

Vacuum Laminating Machine

9TU-M068S 550*380mm

USER'S MANUAL
THANK YOU FOR USING



Dear Customer:

Thank you for purchasing our vacuum laminating machine. Please read the manual carefully before use. Otherwise, you may suffer unnecessary losses due to improper use or insufficient understanding of the equipment.

During use, please observe safety precautions and operate the equipment in strict accordance with the technical parameters set in accordance with the specifications. If there are any quality problems, please contact our company in time and we will help you solve the problem as soon as possible.

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1. Introduction to the equipment structure



Components and functions of the equipment panel:

1. "Back Pressure Regulating Valve": Adjusts the reverse force applied by the pressing cylinder during downward pressure. Back pressure control allows for precise and stable control of the pressing pressure and speed. Note: Back pressure cannot be adjusted to exceed the positive pressure.
2. "Pressure Regulating Valve": Adjusts the pressure applied by the pressing cylinder during downward pressure. Using a precision pressure regulating valve, the pressure required for production can be accurately adjusted.
3. "Back Pressure Display": Displays the current back pressure value adjusted by adjusting the "Back Pressure Regulating Valve".
4. "Positive Pressure Display": Displays the current downward pressure value of the pressing cylinder adjusted by adjusting the "Pressure Regulating Valve".
5. "Negative Pressure Display": Displays the current vacuum value within the working chamber.
6. "Emergency Stop": Press this button in the event of an emergency or when an emergency stop is required. The machine will return to a stopped state. This button can also be pressed when an alarm is active to reset the alarm.
7. "Start Button": Press both "Start" buttons simultaneously on the "Auto" page to initiate automatic operation.

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8. "Power Switch": Turns the device's main power on and off.
 9. "Touch Screen Control": Controls the human-machine interface.

This equipment is mainly used for SCA/OCA products, suitable for TP/LCM laminating and various types of related product laminating, and can be placed in the corresponding position between the work pieces to be bonded with a fixture. The product is moved to the work platform manually for vacuuming, heating, and laminating.

2. Specifications

Brand model	9TU-M068S
Equipment name	Vacuum Laminating Machine
Equipment purpose	Used for SCA/OCA adhesive process product laminating. Suitable for LCD, TP/LCM and various types of related products high temperature laminating.
Power supply specification	AC220V 50HZ
Equipment power	2750W
Working gas source	0.5MPa—0.6MPa
Air supply pressure	4-6Kgf/cm ²
Control system	PLC integrated screen control system
Operation interface	4.3-inch touch screen Chinese/English pages
Drive mode	Airtac cylinder
Pressure regulation	Precision pressure regulating valve adjustment/with back pressure control
Heating method	Constant temperature heating
Fitting size	550cm*380cm
Equipment safety	Emergency stop button, buzzer alarm
Production efficiency	(depending on the product)
Working environment	10—60℃
Working humidity	40%—95%RH
Equipment dimensions	Machine: 103cm*W75cm*H133cm
Product weight	Approx 300kg

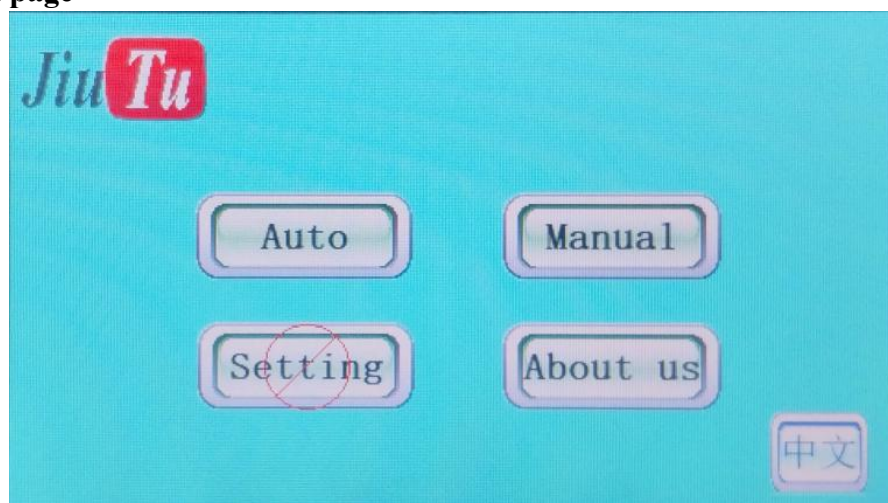
3. Operation instructions

1. Startup page



1.1: Automatically enter the startup page when the machine is turned on, and press the "enter" key to enter the function selection menu

