bags, and the bag is carried to the bag feeding clamps (as shown in Fig.37).

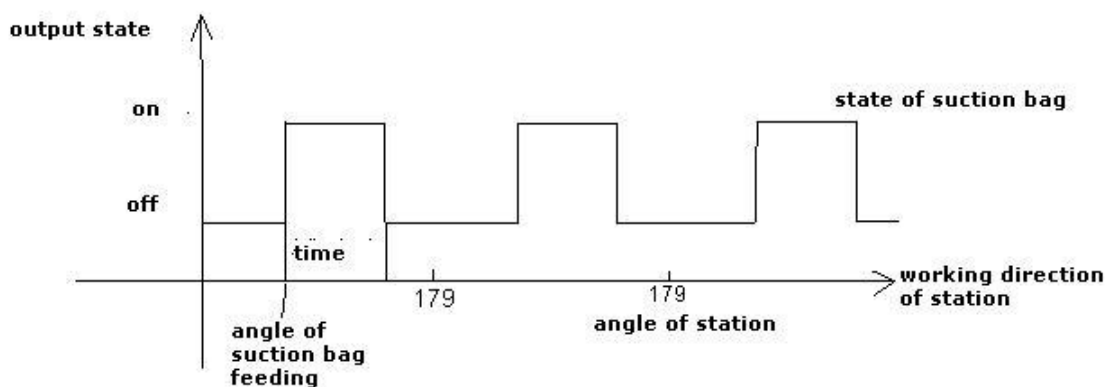


Fig.37 Output Schematic

v 【Debug Menu】 :

【Debug Menu】 Only need to set when machine is in production and

maintenance, no need to set when machine is in normal working.



