User manual

Directory

1 Introduction

a) Safety

Your Responsibilities

As the user of the Artisman routing system it is your responsibility to follow all safety procedures.

Personal Safety Precautions

Any person who operates or does any maintenance on this equipment should be aware that safety procedures are an important part of the everyday job. Know how the equipment functions and respect the machinery. Make sure anyone working on or around the equipment understands and, more importantly, follows all safety precautions. Sudden movement, loud noises, horseplay, etc. must be avoided, as such distractions may result in unsafe conditions.

Accidents can happen that result in serious personal injury if clothing or other articles become entangled in the cutter or other moving parts. The following suggestions, if followed, will reduce the chance of having this type of accident.

· Always wear approved eye and hearing protection when operating the routing system.

· Restrain long hair with a cap or net.

Avoid wearing neckties and scarves.

Avoid wearing hanging jewelry.

Wear gloves only when handling sharp or hot parts.

Never operate this or any other equipment if affected by alcohol, drugs, or any other substance or condition that may decrease judgment or alertness.

Observe and follow all safety signs.

Do not place your hands on the tabletop while the spindle is turned on.

When doing maintenance or other work on the machine always lock out the incoming power supply.

Work Area Safety

It is important to always keep the work area clean. Oil, debris, or water on the floor can cause unsafe conditions. Be sure all work areas are free of hazardous obstructions. Return tools and other equipment to their proper storage place when finished using them.

Cutter Safety

Cutting tools are very sharp and should be handled accordingly. Inspect tools before using and discard any defective tools. Failure to properly handle tooling can result in serious injury.

Installation Safety

An electrician must read and understand the electrical schematics prior to connecting the machine to the local power system. Connecting the wrong voltage power will void the warranty. Place all switches in the off position before connecting power. Always lock the main disconnect switch in the off position if the machine is left unattended. When the machine is installed, be sure that all motors rotate in the correct direction.

b) Maintenance

i · The Overall Maintenance

The Artisman routing system will provide years of productive service if it is maintained properly. There is daily, weekly, monthly, quarterly, and yearly maintenance required. The maintenance schedule is based on a 40-hour work week. Artisman,recommends that any routing system used in excess of 40 hours a week should adjust the following schedule accordingly.

Daily

Each day the Artisman routing system should be cleaned off. All chips should be blown or vacuumed off the machine. The rack area should be paid close attention to. Chip build-up in the rack can cause stalling problems. Systems with Lead Screw Z-axis should lubricated the screw with a non-aerosol, silicon based lubricant. Do not use WD-40 on the Z-axis screw for lubrication. Using anything other than what is recommended, premature wear of the Z-axis screw is immanent. With BALL SCREW systems, oil or lithium grease is acceptable.

Weekly

Each week the routing system should be cleaned thoroughly. The filter on the control box should be vacuumed. Any build up in the racks or rails should be blown out. The filter or filters on the vacuum hold down systems should be removed and cleaned. All oil levels (if applicable) in the vacuum hold down system should be checked and filled if needed. On MG Series routing systems the Y-axis Ball Screw should also be lubricated with oil or lithium grease. MT series routing systems will need to follow this procedure for the X-axis screw as well.

Some older routing systems use a Lead Screw on the X and Y-axis. These systems should be lubricated with a non-aerosol, silicon based lubricant. Using anything other than what is recommended may lead to premature wear of the lead screw.

Monthly

In addition to the daily and weekly cleaning, once a month the racks, Y-axis and Z-axis screws should be cleaned with a scrub brush and degreaser. Once the racks are clean, apply a bead of the lithium-based grease. With the Y-axis and Z-axis screws, follow the lubricating procedures mention previously. Some routing systems will need to follow this procedure for the X-axis screw as well.

Bi-Monthly

Grease all the linear bearing cars at least twice a month. Jogging the machine while applying slight pressure in the opposite direction will do two things. First this helps force the grease into the bearing cars. Second and most important the grease will be incorporated throughout all of the bearings.

Quarterly

Every three months remove the X and Y-axis covers. Inspect the transmission or gearboxes for wear. Ensure that the pinion is engaged all the way into the rack by loosening the mounting bolts of the transmission or gearbox and pushing the assembly up. Check the tabletop bolts to ensure they are all tight.

Annually

Along with the standard maintenance performed on the Artisman routing system, the electrical cabinet should not be forgotten. Turn power off before opening the cabinet. Once the cabinet is open, vacuum out any debris that may have entered the cabinet. DO NOT USE COMPRESSED AIR. This action may cause unwanted particles to short out some of the electrical components.

Artisman， recommends that the belts on all transmissions be replaced every other year. Lead Screw Z-nuts should also be replaced at the same time.

Artisman Maintenance Log

Date	By	Maintenance Performed

|		

ii · Maintain Partly

Spindle Motors

Artisman will warranty its spindle motors for a period of 9 months from the time of shipment. At any time, misuse or abuse of the spindle motor will not be accepted as defective and warranty will be void. After the initial 9 months, Artisman will warrant the spindle to be free from defects for a period of 9 months. Spindle bearings are not covered during this 9-month period.

c) System Diagram

Artisman 3D CNC System consists of two parts and 3D processing machine tool.

COMPONENTS OF ARTISMAN CNC MACHINE
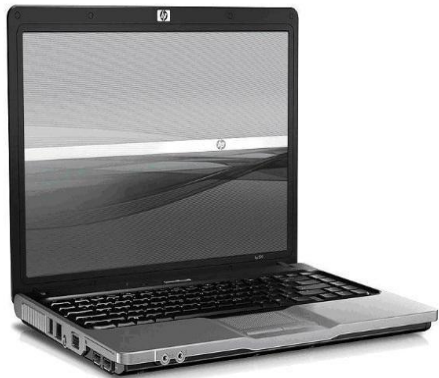
·Computer

The Computer is used to run CAD/CAM carving software, such as WENTAI carving software, and connect the stand-alone control box.

·**3D Processing Machine Tool**
Working Area

d) Fast Start

i · Step 1: Turn On Power

Press the switch control on red

power key, the touch screen for

CNC machine tools and machine

electricity.

ii · Step 2: Find Home

Initialized on the electric control system after operation, the machine

tool spindle automatic search for origin of machine, machine startup

after 30 seconds to complete.

iii · Step 3: Insert Cutter

Put the required type of clamping tool into the clip to ensure tools stable.

iv · Step 4: Set User Home

Press these button to set the tool center in the initial position of the surface of the material.

Press these home button, The keyboard displayed as follow:


```
X+000.00Y+000.00
Z+000.00A+000.00
P2.00 T01OFF H00
[ONLINE]->联机
```

After that, press the enter button to save the home.

Tips：**1.**Use the menu item to adjust the speed if necessary.

2.When the point moves down to 3-5 mm to material surface location, it is recommended to use points to move up and down keys.