2. Function selection page



2.1: Tap "Auto", "Manual", "Setting", "About Us" to enter each function page.

2.2: Tap "中文" and "EN" to switch between Chinese and English display

3. Manual mode page



3.1 "Input": Displays the status of each I/O external signal of the device. Manual operation is not allowed!

3.2 "Output": Press each button to start the corresponding output function, and press again to stop.

"Press": Press the cylinder down and up

"Vacuum pump": Vacuum pump power switch.

"Lamp": Light switch.

"Unzip": Break the vacuum state in the working chamber.

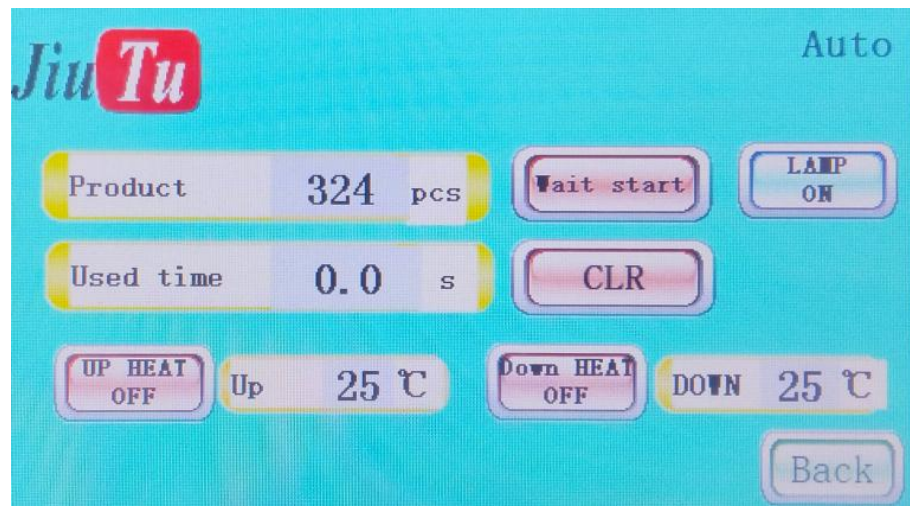
"Flat": Platform cylinder in and out.

"Seal": Sealing cylinder up and down.

"Up heat""down heat": Upper platen/lower platform manual heating switch

3.3 "Return": Return to the function selection menu.

4. Automatic Mode Page



Normal operation process: After the parameter setting is completed,

1 enter the automatic mode -2 click Wait for start-3 press two green start buttons at the same time-4 start running

4.1 "Used time" : the time of a single cycle from the start to the stop of automatic start.

4.2"Product": the number of times the equipment starts pressing, and the production count returns to zero after pressing clear

4.3"Lamp": Platform lighting switch

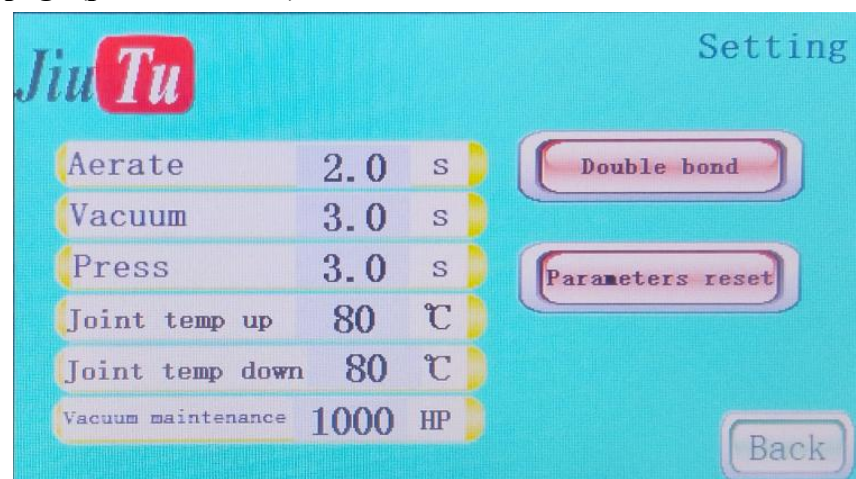
4.4"Wait start": Press and hold to enter automatic mode

