IBrightCut User Manual

Directory

Chapter 1 Software Introduction

1.1 Introduction

IBrightCut is a cutting software customized for advertisement industry, it is compatible with many mainstream graphic design software. IBrightCut provides liable data source for advertisement cutting with its powerful graphic editing functions and accurate graphic recognition ability, gives complete solutions for different needs of the industry with variety of cutting functions. Its high efficiency output and intelligent repeat cutting system makes possible real non operator production line.

1.2 Software Installation and Operating Environment

1.2.1 Hardware Requirements

System：i5 or higher

RAM：4GB or higher

DSPversion：2.2.8or higher

CutterServer：3.0.0.1 or higher

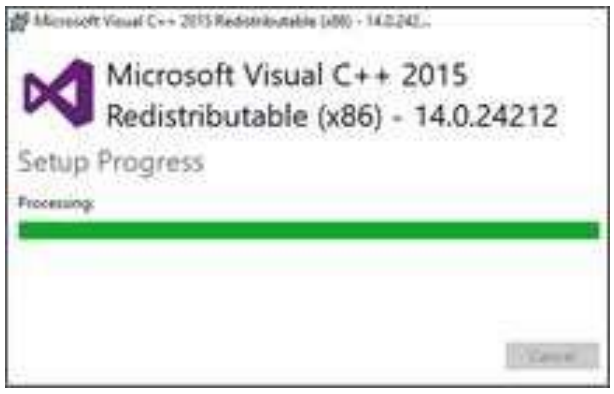
1.2.2 System and Software Environment

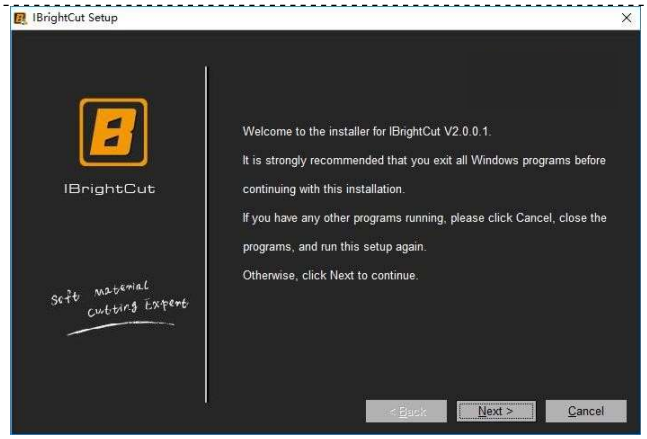
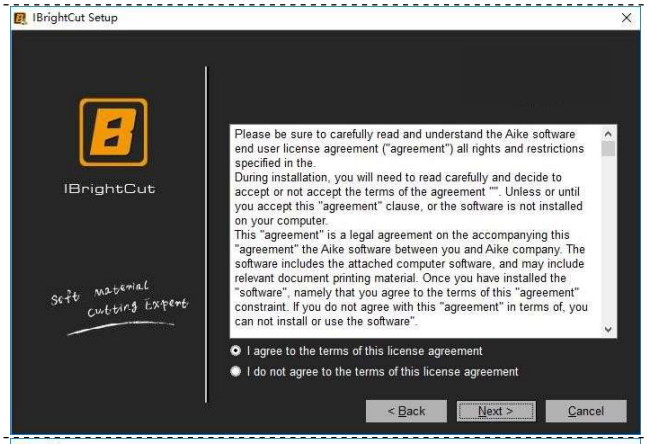
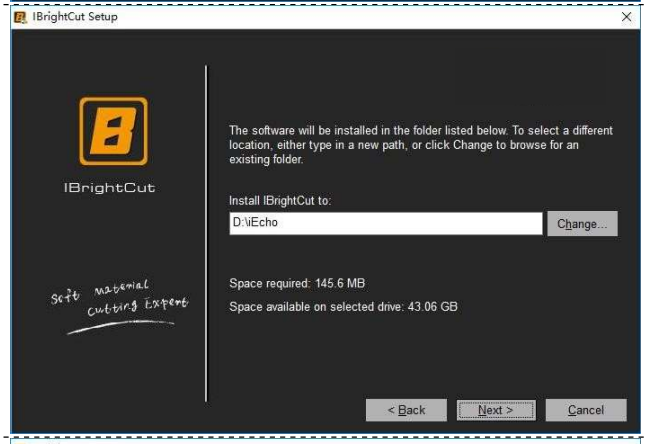
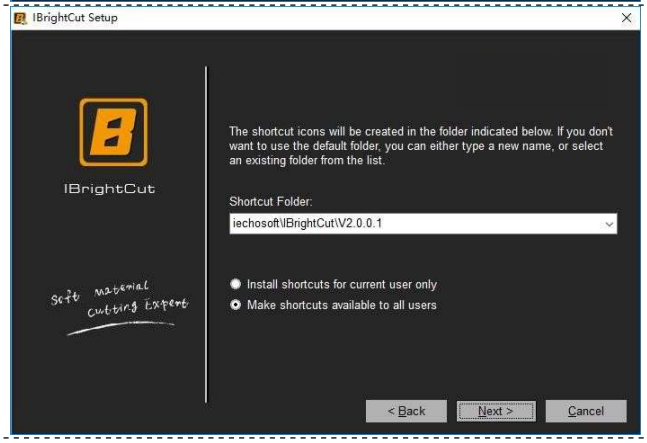
Operating System：Windows 7/10（32bit\64bit）

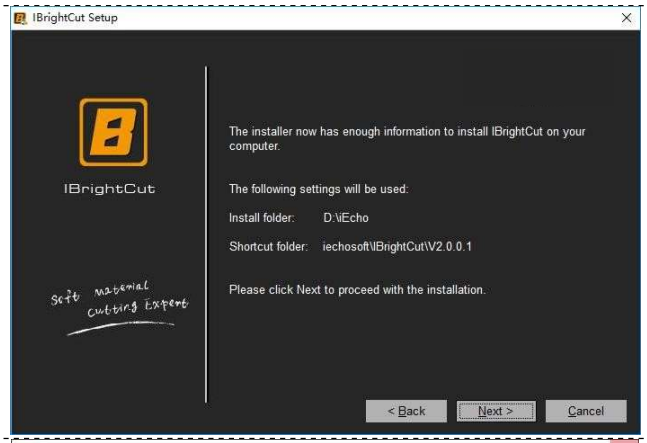
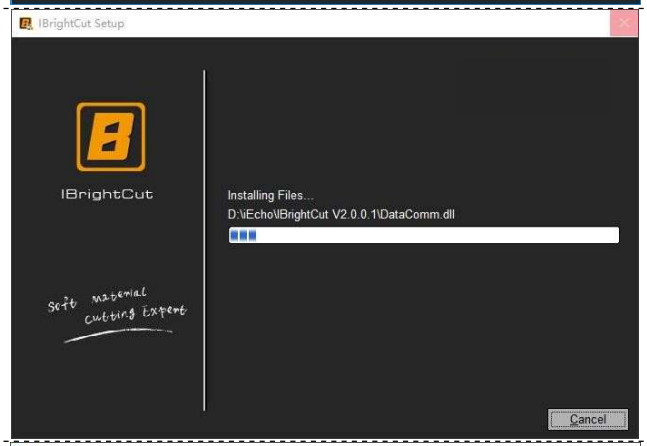
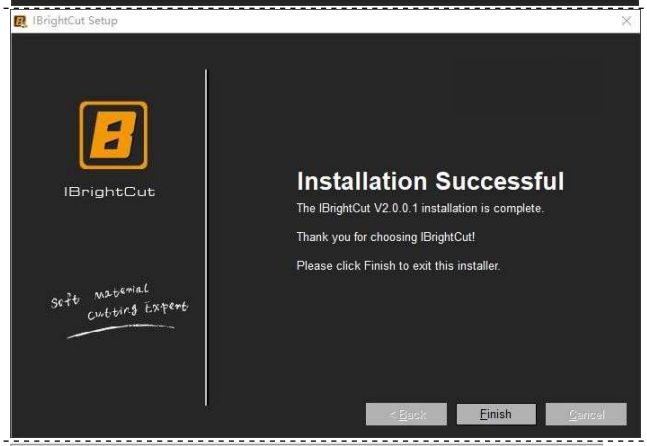
IBrightCut software version：V2.0.0.1 2018.8.30.1299

CutterServer software version：V3.0.0.1 2018.8.30.1

1.2.3 Software Installation

Double click to run the installation package, prompts installation environment, tip Agree to install.	

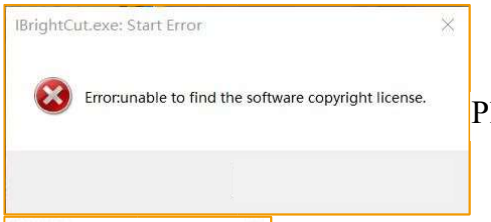
Start installation	
Read carefully software license agreement, choose【I agree with the terms of this license agreement】	
Assign installation folder, it is suggested to not install IBrightCut on system disc	
Assign shortcut folder	

Check installation info	
Wait for the installation to finish	
Click【Finish（F）】to finish the installation	
Read Manual	

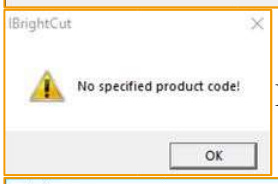
Double click IBrightCut shortcut 

on desktop to run the software.

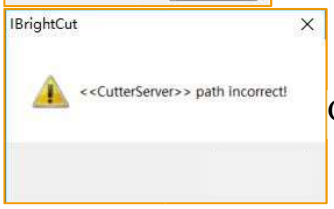
If popups following windows:



Please check if Dongle is plugged;



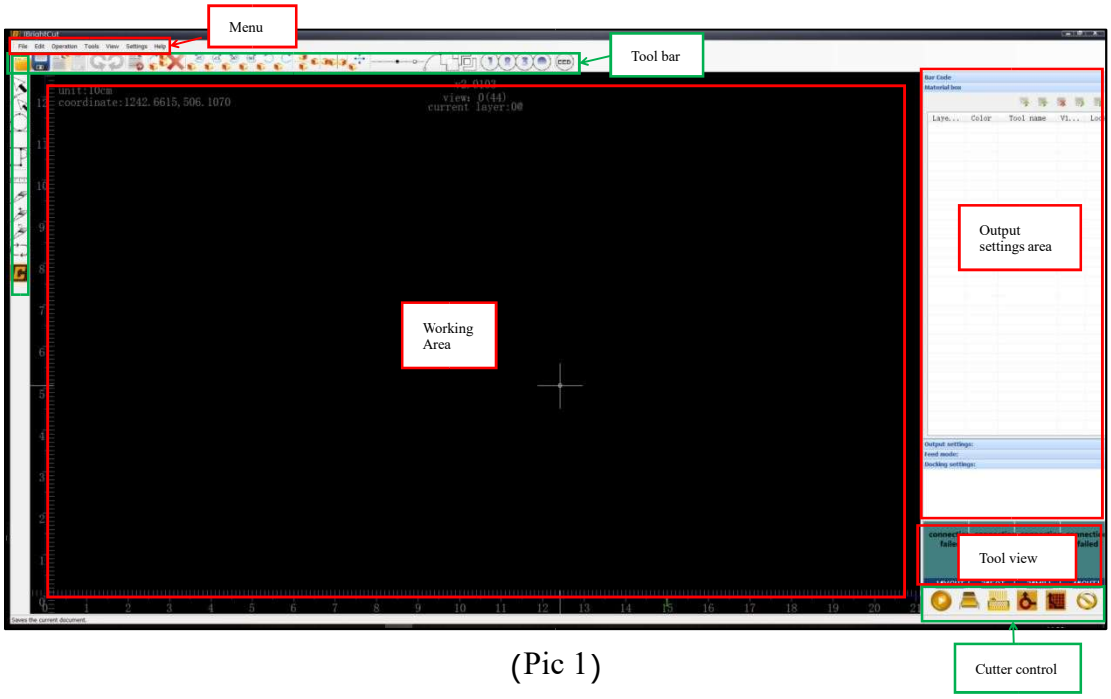
Please add product code;



CutterServer incorrect association, please consult 3.11.6 Association with CutterServer.

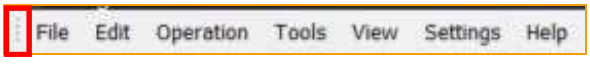
1.3 Software Interface

Software home interface includes 7 part: Menu, Tool bar, Working area, Status, Output setting area, Tools view and Cutter control, as shown in the picture below.



(Pic 1)

1.3.1 Menu



Menu contains 7 options: File, Edit, Operation, Tools, View, Settings, Help, these options nearly include all functions of the software. Single click on red marked zone could adjust position of menu.

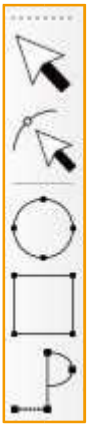
1.3.2 Tool bar

Simple and intuitive icons include all common used function buttons. IBrightCut designed intuitive icon buttons and increased their quantity intentionally to facilitate user's operation.

Tool bar can divide by functions as:

【Operation bar】 

【Data Simulate Bar】 



【Data Edit Bar】

【CCD Settings】

【Sketch Bar】

【Other】

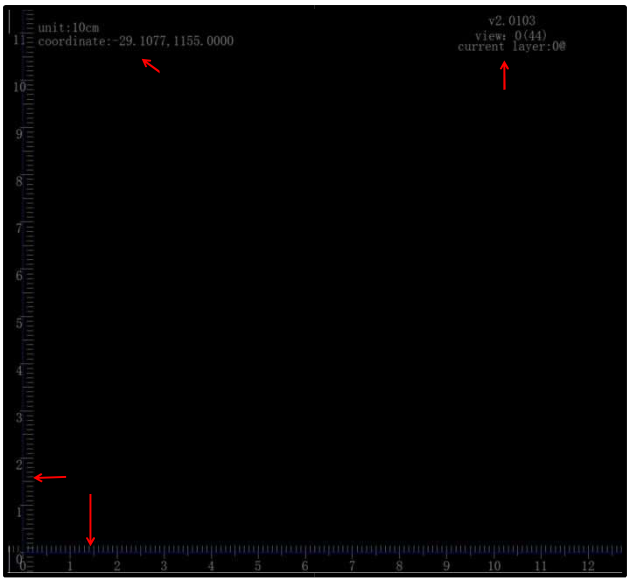
Dragging  on all function bar can adjust bars to any place on the screen.

Under Tool bar 【View】can set visibility of all tool bar icons. As per picture below.

(pic 2)

1.3.3 Work Interface

All drawing edit operations of IBrightCut are processed in working area, blue frame shown in picture 3 is real cutting area size obtained by IBrightCut from CutterServer.



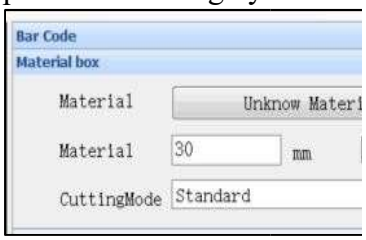
(picture 3)

1.3.4 Status Bar

Left down corner of the interface shows current working status.

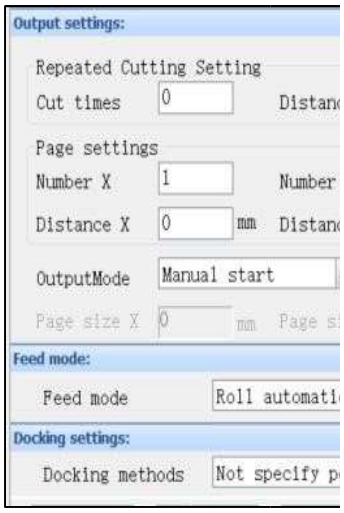
1.3.5 Output Setting

IBrightCut shows most of common output settings on main interface, to raise output parameter edit efficiency and lower output risks of forgetting or incorrect parameter setting by user.

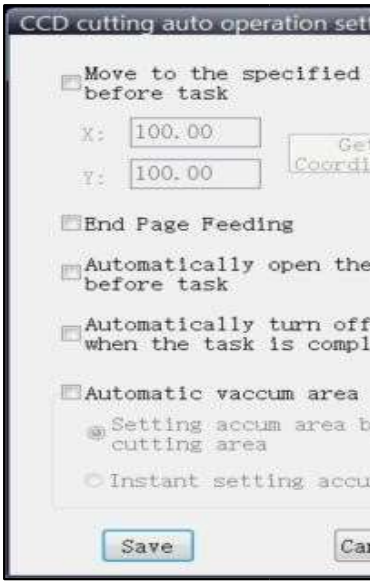


- It supports barcode scan
- When choose unknow material in material settings, pay attention to modify material thickness.

- When choose known material in material settings, don't modify material thickness.
- Layer automatic match cutting parameter in material box.

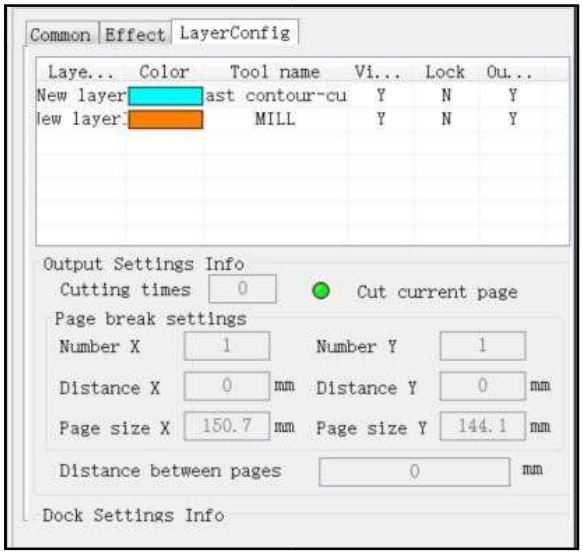


- Supports repeated cutting, array cutting
- Supports direct cutting, manual start, send to pending
- More functions: automatic cutting settings
- Supports material automatic feed
- Supports docking in origin or in end position
- Supports no specified position
- Supports set docking point



- Supports move head to assigned position before cutting
- Supports automatic end page feeding
- Supports automatic turning on/off of the pump before cutting
- Supports automatic vacuum section control and provides two options

In the process of marker recognition, click on layer config option on top of CCD display, can check output parameters of the current task. As shown on picture 4.



(pic 4)

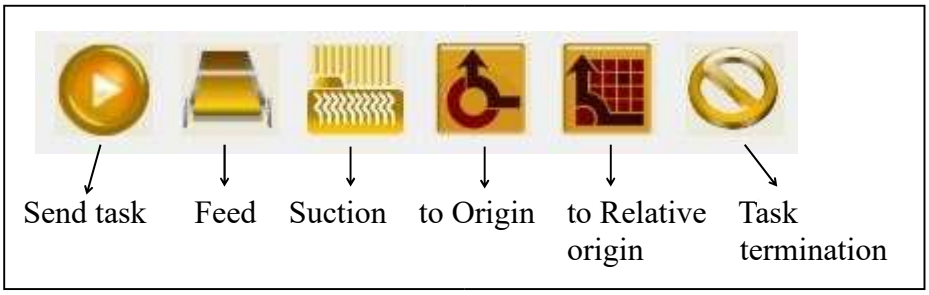
1.3.6 Tools view

Show cutting tools as per picture 5.

(pic 5)

1.3.7 Cutter Control

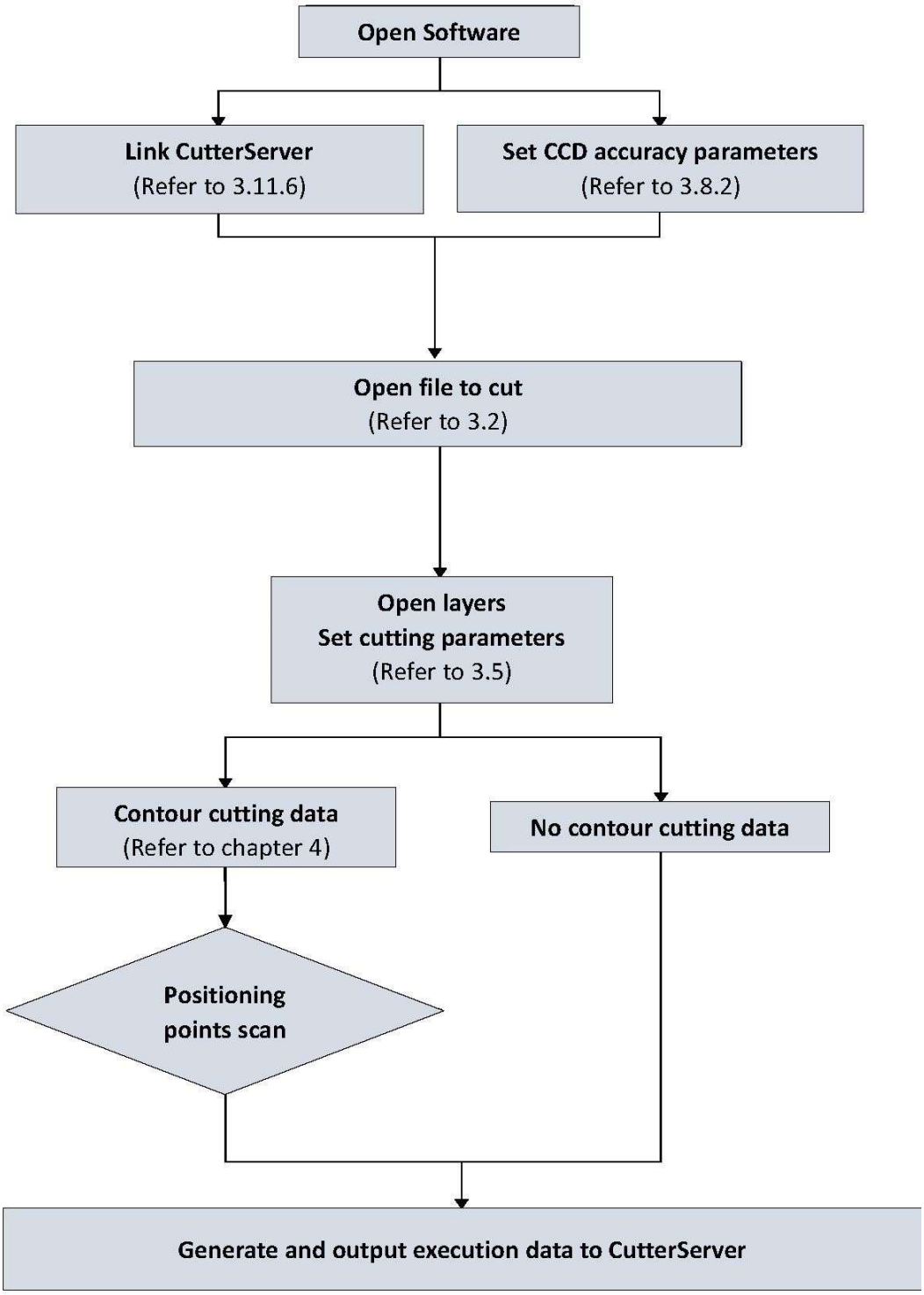
Cutter Control has integrated some of common buttons of CutterServer, to avoid frequent switch between two softwares. Icon functions are illustrated in picture 6.



