User's Manual
RJMKC SERIES

Preface

It is our great honor for you to purchase Runjin CNC cutting system. Runjin CNC cutting system is developed by Ningbo Runjin Mechanical and electrical Technology Co., LTD., which is specialized in the design of CNC cutting equipment for carton, printing and packaging advertising enterprises. It not only has advanced computer-aided design function and a set of superior NUMERICAL control program, but also has many advantages, such as high speed, high accuracy,low noise, simple process and easy to learn, smooth cutting line, perfect crease, to ensure that the products produced excellent quality.

In order to help you to use the equipment easily, we strive to make this manual simple and easy to understand, comprehensive content, suitable for self-study of all levels of people, easy for you and your staff to master the installation steps, basic operations, safety precautions, to simple trouble shooting and other aspects of knowledge. Before you use the device for the first time, please read this user manual carefully so that you can use it correctly and keep it properly. In case of any problems you do not understand or system faults, you can refer to this manual for help.

Declare

- The contents of this manual are subject to change without notice;

- The copy right of this manual belongs to Ningbo Ruking Electrical Technology Co., Ltd.(here in after refer red to as RUK);

- RUK does not make any guarantees for this manual, and users are not responsible for any misunderstandings that maybe caused by this manual;

- If there is any discrepancy between the contents of this manual and the Purchased RUK CNC cutting system, RUK reserves the right of final interpretation;

- If you have any problems while using the Runjin CNC cutting system, Please call the service hot line of RUK Customer Service Center: 400-680-9891

Content

1. Installation of Equipment

1.1 Selection of Equipment Placement Environment

Before unpacking and installing the device, first you need to choose a suitable environment to place the device. This environment should meet the following requirements:

- The ground should be flat and dry; avoid placing it in places containing corrosive gas or liquid, avoid water droplets, steam, oily dust, flammable, explosive gases, floating dust and metal particles.

- The power supply is AC 220V±10%/50HZ, avoid using the same power supply with other high-power or interference electrical appliances to keep the power supply stable.

- Avoid close to heat sources, static electricity, strong magnetism, so as not to interfere with the transmission of the equipment.

- The ambient temperature should be within the range of 5℃-40℃.

- Environmental humidity should be in the range of 1%-75%.

- Should not be placed in a place with strong sunlight, avoid direct sunlight to cause the countertop to sun, which will affect the service life.

1.2 Handling Instructions

The outer packaging should be packed in wood boxes according to international standards.

- This equipment is a precision instrument, so strong vibration and collision should be prevented during transportation.

- Fork lifts are required for loading and unloading during transportation, and barbarous loading and unloading is strictly prohibited.

- Handle with care when transporting, and place it in accordance with the instructions on the outer packaging.

- Do not place the unloaded equipment in a water pile or a damp place to avoid electrical leakage of the equipment.

- When disassembling the outer packaging, the operator must wear gloves to avoid scratches.

1.3 Unpacking Inspection of Equipment

Open the outer packaging and check whether the parts in the box are complete according to the equipment component diagram:

Accessory box, plat form, machine head, chassis, pumping box, receiving rack

- Accessories in the accessory box: including blades, machine tools, electronic accessories, some wires, assembly tools and screws, related documents, and other optional tools. Please check the accessories list for details.

- Note:

Please check the above parts before installation.

The above parts are subject to the actual product, and are subject to change without notice.

1.4 Equipment Appearance Structure

RUK CNC cutting equipment consists of the following six parts: Frame + platform + controller + transmission + machine head(wheel, knife,pen) + air pump

- The frame is responsible for supporting the entire machine table and providing for placing cutting materials;

- The plat form is the working surface where the cutting material is placed. Its level is very important, and there must be no unevenness up and down.This machine uses a 5mm thick aluminum plate to be used after being ground flat according to the super standard;

- The controller is the heart of the entire CNC cutting system. Its performance is the decisive factor to measure the quality of the equipment, and the software level of the controller is the soul. This machine adopts the combination of imported controller and self-developed numerical control software to achieve more advanced functions than imported machines;

- The transmission part is the actuating mechanism of the computer numerical control cutting system, which adopts the combination of

imported transmission belt+imported linear guide rail, so that the cutting system is stable and has a long life;

- The head is divided into knife, pen, creasing wheel and camera.The design structure of the knife head directly affects the quality of the cut sample. The design of the pen head should have a soft and brisk feeling. This machine adopts a standard structure, so that the work of the pen cutter wheel can be done in one go.

- Air pump: The large suction air pump is used to make the cutting material firmly adsorbed on the platform, so that the cutting effect of the material is guaranteed.

1.5 Main Points of Equipment Assembly

After the equipment is placed in a proper position, you need to drop down all the feet to make the machine stable and adjust the levelness by turning the feet.

1.6 Line Connection

Power cord connection method: As shown in the figure below, this Equipment meets the relevant international electrical design requirements and has passed CE certification. According to the national power consumption standards, the chassis and electrical box use 220V±10%

standard single-phase power supply. Please note, L is the live wire, N is

the neutral wire, and GND is the ground wire.

2. RJMKC Series Operation and Touch Screen Interface Settings

2.1 RJMKC Turn On and Turn Off

Turn on：

Connect the power cord, connect the air compressor, turn the

emergency stop switch, the LCD screen is on, wait for about 10 seconds.

After the system is booted, the LCD screen displays the main interface of

the system like following picture. Press enter, the machine will reset and

then the booting will finish.

Turn off：

Press the emergency stop switch to turn off the cutting system.

2.2 Man-machine Interface Instructions

AUTO P	Operating suction:continue to press this button, you can make the suction always open, always close and auto controlled by the system. If you select the auto mode, suction will be opened automatically while cutting.			
Reset	If you press this button, the machine will be reset, just like restarting.			
Repeat	Repeat the cutting of the last version of graphics.			
System Set	Speed	U Speed	The maximum speed when the pen draws a straight line.	
		U Accel	The acceleration and deceleration when the pen draws a straight line.	
		U1 Speed	The maximum speed when the ordinary tool cuts a straight line.	
		U1 Accel	The acceleration and deceleration when the ordinary tool cuts a straight line.	
		U2 Speed	The maximum speed when the oscillating tool cuts a straight line.	

		U2 Accel	The acceleration and deceleration when the oscillating tool cuts a straight line.
		U3 Speed	The maximum speed when the creasing wheel crease a straight line.
		U3 Accel	The acceleration and deceleration when the creasing wheel crease a straight line.
		U Stop Angle	The angle when the pen tool needs to go up and down when it executs the drawing command.
		U Angular Speed	The maximum speed when the pen draws a curve.
		U1 Stop Angle	The angle when the ordinary tool needs to go up and down when it executs the cutting command.
		U1 Angular Speed	The maximum speed when the ordinary tool cuts a curve.
		U2 Stop Angle	The angle when the oscillating tool needs to go up and down when it executs the cutting command.
		U2 Angular Speed	The maximum speed when the oscillating tool cuts a curve.
		U3 Stop Angle	The angle when the creasing wheel needs to go up and down when it executs the creasing command.
		U3 Angular Speed	The maximum speed when the creasing wheel crease a curve.
		Air Speed	The maximum speed when the system is moving.
		Air Accel	The acceleration and deceleration when the system is moving.
	Offset	U Offset X	Based on the laser, adjust the error of the distance between the pen and the laser in X direction.
		U Offset Y	Based on the laser, adjust the error of the distance between the pen and the laser in Y direction.
		U1 Offset X	Based on the laser, adjust the error of the distance between the ordinary tool and the laser in X direction.
		U1 Offset Y	Based on the laser, adjust the error of the distance between the ordinary tool and the laser in Y direction.

		U2 Offset X	Based on the laser, adjust the error of the distance between the oscillating tool and the laser in X direction.
		U2 Offset Y	Based on the laser, adjust the error of the distance between the oscillating tool and the laser in Y direction.
		U3 Offset X	Based on the laser, adjust the error of the distance between the creasing wheel and the laser in X direction.
		U3 Offset Y	Based on the laser, adjust the error of the distance between the creasing wheel and the laser in Y direction.
		U Delay	The system delays a few milliseconds after the pen action.
		U1 Delay	The system delays a few milliseconds after the ordinary tool action.
		U3 Delay	The system delays a few milliseconds after the creasing wheel action.
		Lift tool delay	The system delays a few milliseconds after the tool goes up.
		Tool down delay	The system delays a few milliseconds after the tool goes down.
		Pump Delay	The system delays a few milliseconds after the pump action.
		U1 Rotation Angle Compensation	For adjusting the angle of the ordinary tool. After changing this number, you need to press reset on the touch screen to make it work.
		U2 Rotation Angle Compensation	For adjusting the angle of the oscillating tool. After changing this number, you need to press reset on the touch screen to make it work.
		U3 Rotation Angle Compensation	For adjusting the angle of the creasing wheel. After changing this number, you need to press reset on the touch screen to make it work.
		V-Cut Rotation Angle Compensation	For adjusting the angle of the v-cut tool. After changing this number, you need to press reset on the touch screen to make it work.
	Function	Auto Repeat	After turning on this function,the system will repeatedly execute the current version of file cutting, until cancel it.

		Auto Return	Automatic return to origin function, it will return to the mechanical origin position after cutting a pattern of samples
		Safety Switch	This function is not available on this model.
		Download Port	Download port selection,only network port is supported temporarily.
		PG Switch	Make the equipment enter the waiting state after finishing a plate cutting,until press"OK" to continue.
		Wifi Switch	This function is not available on this model.
		IP Address	The machine's IP address setting(factory setting is 192.168.0.250）
		FQ Function	divide the whole suction area into a few small areas to strengthen the local suction. but this function is not available on this model.
	Advanced		Set by factory personnel.
Manual Test		U Action	For making the pen tool go up or down,the pen depth needs to be manually adjusted by the pen chuck of the machine head.
		U1 Action	For making the ordinary tool go up or down,the ordinary tool depth needs to be manually adjusted by on the touch screen.
		U2 Action	For making the oscillating tool go up or down,the oscillating tool depth needs to be manually adjusted by on the touch screen.
		U3 Action	For making the creasing wheel go up or down,the wheel depth needs to be manually adjusted by on the touch screen.
		Cylinder down	For making the suction feet go up or down, first the air compressor must be on.
		Shock OFF	For turning on or turning off vibration of the oscillating tool.
		Pump	For turning on turn off the vacuum pump.
		roller	For turning on or turning off rolling of the roller.

		Suction cup suction	For turning on or turning off suction of the suction feet.
		Blowing static electricity	For open or close electrostatic blowing manually.
		Platform scrolling	
	Send		Manually test and execute the feeding process.After power-on reset,first press the automatic switching button of the lifting platform twice in a row to put the lifting platform in automatic mode and wait for the cutting platform to receive the signal to allow feeding.
	Test Speed		The speed of manual movement,it can be modified.
			Press and hold the arrow keys to move in the indicated direction. After fine-tuning,the moving speed will be 1/10 of the original.The values shown are the X and Y coordinate values of the position of the machine head respectively.
	Tools Set	Rotate Speed	Rotation speed when the tools change direction. The bigger the number is, the faster the tools rotate.
		Rotate Accel	Rotation acceleration when the tools change direction. The bigger the number is,the faster the rotation reaches the maximum speed.
		U Knife falling speed	Speed when the pen tool drops down.
		U falling acceleration	Acceleration when the pen tool drops down.
		U1 Knife falling speed	Speed when the ordinary tool drops down.
		U1 falling acceleration	Acceleration when the ordinary tool drops down.
		U2 Knife falling speed	Speed when the oscillating tool drops down.
		U2 falling acceleration	Acceleration when the oscillating tool drops down.
		U3 Knife falling speed	Speed when the creasing wheel drops down.
		U3 falling acceleration	Acceleration when the creasing wheel drops down.

		V_Cut Down Speed	Speed when the v_cut tool drops down.(optional)
		V_Cut Down Accel	Acceleration when the v_cut tool drops down.(optional)
	Auto Send	Fix Send SW	When the system isperform feeding,the roller rolls with a delay of a few milliseconds.
		Auto Send SW	Automatic scrolling function switch. If you turn it on, the machine will feed material automatically after cutting.
		Send Offset	Distance of feeding more than the standard position.
		Send Speed	Speed when the machine feed the cutting material.
		Send Accel (Delay of Suction)	The system delays a few seconds after the suction feet drops down to adsorb the material firmly.
		Send Offset (Delay of Cylinder)	The system delays a few seconds after the suction feet raise up.
		Pump Delay(Suction Release Relay)	The system delays a few seconds after the material is sent to the designated position.
		0000	Related to the feeding position of the machine. It was adjusted before shipping, please don't modify it easily.
		Offset X	Related to the feeding position of the machine. It was adjusted before shipping, please don't modify it easily.
		Offset Y	Related to the feeding position of the machine. It was adjusted before shipping, please don't modify it easily.
		Test Speed	The speed of manual movement,it can be modified.
		Platform test speed	The speed of the platform going up or going down.
		Action of platform	For changing the platform movement mode between automatic and manual.

			For moving the machine head manually.
			For moving the platform up and down, first please make sure the it is under automatic mode.
			For moving the felt back and forth manually.
	Tools Test	Tool Speed	The speed of the tools raise up or drop down manually.
		U Depth	Depth of the pen tool.　Press the number directly then you can modify it. Please increase the number a little each time to protect the pen tool.
		U Action	For dropping down the pen tool to check if its depth is suitable.
		U1 Depth	Depth of the ordinary tool.　Press the number directly then you can modify it. Please increase the number a little each time to protect the knife and the felt.
		U1 Action	For dropping down the ordinary tool to check if its depth is suitable.
		U2 Depth	Depth of the oscillating tool.　Press the number directly then you can modify it. Please increase the number a little each time to protect the knife and the felt.
		U2 Action	For dropping down the oscillating tool to check if its depth is suitable.
		U3 Depth	Depth of the creasing wheel.　Press the number directly then you can modify it. Please increase the number a little each time to protect the tool and felt.
		U3 Action	For dropping down the creasing wheel to check if its depth is suitable.
		V-Cut Rack	Angle at which the v-cut tool moves.(optional)
		Cutter	For altering the tool type between creasing wheel and v_cut tool.
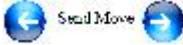
			Tool types can not be selected for this model,SP1 is fixed a s pen,SP2 is fixed as ordinary tool, SP3 is fixed as oscillating tool, SP4 is fixed as creasing wheel.
	Temp origin		Move the laser to the proper position and press this button, This point is then defined as the temporary origin.
Workin g Status		Cut Para	Press it to jump to the cutting parameter screen.
		Reset	Press it to reset the machine.
		Pause	Press it then the cutting job will be paused. Press it again the cutting job will be ended.
		Continue	After pressing "Pause" button one time, then press this button to make the cutting job continue.