3.Save the origin number can be set for any number of 1 ~ 9.

v · Step 5: Online

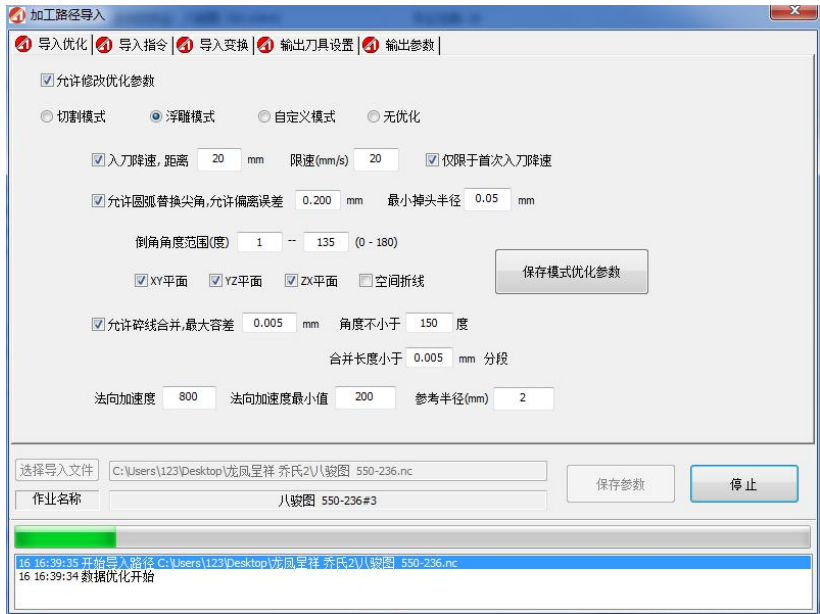Processing the origin (origin) user setting finished, after online, input processing files immediately processing


```
S3408      联机
ART8422@005.150
[ONLINE]->脱机
[ENTER]->重复!
```

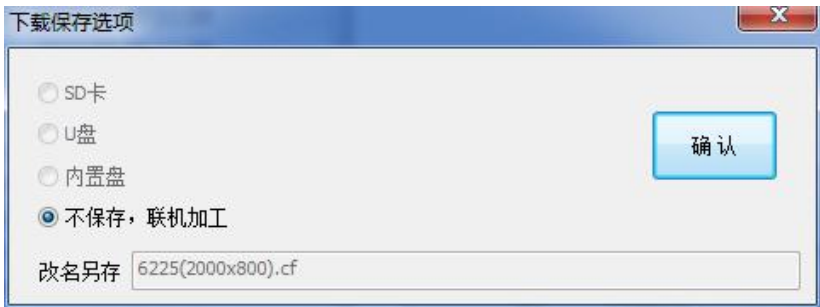### vi · Step 6: Open The AJC

vii · Step 7: Import processing job

viii · Step 8: Issued by the job

Click the keys issued by homework, pop up the following dialog

Click OK.

e) Hints and Tips

Understanding the system and learning the keypad functions will be a real key to using your cutting system in an efficient and productive manner. Read the following tips and use them to your advantage.

TIP1 Safety

Safety glasses and Hearing protection should be worn at all times while operating the machine.

TIP2 Testing

When testing new processes or when learning new functions of the machine, use the following 2 procedures.

1. Insert a pen into the end of the spindle and run the file on a piece of paper.Disable the spindle or the pen will spin. 将

2. Set an imaginary surface above the material high enough that the spindle will still move up and down but never come in contact with the material.

TIP3 Maintain your Machine

1. The **Artisman** routing system will produce consistent, accurate work as long as it is maintained. Maintenance for this system is easy, yet it should not be overlooked. Please

2. Keep it clean. Using a Shop Vac and compressed air, remove the build up of chips and dust on the system daily. Pay special attention to the gear rack and bearing rails.

3. Grease all of the bearings at least twice a month. This is based off an 8 hour work day. Grease the bearings more often if the hours are more than 8 hours.

g）Warranty

Warranty Registration List

项目 \ 周期	每日	每周	每月	季度
清理台面	√			
清理导轨	√			
检查风扇是否干净	√			
X、Y、Z 轴轴承加润滑油		√		
直线导轨加润滑油		√		
丝杠和光杠加润滑油		√		
检查控制器连线		√		
水冷却，水循环是否流畅		√		
清理控制箱内部			√	
检查所有电缆连接			√	
检查 X、Y、Z 三个方向电机、电机轴的固定螺丝是否松动			√	
检查系统是否接地（大地）			√	
检查和校验 X、Y、Z 轴齿轮或链条				√
重新润滑前清理齿条、清理驱动板				√
清洁母板和连接接口（ISA 接口）				√

2 Controller and the Keypad

a）Introduction

All operations to Artisman CNC machine are controlled by the keypad. VIII keyboard control system is divided into network and machine physical keyboard.

Network keyboard，on a computer simulation of a physical keyboard, through the LAN, in the VIII Artisman "motion control" in the AJC,real-time display of synchronization with a physical keyboard.

b）Conception

For get more details about the keypad, you must know some keywords: Artiaman Coordinate apply Descartes Right-handed Coordinate. Seeing it from the side ourselves,like the following picture, The forward direction of X axis is our body's forward direction, the Y axis is our left, the Z axis is our above. Extending your hand, with the thumb, index and medius pose together vertically, ection, the index turns to the Y axis, the medius turns to Z axis.

Home：Since Artisman CNC machine is the real 3D numerical controlled equipment, home means the tool bit in the

spindle, i.e. the position of X=0，Y=0，Z=0.

Physical Home：A home set by the factory, and it's fixed and can't be changed.

User Home：The other name is Processing Home，which is set in the process and can be at any position on the material. Once it was set, processing will start there. Artisman CNC machine can save nine user homes at most.

Online：When the LCD of CNC controller displays "ONLINE"，it means the CNC control system is ready for receiving processing data from computer.

Offline：All the other modes of the CNC controller are offline. Artisman CNC machine (V/VI) has 18 states of offline. We call the one displayed on the first LCD is "offline mode" which displays the position, and the others are menus named No.1 menu, No.2 menu, …No. 17 menu.

Offline Mode: What displays during offline is as follows (the unit is mm)

When power is on, the LCD will display this first.


```
X+000.00Y+000.00
Z+000.00A+000.00
P2.00 T01OFF H00
[ONLINE]->联机
```

c）E-Stop

E-Stop

14
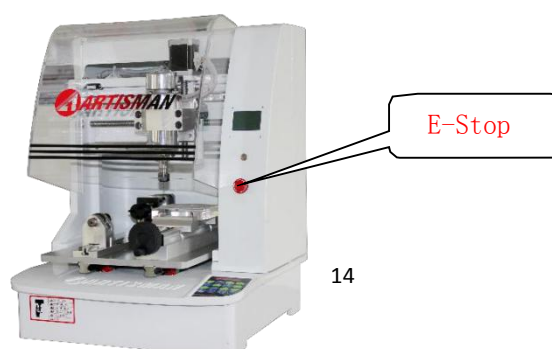
Only use this in case of emergency. Pressing the E-STOP button will cut power to everything but the control board of the machine.The control board will go into emergency stop mode.Once the Emergency Stop button is pushed all of the job setup information is lost.

Note 1: The power to the inverter is cut when the E-STOP button is pushed. This will cause the spindle to coast to a stop, which can take several minutes.

