

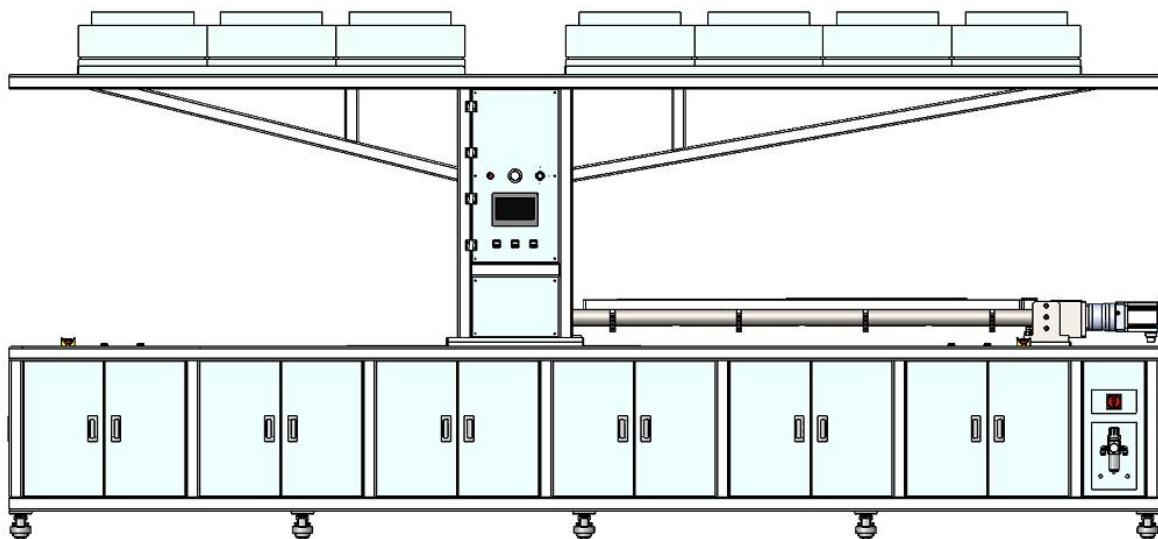
1000*1600 Film Laminator

Equipment Specifications V1.0

Demander confirmation (customer)	Supplier confirmation (Jiutu)	
【 】	Sales center	R&D center

The data shown in the equipment specification are general model specifications/parameters. If the customer specifies requirements, the two parties will communicate and attach the "Technical Agreement" to confirm and take effect together with the specification.

1. Equipment appearance



2. Equipment Configuration List

NO	Product Name	Model	Quantity	Unit	Remarks
1	Laminating machine	1000*1600mm	1	unit	With FFU

3. Equipment Introduction

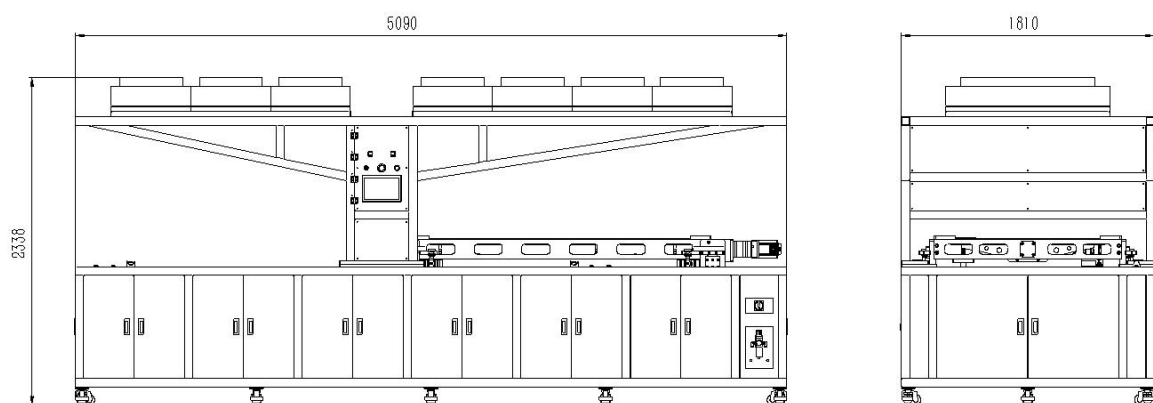
This equipment is specially used for the laminating of soft film to hard plates and soft films in the production process of large-size touch screens; the equipment is a medium-sized machine, efficient and stable, and the fitting size can reach 65 inches; it adopts automatic control, and has a high yield, fast speed and good stability.