(pic 6)

Chapter 2 Software Use Guide

In this chapter will be presented iBrightCut's common working processes with flow diagram, to give a general idea of how to use the software, could guide new users to quick mastering basic operations of the software. For more particular operations please follow the references and find them in next chapters.



Chapter 3 Software Function and Operation

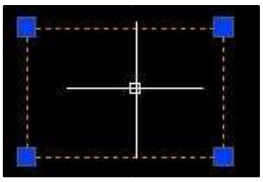
In this chapter are explained in detail all functions and operating method of IBrightCut, it is supplemental and expansion of chapter 2, it helps advanced users to totally master IBrightCut.

1.4 Basic Operation

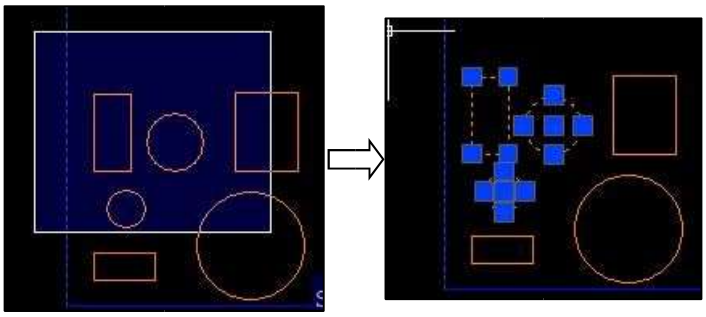
1.4.1 Select

Select is the most basic operation of IBrightCut, many edit functions are based on selected drawings. Select could be point select, frame select and layer select 3 types.

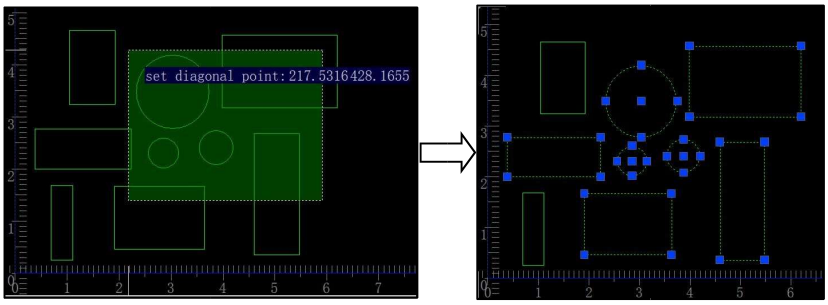
Point selection：single click on drawing line and the line will be selected (for closed pattern drawings, it is enough clicking anywhere inside area.)



Frame selection 1：hold a single click in working area, drag mouse from left side to right side, all elements completely inside frame will be selected.

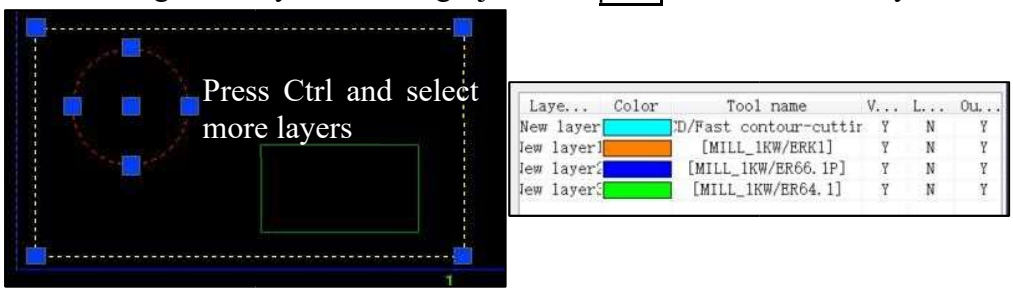


Frame select 2：hold a single click in working area, drag mouse from right side to left side, all elements even partially inside frame will be selected.



Layer select：Click any layer name, its background turns to blue, now all drawings belong to this layer are selected.

For selecting more layer's drawings, just hold Ctrl and select other layers.

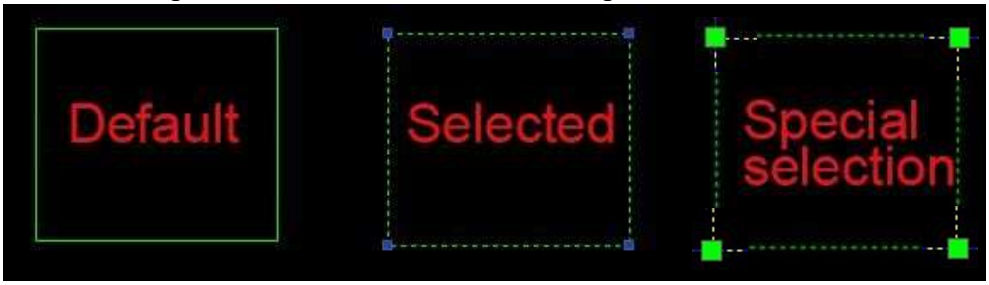


While using IBrightCut drawing edit functions, new drawings made in working are will be automatic assigned to the current selected layer.

Frame select and layer select can pick many drawings at once, in case a drawing is miss selected, just need to hold Shift key and deselect items.

Push ESC key to deselect all drawings selected.

As shown in picture 7, different border lines represent different selection status.



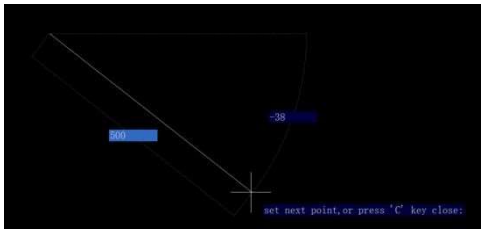
(pic 7)

1.4.2 Input Coordinates

While making drawings, program will ask you to input coordinates to allocate point position. Coordinates include two type of variables, dimensions or angles, +/- and numeric keys to input coordinates, Tab key to switch between two coordinate values, Enter to confirm coordinate, Esc to cancel input of coordinate.

Example 1：Allocate an absolute coordinate point in （100,300）, input with keyboard 100→Tab→300→Enter, as shown in picture 8.

Example 2：Assign randomly a point, create a line of 500mm, set angle with X axis as -38°, input with keyboard 500 （length）→Tab→-38(angle)→Enter, as shown in picture 9.



（pic 8）　　（pic 9）

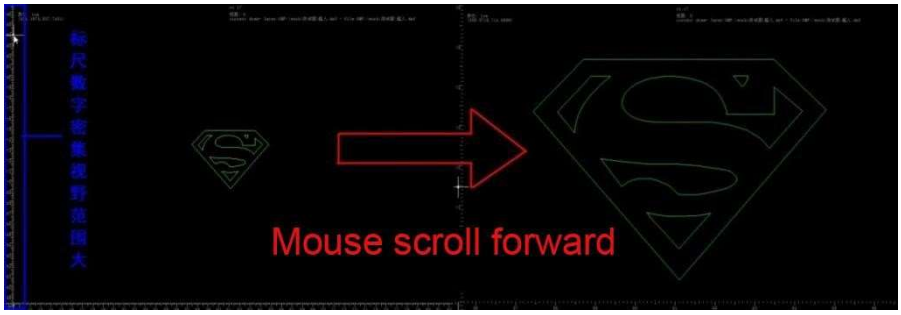
❖ NOTE：Coordinates in working area, unit for length is millimeter (mm), unit for angles is degree(°).

1.4.3 Adjust Working Interface View

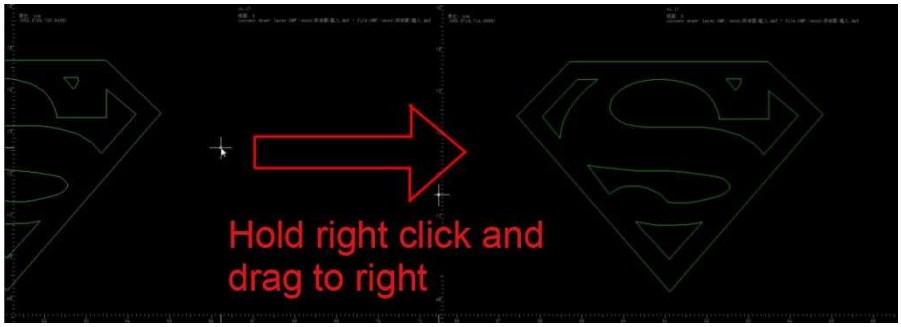
To see clearly and completely drawings in working area, often is necessary to adjust working view. To adjust view there are four methods below:

① Click tool bar【Settings】【- Option】, it is possible to modify view scale value, changes scale of working area respect to cutting area.

② Scrolling mouse wheel can zoom working area view. Moving forward zooms in, view area decreases, working drawing enlarges; otherwise zooms out, view area increases, and working drawing decreases size.



③ In working area, hold right click and drag, can quick adjust view.



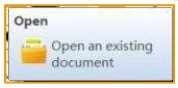
④ Click Tool bar【Back to zero】button, working area view will set to zero point.

Above mentioned operations change only working area view, does not affect drawing's relative dimension to cutting area, or its absolute position on working area.

1.5 Files

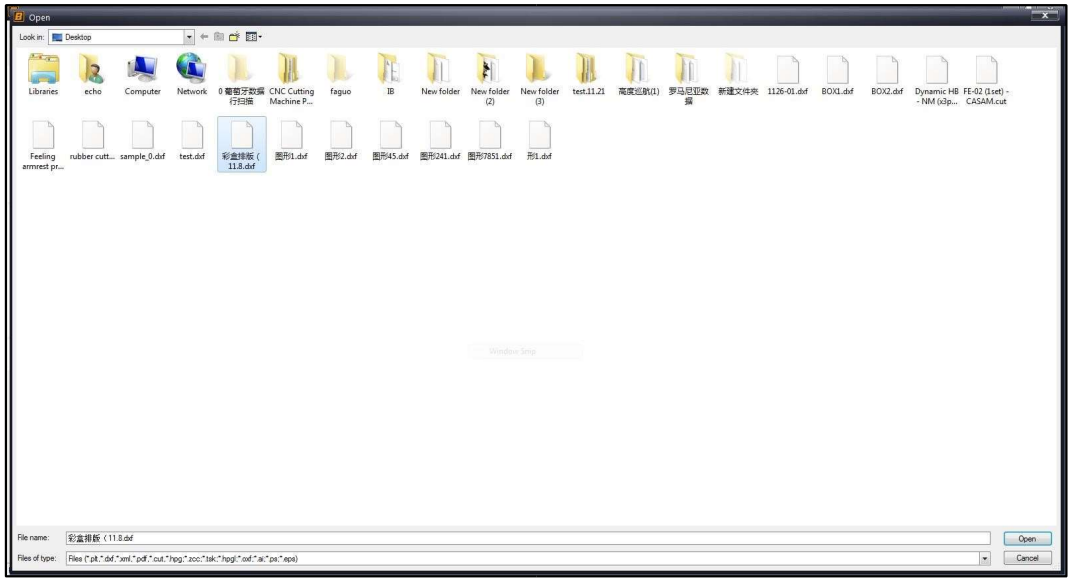
IBrightCut can read PLT, DXF, PDF, XML, TSK, BRG, CUT, HPG etc. type of files, and it can open with two methods (open, insert open).

3.2.1 Direct open



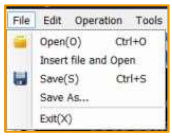
Click menu【File】-【Open】, in pop up window select file to open (as shown in picture 10), click 【Open】, and selected file will be opened.

❖ NOTE: Direct open will clean all data in current working area, and import new file.



(Picture 10)

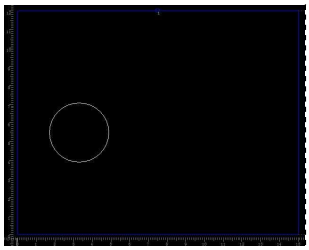
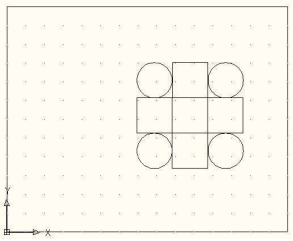
3.2.2 Insert file and open



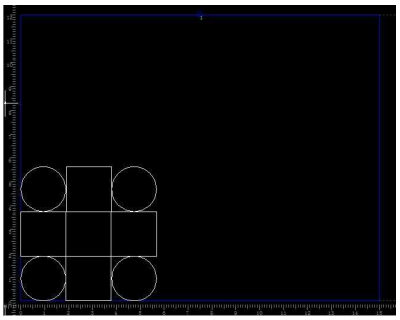
Click menu【File】-【Insert file and open】, in pop up window select file to open, click【Open】, and selected file will be opened.

Insert open preserves existing data in working area, and inserts new file data in right side of existing data.

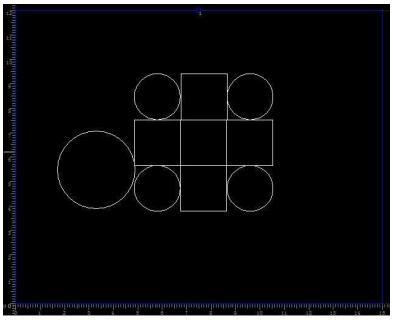
Comparison of two open methods

Existing data inworkingarea		New opened file	

Direct open:

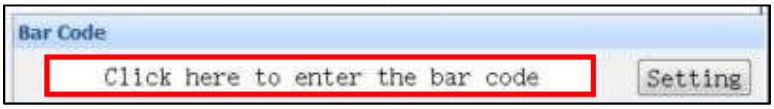


Insert open:



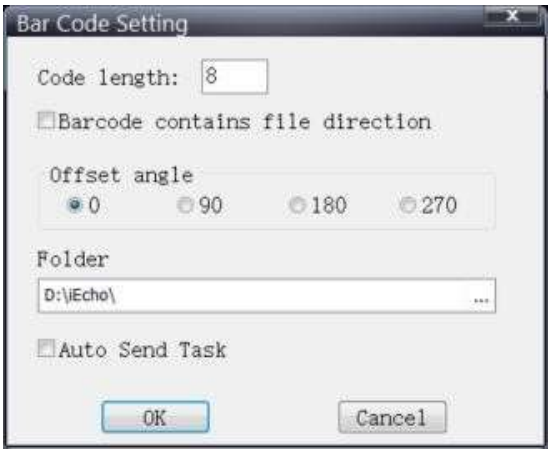
3.2.3 Barcode Scan

Keep cursor in position shown in picture 11, use barcode scanner to scan barcode on the material, then it will open related cutting pattern file.



(Picture 11)

Click 【Settings】button, set barcode scan parameters, as shown in picture 12.



(Picture 12)

Barcode length: input according to actual barcode digits, in picture 13 shows 8 digits.

(Picture 13)

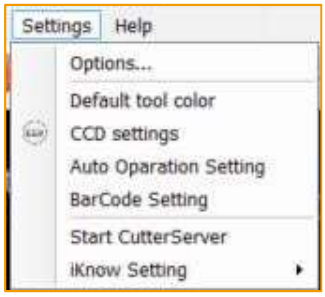
Barcodes include direction information: if barcode scanned has one more digit than printed, then need to select this option (the last digit used to indicate direction of the file).

Angle shifting: after scan, if cutting path opened does not match with actual material laid direction, can adjust file's angle shifted.

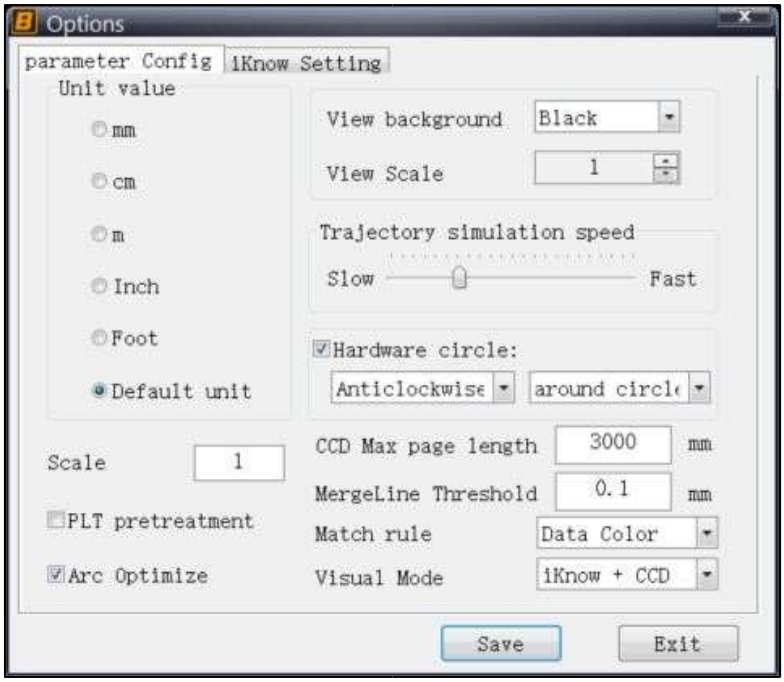
Folder path: assign cutting pattern save location.

Automatic task sending: if this option is checked, when barcode scanned successfully, it will send task automatically.

3.2.4 File Unit/Scale Factor

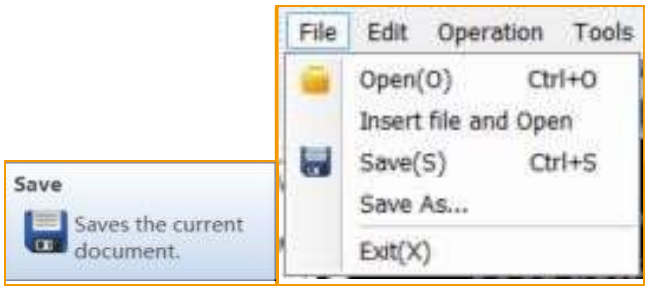


Click 【Settings】-【Option】, prompts settings window, as shown in picture14, in parameter settings can modify length unit and scale factor when open a file. These two options take effect by next time opening a file, existing opened file will not be affected.



(Picture 14)

3.2.5 File save/save as



Click file【Save】button, can save current data as *.brg file, save path is same as original file. Click file【Save as】button, can save current data as *.brg file in an assigned folder.

*.brg type file does not include only drawing data, includes also related output settings (ex: material thickness, layer info, tools settings, repeated cutting parameters, array cutting parameters, docking methods, feeding methods etc.). Using *.brg reasonably can increase efficiency of the work.

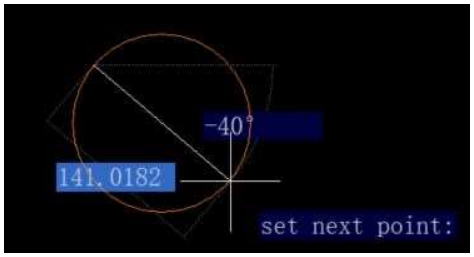
❖ NOTE：Save file name cannot include “.” character.

1.6 Drawing edit

IBrightCut has powerful drawing editing ability, if file opened does not satisfy cutting purpose or does not exist at all, user can direct create and edit drawings in working area.

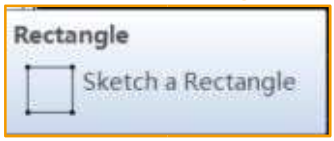
3.3.1 Draw circle

Click tool bar【Sketch a circle】to start drawing circle. Click in working area or input X coordinate value→Tab→Y coordinate value→Enter, assign first end point of a diameter of the circle, click again working area or input Distance to first point→Tab→Angle with X axis→Enter to assign second end point, before assign second point the system shows actual position of mouse cursor, distance to the first point and diameter line angle to X axis, as shown in picture 15. Once second point is assigned automatically exit sketch a circle mode.

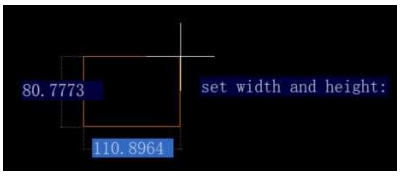


(Picture 15)

3.3.2 Draw rectangle



Click tool bar【Sketch a rectangle】to start drawing rectangle. Click in working area or input X coordinate value→Tab→Y coordinate value→Enter, assign first end point of diagonal line of the rectangle, click again working area to assign other point of diagonal, or input Rectangle length→Tab→Rectangle width→Enter, as shown in picture 16. After assigning rectangle's length and width or second diagonal point, it exits from sketch a rectangle mode. Before exiting the program shows rectangle length and width of cursor position.

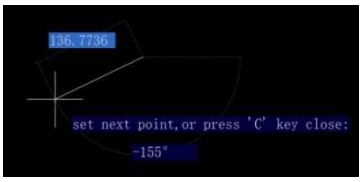


(Picture 16)

3.3.3 Draw Polyline

Polyline is a sequence of connected lines created as an unit, connecting end points of polyline forms a closed pattern.

Click tool bar【Sketch a polyline】to start drawing polyline. Click in working area or input X coordinate value → Tab → Y coordinate value → Enter, to assign start point of polyline, click again working area or input Distance to the previous point → Tab → Angle with X axis → Enter, to assign next point of polyline, as shown in picture 17. Push C on keyboard to close the pattern or ESC to exit sketch a polyline mode.



(Picture 17)

3.3.4 Point edit

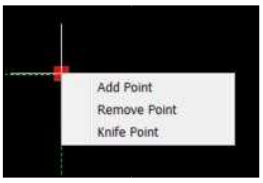
Double click on drawings enters point edit mode. Click tool bar【Point edit】 button can enter point edit mode for all drawings in working area. (NOTE: Non discrete circle does not support point edit, will not enter the mode.)

In point edit mode, points on the drawing are turned into green color, as shown in picture 18. Click any point, it will be selected, selected point is turned to red color, as shown in picture 19.

(Picture 18) (Picture 19)

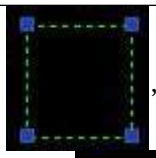
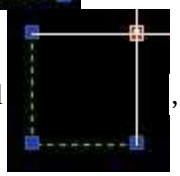
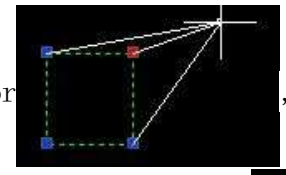
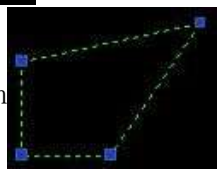
In point edit mode we can:

- Add point: double click at any position of the drawing line, can add a vertex at this position
- Remove point: double click any point can delete this point
- Edit closed pattern's knife point: select the point which want to be cut-in point, right click working area, in pop-up menu select 【Knife point】, as shown in picture 20.



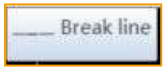
(Picture 20)

How to move points?

Select any drawing(normal selection)  , single click any point on the drawing, point selected turns into red  , now the point is attached to mouse cursor  , move cursor to destination location, click to finish move operation  .

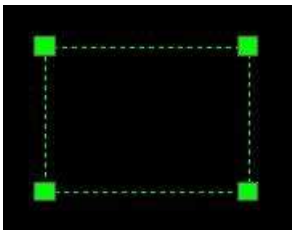
❖ NOTE: " Point edit" function does not include " Point move" , point move operation is done under normal selection.

