USER MANUAL

Bridge Saw Machine GQ-3220C

Content

Operating Instructions

[Pay attention]

1. Make sure that the motor and drive are properly installed, firmly fixed, and the power supply and voltage wiring are correct before powering on.

2. During debugging, the motor should be unloaded first, and after confirming that the parameters are correct, then carry out load debugging to prevent damage to the machine caused by incorrect operation.

3. Do not switch on and off the system frequently to prevent damage to the drive.

4. The drive and motor may heat up after running for a period of time. It is strictly forbidden to touch the drive radiator and motor during running and for a period of time after power off!

5. When an accident occurs or the motor does not operate normally, press the emergency stop button immediately, and the machine will immediately stop running!

[Danger]

Even after the drive is powered off, the high voltage will remain for a period of time. Do not disassemble the power cord within three minutes after the power is turned off, don't touch the terminal block.

It is strictly forbidden to disassemble the driver and motor with power on.

The personnel involved in disassembly and maintenance must have corresponding professional knowledge and working ability.

【Operation precautions】

1. The saw blade shaft must be lubricated weekly

2. Drawing specifications: Drawings must be made strictly in accordance with the drawing specifications, otherwise the machine will wrong action!

3. Don't cut too fast when cutting the ellipse at a small angle, otherwise it will damage the saw

blade and the slab!

4. During machining process (especially the 45-degree chamfer), do not get too close to the saw blade to prevent the danger of saw blade!

5. Every restarts, it needs to return all axis to zero and set the tool again!

6. The machine must be back all axis to 0.0 before operate table up & down!

7. Please don't forget to add hydraulic oil for the hydraulic pump!

8. The operator must not load and unload the blade until the saw blade completely stops rotating; other people are strictly prohibited to operate the machine during the process of loading and unloading the blade!

9. Operators must wear goggles, earplugs, masks and other basic safety protective gear!

10. It is strictly forbidden to open the control cabinet when it is working. If there is a fault, it must be powered off for testing. The testing personnel need to have the corresponding professional knowledge!

11. Before the machine is ready to cut, please check the status and various parameters to avoid unnecessary errors (such as damaging the saw blade). Make sure that the parameters are correct before cutting!