Note 2: The E-STOP button must be pulled out when the main power switch is turned on.

d) Hot Keys

```
X+000.00Y+000.00
Z+020.00 P=0.05
T:01关闭 原点:00
[ONLINE]->联机
```

Fn	⬚⇄⬚	⬚Z=0	MENU	ONLINE
旋转轴顺转	目标刀具	表面测试	菜单	联机/脱机
F1	⬚↓	⬚↑	ESC	↵
旋转轴逆转	落刀	抬刀	取消	确定
ATC	UP	⬆Z	X+	＋
ATC键	Z轴向上移动	Z轴点动向上	X轴正向移动	增加
🏠	Z HOME	Y+←	XY HOME	→Y-
返回脱机界面	Z轴清零	Y轴正向移动	X/Y轴清零	Y轴负向移动
↑	DOWN	⬇Z	X-	－
主轴切换	Z轴向下移动	Z轴点动向下	X轴负向移动	减小
⧖	↙	↻	XYZ	⊟
暂停	机器原点	刀具旋转/停止	移动到指定坐标位置	用户坐标原点

ONLINE **1. Online/offline Button**：

Set the controller with a computer connection status is "online" or "offline". In a CNC controller for "online" when push down this button, the CNC controller by the "online" into "offline", according to the menu by the online menu "" into the main offline interface menu display. In the "offline" status, all the Settings control panel keys to take effect, can be set by the function of the control panel keys of engraving parameters. Under the "offline" interface of offline push down this button, the CNC controller by "offline" into "online". Under the online state, the computer can drive the numerical control machine processing.

When the SD is available, press the online button and menu button, choosing the processing files to realize off-line operation.

ONLINE   MENU

2.Menu Button：

CNC controller under the "offline" interface, press this button, you can switch setup CNC machine different parameters in the menu. Under "online", it can be to choose the processing file on SD card.

3.Setting User Home：

Under the "offline" interface, press this button, the current of the spindle blade of horizontal position set to X axis and Y axis of the process of origin of the "users". When processing will use this as the X-axis, Y axis starting location for actual processing.

4.Setting Surface Home：

Under the "offline" interface, press this button, the current of the spindle blade of horizontal position set to X axis and Y axis of the process of origin of the "users". When processing will use this as the X-axis, Y axis starting location for actual processing.

5.The Right Key On Axis-X :

Under the "main offline interface", push down this button, the numerical control machine processing spindle to the right, call it X + direction. Light touch and then loosen the button for the inching button and move distance for P.

6. The Right Key On Axis-X：

Under the "main offline interface", push down this button, the numerical control machine processing spindle moves to the left, call it X - direction. Light touch and then loosen the button for the inching button and move distance for P.

7. The Forward Key On Axis-Y :

Under the "main offline interface", push down this button, the numerical control machine processing spindle forward movement, called + Y direction. Light touch and then loosen the button for the inching button and move distance for P.

8. The Backward Key On Axis-Y :

Under the "main offline interface", push down this button, the numerical control machine processing spindle backward, called the Y direction. Light touch and then loosen the button for the inching button and move distance for P.

9. The Upward Key On Axis-Z :

Under the "main offline interface", push down this button, the numerical control machine processing spindle moving up, called the

* Z direction. The Z axis is positive upward. Light touch and then loosen the button for the inching button and move distance for P.

In the offline state function setting options "menu", push down this button, you can switch setup CNC machine different Settings menu screen (decreasing) from the current menu.

10. The Downward Key On Axis-Z (Z 轴向下移动键)：

Under the "main offline interface", push down this button, the

the Z direction. The Z axis negative downward. Light touch and then loosen the button for the inching button and move distance for P.

In the offline state function setting options "menu", push down this button, you can switch setup CNC machine different Settings menu screen (sequentially from the current menu).

11. The Enter Key（"确认"键）：

The Enter key, also called Enter key, under the offline parameter modification, push down this button, save the current modification parameter, the modified parameters are stored in the numerical control equipment, even if turn off the power supply, the next time the setting of parameters is still valid after the reboot. In suspended state, press the "confirm" button, the CNC machine from the position of the suspension to continue processing.

Under the online state, press the/button, can be repeated processing, can press the confirm button to repeat again for processing.

During on-line operation, use the keyboard to select files in the SD card, press the/button, then start processing the selected file.

Esc **12. The Cancel Key** :

Any setting under the menu in the offline state, push down this button, the end of the parameter changes (change the parameters of the currently valid, when the power is turned off, switch on again, the setting of parameters is not memory), menu to return to the main offline interface menu.

Under the "pause" status, press the "cancel" button, you can cancel the current operation.

Under the "pause" status, press the "cancel" button, you can cancel the current operation.

During on-line operation, use the keyboard to select files in the SD card, press the "cancel" button to return to the superior menu

Under the "main Offline Interface", press "Cancel" button, you can switch to the A-axis, in this state,you can adjust to A-

axis by UP and DOWN key

13. The Cutter Falling Key :
Under the "offline" interface, press this button, machining spindle into the current set of Z axis zero, namely the origin of the surface.

In modifying "mobile" to the user to specify coordinates the coordinates, to move the cursor to the right

14. The Cutting tool rotation/stop Key :

Under the "offline" interface, press this button, the spindle tool if it is to stop state began to rotate, if it is rotating stop rotating; In inverter control mode in the RS - 485 state, push down this button, the pop-up inverter control menu.

15. User Home :

Under the "main offline interface", push down this button, the prompt show "origin number: input", after enter the origin number (1 to 9), the processing the origin position, also showed "are to the origin X", where X represents the origin of Numbers. In the automatic tool change machine, input 10-99 can be set for rapid tool, and tool, fixed blade length, and so on a series of operations. Under the "main Offline Interface",press and hold more than three seconds, the machine will find home automatically.

At this point if I press the "on line" button again, the tool performs actions, enter ONLINE (ONLINE), coordinate system's origin is the origin of the "users" at this time.

16. Back to the main interface :

You press this button in the offline state, you can direct return to "main offline interface from arbitrary interface interface; Under the online state, you can press this key to offline.

17.Machine Home：

CNC controller under the "main offline interface", push down this button, the numerical control machines automatically find the origin position.

18. The Point Moves Upward Key On Axis-Z :

Under the "offline" interface, press this button once, the processing cutting tool at a fixed interval moving up one time. Interval size can be in a CNC controller "C6. The dynamic step length" in the Settings. This feature is useful when precise adjustment point location. Inching movement step away from the default value is 0.1 mm.

Inching step shortcuts for keyboard/pause key, under the condition of "offline" interface, you can press the pause key can quickly adjust the dynamic step length, dynamic value displayed as Pxx keyboard corresponding points (including 0.05, 0.1, 0.05, 1, 2 five value cycle changes).

In machining process, after the suspension, push down this button can increase the speed of the Z axis.

19. The Point Moves DownwardKey On Axis-Z(Z 轴点动向下)：

Under the "offline" interface, press this button once, the processing cutting tool at a fixed interval moves down one more time. Interval size can be in a CNC controller "C6. The dynamic step length" in the Settings. This feature is useful when precise adjustment point location. Inching movement step away from the default value is 0.1 mm.

Inching step shortcuts for keyboard/pause key, under the condition of "offline" interface, you can press the pause key can quickly adjust the dynamic step length, dynamic value displayed as Pxx keyboard corresponding points (including 0.05, 0.1, 0.05, 1, 2 five value cycle changes).

