



Preheat Machine

Operation Instructions

Preface

We are very grateful to your trust and care! For you to know more about the characteristics and functions of the operation, repair, maintenance and consumables, we issued this Operation Instructions to help you to operate the machine smoothly in the future work. If any words failed to express the meaning or did not read smoothly, we hope you will not stint your criticism, we will sincerely accept and improve it.



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I · Safety Precautions

1. Before operating the machine, you must read to know the operation instructions and safety precautions.
2. Only the professionals who know the machine and familiarize with the risk and rule of the machine can repair it.
3. Must guarantee that no danger to all people around the machine before starting up the machine.
4. When the machine is running, prohibit change or adjust the components and related units.
5. Only to repair and service the machine after shut off.
6. Prohibit operate the machine in case the operator's body or tools were wet.
7. Before connecting the power supply, please check the operation voltage, pressure and ground.
8. Prohibit collide the electrical equipment in the control area to prevent damage.
9. Prohibit remove the safety warning symbol from the machine.
10. Prohibit damage the safety switch on the machine or change its functions.
11. The safety door must be closed at any time.
12. The main switch must be shut off if the machine stopped running.

II、 Applications

Preheating machine mainly designed for mascara or other paste, quantitative accuracy.

III、 Specification

	Specification	Size
1	Dimension	41x51x142cm (L×W×H)
2	Air Pressure	4~6 kg/cm ²

IV、 Environment Conditions

1. Mechanical environmental temperature should be 0~50°C.
2. Mechanical environmental humidity should be 20%~85%RH.
3. The machine should be avoided from dusty polluted environment.

V、 Environmental Noise Estimated Value

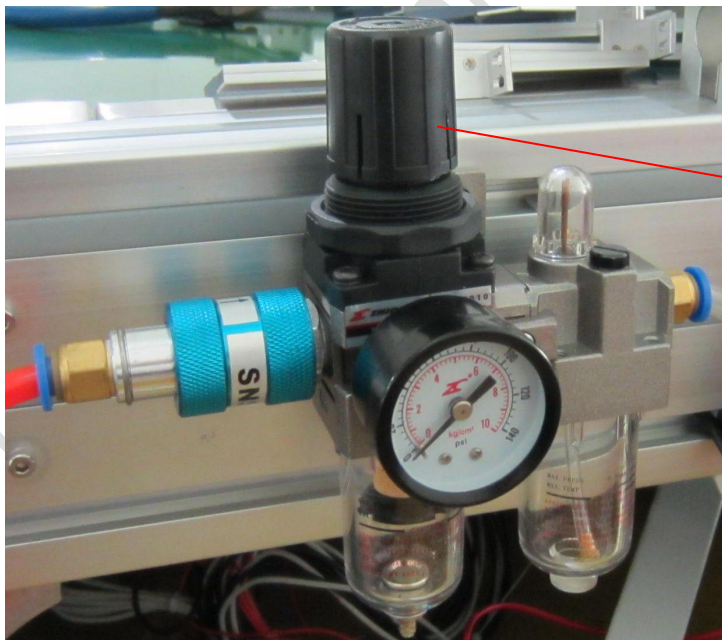
When the machine is running, the noise level produced is below 65dB(A).

VI、 Installation Methods

Before start the machine, air pressure and power supply must be connected well, and adjust to the lowest working requirement (air pressure 4~6kg/cm²), then start the machine.

Adjust the Air Pressure

- (1) Connect the air pressure source to the C-type quick connector on the left of the machine.
- (2) Adjust the pressure regulating knob. Adjust the needle to 4~6kg/cm² on the pressure gauge ; Pressure regulating knob must be pulled up to rotate, clockwise rotate to increase pressure, otherwise, decrease pressure.

