# iPlyCut User Manual

# Content

# Chapter 1 Software Introduction

## 1.1 Instruction

This manual is mainly for the use of IPlyCut software in automotive interior, home, textile and garment industries.

## 1.2 Software Installation and Running Environment

### 1.2.1 Hardware Minimum Configuration Requirements

CPU: 2.0GHz above

Memory: 2GB

Hard disk: 3GB above

GPU: 256MB

Screen resolution: 1024×720

DSP Version : 2.2.8

FPGA version: 1.3.6

### 1.2.2 System and Software Environment

Operation system: Windows 7Windows10 (32bit / 64bit)

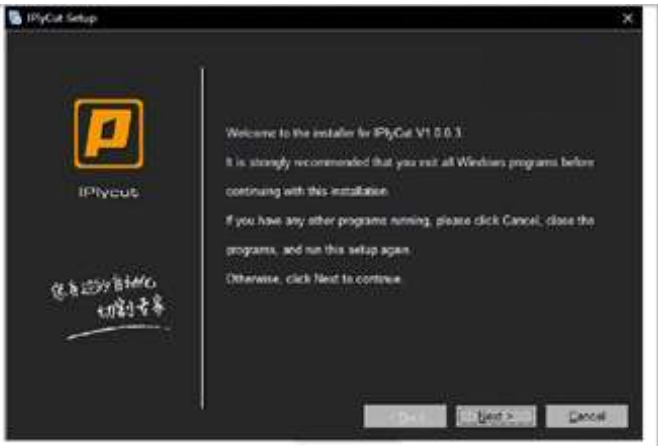
IPlyCut Program version number: V1.0.0.3

IPlyCut Document version number: 2019.1.24.1

### 1.2.3 Software Installation

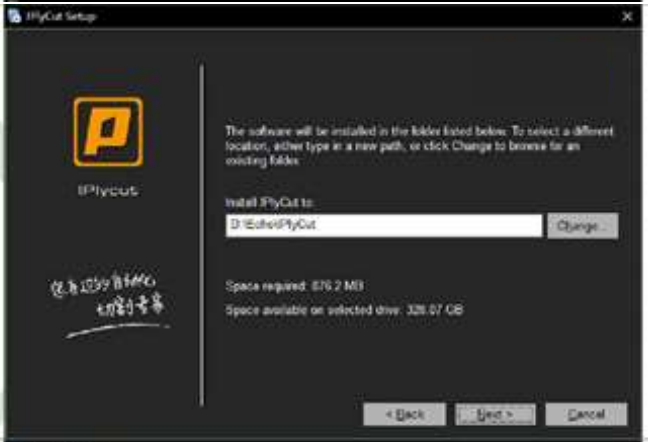
**Note: WIN7 and WIN10 need to run the application as administrators**


WIN7 and WIN10 need to open the installation package as administrators

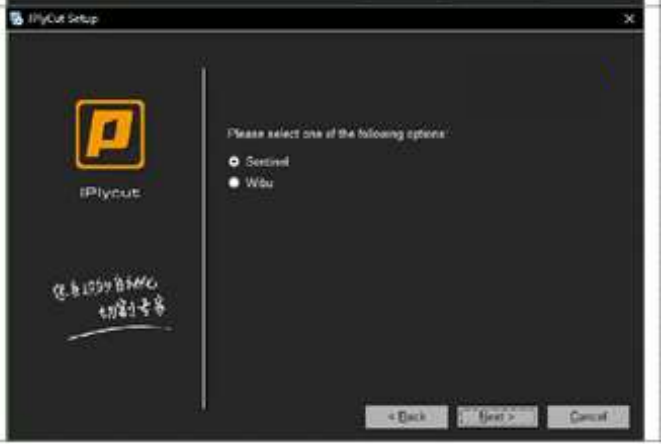


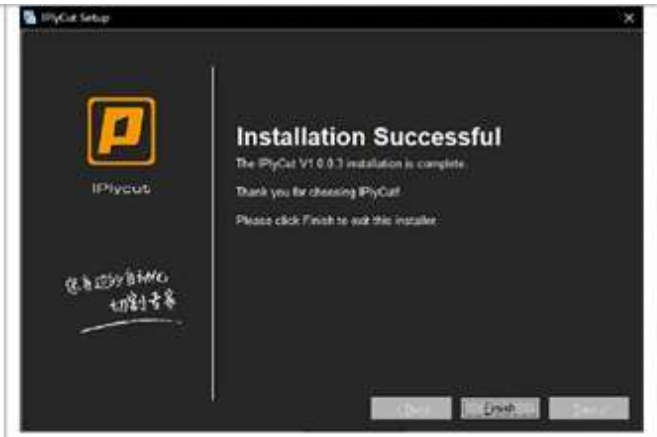

Please read the software license agreement carefully and agree to install it. Please choose [I agree with this clause]


Specify program installation path



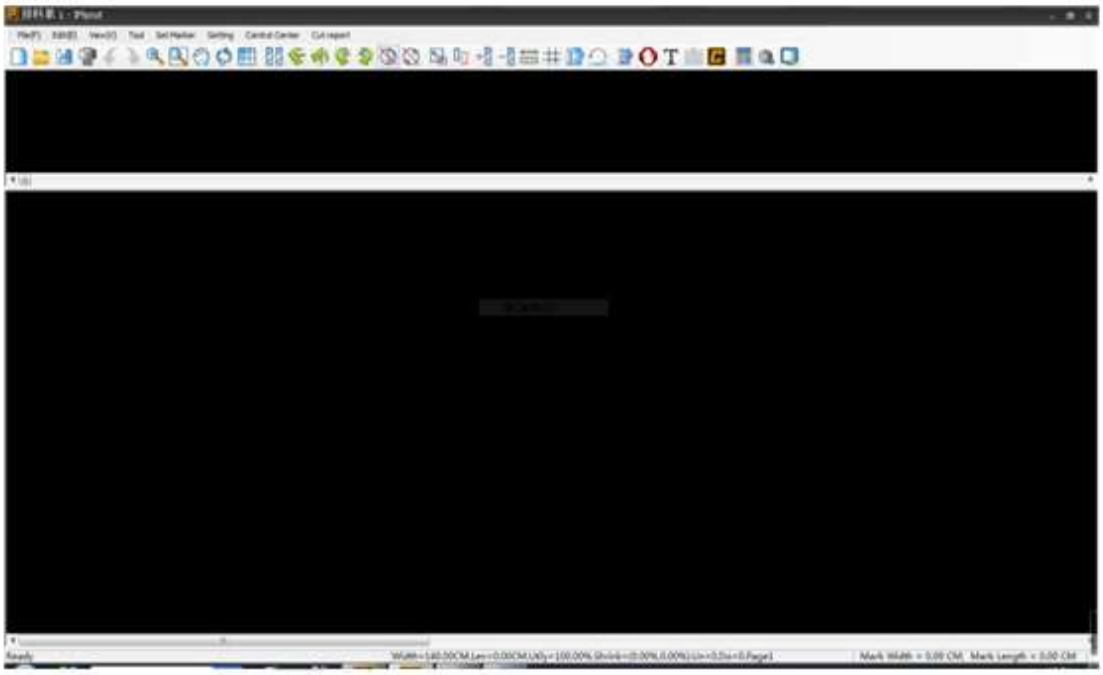

Select Encryption Program



| | |
|---|---|
| Click Finish to End Installation |  |

## 1.3 Software Interface

The main interface of the software includes menu bar. toolbar. status bar and editing area (editing can be divided into non-layout area and layout area). As shown in Figure 1:



( Figure 1)

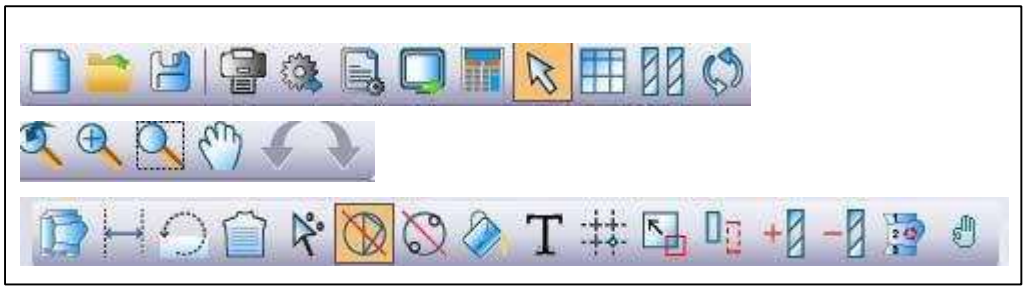
### 1.3.1 Menu Bar

The menu bar is divided into nine options according to its functions: document, edit, view, tool, layout sheet, setting, control center, report clipping and help. As shown in Figure 2. These options cover almost all the functions of the program.


