

AUTOMATIC BLISTER PACKING MACHINE DPP-250

USER MANUAL



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<https://pharmamachinecn.com/dpp-250-blister-packing-machine/>

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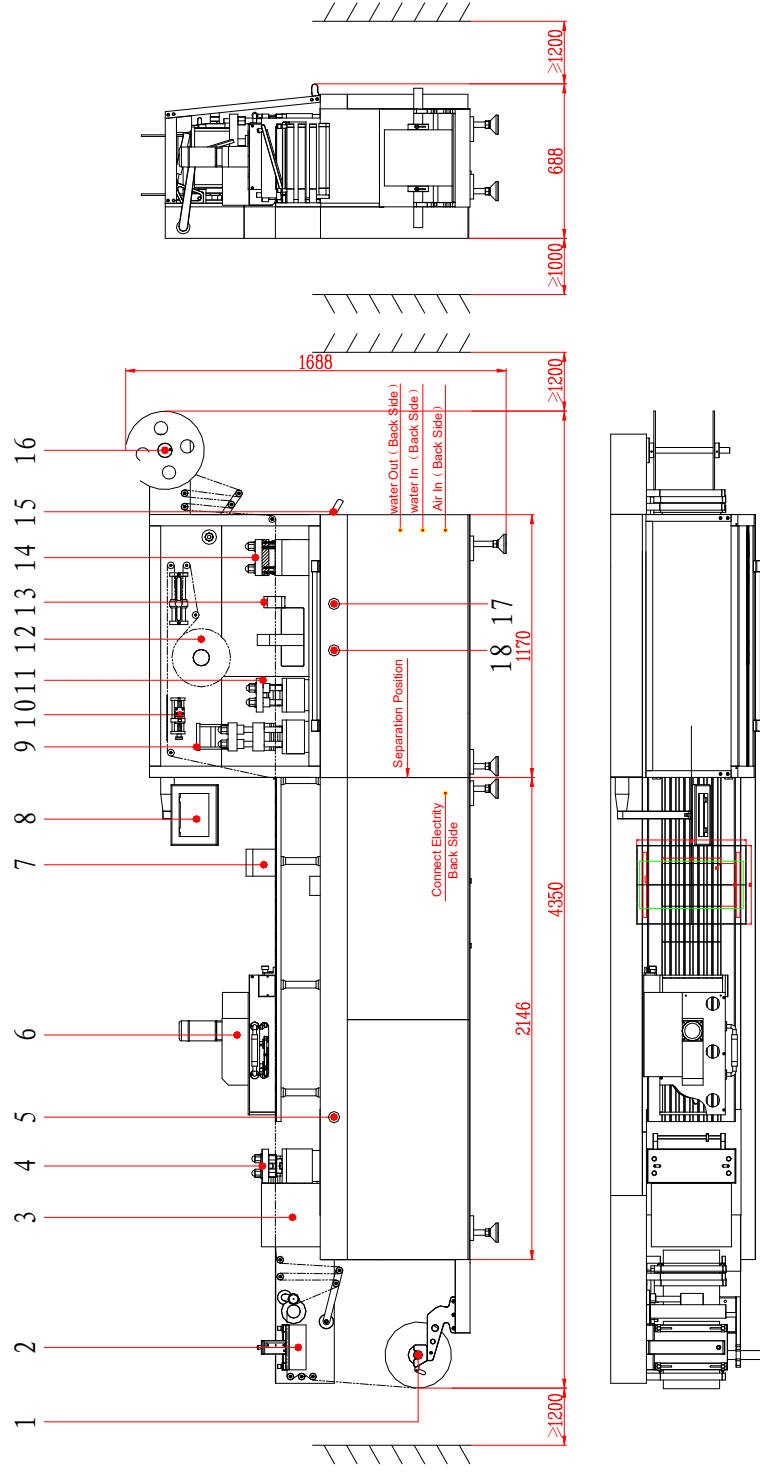
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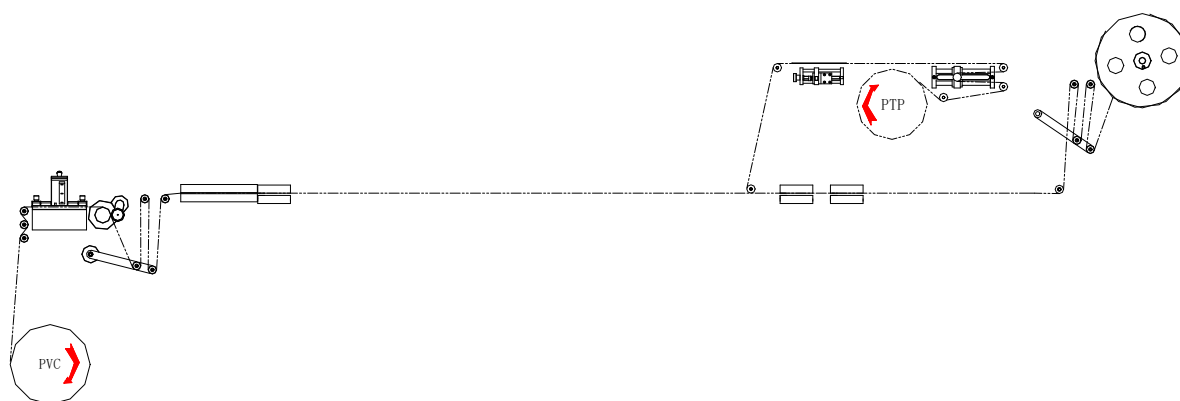
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- 1、PVC 2、PVC Connect Device 3、PVC Heating Device 4、PVC Forming Device
- 5、PVC Forming Mobile Handwheel 6、General Feeder 7、Lack Of Material Detection Device
- 8、PLC 9、Sealing Device 10、Photoelectric To Version 11、Creasing Device
- 12、Aluminum Foil 13、Draught Device 14、Cutting Device 15、Rejection Device
- 16、Collect Waste Device 17、Cutting Mobile Handwheel 18、Creasing Mobile Handwheel

Fig.2 Transmission indicate picture



Pic 2 Transmission indicate picture

I . Application.

Flat Type Blister Packing Machine is specialize sealing equipments applies to packing of alu/pvc or alu/alu blisters for medicine such as tablets, capsules or injection, food, medical treatment apparatus and its similar material. As the packing equipment of the blister type aluminum (PVP)/ plaster (PVC) has taken pressure forming, heat-sealing, so the product come out smoothly and solid.

DPP-260T I Fast Blister Packing Machine designed strictly according to Pharmaceutical GMP standard in which the technologies of frequency control and pneumatic- photo- electro-mechanic are adopted. It's our fourth generation with functions of detection, photo-cell, adjustable range of stroke, body partial and combination, modularization of working stations, two uses of al/pl and al/al and capsule orientation device. The technique fills up the local blank, it's comprehensiveness stands for the leader and more active than the imports.

The company equipped with professional technical support and after-sales service, also send technician to the customer's enterprise to adjusting machines, supervieve technique and training the stuff etc.

This manual explains performance , characteristics , operating and troubleshooting of DPP-260T I Fast Blister Packing Machine minutely. Turn on the machine after reading this manual carefully.

II . Attentions

- 1, Please connect to the ground carefully!
- 2, Make sure that the machine is stopped in the top station when adjust pressure!
- 3, Forbidden to put hands to the forming, sealing, perforation and cutting stations, to avoid hurting your hands!
- 4, Don't put any tool and metal goods on the guide or panel when machines adjusting and working in normal, to avoid object entering sealing station shattering heat plate and heat-weal module!
- 5, Be careful in scalding, for temperature of heating and sealing stations are higher!
- 6, Open cooling water while using, to avoid running hotter, influence life!

III. Installment and maintenances

1) Installment

1, Make sure the whole machine is complete and no damage during the transposition when open the packing (according to the packing list).

2, The machine should be placed level in the room, no need to fix screws on the bottom, but put sheet rubber in 12mm in case that there will be any damage to the ground and remove with the time passing. The minimum area and space for the machine you can arrange according to the picture 1.