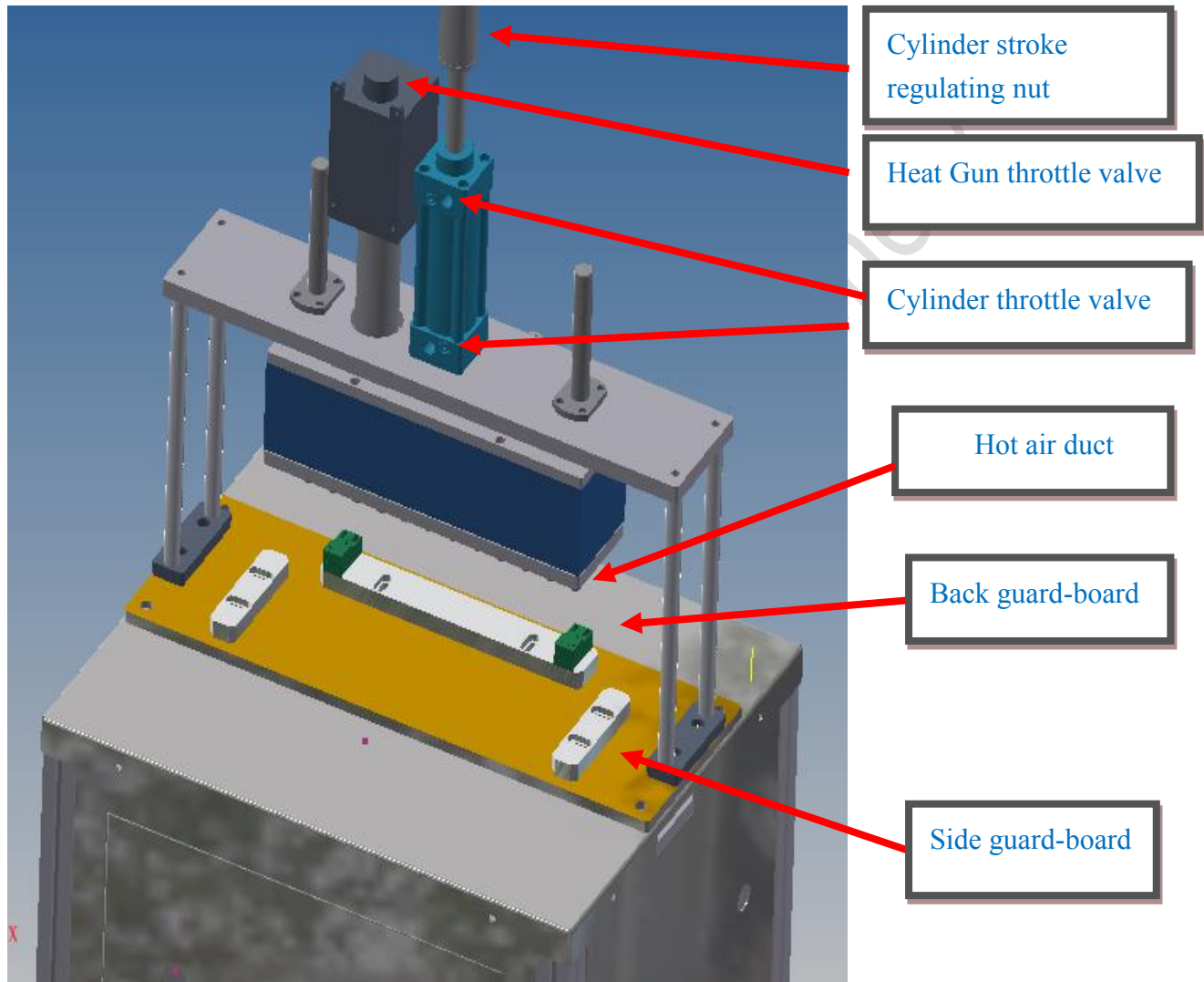


Pull up the regulating knob, increase pressure by clockwise rotation or decrease pressure by anticlockwise rotation

- (3) After adjusted the pressure, please press down the pressure regulating knob.