(Figure 2)

### 1.3.2 Tool Bar

Simple and intuitive image buttons, including all the commonly used functions. As shown in Figure 3



(Figure 3)

### 1.3.3 Status Bar

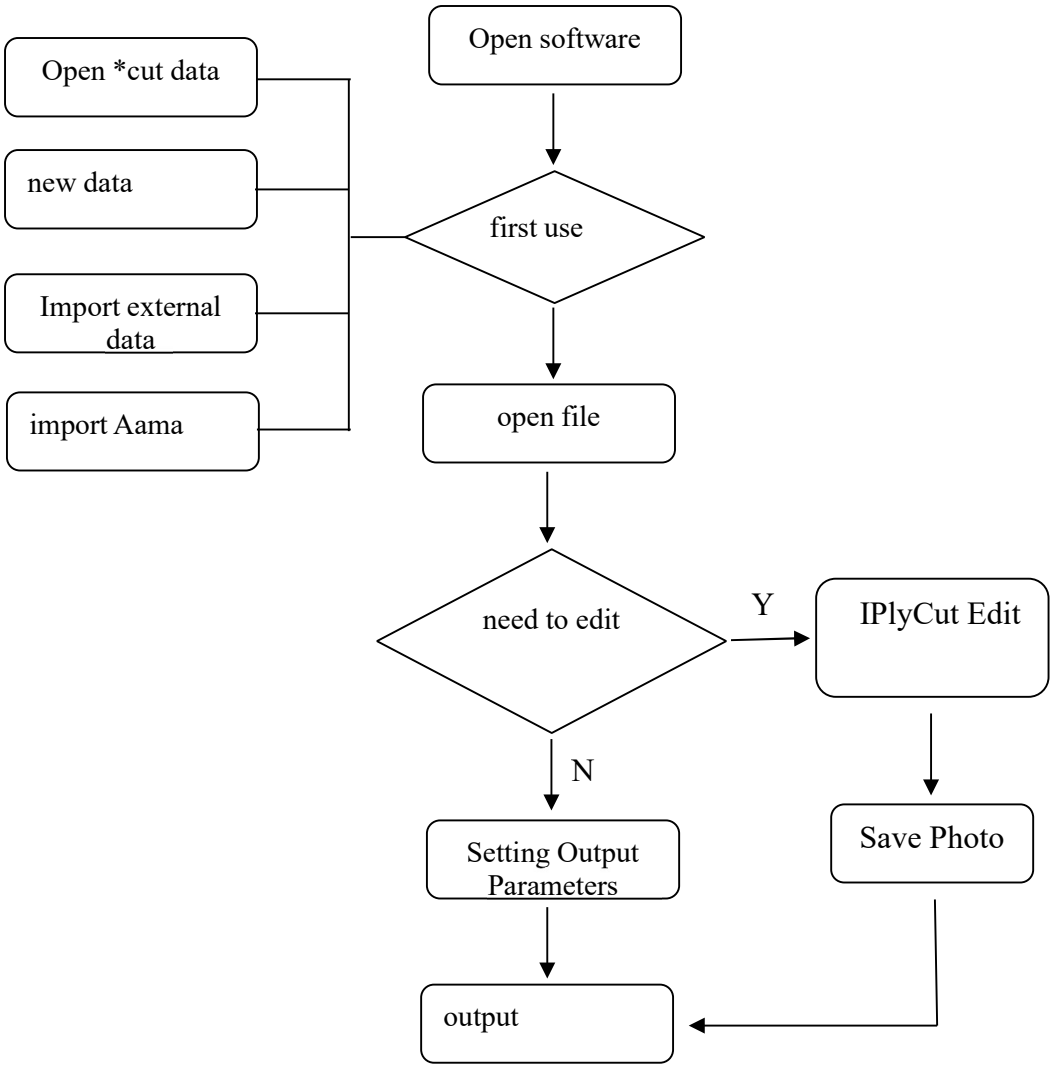
The status bar can intuitively see the size, utilization rate and shrinkage of the layout sheet in the layout area. As shown in Figure 4.


( Figure 4)

# Chapter 2 Software Usage and Guidance

In order to facilitate users to establish the overall idea of software use, this chapter introduces the general workflow of IPlyCut in the form of flow chart, which can guide new users to grasp the basic operation of software quickly.

## Open cut data

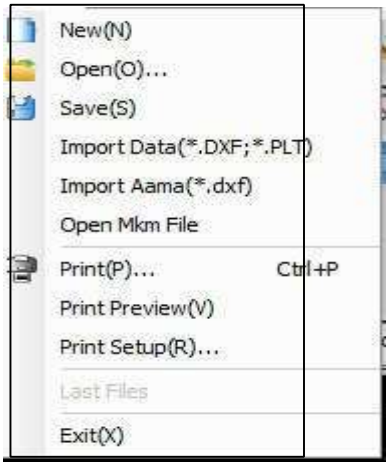


# Chapter 3 Menu Bar Explanation

This chapter explains all the functions and operation methods of IPlyCut in detail. It is a supplement and extension to Chapter 2. It can be used as a complete software manual to help advanced users master IPlyCut in an all-round way.

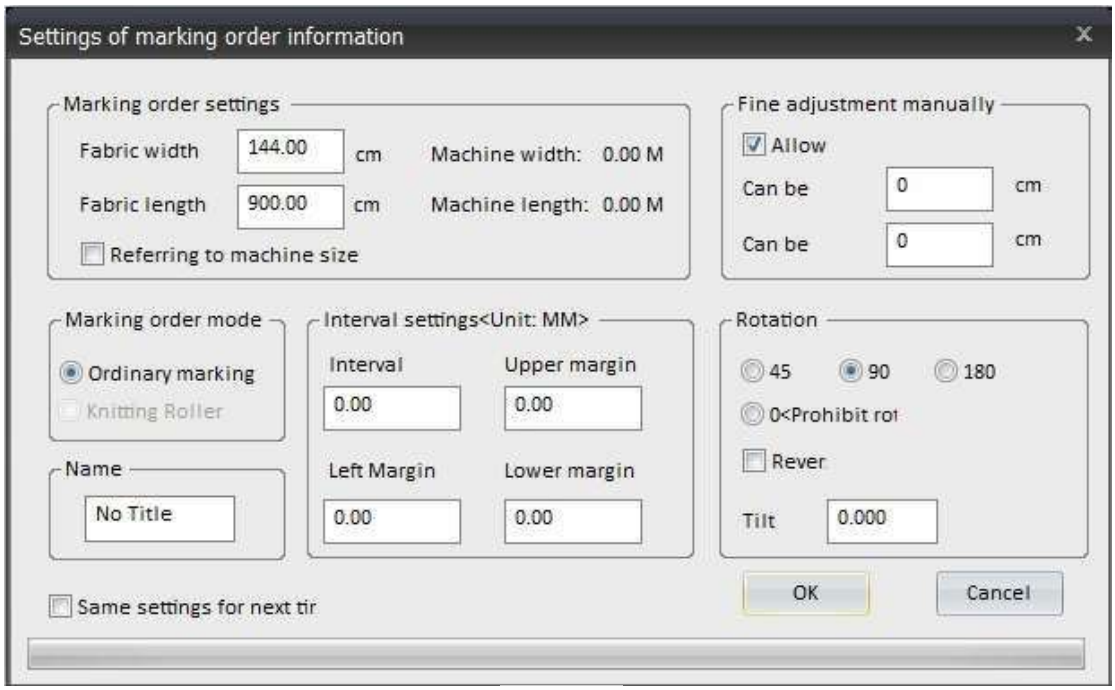
## 3.1 Document

IPlyCut software can interpret Cut, PLT, DXF, ISO, PDF and other format files, and designed four file opening methods (new, open, import external data, import Aama) for users to choose. As shown in Figure 5




(Figure 5)

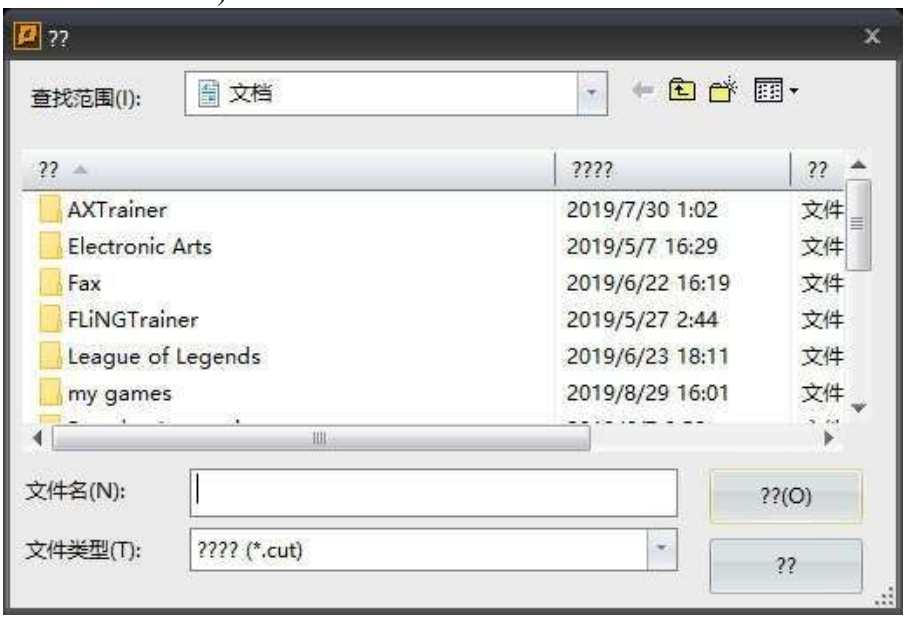
### 3.1.1 New




(Figure 6)

### 3.1.2 Open

Click on the menu bar [File] option and select Open. In the pop-up dialog box, you can find the files that users need, as shown in Figure 7. (Note: The file type open at this time is *. cut format data)




(Figure 7)

