

# **Richpeace Garment CAD System Manual V10.0**

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## **Content Summary**

This manual is matched book with Richpeace Garment CAD. It introduces the software functions and operations. This book comprehensive, with words and pictures, from simple to deep, has strong study and reference value.

It is available for students in fashion school, pattern designer and someone who is interested in garment CAD.

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# Chapter One

## Richpeace Garment Cad Function Summarize

### Section 1 Function summarize

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Richpeace Garment CAD V10.0 is a special system for pattern design, grading and marking. It apply to clothing, underwear, shoes, hat, luggage, sofa, tent, auto and other industries. The system is powerful, simple to operate and easy to get going. It is an indispensable tool for garment enterprises on improve work efficiency and product quality. The system main features are:

1. V10.0 introduce a new design idea - integrate formula method and free design method, the most important feature is linked modification: include design lines linkage, patterns and design lines linkage, transfer dart tool, move and rotate adjust tool, mirror tool and other tools linkage, adjust one part and all other relevant parts are modified together, notch, buttonhole, drill, dart, pleat and other elements can also be linked.
2. Design & Grading part keep the original garment CAD software function, it can add dart, transfer dart, add pleats and so on, it provide rich seam styles, process identification, Various customizable line types. Allows users to create their own unit library, such as collars, cuffs, etc., and load them directly when used.
3. Grading part provide a variety of grading methods: design lines and patterns can be automatically grading, point grading, arrow keys grading, regular grading, and proportional grading, parallel grading and other special grading tools.
4. The button, grain line, notch, drill and other identifying can be edit on the design lines in grading part.
5. Grading part provides down content function, calculating the amount of filling of the whole piece or part, which is convenient for the down apparel company to calculate the amount and cost.
6. Grading part provides digital input function, and the efficiency and precision of the input patterns are much higher than those of the traditional digitizer.
7. Import other formats such as DXF, AAMA/ASTM/AUTOCAD.
8. GMS can read design grading system files, dual interface can nest together. Providing Supernest, Automatic, manual and interactive, and other various nesting ways. Among of them, supernest is international innovative technology. System can automatically finish one lay of marker in a very short period, the fabric utilization can be or even higher than the manual nesting. Specially prevent the horizontal & vertical shading,

and mixed shading problem. It is possible to process multiple marker jobs in queue. Save time and improve productivity. Manual nesting, flexible sloping the patterns, fine-tuning and good utilization of fabrics.

9. GMS tailor-made cap function is used to toys, gloves, underwear, etc. Copy, inverted truss function to achieve a high utilization of the fabric.

10. GMS can read various HPGL files successfully, import the plot files of HPGL and the cutter format files and re-nesting.

11. GMS can be expected to quickly calculate the amount of cloth used and the number of pieces to be cut, increase production efficiency, increase control over the market, and save time and money!

12. The system supports nesting and cutting of the inner contours, connecting with output devices, printing small samples, drawing and cutting 1:1 patterns.

## Section 2 Professional term of this manual

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**“Left-click”**: Press left button and release the button instantly before move the mouse.

**“Right-click”**: Press right button and release the button instantly before move the mouse. Also means to current command finish.

**“Double-click the right”**: Click right button two times quickly in same position.

**“Drag with left button”**: Put mouse cursor on point or line, press left button and don't loosen. Then move mouse.

**“Drag with right button”**: Put mouse cursor on point or line, press right button and don't loosen. Then move mouse.

**“Left button frame selection”**: Before move mouse to point or line, press left button and don't loosen, then move mouse and make a rectangle to select object. If it is a very short distance, to avoid turning to “Drag with left button”, you can press Ctrl key before press left button.

**“Right button frame selection”**: Before move mouse to point or line, press right button and don't loosen, then move mouse and make a rectangle to select object. If it is a very short distance, to avoid turning to “Drag with left button”, you can press Ctrl key before press right button.

**“Click(Press)”**: Put mouse cursor on the object, press left button and release mouse instantly.

**“Click”**: Unless specifically stated, it means “Left-click”.

**“Frame selection”**: Unless specifically stated, it means “Right button frame selection”.

**“F1-F12”**: Twelve buttons on the top of keyboard.

**“Ctrl+Z”**: Press “Ctrl” at the same time press “Z” on keyboard.

**“Ctrl + F12”**: Press “Ctrl” and don't loosen, then press F12.

**“Esc”**: The Esc button on the keyboard top left corner.

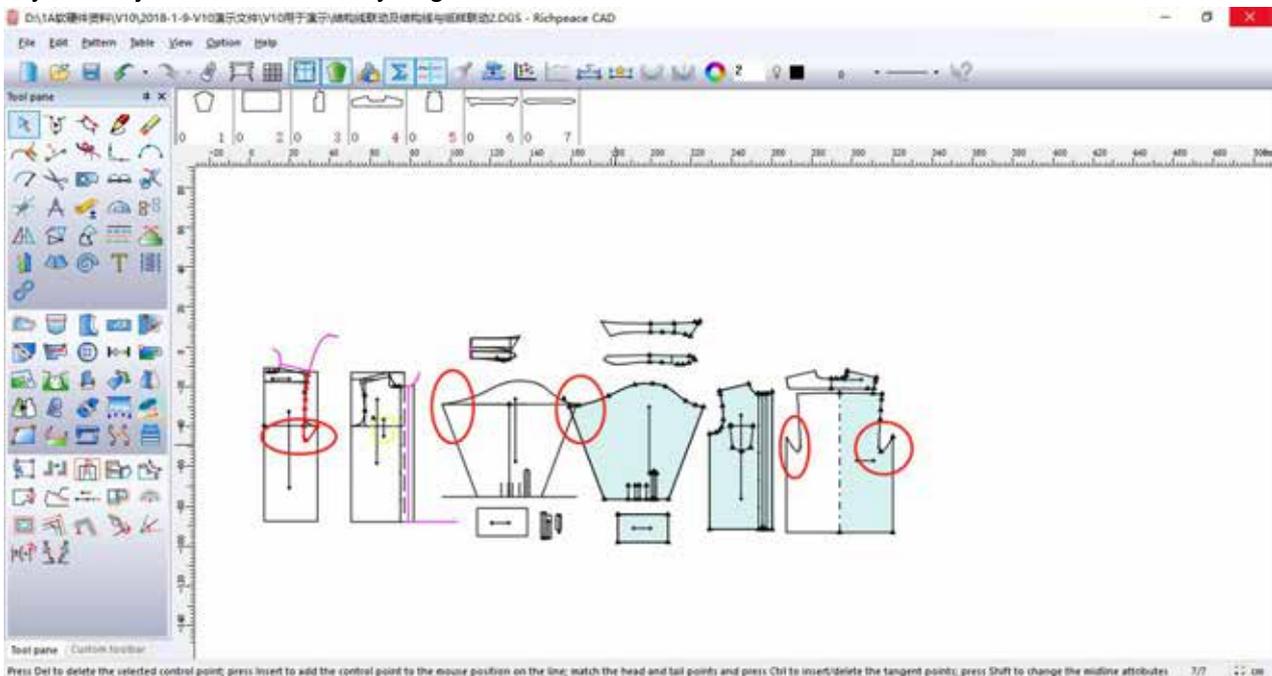
**“Delete”**: The Delete button on the keyboard top left corner.

