350*500MM Mesh Laminator

Specification

The equipment specification will be updated according to customer needs

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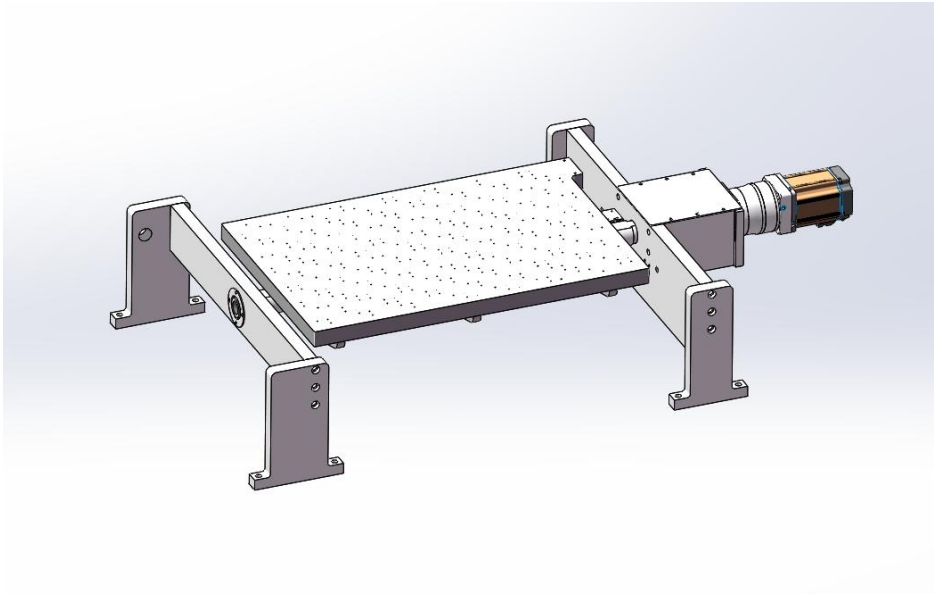
1. 1. Precautions When Using the System

For safety reasons, please operate our machines in accordance with the following guidelines.

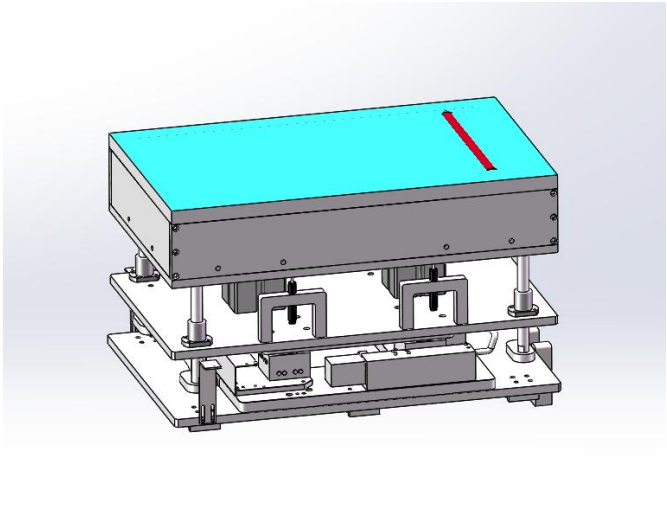
1. During operation, avoid placing any part of your body, such as hands or fingers, in the machine's moving area or in high-voltage areas to avoid injury.
2. The machine should be operated by a designated person.
3. Before operating the machine, ensure that no objects unrelated to the product (such as tools) are inside the machine, and that products or materials are not placed where they should be.
4. Keep all sliding doors closed while the machine is operating.

1.2 Parts That Can Cause Personal Injury

The following components have certain potential dangers during operation. Please do not put your hands within the operating range of the components.



（Flip Platform）



（ Laminating unit platform）

1.3 Precautions regarding electric shock

1. Even if the device's main power switch is off, residual current may still be present in the system (device).
2. Be extremely careful of electric shock if you touch components around the switch.
3. Never touch wiring terminals.
4. This device uses a 220V input voltage. Therefore, when performing maintenance, always turn off the main power switch and ensure that the device itself is not powered.
5. Because voltage/current may still remain in device components even after the main power switch is turned off, ensure that the system (device) is properly grounded before use.
6. Place "Warning" labels around hazardous components.

1.4 Other warnings

1. Before each day's operation, be sure to regularly inspect all machine components, especially moving parts, to ensure proper operation.
2. If any abnormality is detected during machine operation, immediately press the Emergency Stop (EMO) button and notify the responsible personnel promptly.

