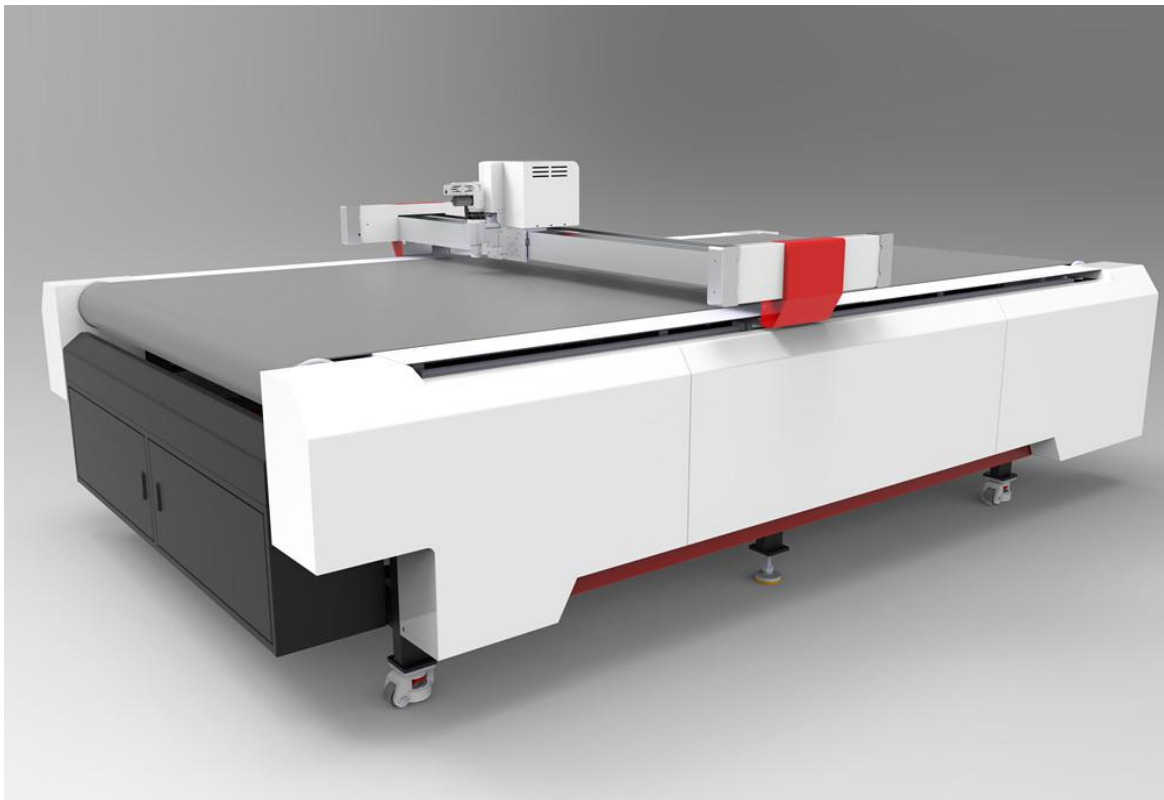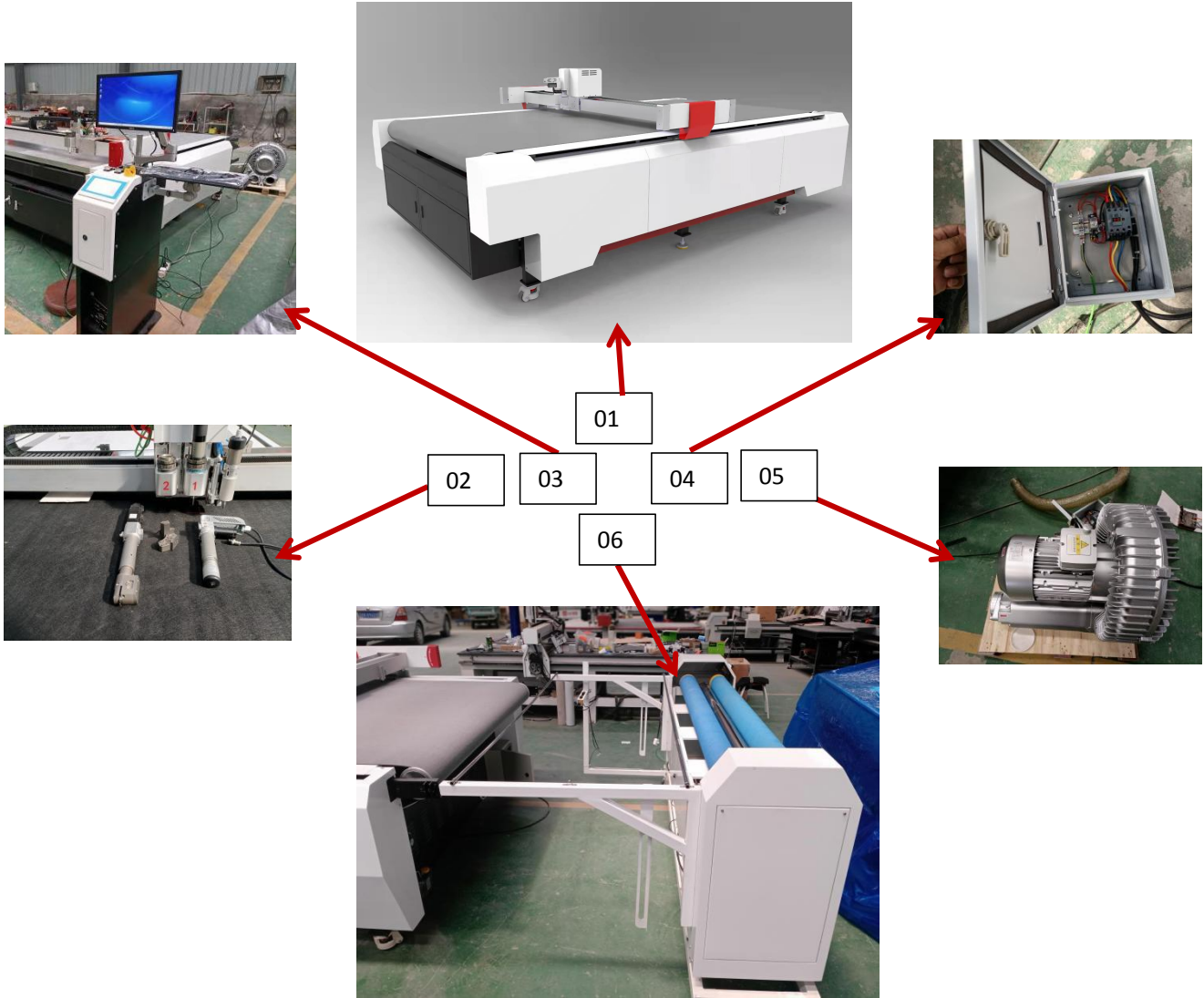# CNC DIGITAL CUTTING MACHINE
INSTALL MANUAL