**“Arrow”**: It is refer to up, down, left, right four direction keys on the keyboard.

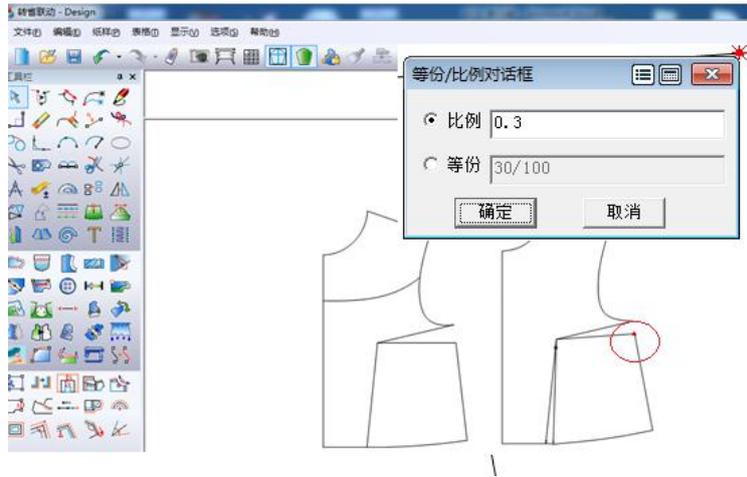
## Section 3 V10 New Functions summarize

1. The most important feature for V10.0 is linked modification: integrate formula method and free design method, the most important feature is linked modification: include design lines linkage, patterns and design lines linkage, transfer dart tool, move and rotate adjust tool, mirror tool and other tools linkage, adjust one part and all other relevant parts are modified together, notch, buttonhole, drill, dart, pleat and other elements can also be linked.

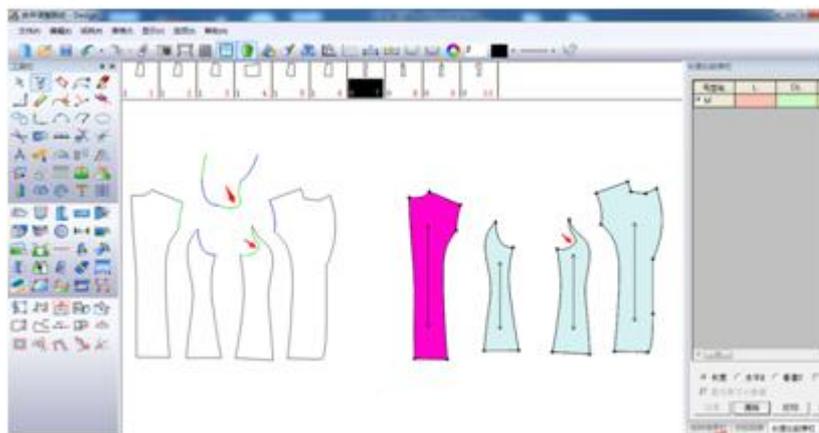
a. Design lines linkage, design lines and patterns linkage-triangle point means linkage point. In order to see clearly, the adjustment is relatively large.



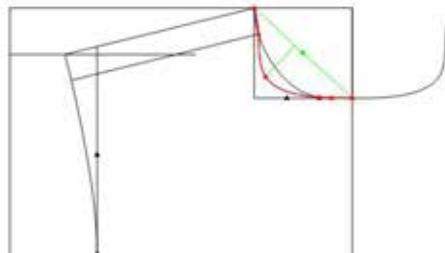
b. Rotate dart linkage: after rotate dart, can continue to change the distance or ratio.



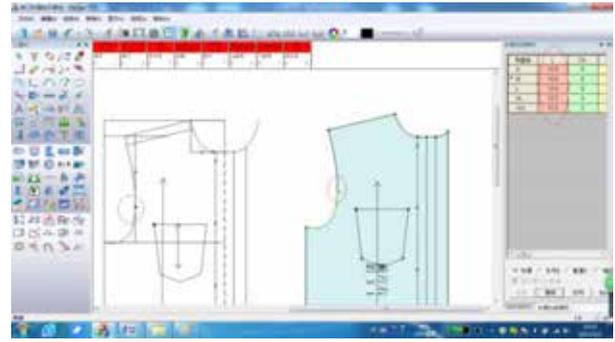
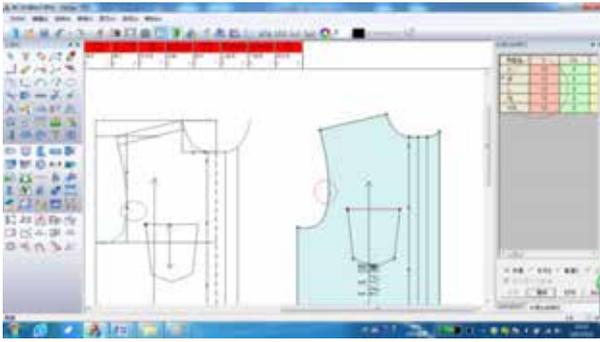
c. Merging adjusting linkage: In order to see clearly, the adjustment is relatively large.