In machining process, after the suspension, push down this button can increase the speed of the Z axis

20. The Spindle Function Key :

Press this button can be directly into the control system is the first "D3. Target tools" menu item, using ATC system manual switching when the main shaft conveniently.

21. The Add Key :

In the offline state "set menu", push down this button, modify the corresponding parameters, the numerical value increase. Revised and press the "confirm" key or "cancel" button, choose whether to save the changes of parameters, and returns the current menu offline menu.

Under the "offline" interface, press the "+" button, enter the "mobile speed (Move speed) set status".

In the working process of the "online", first press the/online/pause "key", when the tool spindle stop, press the "+" button /, can increase the processing speed.

22. The Reducing Key :

In the offline state "set menu", push down this button, modify the corresponding parameters, the numerical reduction. Revised and

press the "confirm" key or "cancel" button, choose whether to save

menu.

Under the "offline", press the "-" key to "processing speed (Cut speed) set status".

In the working process of the "online", first press the key of online/offline /, when the tool spindle stop, press the "-" key /, can reduce the speed of processing.

23. Dust hood control Key :

In "offline" interface, press this button, directly into the dust hood contro menu, used to control the dust hood, convenient in operation.

 24. Surface Test Key :

Under the "offline" interface, press this button, go directly to "B1. The surface of the test, used knife machine, automatic test can automatically determine the position processing on the surface of the material origin, the origin of the automatic determination of the Z axis.

 25. Move to the specified coordinates :

Under the "offline" interface, press this button, according to the prompt for X, Y, Z values, press the "confirm" key, then processing spindle moved to the specified coordinates. Press /, / key at this time, the origin will be reset, press the "confirm" key to prompt for the origin, a (a is 1 ~ 18), are just set the coordinates of the location is the origin of a (a is 1 ~ 18).

26.ATCKey :

Push down this button can be directly into the "B3. Calibration tool long" ATC menu, press the UP/DOWM to switch.

27.SuspendKey :

Press this button you can pause at any location, or cancel the current operation. For your safety, we work in some fixed process do not cancel processing, such as tool change process, the online process.

 the changes of parameters, and returns the current menu offline

If nc equipment is under processing, push down this button, the CNC machine will temporarily stop processing, carried aloft and spindle, spindle stop, pause after the screen display is as follows
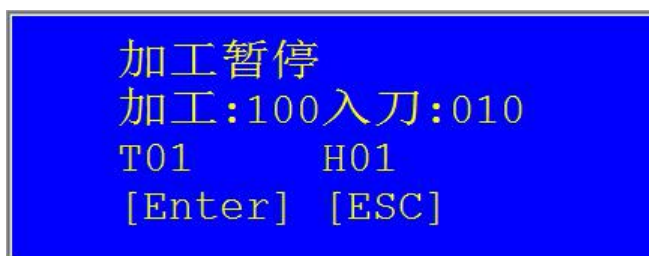
Press the "confirm" button, the numerical control machines continue to start from the suspension of processing. If found the problem hope to cancel the carving, press the "cancel" button (ESC) can stop processing, numerical control machine spindle automatic return the origin. Cancel after carving, will not be able to restore data, have to start again.

In an operation is completed, if under the online state, press the "confirm" button, this assignment can be repeated processing, again press the "confirm" button can be repeatedly processing

Tips：Need engraving "pause", please press the "on line" don't let go, until the CNC machine stops after carving again let go.

Fn **28.CirclingClockwise**

F1 **29.CirclingAnticlockwise**

Hints and Tips

To introduce the following keyboard with the second function of the independent small keyboard control cabinet. Instructions are as follows:

MENU **1.Menu Key**：

The function key to "File" button, "online" in the state of connection with SD card, press this key for File management, processing and processing of files stored in the SD card.

Esc **2.Cancel Key**：

The second function keys for the "Backspace" key, the second function keys are the same as the first function keys, details please see 16 "cancel" button.

The second function keys for the "Save" key, the second function keys are the same as the first function keys, details please see 16 "enter" button.

 4.Machine Home：

The second function keys for the "Num" button. Increase in order to facilitate users to display, digital direct input mode, press the key Num way, can directly by digital input.

Notes: The second function keys for the "Num" button. Increase in order to facilitate users to display, digital direct input mode, press the key Num way, can directly by digital input.

3 Artisman Job Center Software

a) Artisman Job Center

AJC8 (Artisman Job center Software VIII), is based on the Atisman control Center(ACC), according to the requirements of CADM

software, oriented to the philosophy of customer experience as the Center, according to the characteristics of the Windows8 interface development and become a new generation of software. Not only AJC as drawing software and hardware connection of the bridge ,but also shoulder the glorious mission of optimization of the original code.

b）AJC Specifications

AJC- Centered on the customer experience of plate type software，Processor after subversion of traditional ideas, perfect show wisdom craftsmen.

Characteristics are as follows

- Artisman VIII automatic search the local area network controller, no need to set the device drivers;

- Automatic configuration AJC equipment parameters, shall not be obliged to choose device type;

- Job management support a local file, U disk, SD card output;

- Support path optimizing output and various options, import the homework after the output at any time;

- Motion control （network Keypad）can replace physical keyboard in real time, convenient control and display;

- Service mode, upgrading system software can directly configuration controller;

- Support product library CADM output, enter a serial number and size;

- Real-time display user coordinate system, the origin and machine status;

c）Setting And Operation

i · AJC homepage

ii · AJC Job management interface
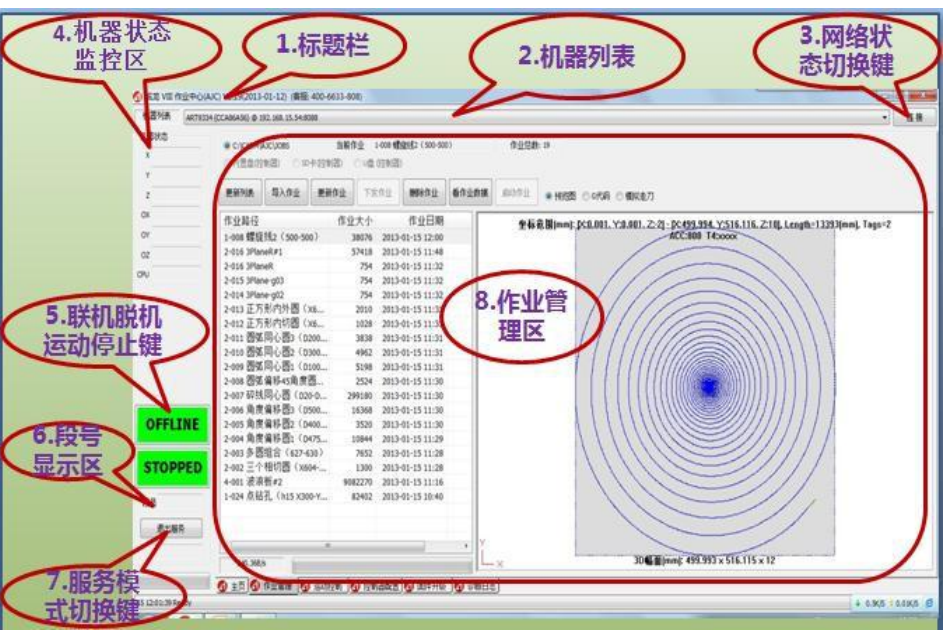
（1）**Title Bar:** Display control information such as name, version number, customer service telephone
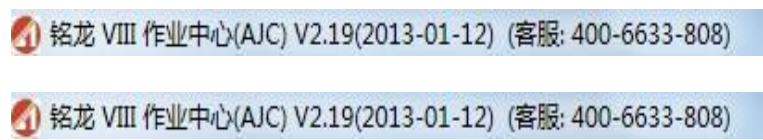
（2） **Machine List:** Display this segment all equipment and machines can be connected in the network address, the user can choose according to need corresponding connection machine.