3, Clean the whole machine. Remove the oily soil, grime with cleanser essence, and rub it with soft cloth.

4, In order to produce safely, you should connect the line to the ground in the signed place according to nomenclature plate.

2) Maintenances

1, Check-up pressure of compress air whether achieve request of natural production, the pressure should be at 0.5 – 0.7Mpa range, forming gas module pressure should control about 0.5Mpa.

2, Open cooling water valve before boot-strap everytime.

3, Fill enough 20# lubricate oil in the reduction box.

4, Put out water in decompression valve before running the machine every time, to avoid water vapor entering in module to influence blister forming quality.

5, Check-up each rolling axletree temperature while running normally, Min. temperature isn't under 40℃ currently, Max. temperature isn't higher 70℃; and change each rolling axletree's grease per year at regular intervals.

6, Keep definite lubricate oil in cam boxes of forming, sealing, perforation, cutting stations. the oil-level subjects to highest point of cam dipping in the oil-based

7, Check-up oil-level often in reducer-box, the oil-level highth would better not under 2/3 of box, and change the oil inside once per year.

IV. Performance and characteristics

1, DPP-260T I Fast Blister Packing Machine could fission pack to enter lift and division cleaning workshop (fission position According to Pic.1), adopt column pin location, bolt-fixation, easy to serial production.

2, The die locate day location pin with precision, and press-board dress up.

3, Main motor adopt frequency control: (punch frequency is 50 times/min). It can enact corresponding punch frequency according to travel and full feeding easy or hard factor.

4, Adopt engine-hand nip draw station, running steadily, synchronization nicety, change travel and design the plate size at will on the range of 30-120mm.

5, Forming and heating plate close and open automatically, it could protract time to boot-strap after put down heating plate, limit wasting material less than one edition.

6, Air bed sealing, net-plate is hoisted by cylinder while stop. Avoid making blister metamorphose by heat radialization while settling, easy to clean the net-plate also, at the same time, play the role of buffer when Overpressure, is propitious to prolong machine usage life.

7, Up-lower net-plate male and female work in heat-sealing, there are punctate net-veins on the positive and negative (could line-pressurize also). Because two side stress are equality, make plate more

level-up, improve pressurize capability as well.

8, Alarm and stop while PVC is out and discription, easy to replace and add PVC on time for work man.

9, All hardware and container are contact with medicament, adopt stainless steel and innocuity produce, according with “GMP” request.

V. Main Technical Parameters

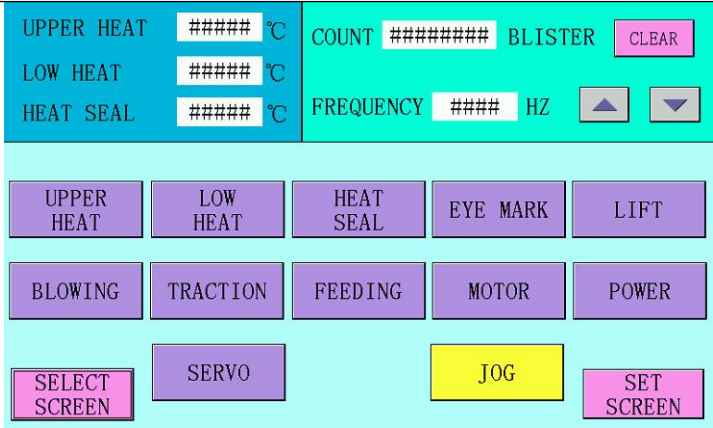
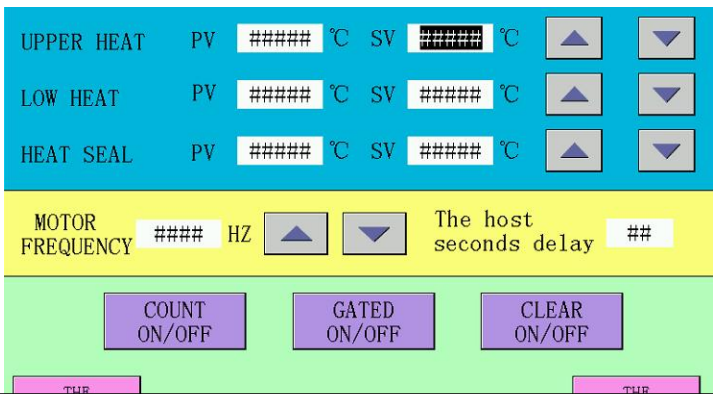
Items		Data
Max. Punch Frequency		10-40 cycles/min (for Al/PVC)
Max. Production Capacity		2400-9600 blisters/min (Al/PVC)
Range Of stroke		40-140mm
Max. Forming Area		250-120mm
Max. Formed Depth		Al/Pl: 14mm-25mm
Forming power (Upper& Lower)		2kw (*2)
Heat-Sealing power		1.5kw
Total power		380V50HZ (220V60HZ) 8.5kw
Motor Power		2.2kw
Volume Flux Of Air Pump		≥0.6m ³ /min
Packing Material	PVC	(0.2-0.5)×260mm
	Heat-Sealing Al-Foil (PTP)	0.025×260mm
Overall machine dimension		3450x700x1710mm
Overall Packing dimension		3300x850x1800mm
Weight		1500kg

VI. Startup Operation

1). Preparation job before start

1. Switch on the power accord to wiring principium picture and using electricity safety rule.
2. Refer to machine back mark to get through inlet, outlet water and inlet air valve.

2). Operation procedure

Item	Operation Instruction	Interface
Welcome Interface		
Connect Power, Dextrorotation Emergency Stop Button Which On Screen Left Side To Jumping Position As Arrowhead.	Shows machine model, name, manufacturer, etc	 欢迎使用DPP-260型自动平板式铝塑包装机 Welcome to the DPP-260 Flat Aluminum automatic packaging machine 请 选 择 Please Select ENGLISH 中 文
Language Interface		
User name	Directly enter the interface	 UPPER HEAT ##### °C COUNT ##### BLISTER CLEAR LOW HEAT ##### °C HEAT SEAL ##### °C FREQUENCY ##### HZ ▲ ▼ UPPER HEAT LOW HEAT HEAT SEAL EYE MARK LIFT BLOWING TRACTION FEEDING MOTOR POWER SELECT SCREEN SERVO JOG SET SCREEN
Chinese	Choose “Chinese” enter Chinese Interface	
English	Choose “English” enter English Interface	
Return	Return to previous interface	
MENU Interface		
MANUAL	Press to enter “MANUAL” interface	 UPPER HEAT PV ##### °C SV ##### °C ▲ ▼ LOW HEAT PV ##### °C SV ##### °C ▲ ▼ HEAT SEAL PV ##### °C SV ##### °C ▲ ▼ MOTOR FREQUENCY ##### HZ ▲ ▼ The host seconds delay ## COUNT ON/OFF GATED ON/OFF CLEAR ON/OFF THE THE
AUTO	Press to enter “AUTO” interface	
BASIC DATA	Press to enter “BASIC DATA” interface	
ALARM	Press to enter “ALARM” interface	
DETECT	Press to enter “DETECT” interface	
ADVANCED DATA	Press to enter “ADVANCED DATA” interface	

TEMP CURVE	Temperature curve	
I/O VIEW	Press to enter “I/O VIEW” interface	
MANUAL（for commissioning）		
RETURN	Press to turn back to MENU interface	UPPER HEAT #### ℃ LOW HEAT #### ℃ HEAT SEAL #### ℃ COUNT ##### BLISTER CLEAR FREQUENCY #### HZ ▲ ▼ UPPER HEAT LOW HEAT HEAT SEAL EYE MARK LIFT BLOWING TRACTION FEEDING MOTOR POWER SELECT SCREEN SERVO JOG SET SCREEN
UPPER HEAT	Press the button, PVC upper heating plate start to heat.	
LOW HEAT	Press the button, PVC low heating plate start to heat.	
HEAT SEAL	N/M (for sealing)	
BATCH No.	N/M	
RECTIFY	N/M	
RISE DROP	N/M	
FEED	Press to start feeding ampules, speed is controlled by the regulator knob in the beside of feeding part.	
DRAW	Control the rise and fall of traction clamp cylinder. It uses for connecting pvc commissioning.	
OUTLET	Press to start out-letting (suction) ampules..	
CONVEY	Start/Stop conveyor	
JOG	Press the button, machine spot work, It’s for adjusting machine	
RUN	Press to run machine.	
STOP	Stop machine.	