3.3.5 Break line

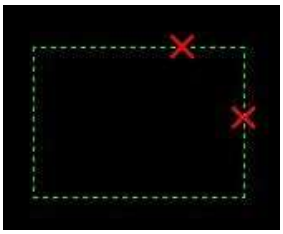


Break line function can be used to break closed pattern.

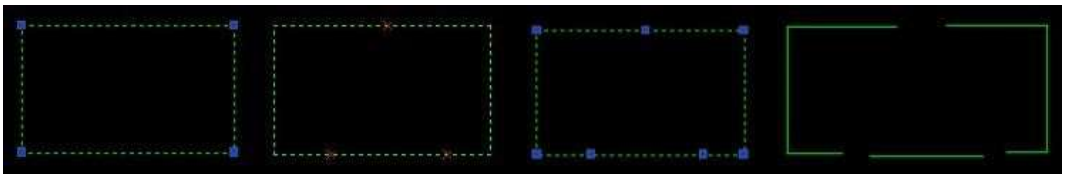
Select the drawing which want to break, click tool bar【Break line】button (or first click button then select drawing), drawing enters special selection state, as shown in picture 21. Click the line you want to break, appears red X mark on the line, as shown in picture 22. Enter key to finish break line operation, after it program exits from break line mode, or ESC in middle of the operation to cancel break line, as shown in picture 23.



(Picture 21)

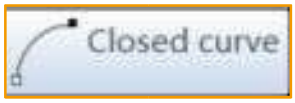


(Picture 22)



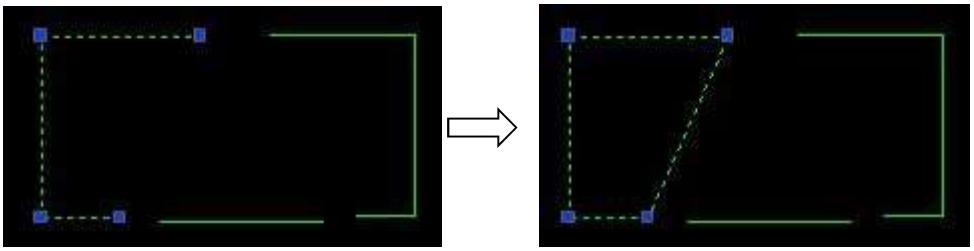
(Picture 23)

3.3.6 Closed curve



Closed curve function used to close opened polylines.

Take example line broken drawing in picture 23, select drawing wish to close, click tool bar【Closed curve】button, drawing closed.

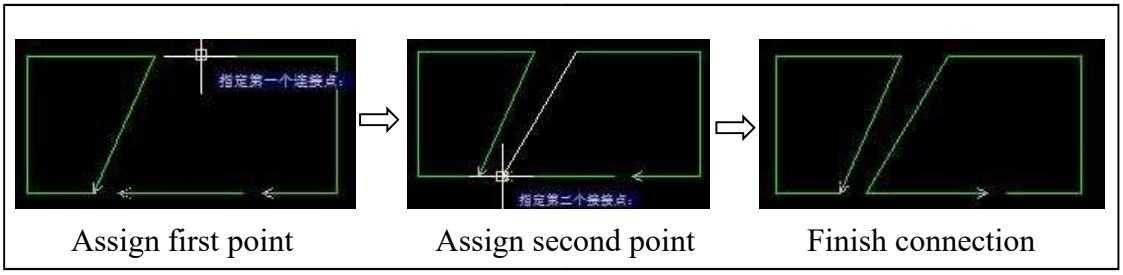


(Picture 24)

3.3.7 Connecting line

Connecting line function can unify independent drawings.

Still take example of picture 23, click 【Connecting line】button, click on first connection point, then click to second point and finish the connection.



(Picture 25)

3.3.8 Move drawings

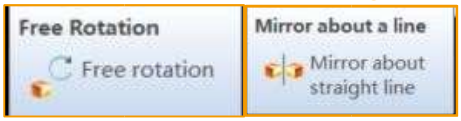
- Method 1: hold left click on drawing and drag it. This method can't set accurate coordinate, it can be used for situation which high accuracy is not required.

- Method 2: Select drawing, click menu【Start point of movement】button, drawing enters move status, move base point is left down point of the outer rectangle, click working area or input X coordinate→Tab→ Y coordinate→Enter assign base point destination location.

- Method 3: click menu【Start point of movement】button, then select the drawing wish to move, press Enter key, click working area or press X coordinate→Tab→ Y coordinate→Enter to assign base point destination.

Before completing movement can press ESC to cancel move, after move program exits from move mode, press Enter or Space to quick enter move mode again.

3.3.9 Rotate/mirror drawing



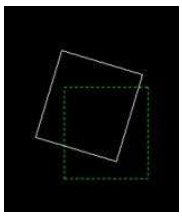
- Free rotation method 1: select drawing, click tool bar【Free rotation】button, click working area or press X coordinate→ Tab→ Y coordinate→ Enter to assign base rotation point, after assigned base rotation point, moving cursor can preview rotation

result (as shown below, dotted line is original drawing). Click again working area or input Rotation angle→Enter to assign rotation angle.

Assign rotation base point: 

Assign rotation angle : 

Rotation result:



(Pic 26)

- Free rotation method 2: click tool bar 【 Free rotation 】 button, then select the drawing to rotate, after selected all drawing to rotate press Enter, click working area or press X coordinate→Tab→ Y coordinate→Enter to assign base rotation point, after assigned base rotation point, moving cursor can preview rotation result, Click again working area or input Rotation angle→Enter to assign rotation angle.

Press Enter or Space to quick enter rotation mode again(requires to assign base point), under rotation mode press ESC to cancel rotation.

【Mirror】function works exactly same as【Free rotation】.

Clockwise or anti-clockwise rotation method:

- Clockwise rotation 45 ° method 1: select the drawing, click tool bar button 

, after completion exists from rotation mode, now if select the drawing and press Enter or Space will rotate 45°again.
- Clockwise rotation 45°method 2:click tool bar button 

, then select the drawing and press Enter, after completion exists from rotation mode, now if select the drawing and press Enter or Space will rotate 45°again.

- Anti-clockwise rotation 

45° , 

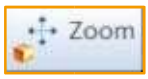
clockwise rotation90° 

, anti- 

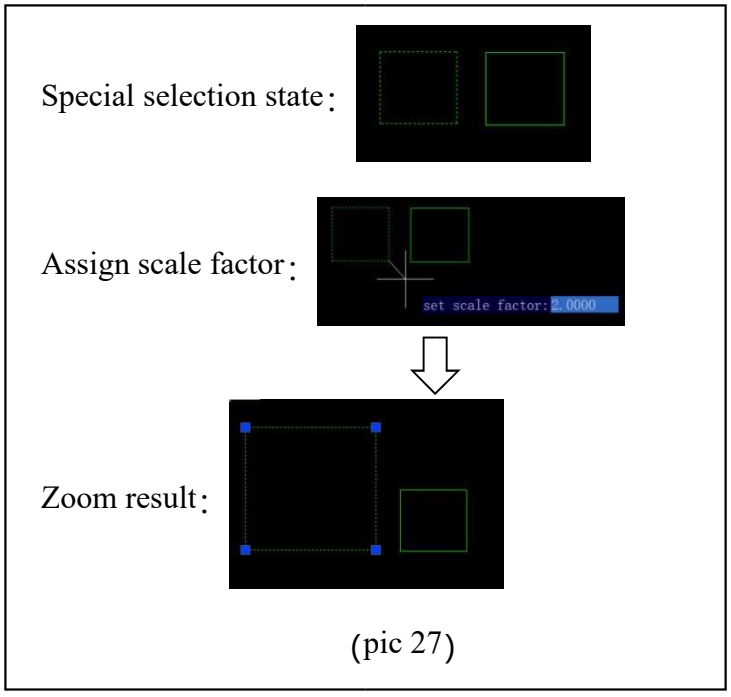
, all work in clockwise rotation90°, rotate 180°

the same way of clockwise rotation 45°.

3.3.10 Zoom



Select the drawing, click 【Zoom】button(or first click button then select drawing, and press Enter key), the drawing enters special selection state. Click working area or input coordinates to zoom assign base point, input zoom scale factor, press Enter to complete zoom operation. If scale factor is N, N>1 is zoom in, 0<N<1 zoom out, 0>N>-1 is reversed zoom out, N<-1 reversed zoom in.

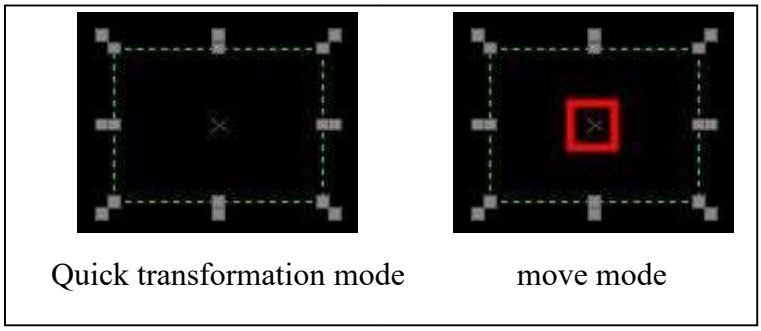


(pic 27)

3.3.11 Drawing transformation

Under drawing transformation mode, user can quick move, rotate, scale, stretch the drawing.

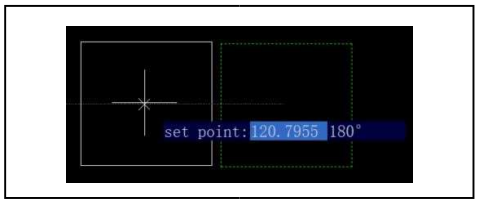
Select the drawing, click 【Drawing transformation】button (or first button then select drawing and press Enter key), drawing enters quick transformation mode.



(Pic 28)

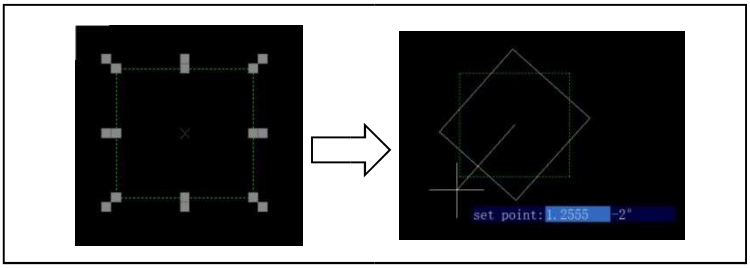
Move: click “x” in center of the drawing, enters move mode, move base point is “x” point(it is center point of the contour rectangle of the drawing). Click working area or manually input coordinate to assign relative coordinate.

As shown in picture 29.



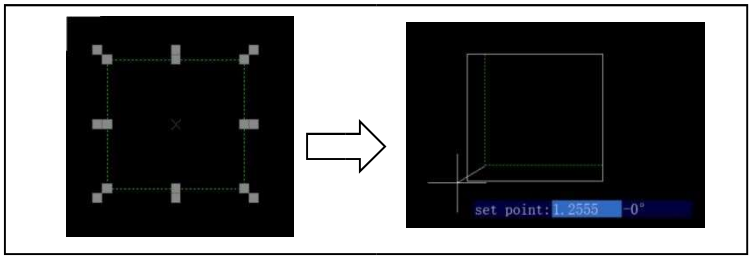
(Pic 29)

Center rotate: click any point marked in red as shown in picture 30, enters rotate mode, move cursor or input coordinates to assign rotation angle.



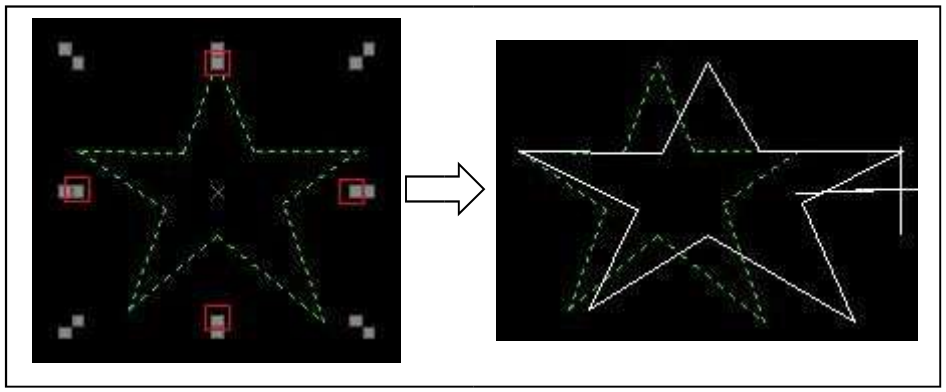
(Pic 30)

Scale: click any point marked in red as shown in picture 31, enters scale mode, click working area or input coordinates to assign scale factor.



(Pic 31)

Stretch: click any point marked in red as shown in picture 32, enters stretch mode, click working area or input coordinates to assign stretch parameters. Press ESC to exit quick transformation mode.



(Pic 32)

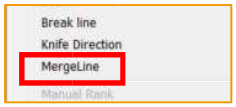
3.3.12 Delete drawing

Select drawing, click 【Delete】button, or press Delete key.

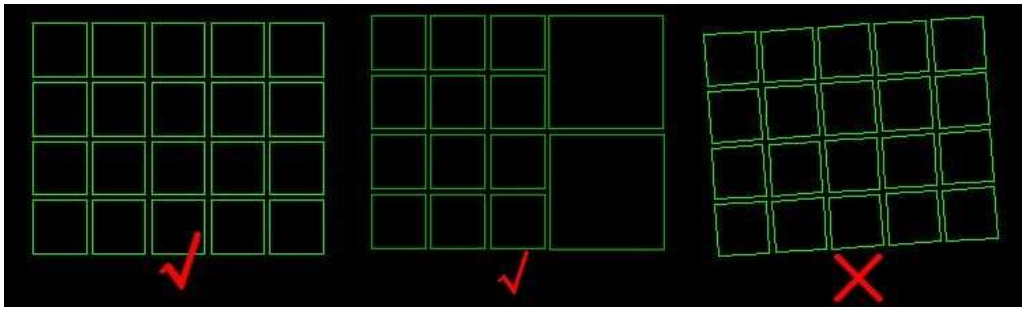
3.3.13 Combination/Disassemble

Select drawings wish to combine, click tool bar【Combination】button. Drawing combined can move, zoom, rotate etc. as an unity. Select combine drawing, click tool bar【Disassemble】button， can cancel drawing's combination property.

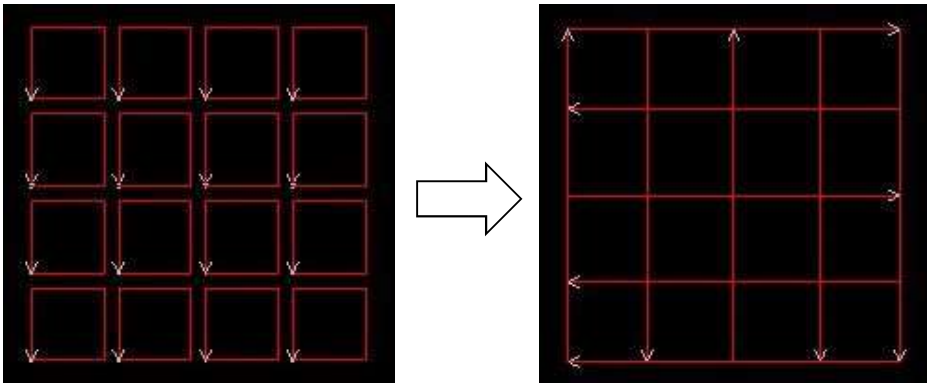
3.3.14 Merge Line



MergeLine function is used to merge lines nearby, for the moment this function can be used to no rotation angle rectangles.

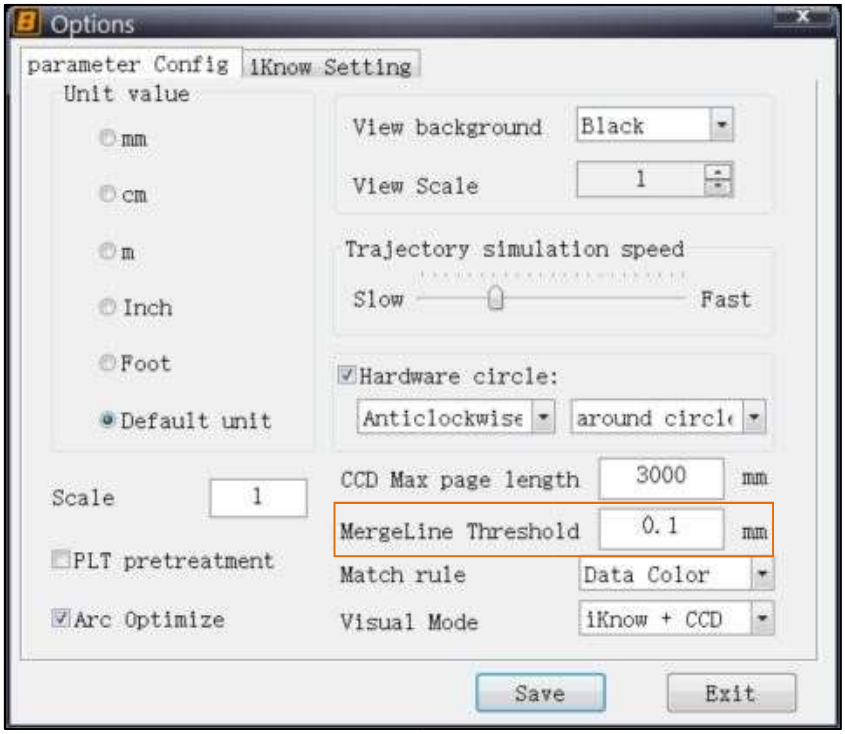


Method of use: right click popup menu and select【MergeLine】.



Before merging　　After merging

MergeLine threshold value is used to set max lines distance to merge. Menu 【Settings 】-【Option】-【Parameter Config】-【MergeLine Threshold】。

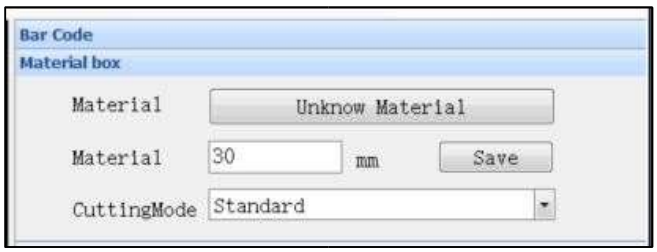


（Pic 33）

❖ NOTE：After mergeline, lines' position may change in range of threshold value. For example user set threshold 0.1, then software considers user can accept a tolerance within 0.1mm.

3.4 Material box

Select the material type before open the files -- unknown material have logging the data as known material in material box.

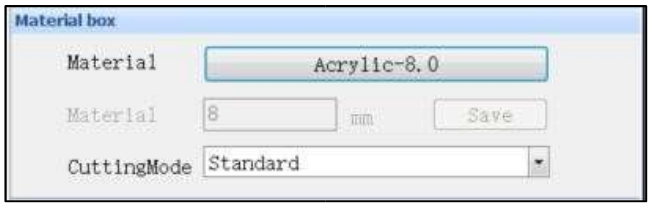


Click" OK" reset layers

Click " don't ask again" will no promote nest time

(Pic 34)

Select known material, after import file, not support to modify the material thickness, automatically matching the cutting parameters.

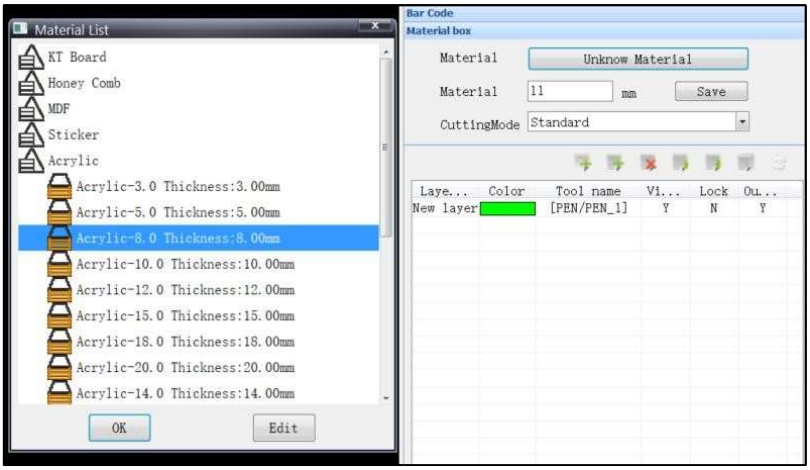


(Pic 35)

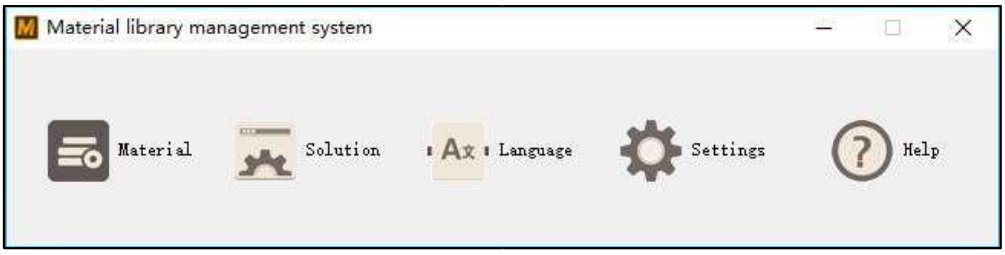
Support to modify the material thickness of unknown material, support to modify the material type, after switching the prompts are as follows

3.4.1 Edit material box

Click【OK】into material management system.



（Pic 36）



（Pic 37）

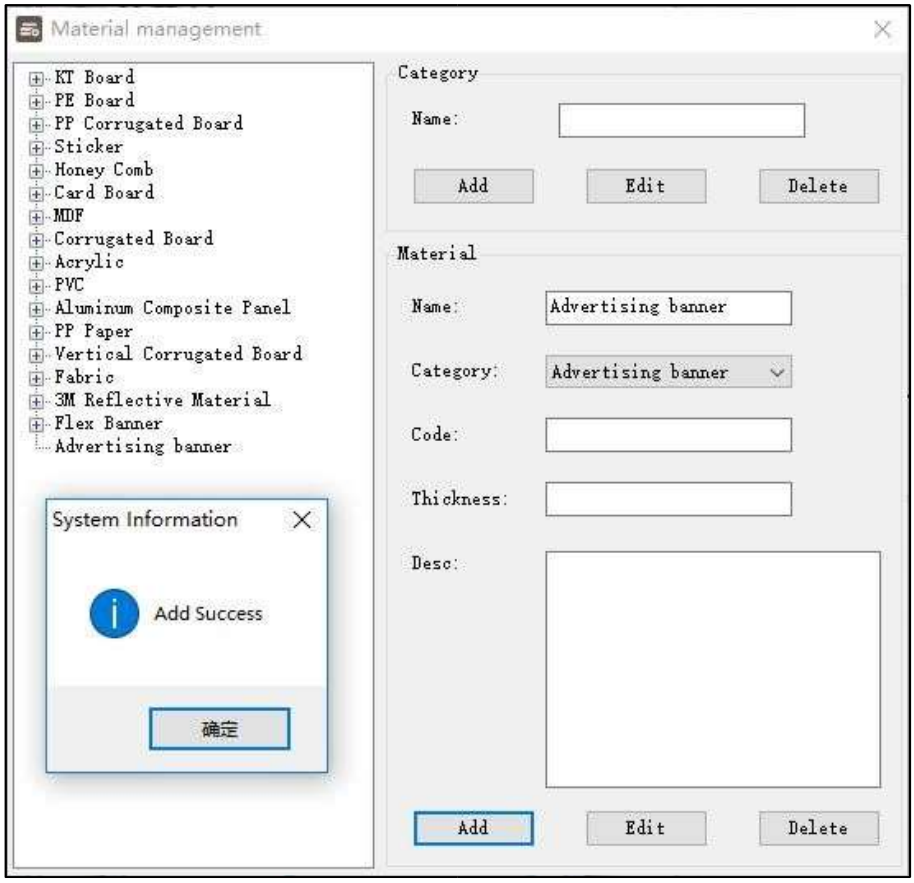
❖ Note： pass into the material management system, IBrightCut cannot be used separately.