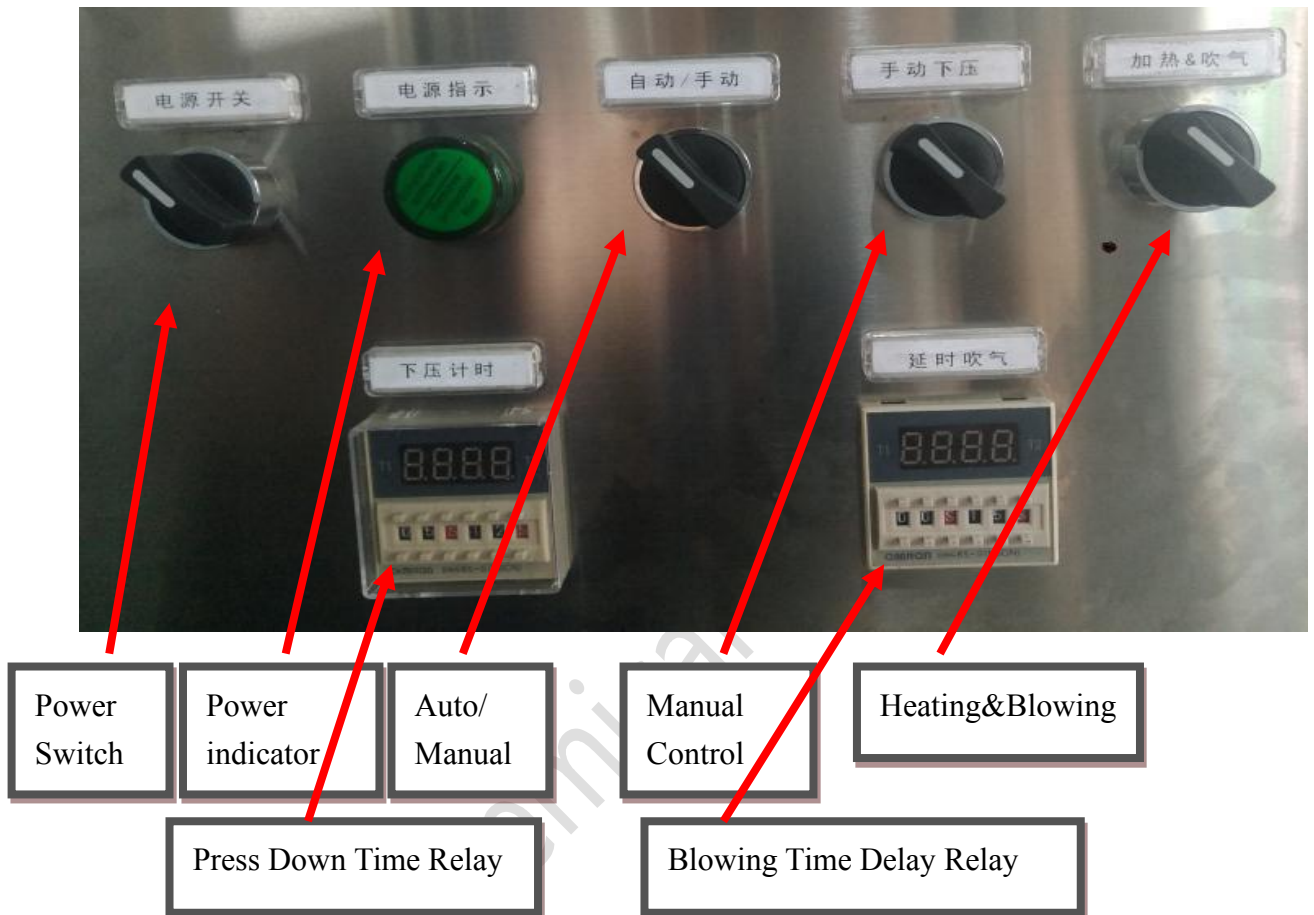
VII、 Machine Adjustment

Machine Adjustment as below:



1. Adjust the **Side guard-board** and **Back guard-board** so that the holes in the lipstick mold are aligned with the **Hot air duct** and then lock the **guard-board**(back&side) to secure their position.
2. By adjusting the **Cylinder throttle valve**, control the speed of rise and fall.
3. By adjusting the **Heat Gun throttle valve**, control the speed of hot air flow.
4. By adjusting the **Cylinder stroke regulating nut**, to adjust the cylinder stroke, thus controlling the distance between **Hot air duct** and the lipstick mold.

VIII、 Electrical control



1.Function of each electrical control device as below:

Power Switch:

Turn left Power Off.Turn right Power On.

Power indicator:

Power Off,Light off, Power On, Light On.

Press Down Time Relay:

Under auto-mode, Set the press down time of the cylinder.

Blowing Time Delay Relay:

Set the delay time of blowing.

Heating&Blowing:

Turn it to right,Heat gun is always heating and blowing; turn it to left, Heat gun is blowing only but not heating, the “Blowing Time Delay Relay” starts counting and, when it reaches the set time, stops blowing.

This is independently controlled, not depended on the auto-mode.

Manual Control:

On Manual mode, turn right to move down, turn left to move up.

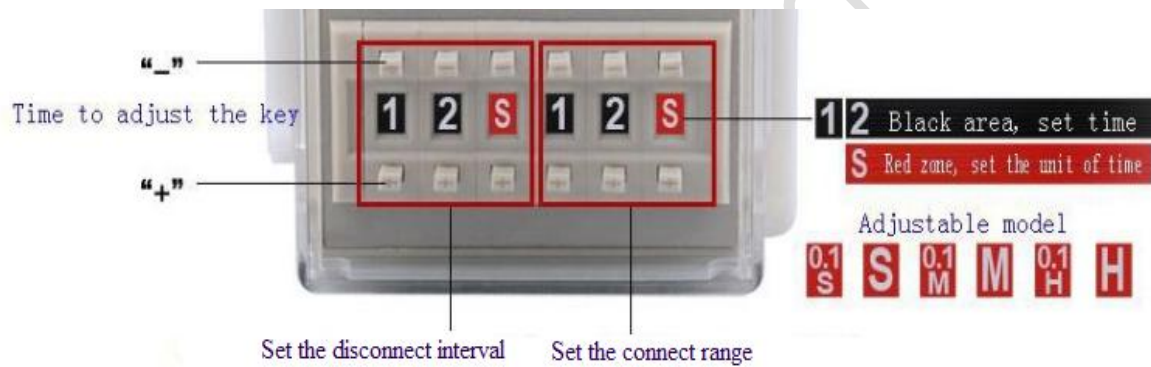
Auto/Manual:

Switch on Auto mode or Manual mode.