机器列表　ART9334 (CCA86A56) @ 192.168.15.54:8088
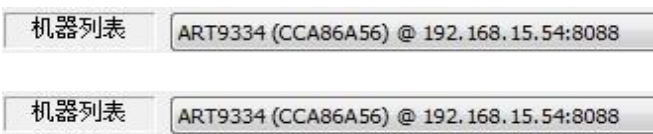
（3） **State transition network button:** Used to connect and disconnect the current device status.

（4）**Machine condition monitoring area:** Can real-time display the machine motion, spindle coordinate, the origin, CPU usage,
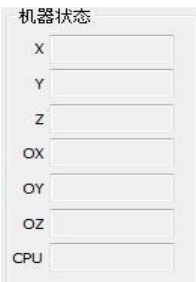
（**5**）**Online / offline. Moving/stopped showing key:** ONLINE/OFFLINE button switch can be used to monitor/ONLINE OFFLINE, STOPPED/MOVING key can monitor/switch machine or stop the current movement state.

（**6**）**Section of the display area:** Operation processing, real-time display

11 / 2402: 2402 to the current operation of the total number, 11 for the processing of the segment number.

（**7**）**Service mode switch button:** The state of the switch for entry and exit service mode.

（**8**）**Job Management Area:** Including the import operation processing parameters set to update, operation to check the delete, Path is simulated, and other functions.
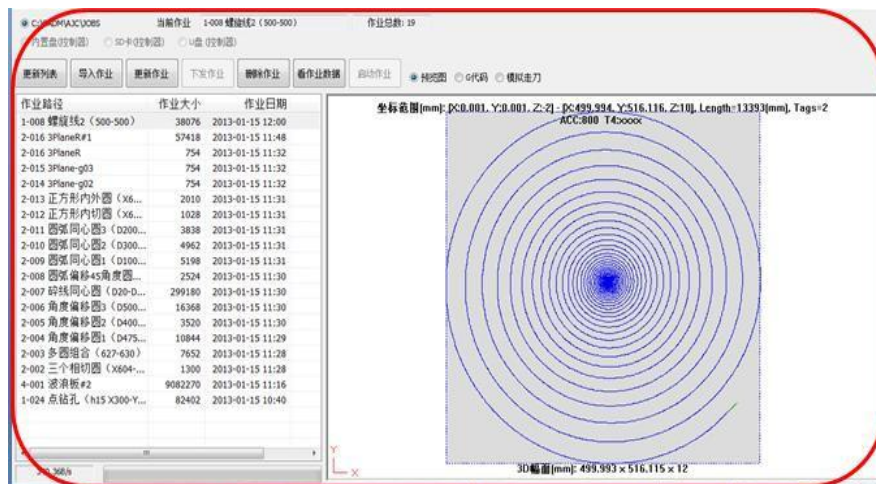
Job management area include: job processing way、the name of the current work, Path to the simulation, Update set of processing parameters, Job list and preview and so on.

In Job Settings, check and include: Update List、Import file, Update operation、Issued file、delete file、To view job data and start job, etc.

● **Update the list:** Equivalent to the refresh function, on the whole list is refreshed.

● **Import the file:** Operation of the import Settings, Its for Cut Mode 、Embossment Mode、Custom Mode、Original Mode, Four patterns for parameter setting.(Such as check on 允许修改优化参数 ,Rounded rectangle box will pop up as shown in fig the parameter Settings, etc)
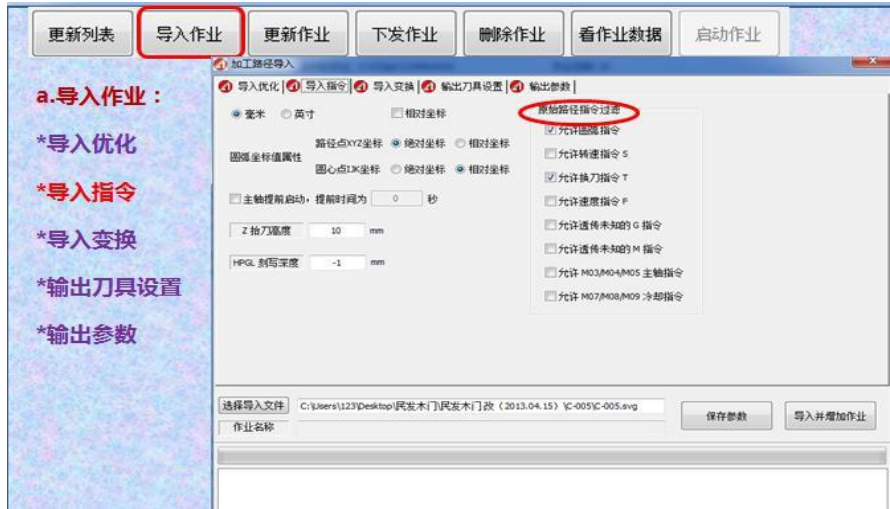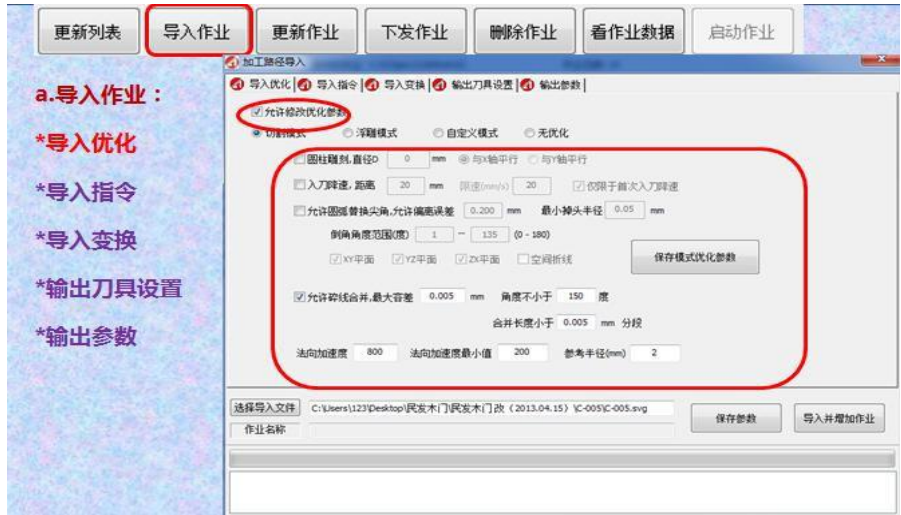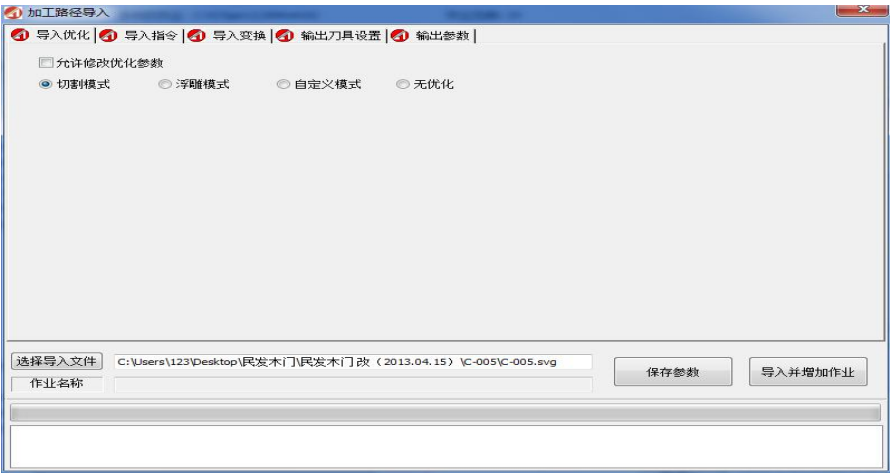
- **Update file**: Alter the existing file parameters in the job list.
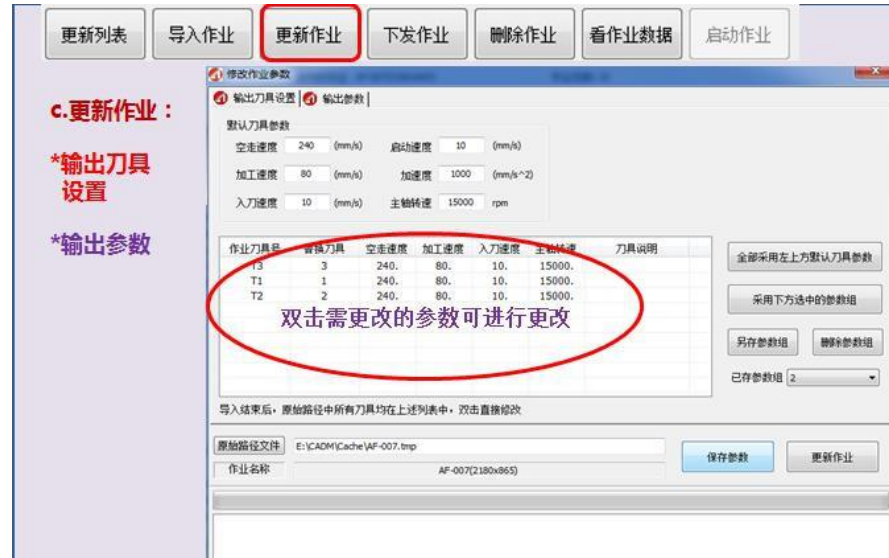
● **Issued file:** Choose the file sent to the controller directly on line processing, and will be processing operations issued to the SD card.