Material management system function introduction：

- Material：

Establish material species， support modify and delete at same time. Operating steps：

click【material management】→enter category name→click【add】→enter material name → choose material classification → enter material code 、 thickness 、 specification→click【add】

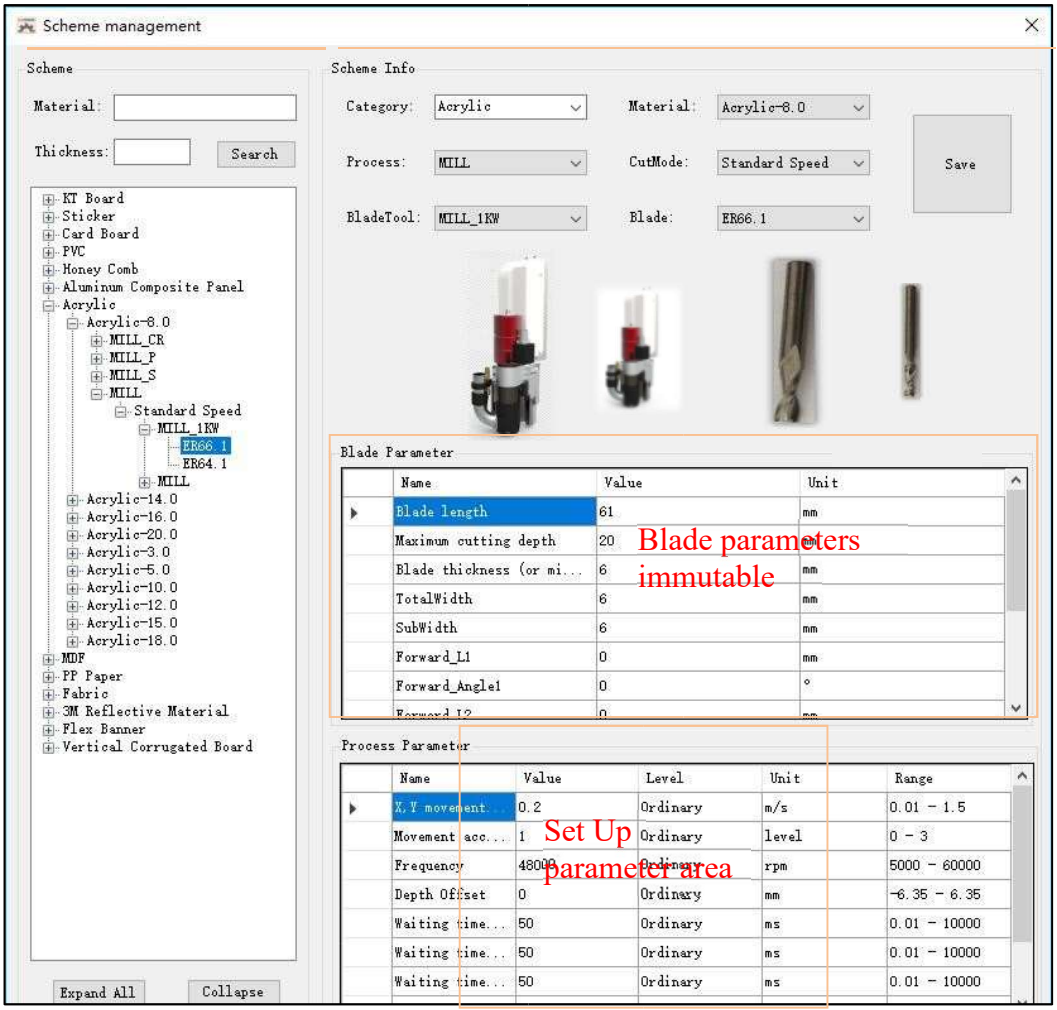


（Pic 38）

- Solution

Establishment of material cutting scheme is the core of material database. It supports the query of scheme at the same time, establishment of new material database and modification of material database scheme.

Project management interface　Pic 39



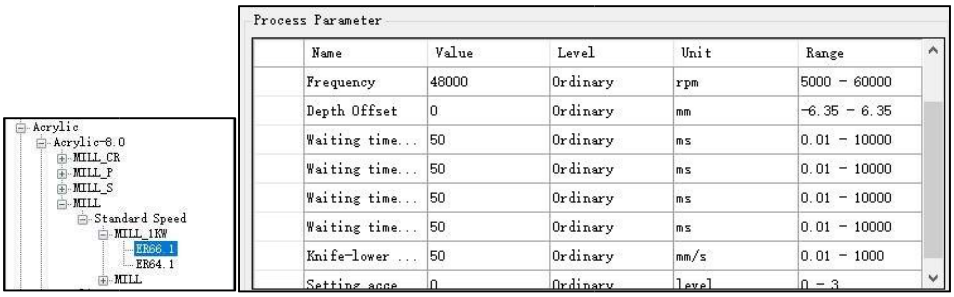
(Pic 39)

(1) Scheme search

Enter material，click【search】。

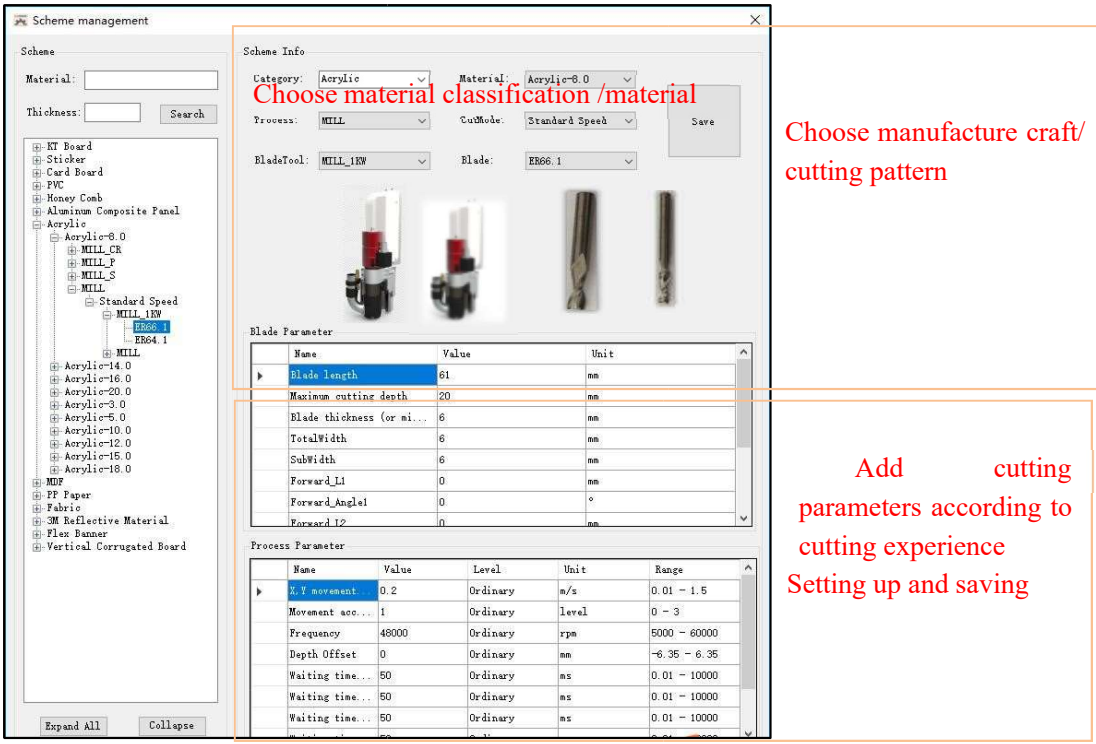
Enter thickness of material and click【search】。

Click the front symbol of ＋， can turn on the project directly



(2) Establish cutting solution

Establish cutting process tools and cutting parameters according to cutting experience.



(Pic 40)

Annotation:

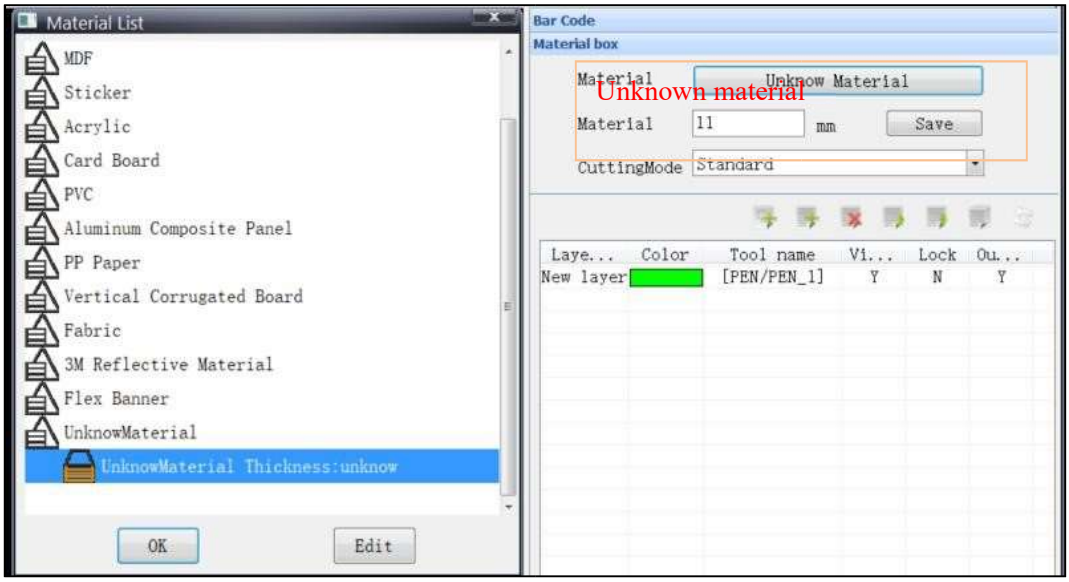
- Materials classification/materials: from 

set up materials species.
- Manufacture craft/tool/blade: choose according to the experience accumulated in actual cutting.
- Cutting pattern: same material can establish four different cutting pattern, high speed - set up top of the parameter ; standard - suggest the most commonly manufacture parameter ; ordinary - set up lower parameter; elaboration - advice set up high quality parameter.
- Automatic tool setting compensation: according to the different materials cutting process, automatic tool setting on the basis of deepening cutting depth.

3.4.2 Material library using

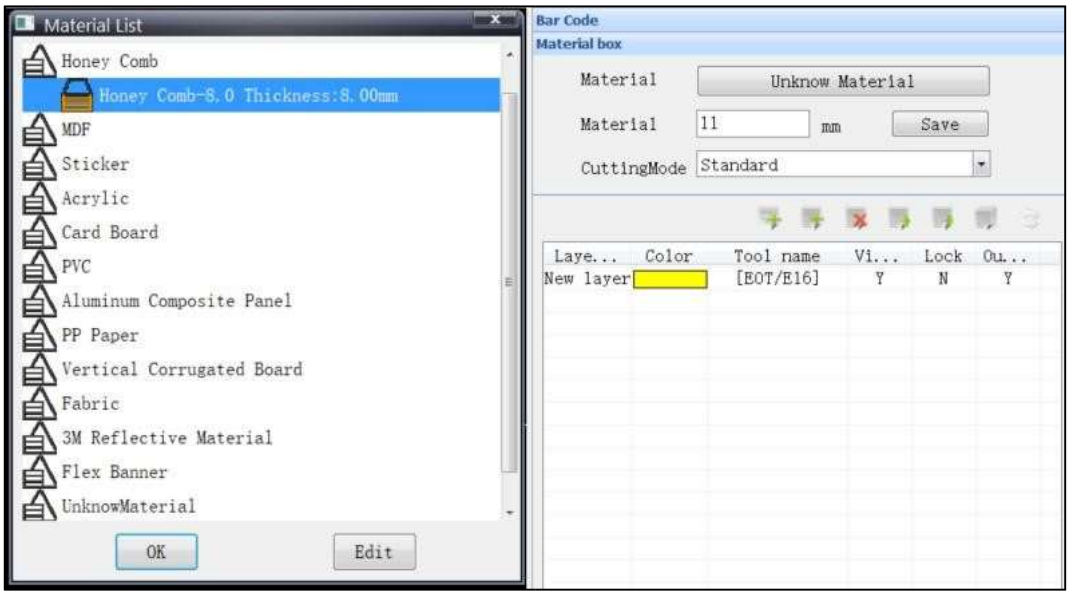
Parameter in the Material depot with CutterServer tool parameters relationship:

The first：IBrightCut choose unknown material，set up cutting parameters in CutterServer，CutterServer tool parameters is the real cutting parameters



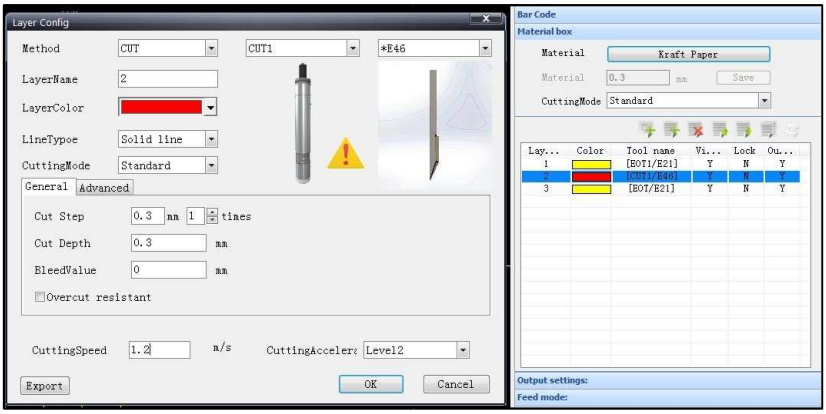
(Pic 41)

The second：choose material library cutting project，verify CutterServer global and tool parameter ≥materials depot parameter。Set up well cutting files，send and cut, carry out on the basis of materials depot set cutting speed ,acceleration, rotate speed parameters.



(Pic 42)

While choosing material depot cutting project speed as 1.2m/s slowly in actual cutting process, please check the whole speed and tool parameters whether the below than depot project speed in Cutter Sever.



(Pic 43)

3.5 Layer operation and layer setting

Depends on consumer actual demand， IBrightCut bring into"coverage" concept，provide convenient layer。


: Command layer function， include flip materials、tool setting, tool changing、turn on and turn off pump


: Add function

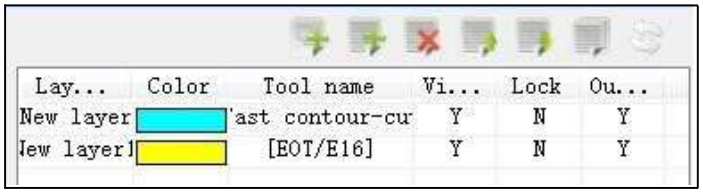

: Delete choosing layer function；


: Upward movement choosing layer function（layer order）；


: Downward movement choosing layer function（layer order)；


: Copy chosen layer function； 
: Overlapping layer function.

3.5.1 layer operation redact

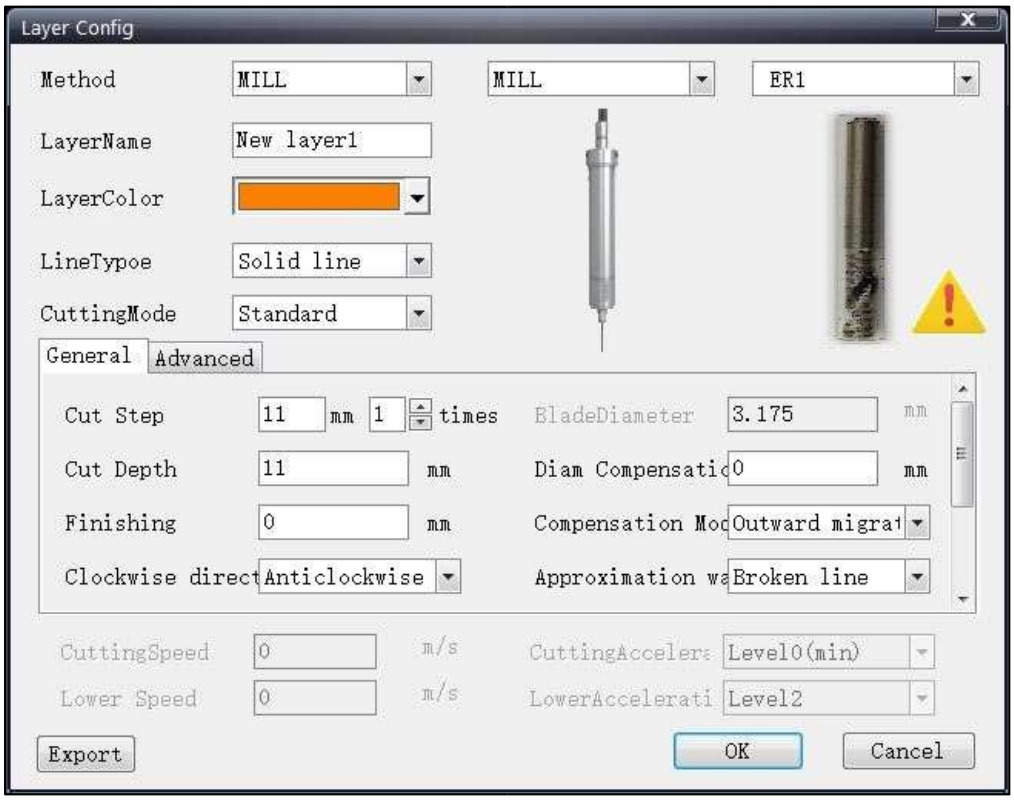


(Pic 44)

Visible, lock, output definition：

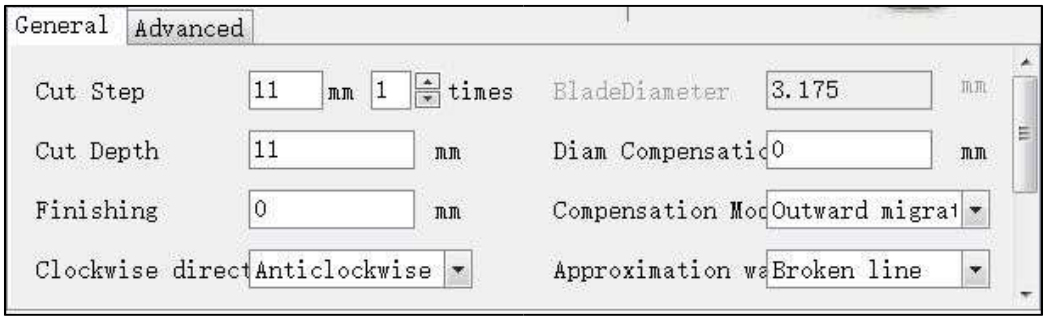
	√	×
visible	Display layer content in working area	Conceal layer content in working area
lock	Allow redact layer content	Forbid redact layer content
output	Allow layer content output cutting	Non output layer content

Double-click layer function pop-up【layer config】 dialog， Pic 45



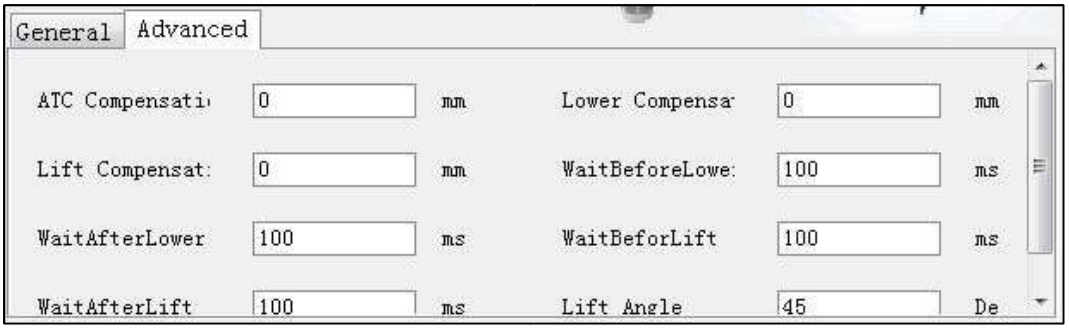
(Pic 45)

General setting drop-down content Pic 46：



(Pic 46)

Advanced setting drop-down content Pic 47：



(Pic 47)

Can modify in advanced setting:

① In-layer graphic processing technology、process tool（knife/pen/CCD） and blade;

② Layer name;

③ Layer color;

④ Cutting linear（imaginary line /dashed line）;

⑤ Choose suitable cutting mode;

⑥ In the case of the material library, set some cutting parameters in the layer and check the matching cutting parameters of the material library;

⑦ When using unknown materials， some parameters are not support when cutting parameters set in the layers.;

⑧ After finishing click【OK】

Tools parameters			
Processing method	**Processing tool**	**Parameter**	**Explanation**
CCD（positioning）	CCD (Camera Registration	Fast cutting	Identify marks automatically

		Accurate cutting	Identify marks automatically
		Cutting marks	Cut the identified marks
		Automatic edge detection	Detect the material edge automatically
		Manual edge detection	Detect the material edge manually
		Concentric cutting	Maintain raw data size cutting

Tools parameters

Processing method	Processing tool	Parameter	Explanation
MARK	PEN	(None)	
CUT	CUT EOT POT DRT	cutting depth	The max cutting depth to the material. Less than the material thickness.(mm)

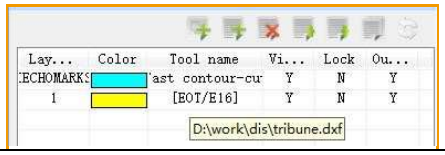
		Cutting step value	when [step value]=0 （Default） or =[cutting depth], knife goes down to the max cutting depth and complete the cutting in1 time； When [step value] < [cutting depth], knife goes down several times and complete the cutting in several times （cutting times=cutting depth÷step value），the last knife down is [cutting depth].
			Value range：0~[cutting depth]（mm）
		bleeding pattern	Control bleeding direction，value range：no bleeding；introverted bleeding；outward bleeding
		Bleeding distance	Control bleeding distance
		Prevent over cut	Cutting straight lines from both sides to the middle to prevent overcutting caused by blade width
MILL	MILL	Choose draft	MILL-，MIIL_CR-，MILL_S-，MILL_P-
		Choose blade	MILL-350，MILL_1KW-1KW