Fig.38 【Main Menu】



Fig.39 【Debug 1】

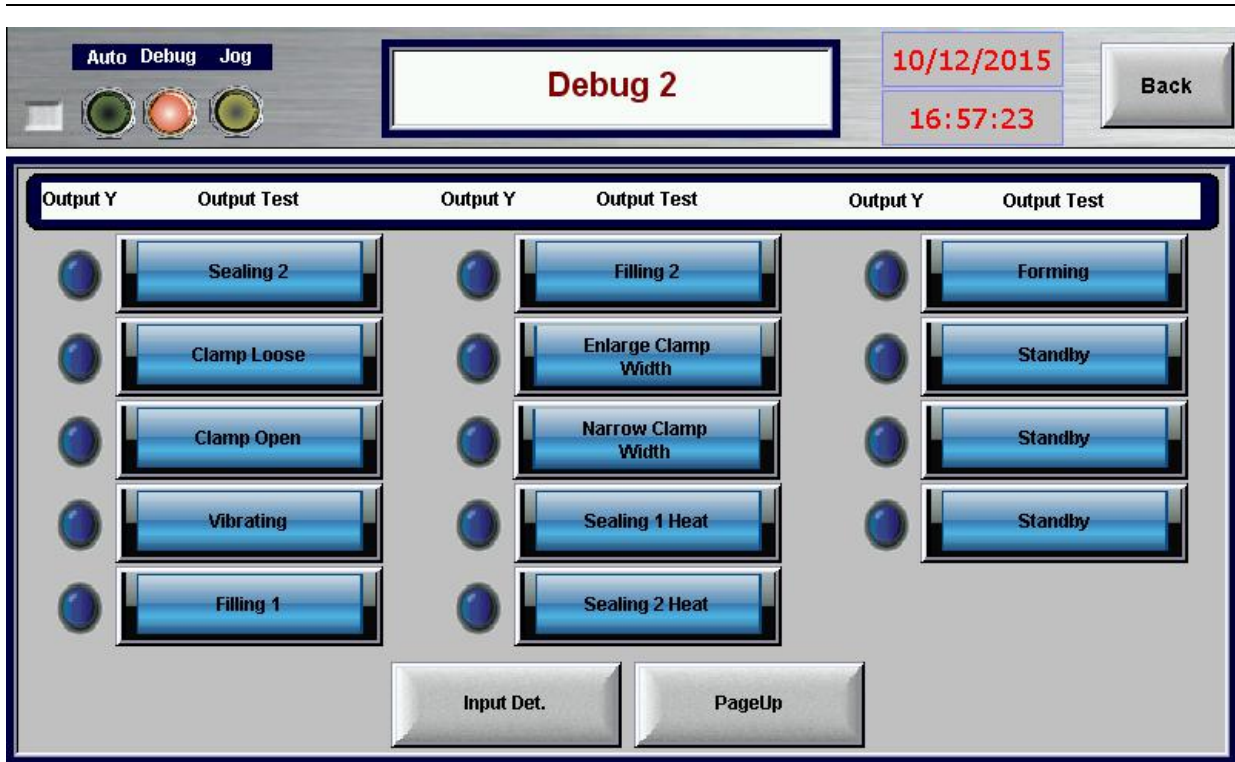


Fig.40 【Debug 2】

Enter into 【Debug Menu】in Fig.38 to control the buttons on the screen. Press the buttons on the column of “*output test*” to check if all the functions are normal (buttons light means ON). Any questions, please check the related output device and driven circuit.

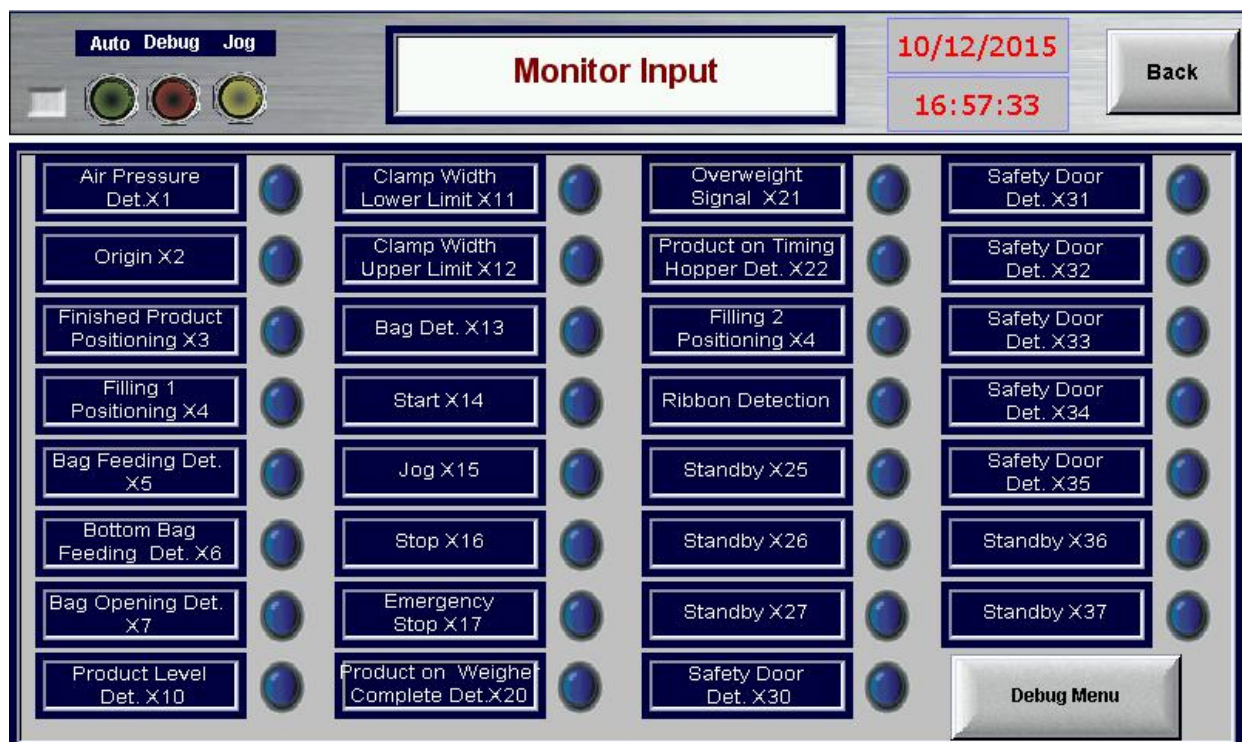


Fig.41 【Monitor Input】

This screen is used to monitor the signal input station. When you enter into this screen, the indicator lights mean there is signal input, and the switch is normal. If the indicator doesn't light when the machine is working, which means there is a problem in the switch or connection circuit.