4. Equipment features

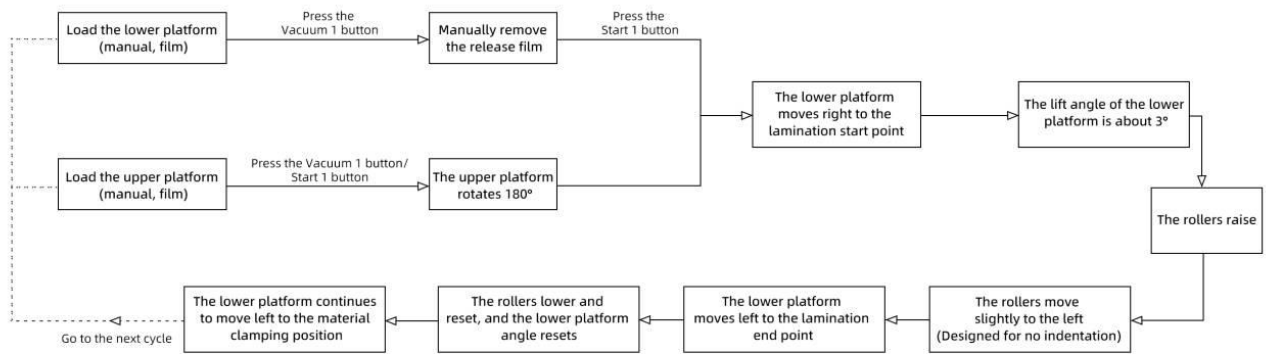
- The equipment adopts steel structure machine with good structural rigidity
- The selected materials and brands of equipment parts are excellent and have a long service life

- The materials used for the equipment fixture platform have excellent performance and no deformation, and the equipment accuracy does not decrease
- The equipment movement is mainly based on the control axis, with stable operation and high accuracy
- The pneumatic system of the equipment regulates pressure and throttles, with stable control and low gas consumption
- The equipment motion module has high repeatability positioning accuracy and good product consistency
- The equipment control system has strong anti-interference ability, the system is stable, fast and has high production efficiency
- The equipment operation interface is simple and easy to understand
- The next platform adopts a unique UVW alignment module
- The roller lifting and lowering fit has good rigidity, high straightness, and precise adjustment of fit pressure
- PLC centralized control, stable and reliable
- User password protection
- Color touch screen, Chinese interface, simple parameter settings
- Unique large-size vacuum platform design, high plane accuracy, no deformation of stress, and strong vacuum adsorption