1. User manual

```
GANGERCNC 5 Axis Bridge Saw
Professional bridge Saw cnc




    Welcome to use GANGERCNC Bridge
            Saw System



    Add:No.9011 Jinlun Road

    Tel:+0086 15866783762
```
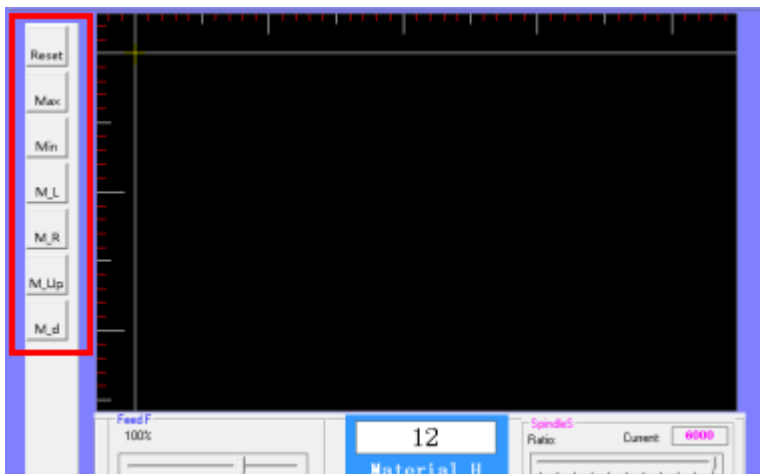
After the machine is powered on, the welcome interface displayed on the control screen, click "Welcome to GANGERCNC Bridge Saw System" to enter the system interface.
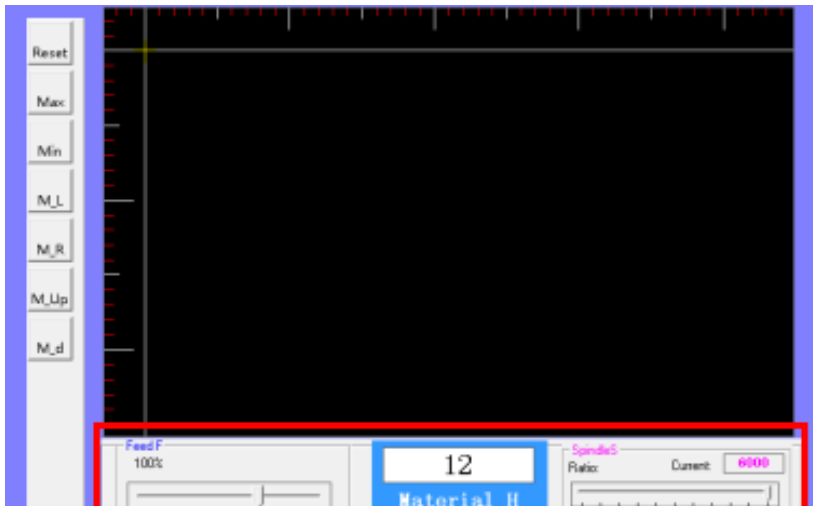
1.1 Main interface
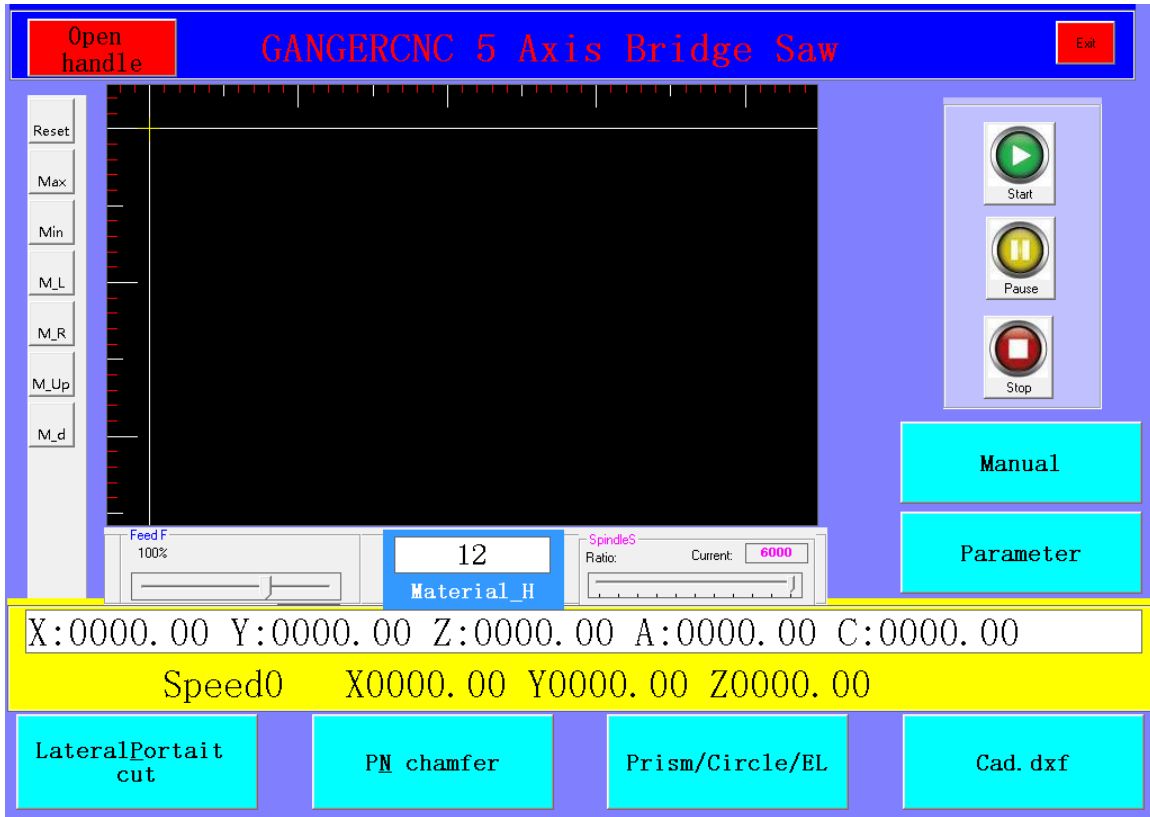
1.1.1 In the main interface