		Cutting step value	Match the cutting depth. If you need to cut in layers, you can directly set the number of cutting steps
		cutting depth	Corresponding materialthickness Semi-milling process：set depth semi-milling，less than actual material thickness Chamfering process： max cutting depth 4mm
		fashioning	Fashioning setting better absorption and prevent sample moving，general setting as 0.1-1mm
		Time direction	Clockwise/anticlockwise，effect cutting surface，changing by real effect
Tools parameters			
Processing method	**Processing tool**	**Parameter**	**Explanation**
MILL	MILL	Feeding process	Divided into non guide line, normal advance and retreat knife, tangent advance and retreat knife - straight line, tangent advance and retreat knife - curve, match the length of guide line, guide line radius and overlap amount
		Blade diameter	Milling diameter，Select the default blade diameter

		compensation	compensation values can be set and filled in according to thediameter
		Polishing(level)	Edge polishing data setting
		polishing （vertical）	Ground polishing data setting
		Compensation process	Select by the cutting requirement ： none compensate/inward excursion/ outward excursion
		Cut-in	Path of blade cutting corner data range： fold line/curve
		Drilling mode	Drilling mode set as if layer operation cutting normally； When the drilling mode is set to yes, all shapes in the layer will be converted into drilling holes, which are located at the center of the rectangle surrounding each figure
BEVEL	BEVEL	Cutting step Value	when [step value]=0 （Default） or =[cutting depth], knife goes down to the max cutting depth and complete the cutting in1 time； When [step value] < [cutting depth], knife goes down several times and complete the cutting in several times （cutting times=cutting depth÷step value） ， the last knife down is [cutting depth]. Value range： 0~[cutting depth] （mm）

		Cutting depth	The max cutting depth to the material. Less than the material thickness.(mm)
Tools parameters			
Processing method	**Processing tool**	**parameter**	**explanation**
BEVEL	BEVEL	Fashioning amount	None
		Fashioning or not	None
		width	
		V-cut mode	Value range：positive position；opposite direction；both
		V-cut correction	
		V-cut angle	

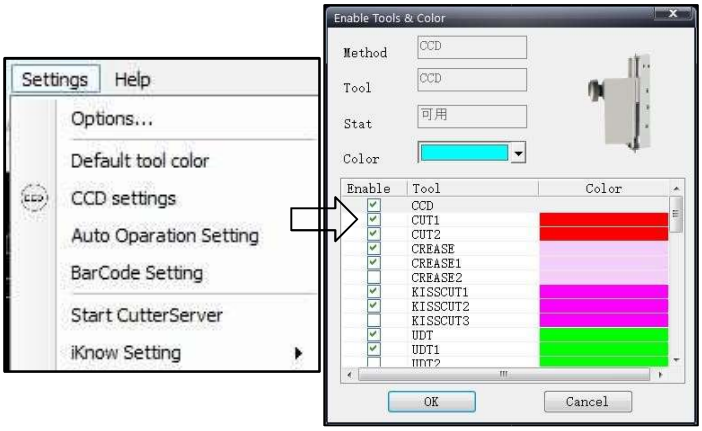
Put the cursor on any layer, you will see the path of the file. For example，put the cursor on CCD, you will see the file of CCD comes from F：\…*.dxf，



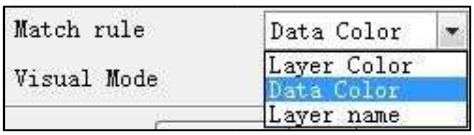
3.5.2 Automatic Knife/Pen Matching with Layers

iBrightCut can automatically match the knife and pen for cutting files. Currently it has the following matching regulations: Match by file color; Match by layer color; Match by layer name. We need todefine the tools colors when first using. Click

【setting】-【default tool color】



click【setting】-【option】， select the match rule in the menu bar。



① Match by layer color

Retain the original layer information, match the knife/pen according to the layers colors.

For example, set Cut1 in red color, the program will match Cut1 to the layers with red color.

② Match by file color

Ignoring the original layer information， iBrightCut will re-partition the layers according to file color, and match correspond knife/pen for the layers.

For example, set Cut1 in red color, the program will partition the red files in one layer, and match Cut1 to this layer.

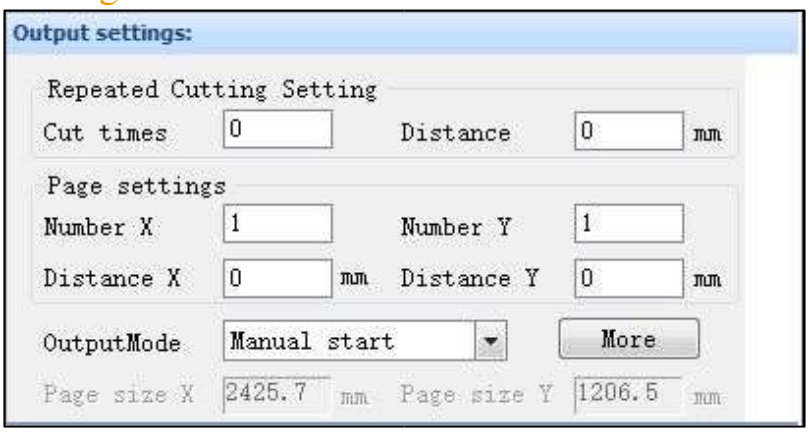
③ Match by layer name

Ignore the information of file color and layer color, iBrightCut will match pen/knife and color according to the layers names.

For example, Set Cut1 in red color, program will match Cut1 for the layers with name of Cut1, and set these layers in red color.

3.6 Format setting

3.6.1 Repeat cutting

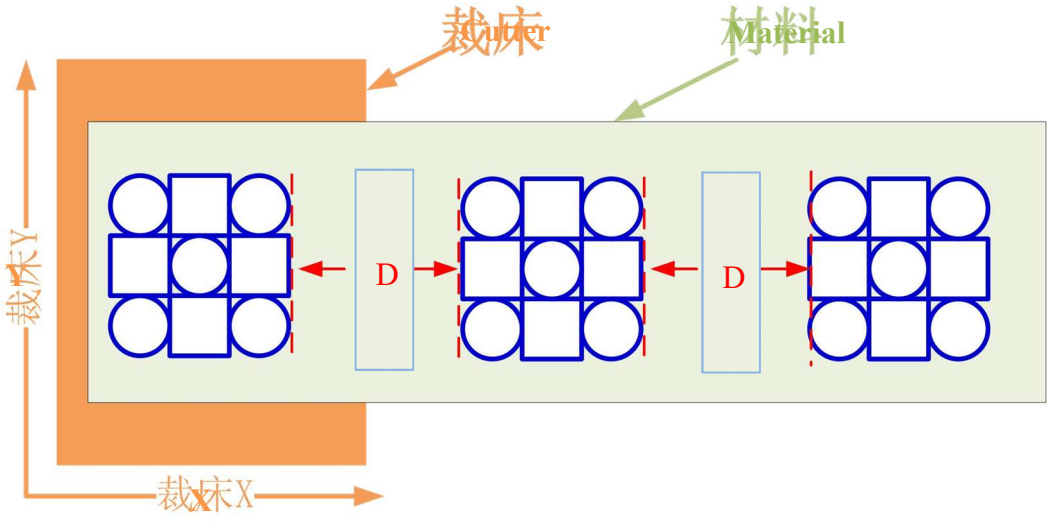


(Pic 48)

Repeat cutting times，"0"means none，"1"means repeat one time (two times cutting totally)

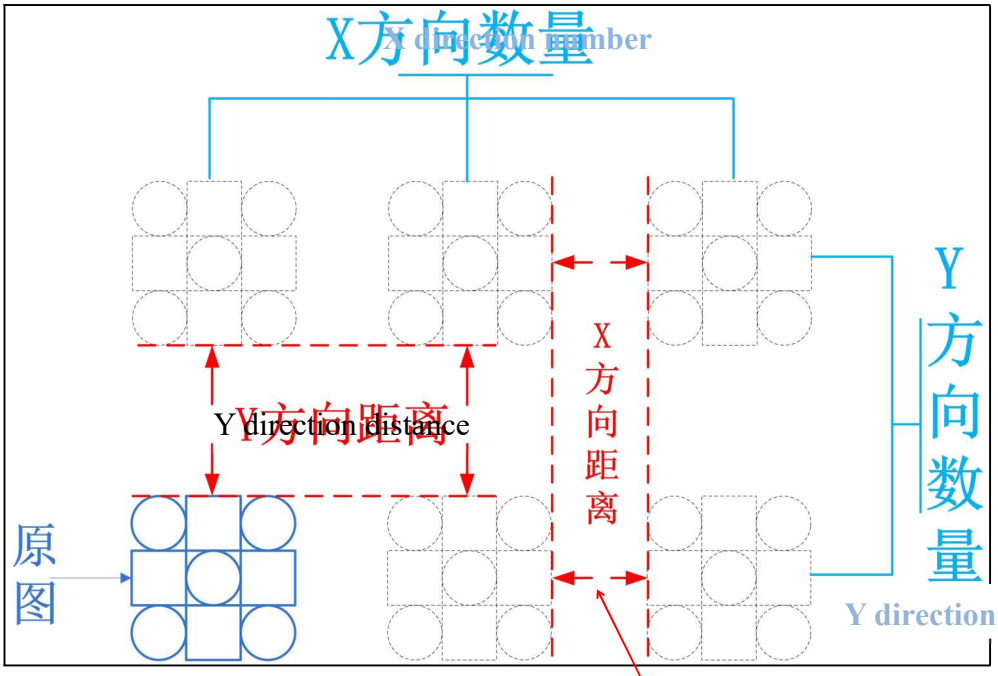
Page interval is a parameter that affect feeding distance. It works for repeating cutting of material rolls. The value is the distance between the two rectangles.（Set this parameter to a negative value when marker points are Shared，such as marker dark point diameter 6mm，the distance set as -6）

3.6.2 Arrays setting



(Pic 49)

X direction number 、Y direction number、X direction distance、Y direction distance are the relevant parameters of Arrays, please see the illustration below:



(Pic 50)

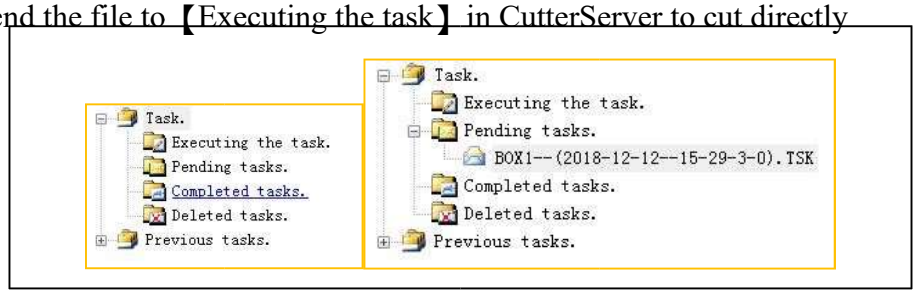
3.6.3 Task pattern

Three different task pattern specification：

①

Direct cutting

Send the file to【Executing the task】in CutterServer to cut directly



(Pic 51)

②

Manually cutting

Send the file to 【Executing the task】 in CutterServer，click  to cut.

Send file to “Pending tasks” in CutterServer

③

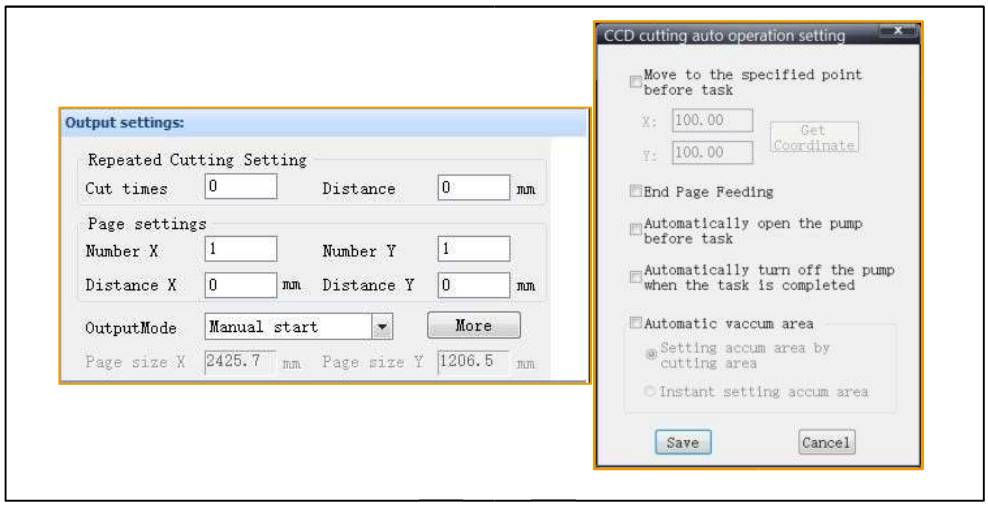
Send file to “Pending tasks” in CutterServer

Send the file to 【pending tasks】in CutterServer，waiting for user manual send task（casing cutting task not support this order）

Page Size X、Page Size Y are the outline size(Rectangular size) of the cutting graphic. It is calculated by the program automatically.

3.6.4 Contour cutting automatic operation setting

Click output set【more】insert into CCD cutting auto operation setting.



(Pic 52)

①

Add start contour cutting shortcuts

Add shortcut　Ctrl + Q，contour cutting scan directly。

②

Move the head to the designated point before the task starts

Move the head to the specified cutter coordinates before the start of scanning (or cutting). This function is suitable for manual laying and can ensure the same laying position

for each user, which can enhance the level of automatic and improve the production efficiency.

Usage: spreading material to the position of cutter, move the head that the red light is aligned to the first point of contour cutting (the non-contour cutting task is aligned to the cutting start point), click "get coordinates" button to read the coordinates of the current position, and click "save". Cut with a key set of keyboard shortcuts, automatically send task, set the docking stations, the function such as automatic on/off pump use effect best, after activated set of shortcuts: pump automatically open, the camera automatically on the cut set of the first point and start scanning, and automatically sent after the completion of the task and start cutting, automatically shut down after the completion of pump and will head to cutter tail spread is expected to wait for the user.

③

Tail automatic pay-off

Automatic pay-off the last task of Contour cutting （non click this function, the last page will stay on the cutter plate rather than automatically pay-off re-cutting task. ）

④

Automatically turn on pump before task start

turn on pump before scanning (or before cutting). (known issue: if pump has already turning on before scanning, the pump will turn off automatically.)

⑤

Automatically turn off the pump after task finished.

Automatically turn off the pump after contour cutting finished （known issue： this function may turning off the pump before cutting task finished in earlier than 2016 DSP version）

⑥

Automatic individual gas area control system - select cutting area to set up gas area control in contouring cutting task， automatically turn on the gas area control which the position of contour cutting material, turn off other area without material position.

⑦

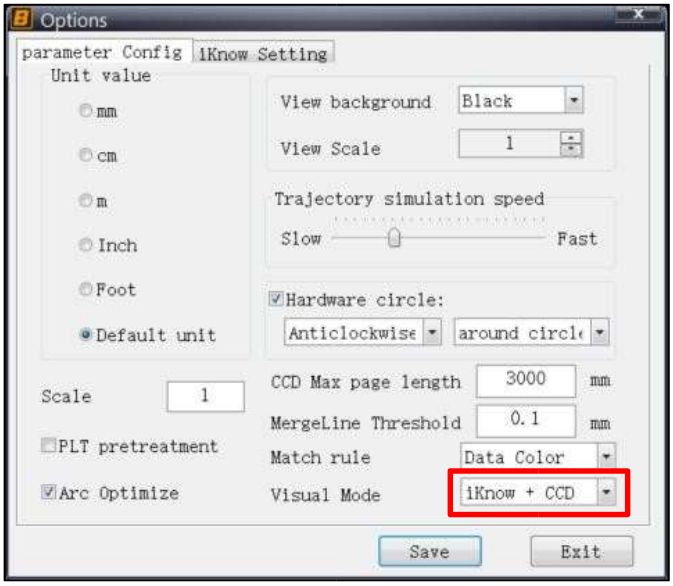
Automatic individual gas area control system- select instant cutting and turning on gas area control in contour cutting task, automatically turn on the gas control position right now.

3.7 i Know Module

iKnow module as the iBrightCut vision application module in advertising industry, the main impact to photo and recognize the material code is to acquiring file.Guide the CCD scan the point automatically on the materials.

3.7.1 Set iKnow parameter

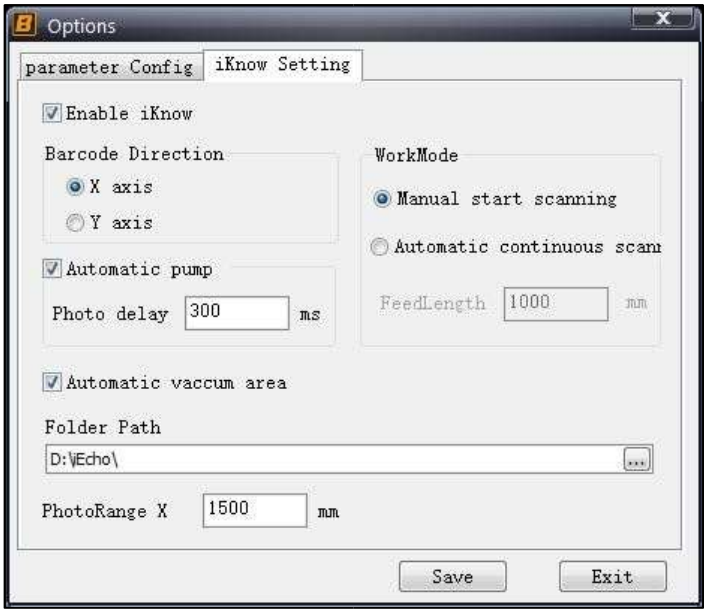
Click 【setting】 - 【options】, select【visual mode】as iKnow +CCD



(Pic 53)

After setting, click iKnow setting, select enable iKnow. Depends on direction of X and Y axis bar code position design, choose bar code direction setting.

Select working mode (manual or automatic) depends on cutting demand, select automatic pump,automatic vacuum area, set up photo range, choosing folder path



(Pic 54)

After setting finished,, click iBrightCut， start scanning and cutting。

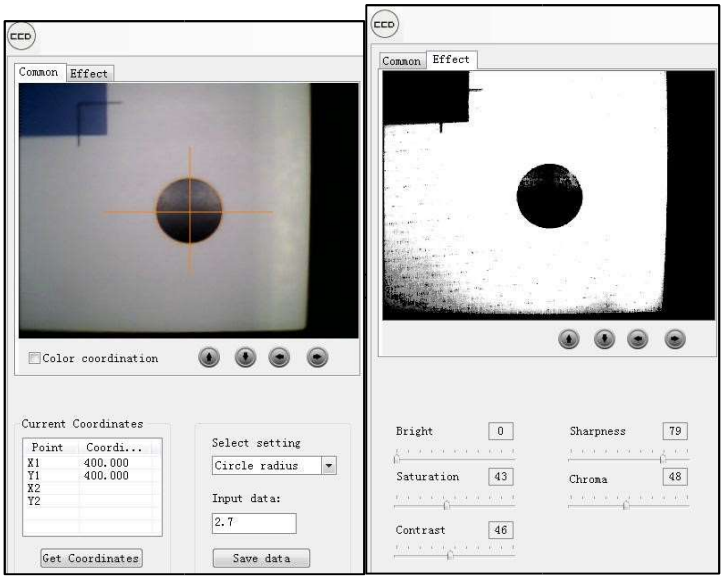
3. 1 **Camera**

Camera mostly using in CCD and effect the precision about cutting directly.

After software installation, the most needed testing parameter in iBrightCut is CCD. Resetting the software, CCD parameters will not be instead of the uploading software without non unload condition. No need to adjust the parameters after rein-stalling the software. If installation software after unloading need to reset the CCD parameters.

3.7.2 Camera function

1 Click  into CCD debugging parameters， click effect change CCD identify locating point contrast

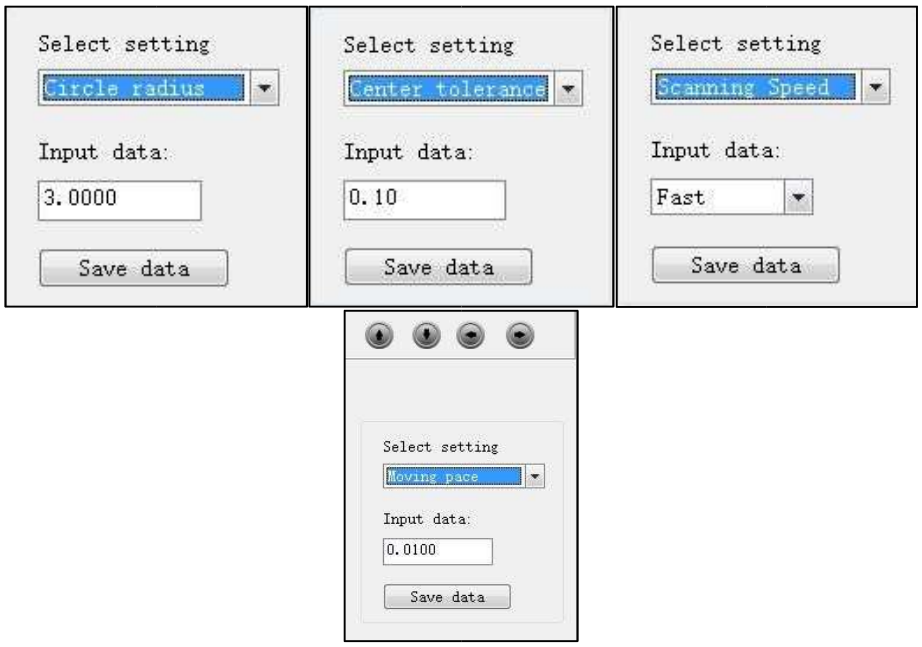


②

Change CCD decided circle radius，normal requirements for circle radius 3mm；

③

Set center tolerance as 0.1mm，select scanning speed as fast, also can set up other data. Moving pace setting under the CCD screen four button moving speed, can set up different data with the real demand.



(Pic 55)

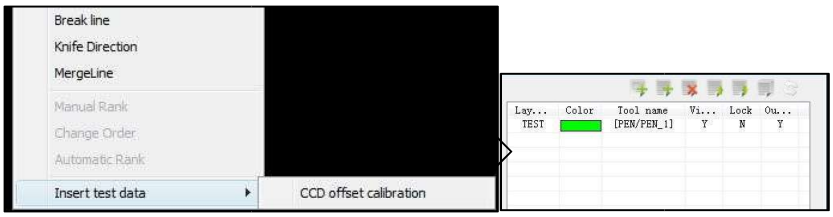
3.7.3 Camera precision

Adjust the distance from the camera to the material surface before adjusting the accuracy of the camera.

