



Ningbo XiHe Automation Equipment Co., Ltd.

Automatic edge drawing machine

OPERATION INSTRUCTIONS



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STATEMENT

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一、Preface

Thank you for purchasing and using the Automatic edge drawing machine

. This manual is the use and maintenance information of this equipment.

In order to ensure the safety of the operator and maintain the excellent performance of the equipment for a long time, before using the equipment, please read this manual carefully and save it for subsequent use to avoid danger or damage to the machine during operation.

This machine equipment is upgraded or updated at any time without notice, please understand! If you have any further technical or use problems, please contact our company in time.

二、Product working conditions

2.1 Working conditions

·Ambient air range

Working hours 5 ~40℃

During transportation and storage 0℃ ~40℃

·Air relative humidity

At 35℃ ≤50%

At 20℃ ≤90%

·The content of dust, acid, corrosive gas and other substances in the surrounding air does not exceed the normal content.

·The altitude does not exceed 1000 meters

·Grid voltage fluctuation: $\leq \pm 10\%$ (when the grid frequency is the rated value)

·Grid frequency fluctuation: $\leq \pm 1\%$ (when the grid voltage is the rated value)

2.2 Working environment

The product should be placed in a dry, ventilated and dust-free environment away from direct sunlight, rain, gas vapor, chemical deposition and corrosive media that seriously affect the use of the equipment, and avoid violent vibration and turbulence.



三、 Summary

Full automatic edge drawing machine is another continuous process based on full-automatic laser welding machine and crimping machine. It has the advantages of high efficiency, high quality, high energy saving, low cost, simple and convenient operation and wide application range. It is an ideal equipment for kitchen utensils production industries such as glass cover industry and steamer industry. Next, we will explain its operation principle, service conditions, functions of each part and daily maintenance.

1.Full automatic edge drawing machine is an ideal special equipment designed and manufactured by Ningbo jinshihong mechanical equipment Co., Ltd. according to the technical requirements of steel strip;

2.The equipment has a wide range of application fields. The touch screen digital input control operation setting is adopted, which is simple and convenient to operate and replace products;

3.Equipment accessories (panel rack, control system, drive motor and pneumatic components) are world-famous brand products. In addition, high-precision planetary reducer can improve the positioning accuracy of products;

4.The equipment adopts programmable controller as the main control unit and nine servo motors for control. The equipment circuit is simple, highly integrated and intelligent, which reduces the failure rate and is convenient for maintenance;

5.Edge drawing machine refers to the product that has been crimped, Through the stretch mold, The stretching effect is achieved by the shape of the stretching wheel, causing it to deform, and obtaining the shape of the product's edge.By controlling the edge-drawing speed, edge-drawing stroke, and the shape of the stretching wheel, the required edge-drawing effect is achieved. The advantage is that the mold replacement efficiency is fast, the operation is simple and the controllability is strong.

四、 Safety precautions

4.1Electricity safety

The basic principle of preventing electric shock is not to touch the two poles of voltage electrical equipment at the same time. The specific precautions are as follows:

1、 Before operation, you must wear qualified protective equipment, such as safety gloves, insulating shoes, and all labor protection equipment must be dry and undamaged;

2、 Before servicing and testing the equipment, cut off the power supply to prevent electric shock.



4.2 Mechanical equipment hurts

When the equipment is working, be sure to keep hands, hair, clothing and tools away from mechanical movement, pneumatic actuators and other operating mechanisms. Pay attention to pneumatic and mechanical pressure components that hurt people. Operators are not allowed to wear loose clothing and accessories.

4.3 Comprehensive preventive measures

- 1、 Ensure equipment power safety measures;
- 2、 Only skilled electricians can work on high-voltage equipment;
- 3、 The equipment safety warning signs must have clear signs and be readily available;
- 4、 During the operation of the equipment, the lubrication and maintenance of the equipment cannot be carried out.

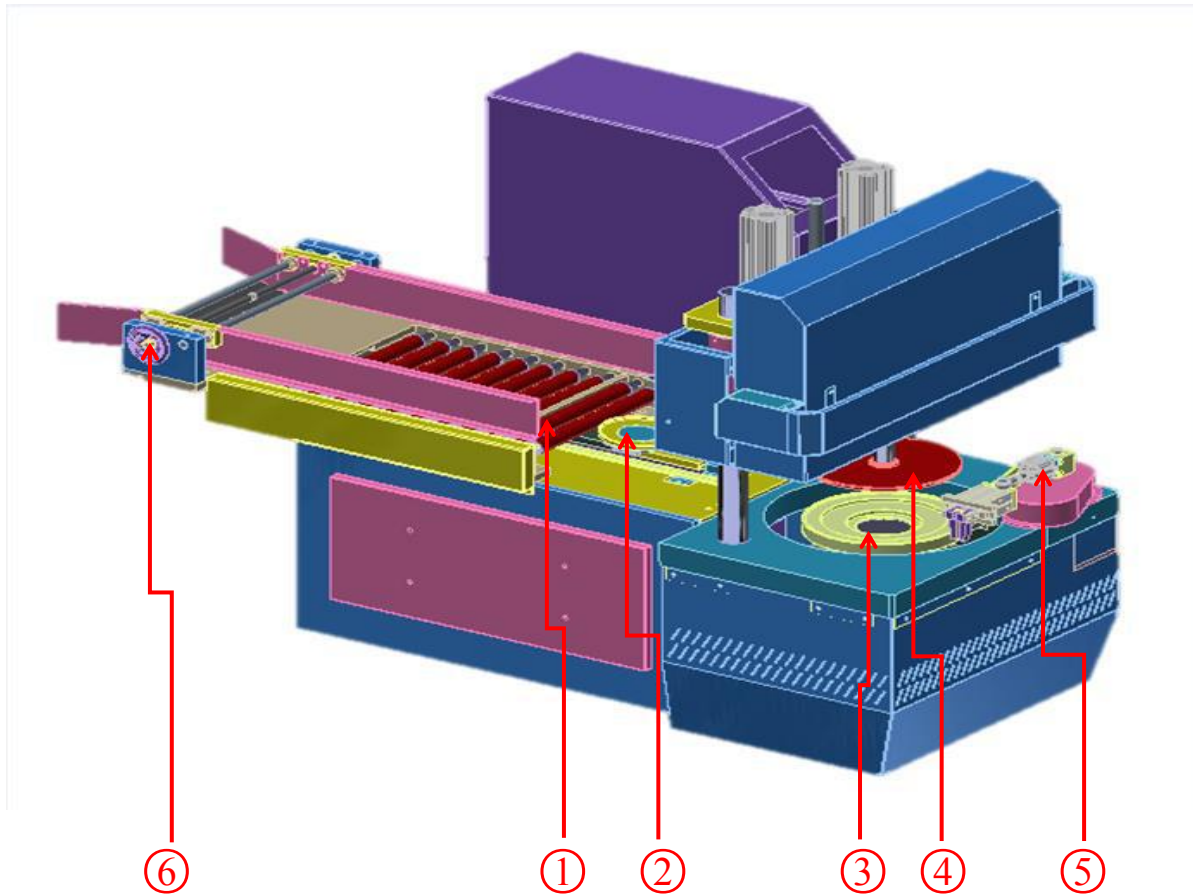
4.4 Precautions for installation and debugging