AUTO Interface

RETURN	Press to turn back to MENU interface	PARAMETER SETTING 2 THE ANGLE ENCODER : ##### REV ##### DEGREE BLOWING STOP ##### DEGREE REV ##### DEGREE STATIC CLIP STOP ##### DEGREE REV ##### DEGREE PNEUMATIO CLAMP STOP ##### DEGREE START ##### DEGREE SECOND BLOWING STOP ##### DEGREE BEGINNING ##### DEGREE MOTOR END ##### DEGREE STOP JOG THE PREVIOUS PAGE THE NEXT PAGE OPERATION SCREEN
UPPER HEAT	Press the button, PVC upper heating plate start to heat.	
LOW HEAT	Press the button, PVC low heating plate start to heat.	
HEAT SEAL	N/A (for sealing)	
BATCH No.	N/A	
RECTIFY	N/A	
RISE DROP	N/A	
FEED	Press to start feeding ampules, speed is controlled by the regulator knob in the beside of feeding part.	
DRAW	Control the rise and fall of traction clamp cylinder. It uses for connecting pvc commissioning.	
OUTLET	Press to start out-letting (suction) ampules..	
CONVEY	Start/Stop conveyor	
JOG	Press the button, machine spot work, It's for adjusting machine	
RUN	Press to run machine.	
STOP	Stop machine.	

BASIC DATA		
NEXT	Press to enter next page of basic data.	UPPER HEAT PV ##### °C SV ##### °C ▲ ▼ LOW HEAT PV ##### °C SV ##### °C ▲ ▼ HEAT SEAL PV ##### °C SV ##### °C ▲ ▼ MOTOR FREQUENCY ##### HZ ▲ ▼ The host seconds delay ## COUNT ON/OFF GATED ON/OFF CLEAR ON/OFF THE PREVIOUS PAGE THE NEXT PAGE

RETURN	Press to turn back to MENU interface	
CAM POSITION	Set up present cam position.	
Upper Heat Temp	Press the button, PVC upper heating plate start to heat.	
Low Heat Temp	Press the button, PVC low heating plate start to heat.	
Heat Seal Temp	0 (for sealing)	
Batch No.Temp	0	
Freq Setup	Control the frequency of main motor.	
Blanking Number	Set the blister quantity of each cut.	
On Duty Yield Control	Control the production quantity when machine work.	
Servo Speed Setup	Adjust the motor’s periodicity	
Tray Reject Number	Set the reject number of blister.	
SERVO JOG	Spot run machine, for commissioning.	
MIAN MOTOR JOG	Spot run motor, for commissioning.	
NEXT PAGE		
NEXT	Press to enter next page of basic data.	PARAMETER SETTING 3 FORWARD TO START SERVO BACK TO PVC START SWING ARM STOP HEAT START CYLINDER STOP ##### ##### ##### DEGREE ##### DEGREE ##### DEGREE ##### DEGREE THE ANGLE ENCODER : THE CURRENT LENGTH SERVO STROKE LENGTH SERVO THE COMPENSATION SERVO FREQUENCY ##### ##### MM ##### MM —— ##### MM ##### HZ SERVO JOG SERVO POINT INTO THE SERVO POINT OUT BACK OPERATION SCREEN
RETURN	Press to turn back to MENU interface	
SIREN OFF	Turn on/off alarm.	
ON DUTY YIELD CONTROL ON	Press to control the production quantity of present running time.	
REJECT COUNT	Show the quantity of rejection blisters.	
ON DUTY YIELD	Show the production quantity of present running time.	

ADD UP YIELD	Show the cumulative quantity.		
ON DUTY RUN TIME	Show the present running time.		
ADD UP RUN TIME	Show the cumulative running time.		
REJECT COUNT CLEAR	Clear present reject count.		
ON DUTY YIELD CLEAR	Clear present production count.		
ON DUTY RUN TIME CLEAR	Clear present running time count.		
ALARM Interface			
ALARM	Show the alarm message.		
SUM/SHEET	In view of Project 1-5 Sum ampoule of each blister		
ADVANCED DATA			
NEXT	Press to access next page of Advanced Data.	UPPER HEAT ##### °C LOW HEAT ##### °C HEAT SEAL ##### °C COUNT ##### BLISTER CLEAR FREQUENCY ##### HZ ▲ ▼ UPPER HEAT LOW HEAT HEAT SEAL EYE MARK LIFT BLOWING TRACTION FEEDING MOTOR POWER SELECT SCREEN SERVO JOG SET SCREEN	
RETURN	Press to turn back to MENU interface		
JOG	Press the button, machine spot work, It's for adjusting machine		
CAM POSITION	At the present status of machine, the cam position shows the number.		
Molding	CAM rise to top dead center, forming die with airway die closed completely, control the the air in and out of airway die. Blow air interval about 150, number interval is 10 to180. (According to the specific condition for fine-tuning.)		
Draw	Traction clip cylinder blowing position, when CAM move from the highest to the lowest point, the CAM down to about half of the position began clamping, and before reach to top dead center to loosen the traction clip.Traction interval about 670, number interval is 230 to 900. (According to		

	the specific condition for fine-tuning.)
Locate	Control the up and down of locating cylinder, cylinder decline when CAM rise to the highest position, loosen the locating cylinder before traction, locating interval about 470, number interval is 330 to 800. (According to the specific condition for fine-tuning.)
Blanking	Control the rejection cylinder of blanking (cutting) part, control it within the scope of the top dead center. Locating interval about 100, number interval is 100 to 200. (According to the specific condition for fine-tuning.)
Reject Sync	Within the scope of the signal to count and rejection, and the scope of the top dead center, locating interval about 150, number interval is 150 to 300. (According to the specific condition for fine-tuning.)
Servo Run	160-300
Rectify Sync	N/A
Stop	When machine stop, the position of each station, can be setup according to the specific situation. locating interval about 100, number interval is 150 to 250. (According to the specific condition for fine-tuning.)
Suck Bottle	Put bottle in blister
Suck Bottle UpDown 1	Feeding arm up and down above feeding roll.
Suck Bottle UpDown 2	Feeding arm up and down above blisters.
Spare	number interval is 0 to 0
NEXT	
NEXT	Press this button to access next page of Advanced Data.
CAM POSITION	At the present status of machine, the cam position shows the number.
Suck Plate	N/A
Detach1	850-100
Detach2	Number interval is 0 to 0, for online use.
Up Heat Temp Range °C	After reach the expected value the thermocouple begin monitoring the temperature.
Low Heat Temp Range °C	After reach the expected value the thermocouple begin monitoring the temperature.
Heat Seal Temp Range °C	After reach the expected value the thermocouple begin monitoring the temperature.
Batch No. Temp Range °C	After reach the expected value the thermocouple begin monitoring the temperature.
Up Heat Time Scale	Temperature heating time interval

Low Heat Time Scale	Temperature heating time interval
Heat Seal Time Scale	Temperature heating time interval
Batch No. Time Scale	Temperature heating time interval
Jog	Press the button, machine spot work, It's for adjusting machine
NEXT	
NEXT	Press this button to access next page of Advanced Data.
RETURN	Press to turn back to last interface.
SIREN OFF	N/A
ALARM OFF	N/A
ON DUTY YIELD CONTROL ON	Control on duty production quantity.
REJECT COUNT	The rejected products quantity.
ON DUTY YIELD	Show machine on duty production quantity.
ADD UP YIELD	Show machine accumulative output
ON DUTY RUN TIME	Show machine on duty running time.
ADD UP RUN TIME	Show machine accumulative running time.
REJECT COUNT CLEAR	Clear the count.
ON DUTY YIELD CLEAR	Clear the count.
ADD UP YIELD CLEAR	Clear the count.
ON DUTY RUN TIME CLEAR	Clear the count.
ADD UP RUN TIME CLEAR	Clear the count.
TEMP CURVE	

UP HEAT CURVE	On the curve shows all the digital temperature.	
NEXT	Press to access next page.	
RETURN	Press to return to MENU interface.	
I/O		
RETURN	Press to return to MENU interface.	
IO.0-I3.3	PLC input corresponding signal.	
QO.0-Q3.7	PLC output corresponding signal.	
JOG	Press the button, machine spot work, It's for adjusting machine	
RUN	Press to run machine.	
STOP	Stop machine.	