1.5 Warning Label

1. Warning labels used in the equipment

During installation, commissioning, operation, and machine maintenance, pay particular attention to personal safety. Correct operating procedures must be followed during equipment operation, and safety warning signs must be observed. Warning labels used on the equipment are shown below, along with accompanying text. Safety awareness must be strengthened in areas of the equipment where warning labels are affixed.

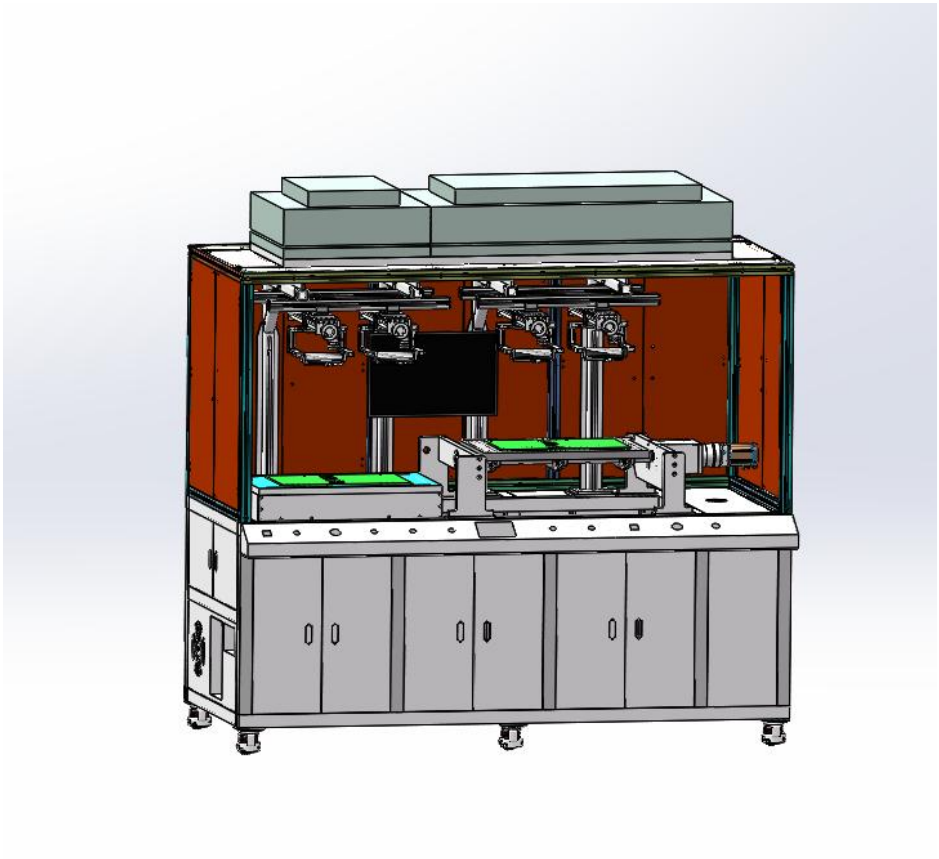
There are moving machine parts here. Do not place your hands or fingers casually. Otherwise, your hands or fingers may be accidentally injured when the machine is running.

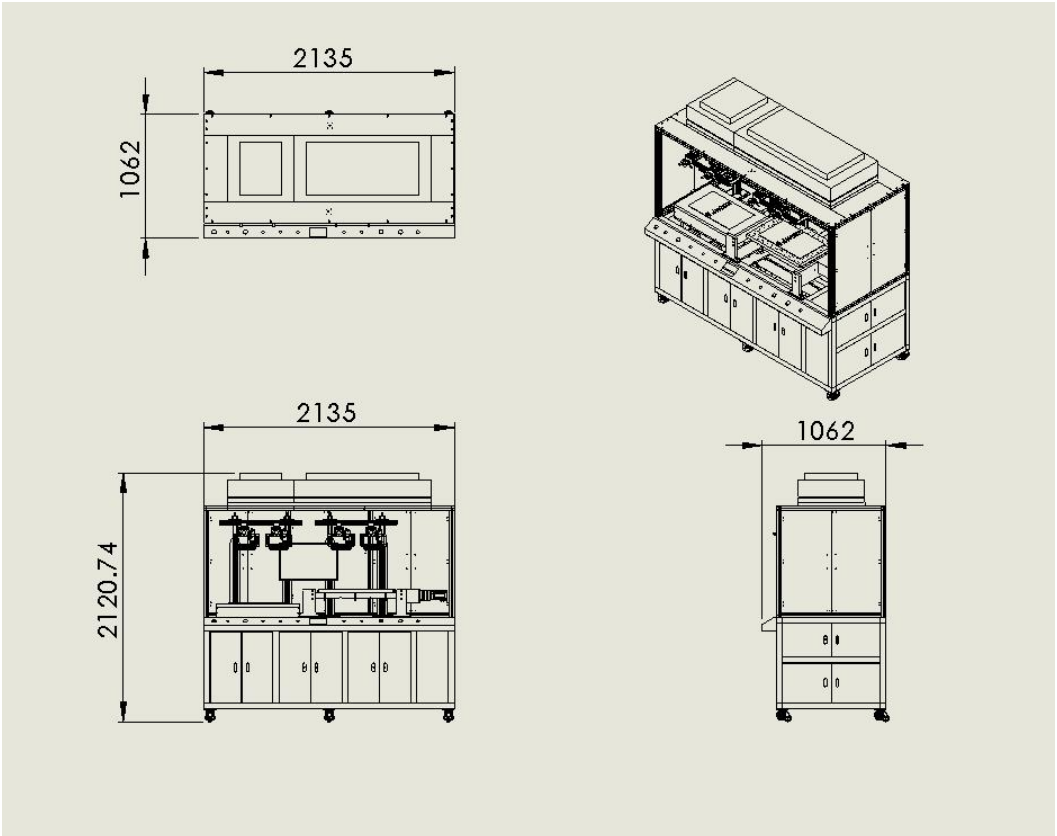
Non-professionals are not allowed to open the device without permission to avoid unnecessary personal injury due to unfamiliarity with the device.