This is the CAD display area. The buttons in the red frame can zoom in, zoom out, move CAD graphics, etc.

1.1.2 In the red frame area of the interface

Can adjust the blade motor ratating speed and processing speed.

1.1.3 Ruler

CAD display area with ruler function, the distance shown in the figure is 1M.

1.1.4 Materials（slab）thickness
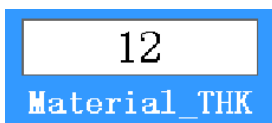
 You can enter the material thickness (slab thickness) in the white box.

1.1.5 Coordinate
display
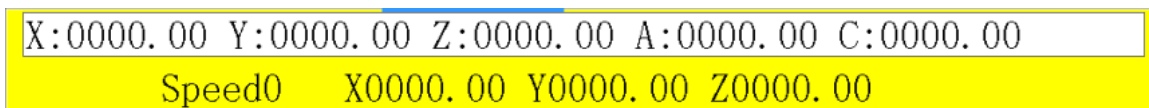
The yellow area in the main interface can display machine coordinates and workpiece coordinates.

1.1.6 Start, Stop and Pause button.

Start button: click the start button, the machine starts to cut work.

Stop button: Click the stop button, the machine stops work.

Pause button: Click the pause button, the machine pauses work, click the start button to continue the previous work.
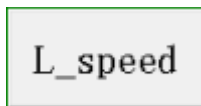
2. Move manually
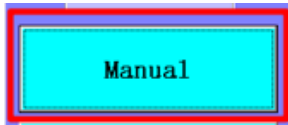
Click **Manual** will shown as above screen.