SHANDONG AMOR CNC MACHINERY CO.,LTD

01. Machine bed；02.Cutting tools；03. control cabinet；04. 380V power box；
05.Vacuum pump
06.Optional Automatic feeding system(Only for feeding machine)

How to install the machine

2.1 Check the package

After you receive the machine, please check whether the package of the machine is damaged and take photos.

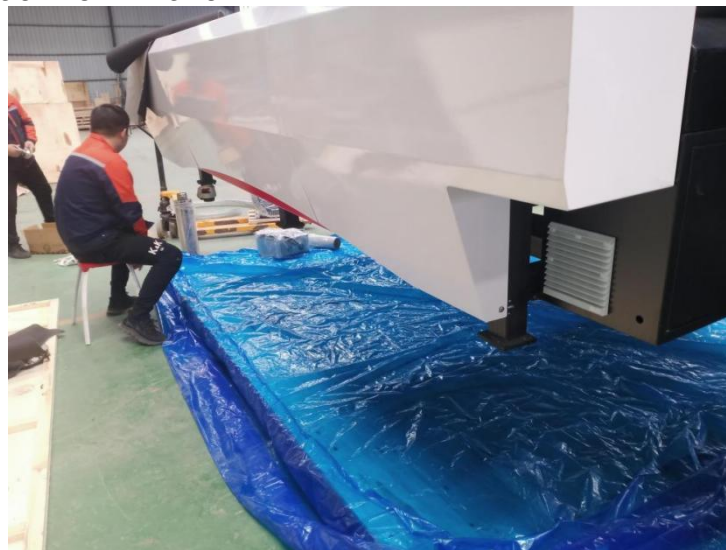Open the packing box, check the machine and count the attached accessories
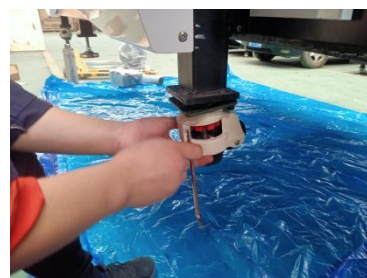
2.2 Install the machine footer
There are three supports on the left and right sides of the machine, of which the front and rear are Fuma wheels, and the screw rod foot cup is used in the middle

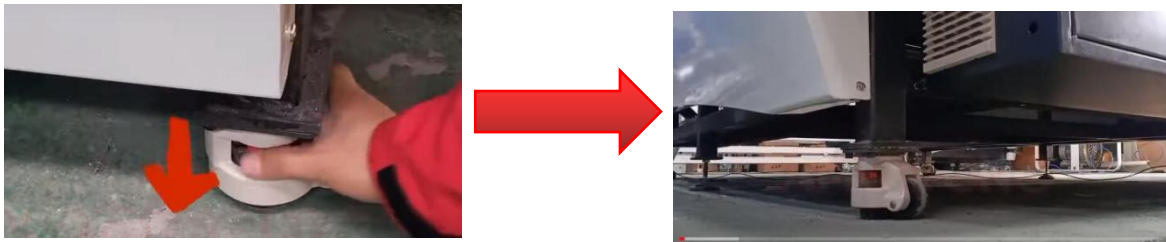Step 1: lift the machine with a forklift:

Step 2: Install the front, rear, left and right four wheels. Four fixing screws are used.