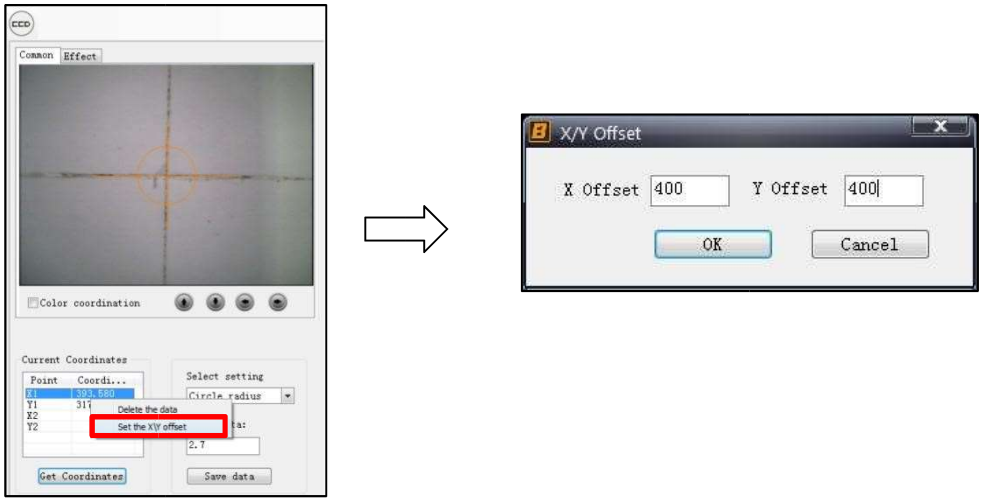
(Pic 56)

①Adjust 400*400 parameters

Right-click on the software，select insert test data，software set up automatically changing 400*400 cutting parameters, the cutting file can using changing the tools eccentricity parameters at same time；



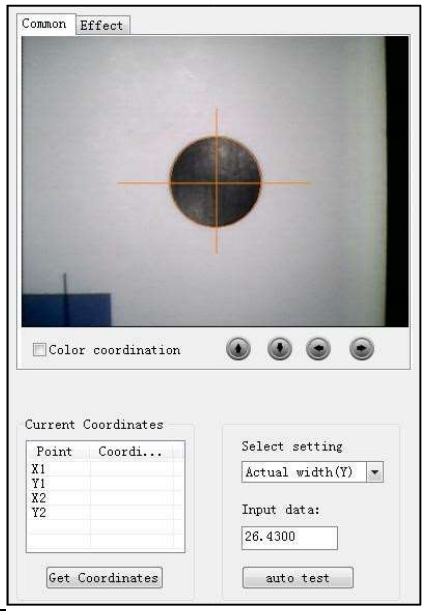
After cutting transmission，gain the X/Y central coordinate，right-click selection set x/y offset，set X offset as 400，Y offset as 400，save；



②

Adjust camera width and height， choose actual width (Y) in select setting,， click auto test, software cutter will automatically detect width and height through the 6mm black locating point, click “OK” after detection.

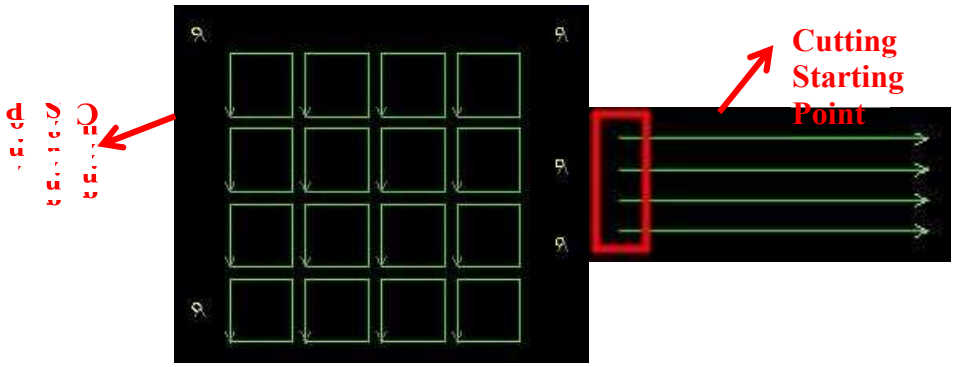
❖ Tips：in CCD interface， move CCD can through the stride button or double-click interface directly.



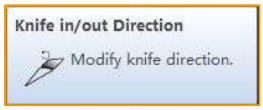
(Pic 57)

3.8 Cutting Starting Point / Cutting Direction Settings

Click  ， show all the cutting starting points and cutting directions on the visible layers. For closed graphics, the arrows are the starting points. For non-closed graphics, the points without arrows are the starting points.



Change cutting direction：



Select the graphic， click【kinfe in/out direction】button， the selection graphic direction will be modified.

❖ Note: For non-closed graphic, the starting points will be changed after changing the cutting directions.

Change the cutting starting point for closed graphics(except circles)： double click the graphic ， click on one point （the point will turn red） ， right click the red point, then click [Knife Point], the point will be set as new cutting starting point. 。

Change the cutting starting point for circle graphics： double click the circle to select it， then double click any point on the circle to complete and exit.

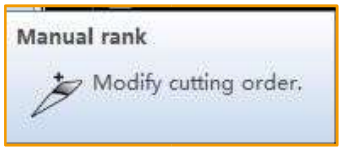
1. Change cutting direction]It does not work to the layers who have router configuration. To change router cutting direction, please see 3.4.2

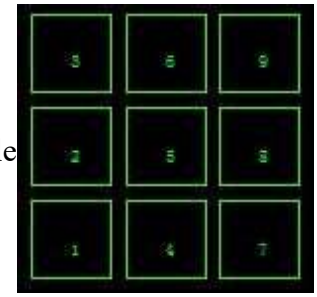
3.9 Cutting Order Settings

3.9.1 Automatic rank

Select automatic rank needed graphic, right-click menu select【automatic rank】

3.9.2 Manual rank

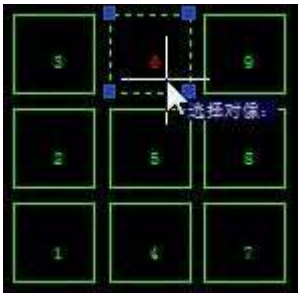


For example 

click【manual rank】button， the unlocked visible graphics with cutting sequence will be shown at the workplace.

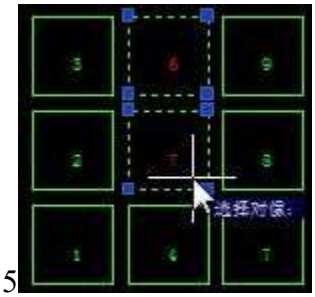
, If we exchange the cutting order as

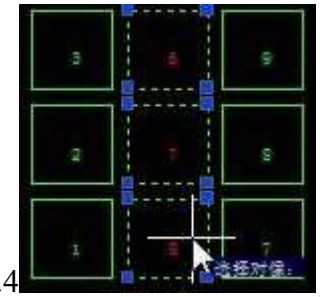
， First click to select Photo NO.6



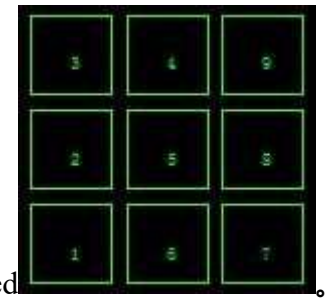
，序号

Sequence No. Change from green to red color； Click to select photo No.

5 

， Sequence No. Change from Green to Red color、 from"5" to"7"； Click to select photo No.4 

， Sequence No. Change from green to red color、 from"4"to"8"； Right click at working area, pop menu, and select 【Manual rank】 

， Rank finished 
。

3.9.3 Change order

Select the two shapes whose order need be changed. Right click menu and select

【Exchange order】

In IBrightCut, The cutting data is preferentially output in the order of the layer, and the priority of [nest] is lower than the priority of the layer order. Such as 

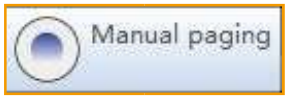
Since the layer “0” is at the top, the cutting machine will cut the red figure 5~16 first, then cut the green figure 1~4.

Only when 2 graphics are selected, the right-click menu [Exchange Order] is available; only when 2 or more graphics are selected, [Automatic nesting] is

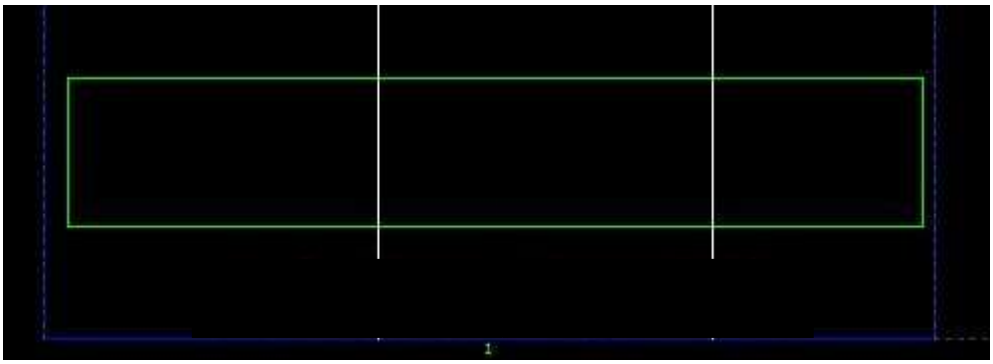
available; only after clicking the [Manual nesting] button,  right-click menu [Manual nesting is available.

3.10 Other setting

3.10.1 Manual paging



Click the [Page Preview] button on the toolbar, enter the page length (mm) on the keyboard and press Enter. The data will be divided into multiple pages according to the length of the page.

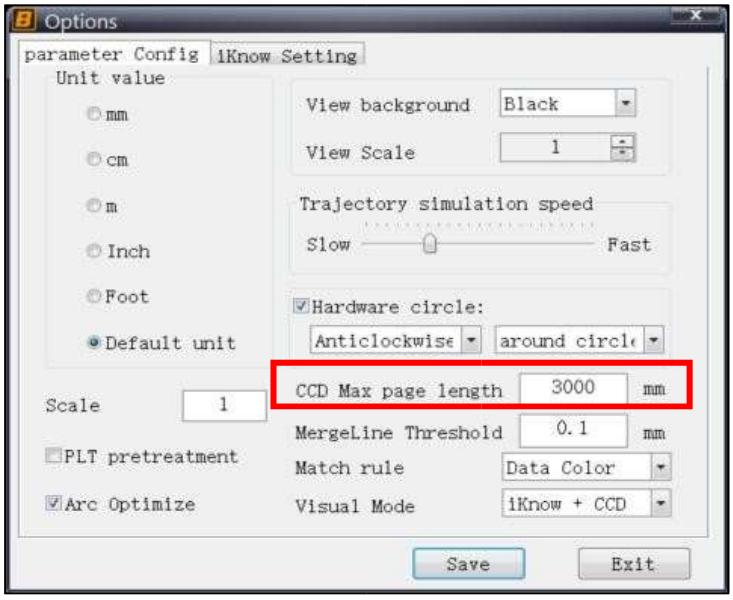


(The white line is the page preview line)

(Pic 58)

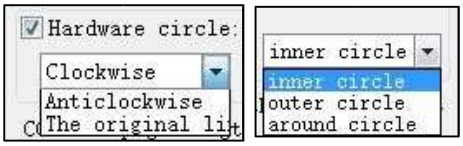
3.10.2 Automatic paging

The automatic paging is the maximum page length of by CCD contour cutting, and setting this parameter reasonably can avoid the Alarm that the cutting range is exceeded during the super-long cutting task.



(Pic 59)

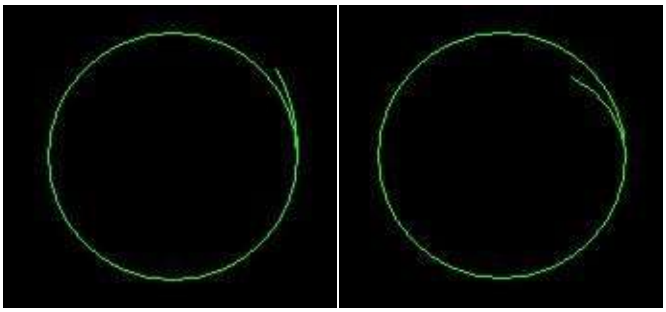
3.10.3 Hardware circle



By default, IBrightCut outputs discrete circles. In the [Settings]-[Options] interface, the output hardware circle is checked. IBrightCut will output continuous circles to avoid the machine from getting stuck when the circle is cut, improve the cutting efficiency of the circle and optimize the cutting efficiency.

Clockwise/Counterclockwise: Used to rotary direction of the hardware circular cutting.

Retain inner circle / retain outer circle / retain inner and outer circle: used to set the direction of the hardware circular guide line. When the inner circle is retained, the guide line is outside the circle. At this time, the inside of the circle is intact but the outside will be destroyed; the guide line is reserved when the outer circle is retained. In the circle, the outside of the circle is intact but the inside will be destroyed; when the inner and outer circles are kept, the guide line is on the circle, and the inside and outside of the circle are intact.

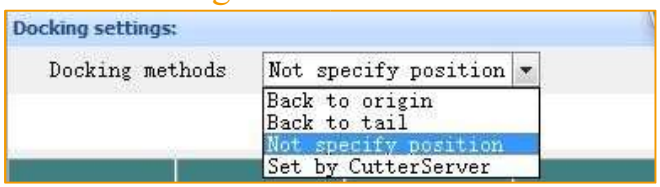


Retain Inner circle Retain outer circle

1	The hardware circle will be added with a guide line only if the tool's "distance between front blade tangent point and rotary center " or "distance between blade rear and rotary center " parameter is not 0. When the "distance between front blade tangent point and rotary center" and "distance between blade rear and rotary center" are both 0, the guide line will not be added regardless of whether the inner circle is retained or the outer circle is retained.

The distance between former knife point to rotation origin
The distance between later knife point to rotation point

3.10.4 Dock setting



Set the docking position of the head after cutting according to requirements.

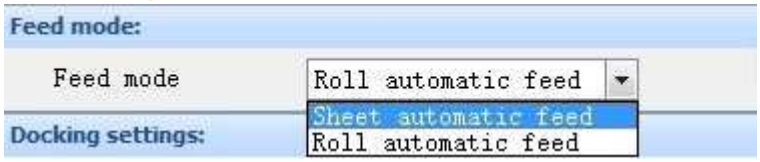
Initialization: When cutting task completed, the machine head returns to the original starting point.

Back Tail: When cutting task completed, the machine head returns to the diagonal position of the original starting point.

No specified docking position: the head does not move aftercutting, and stops at the position where the cutting is completed.

Set by CutterServer: The software will record the temporary docking pointspecified by CutterServer and return to that position after cutting.

3.10.5 Feeding mode



Set the feeding method as per needs. This parameter takes effect only when cut with CCD Camera. If not, the feed length is determined by the CutterServer setting.

Feeding Model detailed explanation

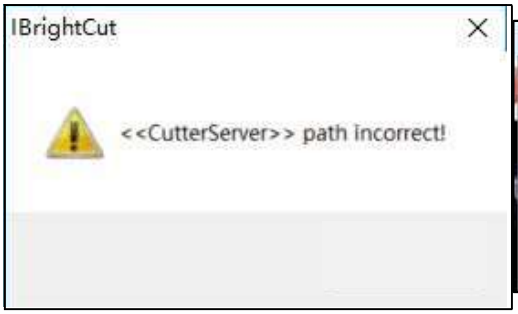
Rolls Feeding: Feeding length= cutting length(for repeat cutting, feeding length=cutting length + page distance)
Setting for CCD overlength paging offset, please refer(4.5.1 overlength CCD Cutting) (4.5.1 overlength CCD Cutting)

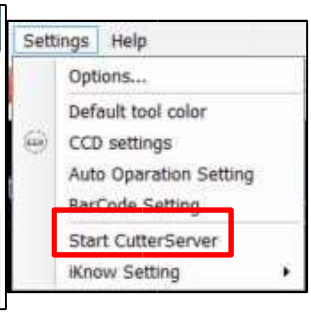
Sheet feeding: Feeding length= Cutting table length.

Manual Feeding: Click  to feed material, Feeding length is controlled by setting in Cutterserver.

3.10.6 CutterServer association

When IBrightCut is firstly used,it need to be associated with CutterServer. If there is no association, a dialog box will pop up indicating that the CutterServer path is incorrect, as shown in Photo 60. Click [OK] to exit the dialog box and click [Settings] - [Start CutterServer] in the menu bar, as shown in photo 61.

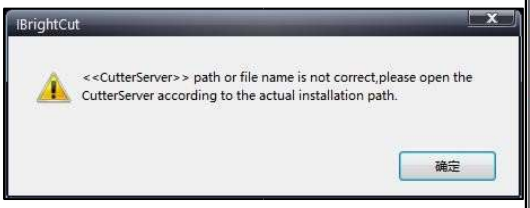


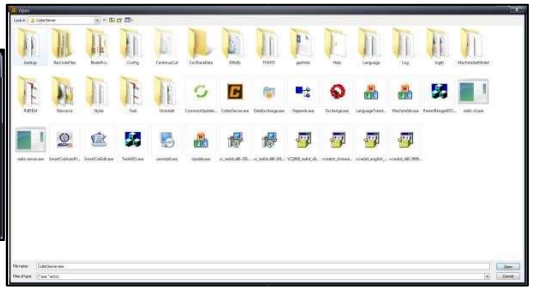


(Pic 60)　　(Pic 61)

Running the CutterServer, the prompt dialog box will be shown as Photo 62, click [OK]. At this time, the pop-up dialog box will be shown asPhoto 63. To specify the path of CutterServer, find and select the CutterServer.exe file, click [Open (O)], CutterServer and IBrightCut will be successfully associated.

This operation only needs to be done when the IBrightCut is used first time or CutterServer path is changed. Afterwards, IBrightCut and CutterServer will run automatically without any more re-association.

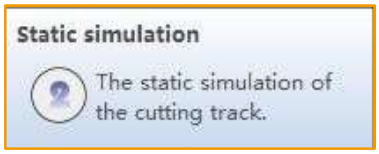


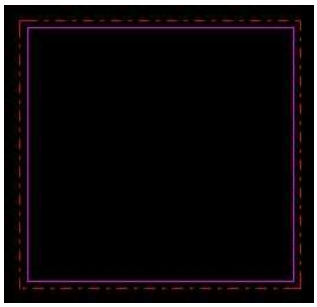


(Pic 62)　　(Pic 63)

3.11 Cutting simulation

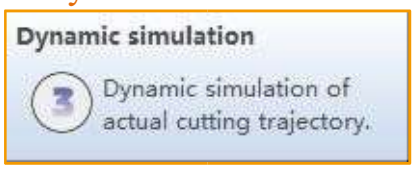
3.11.1 Static simulation



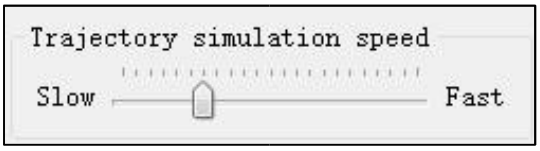


The toolbar button [Static Simulation] can be used to statically simulate the cutting path of milling tool after laid or bleeding. Press the keyboard ESC to exit the track simulation state. The purple rectangle shown in Photo 64 is the original path, and the red dotted line is the simulated actual cutting track. Press ESC to exit the track simulation state.

3.11.2 Dynamic Simulation



(Pic 64)



(Pic 65)

The toolbar [Dynamic Simulation] button is used to dynamically simulate the cutting path according to the cutting order, and press the keyboard ESC to exit the track simulation state. The simulation speed is adjustable. Open the menu bar [Settings] - [Options] and drag the "Track Simulation Speed" slider to adjust the simulation speed.

3.12 Interaction with CutterServer

3.12.1

IBrightCut could communicate with CutterServer after associate with it.(Association method pls refer 3.11.6)

In the interface ofIBrightCut, Press ↑↓←→could move the head, if it doesn't work, check if there is any popup warning from CutterServer.

The buttons  could control the machine directly. Press  to send present task to CutterServer, the interface will change from IBrightCut to CutterServer automatically, and will change back after task finished. Click  could change to CutterServer interface manually.

If the tool configuration is changed in CutterServer, the tools in IBrightCut will changed automatically.

(Pic 66)

The blue square of the IBrightCut workspace will be automatically updated when the tool configuration is modified in CutterServer.

3.12.2 Shortcut button function comparison list and shortcut keys

Shortcut	Function
	Open: Clear present data and open a new data. Alternative : Menu [File]-[Open]
	Save: Save the data and output parameters as *.brg format, the saving path is same with present data. Alternative : Menu [File]-[Save]
	Copy: Copy selected pattern to pasted plate. Operation: Selected the pattern, then click this button. Alternative : Menu [Edit]-[Copy]; Right click [Copy]
	Paste: Put the data into working zone from pasted plate. Operation: Click this button after copy finished, click in the working zone or input the coordinate for paste. Alternative : Menu [Edit]-[Paste]; Right click [Paste]
	Revoke: cancel last step and back to the previous state. Alternative : Menu [Edit]-[revoke]

	Redo: Cancel last revoke, and reduction to previous state. Alternative: Menu [Edit]-[cancel]

Shortcut	Function	Shortcut	Function
	Move		Delete
	counterclockwise rotate 45°		clockwise rotate 45°
	counterclockwise rotate 90°		clockwise rotate 90°
	180°rotate 180°		rotate freely
	X Mirror		Y Mirror
	line Mirror		Zoom
	Point edia		Draw rectangle

	Draw circle		Draw PLine(poly line)
	Graphic transform		Break line
	Add point on Pline		delete point from Pline
	Close selected Pline		Combination

Shortcut	Function	Shortcut	Function
	Resolve		Simulate cutting direction
	Milling simulation of cutting track		Dynamic cutting simulation
	Paging Preview		Measure
	Alter cutting start point)		Change cutting order
	Modify the cutting direction		Connection line

	Add points on Pline		CCD parameter setting
	CutterServer Shift to CutterServer		

Frequently used functions shortcut			
OPEN	Ctrl+O	**Turn on/ off pump**	Ctrl+P
save	Ctrl+S	**CCD Cut**	Ctrl+Q
select all	Ctrl+A	**Put selected graphic to original point**	1
copy	Ctrl+C	**clockwise rotate 90°**	2
Paste	Ctrl+V	**clockwise rotate45°**	3
CUT	Ctrl+X	**X mirror**	4
Cancel	Ctrl+Z	**Point edit**	Double click figures
Redo	Ctrl+Y	**Move working area**	Long press and drag
		Zoom working area	Mouse wheel

Chapter 4 Contour Solutions

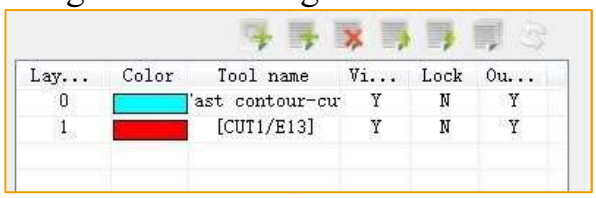
The last chapter introduced all kinds of output settings, which will directly effect the final cutting type. Here are several basis types of cutting.