In this interface, you can move the machine back and front, left and right, return to zero for each axis, switch the moving speed, and change speed, etc.在此界面可以进行五轴桥切机的前后左右移动，各轴回零，行程档位切换，速度切换等操
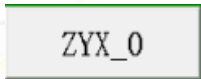
2.1 **Custom** After switching to the custom mode, the machine will only move the set custom value every time.
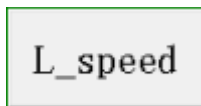
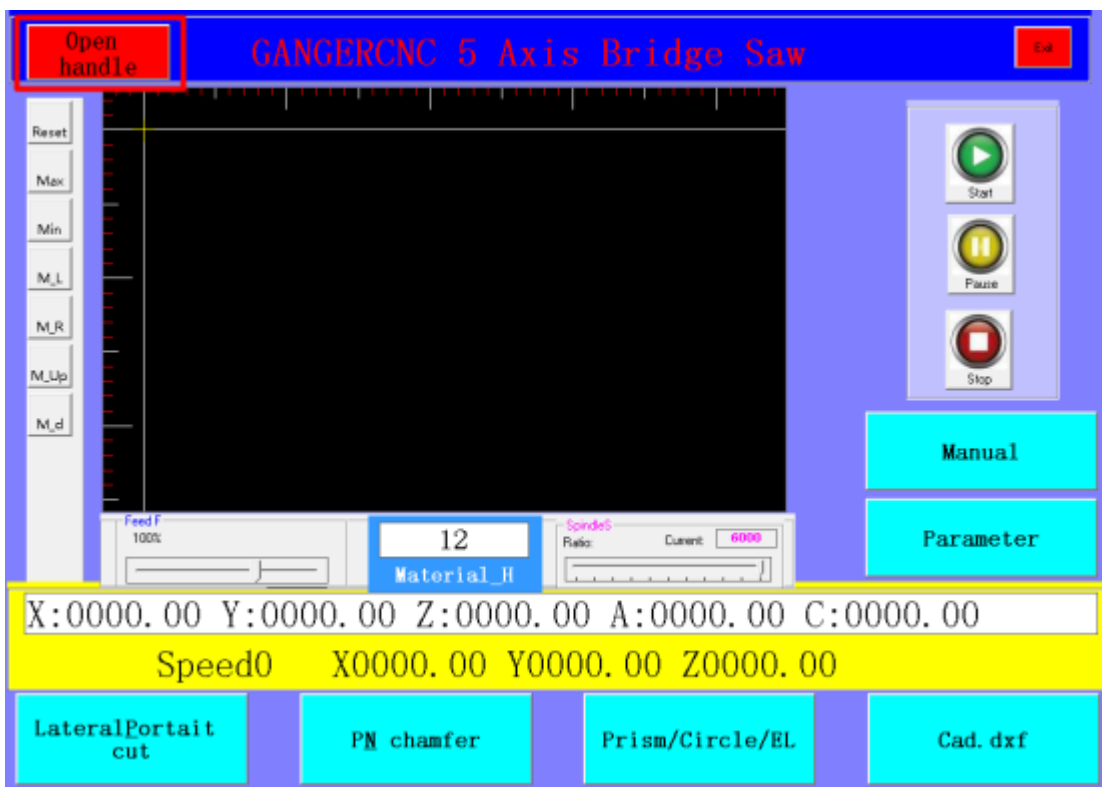**2.2** Click **L_speed** Switch to fast mode.