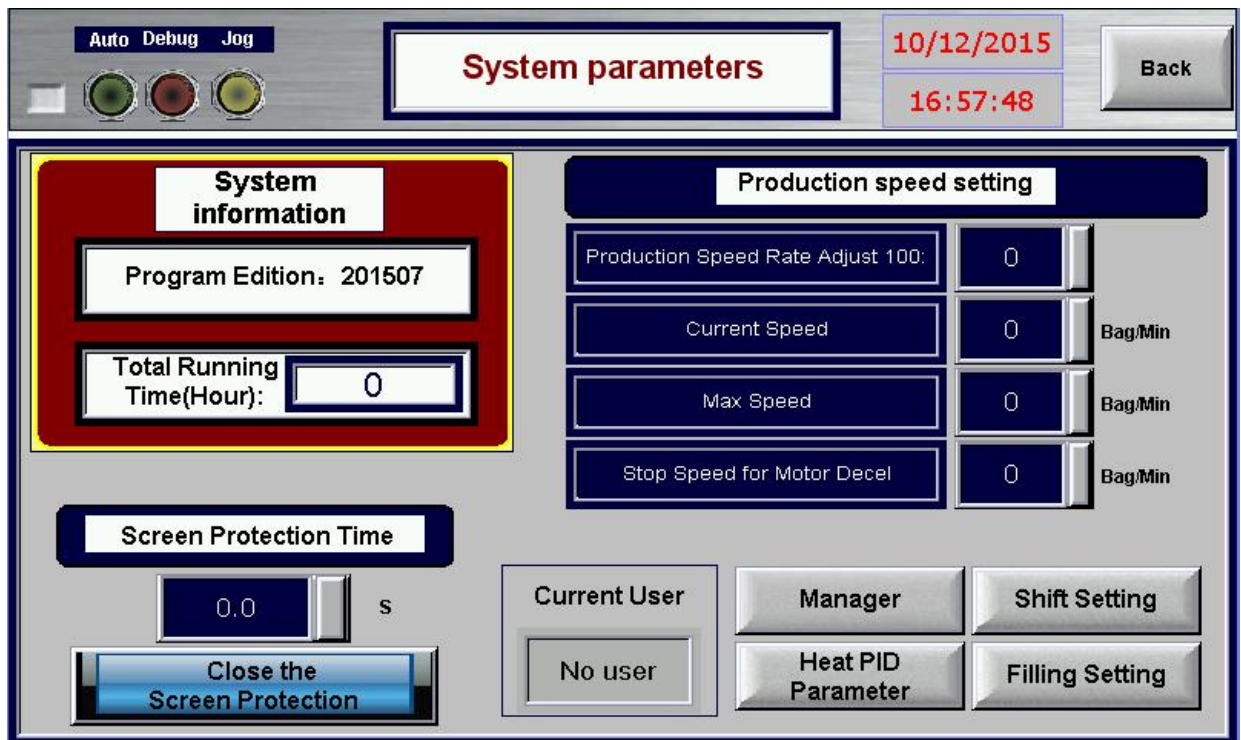


Fig.42 【System Parameters】

This screen shows the production speed setting:

1) “*Production Speed Rate Adjust 100*” gets the machine production speed according to motor odds. When there is a difference between machine speed on the operating screen and real machine running speed, if real machine running speed is slower than production speed, increase the value, and if real machine running speed is faster, decrease the value.

2) “*Current Speed*” should match with the production speed in operating

screen.

3) “Max Speed” is the limit max speed for setting this machine.

4) “Stop Speed for Motor decelerate” shows when machine is stopping, the rotating speed for decelerate.



Fig.43 【Shift Setting】

The shift on this screen shows the relevant station action opening time when the bag opens and bag fullness signal opens.

E.g. “Sealing 1 Bag fullness Shift” shows when bag goes through the bag fullness signal, the opening of sealing station is after how many stations shifts.

If the bag fullness signal and bag opening signal is both opened, one signal is not input, then the filling fails, and the subsequent actions in this station would not work.