Notice: Don't change the advanced data if not necessary!

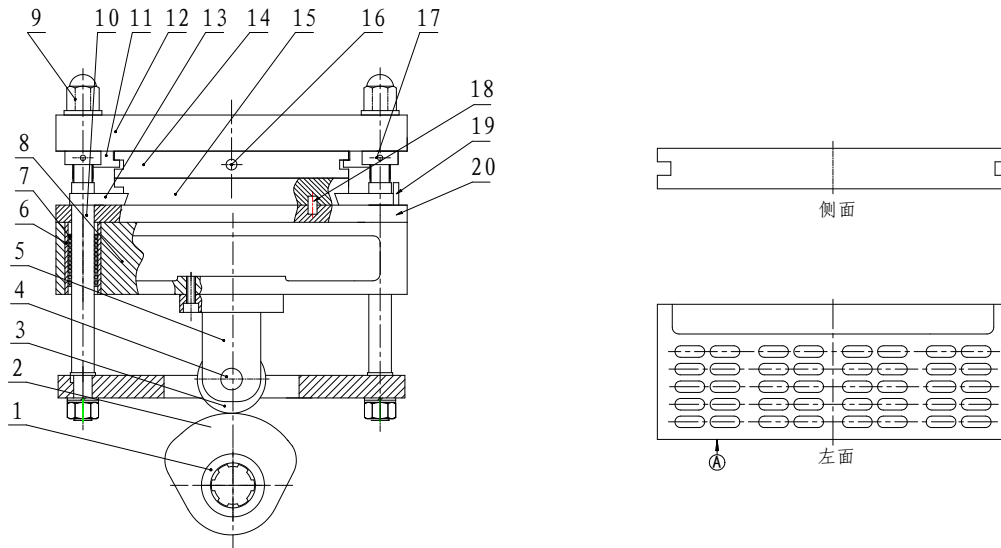
3) Exact Operation

Press moving keyboard to start before working, watch working whether is in gear, if not find any singularity, press amplidyne starting keyboard again, up-down heating plate site position automatically, working automatically after plastic piece intenerate. Watch forming, heat-weal, punch and running.

Start air-stress machine, rise heating plate after charge. Refer to (Pic.2 transmission show) show that plastic piece and aluminum foil have been bunched. Revise center position. Watch forming, heat-weal, punch and running, open feeding strobe put drug to produce after all is in gear (remember to

open cooling water after start).

VII. The using and adjustment of machine

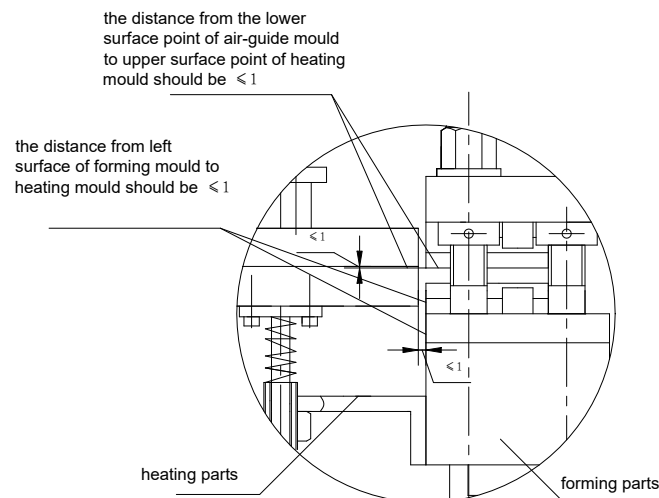


- 1.cam sleeve 2.forming cam 3.roller 4.roller axis 5.roller block
 6.ball jacket 7.ball set 8.under die plate 9.round-nut 10.column
 11.embossed on board 12.flat 13.embossed under board 14.upper airway die
 15.forming die 16.tracheal 17.solid tight-nut 18.location pin
 19.outside-pressure plate 20.cooling plate

pic.11 Aluminum plastic forming station and forming die indicate picture

1. Assemble the aluminum/plastics form die(Pic.11)

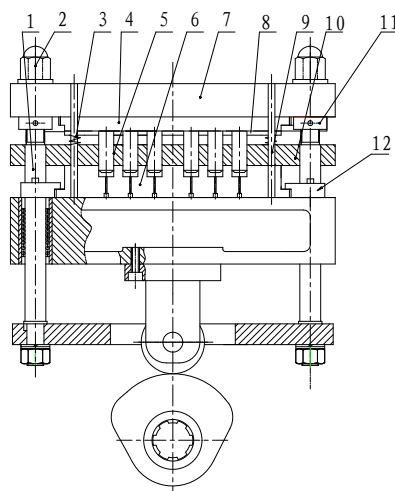
- 1).put the form die approach the heating plate, Clearance for about one mm,(Pic.12), Gap will PVC too long cooling time, Forming the results are not satisfactory.use the mechanism plng fixing position of the form die, Locking splint ends.



Pic.12 forming die installation indicate picture

- 2).Preference for the cell side of the mold(Pic.11), A typical face when heating plate moves, Cooling time so that at least,As shown in Figure 12.
- 3).We need the upper airway die and form die coincide perfectly,or the airway die will leakage,which can have a bad affect on shape quality,tight it with screw after coincid.
- 4).Regulating the heating plate height, And airway Dies difference of a plane around mm, high PVC much difference will occur Wrinkle, As shown in Pic.12.
- 5).Adjust the height of heating plate, Make it on the heating plate and the formation of the coincidence, not arise next heating plate is not just bits and pieces of the phenomenon of the formation of, PVC would otherwise uneven heating, forming quality impact.
- 6).Shake handle (Random accessories) slipped in a positive frame of the pulley hole (opened in front of the middle of the machine can see Cover), let rocking machines Die rise to the highest positions (only points), Forming Regulation Station (Pic. 11) head nut (9) and solid tight nut (17), their upper airway plane suppress Die Die on the plane, uniform pressure to not excessive, Inflatable without leakage can be. (Note : adjustments pressure, must only point on the stands, Surge of pressure to avoid excessive damage to machinery), Transfer will be good solid pressure to bear nuts (17) Turn upward position.

2.Install the havd aluminum form die(figure 13)

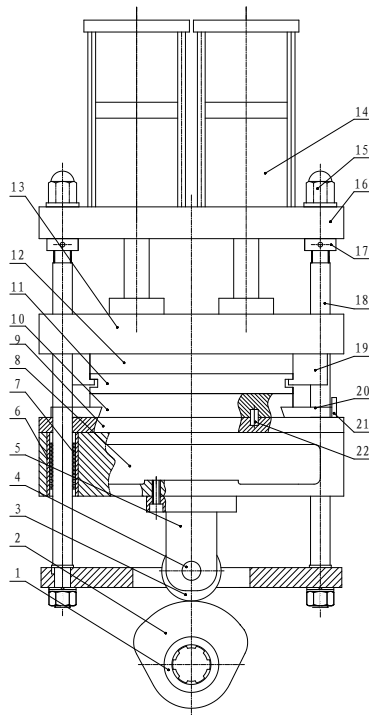


- 1.column 2.round-nut 3.spring 4.on mold
 5.forming punch 6.under die 7.flat
 8.location plate 9.location pin 10.middle die
 11.regulation nut 12.plate

Pic.13 Al/al forming station indicate picture

- 2.1 Installation mode (6), the first two ends platen not compress.
- 2.2 Only stands on the point, the installation mode (10), with cylinder pin (9) Calibration mode with the next model of the center position, Center alignment is not likely to be damaged-forming son, solid tight ends under-platen. Must adjust pressure will be transferred to the next-highest position (only points) Forming pressure as the bubble-forming shapes and text, or graphic clarity, and the corresponding adjustment (note : must adjust pressure on in the stands only.)
- 2.3 Installation mode (4) and cover (7), to tighten regulation of nuts (11) and solid tight head nut (2).