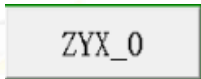
2.3 Press **ZYX_0** ZYX axis back to 0.

2.4 Press A0 or C0 **A 0** **C 0** A-axis and C-axis will back to 0.

3. Use of handle

The handle is mainly used for movement and tool setting in the "X+, X-, Y+, Y- " directions: (The handle has been set to connect to the machine before delivery, and only need to install the AAA battery).
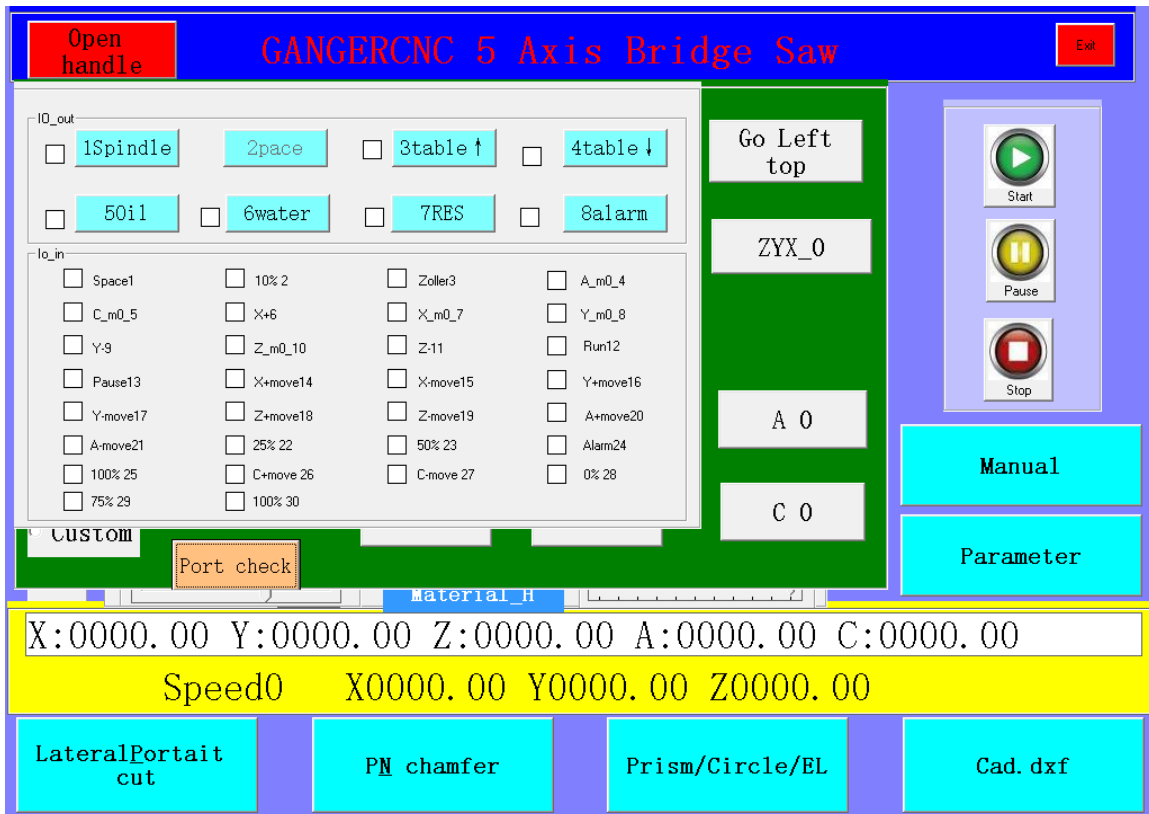
Click [Open handle] to use the handle.