### 3.1.3 File Save

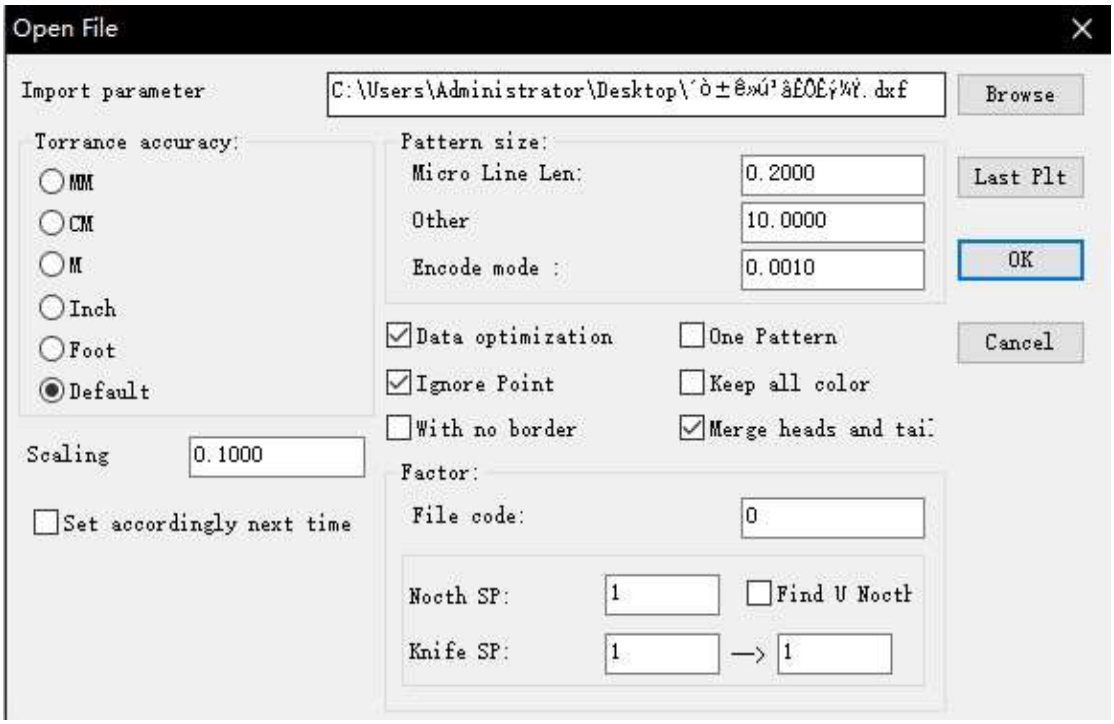
· Click on the menu bar [File] option [Save]. The file will be saved to the specified directory in *. cut format

·

### 3.1.4 Import External Data

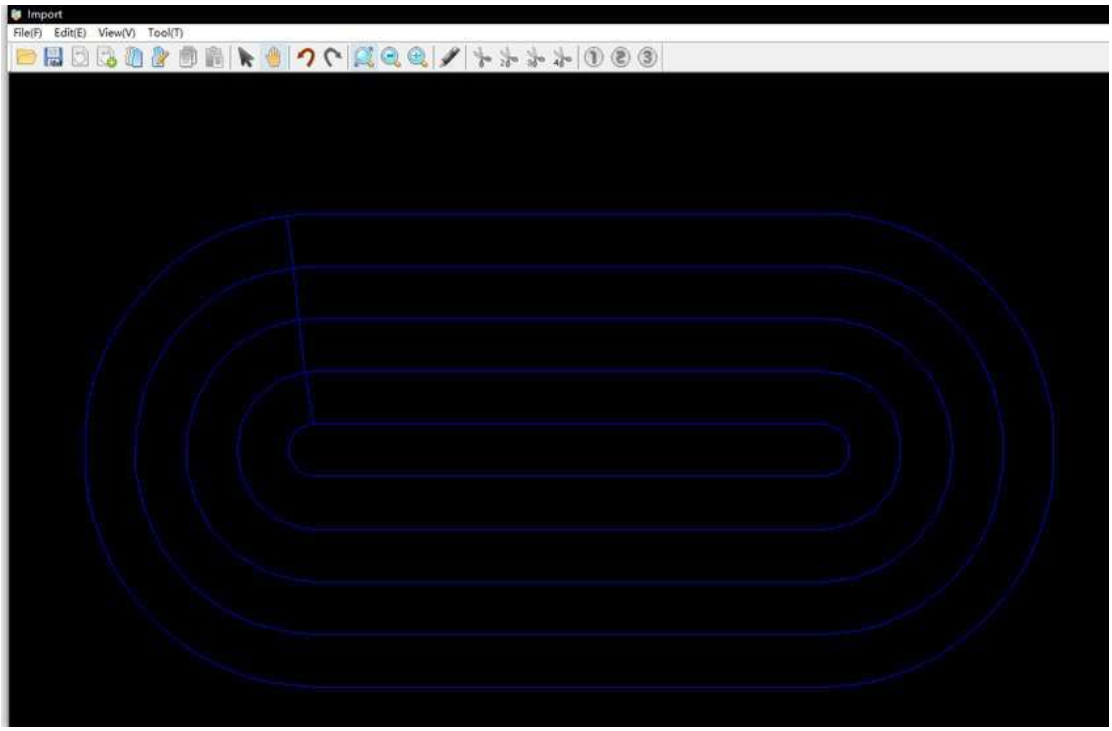
· Select File, click Import External Data, and select DXF or PLT format file

· Pop up the import external data dialog box and click the Browse button to find the file. Users can set parameters such as style unit, cutting size, scaling factor and SP value of cutter eye according to their needs. As shown in Figure 8

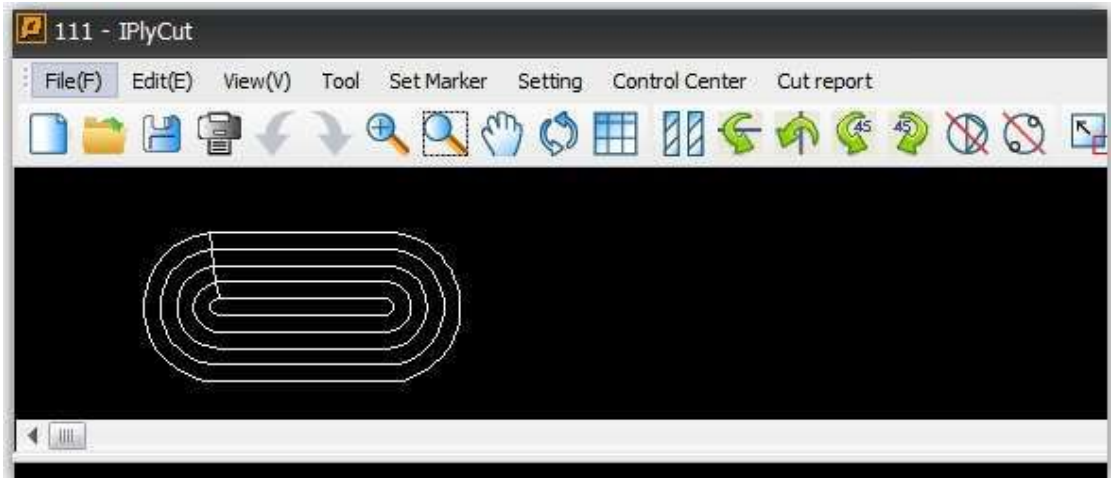



(Figure 8)

- Click [Confirm]. After entering the IplyCutData Import, you can see the file contents in the editing area. At this time, click the menu bar above the IplyCutData Import and select the option. As shown in Figure 9.



(Figure 9) ➢ Click [Overlay], and the file enters IPlyCut. The text is displayed in the untapped area, as shown in Figure 10

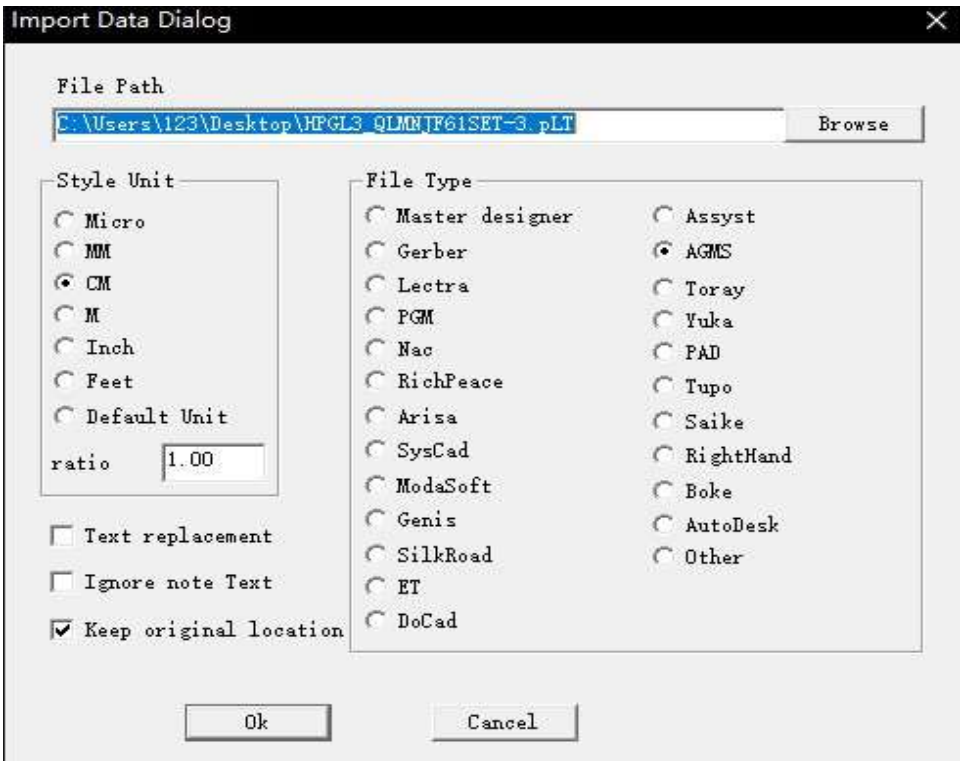



(Figure 10)