3.Install the heatsealing die(Pic.14)



- 1.heat sealing cam sleeve 2.heat sealing cam
- 3.roller 4.roller axis 5.roller block 6.ball sleeve
- 7.ball set 8.under die plate 9.cooling plate
- 10.heat sealing die 11.netted die plate
- 12.heating plate 13.movement die block
- 14.heat sealing cylinder 15.round-nut 16.on-flat
- 17.solid tight nut 18.column 19.embossed on plate
- 20.embossed under plate

Pic.14 heat sealing forming station indicate picture

3.1 And the installation of the heat-transfer and pressure Die for the same, Die plate next to the center position (to adjust and forming a parallel mode). Installed after the first adjustment and Die distance measurement = length (plate length selvage A + B = traction itinerary) X multiples (ie forming and heat sealing spacing theory is the entire trip several times) (Pic.16),

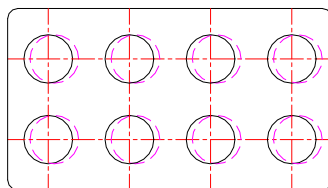
Forming and heat sealing module to the actual distance between them after the formation of the plastic Blister model

accurately hit the heat sealing holes later. If (Figure 15 -1) vertical pressure appeared to be foam of regulation. Moment (Pic.1)

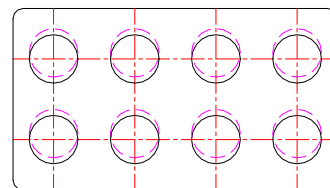
mobile hand wheel (4), makes the point forward or backward movement, Blister reached with the heat-hole exactly date (note : After adjusting until after the blister forming die from the beginning of the heat-traction, Prior to forming that PVC heat sealing must be observed completed all regulatory effect, Closed to the heat-after plastic film around traverse got no better). As a result (Pic.15 -2) at the

—— Die position
- - - - blister position

1、vertical pressure form



2、lateral pressure form



film

Plate runing direction



Pic15 Sealing Blister Moving indicate picture

forming points
forming

lateral pressure foam molding can be loosened heat sealing plate left or right adjustments, mold it into a film and the heat-Blister good agreement, and then adjust Guide, if (Pic.16) splayed guide screw (3) (5) Road track (4) (7) left or right adjustments, Blister reach and fully consistent, calibrated after solid tight screw (3) (5).

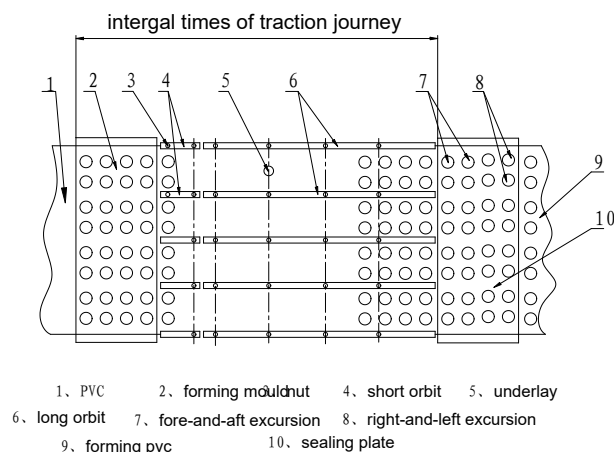
3.2 Netted template installation : (Pic.14)

Netted template installation and forming on the same airway ,With the next model is right after the platen (19) compress.

3.3 Pressure regulator (Pic.14)

1.PVC(plastic piece) 2.forming die 3.bolt 4.short-rubit 5.pads 6.long rubit 7.before and after abduction 8.left and right abduction 9.forming plastic piece 10.heat sealing die Fig.16 regulation of transmit Regulatory pressure, the next model up to the highest point, when the heat cylinder under pressure, adjust column head nut (15) and solid tight nut (17), so that netted plate (12) and the heat mode (10) uniform contact Netted template timely closure promote upward about 3 mm (actual operation and the air pressure and heat sealing temperature, Netted effect, as may be), available ruler or vernier caliper measurement. (Note : The line sealed modest increase pressure.)

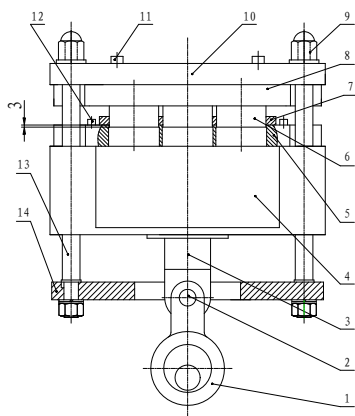
3.4 Guide adjustments (Pic.16)



Pic16 Guide asjusement

Adjuust short guide(4) and long guide(6),made one side of the two draw close the flanlc of blister, Figure (17) of paragraphs 2 and 4 track (Don't close too tight).

4. Blanking die Installatio



- 1.eccentric 2.pin 3.under die block 4.under die plate 5.under die
- 6.on die 7.stripping board 8.on die block
- 9.round-nut 10.flat 11.inner 6-angle screwdriver
- 12.inner 6-angle screwdriver 13.column 14.floor

Pic.17 blanking block indicate picture

4.1 Loose nut(9) plates covered head to the assembled components Die Mold(10) lead on the next board, know their position and inner 6-angle nut(12) ends with solid screws tight installed on the Block mode(8). Shake the handle so that the model guide plate (3) increased contact will be on the scale coincide(6) with the next model(5), the back cover(10), use inner 6-angle nut(11) to punch Block (8) solid tight, then shake hands machinery, die(5) down.

4.2 Position adjustment : moving around the adjustable (Pic.1), the mobile hand(13) punching round, about regulation can be loosened (Pic.17), inner 6-angle nut(11) and (120, by the need to Die components and move around, adjusting to the post-bear.

5. Clamping and reel material adjustment

Unloaded cone platen, By (Pic.2) drive Map or "workflow" signs in the direction of plastic or aluminum foil solid drum tight. If the drum center and die center unaligned, further loosened Cone platen, Its inward or outward adjustment, after re-alignment adjustments solid tight cone platen.

At work fine-tuning nut will then transferred to reel ideal location, after the formation of the plastic film Blister selvage equal on both sides. Fine-tuning methods : splayed solid tight nuts, fine-tune after locking nut.

6. Vibration Feeder common use

6.1 Machines aluminum / plastic packaging to adopt a common Feeder see(Pic.1)(5) will be loaded for drug Feeder observed forming, heat sealing, Punching and operation of all normal and opened Addison Switching, vibration plate began vibration, drug from the feeder for feeding to the inside inflow. Drug content by the number of Feeder photoelectric sensor control, the amount of drugs to meet the requirement, Vibrator stop vibration, to stop the inflow of drugs Feeder, when less than a certain amount began vibration, so repeatedly. Feeder disc roller screen and screen rotation and open the gate as the size of the drug shape, Size and mobility and the packing case may be, in any event, does not achieve the best results can be filled.

6.2 Brush plate Adjustment

Brush site level should be based on the size of regulating drugs, the general site of the brush close to the plastic film feeds plane, Filling the actual results, as do adjust accordingly. The Feeder convenient adjustment, the only loose within 1.60 fastening screws can be adjustable disk brush.