Under Auto-mode,put the mold up, make the mold hit the proximity switch at the back, the red light will be bright when the mold hit the proximity switch which also means that the mold is into the appropriate position, then press the foot pedal, the cylinder will press down, the “Press Down Time Relay” starts counting, When the set time is reached, the cylinder will pull up.

Under Auto-mode,when the mold is not put in the appropriate position, the proximity switch can not sense the mold, press the foot pedal, the cylinder is not press down,it is taking action only when the two proximity switch sense the mold.

2. Time Relay setting Method:



Red Zone, set the unit of time. Black area, set time. Press “+” or “-” to set the time and the unit of time.

The right side Red zone and Black area set for the connect range;

Meaning of the unit letter:

M: minute

0.1M: 0.1 minute

H: Hour

S: Second

IX、 Operation Procedures

Start to operate the machine, please follow the steps below:

Step1 Connect to the air pressure source, start the power switch to Auto-mode, set the, Set the press down time of the cylinder, Set the delay time of blowing.

Step2 Put up the mold, the red light of the proximity switch at the back will be bright, which means that the mold is into the appropriate position, then press the foot pedal, the cylinder will press down, the “Press Down Time Relay” starts counting, When the set time is reached, the cylinder will pull up. The Heating & Blowing and blowing time delay functions are manually controlled according to the user's needs.

X、 Maintenance and Clean

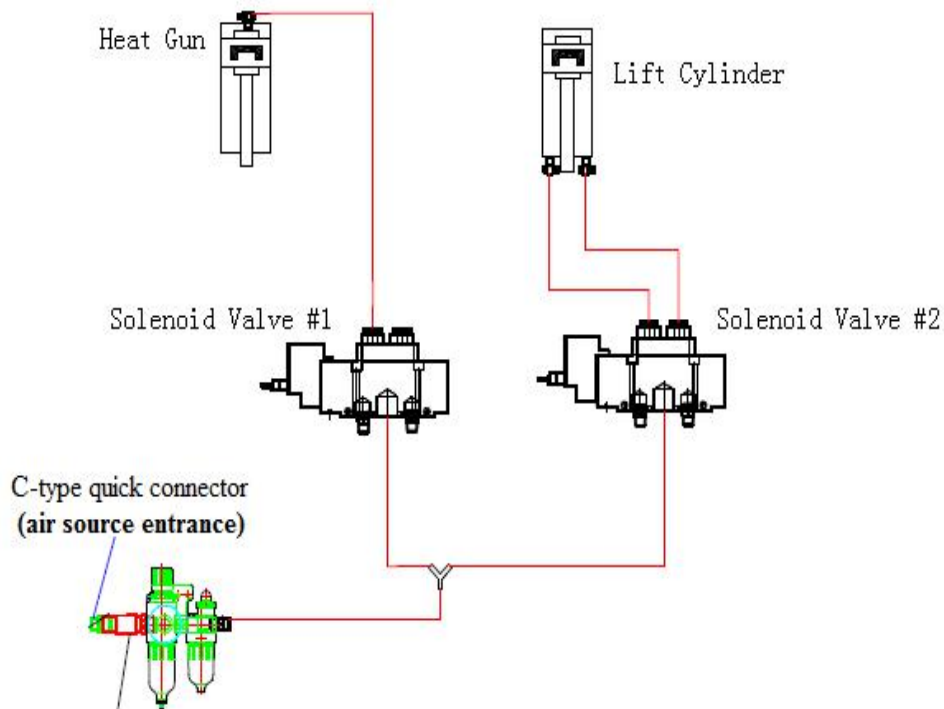
To make the machine run smoothly and extend its life, maintenance must be done as below requirements. Before the maintenance and clean, please shut off the power supply and exhaust air pressure, then maintain as following:

1. Keep the machine clean.
2. Regularly check if the screws loosed or not, tighten it if yes.
3. Check the connecting control wire, broken/bare wire is prohibited.
4. Use the cloth to wipe every guide rod parts with oil,make sure there is no oil dripping after the maintenance.
5. It is recommended that the above maintenance method to be done at least once a day.

Enclosure 1 - Photo of Pneumatic system



The left Solenoid Valve #1 control Heat Gun, the right Solenoid Valve #2 control lift cylinder



Sliding relief valve:

1. Pull down to relief pressure.
2. Push up to input pressure.

1st Page, Total 1 page		Pneumatic system
Model1	Preheat Machine	Topcu Chemical Machinery Co.,Ltd