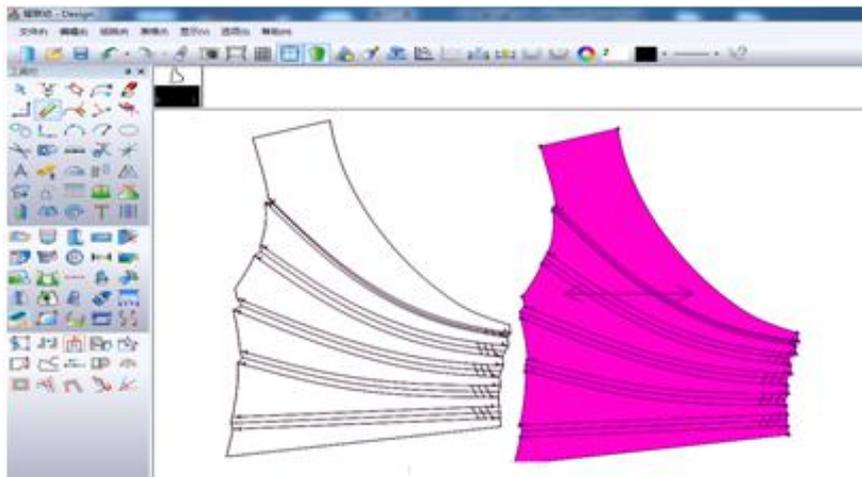
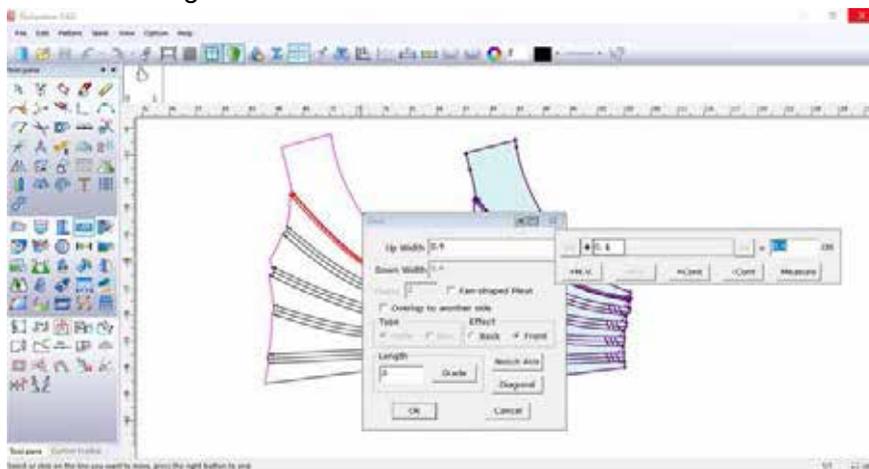
d. Symmetry linkage

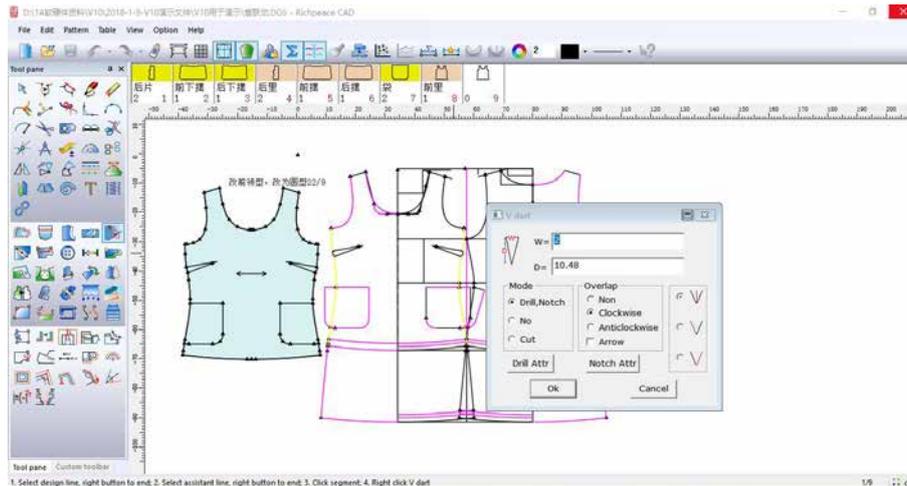


e. Notches, buttons, grain line, drill and other identifying of the pattern can adjust according the design lines..



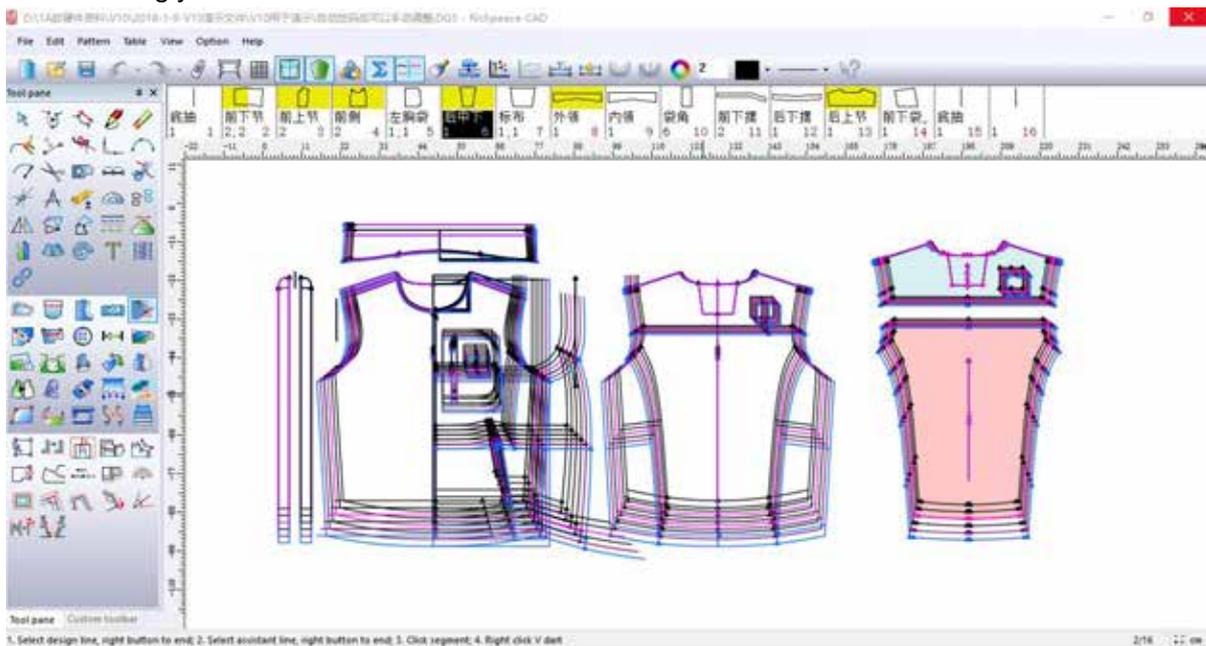
f. Darts and pleats also can linkage.