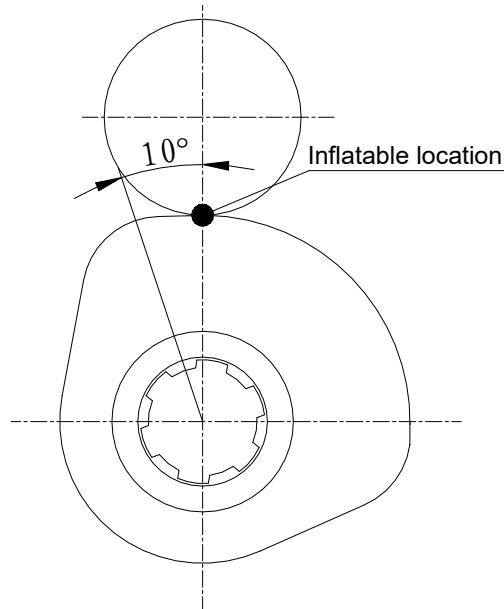
6.3 Brush rolled in, or the use of medication for a period of time after feeding on brush rolled response (including disk screen) cleansing, Removing the Feeder convenience, as long as the release within two housings 20.60 screws can be successively from the bottom of the former housings. outward brush rolled out to clean up after using the same method put in ourselves.

7. Pneumatic

Compressed air into the double-pressure valve, the pressure of not less than 0.5 MPa, and should be controlled in the 50-70 Mpa. Oil Mist for those wanting to add a little oil (20 # oil), the joint relief valve control forming, pressure at around 0.5 Mpa. Boot class prior to the jangled nerves within the venting of stagnant water, so water vapor entering Blister, the effect of forming quality.

VIII. Traction running cam adjust(refer to Pic.19)

Pic.18 cam setting indicate picture

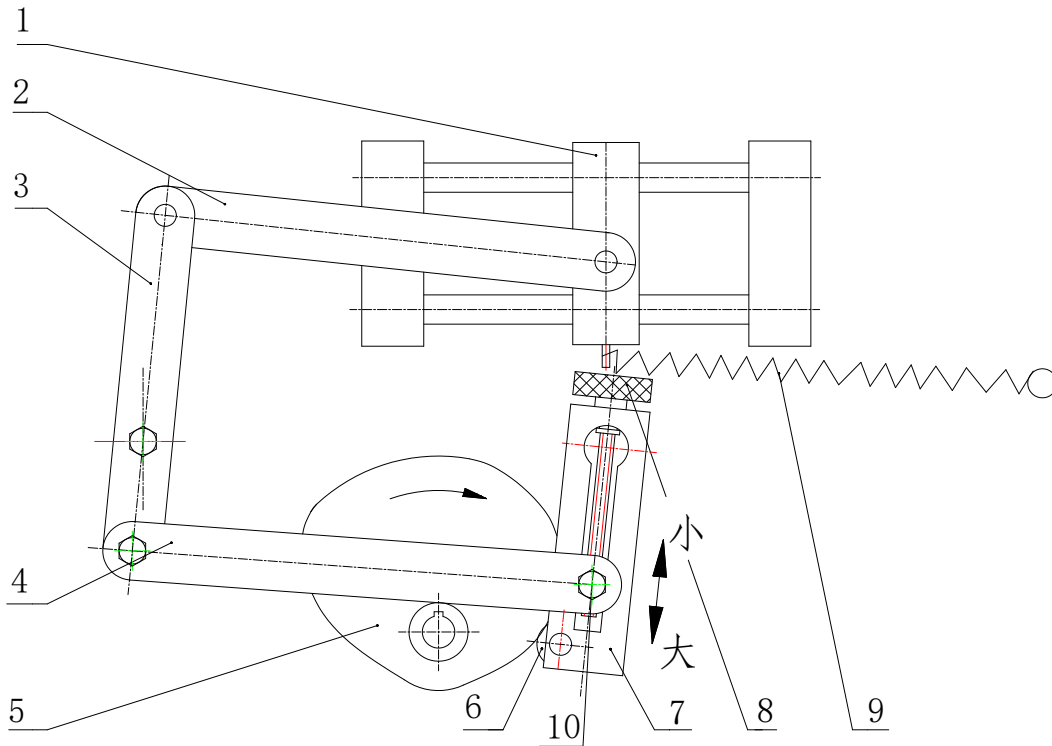


Pic.19 forming inflatable position cam indicate picture

DPP-260T I Fast Blister Packing Machine's pneumatic electricity magnetism valve is controled by coder, could set frondose time when people operate menu's cam setting. The current position in the cam setting menu mean place is going round and round. Pic.18 is the menu have been setted successfully. The configuration interface is blowing location for the zero encoder, if coder is disloucation, in forming the inflatable position encoder adjustment of the gear will encoder transferred back to zero only. Forming inflatable cam position to be adjusted to only point on the turn around 10 °, figure 19 shows. Cam will be installed to set up the interface shown in Figure 18 (under specific circumstances for fine-tuning). The machines can be normal work spaces.

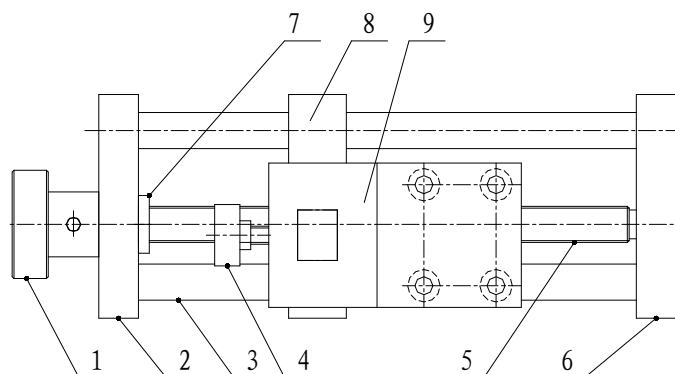
IX. Travel adjustment

Feed with a mechanical adjustment program: open the back doors machines (corresponding location), Loosen (Pic.20), the solid tight Nut(10), adjustment travel and adjustment handle(8), Clockwise direction of rotation, shortening the trip, an anti-clockwise rotation is extended trip. Traction specific length set by Cam decided



1. slider 2.linkage 3.shot put 4.linkage 5.cam 6.roller 7.roller block
8.adjust stroke controller 9.reset spring 10.solid tight nut
Pic.20 Traction agency indicate picture

X.liaht electric version(pic.21)



- 1.big handle 2.front-position plate 3.posite axis 4.small handle
5.asjusting lead screw 6.behind position plate 7.screw
8.light electric eye 9.light electric eye block

Monitor color code that printed on the back seal materials by light electric eye which installed under back-sealing materials during machine running continuously, due to accumulation errors will change forward to light electric eye direction. When color code enter light electric eye monitor scope, light electric eye will feedback optics signal to main procedure, procedure start attraction hand (PIC.20-1) small cylinder impetus stair piston pole moving upward, make traveling shorten 0.3mm, after run continuously a few travels to correct color code position, main procedure will start small cylinder that on traction hand replacement stair piston pole, make machine travel change back setting length again. Adjust travel length so starting once again to make picture on plate position error definite in scope of one light electric eye diameter, to achieve picture and character version goal.

The back-seal materials which use for electro-optics version that back side print drawing what user design and color code use for version. When user print picture on foil, according to plate length add waste edge width obtaining color code distance.

User could adjust light electric eye right and left position by revolving adjusting screw rod (PIC.21-1) what on bighanglt, loosen solid cocking(PIC.21-4) move slide position could adjust light electric eye front and behind position, loosen inner-6 angle which on light electric eye block(PIC.21-9) to adjust light electric eye's up-down position.