1. After opening the package, confirm whether it is the model you ordered.
2. Check whether the equipment is damaged during transportation. If there is any damage, please contact our after-sales service.
3. Our company will not bear any responsibility for equipment damage or other losses caused by not strictly complying with the operating requirements specified in this manual.
4. After 7 days of installation and commissioning, our company cannot return the goods without reason.
5. Before installation and commissioning, please prepare 5 square meters of three-phase five-wire wires (the number of meters required according to your company's operating site), one 40A power switch, one bucket of purified water, about 20L, and several 10 mm air pipes. Compressed air less than 0.6MPa, steel strip materials, etc.
6. After installation and commissioning, our after-sales personnel will teach your company how to operate. Please be sure to send someone to study carefully.



五、 Equipment introduction

5.1、 Equipment picture:



Picture1

- | | | |
|-----------------------------|--------------------------|-----------------------|
| ① Steel ring feeding roller | ② Receiving tray | ③ Drawing lower mould |
| ④ Drawing upper mould | ⑤ Reclaiming manipulator | ⑥ Adjusting wheel |

5.2、 Equipment description:

1、 Picture 1 icon ① is steel ring feeding roller, It is the transmission mechanism from the crimping machine to the edge drawing machine. The feeding roller speed is controllable and can be adjusted according to the size of the product;

2、 Picture 1 Icon ② is receiving tray, It receives materials from the unloading place of the roller and moves the tray through the module servo to reach the edge drawing die. The receiving position, arrival position and safety position can be set, and the feeding speed of the tray is adjustable. The tray uses the specified tray according to the product model and size. When removing the tray, you can easily remove it by pressing the counterclockwise rotation of the tray by hand;



3、Picture 1 Icon ③ is drawing lower die. It is a special drawing lower die die according to the product size and model. The drawing lower die is used together with the die. The lower die rotates through a 1.5KW servo motor and is equipped with a high-precision reducer, with fast reaction speed and adjustable rotation speed;

4、Picture 1 Icon ④ is drawing upper die. It is positioned up and down by lifting servo. The drawing upper die reclaims the material by moving the lifting servo to the drawing tray (the tray is positioned at the drawing die), and then moving to the drawing lower die to realize the function of product edge drawing;

5、Picture 1 Icon ⑤ is manipulator. It takes out the product from the edge drawing lower die and moves to the next process through the upper and lower reclaiming servo, reclaiming deflection servo and reclaiming telescopic servo positioning, with simple operation and strong controllability.

6、Picture 1 Icon ⑥ is adjusting wheel. It adjusts the sheet metal parts on the conveyor wheel according to the size of the steel ring, shrinking in and stretching out.

5.3、Transmitting wheel set radiation sensing pictures:



⑦

Picture2

⑧

⑦ Incoming material induction 1 of conveyor wheel

⑧ Incoming material induction 2 of conveyor wheel



5.4、Description of transmission wheel pair shooting:

1、Picture 2 Icon ⑦ is incoming material induction 1 of conveyor wheel. During automatic operation, when the product senses the incoming material sensing 1 switch, the automatic front and rear servo of the crimping machine stops moving forward (when the crimping machine is connected with the edge drawing machine), corresponding to the plc2 input point X20

2、Picture 2 Icon ⑧ is incoming material induction 2 of conveyor wheel. When the product senses the incoming material sensing 2 switch, in the automatic state, the front and rear servo of the crimping machine stops moving forward (when the crimping machine is connected with the edge drawing machine). When the pallet is at the roller reclaiming place, the roller is transmitted to the pallet at variable speed, corresponding to plc2 input point X21

5.5、Grating, reflection induction picture:



⑨

Picture 3

⑩

⑨ Pallet incoming radiation sensor

⑩ Reflection induction of grating in die

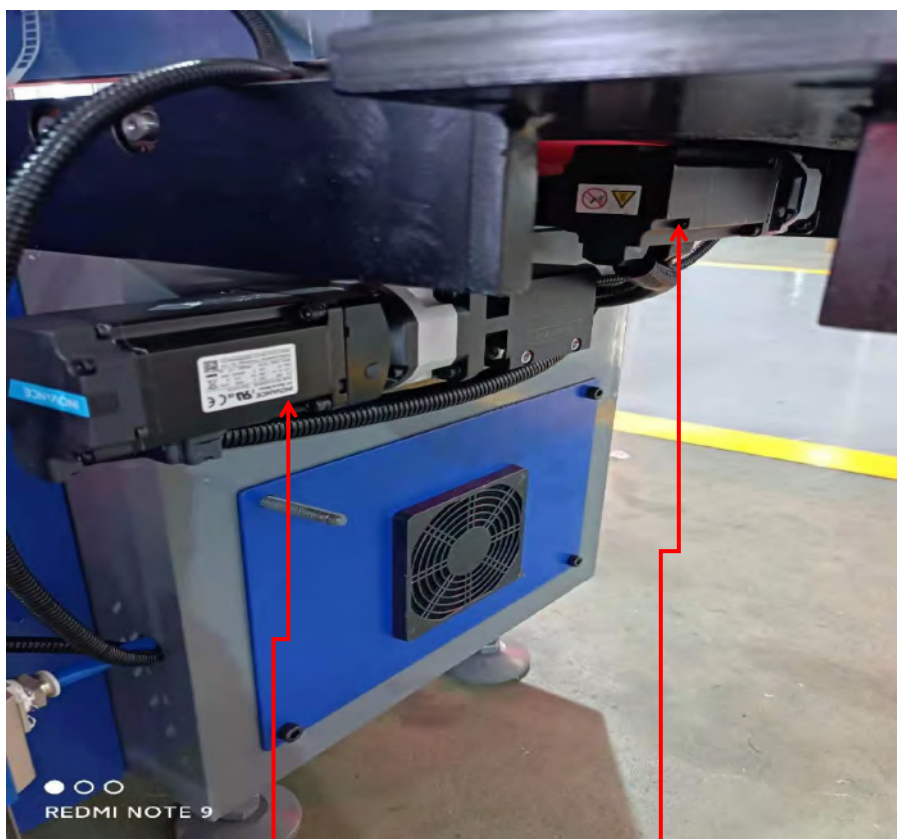


5.6、Picture3 description of reflection and grating induction:

1、Picture 3 Icon ⑨ is Pallet incoming radiation sensor. During automatic operation, the tray sensor senses the product. If the drawing upper die is in the standby position, the tray moves to the discharge position. If the upper die is not in the standby position, the tray moves to the safe position. This sensing corresponds to plc1 input point x14

2、Picture 3 Icon ⑩ is Reflection induction of grating in die. In the automatic operation, when the drawing upper die returns, if the sensor does not sense the product, the equipment will give an alarm and automatically stop the operation. If the sensor senses the product, it will automatically run the next step. After the manipulator grabs the material, if it senses a product, the equipment will alarm and stop running. This sensing corresponds to plc1 input point x15

5.7、Servo motor identification picture:



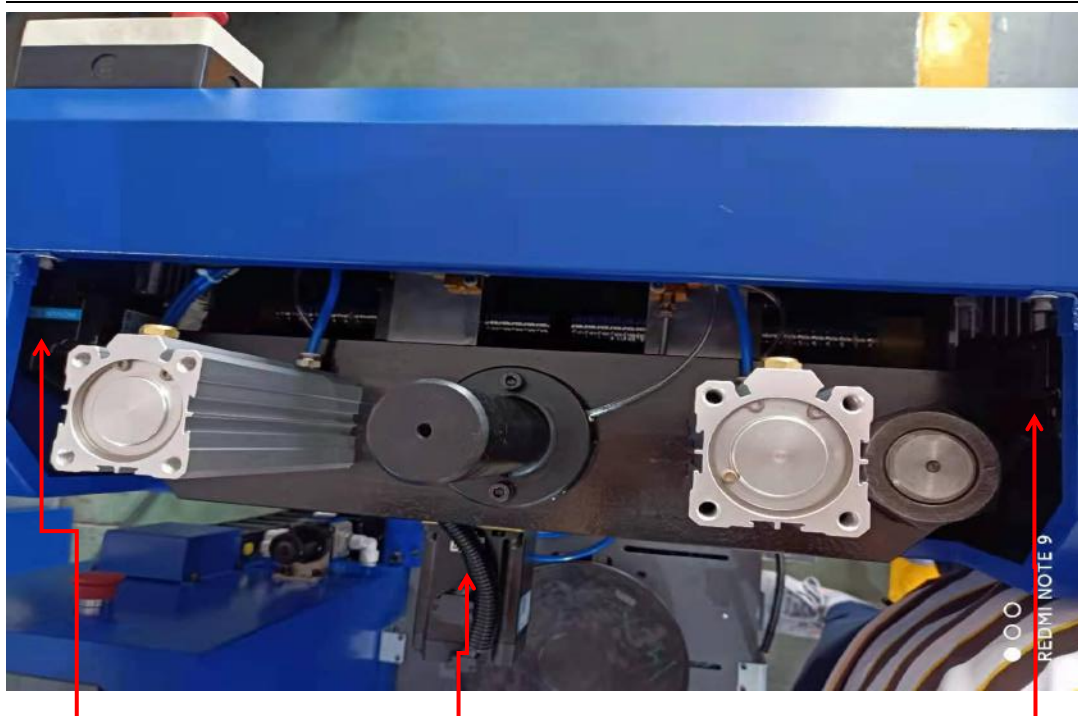
⑪

Picture 4

⑫

⑪ Module servo motor

⑫ Drive wheel servo motor



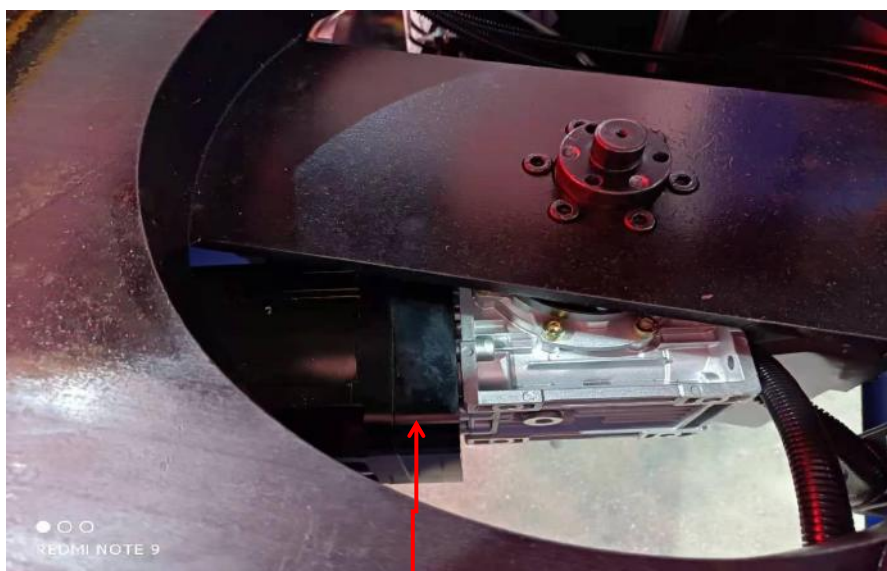
⑬

⑭

Picture 5

⑮

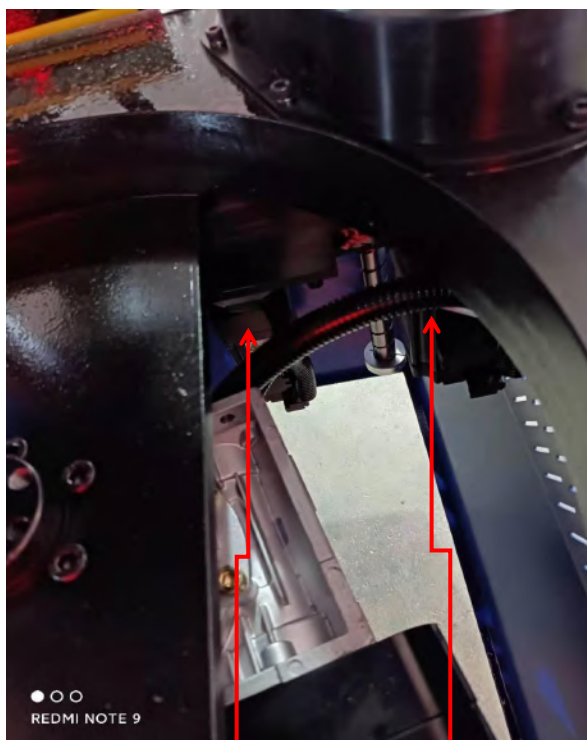
⑬ Edge drawing 1 servo motor ⑭ Lifting servo motor ⑮ Edge drawing 2 servo motor



⑯

Picture 6

⑯ Rotary servo motor



⑰ Picture 7 ⑱



Picture 8 ⑲

⑰ Reclaiming lifting servo motor

⑱ Reclaiming deflection servo motor

⑲ Reclaiming telescopic servo motor

5.8、 Servo motor description:

1、 Picture 4 Icon ⑪ is Module servo motor. The module servo motor moves the tray to move the product from the blanking place of the conveyor wheel to the drawing die.

2、 Picture 4 Icon ⑫ is Drive wheel servo motor. It transfers the product from the material receiving place of the crimping machine to the module servo upper tray, and the transmission speed is adjustable.

3、 Picture 5 Icon ⑬ is Edge drawing 1 servo motor. The servo is to move the right side of the edge drawing machine, move the stretching wheel left and right, and make the



steel strip deform during automatic operation to realize the steel ring stretching function. The stretching speed is adjustable and the distance can be set.

4、Picture 5 Icon ⑬ is Edge drawing 2 servo motor. The servo is to move the left side of the edge drawing machine, move the stretching wheel left and right, and make the steel strip deform during automatic operation to realize the R-angle stretching function of the steel ring.

5、Picture 5 Icon ⑭ is Lifting servo motor. Move the drawing upper die up and down, take the material from the tray to close the die with the drawing lower die, and return to the waiting position after drawing.

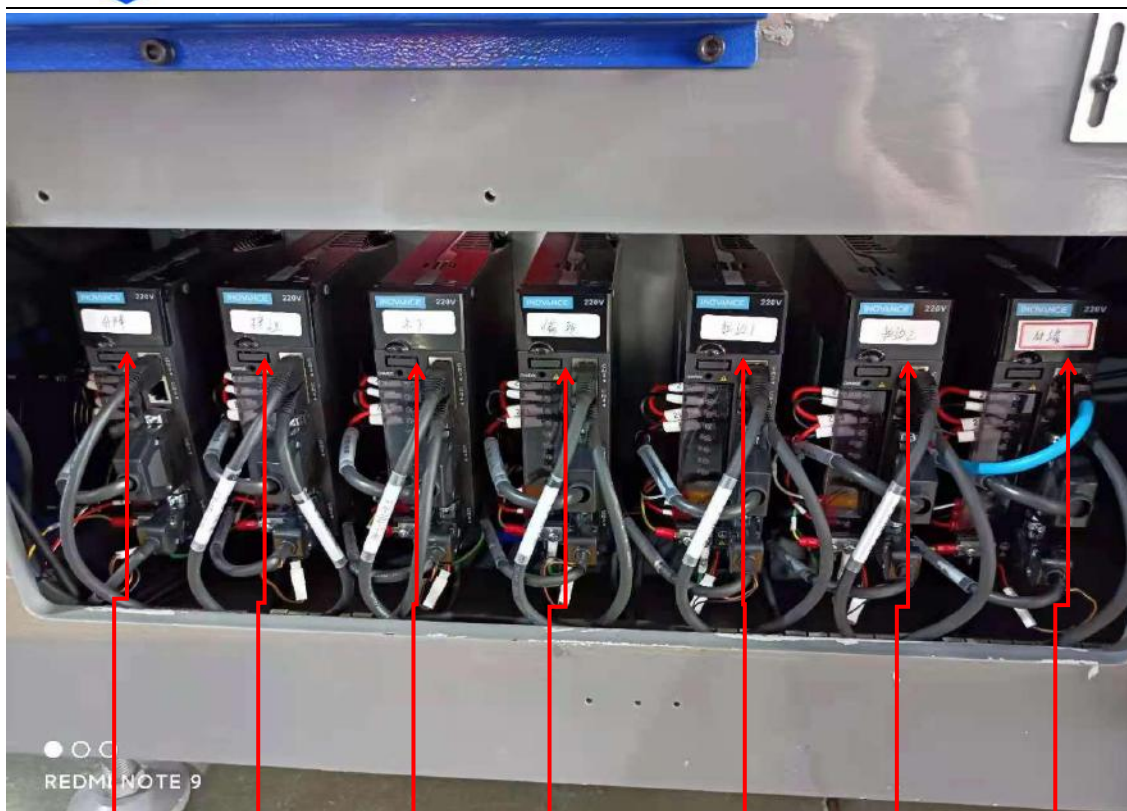
6、Picture 6 Icon ⑯ is Rotary servo motor. In the automatic state, after the upper die is closed with the lower die, the rotating servo motor starts to rotate, and then the stretching wheel starts to move the edge drawing, and the rotation speed is adjustable.

7、Picture 7 Icon ⑰ is Reclaiming lifting servo motor. Realize the function of moving the reclaiming manipulator up and down, cooperate with the reclaiming deflection servo and reclaiming telescopic servo, and move the finished product from the drawing die to the next process.

8、Picture 7 Icon ⑱ is Reclaiming deflection servo motor. Realize the function of left-right deflection of the reclaiming manipulator, and rotate the manipulator from reclaiming to discharging.