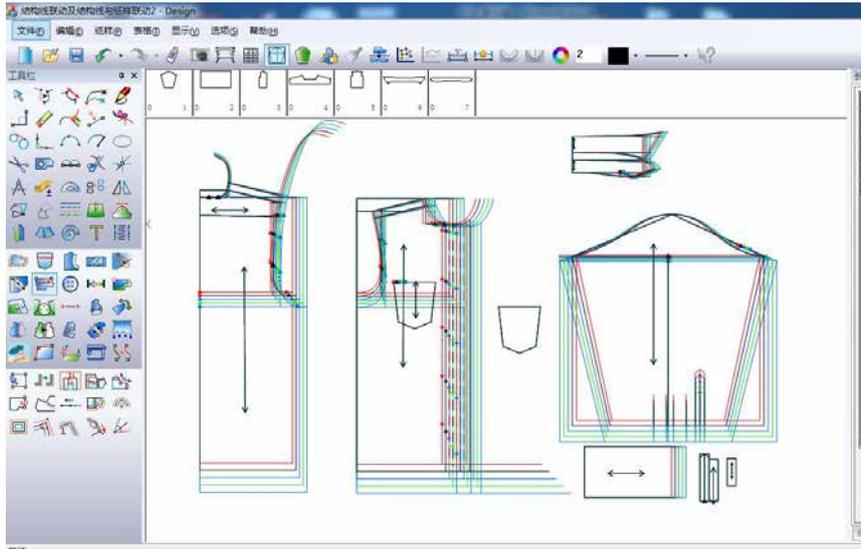


2. Another big feature is grading automatically, all sizes can be adjusted synchronously or individually. (You need to edit the size table and related human body size data before design pattern.)

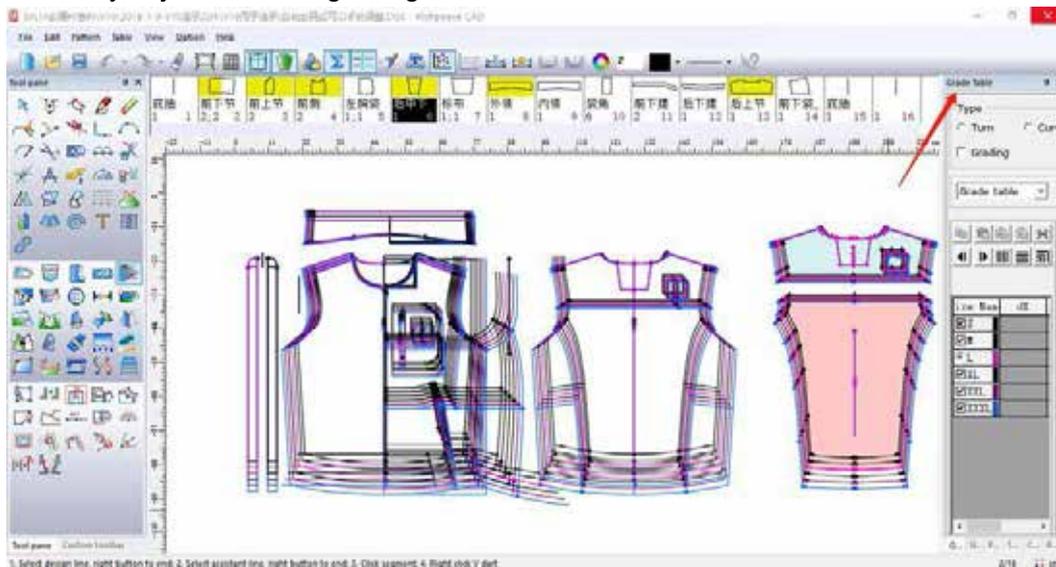
a. Mainly grading automatically, design line adjustment or data adjustment of the size table, all sizes are adjusted accordingly.



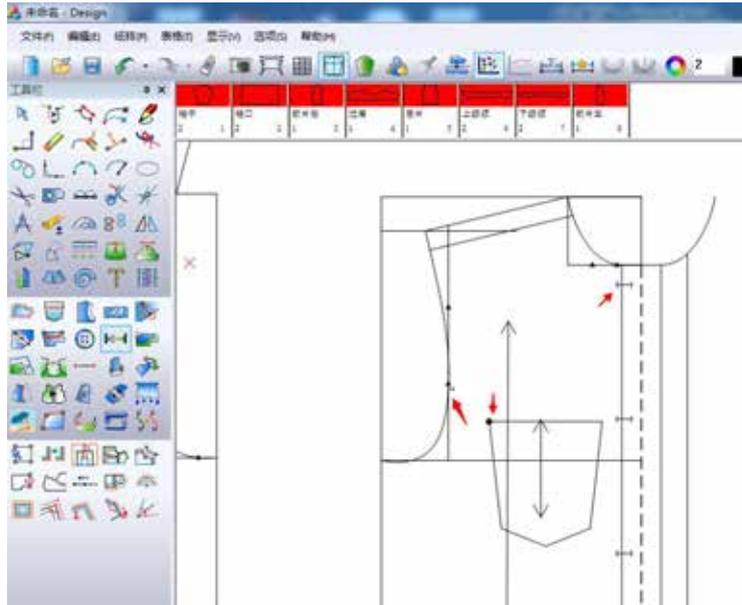
b. Design lines also can grading automatically, check whether the grading is correct and the lines are smooth at any time.