2.3 Operation Example

● Acceleration setting (for example, setting pen acceleration)

Press the "System Set" button on the homepage , and press the "Speed"

button when the system set page appears. On the speed setting page,

press the value on the right of "Pen Accel", the system will pop up the

number. After entering the value on the keyboard, press the ENTER

button. Press "BACK" button to return to the homepage, and the pen

acceleration setting is completed.

U Speed:	0000	U Stop Angle:	00	Air Speed:	0000
U Accel:	00	U Angular Speed:	000	Air Accel:	00
U1 Speed:	0000	U1 Stop Angle:	00		
U1 Accel:	00	U1 Angular Speed:	000		
U2 Speed:	0000	U2 Stop Angle:	00		
U2 Accel:	000	U2 Angular Speed:	000		
U3 Speed:	0000	U3 Stop Angle:	00		
U3 Accel:	00	U3 Angular Speed:	000	BACK	

● Locate the temporary origin

Press 'Manual test' on the homepage, on the coming page press the arrows to move the laser to the position where you want to locate the origin, and then press "Temporary origin" button to confirm temporary origin. Then the machine will cut the material based on the position of the laser which you just defined.

(Note: To cancel the positioning, press "Temp origin" button again and then it will return to 0. This temp origin can not be saved after you turn off the machine.)

U Action	Shock OFF	Vibration more Test Speed:	Tools Set
	Pump	000	Auto Send
U1 Action		Send	Tools Test
	roller		
U2 Action	Suction cup suction	Slow	
U3 Action	Blowing static electricity	0000.0 0000.0	
Cylinder down	Platform scrolling	Temp origin 0000.0 0000.0	BACK
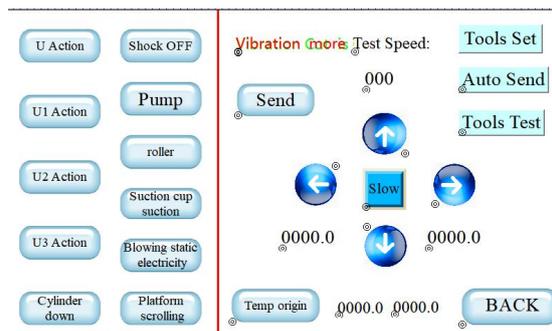
2.4 Decrypt

● When the system displays the words "The program has expired, please contact the manufacturer", it means that the machine has expired, please contact us.

<p style="color:red; text-align:center">Out of time,please contect the manufacturer.</p>

● Restart the machine. When the following page comes out, press the area of the touch screen in the red circle.

● The screen will jump to the decryption page. Send us this page, we can tell you the password. Then please input the password in the blue circle and then press back and enter to start the machine normally.

3 .Tools Installation and Tool Depth Adjusting

3.1 Tools Installation

- Pen tool installation

Loosen the screw and take out the tool
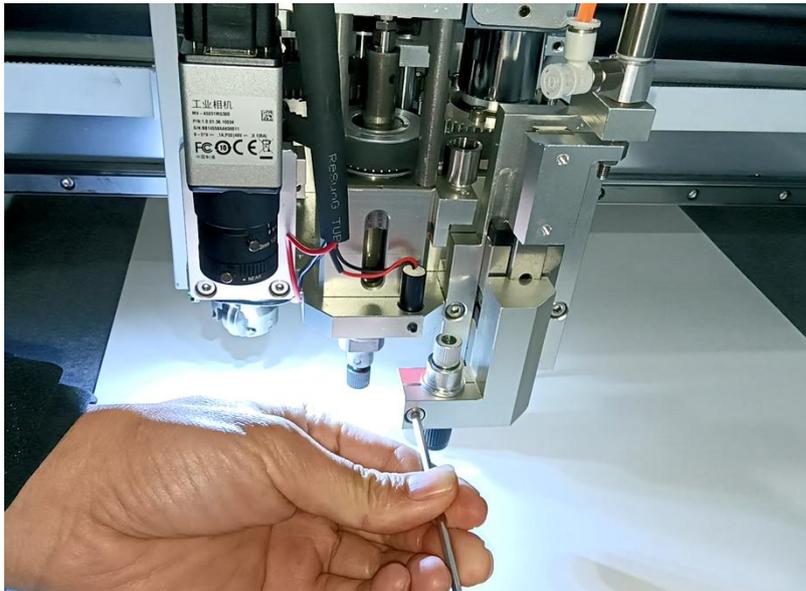
Turn and divide the black part from the silver part.
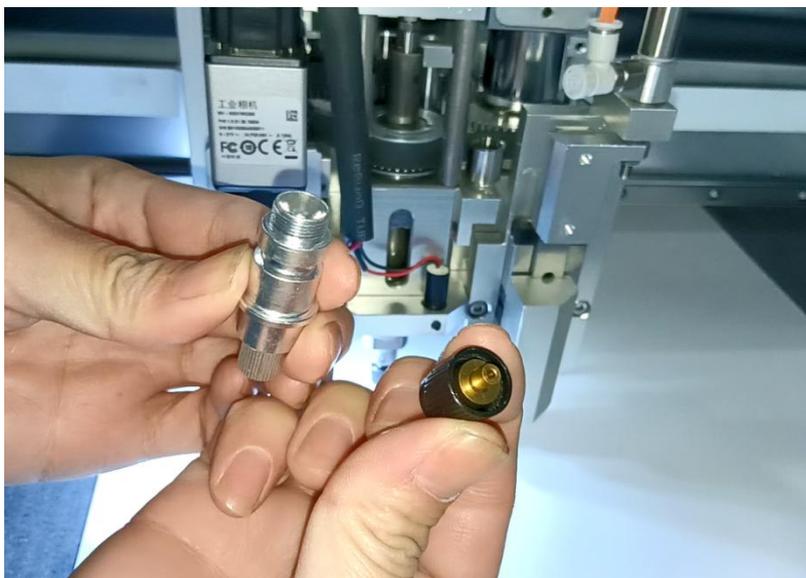
Insert the blade into the black part.
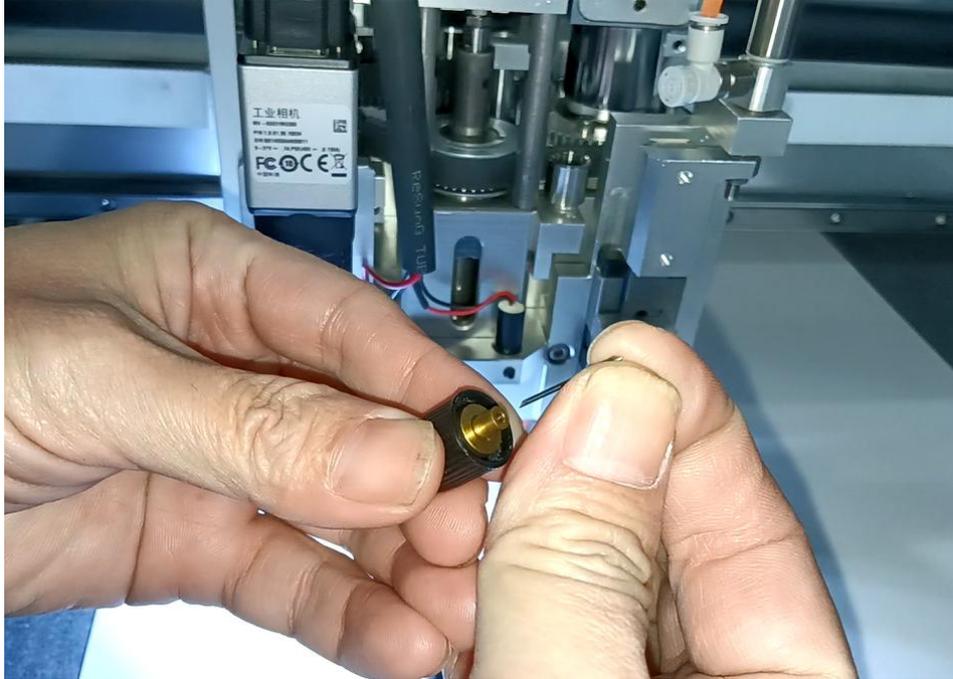
Turn and Join the black part and the silver part together.
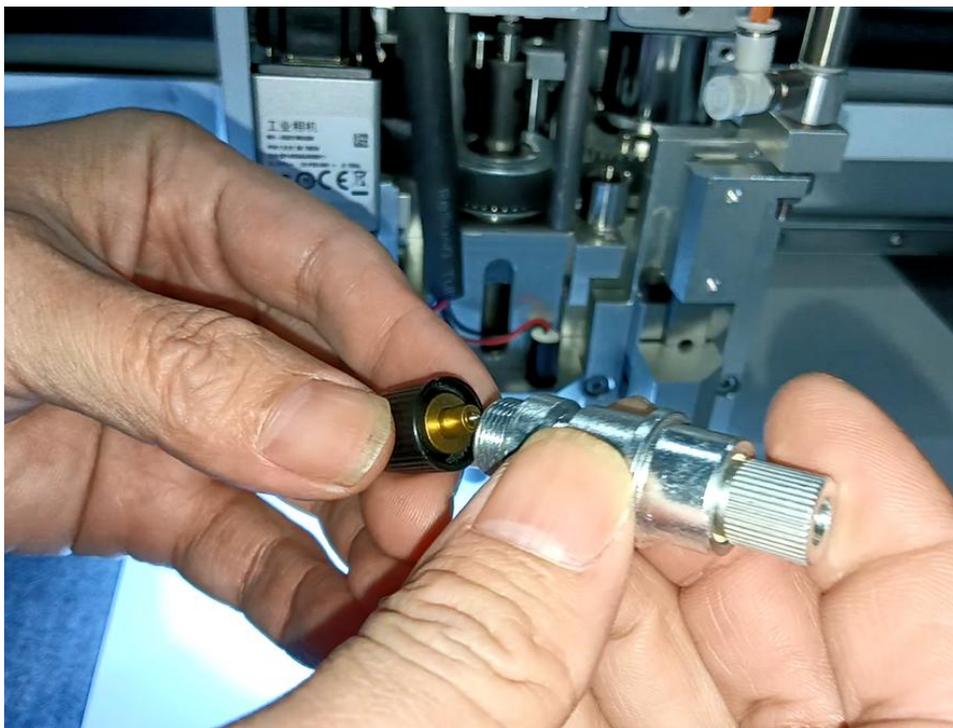
Turn the back of the silver part to adjust the length of the blade coming out, to get half cutting and full cutting.

Put the tool on the holder and tighten the screw.
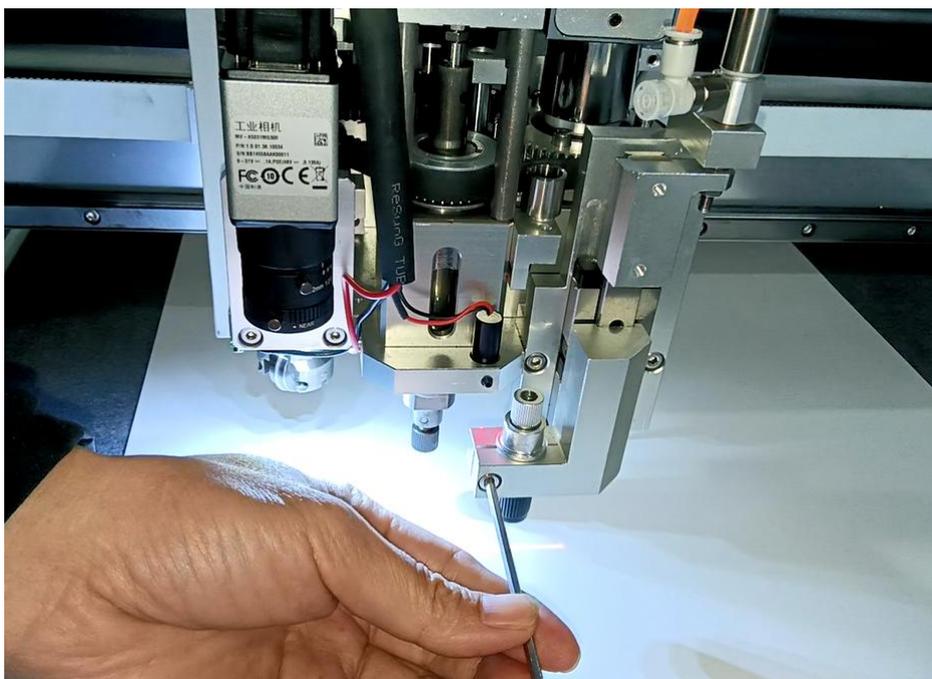
● Blade of ordinary tool installation