2.1 Overall description of the equipment

1. This equipment is specifically designed for laminating soft film to hard board and soft film to soft film during the production of large-size touch screens. This medium-sized machine features efficient and stable single-sided flip-over operation, and can laminate panels up to 300 x 500. It utilizes automated control and automatic alignment, resulting in high yield, high speed, and excellent stability.

Attached is the machine size diagram:





2.2 Device Function

1. The machine is suitable for soft-to-soft and soft-to-hard lamination processes.
2. Manual loading and unloading, automatic lamination.
3. 300x500 lamination dimensions.

2.3 Equipment Structure

2.3.1 Equipment Unit

No.	Item	Specification	QTY	Remark
1	Equipment Dimensions	2135*1062*2121mm	1	
2	Turning Template Dimensions	430mmX640mm	1	
3	Cage Dimensions	430mmX710mm	1	
4	Effective Fitting Dimensions	300MM*500MM		
5	Equipment User Interface	switch button	1	

2.3.2 Workbench part

No.	Item	Specification	QTY	Remark
1	Pressed product dimensions	300mmX500mm	1	
2	Workbench operation	Button operation		

2.4 Equipment specifications

2.4.1 Performance

No.	Item	Specification	Productivity	Remark
1	Equipment Capacity (C/T: Cycle Time)	Every 25-30 seconds	Approximately 120 pieces/hour	

No.	Item	Specification	Productivity	Remark
2	Equipment Failure Rate	≤2%		
3	Product Qualification Rate	≥98%		Defective incoming materials are not included

2.4.2 Parameter control

No.	Item	Specification	Remark
1	Parameter settings	Flip fit parameters can be set	

2.4.3 Electrical parameters

No.	Item	Specification	Remark
1	Control system	Touch screen PLC, servo motor, control buttons and pneumatics.	
2	Solenoid valve	CKD	
3	Push button switch	Jiayi	
4	Pneumatic cylinder	Xingchen	
5	Touch screen/PLC	Xinjie	
6	Servo motor + drive	Xinjie	
7	Screw screw	TBI	
8	Circuit protection	Improper operation will cause the machine to stop functioning. If the machine stops functioning after pressing the emergency stop button, it will reset. Earth leakage circuit breaker for protection against electric shock. The grounding of the anti-static plug is separate from the power ground.	
9	Anti-static plug grounding requirements	Separate the anti-static plug grounding from the power grounding	

No.	Item	Specification	Remark
10	Identification of gas pipes/wires, etc.	Wire numbers are marked on both ends of the wires. Gas pipes are marked on both ends. Electrical accessories are fully labeled.	The logo is consistent with the design drawing
11	Safety protection	Emergency stop buttons are installed on the left and right sides of the machine where the operator stands.	