Step 3: Install the screw foot. Rotate the mounting counter clockwise.

Step 4: fix the machine. Move the machine to the installation site and fix the wheel and foundation
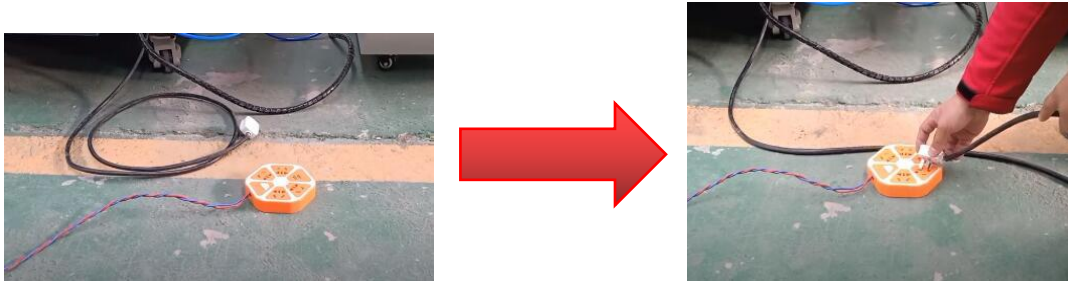

2.3 Connect the control cabinet to the machine.
Step 1: Insert the plug on the machine into the socket of the control cabinet

Step 2: Install the computer:

2.4 Connect 220V power supply. Insert the reserved plug of the machine (on the right front side of the machine) into the 220V power supply plug row.
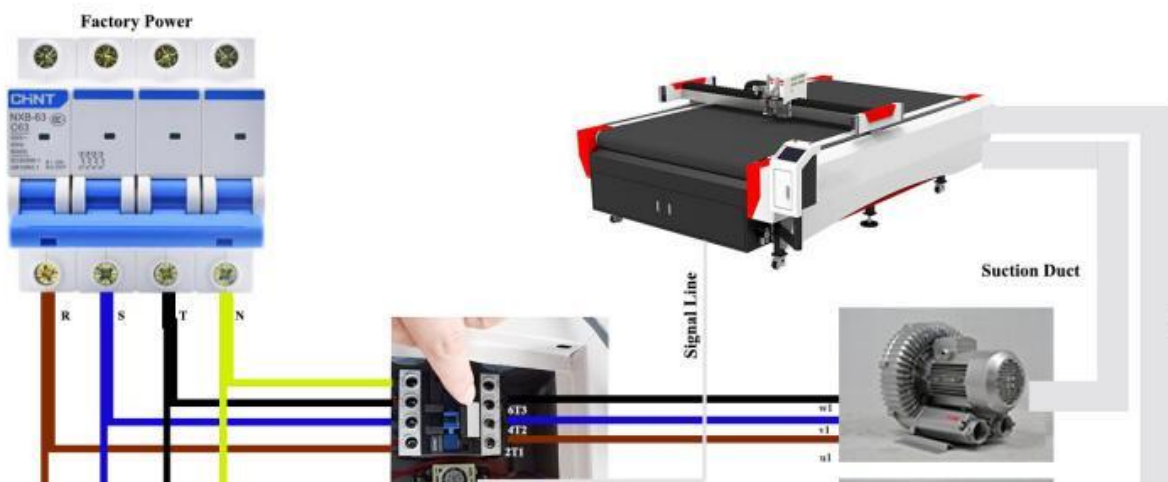

2.5 Connecting gas
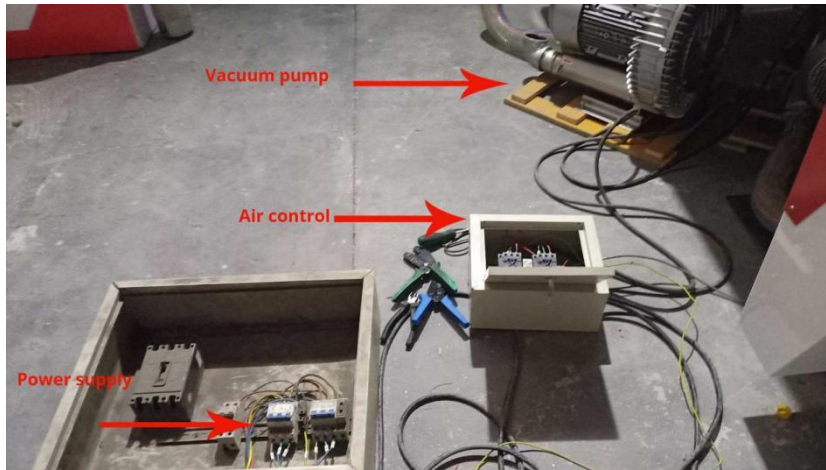 Connect 8mm diameter gas pipe with air pressure of 0.6MPa


2.6 How to install vacuum pump

Vacuum pump power requirements: 380V

Before installation, please pay attention to turning off the power to ensure the safety of workers.