### 3.1.5 Imput Aama

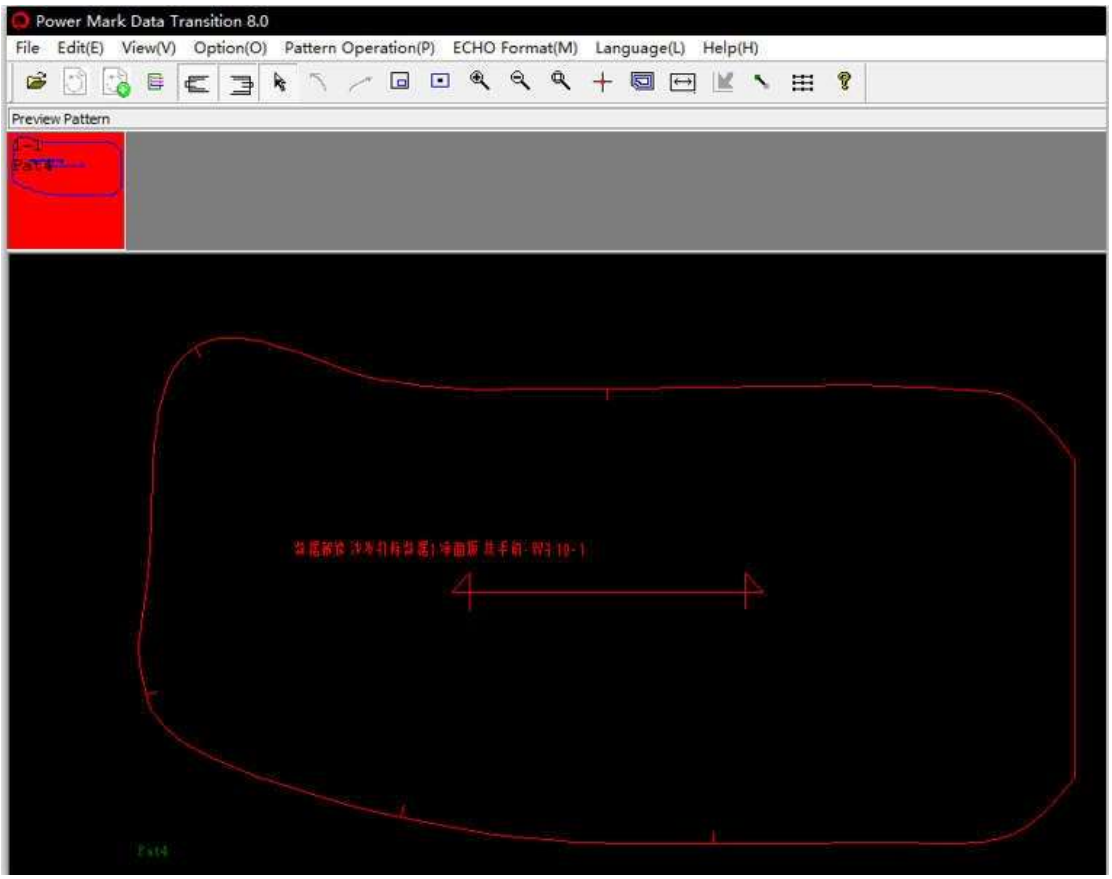
➢ Click on the File option under the menu bar and select Import Aama

➢ Enter Super Layout Data Conversion 8.0, while popping up the import external data dialog box, click the "Browse" button to find the required files. As shown in Figure 11

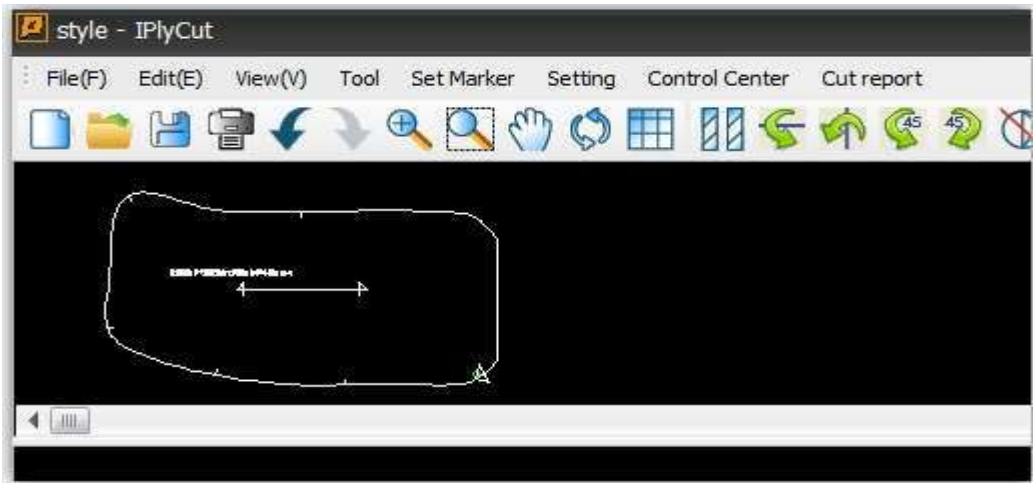



(Figure 11)

- Find and open the files, then enter the import external data dialog box in Super Layout Data Conversion 8.0. At this time, setting style units and file types according to users' needs
- Click "OK" to enter the file into the Super Layout Data Conversion. At this point, you can see the samples displayed in the preview area and the edit area. As shown in Fig. 12 and 13




(Figure 12)



(Figure 13)

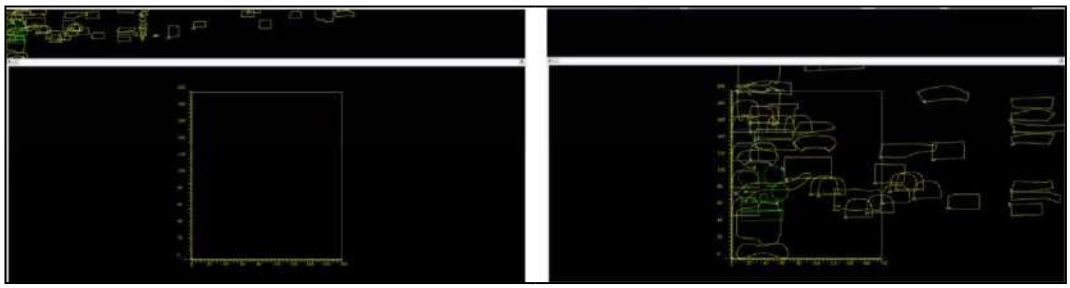
### 3.1.6 Open Recently

Under the menu bar [File] option, you can see the recently opened data. If the user wants to open it, just click on it directly.

## 3.2 Edit

### 3.2.1 To the layout area

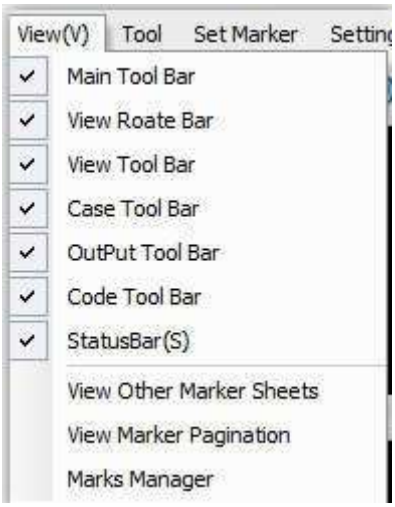
Click on the column [to the layout area] below the [Edit] function box, and all the samples in the unlayout area will be transferred to the layout area. As shown in Figure 14



(Figure 14)

## 3.3 View

Under the menu bar option, there are 13 functional areas: Main Tool Bar, View Tool Bar, Case Tool Bar, Code Tool Bar, Status Bar, View Cutting File, Layout Paging, Selection of Projection, Language, Layout Mode, Editing Title, Left and Right Views and Layout List Management. Now let's talk about it.




### 3.3.1 Main Tool Bar

Under the View function bar, choose the Main tool bar,the toolbar is displayed by checking the options; if you do not check, the toolbar is not displayed.
(Recommendations)

### 3.3.2 View Tool Bar

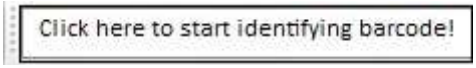
Under the View toolbar, check the View Tool Bar option to display the toolbar; no toolbar is displayed without checking. (Recommendations)

### 3.3.3 Case Tool Bar

Under the View toolbar, check the View Tool Bar option to display the toolbar; no toolbar is displayed without checking. (Recommendations)

### 3.3.4 Code Tool Bar

Under the View toolbar, check the View Tool Bar option to display the toolbar; no toolbar is displayed without checking. (Recommendations)




### 3.3.5 Status bar

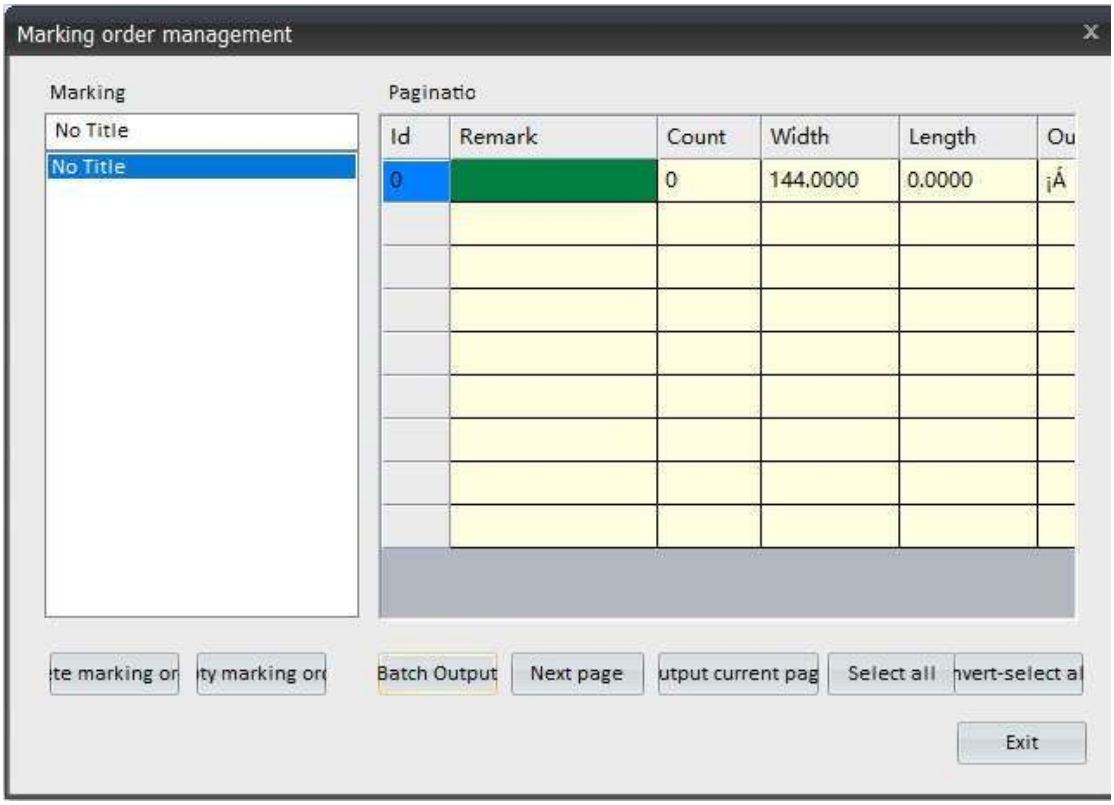
Under the [View] function bar, if you select the status bar option, the status bar will be displayed at the lower right of the software; if you do not select, the status bar will not be displayed. (Recommendations)

### 3.3.6 Language

This software has three language modes. Simplified Chinese, English and Traditional Chinese. Users can change their language according to their language habits.