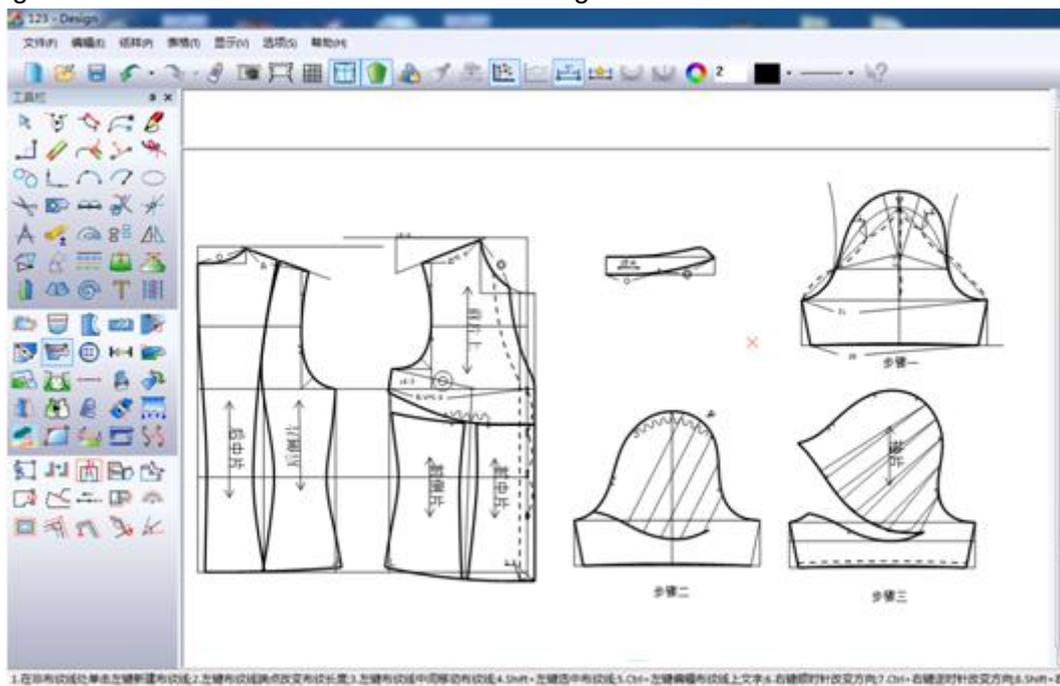
c. Can also manually adjust the local grading.



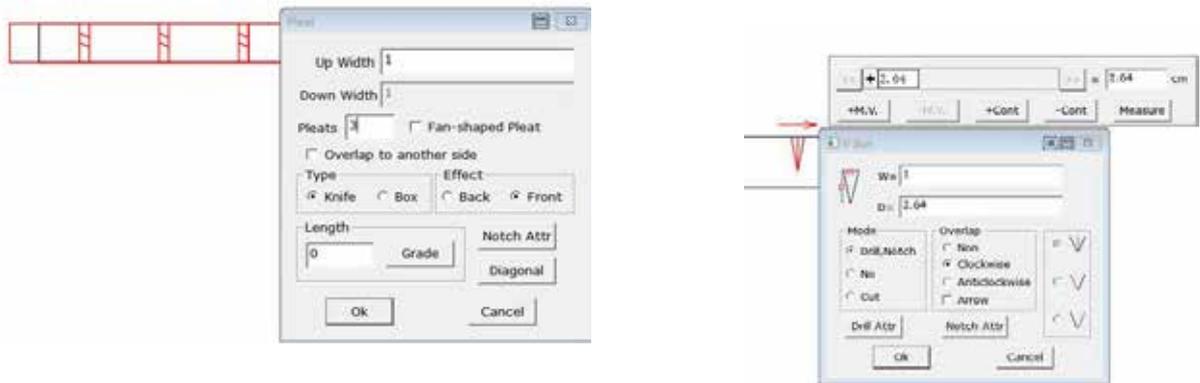
3. The button, grain line, notch, drill and other identifying can be edit on the design lines.



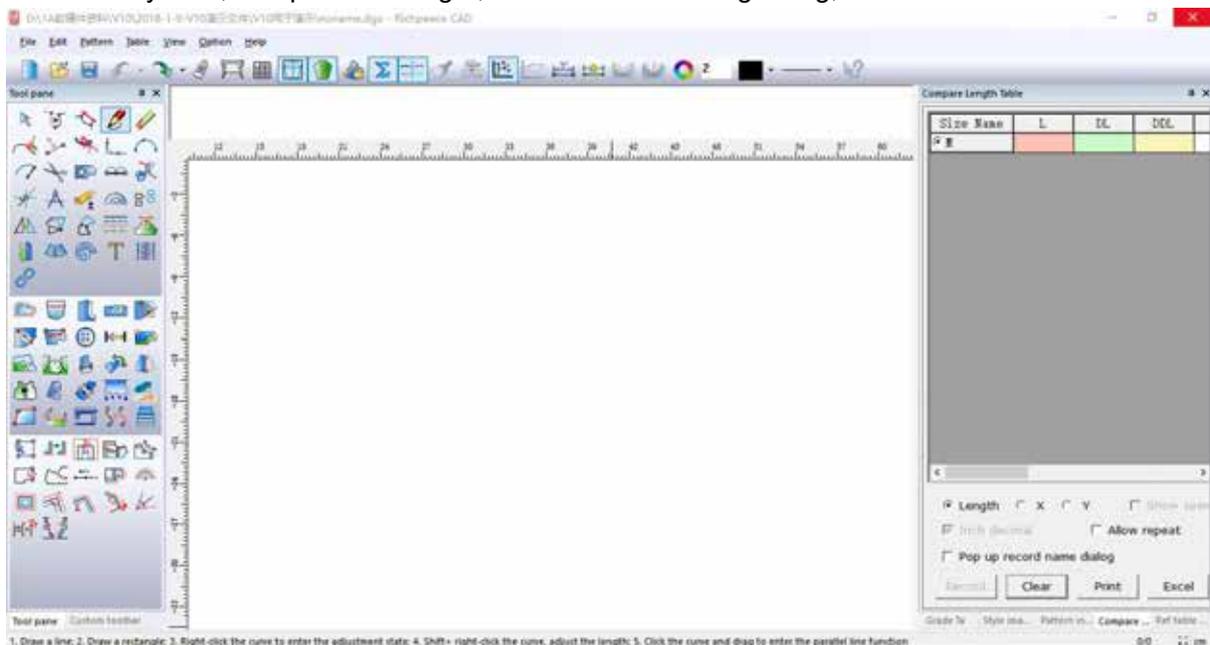
4. Can add grain line and edit the information on the design line.