Loosen the screw and remove the cap of the tool.
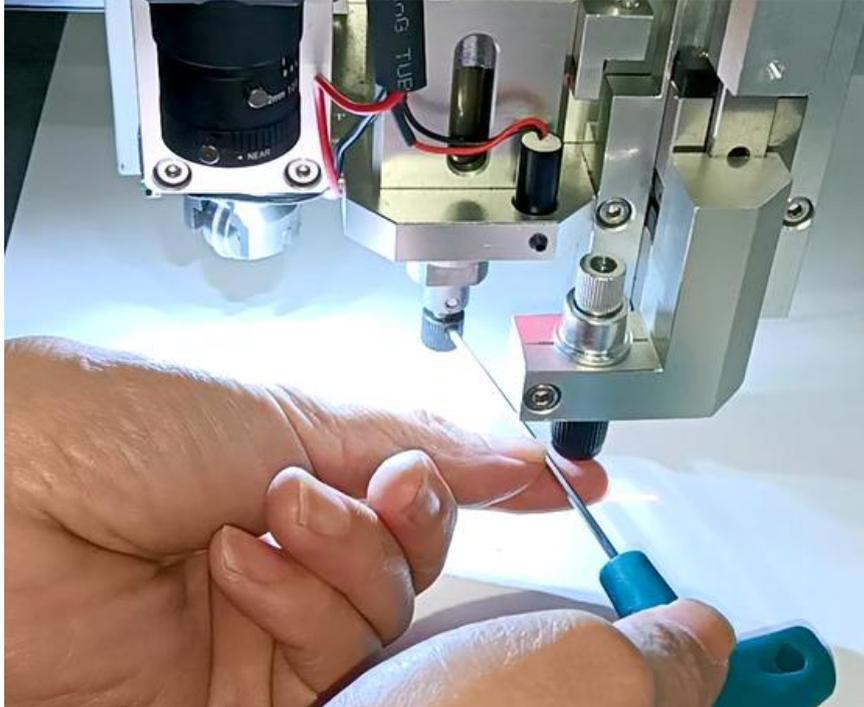
Remove the old blade.
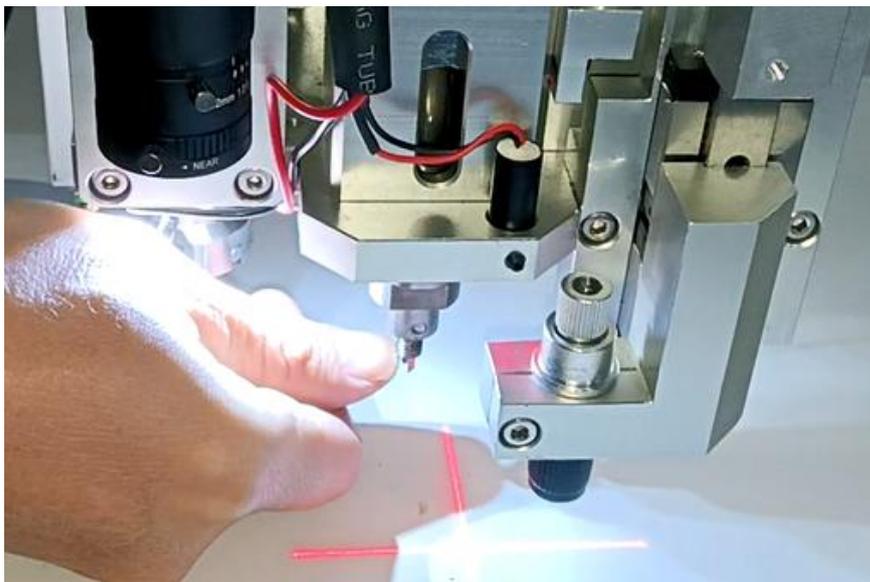
Insert the new blade completely. Please notice the direction.

Put on the cap on the tool, turn it to adjust the length of the blade coming out to get half cut or full cut. When you adjust it, you can touch the blade with a finger.
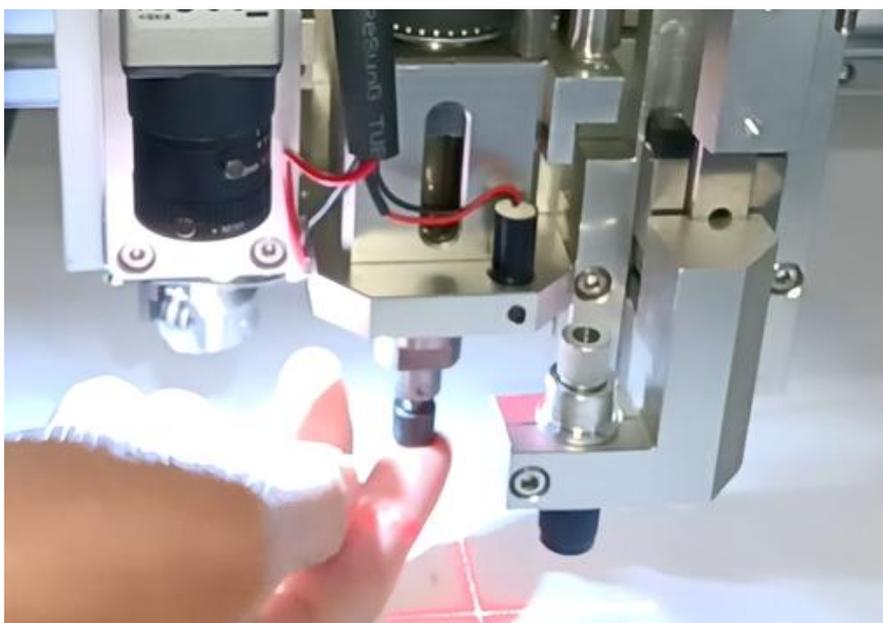
Tighten the screw to fix it.
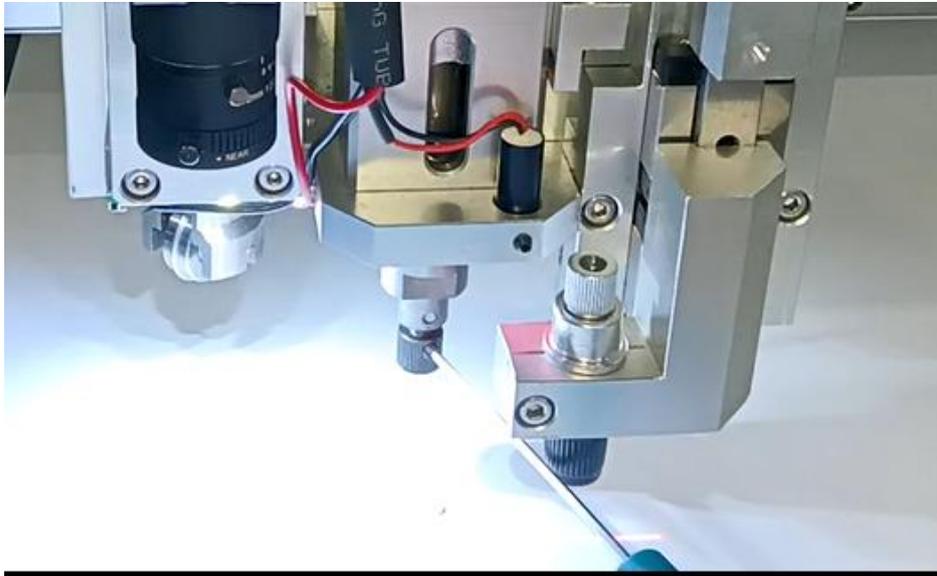
● Creasing wheel installation.

Put the wheel on the tool.
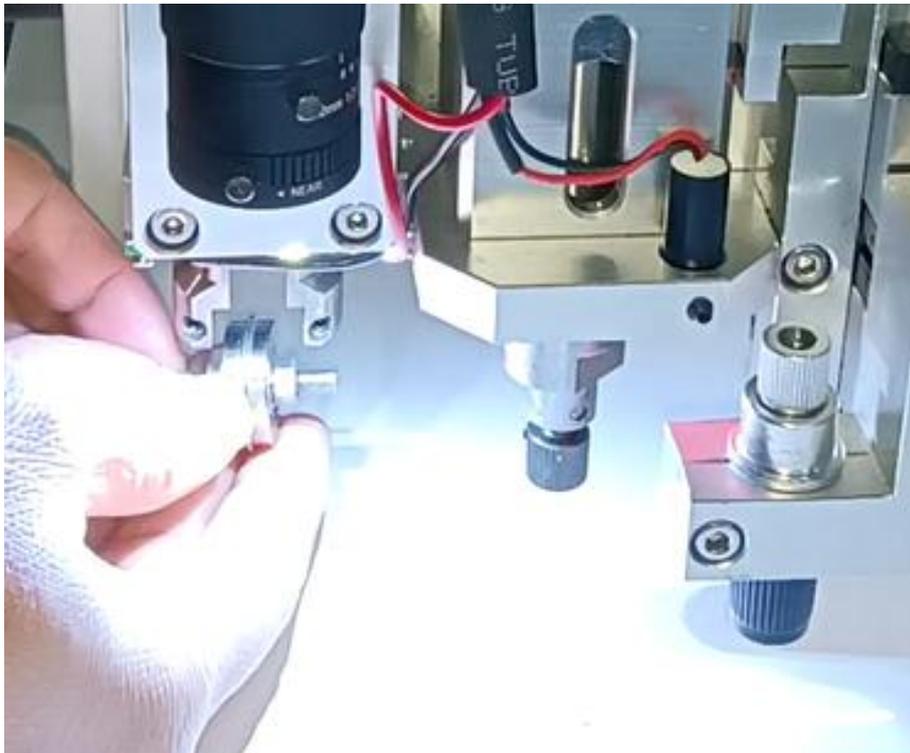
Tighten the two screws to hold the wheel firmly.
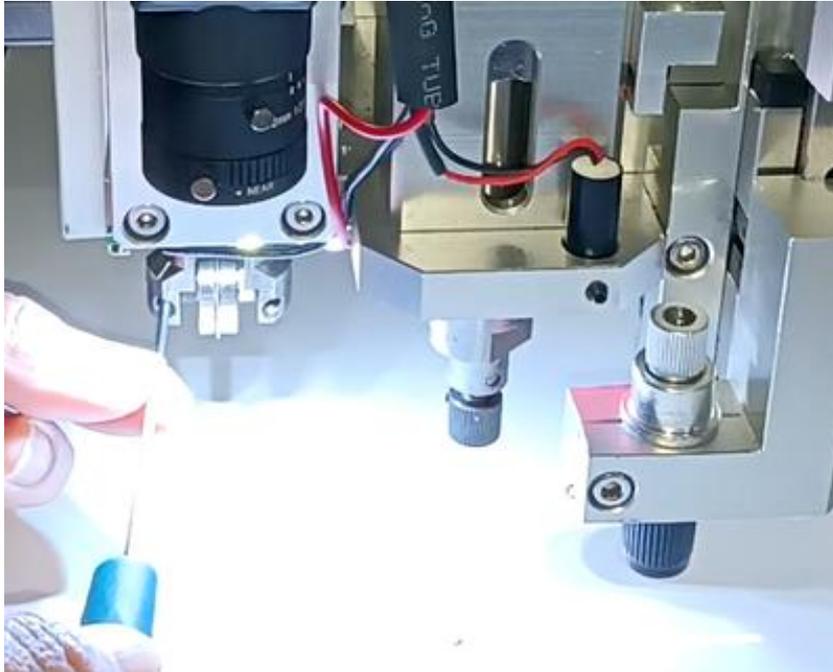
- Blade of oscillating tool installation