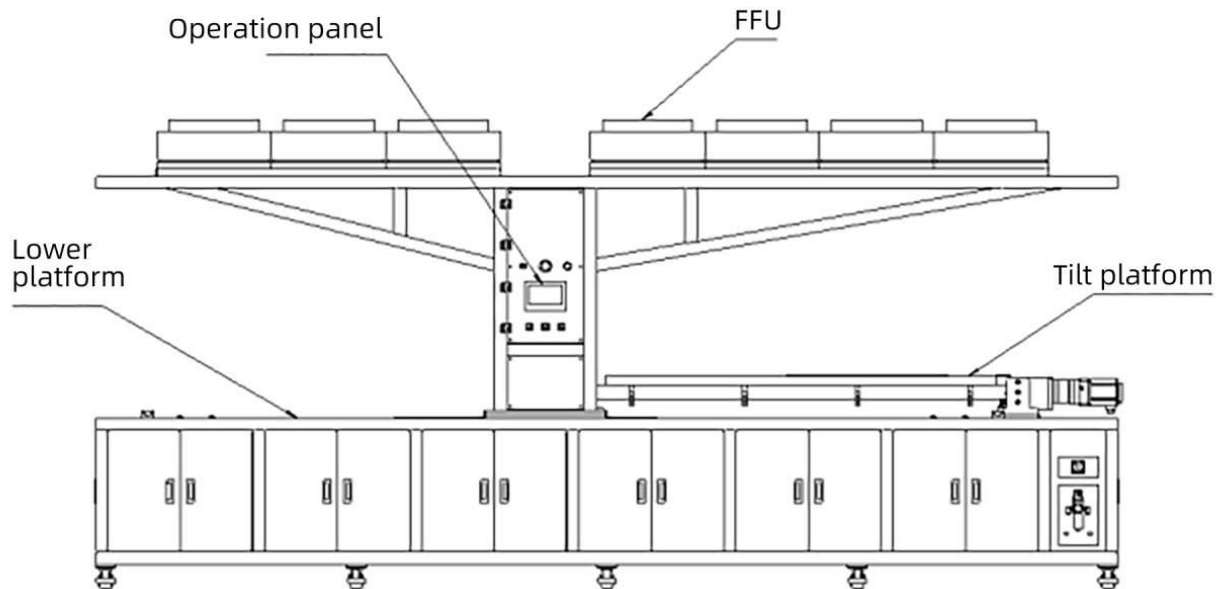
5. Equipment CAD layout drawing



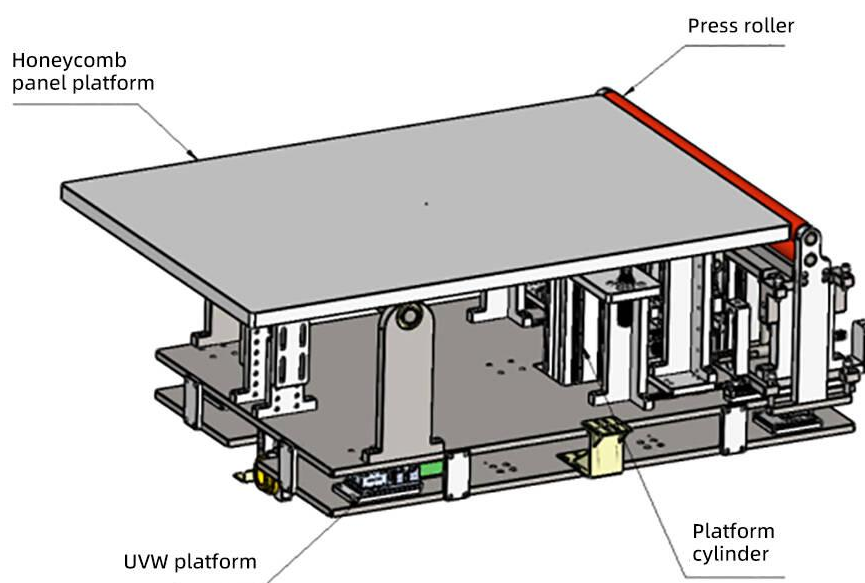
6. Equipment process flow chart



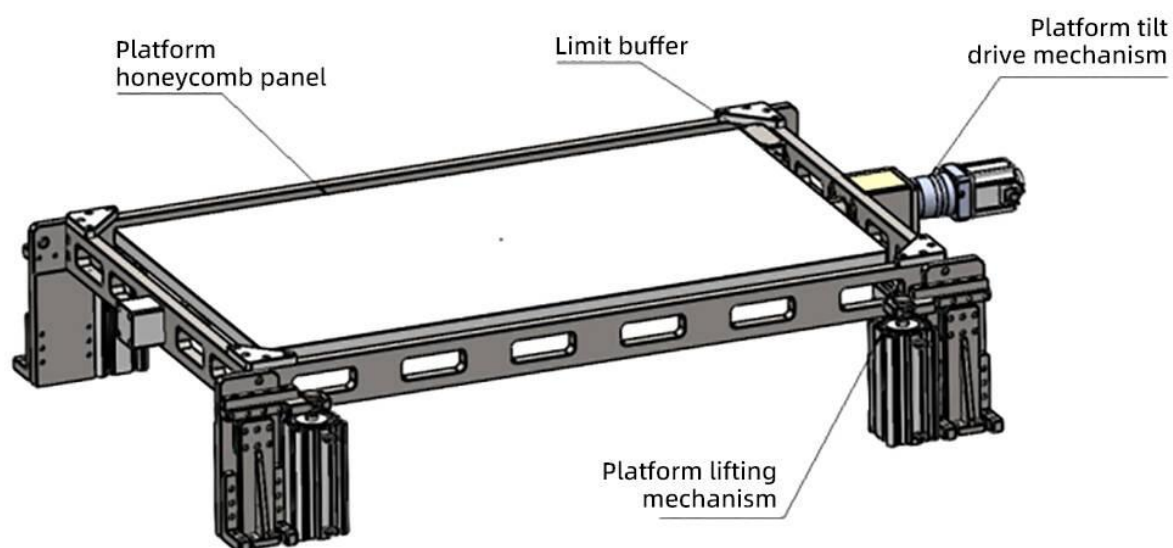
7. Equipment functional structure diagram