4.1 Quick contour cutting and precision cutting with CCD Camera Quick

contour cutting and precise contour cutting literal meaning:

Quick cutting speed is faster

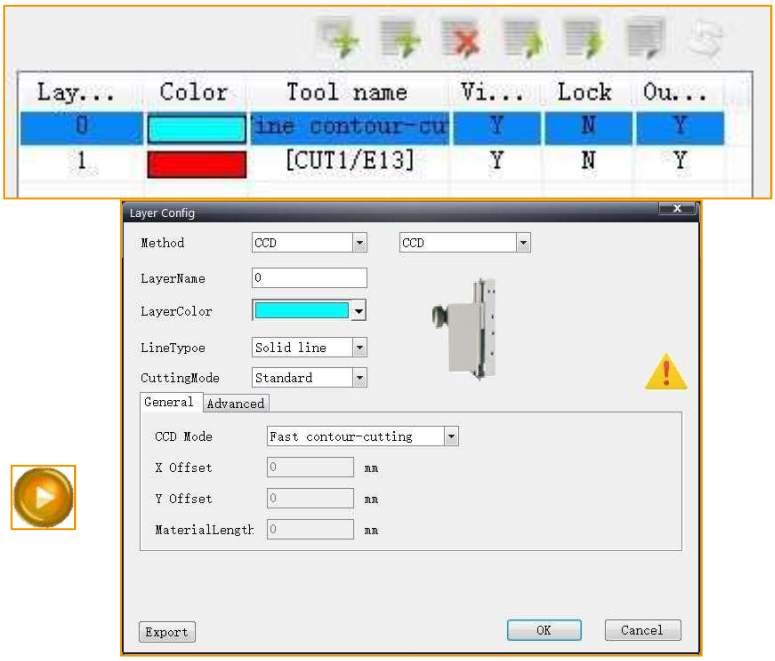
Precision cutting accuracy is higher.



- **Quick Contour Cutting**

Open the cut file and place the marker layer on the top. It will popup layer configuration dialog after double-click mark layer, Please set the cutting type as [Quick contour cutting] and then set the rest pen and tools parameters layers and click the cutter control bar button to start the quick cut.

- **Precision Cutting**



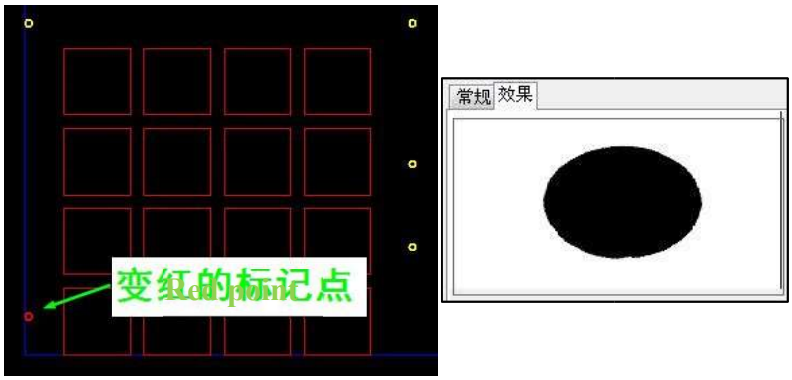
Open the cut file and place the marker layer on the top. It will popup layer configuration dialog after double-click mark layer, set the cutting type as [Precision contour cutting] Set the rest pen and tools parameters layers and click the cutter control bar button to start the quick cut.

The program will be operated to find

the points firstly, it will change to CCD control panel on output area automatically. At this time, the former yellow point will be changed to red (refer to photo 67). This red point is the first point for deformation cutting.

Adjust the camera position and makes the first point into the camera shooting range. Adjust CCD color to make the effect much clear in the selected

marking point (refer to photo 68).Click this button  on the bottom of CCD screen to recognize the marking point.



The marker becomes red (Photo 67)

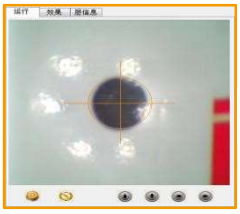
(Photo 68)

After recognizing the first point, the camera will move to the next point automatically. The recognized and being recognized points will be marked in green(except the first point), the points that are not recognized cannot change the color.

It will appear a new graphics in a place on the working area after recognizing all the points, it is the final cutting file for contour cutting, which will be sent to CutterServer for cutting.

Tips: Sometimes, because of the angel of locating or light factors, the program cannot recognize the next point. I t will popup this

window , click (Yes), adjust the location of

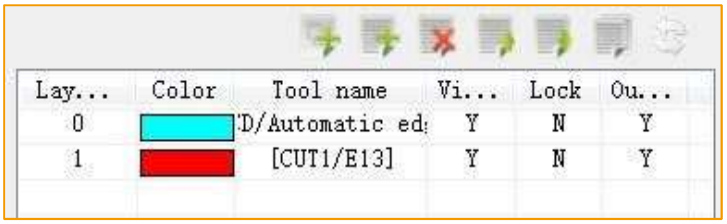


camera manually, make the cross center be same with circle ,click the button  continue recognition.

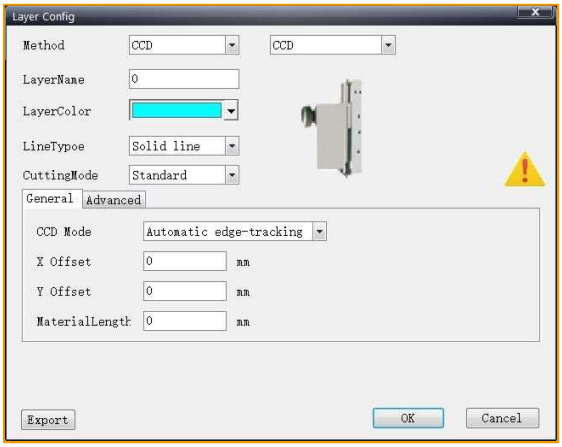
centerbelow the screen to

If you cannot accept the recognition point, can click below the CCD screen. This operation will clear all the information during this cutting. Camera will returns to the first marking point automatically waiting for next instructions. At this time, click below the screen, recognize the points again, or click to quit this cutting.

❖ Tips:When start contour cutting, CutterServer will activate red light automatically. Please do not manually change the cutting tool, or the contour cutting may be not inaccurate.



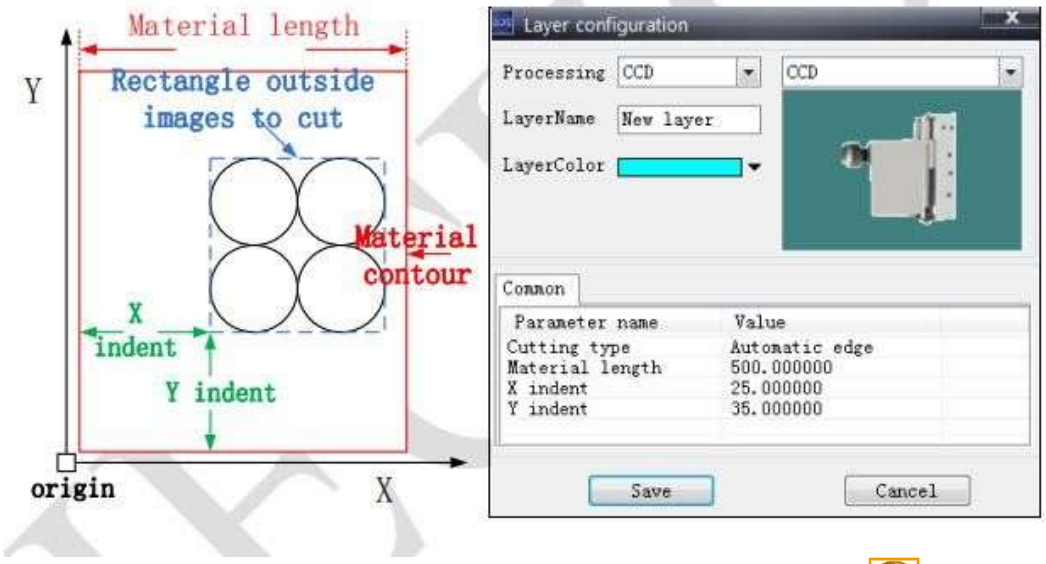
4.2 Edge Contour Cutting



Edge contour cutting can be divided into Automatic Edge and Manual Edge.

Open the edge contour cutting file create a new layer then put it on the top. Double click marking layer, choose the contour cutting type to be Automatic Edge or Manual Edge. After setting cutting parameter, please click button to start edge contour cutting. Compared to contour cutting, the position layer of edge contour cutting is empty(no data for marking points). Material length, X intent and Y intent are the main factors for edge contour position. Length of camera for edge contour depends on the material length. X and Y intent depends on the relative position between cutting pattern and material boundary.

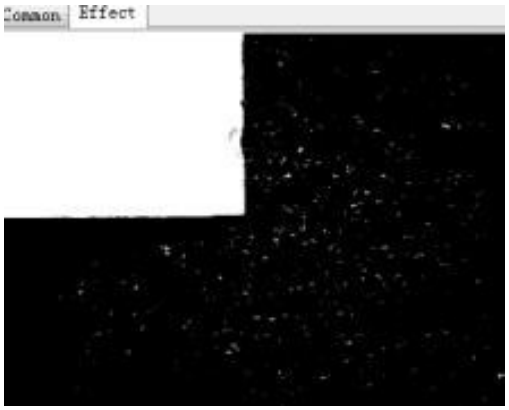
After



to start saving the above parameters, click the control button edge cutting. When contour cutting, the program can mark the first position point, while no information for edge contour cutting. Therefore, how can we know the first point on edge contour cutting? According to Ibrightcut working area, put the cutting material on the cutting table, the nearest material to original of cutting table is the first point.

When automatic edge contour cutting, adjusting the camera position to make the first point into camera range, adjust the CCD color to make the material in the effect contrasting with the color of felt.

Click on CCD screen, the cutting machine will recognize the edge of material with X axis of machine.



When manual edge contour, adjust the camera position in the screen to make the cross center aligning to the first point, click in CCD screen, the button

will become , move the cutting head along X axis, adjust the camera position to make the cross center in the screen aligning to any point of material edge, click to find the second point(Only two points are required for manual contour. The larger of distance between the second point and the first one, the higher the accuracy will be.)

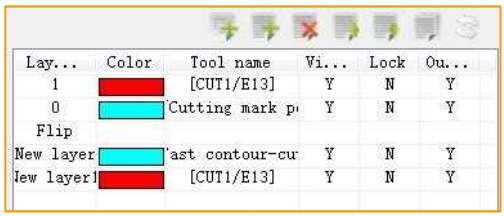
Similar to contour cutting, after finishing , it will create a new graphics in the working area as the final cutting.

During automatic edge contour, if the program cannot recognize the edge of material automatically, please adjust the camera position and click  , specify material edge. Compared with contour cutting, after manual position, the program cannot continue to recognize the edge, it will create the final cutting data. Therefore, if fail to automatic contour, please adjust it by hand, in order to improve the location accuracy, please try to locate the farthest point to the first point.

4.3 Cutting markers

The cutting points are used in reverse contour cutting. For printed materials, in general, we put the patterned side of the material on the cutting surface, and the reverse cutting is to turn the material along the X axis and make printed side downward.

Cutting marking layers are required when using reverse contour cutting. Reverse contour cutting



Layer 1: the layer is empty, please choose cutting tool and establish a layer.

Layer 2： Set cutting the marker points as the positioning layer

Layer 3: Click button  to add commanding layer (to turn over the layer)

Layer 4: CCD contour layer is used as positioning point.

Layer 5: Cutting layer for cutting tools and cutting parameters.

The cutting data is output in layer orders. When turn over the layer, software will automatically flip all subsequent layer data.

4.4 Concentric Contour Cutting

When the printed image is enlarged or shrink, please choose concentric contour cutting to ensure the cutting result is in accordance with original path.

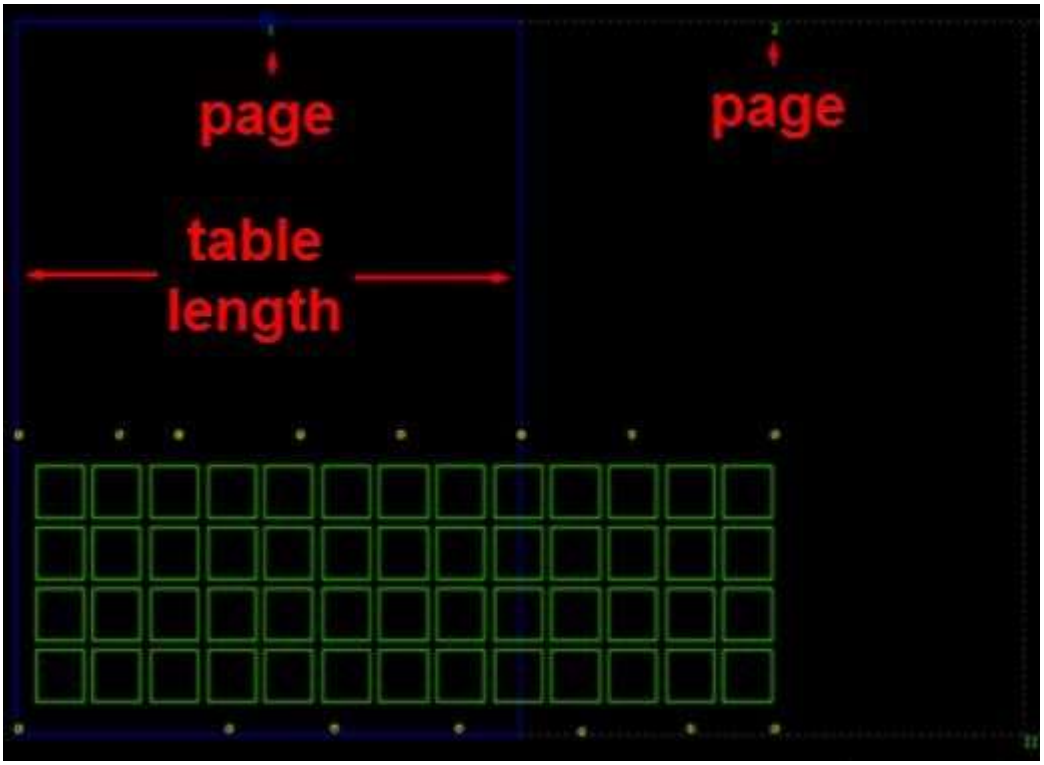
Tips: 1. At least four markers are required and markers should be distributed in the four corners of the first page.

2. The data is as the outer contour. The inner contour is not applicable for concentric cutting.
3. Please do not to make use overlong contour cutting when conditions permit. If overlong contour required, please only use automatic paging instead of manual paging and only marking in the first page.
4. Cutting data should be closed contour
5. Concentric contour is not applicable for dotted line and hardware circle

4.5 Other Contour Cuttings

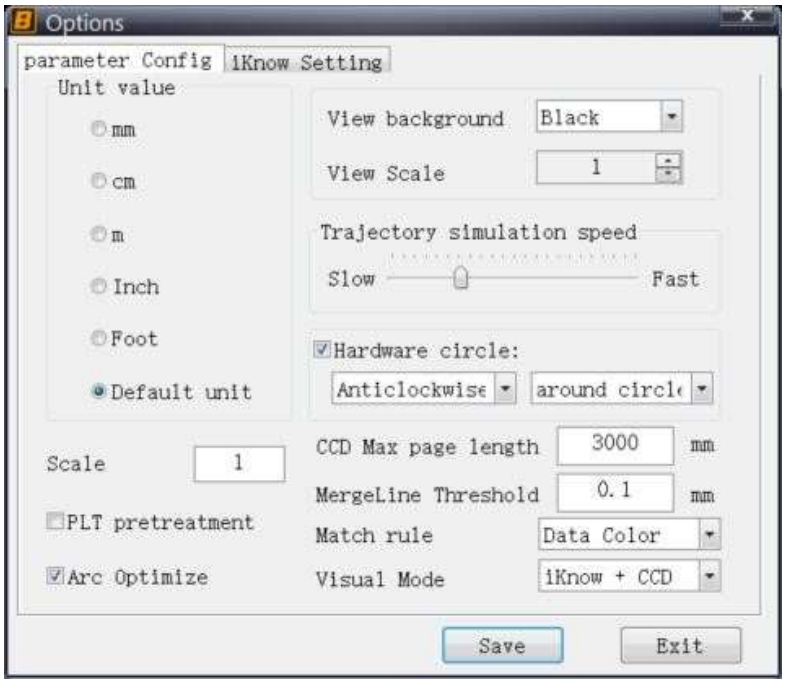
4.5.1 Overlong Contour Cutting

If the cutting length is beyond the length of cutting table, the program will be divided into pages automatically. Overlong cutting does not require for paging length manually. Software will identify the best paging position. The markers in the junction are shared by each pages.



(Photo 69)

Tips 1: The max page length can be set in options column. Please set the maximum paging length properly to avoid materials are beyond cutting area during cutting process.



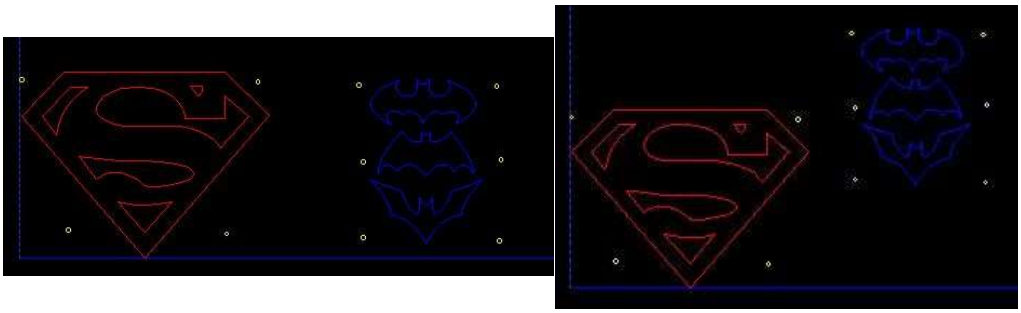
Tips 2: When manual paging required, please use the “ manual paging” function 

. If shared markers are required, please make sure the distance between markers and paging line is within 0-5cm.

Tips 3: This vision has new rules for adding markers: markers should be added in pairs and distance between each pair should be less than cutting area length.

4.5.2 Multi-file contour cutting

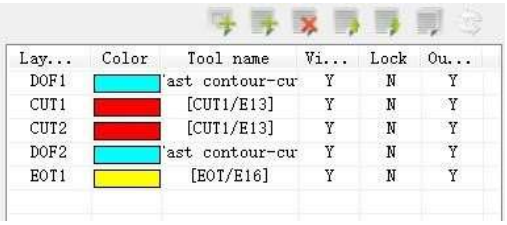
Append to open more contour files(it’s unnecessary to sort off the relative position of all files, the location of files cannot be effected for the contour cutting result, for example , open file A and B at the same time, photo 70 and photo 71 are equivalent)



(Photo 70) (Photo 71)

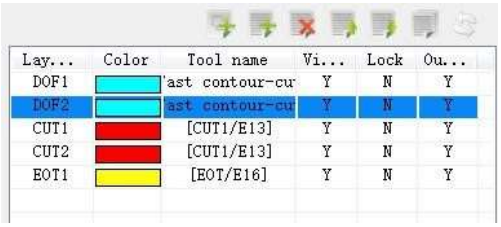
Click  in control bar, CCD screen will popup automatically. Please move the camera to make the first point of file A (the point with red color in the cutting area)enter into camera range.Click  below CCD screen,
The cutting head will stop movement after scanning all the points of file A and wait for the first position point of file B which is aligned by user(the point with red color in the cutting area). Move the camera to the aligned location;click  on the CCD screen, the program will scan the position points of file B automatically.After finishing scanning, it will cut for A and B files.

Tips: In the multi-file contour cutting, each layer must be adjacent in the same file.



Lay...	Color	Tool name	Vi...	Lock	Ou...
DOF1		ast contour-cu	Y	N	Y
CUT1		[CUT1/E13]	Y	N	Y
CUT2		[CUT1/E13]	Y	N	Y
DOF2		ast contour-cu	Y	N	Y
EOT1		[EOT/E16]	Y	N	Y

Right



Lay...	Color	Tool name	Vi...	Lock	Ou...
DOF1		ast contour-cu	Y	N	Y
DOF2		ast contour-cu	Y	N	Y
CUT1		[CUT1/E13]	Y	N	Y
CUT2		[CUT1/E13]	Y	N	Y
EOT1		[EOT/E16]	Y	N	Y

Wrong

4.5.3Combination Cutting

Combine the above cutting type, can get many combination cutting types.