Disconnect the power cable of the tool.
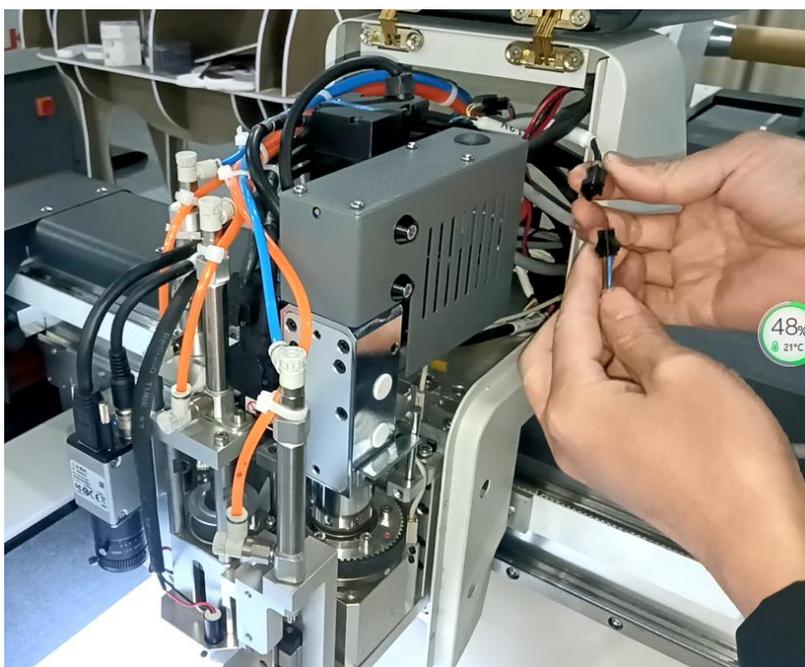
Turn the upper part of the tool clockwise to divide the tool from the pole.
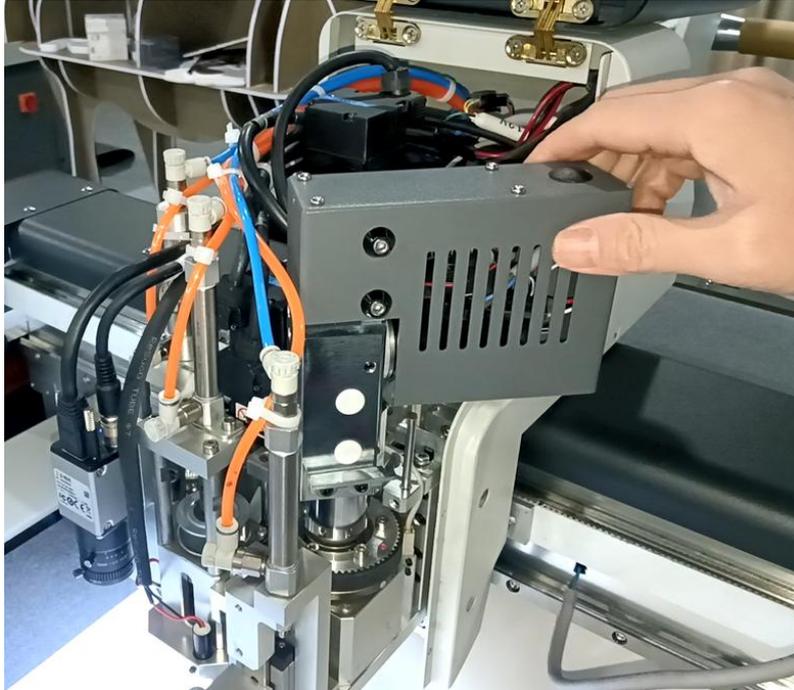
Loosen the side screw which is used to fix the handle of the oscillating tool.
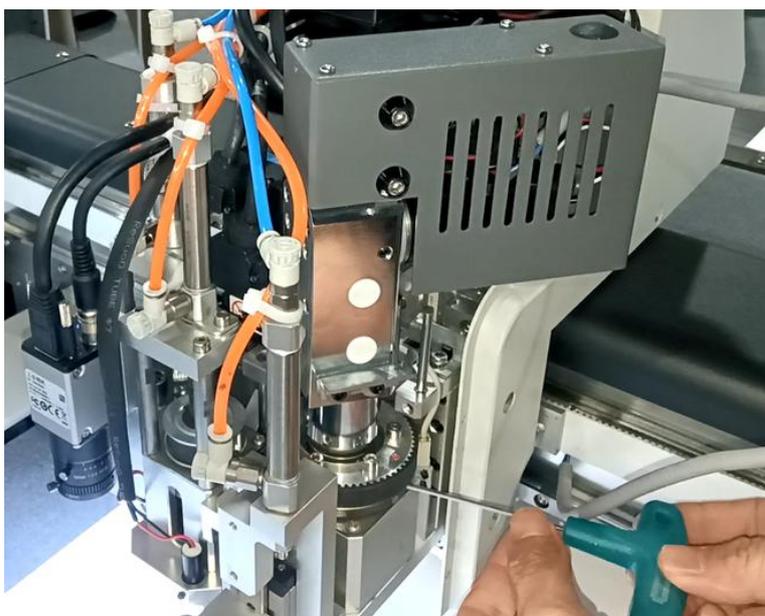
Turn the lower part of the handle anticlockwise to unlock the tool.
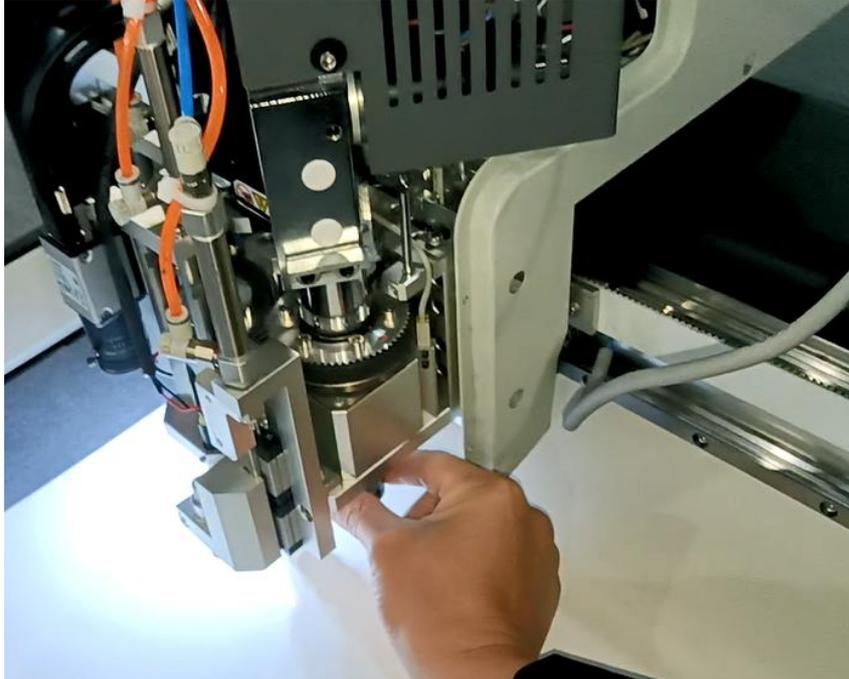
Then you can take the tool out of the module.
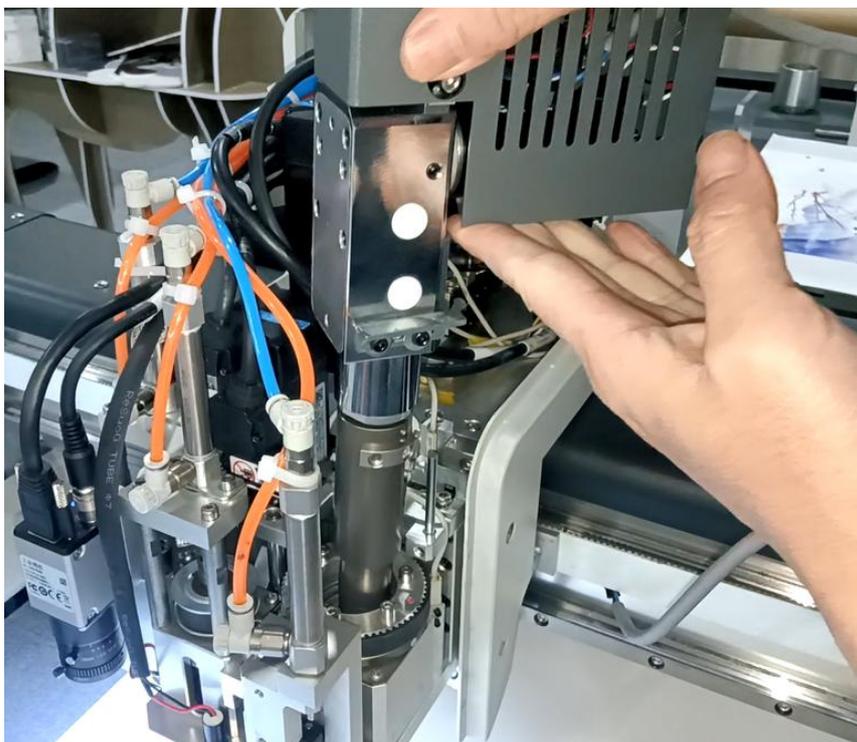
Loosen the screw on the blade side. Please don't turn the screw on the opposite side because it is used to fix the holder.

Remove the broken blade and insert the new one. Shake it with your hand to confirm it is inserted completely. Notice the direction of the blade.
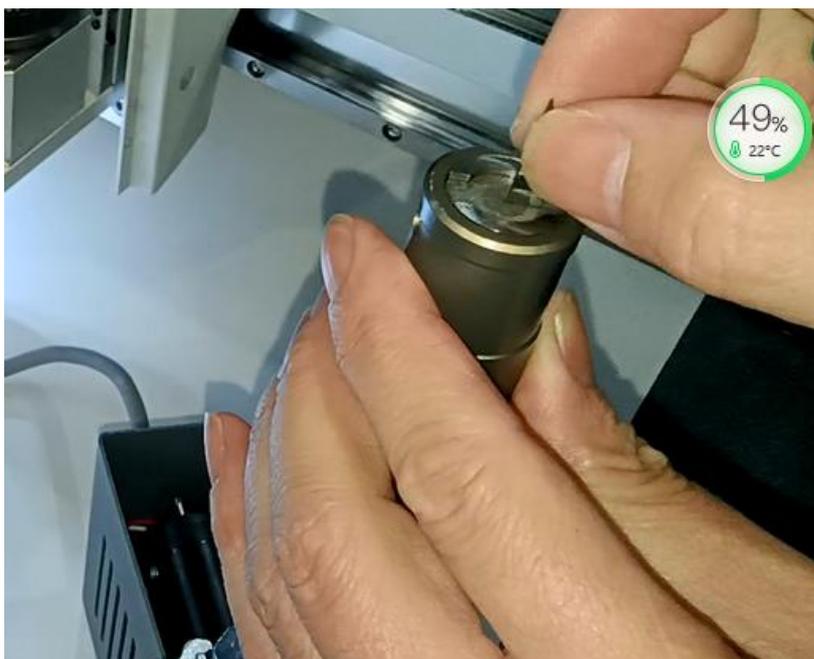
Tighten the screw. Please notice, don't turn the screw with strong power, otherwise the screw will be damaged.

Put the tool in the module. Please notice the direction.
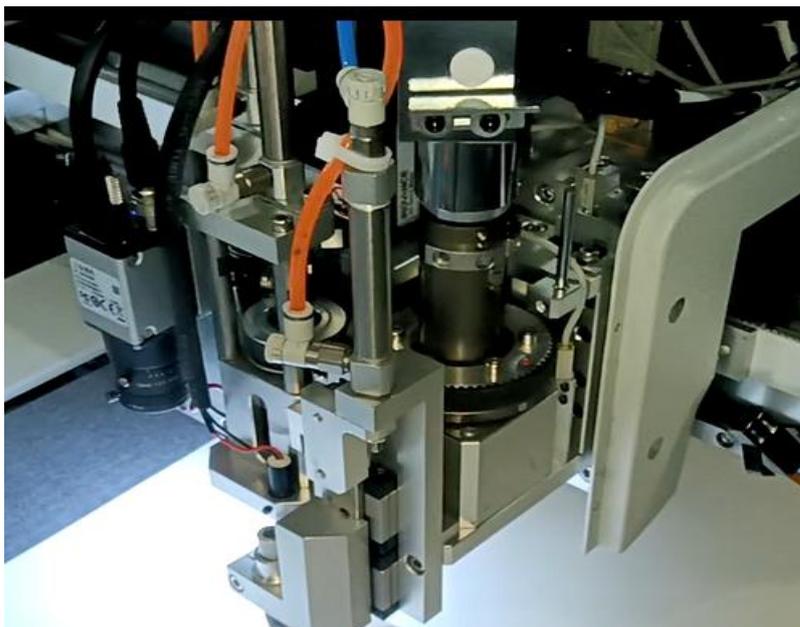
Turn the lower part of the handle clockwise to lock the tool.
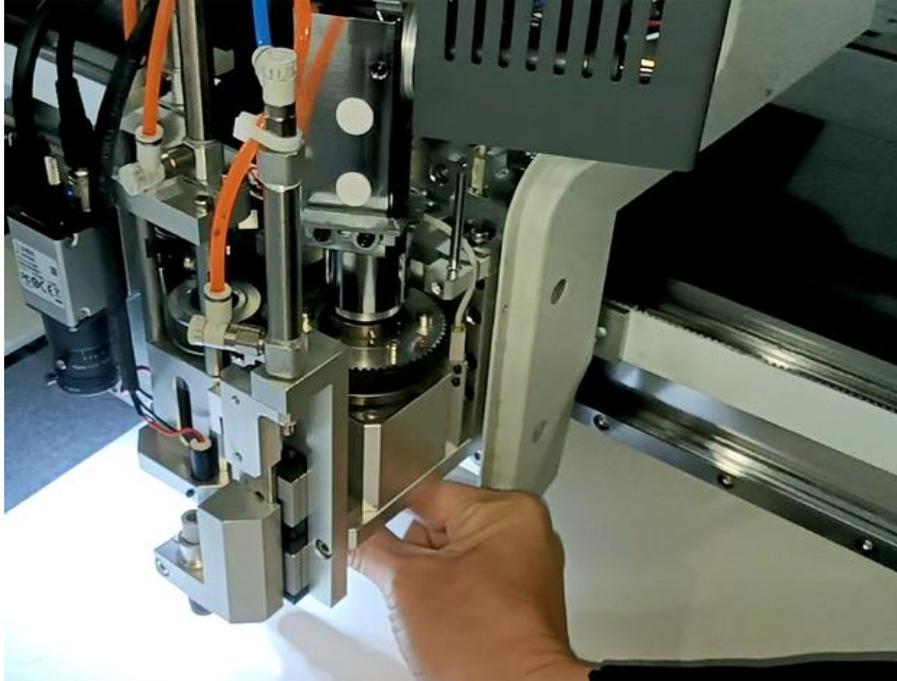
Turn the upper part anticlockwise of the tool to fix it with the pole.
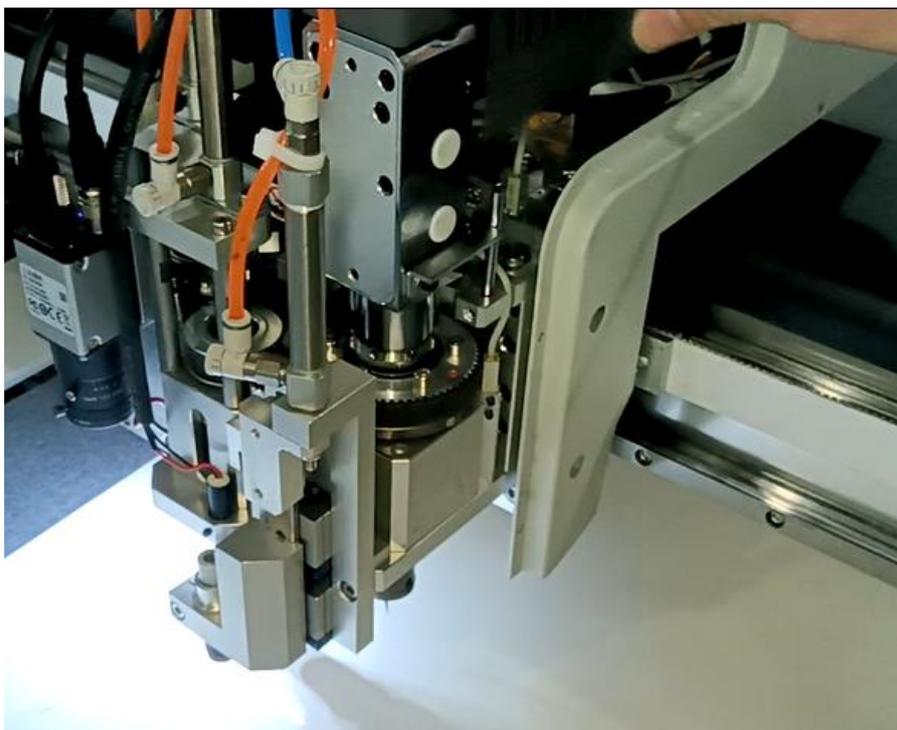
Connect the power cable.
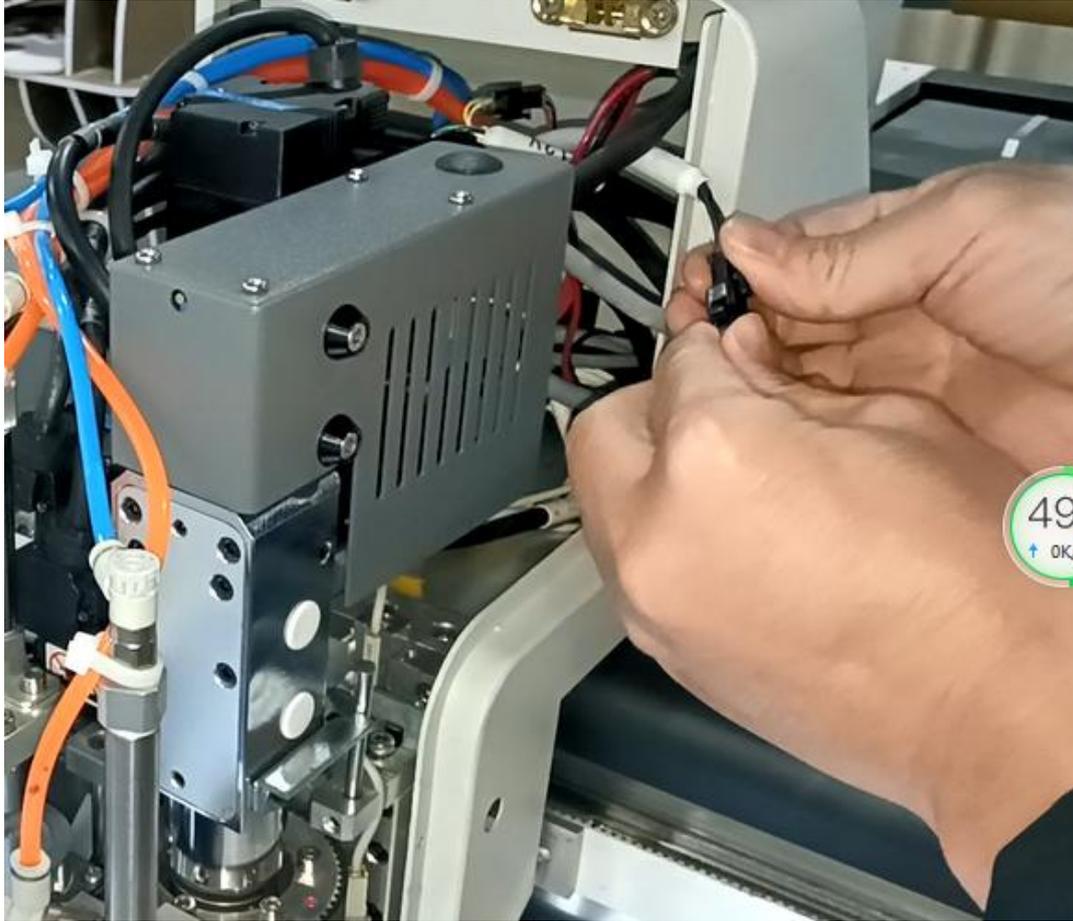
3.2 Tool Depth Adjusting