2.4.4 Electrical Supplement

No.	Item	Specification	Remark
1	Power supply and demand	1）AC220V/50Hz/8KW 2)There is a 3m long wire outside the machine, at the end of which is an industrial plug for connecting to the factory power supply.	
2	Compressed air	Hose Color: White Hose Diameter: ₵8mm A 3m long ₵8mm hose is left outside the machine, with a quick-connect connector at the end for connecting to the factory air supply. Operating Air Pressure: 0.40-0.60 MPa Air Consumption: ≈400 L/min	
3	Vacuum	Vacuum Control Method: Vacuum Pump Vacuum Capacity: ≈60 L/min Vacuum Tubing Color: Transparent	Vacuum equipment comes with

2.4.5 Others

No.	Item	Specification	Remark
1	Machine weight (kg)	Approx. 500KG	
2	Machine color	The machine surface is powder-coated and	

No.	Item	Specification	Remark
		painted in white. Other parts are chrome-plated or oxidized	
3	Delivery status	Equipment surfaces must be clean and dust-free. Warning signs should be posted in areas where high temperatures or other hazards exist.	
4	Use environment requirements	Clean, dust-free, cleanroom	

3.1 Receiving inspection of equipment

3.1.1 Surface and Metal Structure

Inspect the equipment for peeling or scratched paint.

Inspect the equipment for loose parts, cracks, or other signs of damage.

3.1.2 Buttons and Screws

Inspect for loose or missing parts.

3.1.3 Overall System

Inspect the machine's sheet metal cover and all components to ensure they are secure and not damaged.

3.2 Equipment Installation Precautions

3.2.1 Pre-installation Inspection

The machine will be installed and debugged at the factory. After unpacking, check for loose components and damage. Before installation, check all dimensions of the machine, ensuring adequate clearance around the machine.

3.2.2 System Installation Environment

Avoid installing in the following locations to prevent accidents:

Exposed to sunlight

Located in locations subject to electromagnetic interference

Near heat sources

Out of temperature range (<19°C or >26°C)

Out of humidity range (≤40% or >70%)

Located in locations without adequate ventilation
Located in locations subject to moisture
Located near fire sources
Located in locations where the system could be damaged by chemicals or gases
Located on uneven surfaces

3.2.3 Installation space

For safe operation, the system must be installed at least 1.0m away from any wall. Move the device to the appropriate location.
Use the four support legs to support and level the unit, and then connect the gas and electrical lines.

3.2.4 Power supply

Please provide power and voltage according to the instructions. This system requires an independent power source and must not be connected to other devices.
Connecting the power cord with wet hands is extremely dangerous!
After connecting the power cord and turning on the power, please note the following:
Make sure the power cord is not loose.
Make sure the power cord is not cracked or scratched.
Make sure the power plug and power cord are not abnormally hot.
Connect a ground wire to the system to avoid electric shock.
The ground wire is a green wire.
The ground terminal should be marked with a "GND" sign or with a ground rod.
For easy ground connection, use a plug suitable for the surface structure or a terminal on a distribution board.

3.3 Gas and electricity access

3.3.1 Insert the 8mm air hose into the air conditioning unit. Connect the hose to the factory air supply and adjust the air conditioning unit pressure to 5 bar.
3.3.2 Connect the power plug to the 220 factory power grid.

4.1 Pre-operation inspection

4.1.1 Check that the air pressure reaches 5 brass.

4.1.2 Check that the power is on.

4.1.3 Turn on the power switch and check that the screw has returned to its origin position normally and that all cylinders are in their home positions.

4.1.4 Once all is confirmed, you can operate the equipment.

4.2 Operation process

1.	Process Flow	1) Manually place the glass sheet on the left (or right) workbench, adjust its position, and vacuum seal. 2) Place the membrane sheet on the mesh cage platform and remove the protective film from the membrane structure adhesive. 3) Press the start button to rotate the cylinder 180 degrees. 4) After the 180-degree rotation, the lower workbench, driven by the motor, moves to the right to complete the bonding process. 5) Reset, and the single cycle is complete.
2.	Fitting Accuracy (mm)	≤±0.15mm
3.	Loading and Unloading	One or two people can load and unload materials at different locations.
4.	Product Changeover	1) Universal template, made of anti-static and scratch-resistant material. 2) When replacing a new product, the adjustment time is approximately 10 minutes.

5. Documentation and After-Sales Service

No.	Item	Specification	Remark
1	Documents	One operating manual	Chinese, provided upon delivery
2	Training Content	1) Equipment Installation and Adjustment 2) Equipment Operation 3) Equipment Adjustment and	Training begins on the day the equipment is installed. Training duration is one day. If necessary, the training

No.	Item	Specification	Remark
		Parameter Setting 4) Equipment Maintenance 5) Troubleshooting Common Equipment Problems 6) Replacement of Fragile Equipment Parts 7) Other Precautions	period can be extended or shortened through mutual agreement
3	After-Sales Service	The equipment is guaranteed for one year under normal use, including installation and commissioning after the machine arrives at the factory and personnel training	