The vacuum adsorption system divided into three parts: "Vacuum pump", "Air control", and "Power supply", as shown in the figure:
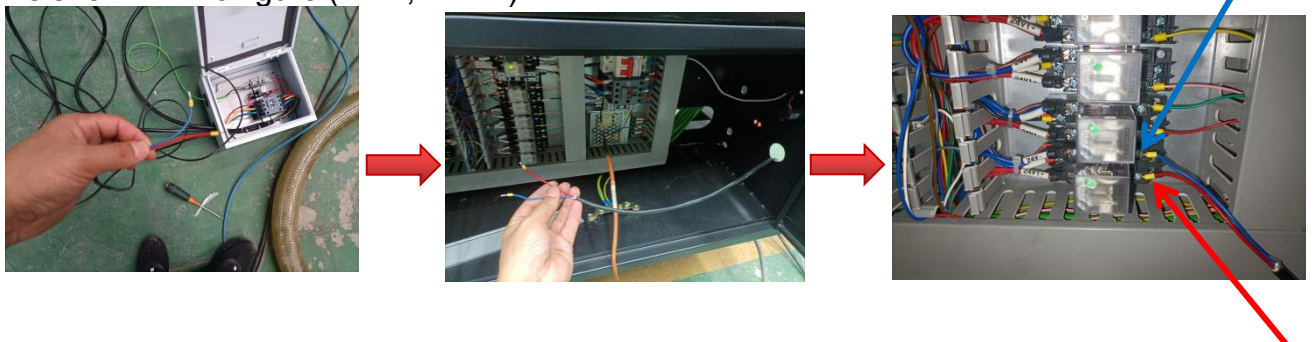
The first step :Connect the "Vacuum pump" power cables (U1, W1, V1) to the "Air control" (2T1, 4T2, 6T3), as shown in the figure:
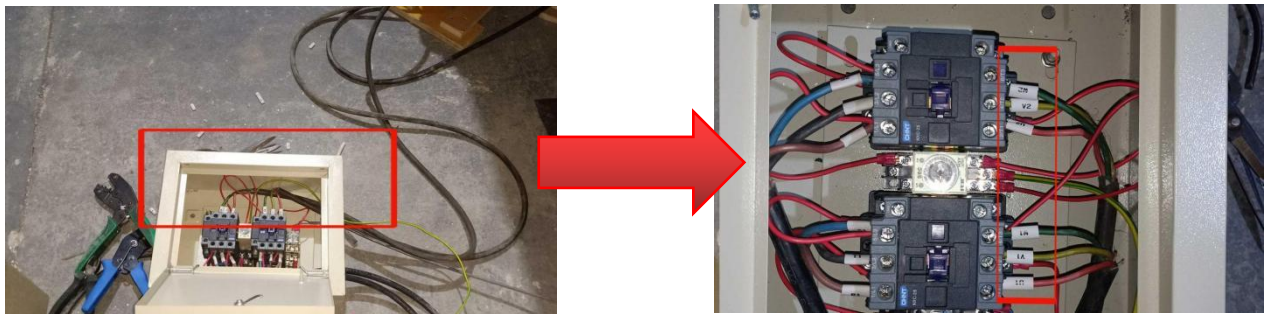

The second step: Connect the power supply line (three live wires and one neutral wire) in the "Air control" to the "Power supply" in the factory as shown in the figure: (Hint: Due to the high power of the vacuum pump, please strictly make sure one vacuum pump connect 1 earth leakage switch.)