Press Manual Test and tool Tools Test on the touch screen to enter the the depth adjusting page. U-U3 are pen tool, ordinary tool, oscillating tool and creasing wheel.
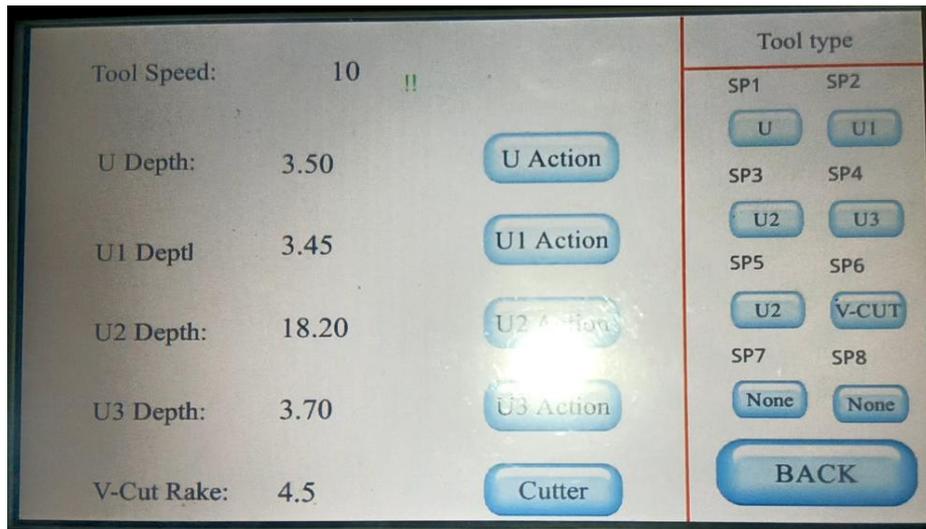
Touch the number directly, you can change the number of the depth. If you don't how how much is the depth, first please change a small number near 0, then increase it a little each time.
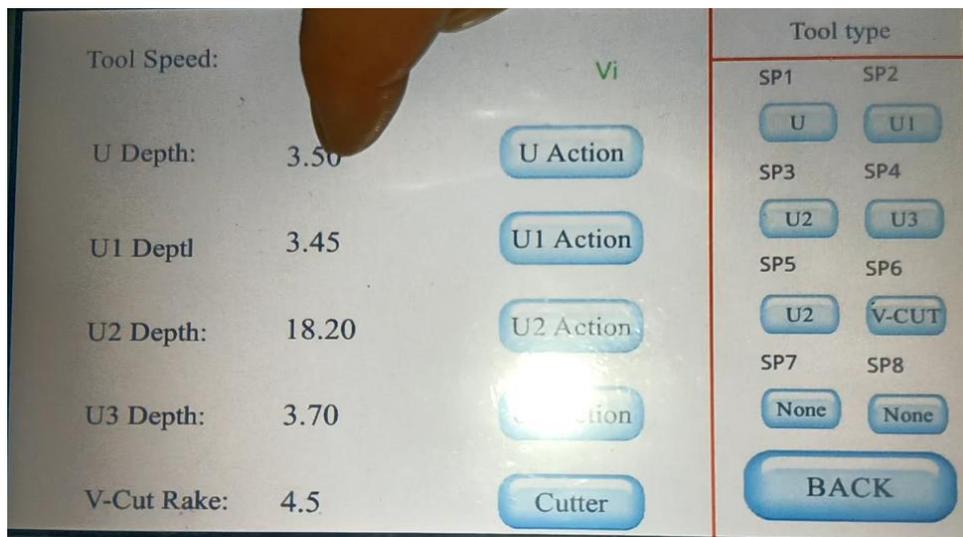
After you change the number, press this button to confirm.

Tool Speed:	Min:0.00 Max:200.00 3.50				Tool ty	
					SP1	SP
					U	
U Depth:	1	2	3	⌫		
	4	5	6	⊗		
U1 Deptl						
U2 Depth:	7	8	9	←	U2	V-CUT
					SP7	SP8
U3 Depth:	0	+/-			None	None
					BACK	
V-Cut Rake:	4.5		Cutter			
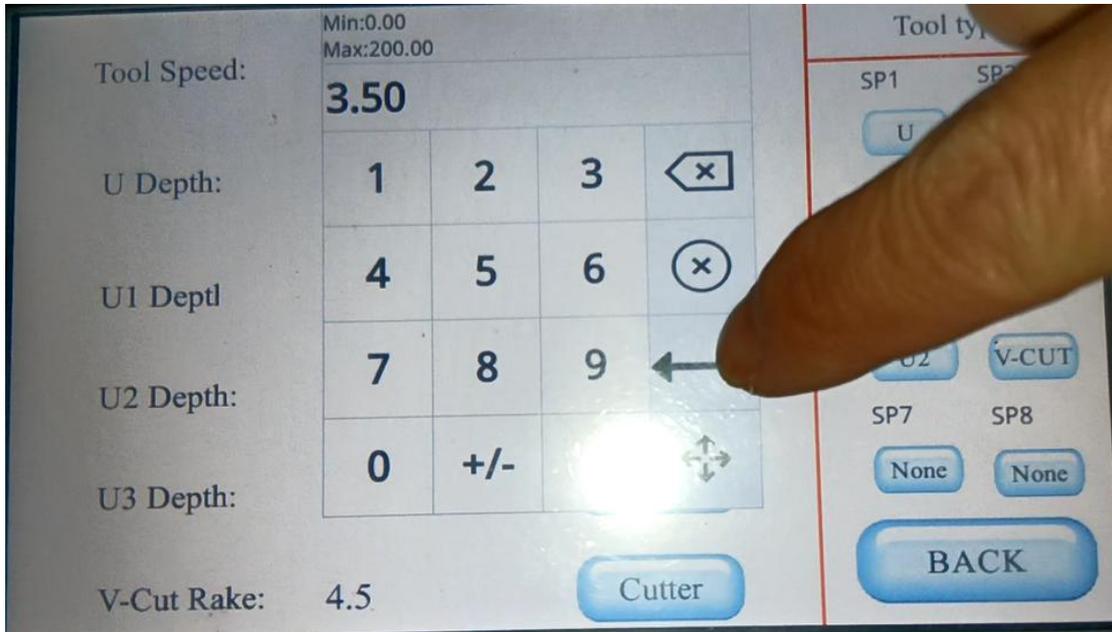
Press U Action to check if the value is suitable.

Tool Speed:	10	Cut is OK!!			
					U1
U Depth:	3.50	U Action	SP3	SP4	
			U2	U3	
U1 Deptl	3.45	U1 Action	SP5	SP6	
			U2	V-C	
U2 Depth:	18.20	U2 Action		48%	
			SP7	↓23.6K/s SP8	
U3 Depth:	3.70	U3 Action	None	None	
			BACK		
V-Cut Rake:	4.5	Cutter			
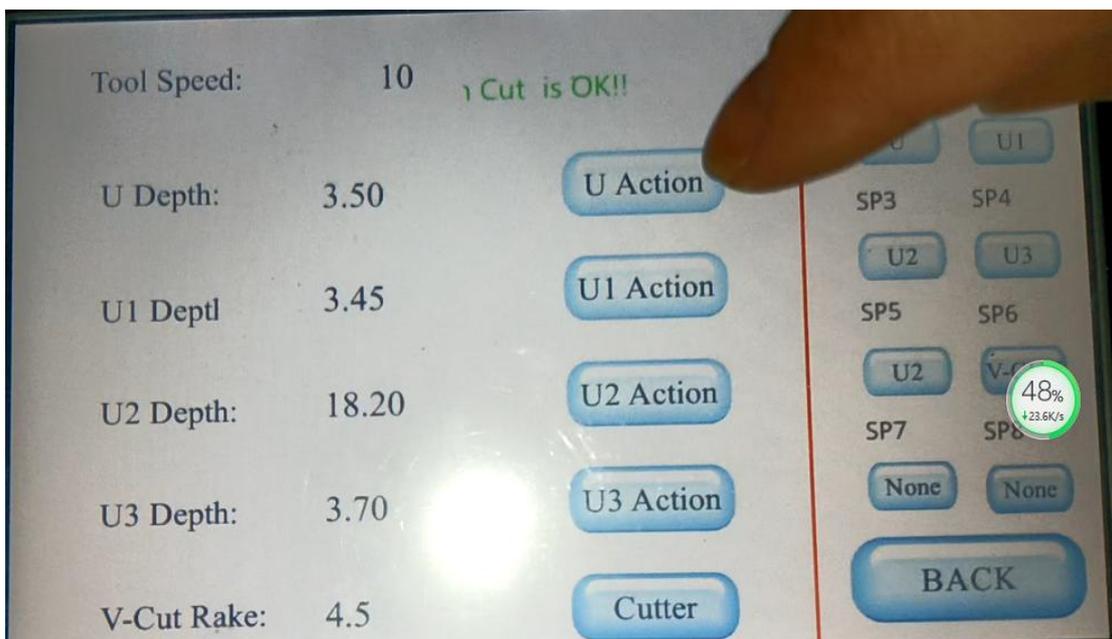
4. Use of Software and Machine

4.1 Installation of the Software

There are two softwares, the camera software and the cutting software. Before install the camera software, you need to connect the computer and the machine with a network cable which you can find in the tool box, one end is plugged into the network adapter of the computer and the other end is plugged into the router in the electrical box, then set IP address of the computer to 192.168.0.249, and set advanced configure as following pictures. Next install the camera software step by step. The camera software icon is like this
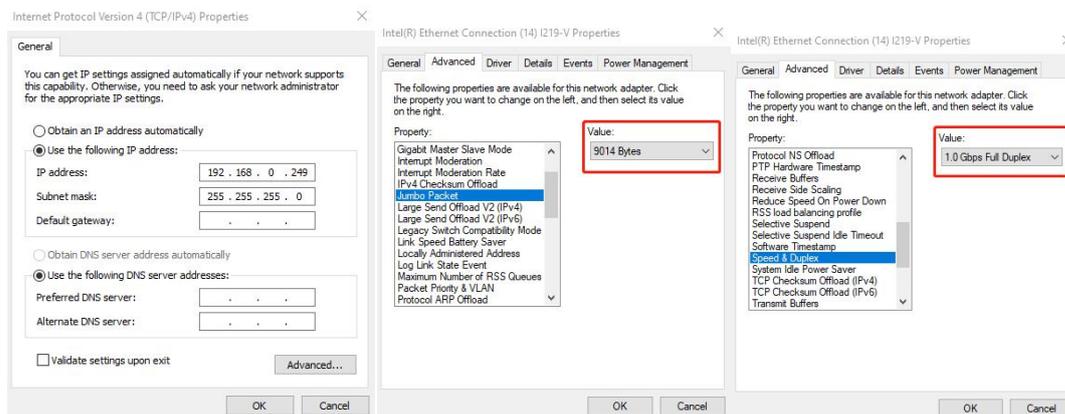
The cutting software does not need to be installed, it only needs to be decompressed. Open the release folder, find a file called

RukAssist, then create a shortcut of this file on the desktop.