Introduction to the function keys of the handle:

After the machine is powered off, the handle will close automatically.

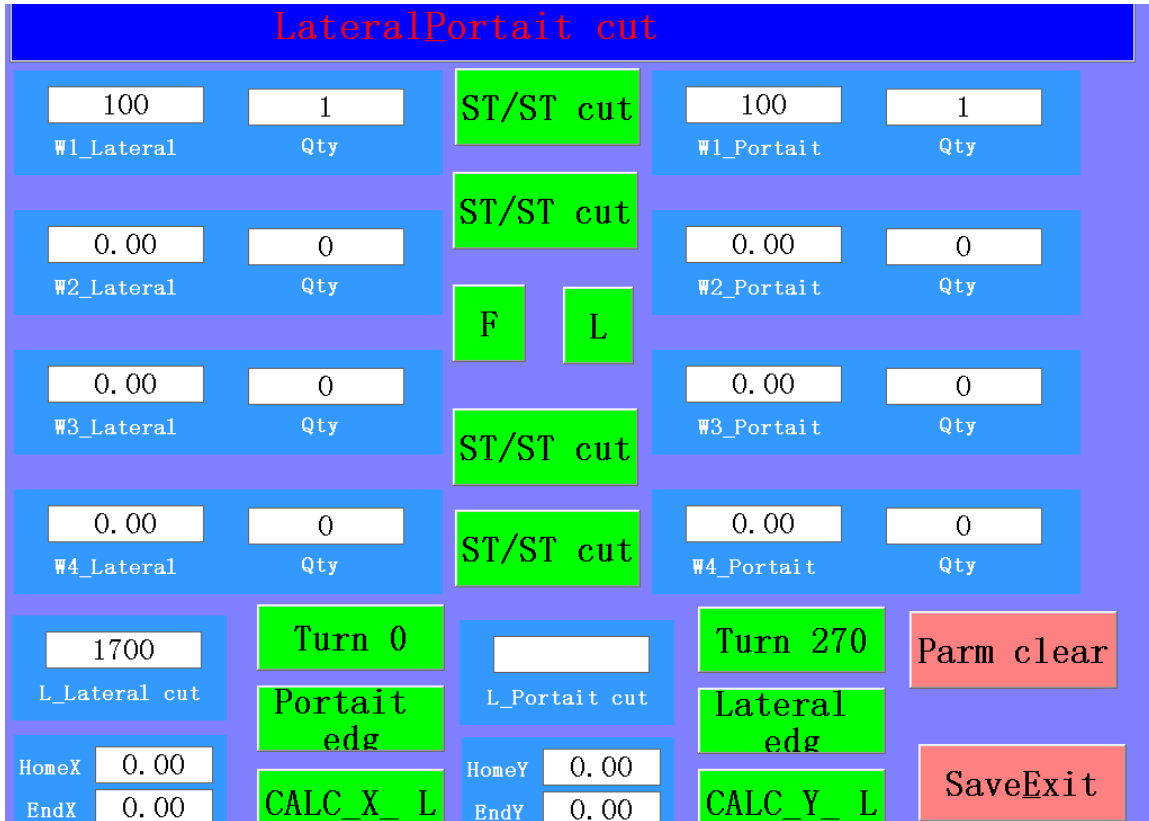# 4. Interface check

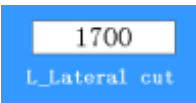
Click interface check, will shown as above interface

4.1 In the port check interface, you can start and stop the blade; table up&down (**the machine must be back all axis to 0.0 before operate table up&down**); start and stop the oil lubrication; and observe the limit status and etc.operations.
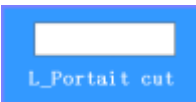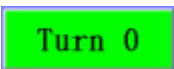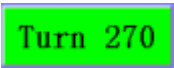
5. Lateral Portait cut

5.1 : You can set the width and quantity of the slab in the Y axis

(the machine defaults to cut a slab with two shots, if you only need to cut one shot, please use the
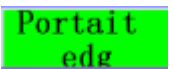
 function)

5.2 : You can set the width and quantity of the slab in the X axis

(the machine acquiescence to cut a slab with two shots, if you want cut one shot, please use the
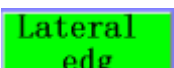
 function)

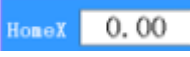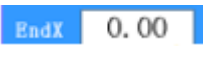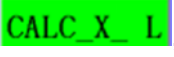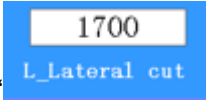**5.3** `1700` `L_Lateral cut` : You can set the cutting length when the blade on 0°position.
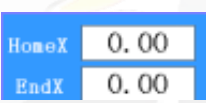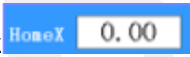
5.4 `L_Portait cut` :You can set the cutting length when the heads on 270°.

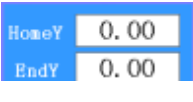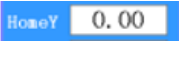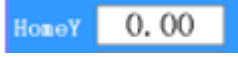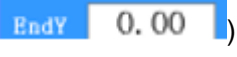**5.5** Click `Turn 0` The head can be quickly turned back to 0° from any angle.

5.6 Click `Turn 270` The head can be quickly turned to 270° from any angle.

5.7 Click `Portait edg` The machine only cut one shot at 0°.

5.8 Click `Lateral edg` The machine only cut one shot at 270°.

5.9 `HomeX 0.00` `EndX 0.00` : Select a starting point in the X direction, double-click `HomeX 0.00` (the coordinates of the start point will be displayed in `HomeX 0.00`), and then move the blade to the needed position (the coordinates of the end point of X will be displayed in `EndX 0.00`), and then click `CALC_X_ L`, the distance between the start point and the end point will be displayed in " `1700` `L_Lateral cut` ".

5.10 `HomeY 0.00` `EndY 0.00` : Select a starting point in the Y direction, double-click `HomeY 0.00` (the coordinates of the start point will be displayed `HomeY 0.00`), and then move the blade to the needed position (the coordinates of the end point of Y will be displayed in `EndY 0.00`),

and then click **CALC_Y_ L**, the distance between the start point and the end point will be

displayed in "**L_Portait cut**".