Annex 1--Common Faults and elimination methods

	Fault	Reasons	Removal methods
Plastic Blister Form badly	Blister-end perforation	1.temperature is too high 2. PVC poor quality	1.Lower temperature 2.Turn over PVC plastic film
	Forming incomplete	1.forming temperature is too low 2. the next scale parallel 3. O-ring damage 4. stomatal and blowing vent plug 5. air pressure is not appropriate 6.inflatable time wrong	1. Increase temperature 2. Column regulation ball nut (including locking nut), and down-scale parallel anastomosis good seal 3.Replace o-ring 4.Dredge with steely 5. Adjust the pressure relief valve, typically (0.3-0.5Mpa) 6.adjust inflatable cam station(To be closed or Die blowing)

Aluminum Foil Blister Form badly	Blister forming deep is not enough or depth inconsistent	Forming not tuned in depth	Loosen (Pic.8) by the regulatory Nut (15) (16) downward adjustment with vernier caliper measurement of the depth of bubble forming, drugs than 0.3-0.5 mm thickness, depth, if inconsistent, available vernier caliper measurement within the claw forming stations on the automatic mode (8), and forming die under the distance between, Adjustment (15) and (16) Nut parallel to 1.40, the error is less than 0.1 mm
	After forming the bubble burst eyes	1. Forming deep depth 2. Foil elongation not enough	1. Lower forming depth 2. Otherwise purchase
	After forming on the plane wrinkle	1. Forming deep depth 2. Forming to the distance Forming to the distance	1. Lower forming depth 2. Forming station adjustment nut(18)(19), the next step up pressure on the scale between
Blister plastic film can not accurately entered Kong feel the heat	Ahead or lag	1. Not good trip transfer 2. Forming to the distance Forming to the distance	1. Measuring each version of the itinerary is accurate or not, if the gap between adjustable forming itinerary 2. Moment (Pic.1) forming mobile hand wheel, adjusting the heat Die Mold and the distance between
	Horizontal edge or partial unilateral tight	1. Track improper adjustment 2. Die with the heat and cooling system, leading to a rise in temperature deformation of PVC or extended 3. PVC poor quality, heated on both sides stretching inconsistent	1. Adjust orbit 2. Cooling water flow increase 3. Replace PVC(plastic piece)
Heatsealing bad	Not sticking firmly	1. Low temperature aluminum foil until they surface of the plastic melting point 2. Foil poor or uneven glue	1. Increase temperature to maintain a constant temperature at about 160 ° C (the exact temperature and the room temperature and the speed of the) 2. Replace aluminum foil and try again
	Netted uneven	1. Netted rust or pollution 2. Heat-weal temperature too low 3. Netted plate coincide with the next-bad	1. Clean with wire brush or used wire saw blade sharpened 2. Increase heat-weal temperature 3. Local oil grinding stone under-plane (to be Hongdan or vegetable Tu-plane

		4. Forming temperature is too low, rafah blister forming a bubble and the thin bubble between the thickness 5. Under pressure 6. The next module grievances 7. Cylinder heat sealing column rose high enough, the heat mode to the highest point, the upper die (plastic plates) must have about 3 mm to promote upward	after next Netted board will coincide mobile point of contact anomalies) 4. Increase forming temperature 5. Increase heat-weal air pressure (not more than 0.5Mpa) 6. Transfer right platforms 7. Loosen columns four head Nut, downward adjustment, promote upward shall not exceed 5 mm, parallel to foursquare
	Foil through pressure	1. Heat-weal temperature too high 2. Too much pressure on the heat	1. Lower heat temperature 2. Lower heat pressure
Aluminum foil wrinkling	Natural wrinkle	Aluminum foil and plastic film adhesive was not parallel Rafah	Turn aluminum foil, adhesive again
	Oblique wrinkle (All the wrinkles oblique direction)	1. Aluminum foil unilateral close or loose 2. Foil roller is not parallel 3. Forming, die installation are not parallel	1. Regulate both positive and negative rod adjustment screw, change to the stick parallel degree Festival 2. Regulation (Figure 1) Knurling adjust the handle (18), so that pressure stick with the orbital plane-parallel 3. Correction two parallel mode, a general benchmark for Die, Die correction heat sealing

Annex 2—Electrical components schedule

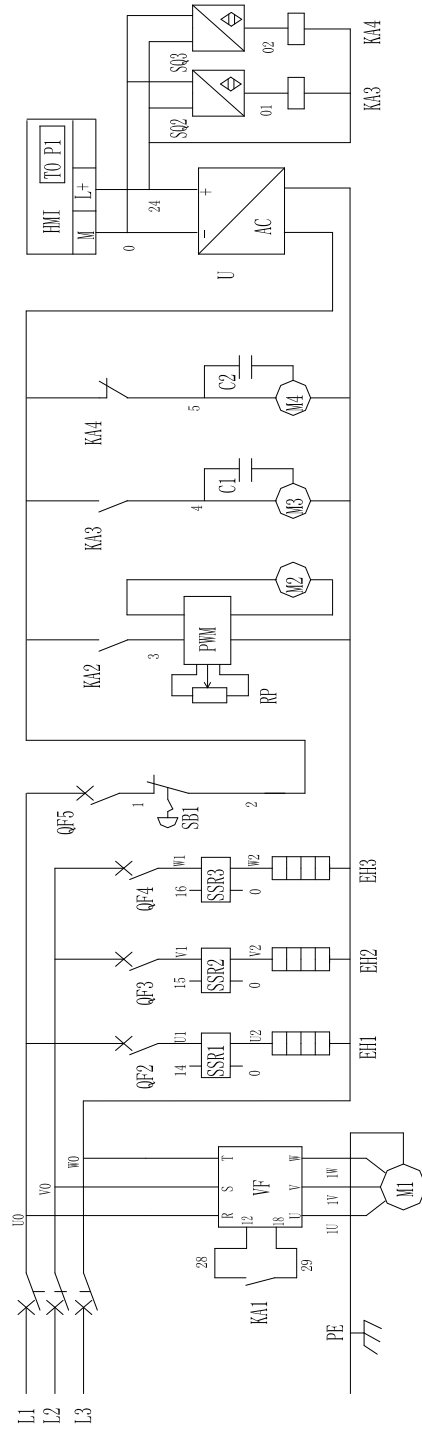
Name	Model	Quantity	Remark
Touch screen	PWS1711-STN	1	24V
Programmable controller	ES3200T2	1	
Temperature controller	TDA4848V1	3	220V
Inverter	WFD-A	1	2.2Kw
Air switches	DZ47	4	10A/P-3, 3A/P-1
Solid state relay	SSR	3	40A

Proximity switch	JZ-D4NK-M	3	DC-9V-30V
Switching power supply	S-40-24	1	40W
Ac motor	90YY40	3	90W
Dual hot	WRNX-21	3	2.5M
Solenoid valve	4V210-0608	1	220V
Transformer	BK-350	1	120V
Photoelectric amplifiers	E3X-NALL	8	24V
Fiber	TC-200	16	
Motor	Y2-90L-4	1	1.5Kw
Addtion motors	90ZYT02	1	90W
Filling governor	4A	1	
Heating plate		1	2Kw
Buzzer	DMQ-27	1	DC6V-15V
Ac contact electric	CIX1-12/22	1	50HZ,220V