At last set the cutting software refer to the following pictures.
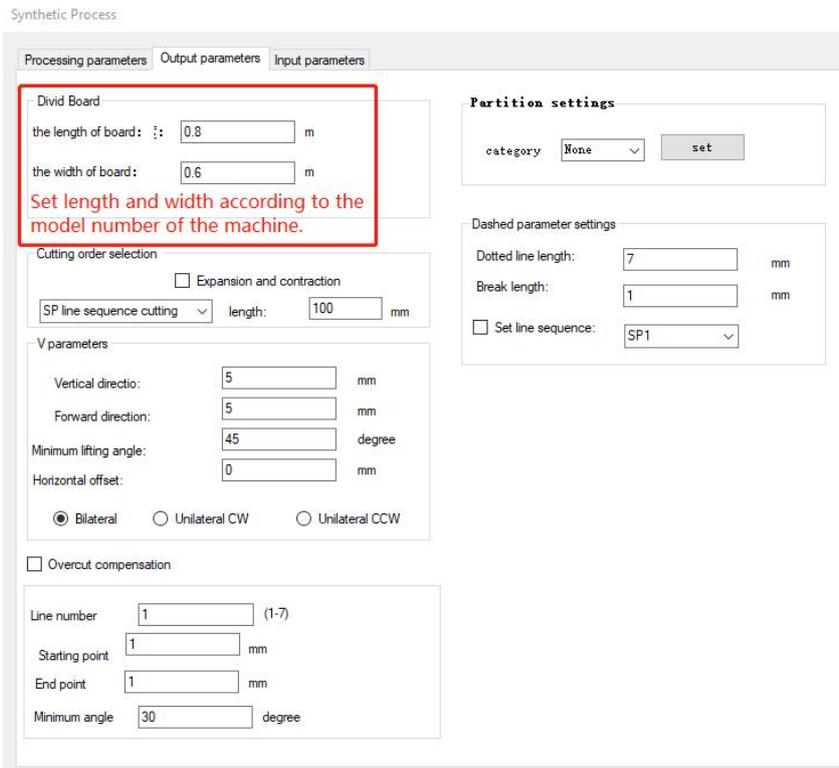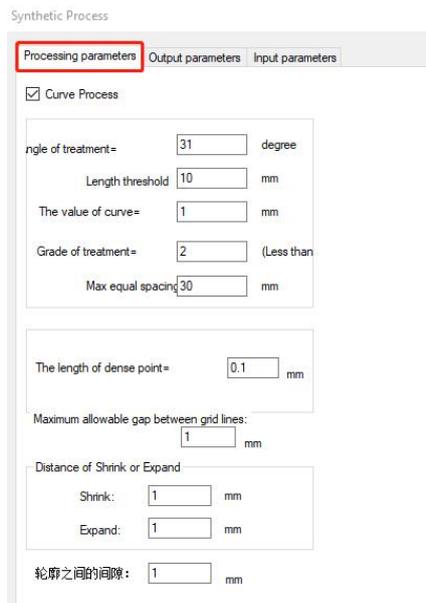
Synthetic Process

Processing parameters | Output parameters | Input parameters

Mark point specification (in file)

Circle radius [2.5] to [4.5] mm

Cross length [3] to [3.5] mm

Cross width [3] to [3.5] mm

Set mark point size

Direct of cutting

( ) NoSet ( ) CW ( ) CCW

Gap of Multi file input: [10] mm

☑ Delete dense point   ☐ Del Coincident line

☐ Flip

rotate: [0] degree (positive angle is counterclockwis

☑ Are disconnected cor☐ Delete line midpoint

☑ Move to the specified point:

X: [0]   Y: [0]

☐ Angle of Chamfering

the angle of chamfe[90]   degree（±5）

us of chamfer= [5]

🖥 Cutting parameter setting   — ☐ ✕

CamSet | Mech&offset | MarkSet | FindMark | Projector | OtherSet

Cam Model [1]

[∨]

Exposure [8000]

Gain [8]

Frame Rate [30]

[Get]   [Set]

M2 Exposure [12000]   QR Exposure [7000]

M2 Gain [8]   QR Gain [6]

M3 Exposure [15000]

M3 Gain [8]

[Cam Size x1] [Cam Size x2] [Cam Size x2.5]

[Confirm and save]   [Cancel]

Cutting parameter setting — □ ×

CamSet | **Mech&offset** | Mark Set | FindMark | Projector | OtherSet

Cam dis X   100   plt unit
Cam dis Y   100   plt unit

Set camera offset here.
Open the electrical box
and get the values of
camera offset.
1mm=40 plt unit

Max plate space   0   mm

According to the
model number

Mec X   Min   -30   mm   Max   0.8   m
Mec Y   Min   -90   mm   Max   0.6   m

☐ Beam correction

QR code from the first mark point
X: 0   mm
Y: 0   mm

0   mm per meter

QR code files are stored in:
0   ...

Confirm and save | Cancel

Cutting parameter setting — □ ×

CamSet | Mech&offset | **Mark Set** | FindMark | Projector | OtherSet

Mark Select: circular   ▼

Mark Parameter

Diameter of circle: 70   Pixel unit

Length of cross: 70   Pixel unit

Width of cross: 10   Pixel unit

Move parameters: 1.3

Filter size: 5

Confirm and save | Cancel

Cutting parameter setting — ☐ ✕

| CamSet | Mech&offset | Mark Set | FindMark | Projector | OtherSet |

☐ Manual mark point finding   ☐ No rectangle optimization

☐ Deviation correction without stretching   ☐ Calibration

☐ Quick mark finding mode   ☐ Fast Calibration

☐ Shuttle cutting

☐ Portable point finding (manual opening)

Find moving range   [small ▾]

Cut from the   [1]   edition

[Confirm and save]   [Cancel]

Cutting parameter setting — ☐ ✕

| CamSet | Mech&offset | Mark Set | FindMark | Projector | OtherSet |

☐ Transfer data to projector

Projector IP: [192.168.2.200]

Projector port: [3333]

Machine number: [ruk]

[Confirm and save]   [Cancel]
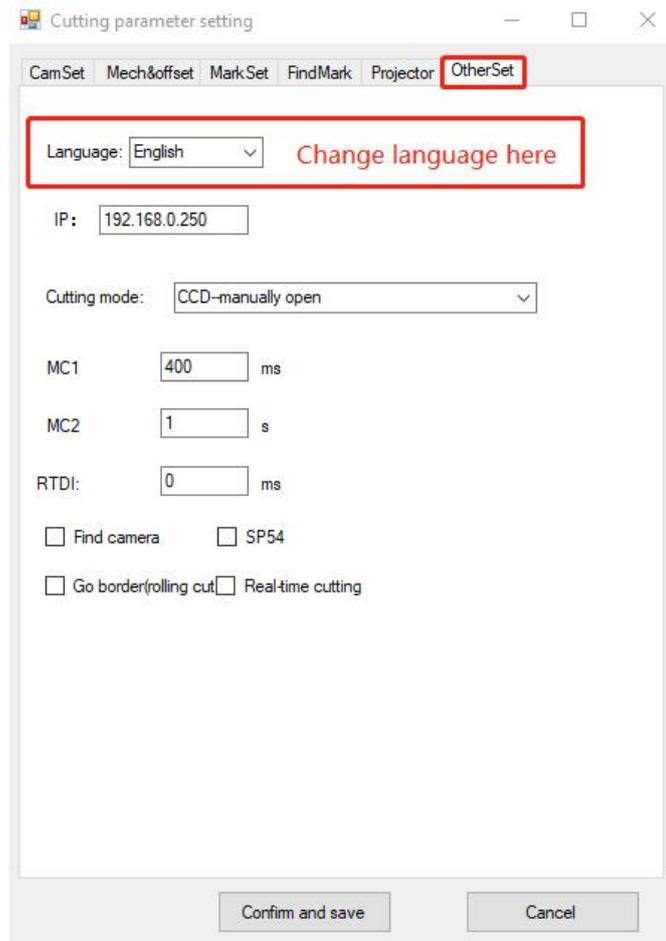
4.2 Use Software and Machine to Cut Materials

Software setting zone

Drawing zone. You can draw or modify some figures here.

Camera image display zone. Under ccd mode, you need to double click to open the camera.

Controlling zone. You can click the arrows to move the machine head,select cutting mode, set cutting quantity and start or stop cutting in this zone.
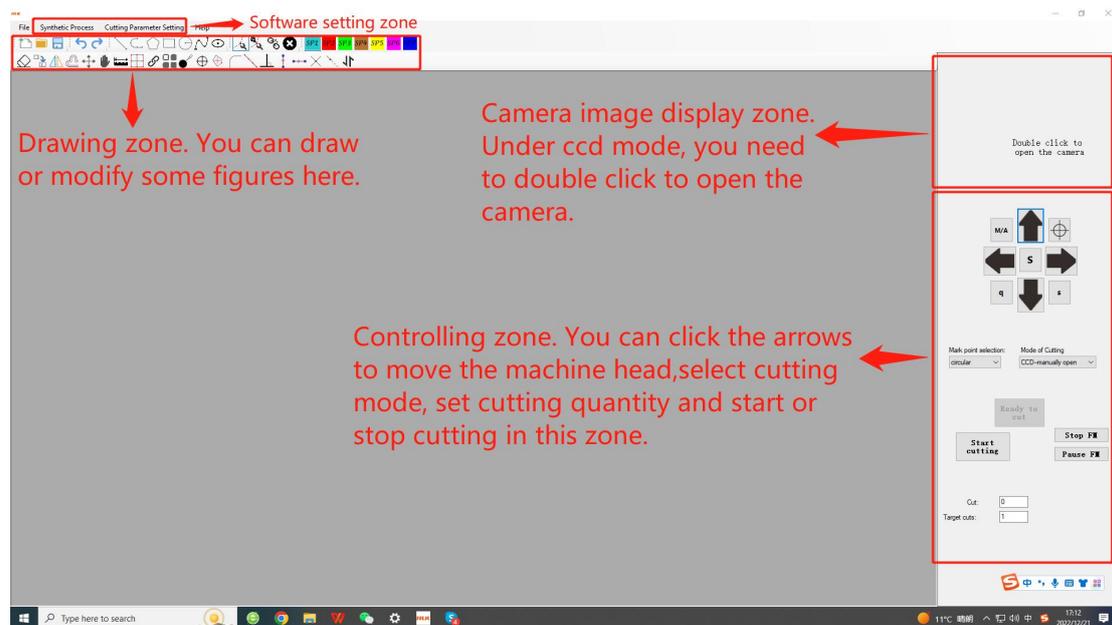
● How to cut blank materials

If you want to cut many sheets of material, please do these preparing works: turn on auto send switch,the machine will feed the material automatically after the first cutting job; turn on platform moving mode to automatic mode; turn off auto repeat function. (Refer to "2.2 Man-machine Interface Instructions" to enter the setting page.)