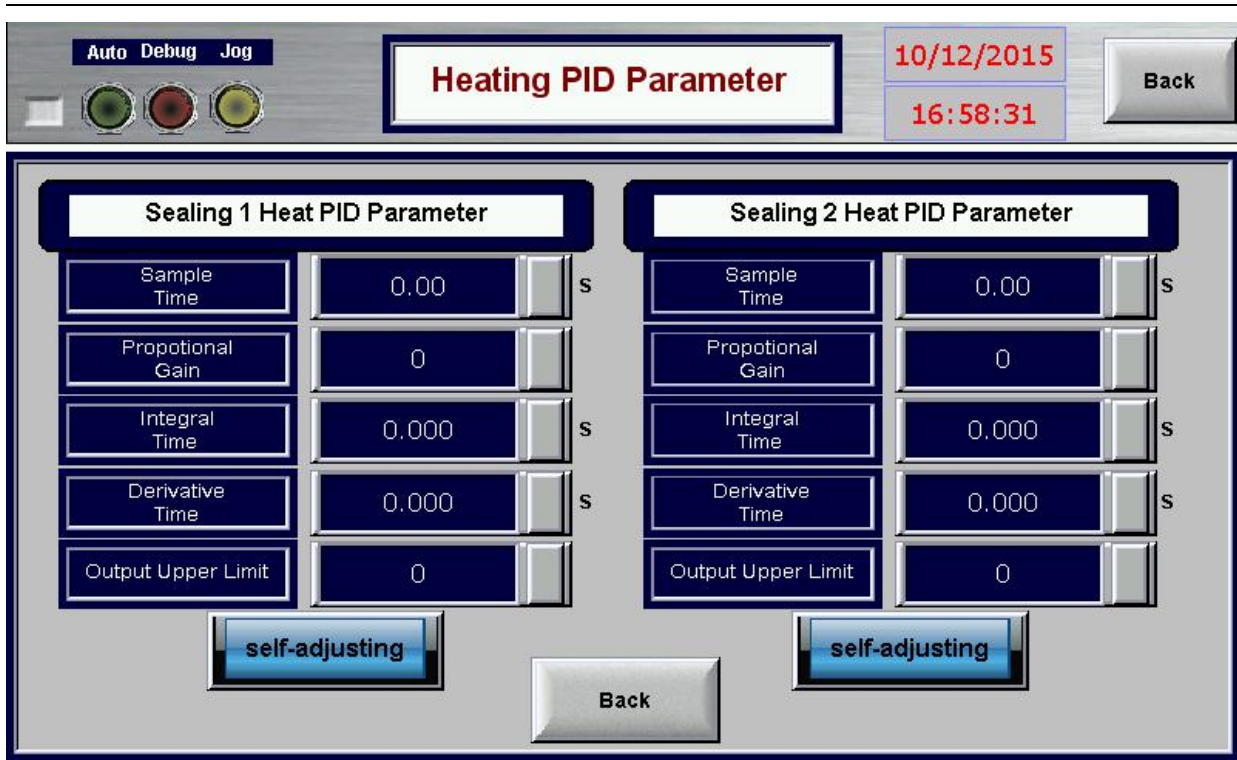


Fig.44

vi **【Operating Menu】** :Functions of each screen,button:



Fig.45 Operating Menu

1) Function Select

2) Total Running Time: show the running time from the machine first start

time to current production time, thus maintainer can refer it to maintain

machine.

3) Temp. Control: **【Current】** show the real temperature of sealing 1 and sealing 2. **【Set】** set the required temperature for sealing.

4) Angle: show host encoder synchronous angle.

5) Production Speed: input and show the packaging speed of per minute.

6) Production Capacity: use to calculate the packaging quantity, the package that no sealing is not included.

7) Start: For starting the machine to run.

8) Jog: To press it the machine will run slowly, loosen it the machine will stop.

9) Stop: To press it, the machine will stop soon.

10) Clear: For clearing out total output packages.