5.11 Click ▶ **Start**, the head is will cut at 45° chamfer state.

6. PN chamfer set

PN chamfer set

100	1	100	1	**Front ST edg**
W1_Lateral	Qty	W1_Portait	Qty	
0	0	0	0	**Rear ST edg**
W2_Lateral	Qty	W2_Portait	Qty	
0	0	0	0	**L_ST edg**
W3_Lateral	Qty	W3_Portait	Qty	
0	0	0	0	**R_ST edg**
W4_Lateral	Qty	W3_Portait	Qty	

1700	**Turn 0**	100	**Turn270**	0
W_Lateral cut	**Lateral edge**	L_Portait cut	**Portait edge**	D_ST cut
12		12		**Parm clear**
D_chamfer		D_Rev chamfer		**SaveExit**

6.1 : You can set the width and quantity of the slab in the Y axis (the machine defaults to cut a slab with two shots, if you only need to cut one shot, please use the function) .

6.2 :You can set the width and quantity of the slab in the X axis (the machine acquiescence to cut a slab with two shots, if you want cut one shot, please use the function) .
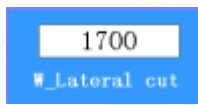
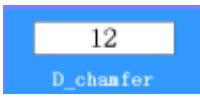**6.3** : You can set the cutting length when the blade on 0°position.

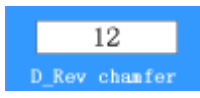**6.4** : You can set the cutting length when the heads on 270°.

6.5 Click : The head can be quickly turned back to 0° from any angle.

6.6 Click : The head can be quickly turned to 270° from any angle.

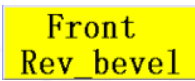**6.7** Click : The machine only cut one shot at 0° on the C axis and 45° on the A axis.

6.8 Click : The machine only cut one shot at 270° on the C axis and 45° on the A axis.

6.9 `12` `D_chamfer` : The chamfer depth is the thickness of the slab.

6.10 `12` `D_Rev chamfer` : The depth of the reverse chamfer is the thickness of the slab.

6.11 `Front ST edg` : When the machine is cutting, the head is at 0 degrees.

`Front bevel` : When cutting, the head is tilting at 45 degrees, the upper surface of the cut slab is larger than the lower surface.

`Front Rev_bevel` : When cutting, the head is tilting at 45 degrees, the lower surface of the cut slab is larger than the upper surface.

Attention: The use of the buttons for "Rear", "Left" and "Right" is the same as the "Front" button.

6.12 `0` `D_ST cut` : Only valid for CAD function processing; every time the depth of straight cutting increases by 1mm, the cutting depth of the machine will increase downward by 1mm.

7. Circle/Prism/Ellipse Set

7.1 : Center coordinate in X direction

7.2 : Center coordinate in Y direction

7.3 : The radius of the outer circle ensures that the inner circle is cut out.

7.4 : The radius of the inner circle ensures that the outer circle is cut out.

7.5 : The outer ellipse radius in the X direction (the outer ellipse radius ensures

that the inner ellipse is cut out).

7.6 O-ellipseY : The outer ellipse radius in the Y direction (the outer ellipse radius ensures that the inner ellipse is cut out).

7.7 I-ellipseX : The inner ellipse radius in the X direction (the inner ellipse radius ensures that the outer ellipse is cut out).

7.8 I-ellipseY : The inner ellipse radius in the Y direction (the inner ellipse radius ensures that the outer ellipse is cut out).