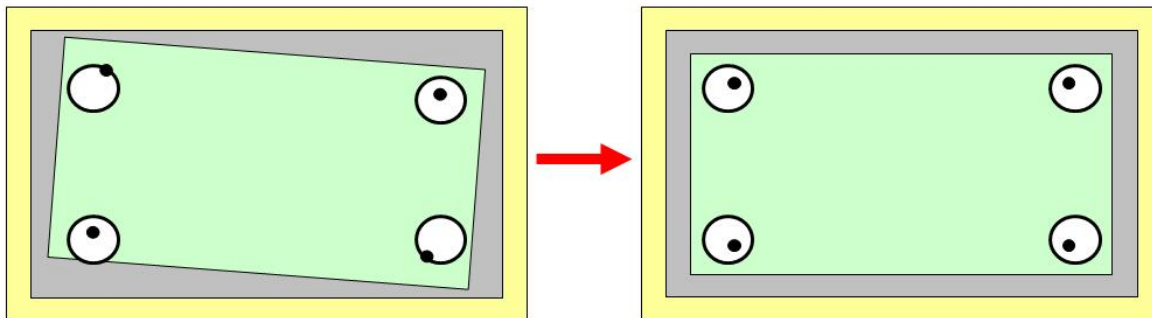
7.1Key function configuration diagram



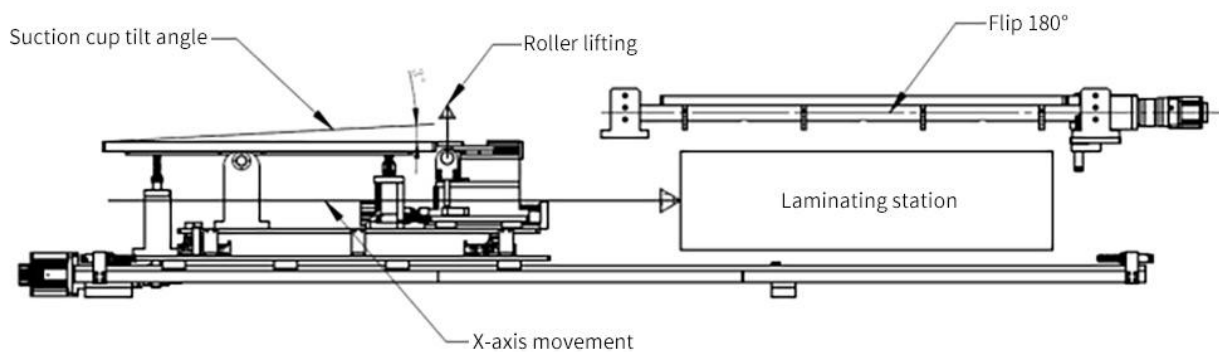
7.2Key function configuration diagram



7.3 Key process schematic diagram



7.4 Key process schematic diagram



8. Equipment Specifications

Machine Specifications		
1	Working environment	Temperature 25± 5°C, humidity 60±5%, cleanliness level 1000
2	Equipment power supply	AC380V 70Hz
3	Equipment gas supply	5~7 kg/cm ² , pipe $\varnothing$ 12 with quick plug
4	Equipment power	20KW
5	Equipment gas consumption	1000L/min
6	Vacuum system	Machine comes with

7	Control system	PLC + touch screen
8	Working height	930±50mm
9	Operation interface	Button operation panel + human-machine interface
10	Equipment dimensions	L5090xW1810xH2338mm（with FFU）
11	Equipment weight	3500Kg
12	Machine color	Standard computer white

Equipment applicable product specifications

13	Applicable products	65 inches
14	Effective fitting size	L1600xW1100mm
15	Upper platform size	L1950xW1100mm
16	Down platform size	L1600xW1100mm
17	Roller effective length	L=1100mm
18	Effective fitting stroke	1600mm

Equipment accuracy

19	Control axis repeatability accuracy	±0.05mm
20	Working platform flatness	0.20mm
21	Positioning system accuracy	±0.05mm
22	Equipment repeatability accuracy	±0.10mm
23	Fitting accuracy	±0.20mm（Excluding material error）

Equipment Specifications

24	Laminating method	Up and down products are close, roller pressing
25	Compression method	Cylinder output roller rolling