9、Picture 8 Icon ⑲ is Reclaiming telescopic servo motor. Realize the function of rotating the angle of the reclaiming manipulator in the reclaiming process, so as to avoid the scratch of the product due to the wrong angle in the grasping process.

5.9、Identification picture of electrical components of electric control box:



②①

②②

②③

②④

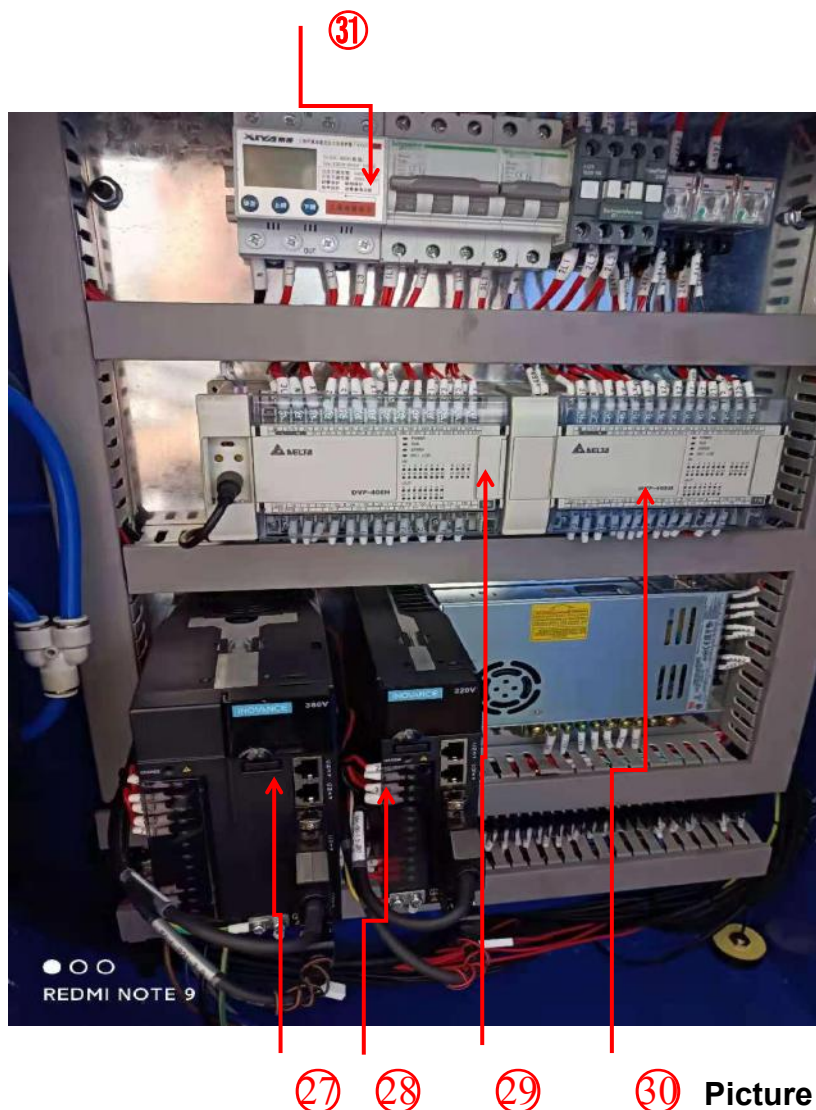
Picture 9

②⑤

②⑥

②⑦

- ②① Lifting servo driver ②② Module servo driver ②③ Reclaiming up and down servo driver
②④ Reclaiming deflection servo driver ②⑤ Edge drawing1servo driver
②⑥ Edge drawing2servo driver ②⑦ Telescopic servo driver



Picture 10

②⑦ Spindle rotation servo driver

②⑧ Rolling wheel servo driver

②⑨ Main control unit PLC1

③⑩ Main control unit PLC2

③① Phase circuit protector

5.10、 Description of electrical components:

1、 The servo motor driver is shown in icon ②⑩ in picture 9 to icon ②⑧ in picture 10, In case of servo failure, the servo driver will alarm code. Touch it according to the fault code in the servo driver manual. Under normal operation state, the driver will display the word "run", indicating that the servo is normal and the word "er..." appears. Under flashing state, it indicates that the servo has an alarm, and the corresponding servo alarm will also be displayed on the main screen of the touch screen, After the alarm processing is completed, it is usually necessary to power off and restart.



2、Picture 10 Icon ③① is Phase circuit protector. When the incoming line has zero or phase loss, the live line and the zero line are reversed, and the voltage is too high or too low, it will automatically disconnect to protect the electrical components of the electric control box.

4.3 Equipment technical parameters:

Name	Unit	Technical parameter
Equipment size	mm	1800*1100*1200
Equipment weight	kg	550
Total power	KW	6
Required air pressure	Mpa	0.5~0.7
Input voltage	V	380V Three phase five wire
Rated frequency	HZ	50
External cable standard		4*3+2.5*2 (U V W N PE)
Drawing speed	pcs/min	7-10

4.4 Equipment characteristics:

1、The edge drawing machine is the next process of the crimping machine on the basis of crimping. It is an indispensable process of the automatic line in the kitchenware industry

2、The up and down movement, transmission wheel, module movement, edge puller position and spindle rotation are all controlled by Huichuan servo motor. The position of product reclaiming, manipulator reclaiming, manipulator discharging and stretching depth are controlled by parameters. It has the advantages of high control precision, low failure rate and simple operation.

3、Edge drawing is a process of edge drawing completed by upper and lower dies, an R-angle drawing wheel and a right angle drawing wheel.

4、The pneumatic components adopt Taiwan Yadeke and Japan SMC executive components, with long service life and high reliability.



五、Maintain

5.1 Equipment maintenance:

- 1、 All guide rails and screw rods shall be greased every six days, and the surface shall be cleaned before filling.
- 2、 All mechanical moving parts shall be inspected every three days without looseness or damage.
- 3、 Various faults encountered during commissioning shall be recorded, such as fault problems and solutions, so as to facilitate the next rapid processing.