### 3.3.7 Layout sheet management

- Under the "View" function bar, select "Material Sheet Management" and pop up the Material Sheet Management dialog box. As shown in Figure 15




(Figure 15)

- According to the requirements, can select the items, such as delete, clear, batch output, next page, input the current page, select all, anti-all selection, etc.

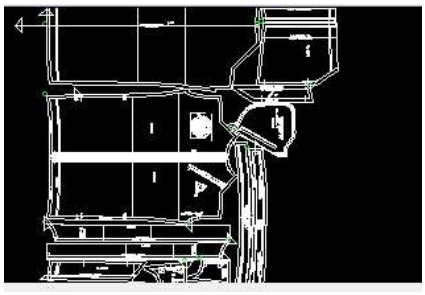
## 3.4 Tools

### 3.4.1 Tool Sorting

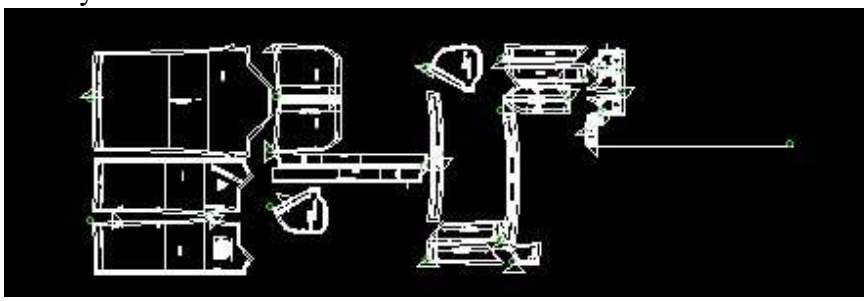
Under 【Tools】function bar, select【Sorting Tools】, will see that there are five sorting methods: Normal mode、 Size sorting、 Specification sorting and irregular nesting. Customer can select the appropriate sorting method according to the needs.


Below are the working sketch of four sorting methods:

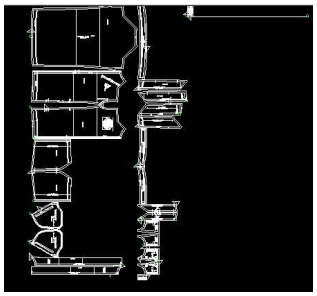
- Common mode (default)



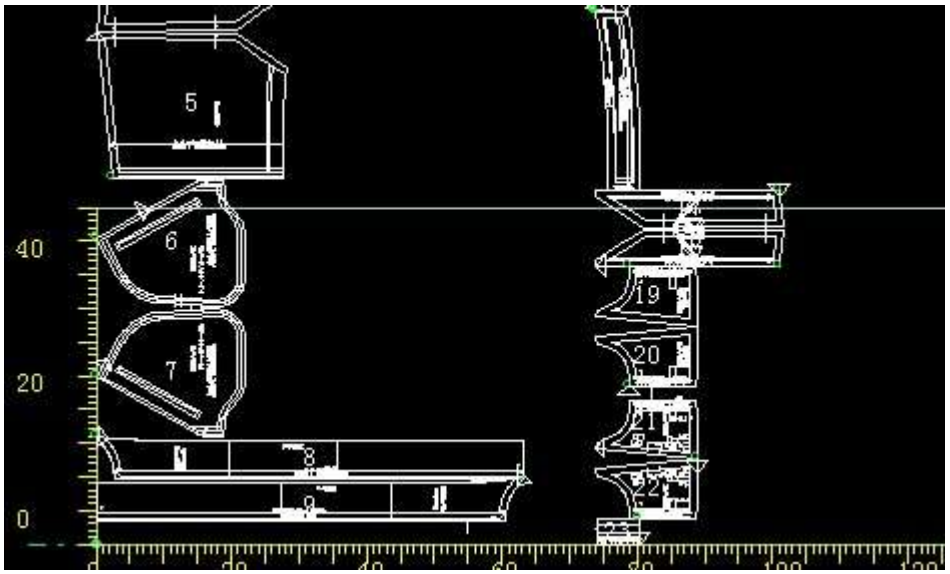
Sort by size



- Sort by specification



- Irregular marking

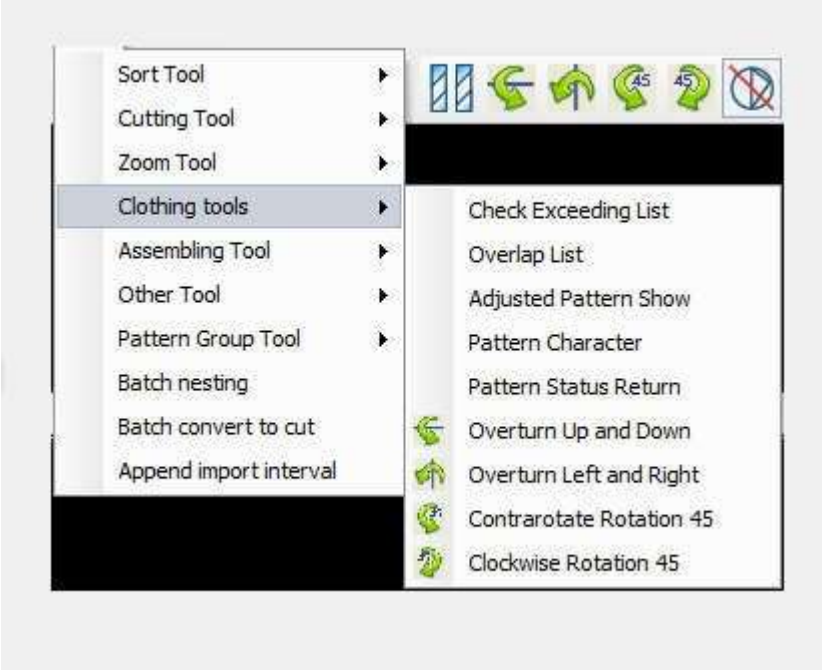


### 3.4.2 Zoom Tool

【Zoom Tool】: including zoom in, zoom out,zoom in for the part, full screen preview, full screen display and translation picture.


### 3.4.3 Cutting Tool

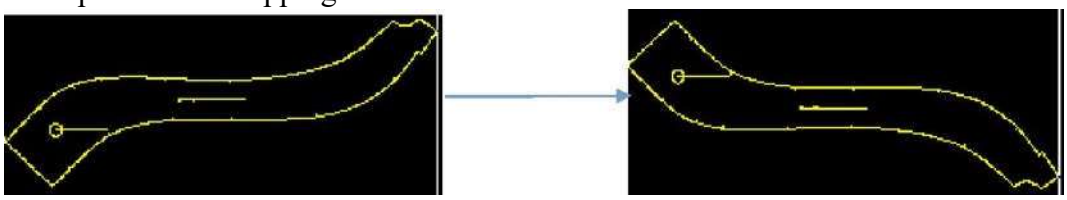
[Cutting tool] includes: forcibly exceeding the upper door width, forcibly exceeding the lower door width, checking the excess list, forcing overlap in the X direction, forcing the overlap in the Y direction, detecting the overlap list, adjusting the piece display, cutting piece properties, and cutting pieces. Respond to the tool, flip it upside down, flip left and right, 45 counterclockwise rotation, and counterclockwise. Flipping up and down, turning left and right, and counterclockwise are the common tools. We will explain them one by one in the following, and other parts will not be explained in detail.