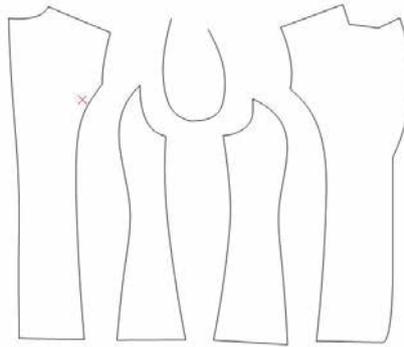
5. Dart and pleat also can edit on the design line and can adjust automatically.



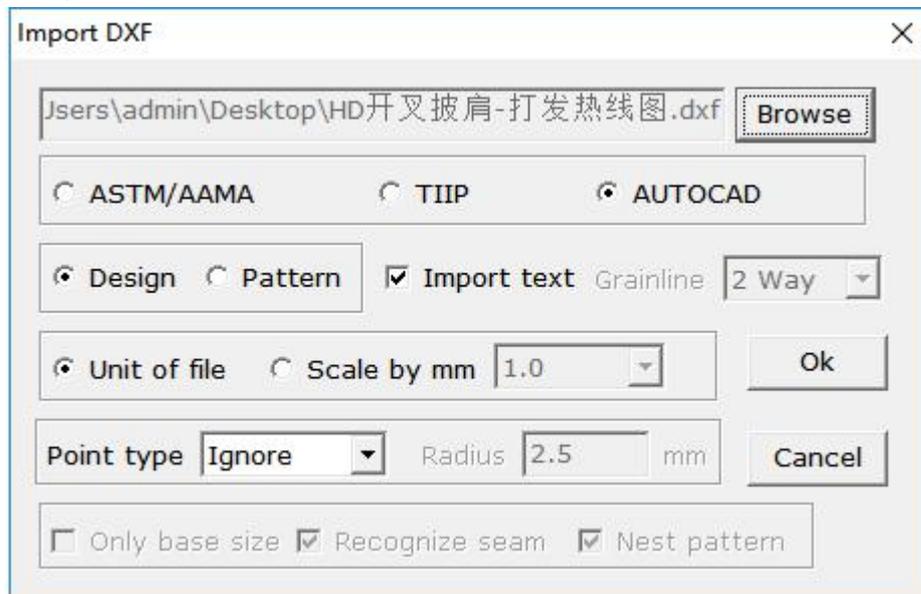
6. Pattern information bar, compare length bar and point grading bar can float or dock, view the pattern information at any time, compare the length, view the amount of grading, etc.



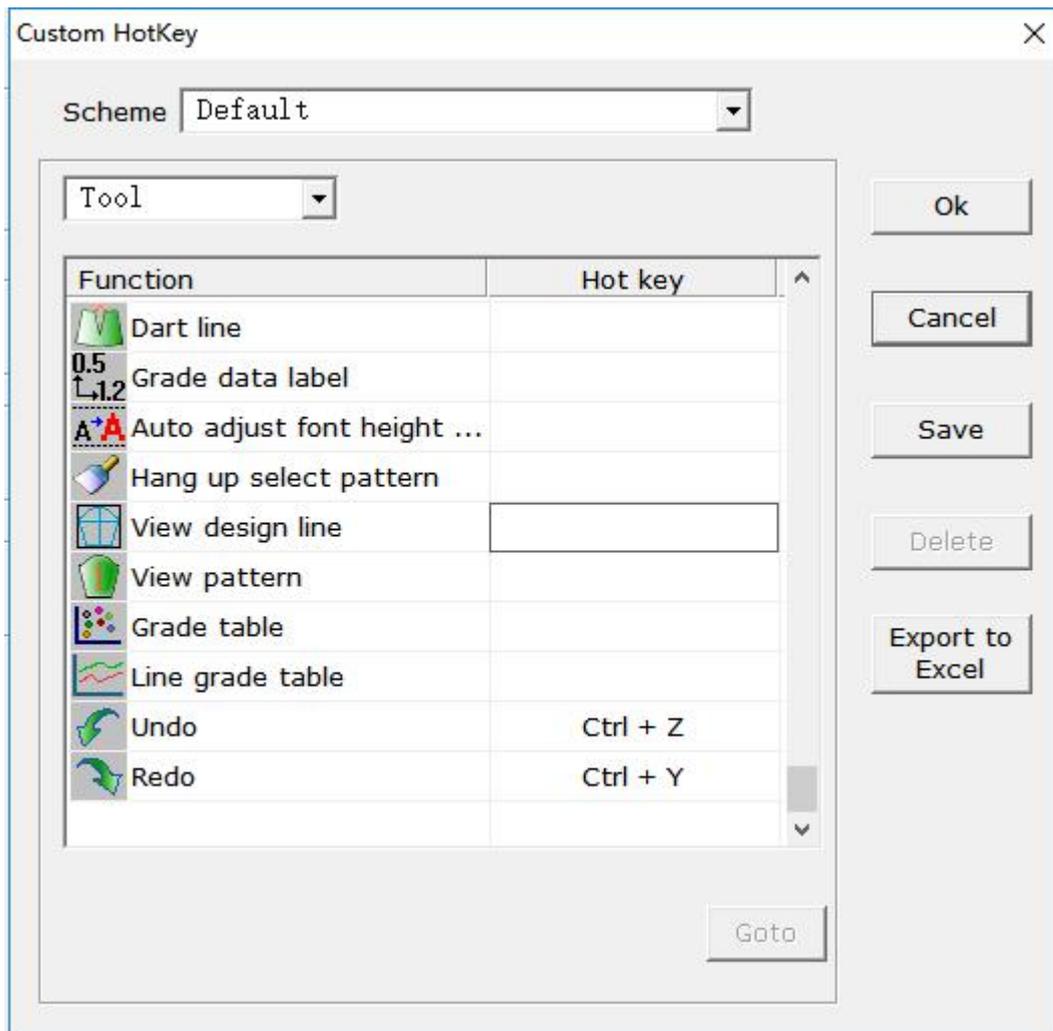
7. The merger adjustment can take out specific lines and make adjustments convenient. At the same time, the merger adjustment line can also be retained to facilitate later adjustments and no need to re-adjust them once.