5.2 Daily maintenance:

1. During operation, the pressure of air source treatment duplex must be adjusted to 0.5-0.6mpa
2. Filter drainage operation shall be carried out at least once per shift (8 hours). Drainage method: cut off the air source, treat the inlet air source of the duplex, exhaust the pressure gas in the air path, and the pressure gauge value is 0. In this state, the filter will drain automatically. After the operation is completed, it must be confirmed that the water collected in the filter has been discharged
3. Check the oil level of the oil cup of the oil feeder once a week to ensure that there is oil in the oil cup. The oil feeder uses isovg32 or lubricating oil of the same level. The oil output is adjusted by the knob above the oil feeder. It is recommended to adjust it to the number 2.
- 4、 All guide rails and screw rods shall be greased every six days, and the surface shall be cleaned before filling.



六、Common fault analysis and elimination

Fault phenomenon	Cause of failure	Solution
No response after startup	Power failure or phase loss	Restore power
Servo alarm	Check whether the material is jammed	Clear the alarm or power on again according to the servo alarm code
Cannot reset	1、The origin switch is damaged and the welding station cannot move back. 2、The device is in alarm state.	1、Check whether all cylinder switches are in position, and replace the welding origin switch in time. 2、Clear alarm
After edge drawing, the upper mold of the product cannot be demoulded	1、The R angle of the drawing upper die does not match the R angle of the finished edge of the product. 2、At the moment of demoulding the upper die and the lower die, the upper die immediately stops rotating, and the upper die bearing rotates too tightly. 3、Lifting servo belt position parameter is not set properly。	1、Adjust the R angle of crimping or repair the upper die. 2、Adjust the flexibility of the upper die bearing to make the upper die rotate more easily. 3、Modify the lifting servo belt parameters. 4、Modify the return speed of lifting servo. 5、Modify the return speed of the edge puller.
After pulling the edge, the product flies out	1、Lifting servo belt position high 2、Fast rotary servo speed 3、Short lifting return delay	1、Lower the lifting servo belt position 2、Reduce the speed of the rotary servo 3、Increase the time of lifting return delay



Bad shape of edge drawing	<ul style="list-style-type: none">1、 The angle of the stretching wheel is not adjusted properly2、 The height position of the contact surface between the drawing wheel and the drawing upper die is not adjusted properly.3、 The speed of the stretching wheel is too fast or too slow in the process of edge drawing.4、 The rotary servo rotates too fast or too slowly	<ul style="list-style-type: none">1、 Adjust the angle position of the edge puller2、 Adjust the height position of the edge puller3、 Modify the running speed of edge drawing4、 Modify the running speed of rotary servo
After edge drawing, the product size is wrong	<ul style="list-style-type: none">1、 Incorrect drawing dimension parameters2、 Deformation or wear of edge puller3、 There is clearance in the edge pulling mechanism or the screw is loose	<ul style="list-style-type: none">1、 Modify the parameters of the tab size2、 Replace the edge puller3、 Adjust the clearance of the mechanism and tighten the screws of the edge puller mechanism

七、 Operation essentials

7.1 Operation preparation:

1. Connect the air source so that the indication of the pressure gauge is 0.5-0.7mpa.
2. Connect the 380V power supply, turn on the circuit breaker switch of the control box, and unscrew the emergency stop button on the panel to keep the machine powered on.
3. When the cylinder servo motor is at the specified position, in the manual state, press any button on the manual screen to carry out manual operation.
4. Automatic working conditions of the machine: the equipment has no alarm, the full axis reset is completed, and the equipment is in automatic state.



八、Controller introduction

8.1 Characteristics of control system

·The control system of the machine adopts Delta PLC, Fanyi touch screen and Huichuan servo driver. It can adjust the crimping depth, reclaiming position, crimping position and crimping speed, which is more convenient to control.

8.2 Introduction to touch screen button switch

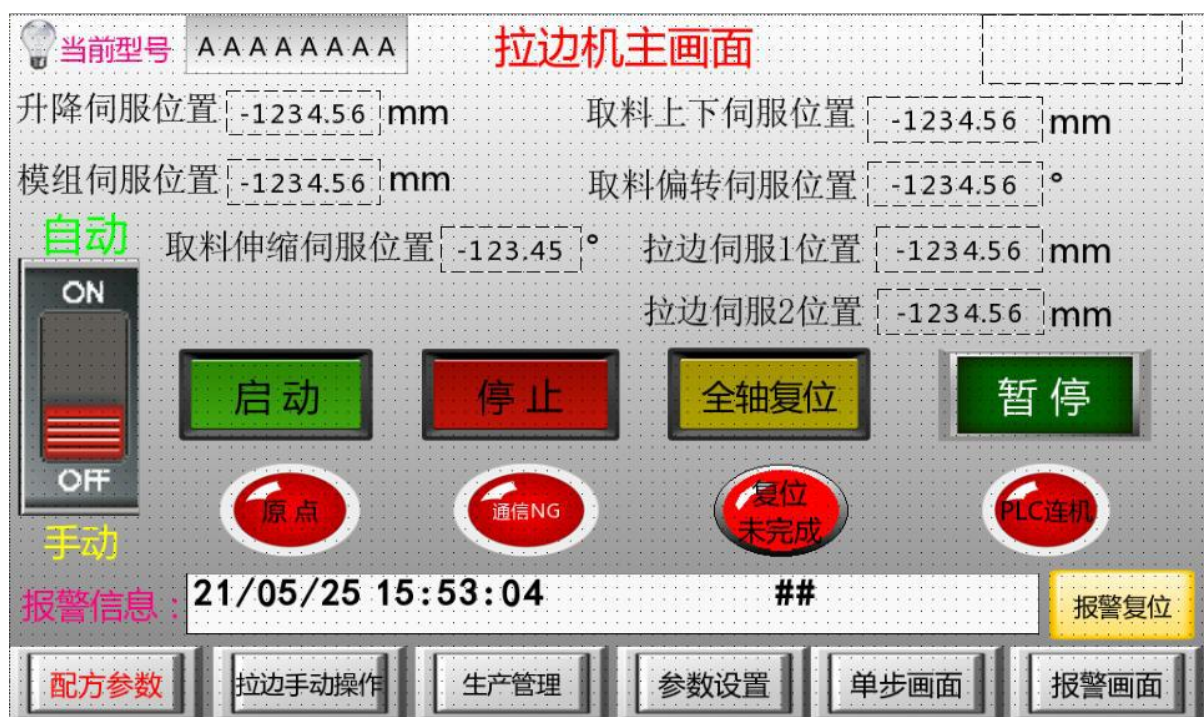
·On the premise of connecting the power supply, press the "emergency stop" button on the lower board of button 1, the work indicator on the panel is on and the touch screen is displayed.