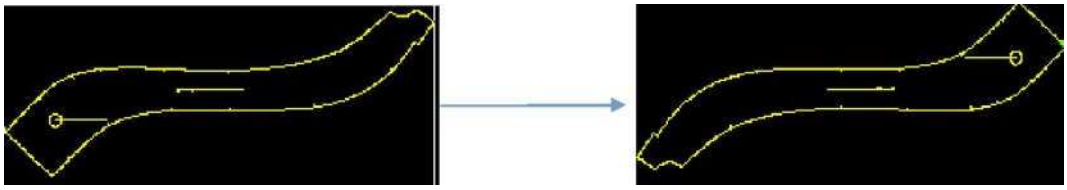

90

rotating

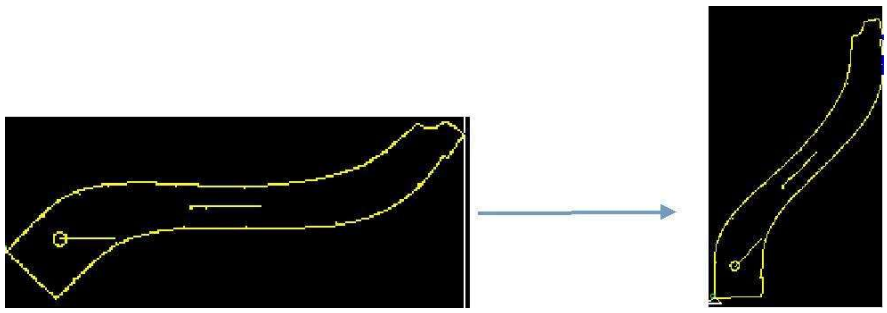
- Up and down flipping



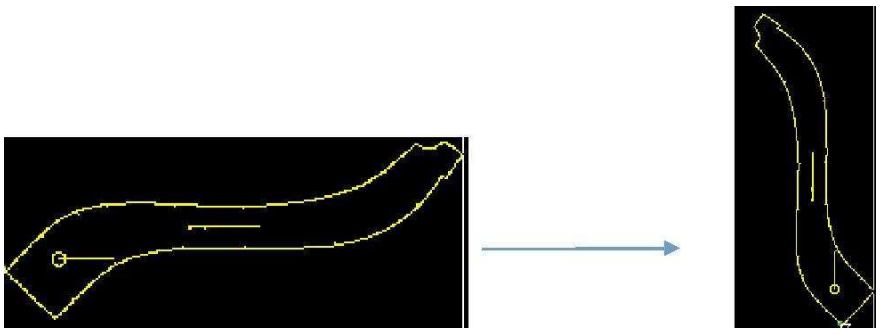
- Left and right flipping



45 counterclockwise rotation



90 counterclockwise rotation



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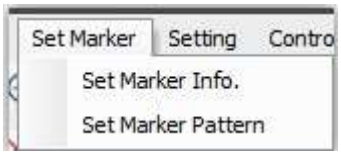
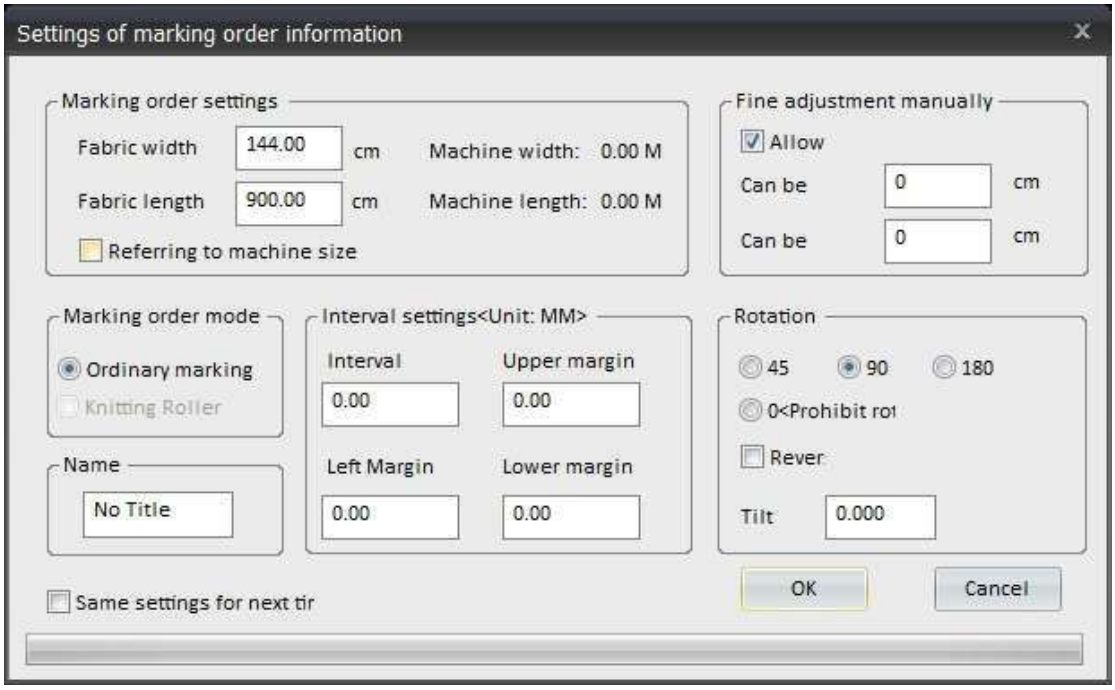
## 3.5 Nesting Setting

Select the menu bar 【Setting Nesting】, set the nesting information or leather nesting.




Here is the introduction of normal settings, others are not explained in detail. Select 【Nesting Information】, it will pop up the below dialog in Figure 16.



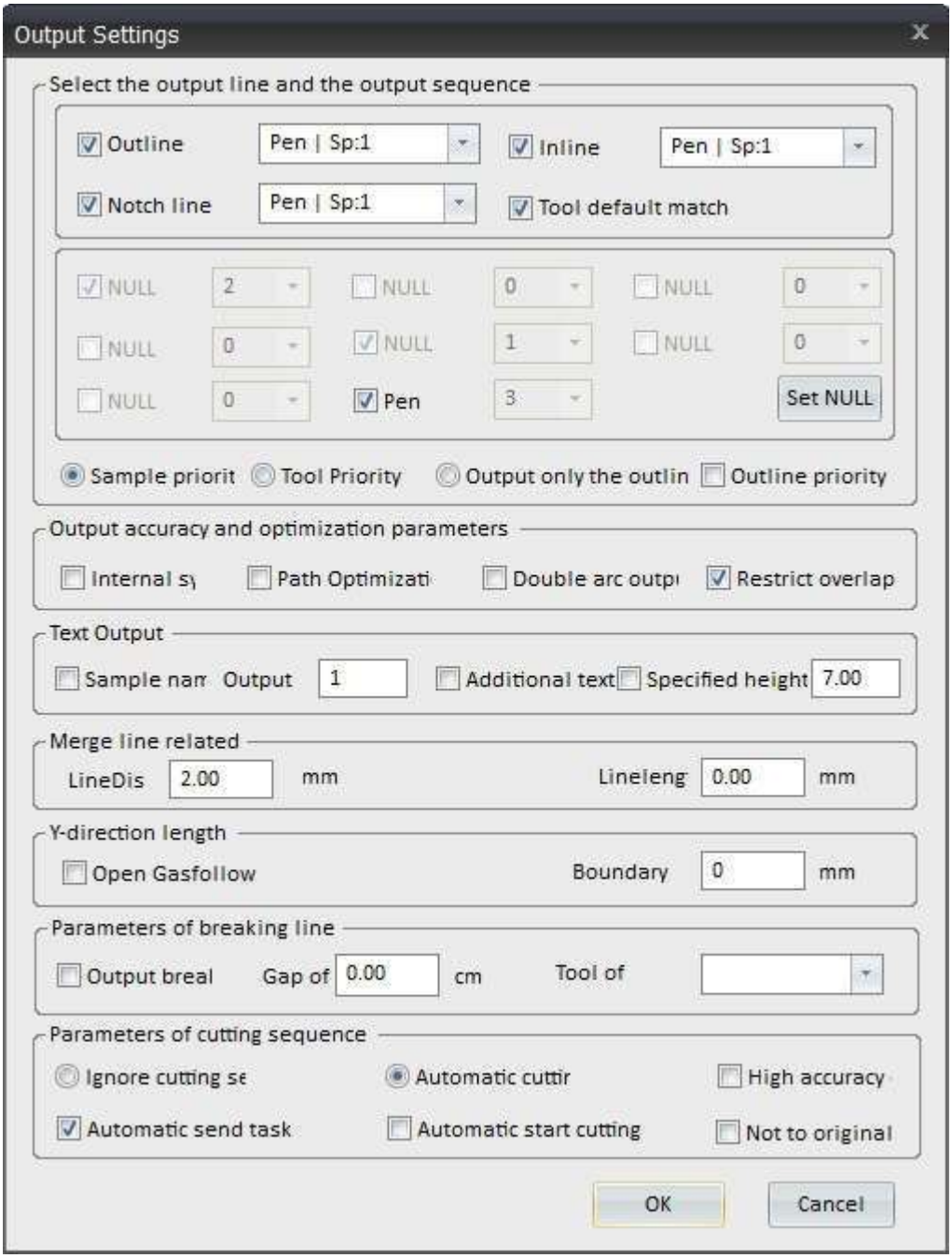

(Figure 16)

- Nesting setting, can set the fabric width and length. User can set the fabric width and length according to the actual size.
- Interval setting, the interval item is the interval between the patterns. User can set it according the needs, the interval of normal patterns is 5mm.
- Rotation, we recommend that user select it with 180 degree.

## 3.6 Control Center

### 3.6.1 Output setting

Select 【Output】under the menu bar 【Control Center】, it will pop up like figure 17.




(Figure 17)

- Tool selection and sequence, user can select the output outer contour, inner line, notch, etc, and select the cutting tools.
- User can select pattern priority, tool priority, only output outer contour or outer contour priority. If with different tools, we recommend the queue is notch, cutting and pen.
- Text output, can set pattern name, additional text, etc. It will do not set generally.
- Output accuracy and optimization parameters,can select internal line

synchronization, path optimization, notch sequence and limit overlap. Limit overlap function is mainly used to ensure that the patterns can not be overlapped during nesting. Generally select path optimization and limit overlap.

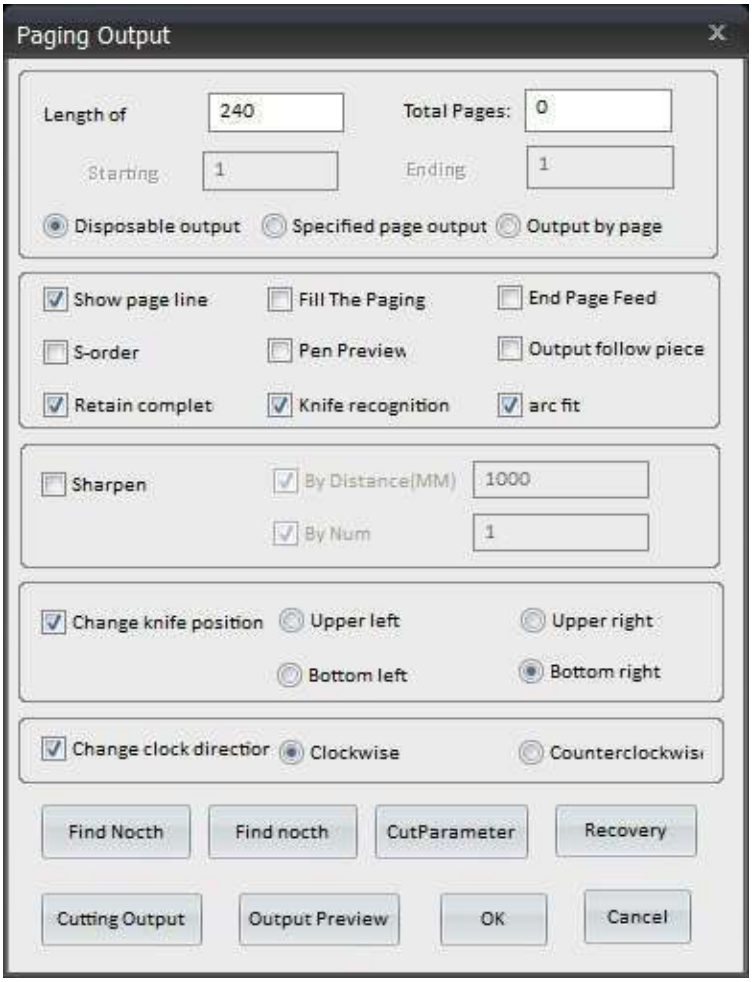
- Merge Line setting, only suitable for single page output. The software will automatically merge the lines that meet the needs after setting the line spacing and line length.
- Gas follow, can choose the types to open after selecting the opening area.