8. When importing DXF, all different formats of DXF are unified into the same window for easy searching.



9. Unified shortcuts to add hidden structure lines.



10. Can do closed curve.

11. Increase down content and layer setup function.

12. There is a warp display function when increasing the shrinkage.

13. The digital input is upgraded to the board base map, making it easier to set up.

# Chapter Two

## Richpeace Design And Grading CAD System

### Section 1 Shortcut key, mouse wheel and keyboard introduction

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**A**-Modify    **B**-Intersect And Equal Distance Line    **C**-Compasses    **D**-Divider    **E**-Eraser  
**F**-Intelligent Pen    **G**-Move    **J**-Docking    **K**-Mirror    **L**-Angle line    **N**-Move and rotate Adjust    **P**-Point  
**R**-Compare Length    **S**-Rectangle    **T** -One –Way Extend    **V**-Corner    **W**-Forfex    **Z**-Size Align  
**F2**-Switching shadow and border line    **F3**-Show/hide the length between two grading points  
**F4**-Show basic size Or show all    **F5**-Switching sewing line and seam allowance  
**F7**-Show /hide Seam    **F8**-Show next size    **Shift+F8**-Show last size  
**F9**-Match whole line/segment line    **F10**-Show/hide plot paper width  
**F11**-Match one size/all size    **F12**-All pieces enter into patterns window  
**Ctrl+F7**-Show/hide Seam    **Ctrl+F10**-Display page borders when printing on one page  
**Ctrl+F11**-1:1 display    **Ctrl+F12**- All Pieces enter working area  
**Shift+F12**-Pattern position in the work area linked/unassociated  
**Ctrl+N**-New    **Ctrl+O**-Open    **Ctrl+S**-Save    **Ctrl+A**-Save as    **Ctrl+C**-Copy pattern  
**Ctrl+V**-Paste pattern    **Ctrl+D**-Delete patterns    **Ctrl+Q**-Generate Shadow  
**Ctrl+E**-Edit Size and measurement    **Ctrl +F**-Show /hide grading point  
**Ctrl +K**-Show/hide non grading points    **Ctrl+J**-Fill color/don't fill pattern  
**Ctrl+H**-Show /hide chord height when adjust    **Ctrl+R**-Create new grain line  
**Ctrl+B**-Move/Rotate/Copy    **Shift+C**-Snip curve    **Ctrl+Z**-Undo  
**Shift+S**-Curve adjust    **Ctrl+Y**-Rework    **Shift+F4**-Show/hide design lines grading  
**Shift+Right click**-Horizontal vertical point    **Ctrl+Right click**-Closed curve  
**Ctrl+Shift+Alt+G**-Delete all G-line    **ESC**-ESC current operation  
**Shift+Modify**-Variables recorded by a mobile label or measurement tool  
**Shift**-When draw lines, press Shift, switching curves and broken lines/straight and curve points on the design line  
**Enter**-Line changing operation when edit words/change parameter of current point/ show dialogue table of cursor point  
**X button**-Using together with size align button, Align grading value in x direction

**Y button**-Using together with size align button, Align grading value in Y direction

**U button**-Press U, at the same time click pattern, Pattern can go back to pattern list

**Delete**-When the mouse cursor is a intelligent pen/modify tool, right-click on the line segment, place the mouse on the point/line, and press Delete to delete the point/line

**Note:**

**F11:** When grain line move or extend, Match one/all size;

With T move T text, Match one/All size;

When erasing auxiliary line with eraser, Match one/All size.

\*\*\*: When there is one point in the lower right corner of the software interface , match the currently selected size; when there is four point , match all size.

**Z key all size alignment operation:(Check after point grading)**

1. Select a point or a line by Select tool;
2. Press the Z key, and the grading line will be aligned with the control point or line. Pressing the Z key consecutively will set the code in the XY direction, the Y direction, the X direction, and the recovery cycle.

**Mouse Wheel:**

With any tool selected,

Rolling the mouse wheel forward, the patterns or design lines of the work area moves downwards;

Rolling the mouse wheel backwards, the patterns or design lines of the workspace moves upwards;

Click the mouse wheel for full screen display.

**Press Shift:**

Move wheel front direction, all work area pattern or design line move towards right direction.

Move wheel back direction, all work area pattern or design line move towards left Direction.

**Keyboard Direction :**

Press up button, all work area pattern or design line move towards down direction.

Press down button, all work area pattern or design line move towards up direction.

Press left button, all work area pattern or design line move towards right direction.

Press right button, all work area pattern or design line move towards left direction.

**Small keyboard + -:**

“+”on keyboard, press once time, All work area pattern or design line show according to Proportion;

“-”on keyboard, press once time, All work area pattern or design line show according to Proportion.