Fix Send SW: OFF   0000   Offest X 0000 Offest Y   0000

Auto Send SW: **ON**   Test Speed: 000   Platform test speed: 00

Action of platform: **ON**

Send Offest: 000.0   0000.0   0000.0

Send Speed: 0000   Slow

Send Accel: 00.0

Send Offset: 00.0

Pump Delay: 00.0   Send Move   BACK

Function Set

Auto Repeat: OFF   Download Port: EtherNet

Auto Return: OFF   PG Switch: OFF

Safety Switch: OFF   Wifi Switch: OFF

IP Add: 000   000   000   000

Version: 00.000   FQ Function   BACK
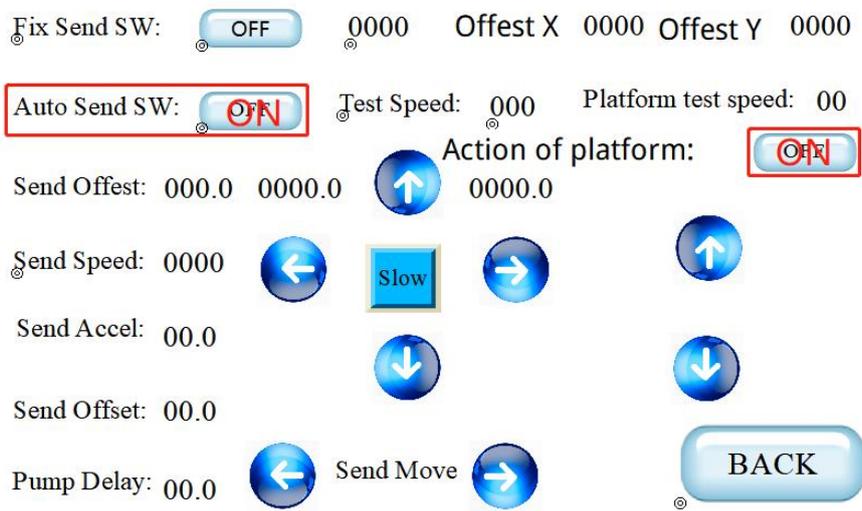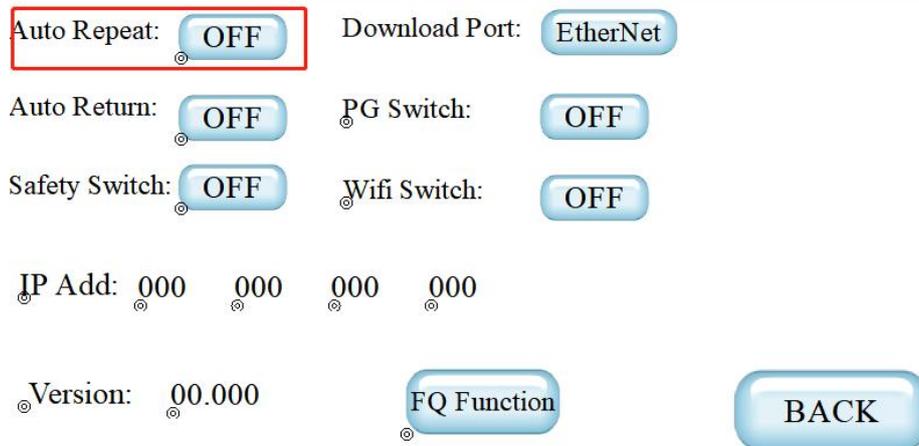
Next we will make box samples with blank white card paper, we will use the wheel to make creasing and use ordinary tool to cut.Come back to the software, open a plt or dxf file, right click to adjust its direction, right click to place it to origin position, change the creasing lines to sp4 and cutting lines to sp2 (sp1 is for the pen tool, sp2 is for the ordinary tool, sp3 is for the oscillating tool, sp4 is for the creasing wheel).
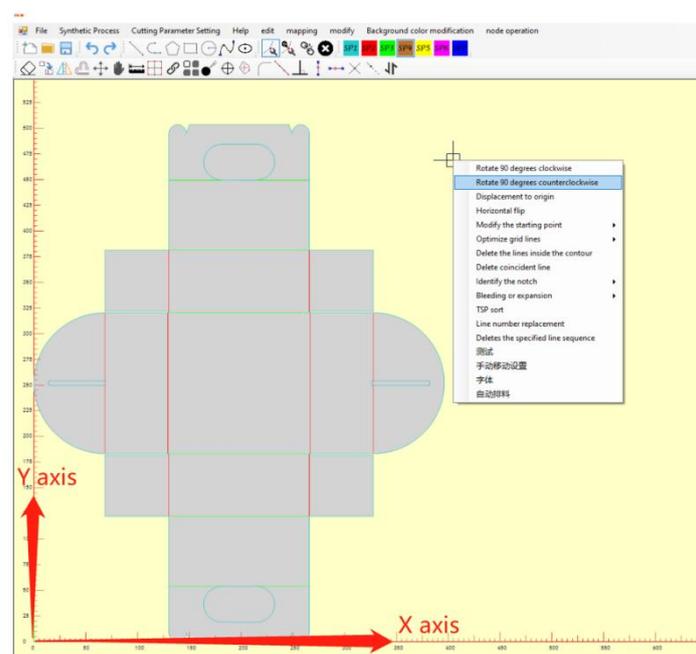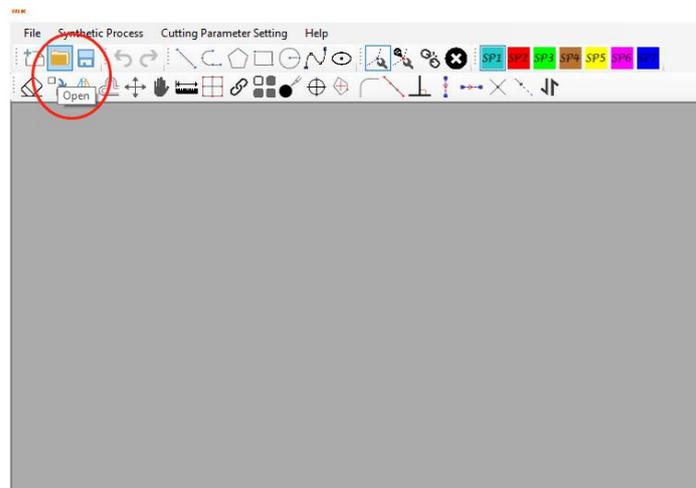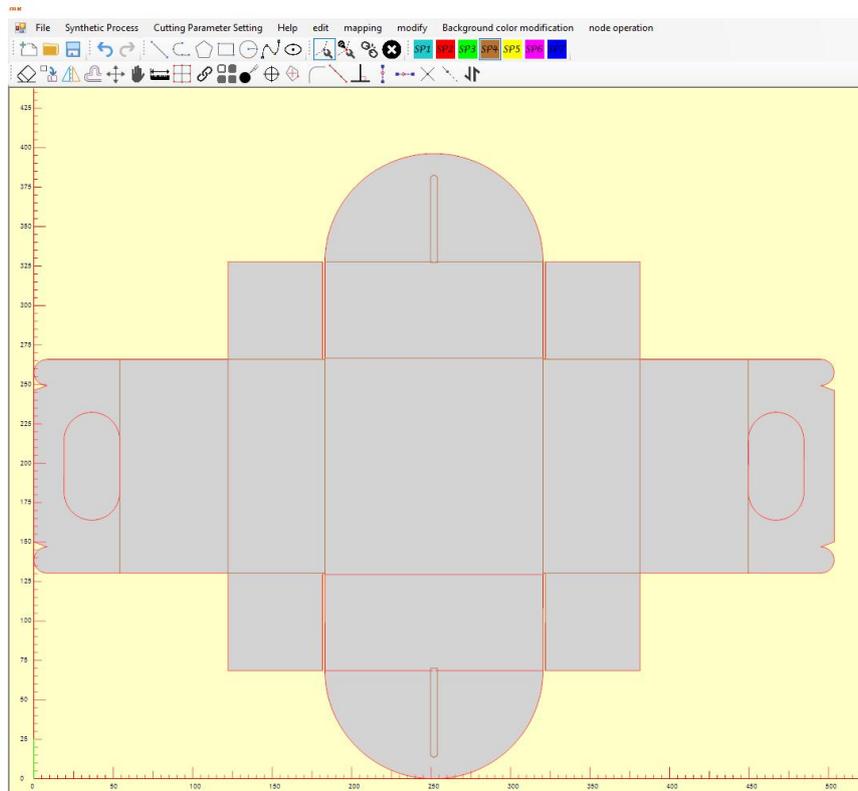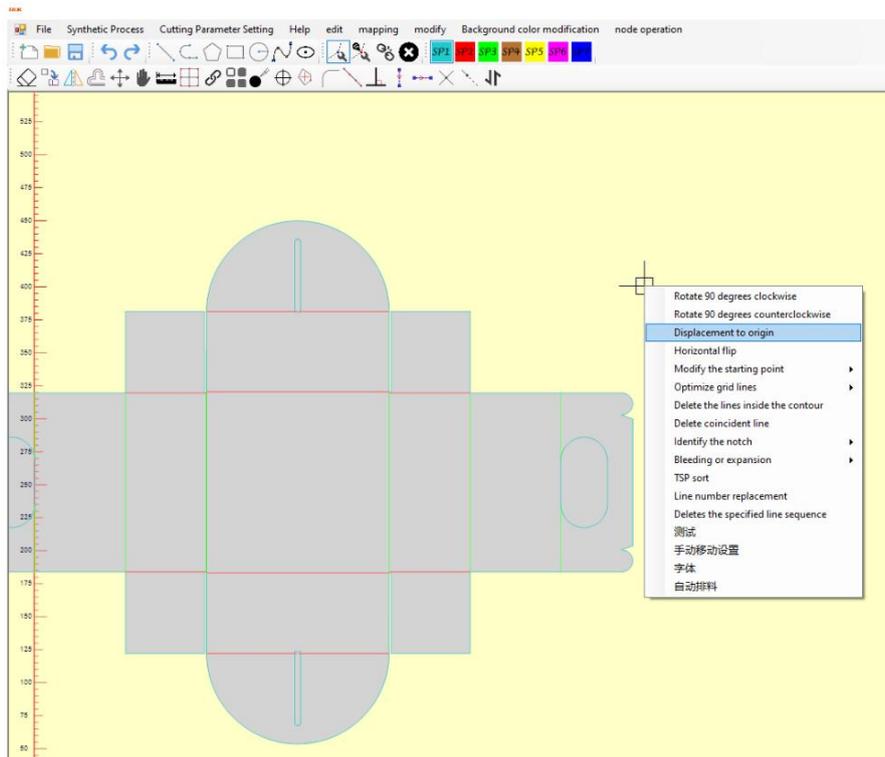
Press "Send" button on the control panel to pick up the first piece of paper, move the red laser to the proper position and press "Temp origin" button to confirm the temporary origin., change cutting mode to "Straight hair rolling cut", input the target quantity, at last click "Start cutting" button.
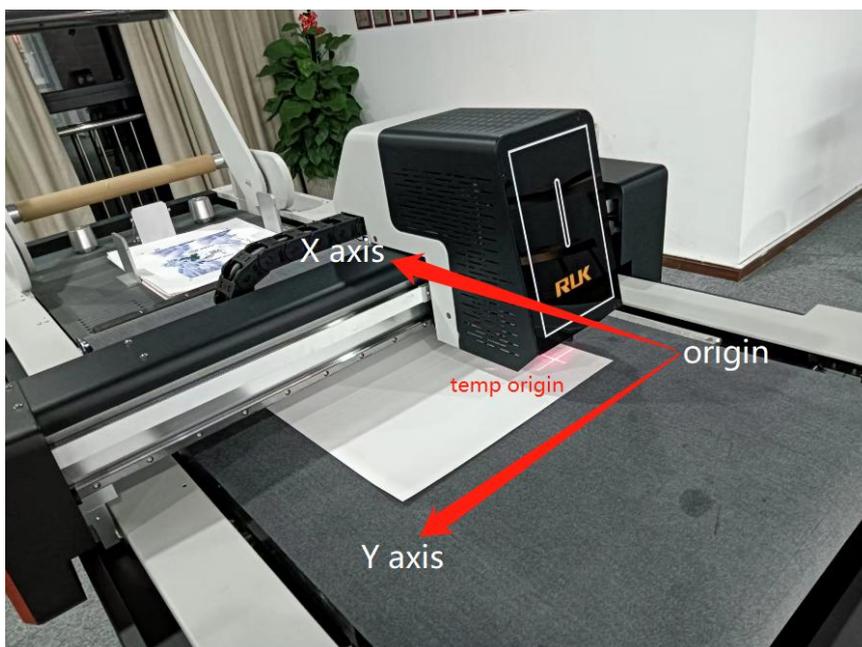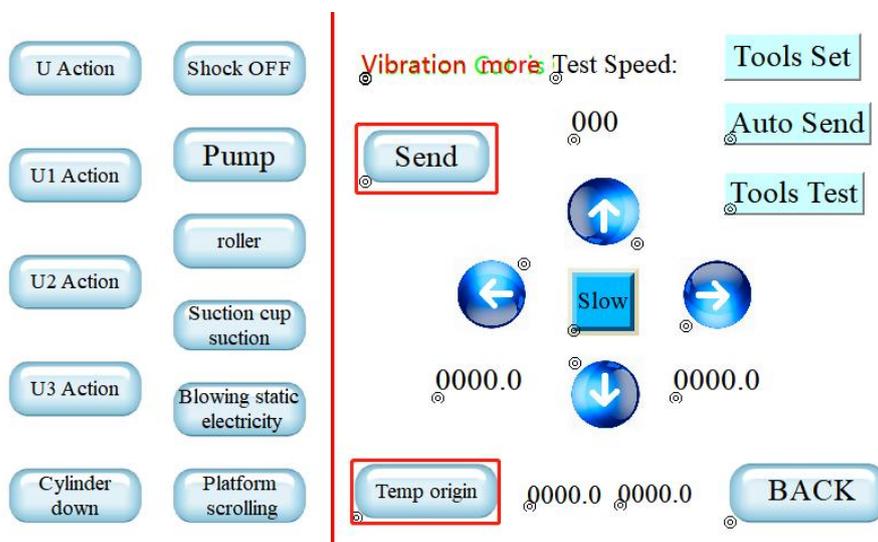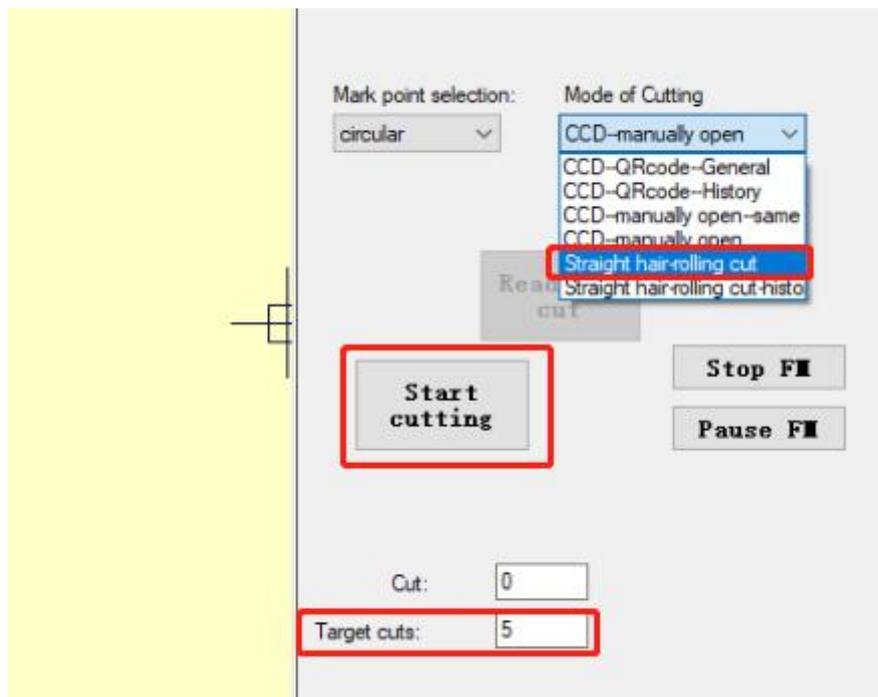
The machine will make the first box sample, after that it will repeat to feed the materials and cut them, until finish the target quantity. You can click "Pause FM" to stop the cutting job.

● How to cut printed materials

If you want to cut many sheets of material, please do these preparing works: turn on auto send switch,the machine will feed the material automatically after the first cutting job; turn on platform moving mode to automatic mode; turn off auto repeat function. (Refer to "2.2 Man-machine Interface Instructions" to enter the setting page.)

Fix Send SW: OFF 0000 Offest X 0000 Offest Y 0000

Auto Send SW: OFF Test Speed: 000 Platform test speed: 00

Action of platform: OFF

Send Offest: 000.0 0000.0 0000.0

Send Speed: 0000 Slow

Send Accel: 00.0

Send Offset: 00.0

Pump Delay: 00.0 Send Move BACK

Function Set

Auto Repeat: OFF Download Port: EtherNet

Auto Return: OFF PG Switch: OFF

Safety Switch: OFF Wifi Switch: OFF

IP Add: 000 000 000 000

Version: 00.000 FQ Function BACK

Next we will make box samples with printed card paper, we will use the wheel to make creasing and use ordinary tool to cut.Come back to the software, open a plt or dxf file, right click to adjust its direction, right click to place it to origin position, change the creasing lines to sp4 and cutting lines to sp2 (sp1 is for the pen tool, sp2 is for the ordinary tool, sp3 is for the oscillating tool, sp4 is for the creasing wheel), change the mark points to sp7.