Initial page·



·After the machine is powered on, the initial state of the touch screen displays the startup screen, which displays the equipment name, company address, contact telephone, Chinese and English buttons and the "enter operation" button.

Main operation interface·



The host operation touch screen displays the above screen. In the automatic state, the equipment has no alarm and the full axis reset of the equipment is completed. Press the "start" button on the screen to start the machine normally. The corresponding induction switch indicator light is also displayed on the screen, and the indicator light on the screen will be on. If it is not in the starting position, switch to manual, press the "reset" button, and the machine will automatically return to the starting position.

In the process of automatic operation, press the "stop" button, the equipment will complete the current product, run to the next round, and the equipment will stop automatically. When the equipment fails, the corresponding alarm information appears in the alarm information column, which is convenient for the user to find out the corresponding fault in time. After the fault is handled, press the "alarm reset" button to clear the alarm information in the alarm information column. When there are alarm information such as servo alarm, the equipment can process the alarm information when it is powered off and restarted.

In the main operation interface of the touch screen, press the "edge pulling manual operation" button, and the screen will jump to the continuous manual screen. In the manual state, press the "belt servo start" and "rotary servo" buttons on the screen, the corresponding servo motor will start, and the button indicator light will be on during operation. Adjust the hand wheel shaft to the "off" gear and the speed gear of the hand wheel to the ideal speed. When you shake the wheel, the edge pulling



servo motor will move forward or backward, and the data of edge pulling servo position will change accordingly. Press the "edge pulling servo switching" button on the screen to control the switching of two edge pulling servo. Do not collide with mechanical parts during shaking the hand wheel. Press the "starting point position", "in place position" and "material locking position" buttons in the edge pulling 1 interface box or edge pulling 2 interface box, and the servo will run according to the parameters set in the parameter screen. Before these position buttons, ensure that the corresponding parameters of the parameter screen comply with the actual servo position, so as to avoid collision and damage to mechanical parts.

Edge pulling manual operation·



·In the touch screen edge pulling manual operation interface, press the "next page" button, or directly turn the gear switch of the hand wheel to "X", and the screen will jump to the x-axis manual operation screen· In the main operation interface of the



touch screen, press the "edge pulling manual operation" button, and the screen will jump to the continuous manual screen. In the manual state, when you shake the hand wheel, the lifting servo motor will rise or fall, and the data of the lifting servo position will also change. In the process of shaking the hand wheel, pay attention not to collide with the mechanical parts. Jog the "original difficult position", "starting point position", "return position", "pressing position" and "loading position" buttons in the interface box. The lifting servo will operate according to the position and speed set in the parameter screen. Before these position buttons, ensure that the corresponding parameters of the parameter screen comply with the actual servo position to avoid collision and damage to mechanical parts.



X axis manual operation page

参数设置		X轴手动操作			
升降伺服起始位置	-1234.56	MM	确认	原始位置	
升降伺服取料位置	-1234.56	MM	确认	取料位置	
升降伺服返回位置	-1234.56	MM	确认	返回位置	
升降伺服压料位置	-1234.56	MM	确认	压料位置	
升降伺服带料位置	-1234.56	MM	确认	带料位置	
主画面		升降伺服当前位置	-1234.56	MM	下一页



In the x-axis manual operation interface of the touch screen, press the "next page" button, or directly turn the gear switch of the hand wheel to "Y", and the screen will jump to the y-axis manual operation screen. The operation method is the same as that of the x-axis, and the screen is shown in the figure below.

Y axis manual operation page



Z axis manual operation page



参数设置		Z轴手动操作			
取料上下伺服起始位置	-1234.56	MM	确认	手指气缸	原始位置
取料上下伺服取料位置	-1234.56	MM	确认		取料位置
取料上下伺服放回位置	-1234.56	MM	确认		放料位置
取料上下伺服当前位置			-1234.56	MM	
主画面		下一页			

4-axis manual operation page

参数设置		4轴手动操作						
取料偏转伺服起始位置	-1234.56	度	确认	手指气缸	偏转待机位置			
取料偏转伺服取料位置	-1234.56	度	确认		偏转取料位置			
取料偏转伺服放料位置	-1234.56	度	确认		偏转放料位置			
				排水				
取料伸缩伺服起始位置	-1234.56	度	确认		伸缩待机位置			
取料伸缩伺服取料位置	-1234.56	度	确认		伸缩取料位置			
取料伸缩伺服放料位置	-1234.56	度	确认	偏转伺服切换	伸缩放料位置			
主画面		偏转伺服当前位置	-123.45	度	伸缩伺服当前位置	-123.45	度	下一页

·When the edge drawing machine needs to use a variety of models to stretch, it needs to use the formula function. The formula can store parameters of a variety of models and specifications. In the process of use, it can avoid setting parameters



Recipe page.

In case of failure and need to re debug or make new models of products, you can run the one-step mode, which is very convenient to find the problem points in the process of use. Click the "single step screen" button on the main screen to enter the single step screen. When the equipment is reset, no alarm and automatic mode, open the "single step" button of the single step screen and click the "single action" button to



realize the single step start of the equipment. In the process of single-step operation, all single action actions operate normally. Click the "linkage" button to realize the single cycle of action linkage. During use, some functions of the equipment can also be switched, which can be set in the single step screen.

Single step screen



Click the "production management" button on the main screen to enter the output setting page, where you can see the product count and cumulative count. Setting the output means that the automatic shutdown function can be realized when the equipment product count reaches the set output setting value. When the output is set to 0, the shutdown function of reaching the output will not be enabled. Press the "reset" button once, the product count value will be cleared, and the production beat, count per minute, current count, current servo position and current state can be monitored.

Production management page



主画面

生产管理

日期:1234年12月12日
星期:日 时间:12时12分12秒

生产节拍: 12.3 S
累计计数: 12345678
每分计数: 12 个/分
当前计数: 12 个/分
计数: 123456
清零

名称	当前状态	当前位置
升降伺服		-123.45 mm
模组伺服		-123.45 mm
取料上下伺服		-123.45 mm
取料偏转伺服		-123.45 度
拉边伺服		-123.45 mm

Press the "parameter setting" button on the main screen, and the touch screen will enter the parameter setting screen, as shown in the following figure.