7.9 Blank L : the length of the slab to be cut prism

7.10 Bland W : the length of the slab to be cut prism

7.11 PrismX : the length of straight side of prism

7.12 PrismY : the length of hypotenuse side of prism

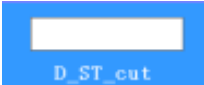**7.13** D_Level X : the height between two straight sides of the prism in the Y direction
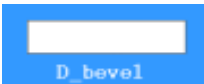
7.14 Layers : The number of processing layers is determined by the thickness of the slab, generally one layer is 3-4mm.
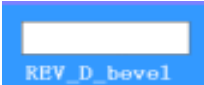
8. CAD

On the computer, save the CAD drawn graphics in DXF format, save the file to the U disk, plug it into the USB interface on the system (black box) in the electrical box, and then copy the file to the JHFIVE folder in the D disk.
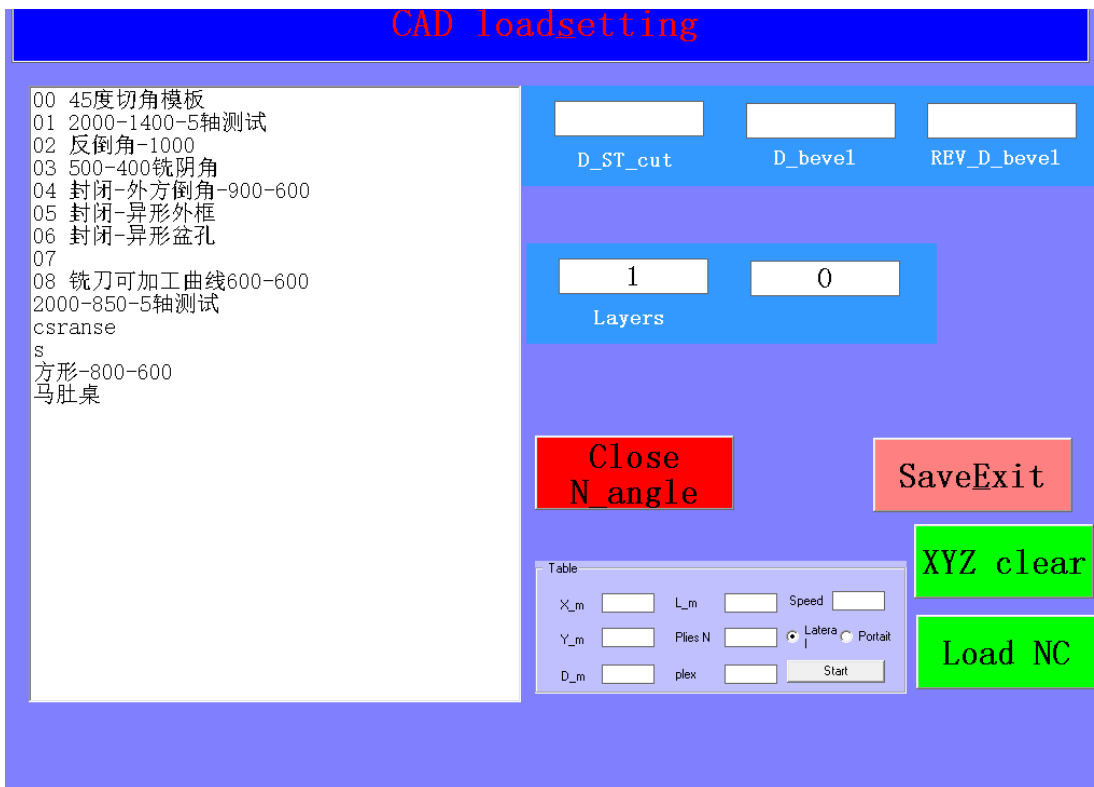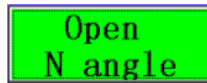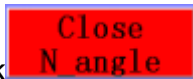

8.1 : Every increase 1mm, the cutting depth of the machine will increase by 1mm.

8.2 **:** means the thickness of the slab.

8.3 : means the thickness of the slab.

8.4 : The number of processing layers is determined by the thickness of the slab, generally one layer is 3-4mm

8.5 Click to turn to for processing CAD graphics.