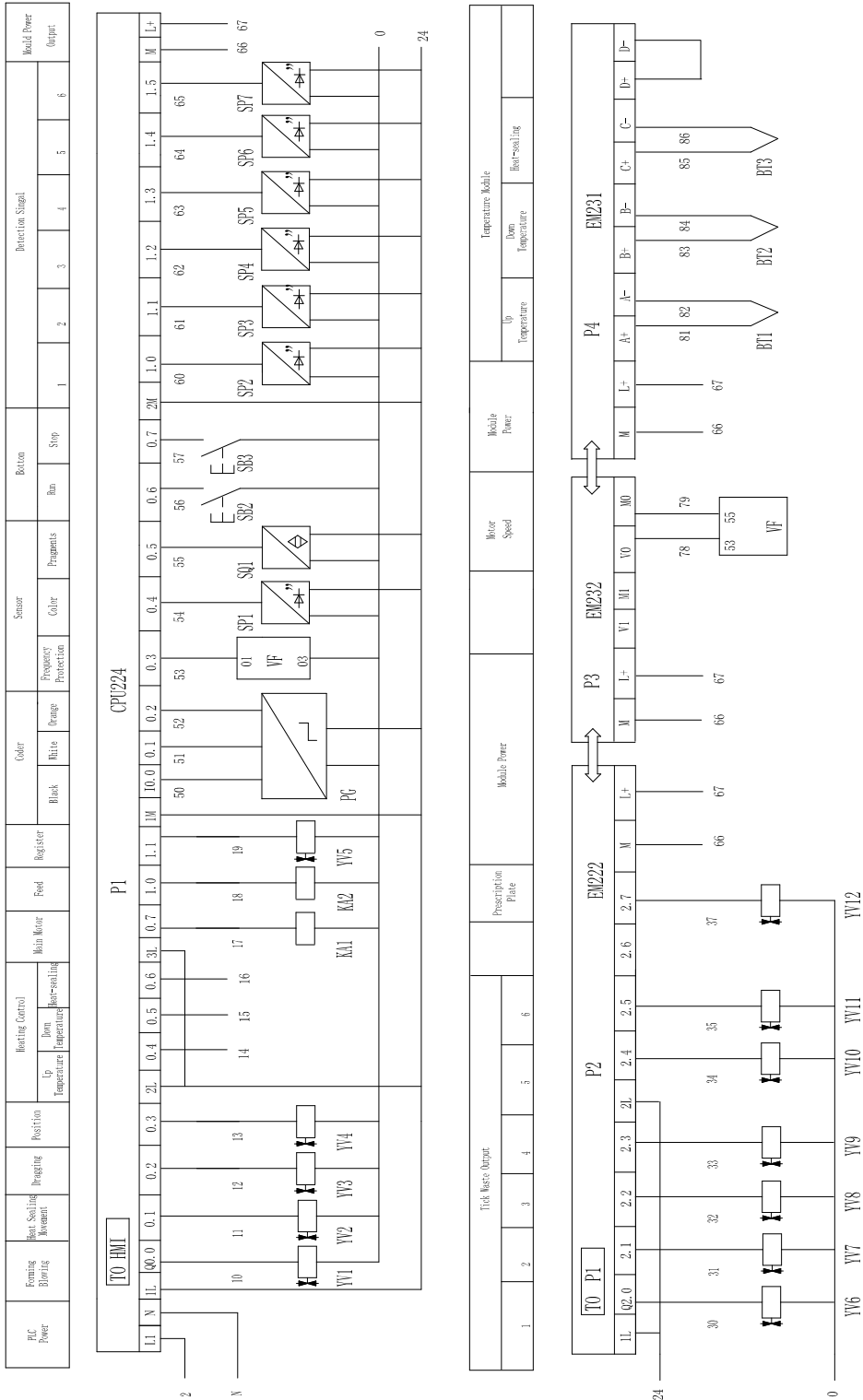
Annex 3--Electrical schematic diagram

260T I –PLC (A)

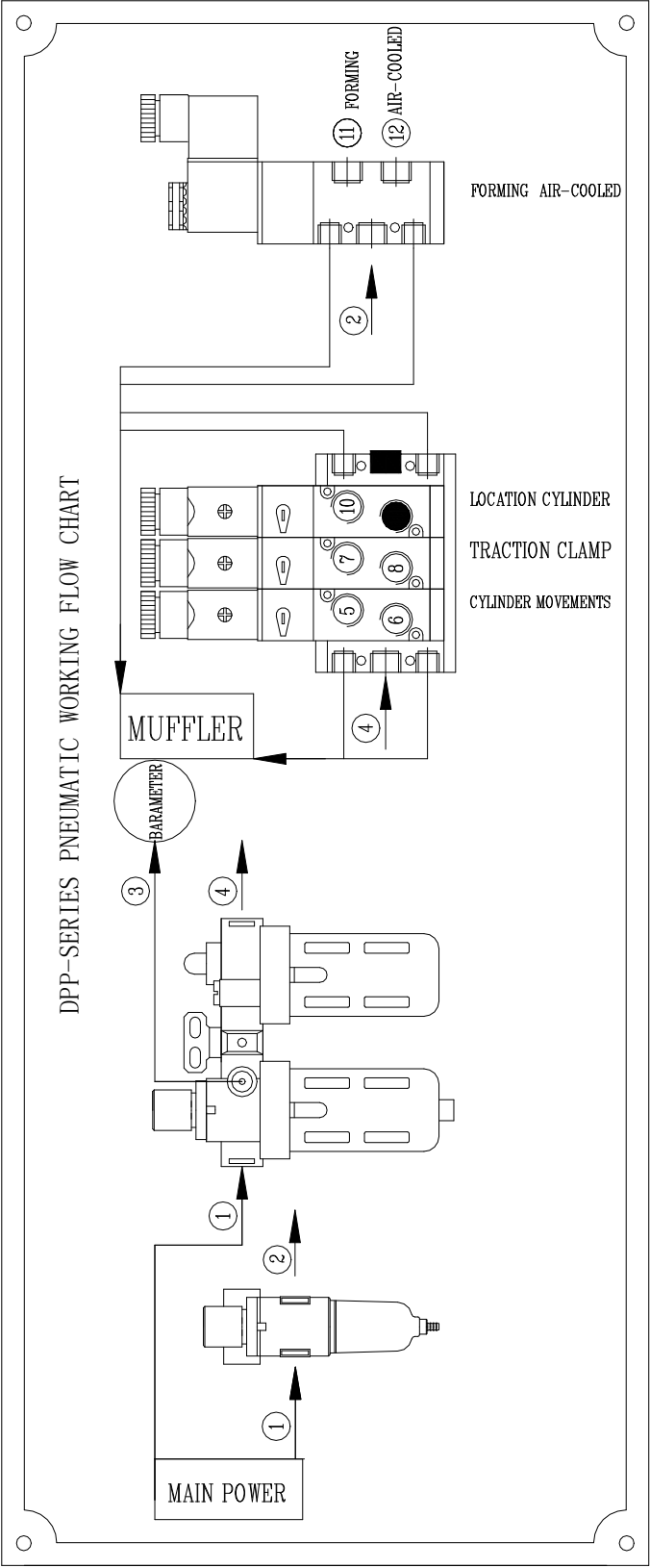
Power	Mian Motor	Heater		Stop	Feed Motor	Waster Motor	pvc Motor	Screen	Waster Singal	Pvc Singal
		Up Temperature	Down Temperature							



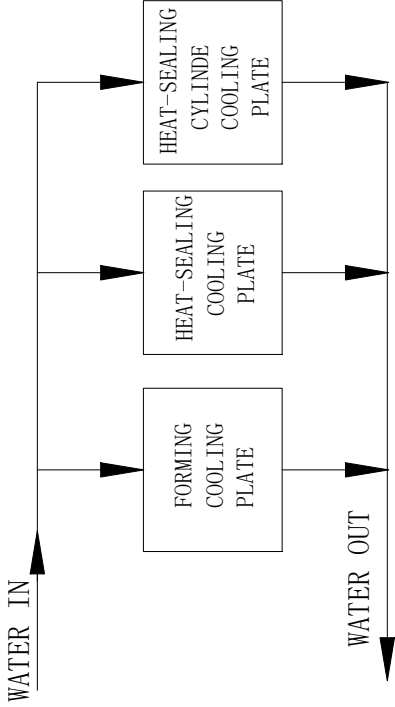
260T I -PLC(B)



Annex 4—Pneumatic Diagram



PS: 1、①.④ is $\varnothing 10$, other is $\varnothing 8$.



Annex 5—packing list

No.	Name and specs	Quantity	Remark
1	DPP-250/260Blister Packing Machine	1	
2	Shake the handle	1	
3	Steel digit (0-9 each20)	150	
4	Steel letter (A-Z each 5)	130	
5	Wire brush	1	
6	Roller	2	
7	Needle:5X30	50	
8	sharp-nose pliers	1	
9	Screwdriver “Slotted”“Cruciform”	2	
10	Inner turret wrench 5,6,8,10,12 mm	5	
11	Moving wrench:8,12 inch	2	
12	Pressure oil can	1	
13	Forming seal rings	3	
14	Cylinder seal rings	2	
15	Solid relay	1	

Annex 6—technical Documents

	Technical papers	quantity	Remark
1	DPP-250/260 Blister Packing Machine manual	1	
2	Factory certification	1	
3	Temperature controller manual	1	
4	Inverter manual	1	

Due to the continuous improvement products, certain areas may be inconsistent with the statement,in the absence of significant changes without further notice.