Host parameter page

主画面

主机参数设置

取料手动操作

拉边手动操作

升降自动速度	123.4 %	取料升降自动速度	123.4 %	升降返回延时	12.3 S
升降返回速度	123.4 %	取料伸缩自动速度	123.4 %	托盘返回延时	12.3 S
模组上料返回速度	123.4 %	取料偏转自动速度	123.4 %	来料感应延时	12.3 S
模组上料自动速度	123.4 %	拉边1自动速度	123.4 %	产品取料延时	12.3 S
皮带送料手动速度	123.4 %	拉边1返回速度	123.4 %	气缸夹紧延时	12.3 S
皮带送料自动速度	123.4 %	拉边2自动速度	123.4 %	拉边到位延时	12.3 S
皮带送料慢速速度	123.4 %	拉边2返回速度	123.4 %	拉边1启动延时	12.3 S
		旋转结束延时	12.3 S	拉边2启动延时	12.3 S

The parameter page is used to set the servo speed and cylinder arrival delay during the automatic operation of the edge drawing machine. Press and hold the



blank space in the lower right corner of the parameter setting screen, and the touch screen will enter the servo limit parameter setting screen, which is the soft limit setting, low limit travel and high limit travel of servo travel when the servo is using the hand wheel. As shown in the figure below.

Servo limit parameter setting

伺服限位参数设置

升降伺服上限值	-1234.56 MM	取料上下伺服上限值	-1234.56 MM
升降伺服下限值	-1234.56 MM	取料上下伺服下限值	-1234.56 MM
模组伺服上限值	-1234.56 MM	取料偏转伺服上限值	-1234.56 度
模组伺服下限值	-1234.56 MM	取料偏转伺服下限值	-1234.56 度
拉边伺服上限值	-1234.56 MM	取料伸缩伺服上限值	-1234.56 度
拉边伺服下限值	-1234.56 MM	取料伸缩伺服下限值	-1234.56 度
		拉边2伺服上限值	-1234.56 MM
		拉边2伺服下限值	-1234.56 MM

 主画面

全自动拉边机参数表									
升降伺服参数		模组伺服参数		取料上下伺服参数		取料偏转伺服参数		麻转伺服参数	
H00-00=14101	电机编号	H00-00=14101	电机编号	H00-00=14101	电机编号	H00-00=14101	电机编号	H02-00=0	控制模式选择0-速度模式
H02-01=1	绝对值系统选择	H02-01=1	绝对值系统选择	H02-01=1	绝对值系统选择	H02-01=1	绝对值系统选择	H02-02=1	方向选择0-正转, 1反转
H02-02=0	方向选择0-正转, 1反转	H02-02=0	方向选择0-正转, 1反转	H02-02=1	方向选择0-正转, 1反转	H02-02=0	方向选择0-正转, 1反转	H04-07=1	报警选择
H04-07=1	报警选择	H04-07=1	报警选择	H04-07=1	报警选择	H04-07=1	报警选择	H03-12=4	D16端子选择
H05-02=2500	1圈脉冲数	H05-02=2500	1圈脉冲数	H05-02=4000	1圈脉冲数	H05-02=7200	1圈脉冲数	H03-14=6	D17端子选择
H09-00=1	自调整模式选择	H09-00=1	自调整模式选择	H09-00=1	自调整模式选择	H08-00=100	H8-15=3.00	H06-00=0	H06-01=5
H09-01=15	刚性等级选择	H09-01=15	刚性等级选择	H09-01=15	刚性等级选择	H08-01=60	H8-02=10	H06-02=3	H06-03=0
H0C-00=1	伺服轴地址	H0C-00=2	伺服轴地址	H0C-00=3	伺服轴地址	H0C-00=4	伺服轴地址	H06-05=100	H06-06=100
H0C-02=2	串口波特率设置	H0C-02=2	串口波特率设置	H0C-02=2	串口波特率设置	H0C-02=2	串口波特率设置	H08-00=100	H08-15=3.00
H0C-03=0	MODBUS数据格式	H0C-03=0	MODBUS数据格式	H0C-03=0	MODBUS数据格式	H0C-03=0	MODBUS数据格式	H08-01=60	H08-02=10
H03-11=1	伺服上电使能	H03-11=1	伺服上电使能	H03-11=1	伺服上电使能	H03-11=1	伺服上电使能	H02-25=1	H02-26=800
						H07-09=100		H02-27=60	
						H07-10=100		H12-00=2	H12-01=16
								H12-23=800	
								H03-11=1	伺服上电使能
拉边伺服参数1		送料伺服参数		伸缩伺服参数		拉边伺服参数2			
H00-00=14101	电机编号	H02-02=1	方向选择0-正转, 1反转	H00-00=14101	电机编号	H00-00=14101	电机编号		
H02-01=1	绝对值系统选择	H04-07=1	报警选择	H02-01=1	绝对值系统选择	H02-01=1	绝对值系统选择		
H02-02=0	方向选择0-正转, 1反转	H05-02=2000	1圈脉冲数	H02-02=1	方向选择0-正转, 1反转	H02-02=1	方向选择0-正转, 1反转		
H04-07=1	报警选择	H09-00=1	自调整模式选择	H04-07=1	报警选择	H04-07=1	报警选择		
H05-02=3600	1圈脉冲数	H09-01=15	刚性等级选择	H05-02=2000	1圈脉冲数	H05-02=3600	1圈脉冲数		
H09-00=1	自调整模式选择	H07-09=100	伺服上电使能	H08-00=100	H8-15=3.00	H09-00=1	自调整模式选择		
H09-01=15	刚性等级选择	H07-10=100		H08-01=60	H8-02=10	H09-01=15	刚性等级选择		
H0C-00=1	伺服轴地址			H0C-00=6	伺服轴地址	H0C-00=7	伺服轴地址		
H0C-02=2	串口波特率设置			H0C-02=2	串口波特率设置	H0C-02=2	串口波特率设置		
H0C-03=0	MODBUS数据格式			H0C-03=0	MODBUS数据格式	H0C-03=0	MODBUS数据格式		
H03-11=1	伺服上电使能			H03-11=1	伺服上电使能	H03-11=1	伺服上电使能		
				H07-09=100					
				H07-10=100					