11) The ten buttons *“Bag Feeding”*, *“Coding”*, *“Bag Opening”*, *“Bag Bottom Opening”*, *“Forming”*, *“Vibrating”*, *“Filling1”*, *“Filling 2”*, *“Sealing 1”*, *“Sealing 2”*, *“Vacuum Pump”*, *“Finished Product Output”* can start and stop-the blue shown means “stop”, and the orange shown means “start”.

12) “Alarm information Window”: Show the machine running or abnormal information, in the left of *“Reset”*.

13) Alarm Reset: After trouble solved, to click, the machine will be running normally again.

14) Back: Click to return to the **【Main Menu Screen】** .

15) Press set, the “sealing 1” and “sealing 2” turn to red, and the sealing begins to heat.

IX Machine Maintenance and Inspection (Attention: turn off the power

before doing all the operation below !)

1) Clean the machine after finished packaging work every time;

2) Do not use water or steam spraying machine to clean, use soft wet cloth;

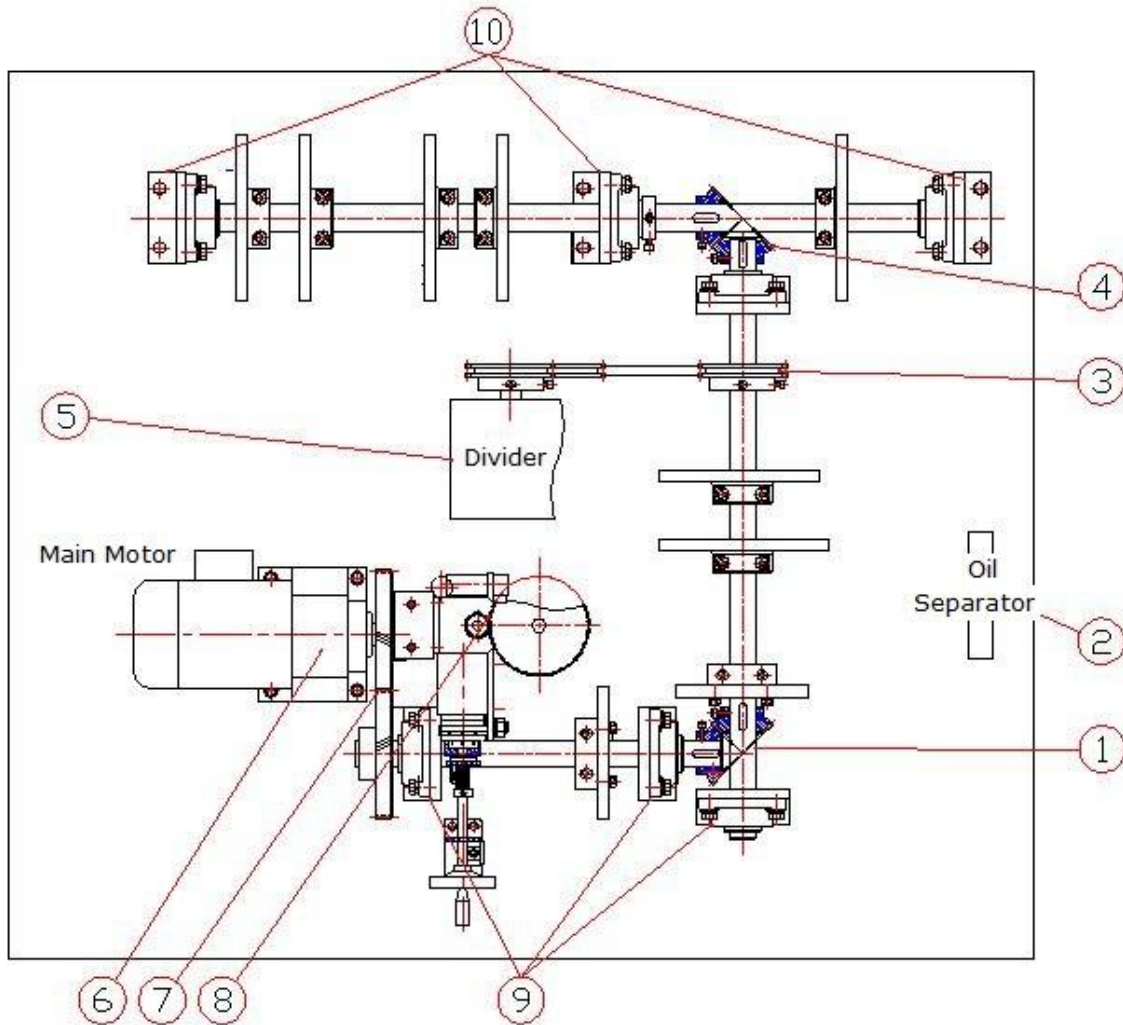
3) Inspect the machine at least once every month, inspect if any looseness of transmission parts, moving parts and fastening piece, if there is, recover it and lock.