The third step: Connect the "Air control" signal line to the relay in the electrical part of the machine. The red wire is connected below and the blue wire is connected above. As shown in the figure:(24V-,24V1+)
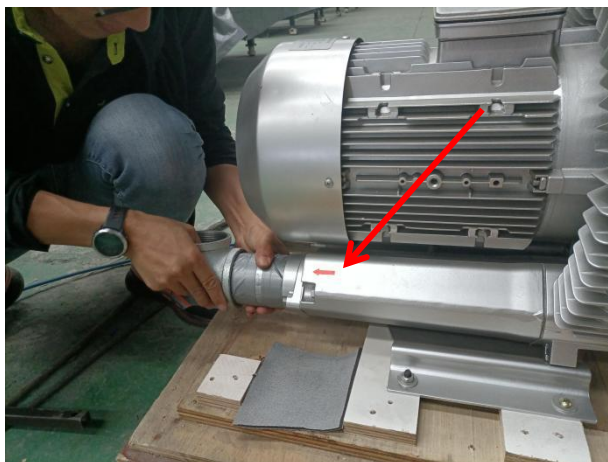
The fourth step: Connect the protection line of the vacuum pump. Connect the wires marked with "ER1" and "ER2" to the designated position of the distribution box:
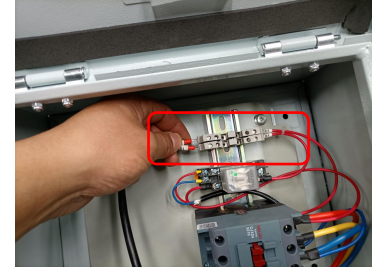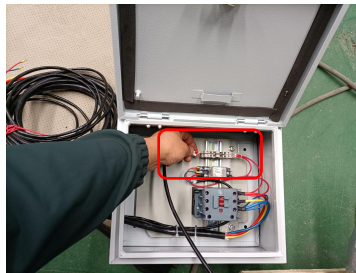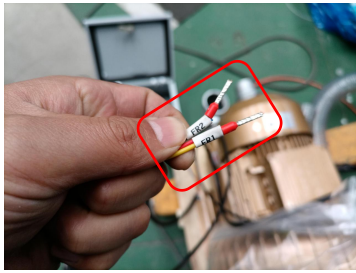
The fifth step: Connect the air pipe of the vacuum pump to the machine, as shown in the figure:
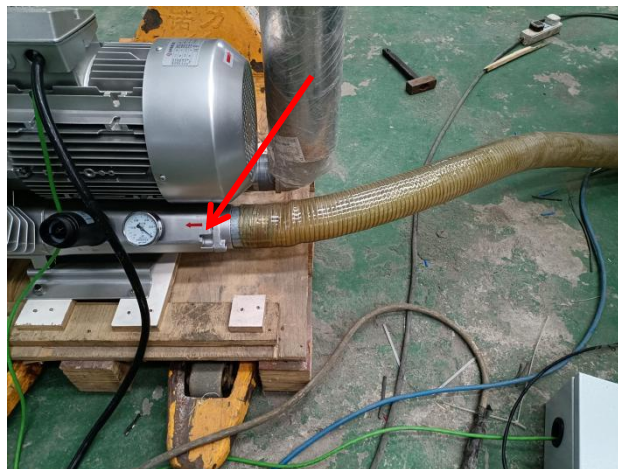
Step six: Install the silencer on the vacuum pump

Now that the machine is assembled, we also need to test whether the vacuum pump is installed correctly, which will be shown in detail in "3.2 how to detect the vacuum pump".

2.7 How to install the deviation correction system:(Only for feeding machine optional)

Step 1: remove four fixing devices, which are located at the front, rear, left and right positions of the feeding system:
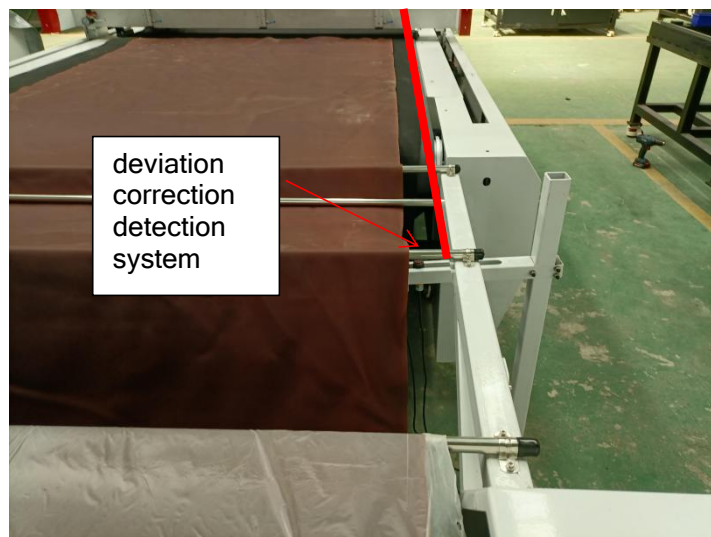
Step2:Place the automatic feeding system behind the machine with a distance of 30-50cm;

Requirement 1. Keep the feeding system parallel to the machine:

Requirement 2: Ensure that the deviation correction detection system is within the range of the machine working platform, as shown in the figure:
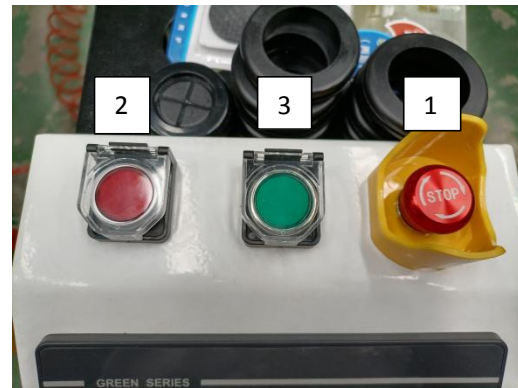

deviation correction detection system

Third, fix the foundation to avoid movement during work.
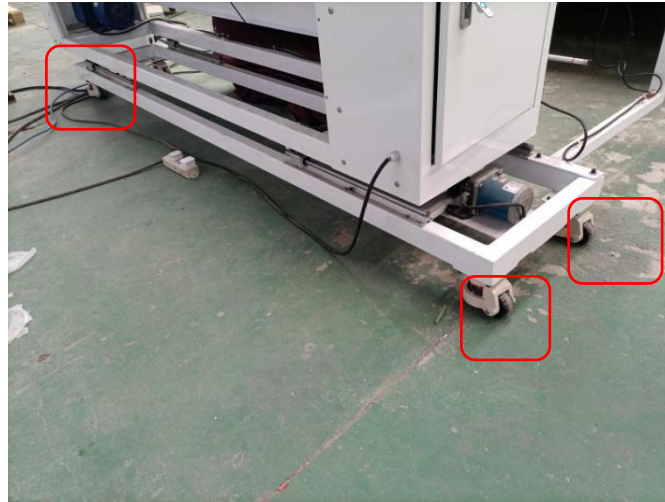
How to operate the machine

3.1 How to start machine
 Step 1: turn on the power supply of the machine.

1. Rotate the emergency stop switch to ensure it is idle;
2. Press the red button to turn on the electrical power supply of the machine;
3. After 5 seconds, press the green button to open the operation panel.