There are combination cutting types of iBrightCut, as following:

	Array Cutting	Overlong Cutting	Repeat Cutting	Reverse Cutting
Deformation Contour Cutting	√	√	√	√
Edge Contour Cutting	√		√	√

① Deformation contour cutting array output

② Overlong deformation contour cutting

③ Deformation contour repeat output

④ Reverse deformation contour cutting(or say contour cutting mark point on the reverse)

⑤ Edge contour array output

⑥ Edge contour cutting repeat output

⑦ Reverse edge contour cutting

	Prolong Cutting	Repeat Cutting	Reverse contour cutting
Deformation array	√	√	
Prolong deformation		√	√
Deformation repeat			√
Edge tracking array		√	
Edge tracking repetition			√

⑧ Overlong deformation contour array output

⑨ Deformation contour cutting array repeat output

⑩ Over-long deformation contour repeat output

⑪ Prolong reverse deformation cutting(front prolong cutting mark point+ prolong deformation cutting)

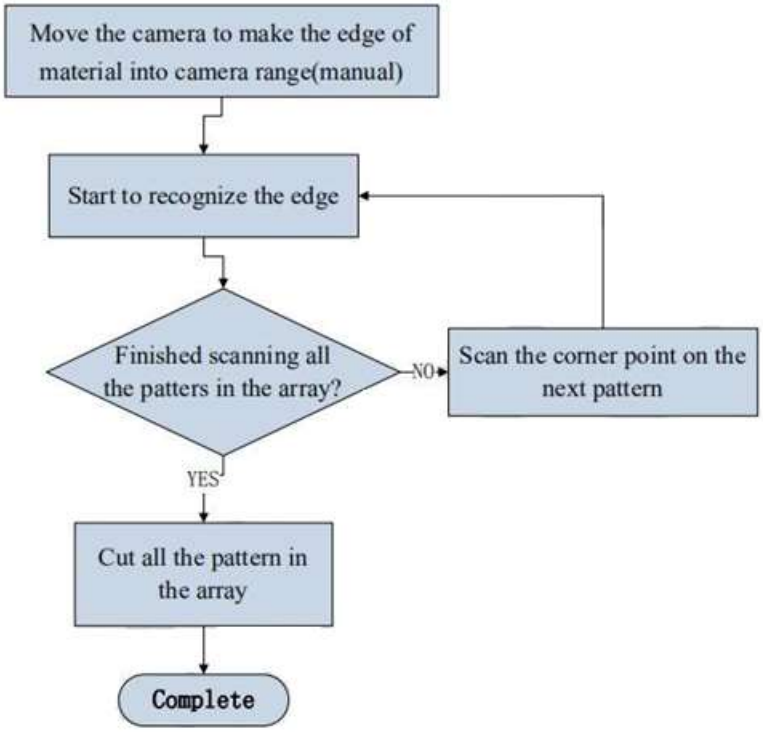
◯ 12 Reverse deformation contour cutting with repetition output (front cutting markers with repetition output+ reverse deformation contour cutting with repeat output)

◯ 13 Edge contour array repeat output

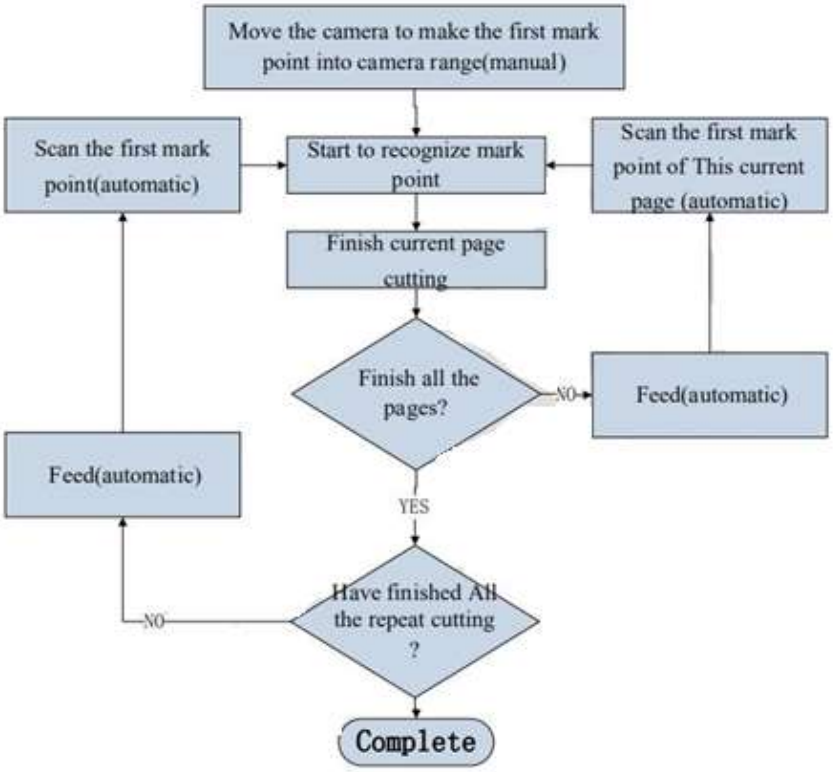
◯ 14 Reverse edge repeat output

◯ 15 Front position marking point+ reverse edge tracking cutting.

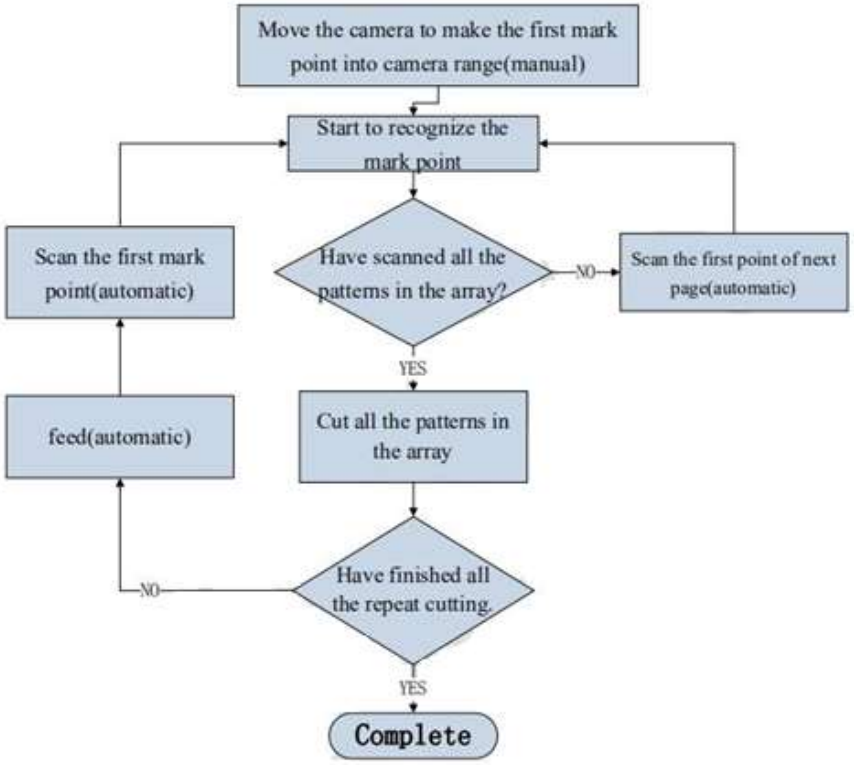
4.5.4 Edge Contour Cutting Array Output



4.5.5 Overlong Deformation Contour Cutting Repeat Output



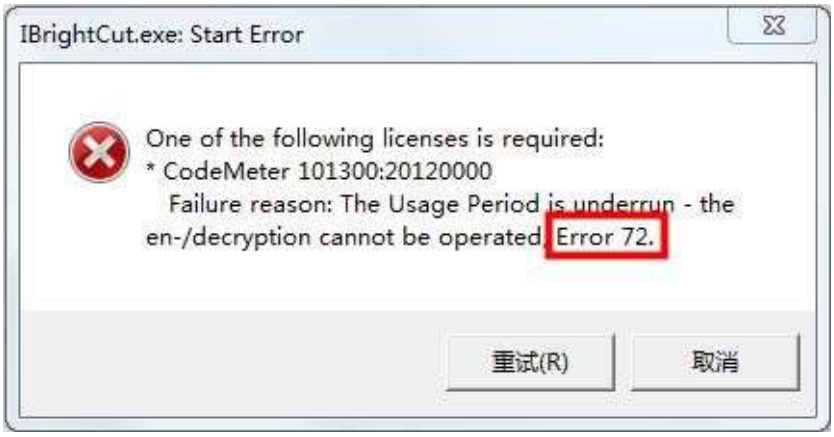
4.5.6 Output Deformation ContourArray Repeat Output



Chapter 5FAQ and Solutions

5.1 Can't run the software

- **Error 72'when start the software**

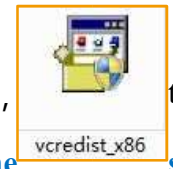


Solution:

Please check whether system time is correct.

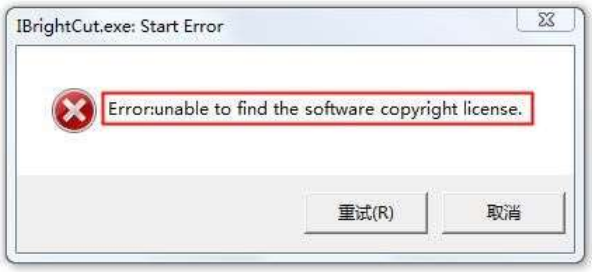
- **Error "LayerDataInface.dll not found.File must be available to run the application!"pplication!"**

Solution:

Please install vcredist_x86, 

then run again IBrightCut.

- **Error:unable to find the software copyright license.**



Solutions:

1. Please check whether dongle is connected correctly.
2. Please check whether dongle driver works well.

CutterServer error: "PLT file read error"

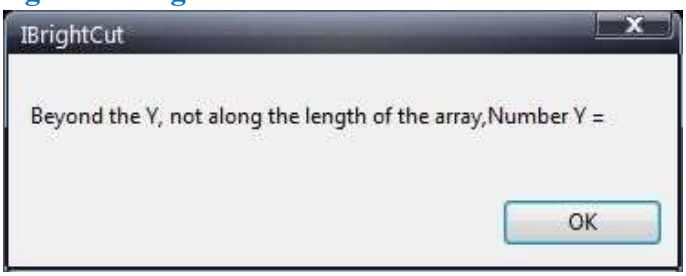
Solution：

1. Please check whether there is any unassigned data to layer in working area.

2. Please check whether set dotted line cutting for hardware circle.

5.2 Unable to send data

➢ **When sending task IBrightCut shows“Y direction over machine length !”**



Solution：

1. 1.Check whether the drawing exceeds blue frame range.

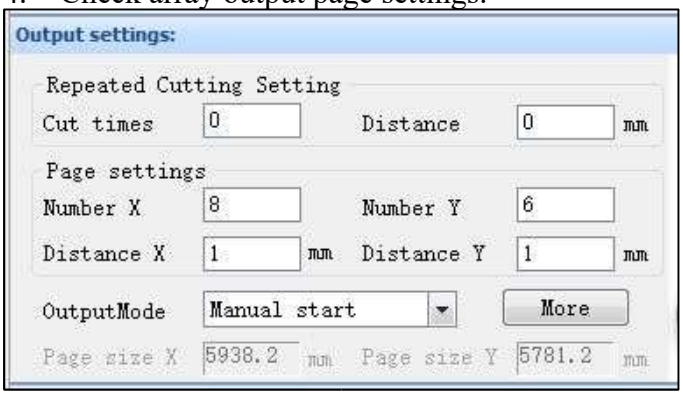
2. Check whether IBrightCut and CutterServer are associated correctly.

3. Check CutterServer parameter for cutting scope.

Parameter Set

Parameter item		Value	Unit	Range Of Value
Adjustment	Measured length	1000.000	mm	0.000 ~ 200000.000
	Scheduled length	1000.000	mm	0.000 ~ 200000.000
Cutting scope	Length	2500.000	mm	0.000 ~ 2500.000
	Width	1600.000	mm	0.000 ~ 1600.000

4. Check array output page settings.



5. If above settings are all correct, please re-open the file or restart the software.

➢ **CutterServer error: Error on reading PLT file.**

Solution：

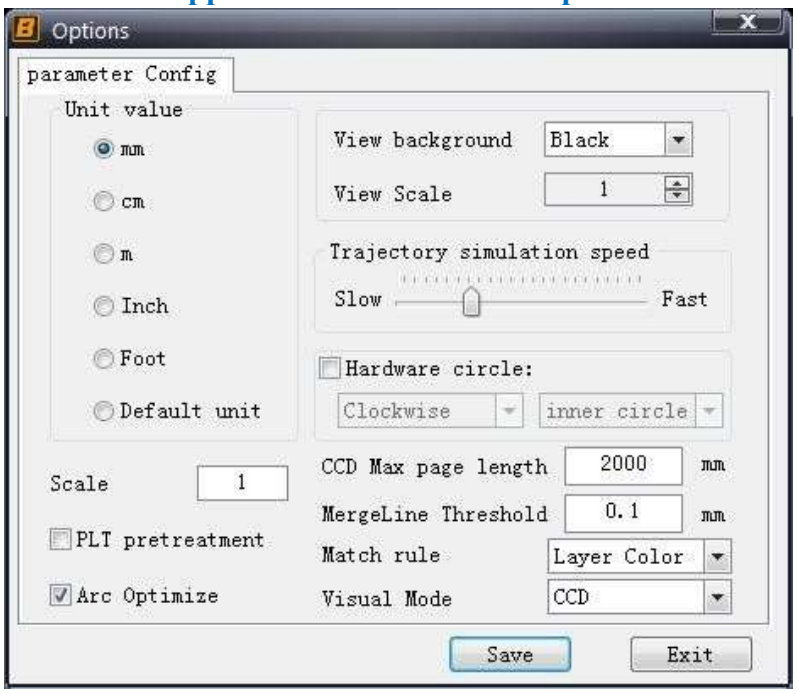
1. Please check whether exits data which is not appointed to any layer on workplace.

2. Please check whether dotted line is set in hardware circle.

3. Please check whether parameter for material thickness and cutting depth is correct.

5.3 Parameter can not be set

- **"Save"button disappear and can not save the parameter**



Solution:

Parameter can not be set in working condition. Please cancel current task and retry.

- **No effect after modifying the program parameter or configuration**

Solution:

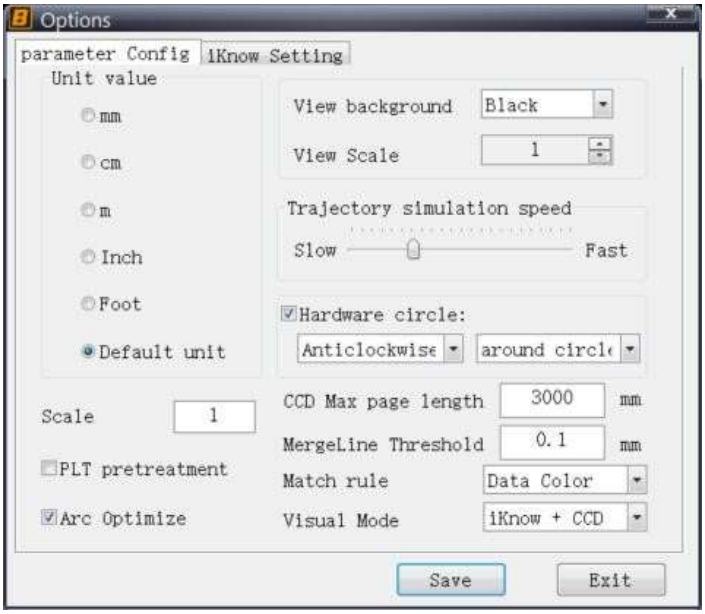
The parameter can not be modified. It's maybe because the directory attribute of iBrightCut is set as "read only". Please cancel the "read only" and retry.

5.4 Cutting beyond the cutting area

- **When perform the task of overlong contour cutting, it often shows "Beyond the cutting area" on CutterServer.**

Solutions:

Please adjust the "CCD Max page length" in options column.



- **The contour cutting has not finished scanning, but cutting files is sent to CutterServer.**

Solutions:

When prolong cutting is not required, please set the max page length to the effective cutting length.

5.5 Can't recognize markers properly

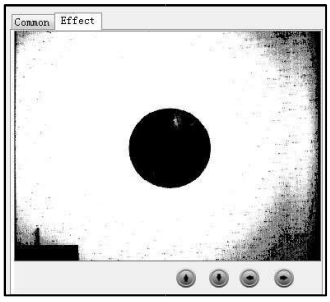
Please check the list below before using contour cutting:

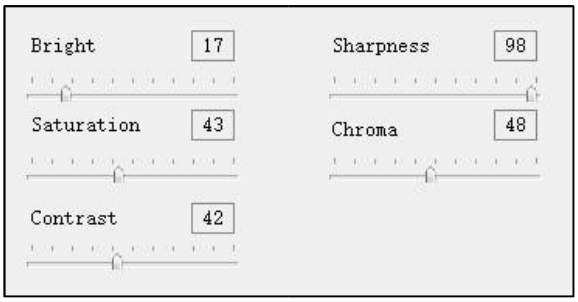
1. The CCD is fixed firmly and height is properly.
2. The X/Y offset of CCD is correctly. The contour height and width is correct.
3. The focal length, brightness and contrast is properly.

- **Can't recognize markers even though the markers are in the scanning range**

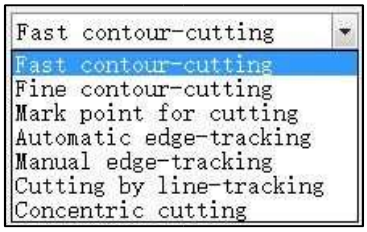
Solution:

1. Please check effect column and adjust parameter and ensure the scanning works well (marker contour is clean and clear).





2. Please check whether the cutting options are correct.



3. Please check whether marker radius is correct.

➢ Can't find markers due to CCD

Solutions:

After send contour cutting task, the first marking point will be marked as red color. If CCD can't find markers, please check whether first marking point is red. Please also check whether material is placed properly. When the point contour direction is right but offset of the marker, please check whether cutting data matches printed image.

➢ Long time at one marker and CCD vision flashes.

Solution:

Please check whether there are overlapped markers.

5.6 Contour cutting

Before contour cutting, please make sure:

1.The CCD is fixed firmly and height is properly.

2.The X/Y offset of CCD is correctly. The contour height and width is correct.

3.The focal length, brightness and contrast is properly.

4. Overlapped parameter for cutting tool is correct.

➢ Large Contour cutting offset

Solution：

1. Please reset the XY offset. Please make sure the corner point (400, 400) is the lower left corner when you drew the rectangular in IBrightCut.

2. Please make sure the layer with markers are placed on the top layer.

➢ Contour offset does not change after adjusting CCD parameter

Solution：

Please restart software.

➢ Can’t adjust CCD position

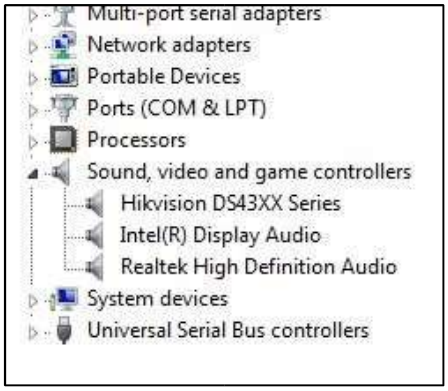
Solutions：

1. If you can not use keyboard button ↑ ↓ ← → to adjust CCD, please click any point in CCD vision and reset.
2. If both rough and fine adjustment are in valid, please check whether CutterServer popup warning window.
3. Please check whether CutterServer serial port is connected properly.
4. If the problem occurs frequently, please check if the connection between the computer and the cutting machine electrical box is loose.

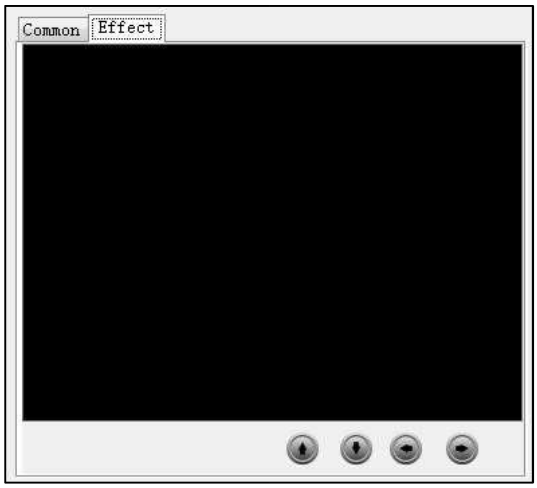
➢ No image when open CCD

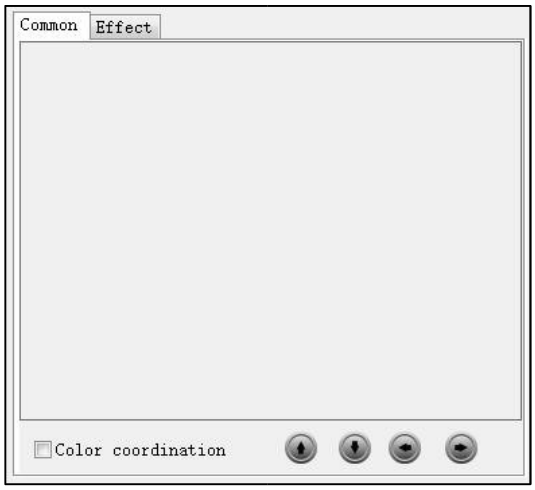
Solution：

1. Please check and ensure that the video card driver is properly installed.



2. When no image in“common”and no signal in “effect”, please check the cable for CCD is connected properly.





3. If the “common” and “effect” tabs are not displayed but the video card driver is properly installed, please check if the computer graphics card driver is normal.
   Try to re-install or upgrade the graphics card driver.

➢ Feeding distance of repeat contour is abnormal

Solution:

Please check whether CutterServer the “use PN Feeding Length”is marked with √.

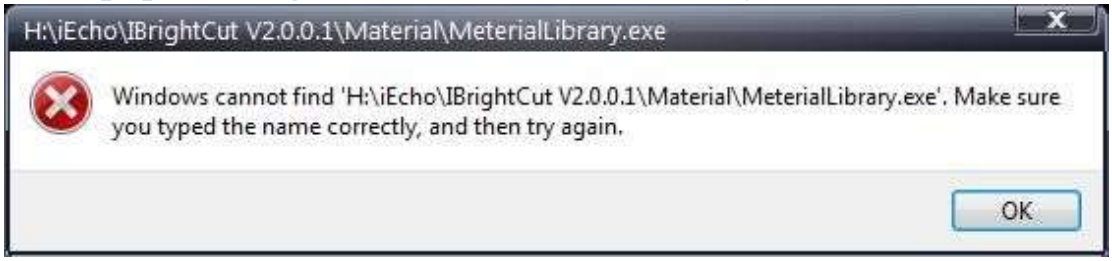
Use PN Feeding Length	☑			
After Over Window Wait Time	0.000	s	0.000 ~ 127.000	

5.7 Can’t open material library

Solution：

1. No permission. Please check the dongle whether material library is included.
2. No .NET operation condition. Please update ≥.net 4 operation condition.

➢ Popup warning cannot find material library



Solutions:

MaterialServer.exe may be deleted by antivirus software. Please re-install and add this program to trust list.

5.8 Data lost for prolong cutting

➢ Paging for prolong cutting

If there is hardware circle in prolong cutting, the circle will be lost.

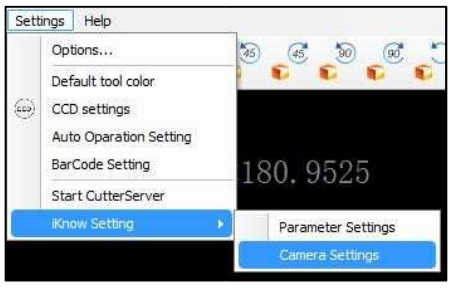
Solution:

Delete this circle parameter in setting-option.

5.9 Can't open iKnowiKnow

➢ iKnow can not work well iKnow

Click iKnow to start. There are warnings for " can't open the camera" or"program exception.



Solution:

Please check the camera cable is connected properly and check the signal light works.

5.10 Target location is unreachable

➢ Warnings occur below for CCD

Solution：

Please check whether material position is beyond cutting area and adjust the material position.

5.11 Other Warnings

➢ “CutterServer path incorrect”

Solution：

Please click start CutterServer in“ Setting”

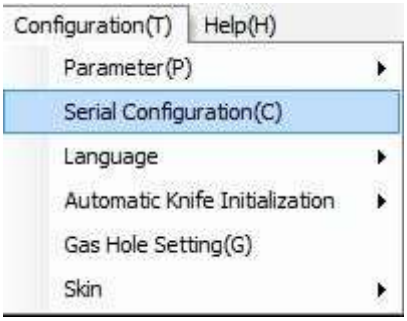
➢ ”Equipment was not detected”

Solution：

1. Please make sure serial card driver is installed properly.

2. Please make sure serial cables are connected properly.

3. Please check if the CutterServer serial port configuration is correct.



4. Please re-start iBrightCut and CutterServer if serial port configuration is adjusted.

➢ Start Error: file must be available to run the application.

Solution：

1. Please check whether program is in working condition.
2. Please click to retry.
3. Please cancel if retry does not help.