● **Delete file:** The list to delete the selected assignments. (hold down the shift or CTRL key to select more than one assignment file)

● **Check the job data:** View the job current job processing data.

● **Start work:** When working directly with the computer processing in the SD card, Used to start the work.

（**9**）**Control Configuration**
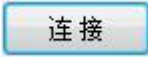
（**10**）**Upgrade Firmware**

（**11**）**Diagnostic Log**（诊断日志）

iii · Example 操作实例

（**1**）First, open the work center, the "machine list"

automatically search all machines within the local area network

(LAN), Choose to operate the machine, click .And
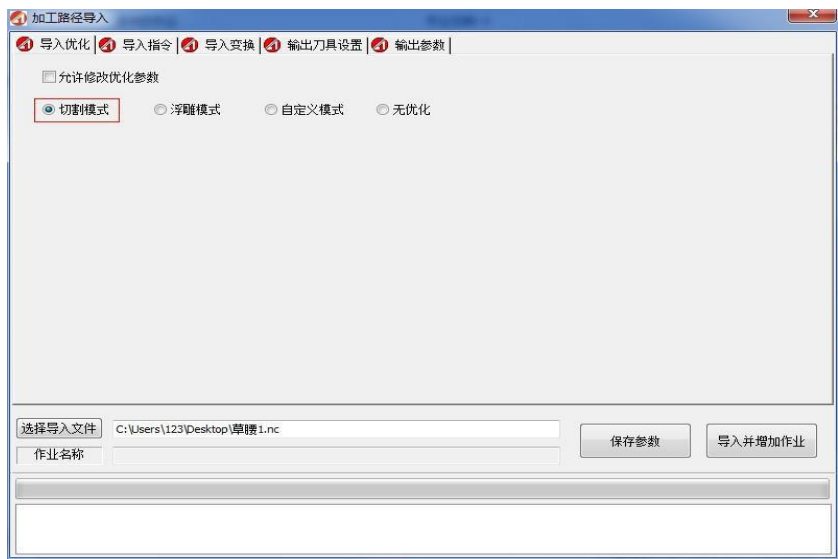
then, click ,
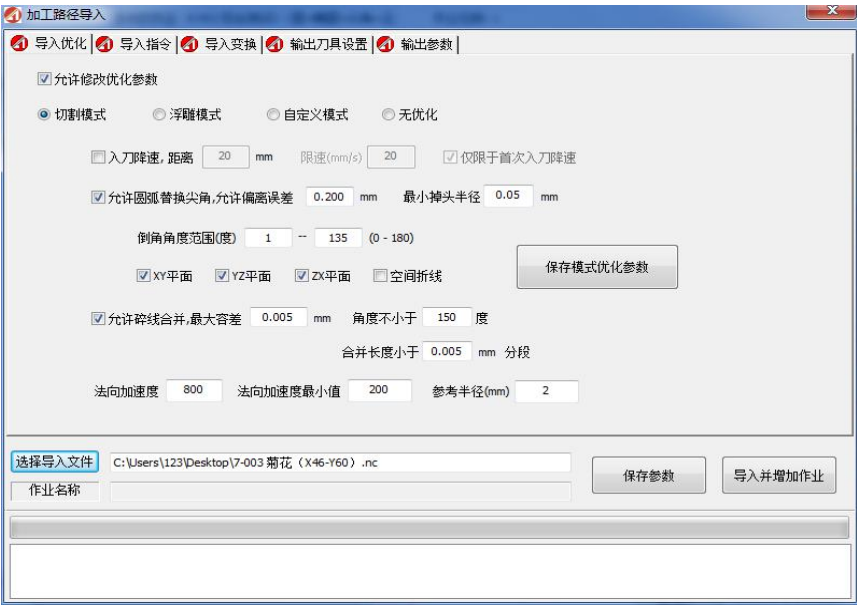
As shown in the fig below;
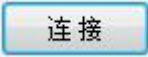
A file named "7-003 菊花（X46-Y60）" job import   AJC process:

（2）The processing path in their import dialog, Including "cutting mode" and "embossment mode" "custom" mode "Raw Mode" four patterns, according to the actual processing and click on the corresponding processing mode, the following select .
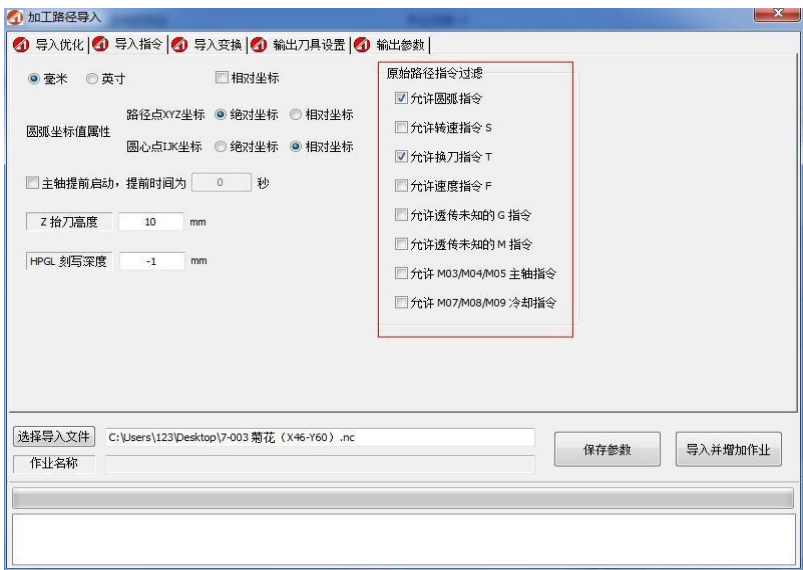
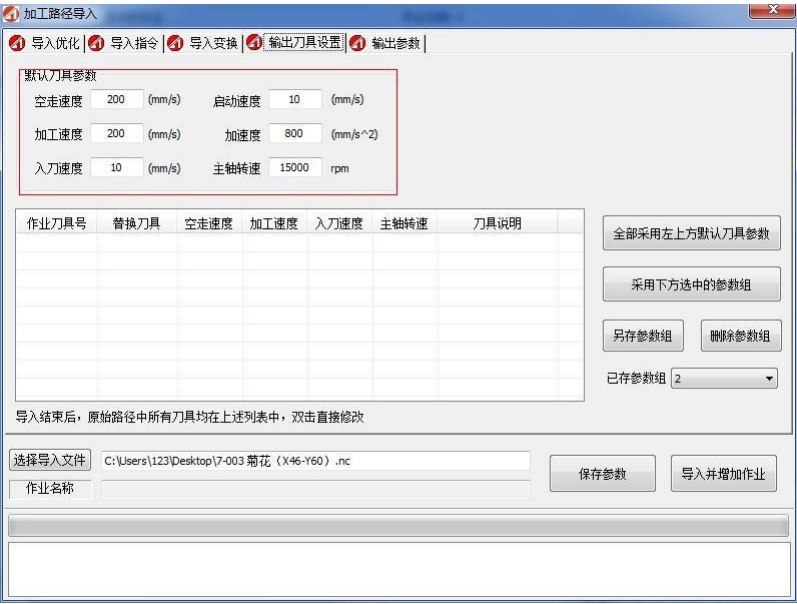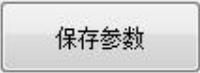**Notes**: Item can be checked ☑允许修改优化参数 , to set the current model parameters.

（3）Click the import file, find the file named "7-003 菊花（X46-Y60）", open the file.
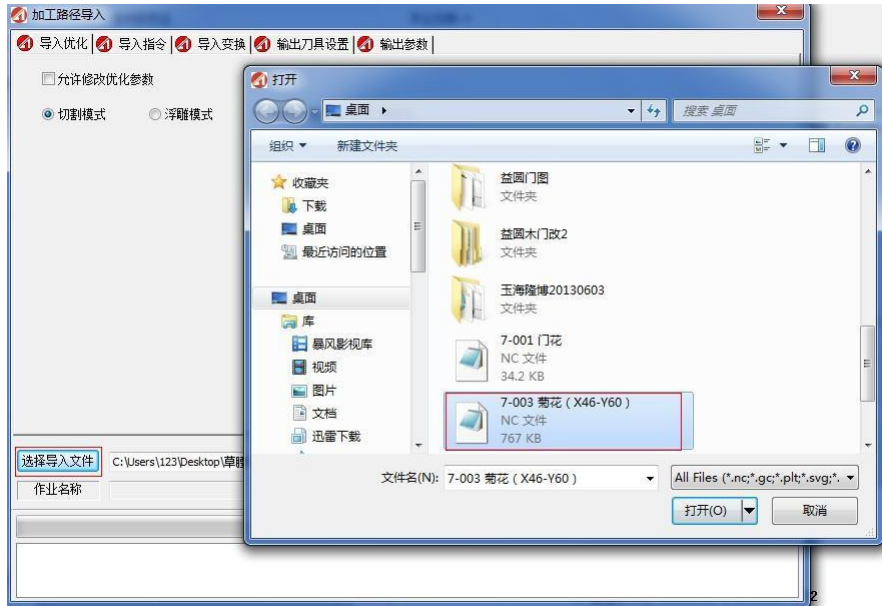
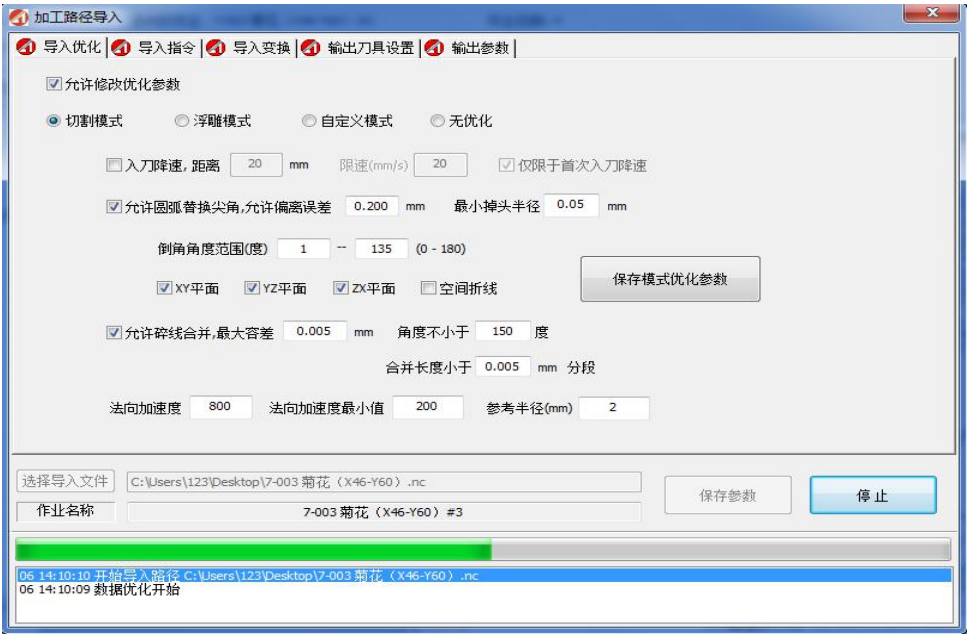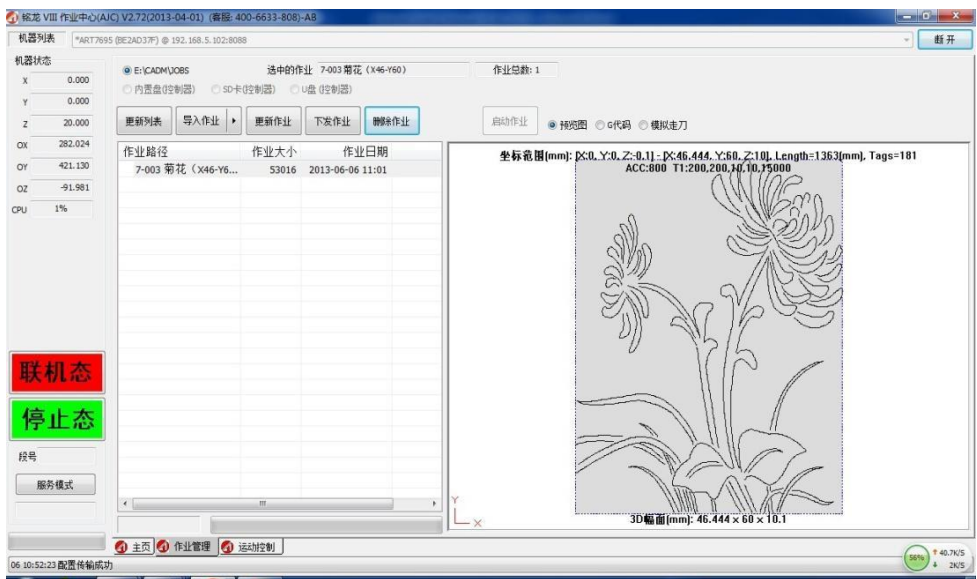（4）According to the processing operation need to set up "import" and "import directive transformation", "output tool Settings" item. As shown in the figure below;