Step 2: click "origin" to let the machine to the origin

3.2 How to test the vacuum pump

Step 1:Click "Vacuum" on the operation panel
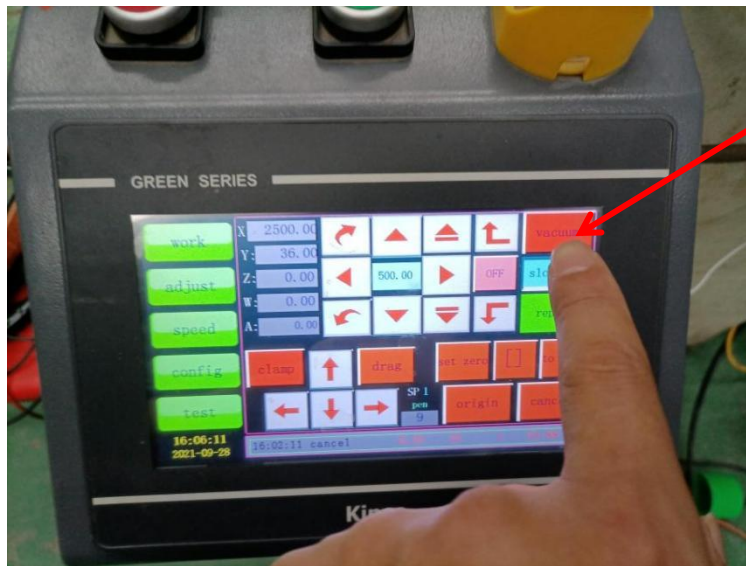
Step 2: Check whether the adsorption direction of the vacuum pump is correct. Take a soft fabric and place it at the exhaust outlet of the vacuum pump:
If it blows outward, it indicates that the installation is correct;
If it sucks in, it means the installation is wrong.

If the installation is wrong, the correction method is as follows:
You can change the position of 2 of "R, S, T" arbitrarily, and then check whether the installation is correct.
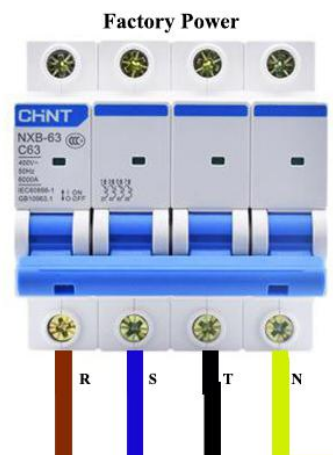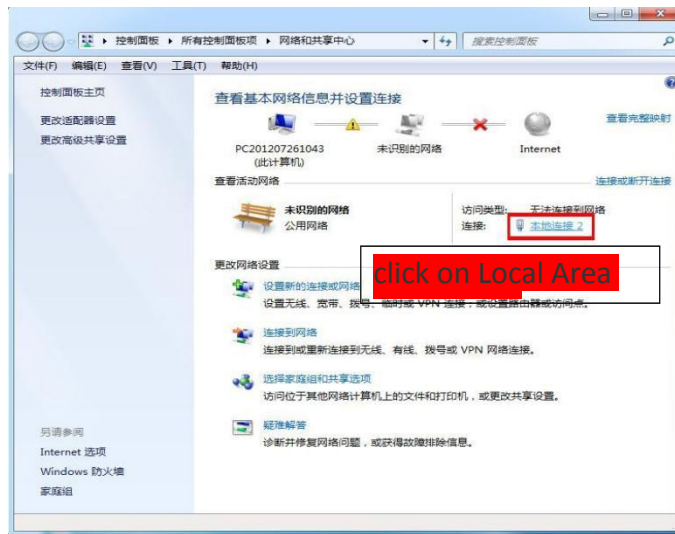
3.3 How to connect the machine and software:

Step 1: Take out the configured network cable, connect one end to the computer and insert the control board card of the machine:
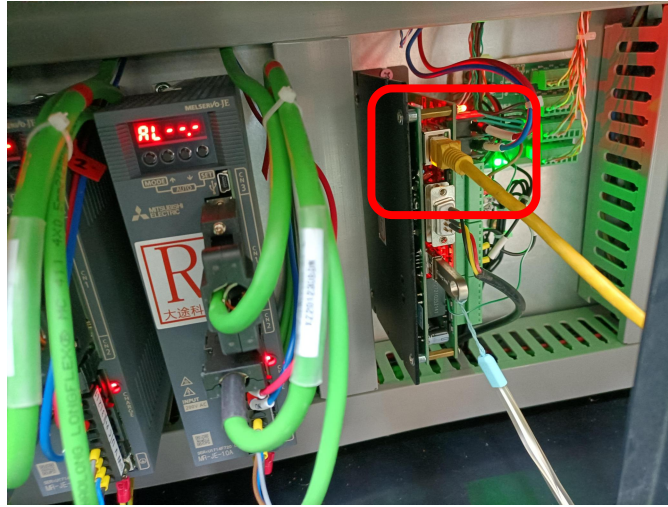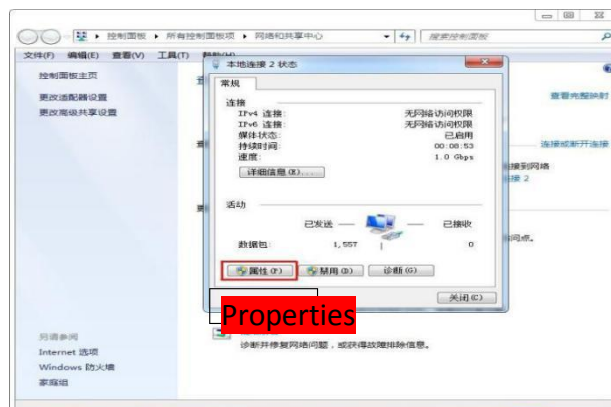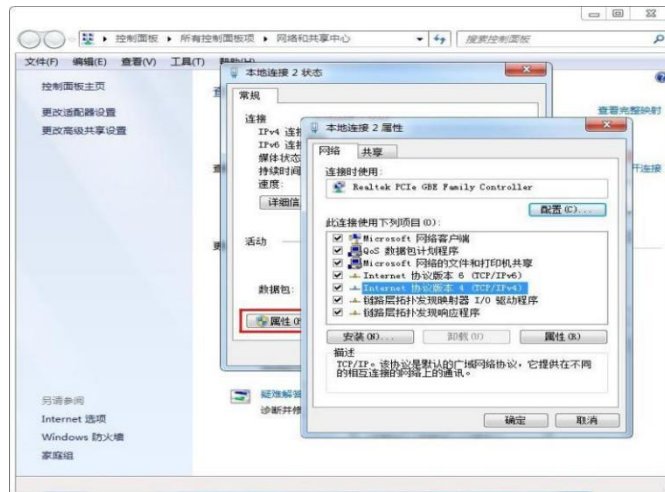

Step 2: set the IP address of the computer
Right click on the mouse - Network and Sharing Center, click on Local Area

Connection

Click on Properties

Double-click on Internet Protocol Version 4 (TCP/IPV4)

Click on use the following IP address to change the IP as shown below:
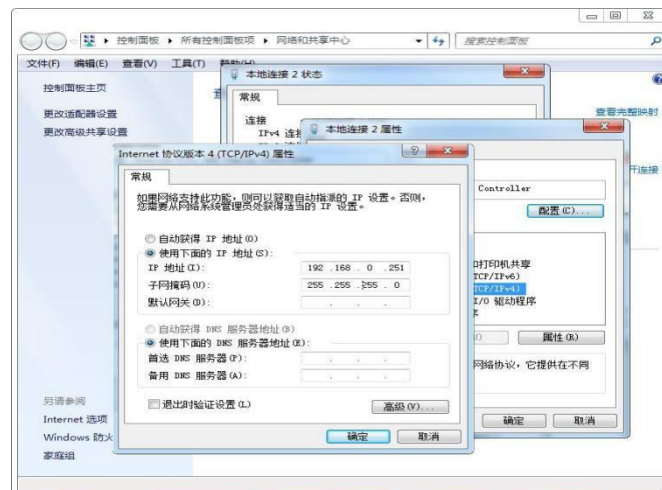
(Note: Because the IP of the machine is 192.168.0.252, the last IP in the protocol version 4 cannot be the same as the last IP of the machine, so the last IP can be larger or smaller than the IP of the machine, 253 or 251 are okay.)

Then click on OK and the network IP configuration is complete.