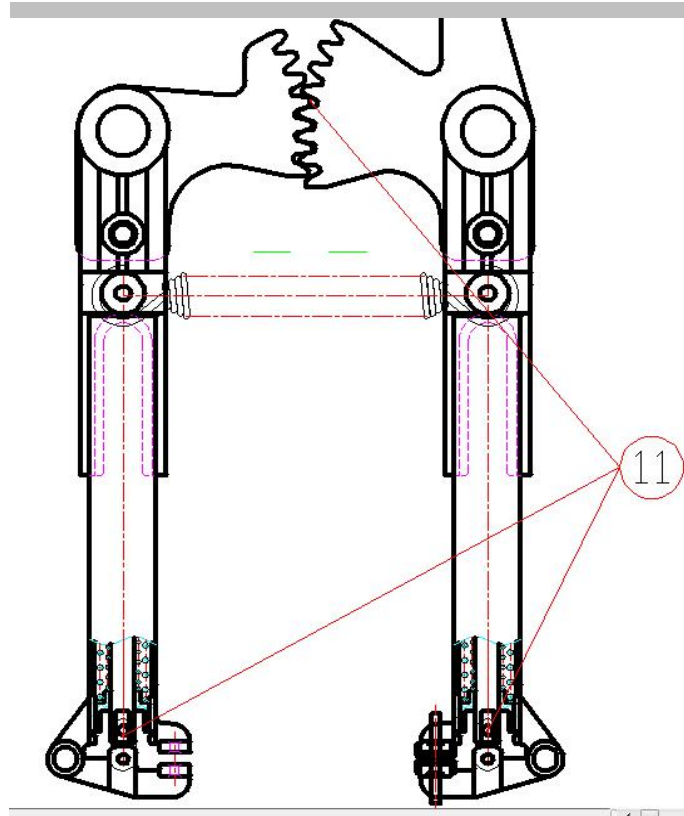
4) Inspect the machine completely every half year, inspect if any damage of transmission parts, moving parts and wearing part, if there is, replace timely; inspect whether the connection of electronic wiring and electronic components is firm, inspect if large mount of dust on the electronic patch board and electronic components, if there is any problem, recover it and clean dust.

5) Adding oil according to the requirement list below

No	Description	Oil Type	Oil Adding Times	Note
1	Bevel Gear	Lubricant	Once per month	
2	Centralized Oil Supply	Gear Lubricant	Once per week	
3	Chain Wheel	Lubricant	Once per month	
4	Bevel Gear	Lubricant	Once per month	
5	Cam Indexers	Gear Lubricant	Once per year	
6	Reducer	Gear Lubricant	Once per year	
7	Gear	Lubricant	Once per month	
8	Gear	Lubricant	Once per month	
9	Bearing Seat	Lubricant	Once per month	

10	Bearing Seat	Lubricant	Once per month	
11	Bag Clamp	Vegetable Oil	Once per day	





Faults and Solutions:

Stations	Failures	Reasons	Methods	
Bag Feeding	Bags fail to be sucked	Vacuum pressure is not enough	Clean the vacuum filter or change the filter element	
		Bag magazine is too wide	Adjust to narrow	
		Bags pressure	Put too much or less	
		Angle of the bag-feeding suction is wrong	Adjust the parameter	
		Bags are largely out of shape	Sort or change the bags	
	Suck too much bags	Bags are stick together	Sort the bags	
		Bags are with static electricity	Remove the static electricity	
		Bag magazine is too narrow	Adjust wider	
		Air blowing for bag-separating not work	Turn on	
	Fail to grip well in bag feeding	Bags are greatly out of shape	Sort or change the bags	
		Angle of the cylinder is wrong	Adjust the parameter	
	Bags are not feeding in level	Bag magazine and gripper is not in line	Adjust the bag magazine up or down	
	Fail to grip well	Center position of bag magazine is wrong	Adjust the bag magazine left or right	
	Bag mouth are not straight	Splint is not in right position	Adjust the splint	
		Angle of bag feeding cylinder is wrong	Adjust the parameter	
	The bag-feeding splint strikes the bag when gripping the bag	Bags are greatly out of shape	Sort the bags	
		Bag-feeding vacuum cups are not in right position	Adjust the suction position	
	Coding	Bags fail to enter into the coding station well	Bags are largely out of shape	Sort the bags
			The position of printer is wrong	Reinstall
		Coding not clear	Temperature is too low	Adjust the temperature
Characters are installed badly			Reinstall	
Ribbon is in bad quality			Change the ribbon	
Bag Opening	Fail to open	The action of cylinder and gripper is wrong	Adjust the parameter of bag-opening cylinder	
		Action of bag-opening suction is wrong	Adjust the parameter of bag-opening suction	
		Cylinder work fast	Adjust the cylinder valve	
		With some problem in bag feeding ⁵⁰	See the solutions for bag-feeding	

Filling	Filling even no bags coming	The distance between the bag expanding rod and proximity switch is too far	Adjust the distance
		The angle of filling is too early	Increase ON value of filling
		Filling is too late, and it is not finished, but the bag moves	Decrease ON value of filling
	No filling when bag open	The timing hopper opened but no filling, the filling is too late	Decrease ON value of filling
		The speed of measure equipment is too slow	Reduce ON value of filling
		The distance between the bag holding rod and proximity switch is too near	Adjust the distance
Heat Sealing	Sealing is not strong	Temperature is too low	Adjust the temperature
		Pressure is not enough	Check whether the connecting rod screw is screw strong or pressure balance, if not, use cooper sheet as gasket.
		With some problem in bag feeding	See the solutions for bag-feeding (not feeding in level)
	Sealing is cockled	Temperature is too high	Adjust the temperature lower
		Sealing position is too high	Adjust the bag feeding position
	Sealing is wrinkle	Temperature is high	Adjust the temperature lower
		Bag material is with problem	Note: to avoid the failure, the buyer must send us sample bags for testing before machine shipping

Note: The failure of some pneumatic components such as cylinder, air suction and air blowing etc. happens, please check by the following methods:

a) Cylinder not working: first remove the transparent pipe on the cylinder, enter into the Debug Menu *Screen*, click the corresponding button to check if there is gas out from the pipe or not (For example, if the bag feeding cylinder is not working, click the *Bag Feeding Cylinder* in **【 Debug Menu Screen 】,**). If gas coming out from the pipe is normal, please change the

cylinder.

b) To check the signal wire with the multimeter, if broken, change it.

c) Click the buttons in *Debug Menu Screen* to check if the light of PLC work or not, light on mean with signal output

d) If all the above parts are normal, then there may be failure in vacuum valve or the solenoid valve of cylinder. 1) with internal dirt, remove to clean or replace a new one 2) The inside electromagnetic coil is burned, change it.

Machine Parameter

(For each machine, all the set parameters must be recorded as following for future use)

Station	Start Angle	Action Time	Remark
Bag Feeding			
Bag Feeding Suction			
Bag Opening			
Bag Opening Suction			
Filling			
Coding			
Bag Expending			
Vibrating			
Air Squeezer			
Heat Sealing			
Forming			

The above parameters will be subject to our scene adjustment in factory, and can be only slightly adjusted about 2-3 degree in the process of production. To avoid colliding between the components, too large change

is not allowed. If any collision caused by improper adjustment, all expenses shall be borne by the customers for the repair.

X. Maintenance Record and Feedback:

Thank for choosing the packing machinery products developed and manufactured by our company. Using our products can promote packing image of your products and improve the products quality and production efficiency, and bring you and your company more benefits.

If there are any problems during the using process or any valuable opinions and suggests, please contact us timely. We will seriously treat your problem and opinion consistently, and refer to your precious suggests!