Type 1: Open all the areas to cover the gas field, close one field after finishing.

Type 2: When start the cutting, open the forthcoming area, will close it after finishing cutting.

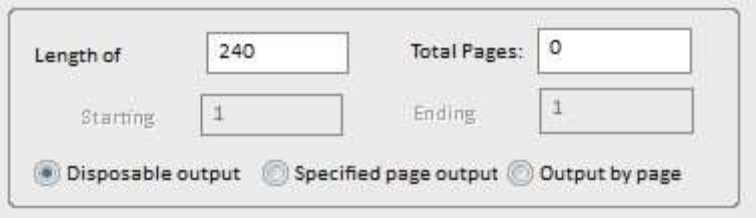
### 3.6.2 Cutting Output

Cutting output dialog box is shown in Figure 18.

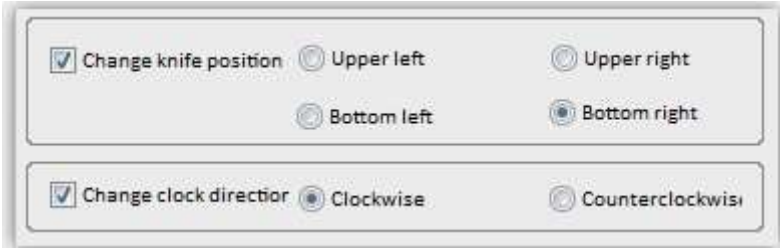



(Figure 18)

### 3.6.2.1 Paging Output Setting




### 3.6.2.2 Pattern Output Setting





【Change the position of knife】: Select the upper left/ lower corner、 upper right/lower corner as the starting point.

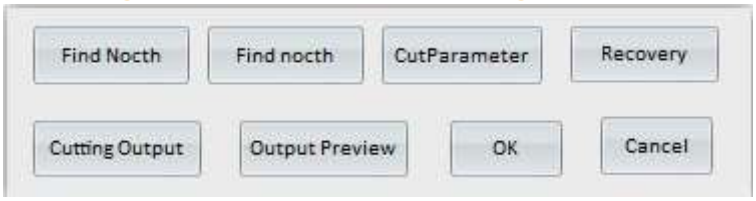
【Change the cutting direction】: can choose the cutting direction of clockwise and counterclockwise.

【Notch Recognition】: will recognize the notch that meets the notch requirements of contour.

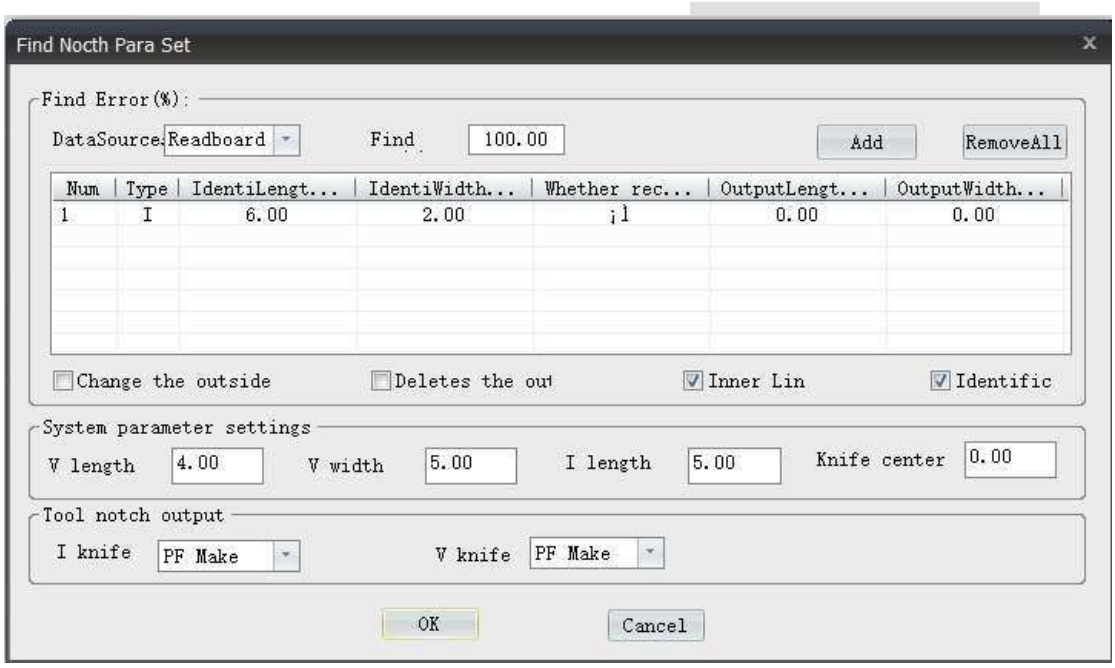
【Sharp angle separation】: If there is a small sharp angle in a pattern and it can Paging output, user can set the each length according to the actual cutting area, and can not exceed the max. Effective range. For regular use, we recommend one-time output. not be recognized, we recommended to select sharp angle separation.

➢ 【Double arc Output】: will optimize the smoothness of arc cutting after selecting.

### 3.6.2.3 Notch Recognition Parameter Setting




Click 【Notch Parameter】, it will pop up the dialog box in figure 19, which can set notch recognition parameter.




(Figure 19)

## 3.7 Help

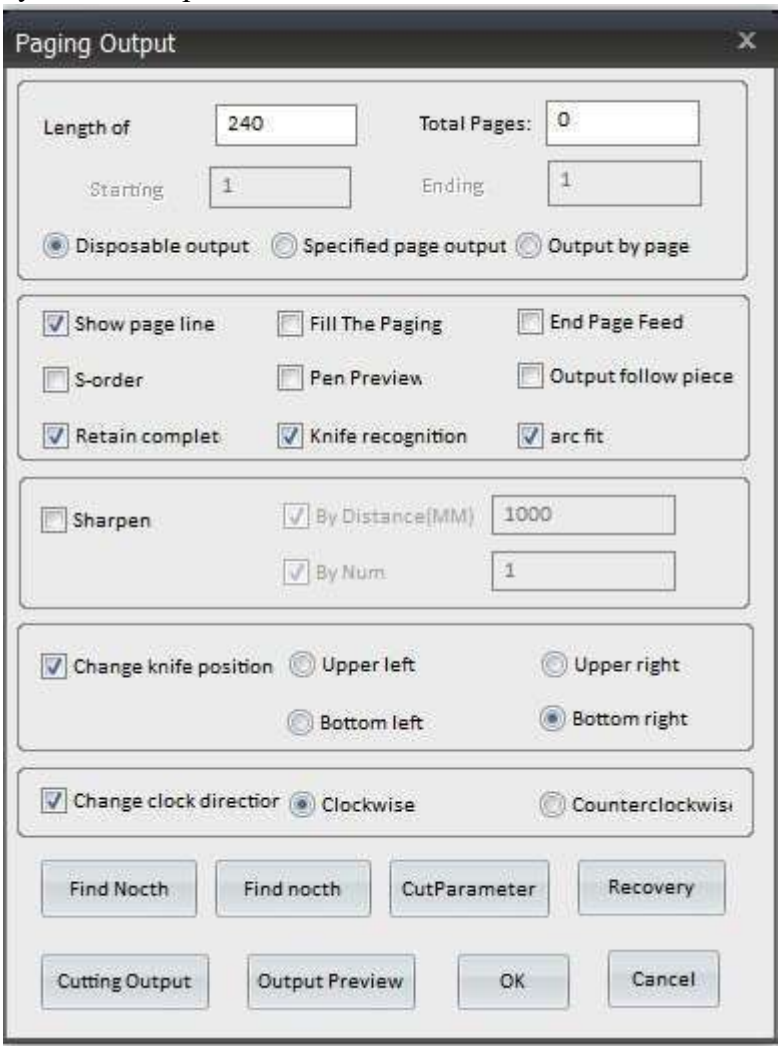
Used for checking the current software version. Click【Help】, it will pop up the dialog box in figure 20.