4.5: Up heat/Down heat: Upper platen/lower platform manual heating switch

4.6 "Sample Message" : when the equipment alarms, the current alarm information will be displayed, which is hidden in normal conditions. After the alarm fault is handled, press "Reset"

4.7 "Back" : Return to the function selection menu.

5. Parameter setting page (password 9595)



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- 5.1 "Aerate": Set the time for pressing the product
 - 5.2 "Vacuum": Set the vacuuming time when the machine is running automatically
 - 5.3 "Press": The time to release the vacuum in the chamber before the end of the operation;
 - 5.4 "Joint temp up" : Upper platen temperature setting
 - 5.5 "Joint temp down" : Lower platform temperature setting
 - 5.6 " Vacuum maintenance " : Set the production frequency to trigger a scheduled vacuum pump maintenance alarm. (After changing the vacuum pump oil, click Complete Maintenance.)
 - 5.7 "Single bond/Double bond" : whether to press double keys or single key to start the machine can be setted
 - 5.8 "Back" : Return to the function selection menu.

4. Faults and Solutions

Fault phenomenon	Troubleshooting and solutions
The pressing cylinder does not press down	1. Check whether the air inlet pressure is normal, check whether the air pressure displayed on the air source filter gauge is normal
	2. Check whether the emergency stop button is reset normally, and whether the start button is normal
	3. Check whether the positive pressure and back pressure are adjusted reasonably (the positive pressure display should be greater than the pressure value displayed by the back pressure)
	4. Check whether the vacuum has reached the set value (check whether the out1 light on the negative pressure gauge is on, and whether the actual vacuum value on the negative pressure gauge is greater than or equal to the set negative pressure value)
The temperature does not heat up	1. Is the temperature sensing wire not connected properly or broken (check whether the sensing wire on the thermostat is connected properly)
	2. Are the thermostat parameters set correctly and whether the switch on the panel is turned on
	3. Check whether the heating tube or solid-state heating controller is damaged
The vacuum pump does not work There is no vacuum	1. Check whether the relay or AC contactor is damaged, and replace it if necessary.
	2. Check whether the vacuum pump power supply is connected normally

5. Equipment Alarm Description

Alarm abnormality	Alarm description
Emergency stop	The emergency stop button is pressed or the emergency stop button is disconnected (the emergency stop button can be reset)
Vacuum	The vacuum pump fails to reach the set vacuum value for a long time, which reflects that

Alarm abnormality	Alarm description
abnormality	there is a vacuum leak in the sealed chamber or the vacuum pump is abnormal. (Check whether the vacuum pump is regularly changed and maintained)
Up/down heating abnormality	When the detected real-time temperature deviates from the set temperature by ± 10 degrees, an alarm will be triggered. (The temperature alarm deviation value can be set)
Platform in not reached	The platform inlet sensor position is incorrect or faulty (the sensor position can be adjusted, and the light is on if it is normal)
Platform out not reached	The platform outlet sensor position is incorrect or faulty (the sensor position can be adjusted, and the light is on if it is normal)

6. Daily Maintenance

1. Vacuum Pump Maintenance: Change the vacuum pump's oil regularly every 3-6 months (drain the oil inside the vacuum pump and add new oil, filling it to 3/4 of the oil gauge. Use 100# vacuum pump-specific oil).
2. Guide Rail and Bearing Maintenance: Lubricate the machine's guide rails and bearings regularly every 2-3 months (use special grease for guide rails and screws).