（5） The setting is completed, click 保存参数 , then

导入并增加作业 , As shown in the fig below;

Finished my homework "7-003 菊花（X46-Y60）" import operations center all process of AJC.

iv · Hints and tips 提示和技巧

（1） The import job, the machine is not connected, the job according to the last job import machine imports, at the same time has the following prompt dialog box pops up, select "yes" operating import job, choose "no", leave the import.

（2）Import parameters Settings, considering the actual machining operations, such as: processing speed, and starting speed, etc.

（3）Import the SVG file ， please check whether they have been inserted encryption dog of CADM software

4 Artisman Glossary

AXIS

A direction in a coordinate system, X, Y, and Z. On tangential knife system there is a fourth axis, Theta.

AXIS MOTOR

A motor that causes motion in a particular axis.

BEARING CAR

Also known as a bearing truck. The bearing on which an axis moves

along a rail. There are 2 bearing cars for each rail.

BEARING RAIL

The rail that the bearing cars ride on. There are 2 rails for each axis.

BITE SIZE

Used in multipass, the depth of each pass.

CLIMB CUT

A direction the cutter moves along a cut to produce a climbing

motion. For a closed contour it is clockwise on the outside of the cut

and counter clockwise on the inside of the cut.

COLLET WRENCH

Wrench used to loosen or tighten the cover nut on a spindle or tool

holder.

COMPRESSION CUTTER

A spiral up/down cutter. This cutter is a spiral up at the bottom and

spiral down at the top. Used for high feeds in wood and laminates.

CONICAL CUTTE

The operating system of the controller. Contains all of the low-level chamfering.

CONVENTIONAL CUT

The opposite cut of a climb cut. For a closed counter clockwise on the outside of the cut, and clockwise on the inside.

CUT CONDITIONS

Changes the motion parameters of the routing system to the most efficient condition for standard cutting or engraving

CUT DEPTH

A function that sets the depth of cut. The Z0-axis distance the end of the cutter will go below the surface of the material during a cut.

CUT SPEED

A hot key function that sets the speed of cut.

EMERGENCY STOP

The red mushroom button used to remove power from the machine except for the controller board and limit switches.

FIRMWARE
commands and is the first level of controller software.

GANTRY

The mechanical part of the routing system that moves the spindle from the front to the rear of the table. Also known as the bridge.

GCODE

Machine code language with G and M codes that the controller can use to execute motion commands.

GEARBOX

Drive system on Pro series using gear reduction to produce rotation of the pinion.

The operating system of the controller. Contains all of the low-level

HARD HOME POSITION

The home position determined by the location of the targets and
limit switches, typically the front right side of the table.

AMHC MODE

For multiple head machines , just like ATC.

HOT KEYS

One touch keys on the keypad that performs controller functions.

HPGL

Machine code language that the system executes as a file.HPGL

EXCEL FILE

a excel file to configure machine parameters。.

AJC

Artisman Job center Software, a uility program used to communicate between the controller and the host PC.

KERF

The spacing between parts. Must be larger than the tool diameter.

KEYPAD

The part of the pendant that contains the LCD and Hot Key buttons.

LINEAR TOOL CHANGER

Tool changing system with the tool holders lined up along one axis. This is the most common tool changer for the 5，7series.

MISTING NOZZLE

The tip of the flex hose on the misting system.

MISTING UNIT

Unit that rides of the back of the carriage assembly that provides misting lubrication for cutting metal. There are 2 versions, automatic and manual.

MULTIPLE PASSES

Cutting through material by repeating the contour at different depths, going deeper each time by the bite size.

MULTIPLE SPINDLES

More than one spindle or routing head.

O FLUTE

Type of cutter that has a half moon geometry from the end view.

PARK

Used to place the spindle at the farthest point away from the material for loading and unloading.

PAUSE

Yellow button on Keypad, puts the controller into Pause mode.

PRESSURE FOOT

An attachment for the spindle that helps hold down material and remove chips that have been cut.

Type of cutter that only has one cutting edge.

SOFT HOME

One of 9 home positions that the user can store to be recalled at a later time.

RACK AND PINION

System of transferring movement from the rotation of the motors to the linear movement of the system by way of gears.

ROTARY TOOL CHANGER

Tool changing system with the tool holders held on a rotating turret. Used on the PRO series.

SERVO DRIVE

Servo amplifier used to move the SERVOMOTORS.

SERVOMOTOR

Axis motor on a servo system.

SIDE COVER

Covers on the each end of the gantry covering the X-axis motor and limit switches.

SINGLE FLUTE

SLEW

A movement of the system that is not a cutting move. It is a move above the material at maximum speed.

SOFT HOME POSITION

Any set home position, set by pressing the set home hot key, used as the origin for executing programs.

SPINDLE

The rotating motor that holds the cutting tool.

SOFT HOME

One of 9 home positions that the user can store to be recalled at a later time.

RACK AND PINION

System of transferring movement from the rotation of the motors to the linear movement of the system by way of gears.

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SOFT HOME POSITION

Any set home position, set by pressing the set home hot key, used as the origin for executing programs.

SPINDLE

The rotating motor that holds the cutting tool.

SPINDLE PLATE

The plate that mounts the spindle to the Z-carriage plate.

SPINDLE SPEED

The speed that the spindle is rotating, in RPMs.