(Figure 20)

# Chapter 4 Multi-layer Cutter Function

## 4.1 Sharpening

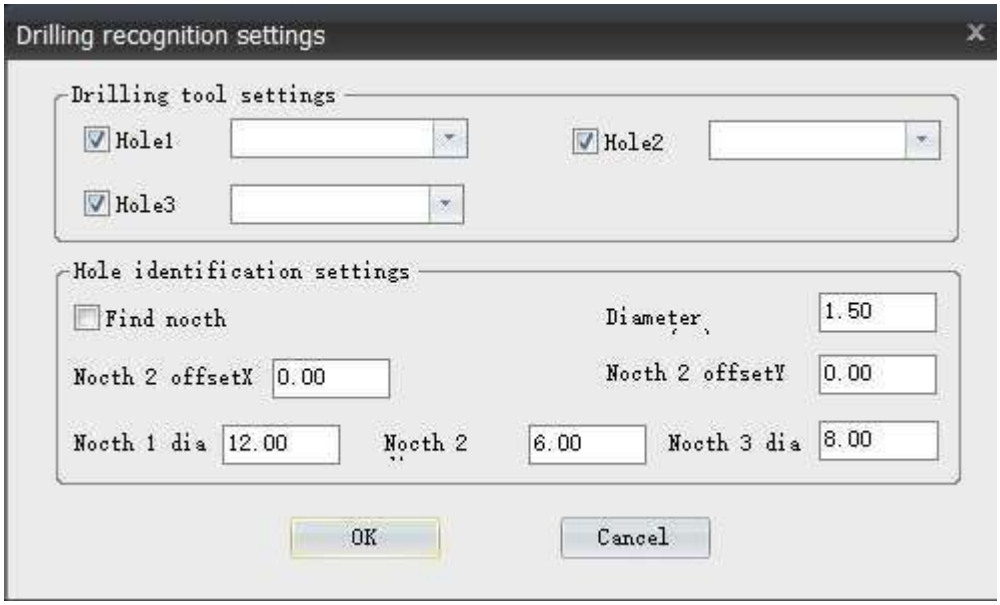
Select sharpening, the sharpening function is effective. There are two methods: by distance and by number of pieces.




(Figure 21)

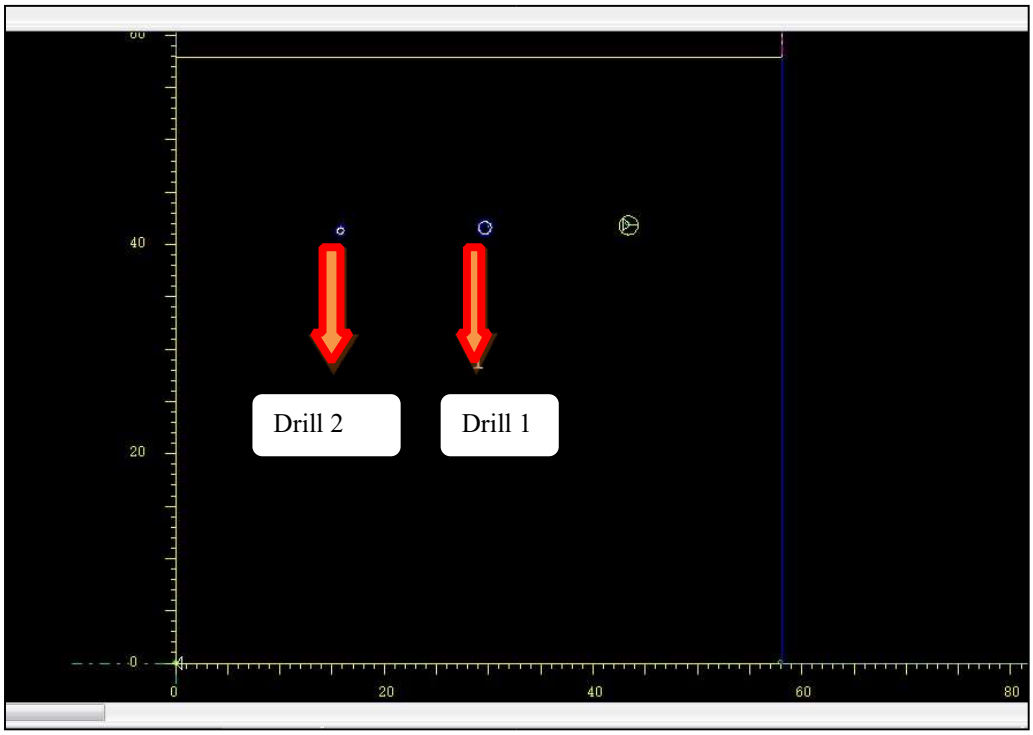
## 4.2 Drill

As shown in Figure 22 【Drill recognition setting】, according to the needs, user can select the corresponding drilling hole in 【Drilling cutting tool setting】, and fill in the diameter and diameter error in 【Hole recognition setting】. After confirmation, the device will recognize automatically the hole within the tolerance of round hole.




(Figure 22)

The drill 1 and 2 are recognized after output preview, will shows dark color in Figure 23.



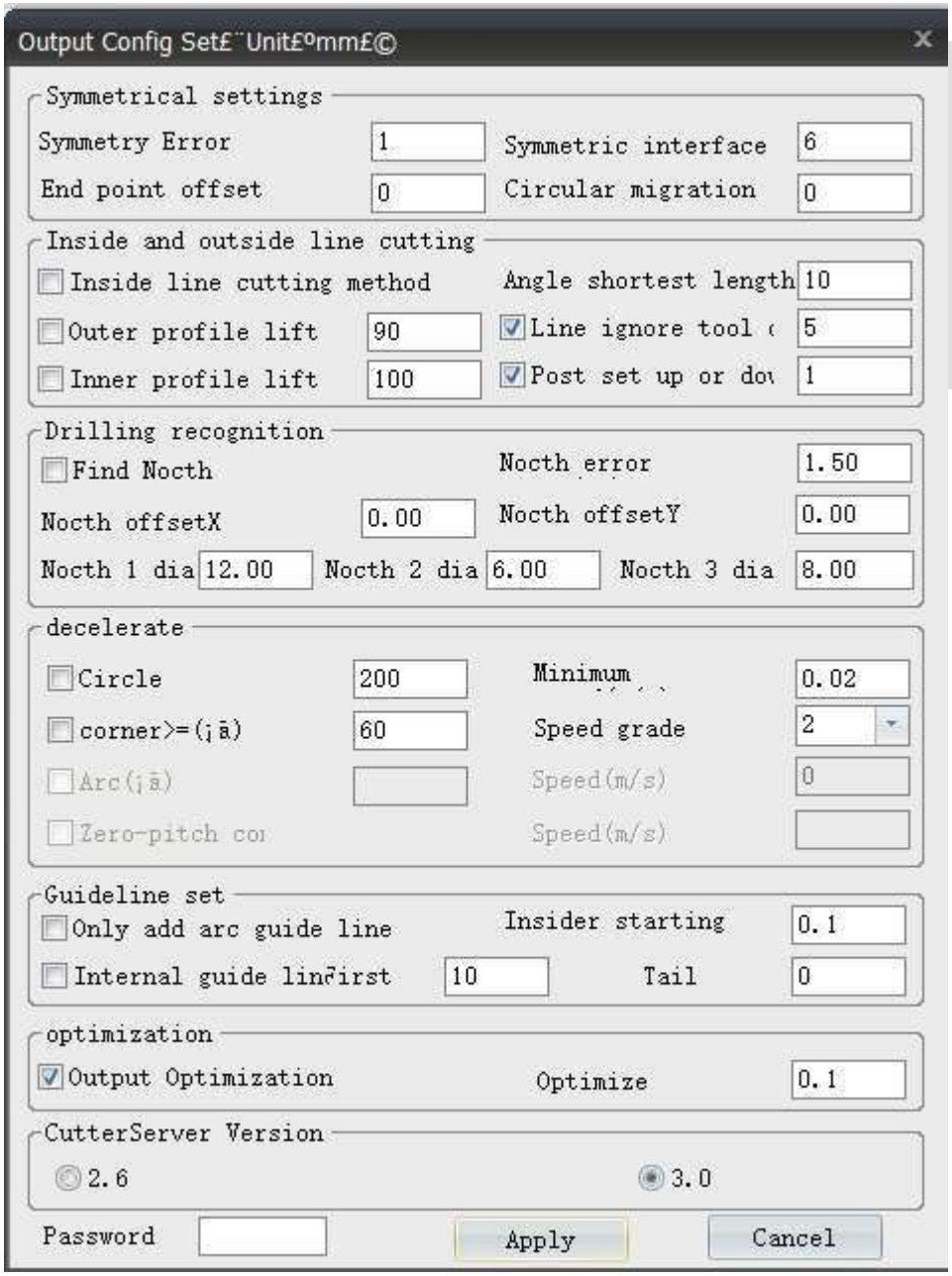

(Figure 23)

## 4.3 Deceleration

In【Deceleration Setting】 of【Output Configuration Setting】, can choose corner deceleration. Use can set the corner value after selecting the corner > =60. It will

decelerate at the corner where it meets the requirements if the corner is bigger than that of the setting value.

Use can select 【Speed Grade】according to the requirements, the level is from 1 to 5. The bigger of the grade value, the faster of the speed.




(Figure 23)

# Chapter 5Toolbar Details

| | |
|---|---|
| 【New】 | This function is common, as described above. |
| 【Open】 | This function is common, as described above. |
| 【Save】 | This function is common, as described above. |
| 【Print】 | This function is common, as described above. |
| 【Output Setting】 | This function is common, as described above. |
| 【 Machine Parameter】 | Not available. |
| 【Cutting Output 】 | This function is common, as described above. |
| 【Machine Control 】 | Not available |
| 【Picking Up 】 | This function is common, used for pattern moving |
| 【View Other Nesting Orders】   | not commonly used.Click here to view other ut. |
| 【Refresh】 | This function is not commonly used. Can refresh data. |
| 【Auto Nesting】 | This function is common, as described above. |
| 【Manual Nesting】 | This function is not commonly used. Can do nesting manually. |
| 【Renew Nesting】 | This function is common, can move all the data to the nesting area. |
| 【Setting Pattern List】  | This function is not commonly used. |

| | |
|---|---|
| 【 Adjustment Priority】 | This function is not commonly used. |
| 【No Flipping】 | The pattern can not be flipped when selected. |
| 【No Rotation】 | The pattern can not be rotated when selected. |
| 【Script 】  | Click this icon to set the text. |

# Chapter 6 Precautions

Please re-install the nesting software Nester6.2 if have problems.

When input DXF file, if the speed is very slow, we suggest that observe the unit and scaling factor whether they are right.

It is recommended to close the anti-virus software when install Iplycut software.