Y axis

X axis
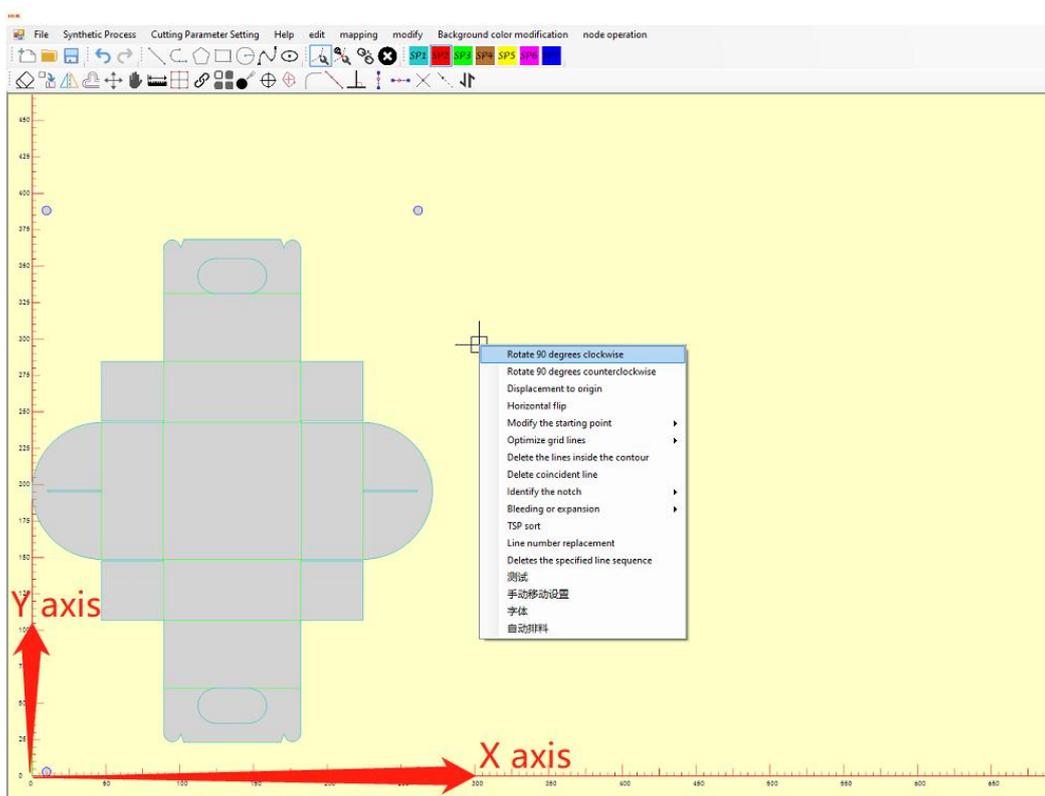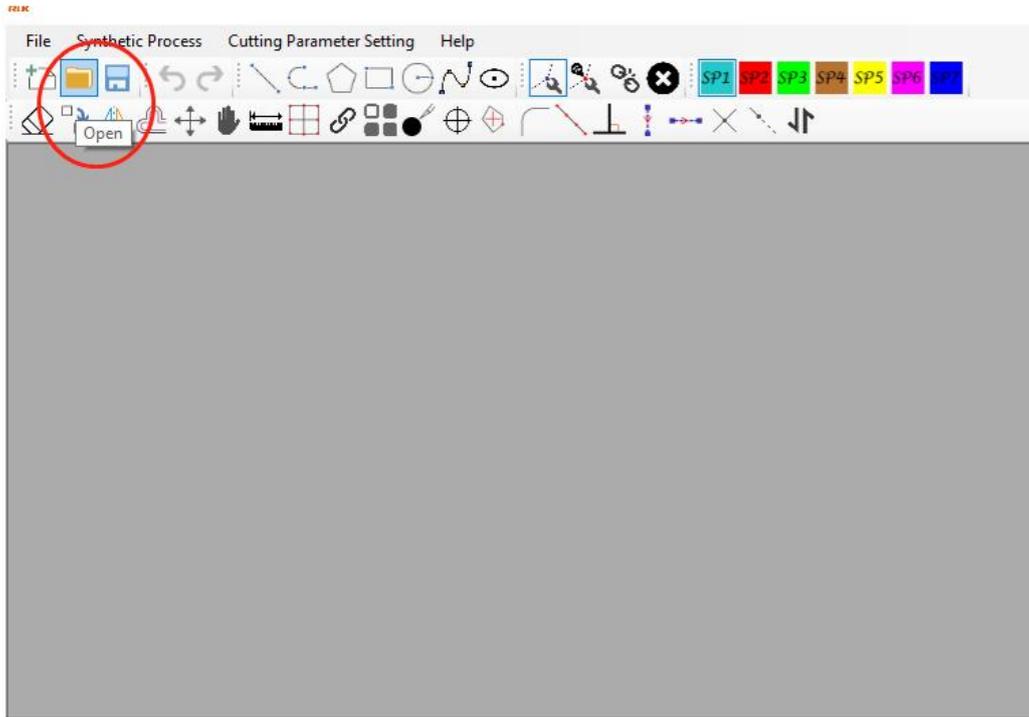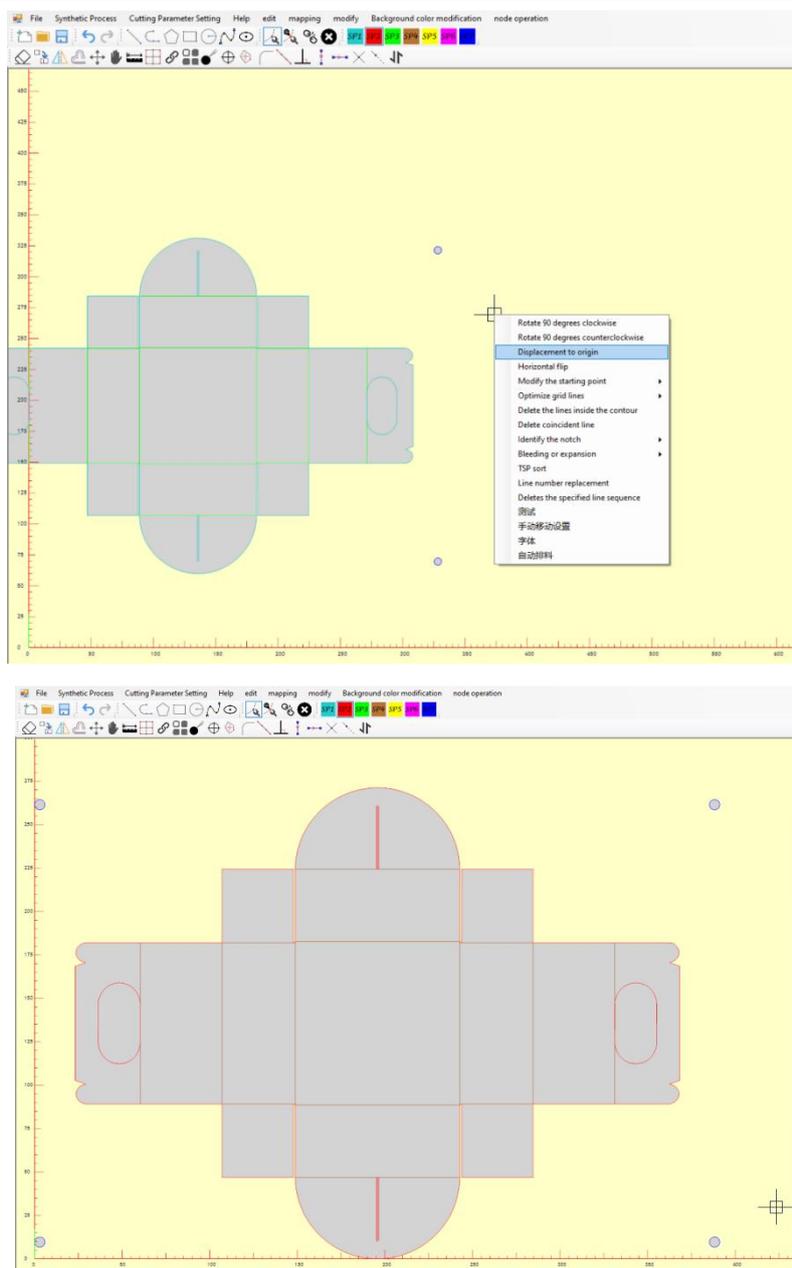
Press "Send" button on the control panel to pick up the first piece of paper, double click to open the camera, move the camera above the first mark point. Change cutting mode to "CCD-manually open-same file continuously", input target quantity, at last click "Start cutting" button.

U Action	Shock OFF	Vibration more Test Speed:	Tools Set
U1 Action	Pump	000	Auto Send
	roller	Send	Tools Test
U2 Action	Suction cup suction		
U3 Action	Blowing static electricity	0000.0 0000.0	
Cylinder down	Platform scrolling	Temp origin 0000.0 0000.0	BACK
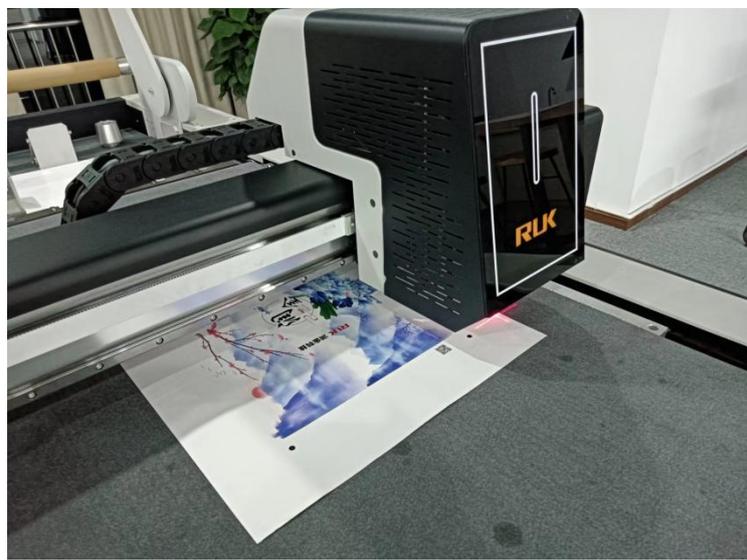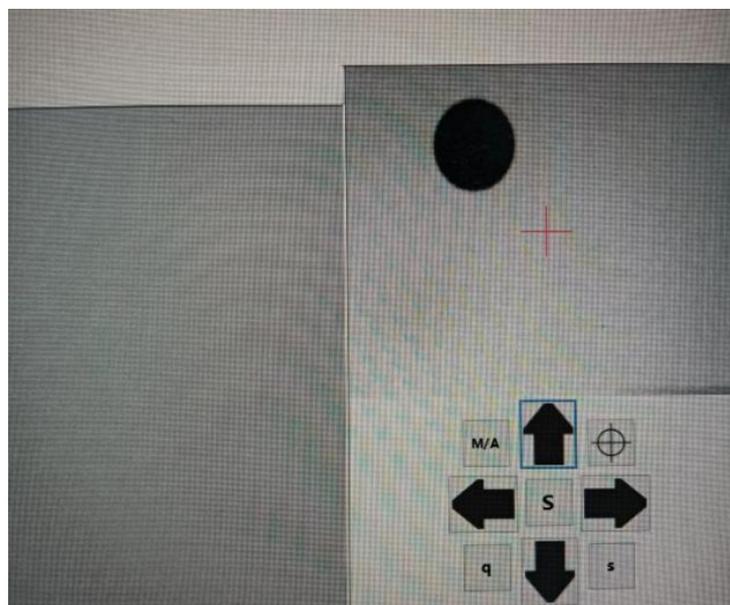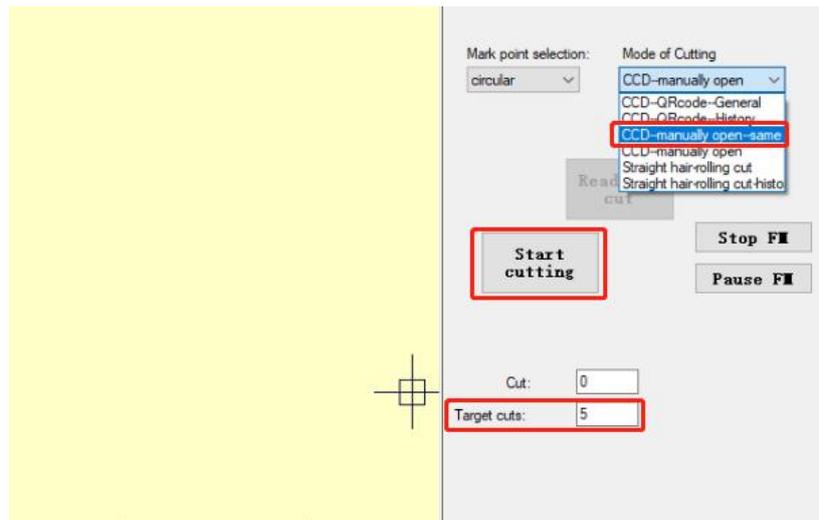
The machine will read the 4 mark points and make the first box sample, after that it will repeat to feed the materials and cut them, until finish the target quantity. You can click "Pause FM" to stop the cutting job.

These are the examples of making boxes with white paper.You can also use this equipment to cut many other materials, either coil materials or plate materials.

5. User Notice

- Electricity specification: 220v±10%/50HZ, AC power must be installed with a ground wire to prevent static electricity.

- The packaged computer numerical control cutting system should prevent large vibrations and collisions during transportation.

- Keep the surface of the equipment clean, and clean up the debris on the surface of the machine regularly.

- The air compressor needs to discharge water every day.

- Do not put heavy pressure on the rails and beams on both sides of the equipment table to avoid damage to the rails.

- Do not place scissors or other objects on the cutting table to avoid touching the machine head when starting the machine.

- Plug plugs and cables should be pulled out of the plug body, avoid plugging and unplugging only by grasping the cable, let alone plugging or unplugging when the power is on.

- In the event of an abnormal situation such as blocked movement, be sure to immediately cut off the power and do not use it again, please contact the supplier immediately.

- Anyone who uses this CNC cutting system must meet the following conditions:

  -At least 18 years old;

-Have received the training of the technical staff of Runjin Company;

-Have read and understood the contents of the manual;

-Note on safety matters: the trainee operator must operate the machine

accompanied by experienced personnel

6. Machine Maintenance Instructions

This cutting machine is a precision electromechanical product. The whole machine includes two parts: control cabinet and precision machinery. Therefore, it must be carefully maintained to prevent various failures in order to extend the service life of the equipment.

The following matters need to be paid attention to during maintenance:

- Choose a good environment and use the cutting bed. It should not be placed in a place with strong sunlight. Avoid direct sunlight, which will cause the surface to sunburn and affect the service life.

- Periodically wipe the machine table with alcohol to prevent the suction from clogging (do not pour alcohol directly into the table for wiping).

- Do not place heavy pressure or scissors or other objects on the equipment to avoid touching the machine head when starting the machine;

- Do not put heavy pressure on the rails and beams on both sides of the equipment table to avoid damage to the rails.

- Avoid plugging and unplugging just by grasping the cable. It is strictly forbidden to plug and unplug the device's online cable with power on, otherwise it will damage the device or computer;

- Electricity specification: 220V±10%/50HZ, AC power needs to be installed with a ground wire to prevent static electricity;

- Regularly maintain, optimize, and disinfect the computer system. The instability of the computer system will also affect the normal operation of the equipment;

- During the operation of the machine, please do not put your head and hands close to the running beam or machine head to avoid accidents;

- The packaged computer cutting system should prevent strong vibration and collision during transportation;

- If there is a loud noise or movement is blocked, please cut off the power immediately, do not use it again, please contact the supplier immediately

- After the cutting bed is used, cover it with a dust cover to prevent dust from entering the machine.

7. Equipment Common Questions and Answers

Failure Phenomenon	Reason	Solution
No display on the LCD screen when the power is switched on	Whether the power cord is in good contact and whether the switches are turned on	Rewiring,turn on the switch
Can't reset normally	The reset conditions cannot be met	Check whether the air pressure or other sensors are working properly, or whether there is displacement
Some parts of the model are well cut, Some places cannot be cut through	Knife depth is not enough.	Increase the depth.
The equipment does not move when cutting samples	Poor contact of signal wire	Check if the signal line is plugged in
The cut sample has burrs	The speed is too fast or the vibration is not opend or the blade is notched	Reduce the cutting speed and turn on the vibration switch.

Edited by Walton

2022.12