Step 3: Read machine parameters

Click"file"—"machine param"
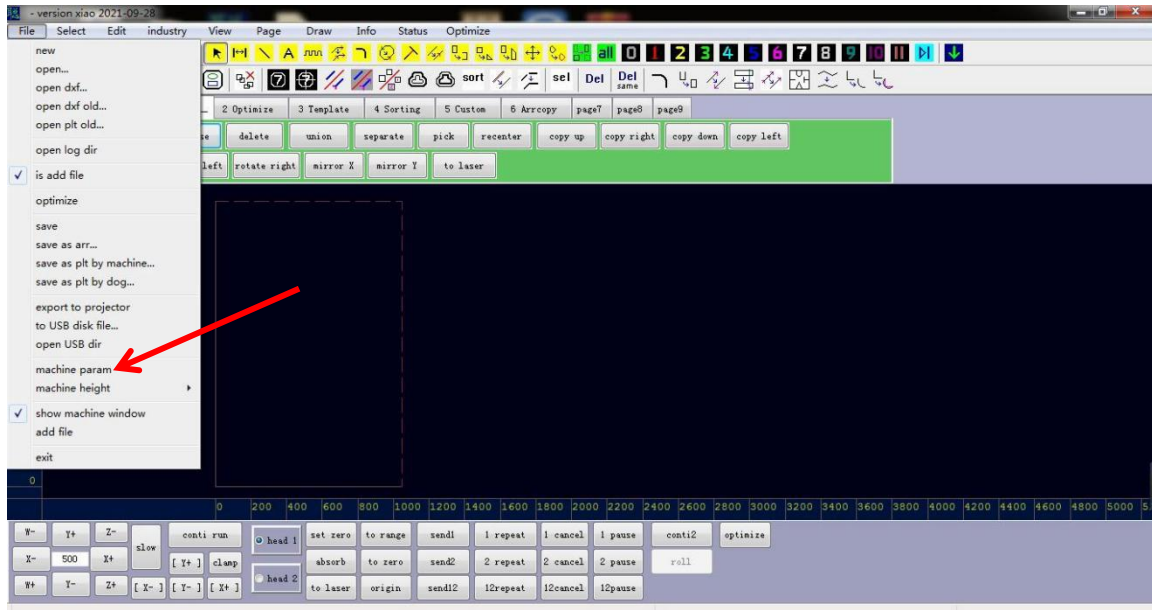
Click"get from machine" and"reflash workrect"
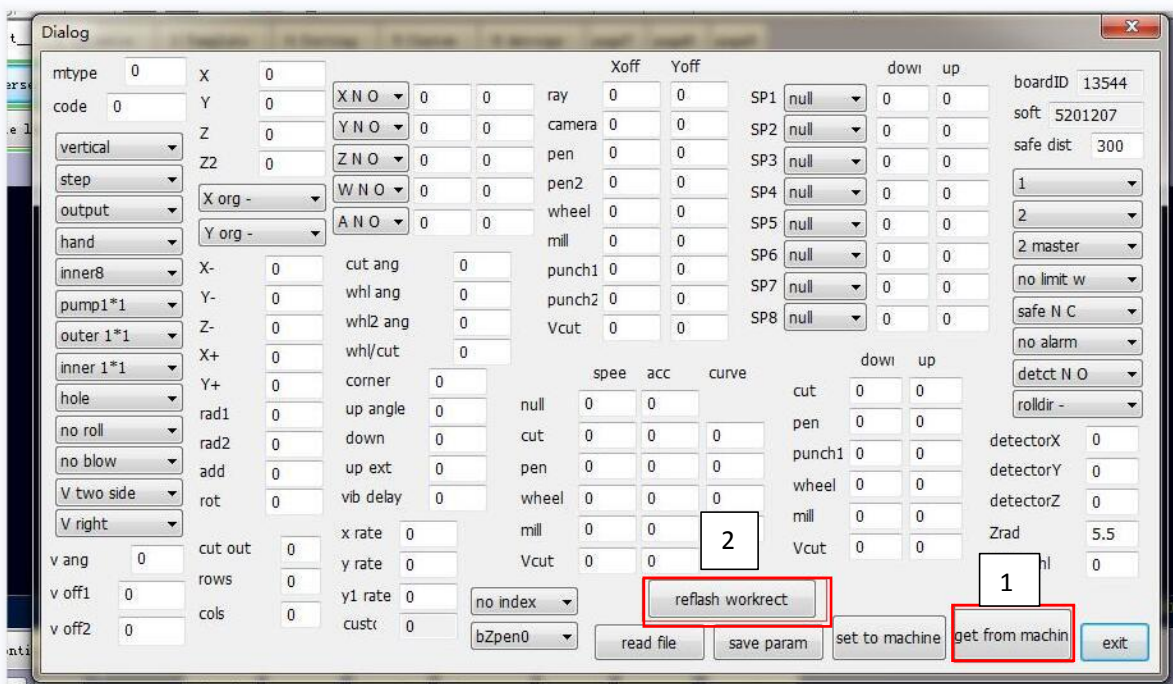
3.4 Test machine platform data

After the machine is fixed, we need to test the data of the machine platform.

Step 1: After ensuring that the machine has returned to the original , click the down and right buttons to move the cutting head to the lower right of the machine.

Method 2: check the number setting through the operation panel
Click "adjust" -- click "SP XX" to switch the number, and the corresponding different tools will be displayed later:

Tools and numbers corresponding to different processes (some tools will be different, subject to the actual viewing results)

Cutting	EOT,power rotary tool	SP4，SP6
Grooving	V grooving tool	SP3，SP5(Curve grooving)
Punching	Punching tool	SP2
Marking	Pen marking	SP1
Creasing	Creasing	SP2
Mill	Routing tool	

3.5 How to install cutting tools and blades

3.5.1 How to install vibrating tool

Step 1: check the control panel to ensure that the coordinate of "W" axis is 0; If it is not "0", click the space after "W"

Step 2: Pull off the cap of the vibrating knife (skill, average force on the left and right), as shown in the figure:

Step 3: Loosen the fixing screw of the tool holder with a wrench