26	Upper platform vacuum hole	10x10, $\varnothing 1$
27	Down platform vacuum hole	10x10, $\varnothing 1$
28	Upper platform control method	Servo motor control
29	Down platform control method	Servo motor control
30	Roller lifting stroke	250mm
31	Fitting force range	$\leq 30\text{Kg}$
32	Alignment method	Mechanical alignment, Angle-to-angle counter
33	Automatic alignment adjustment stroke	$X/Y \pm 10\text{mm}$, $R \pm 0.5^\circ$
34	Parameter debugging method	Touch screen parameter setting interface to modify data
35	Product line replacement method	For existing data products, the switching time is less than 15 minutes; for new data products, the switching time is less than 30 minutes.
36	Production beat	20S (Excluding labor time)
37	Loading and unloading method	Manual GG placement and cleaning Manual film placement and removal
Safety protection		
38	Emergency stop button	After pressing the emergency stop button, the device needs to find the origin again after manually resolving the fault.
39	Electrical protection	The circuit is equipped with short-circuit protection; The control has an electrical interlocking design to prevent misoperation; The function is equipped with signal feedback such as vacuum detection
40	Safety grating	6 sets
41	Safety door switch	No conditions of use
42	Safety sign	Locations with AC30V or above, DC60V or above, and 240VA or above; Locations with surface temperature exceeding 50°C ; Locations with mechanical movement
Anti-static device		
45	FFU	7 sets

46	Ion fan	Optional accessories
47	Static grounding	Optional accessories

9. Main parts brands

No.	Item	Use brand	Optional brand	Remark
1	Linear guides		HIWIN/PMI/CSK/THK or equivalent brands	
2	Ball screws		TBI/HIWIN/THK or equivalent brands	
3	Servo motors		YASKAWA/Panasonic/Leisai / Yankong / Xinjie / Huichuan or equivalent brands	
4	Stepper motor		Leisai/Yankong/Shinano/Lisan or equivalent brands	
5	Pneumatic actuator		SMC/MAXAIR/AirTAC/Xingchen or equivalent brand	
6	High-speed fan		Shenghong/Lion Song/Hank/Ailed or equivalent brands	
7	Touch screen		Kinco/WEINVIEW/XINJIE or equivalent brands	
8	PLC		OMRON/Panasonic/MITSUBISHI/KEYENCE/XINJIE or equivalent brands	
9	Inverter		MITSUBISHI/INVISHI or the same brand	
10	Sensor		OMRON/Panasonic/KEYENCE/SICK/Leuze/Autronics or equivalent brands	Using different types of materials
11	Electrical control element		SCHNEIDER/CHNTor equivalent brands	Using different types of materials
			Ming Wei/Izumi or equivalent brand	
12	Pneumatic control element		SMC/CKD/FESTO or equivalent brand	
13	Digital pressure gauge		SMC/MAXAIR or equivalent brand	

10. Items and information included with the device

No.	Type	Item	Available or Not	Remark
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No.	Type	Item	Available or Not	Remark
1	Items comes with machine	Special tools	No	
2		Equipment spare parts	No	Provide spare parts list, separate purchase
3		Equipment wearing parts	No	Provide a list of wearing parts, separate purchase
4	Documents comes with machine	Equipment operation manual	Yes	Paper/electronic version, including electrical wiring diagram
5		Equipment usage video	Yes	Equipment operation, debugging, product line change

11. After-sales service

1	Equipment warranty regulations	The whole machine is guaranteed for one year from the date of delivery, and there is no time limit for after-sales service; if the equipment is resold, it is not covered by the warranty.
2	Free warranty part	Under normal use conditions, damage caused by poor processing and manufacturing will be repaired free of charge for an unlimited period of time.
3	Paid service part	The vacuum pump and high-speed fan are only warranted for 3 months, which means that the user must bear the repair costs if the damage is caused by overload use; Equipment consumable parts are not covered by the warranty except for quality issues.
4	Disclaimer	Damages caused by force majeure such as natural disasters; Damages caused by malfunctions due to your company's transformation; Damages caused by malfunctions due to improper use and poor maintenance; Compensation for secondary losses such as production line stoppage and property damage, including production guarantees; Material-related costs required for equipment trial operation.

12. Equipment Use Training Plan

Training Program List					
No.	Project Name		Trainin g Time	Number of Trainees	Remark
1	Equipment operation	Use Operation	30min	2	Equipment operator
		Debugging parameters	45min	2	

Training Program List					
No.	Project Name		Trainin g Time	Number of Trainees	Remark
		Product change production line	30min	2	Engineering (debugging) Technology (manufacturing) Equipment (manager)
2	Safety precautions		15min	All	
3	Equipment maintenance		15min	2	Equipment (Management)
4	Equipment Troubleshooting		30min	2	Engineering (debugging personnel) Equipment (manager)

13. Equipment acceptance

After the equipment enters the factory, we will immediately confirm that the equipment meets the "Equipment Specification" and usage requirements in terms of structure, performance, accuracy, operation, safety, etc., and then accept and implement them one by one under the condition that your company's inspection personnel are present.