**Space Function:**

1. Select any tool, Put cursor on pattern, Press”space”, can become moving pattern cursor;

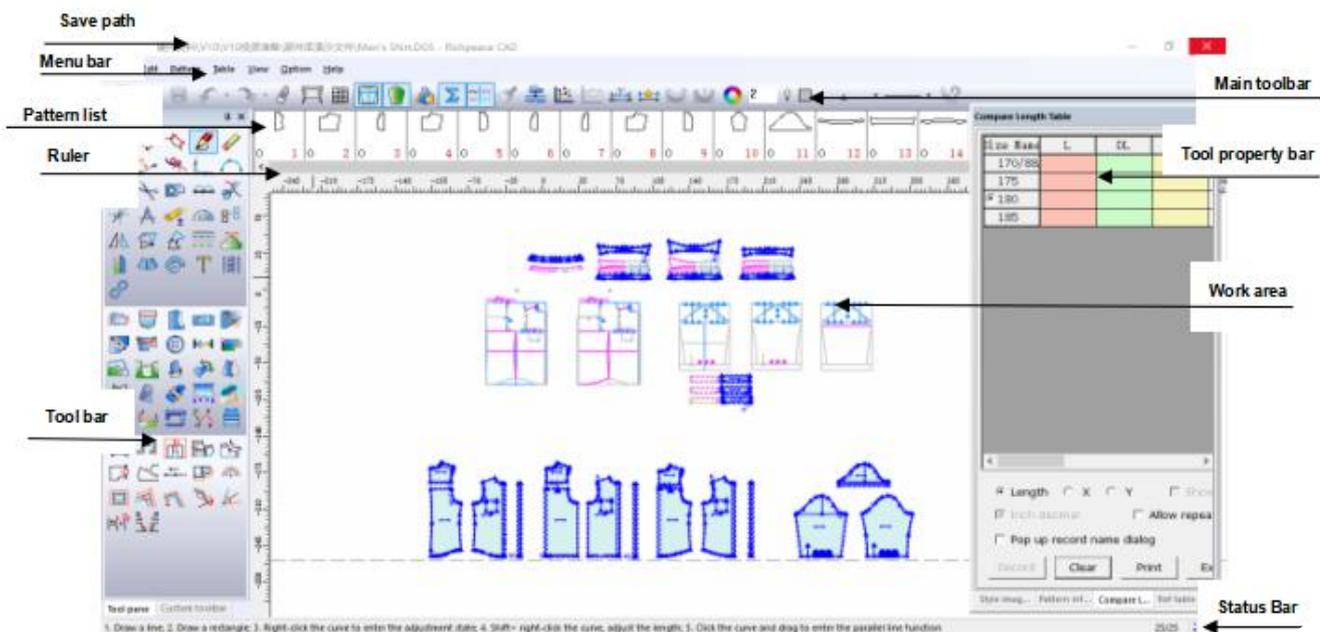
2. Use select tool ,select a number of patterns, press the “space”, the selected patterns can be moved together;

3. In the case of using any tool, press the “space”, (do not pop up) to convert the cursor into an enlargement tool. At this time, scroll the mouse wheel forward. The contents of the work area will be magnified and displayed with the cursor at the center, and the mouse wheel will be rolled backwards. The content is narrowed down with the cursor at the center. Right-click for full-screen display.

## Section 2 Richpeace Design and Grading System interface introduction

### Interface Introduction

Interface is user work house, if you familiar interface, you familiar work environment, improve work efficiency.



- **File Save Path**

Show current opened file path.

- **Menu Bar**

It is putting menu command place, And there are various command under each menu. Click menu, You can see a menu list, Click select one command. Also press and hold Alt and press letter behind menu, You Can select Menu, Press direction button to select object.

- **Pattern list Box**

It is a pictorial list of pieces within a design file. The Pattern Listbox shows a small picture of each piece in a design file .You can display the Pattern List box location from **【Option】** -- **【System Setup】** -- **【UI Setup】** -- **【Piece List box Arrange】** . By dragging a pattern and move,

you can adjust its arrangement order of pattern in the Pattern List box. Also you can select pattern with menu, copy or paste pattern. Right-click on the part list box to select the arrangement and display all the patterns.



- **Ruler Bar**

Show used unit.

- **Tool Bar**

Tools of this bar are used for drawing and modifying design lines, patterns, and grading.

- **Tool property bar**

Select each tool, the side will display the tool's property bar accordingly, making a tool to meet more functional requirements, reducing the number of switching tools.

- **Work Area**

It is seems a paper, You can draw design line, Also you can grading、Plot or show paper border.

- **Status Bar**

The Status Bar is on the bottom of the interface. The status bar displays information of the current tool and the prompts for its operation.

## Section 3 Main Toolbar

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### **NEW (N)**      **Ctrl+N**

#### Function:

It is used to establish a new file.

#### Operation:

1. Click new icon  or Ctrl+N to establish a new file;
2. If there are unsaved file in work area, It will appear **【save current file or not】** dialogue table to ask save or not.
3. Click **【yes】** will appear **【save as】** dialogue table, select path and input file name, click **【save】** . If you ever save before, Will save to original place.



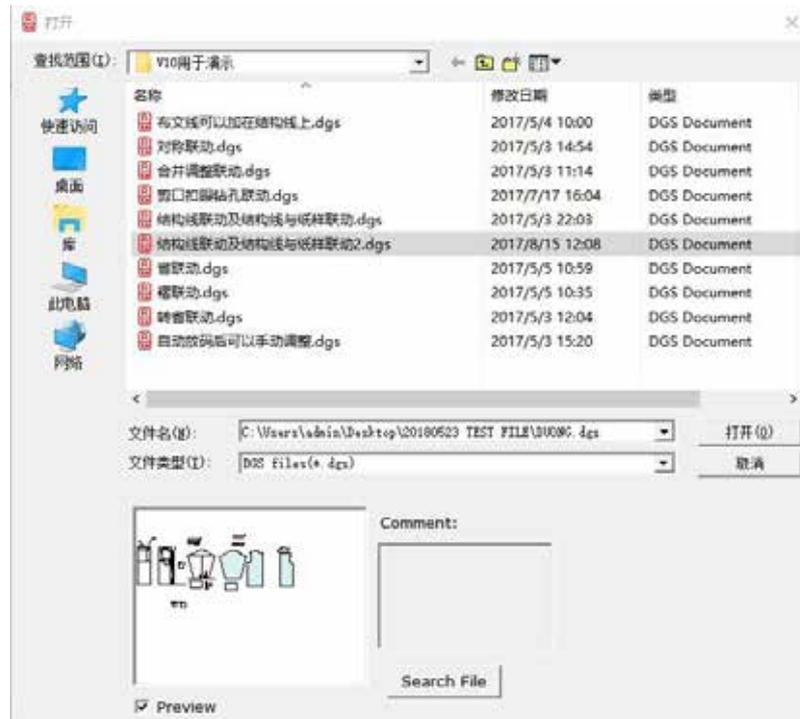
### **Open**      **Ctrl+O**

#### Function:

Open a file already saved.

#### Operation:

1. Click this icon  or press "Ctrl+O", You will see **【open】** dialogue table;
2. Selecting the appropriate file type, Select file according to path;
3. Click **【open】** (double click file name), You can open a saved pattern file.
4. **【OPEN】** : dialogue table parameter introduce:

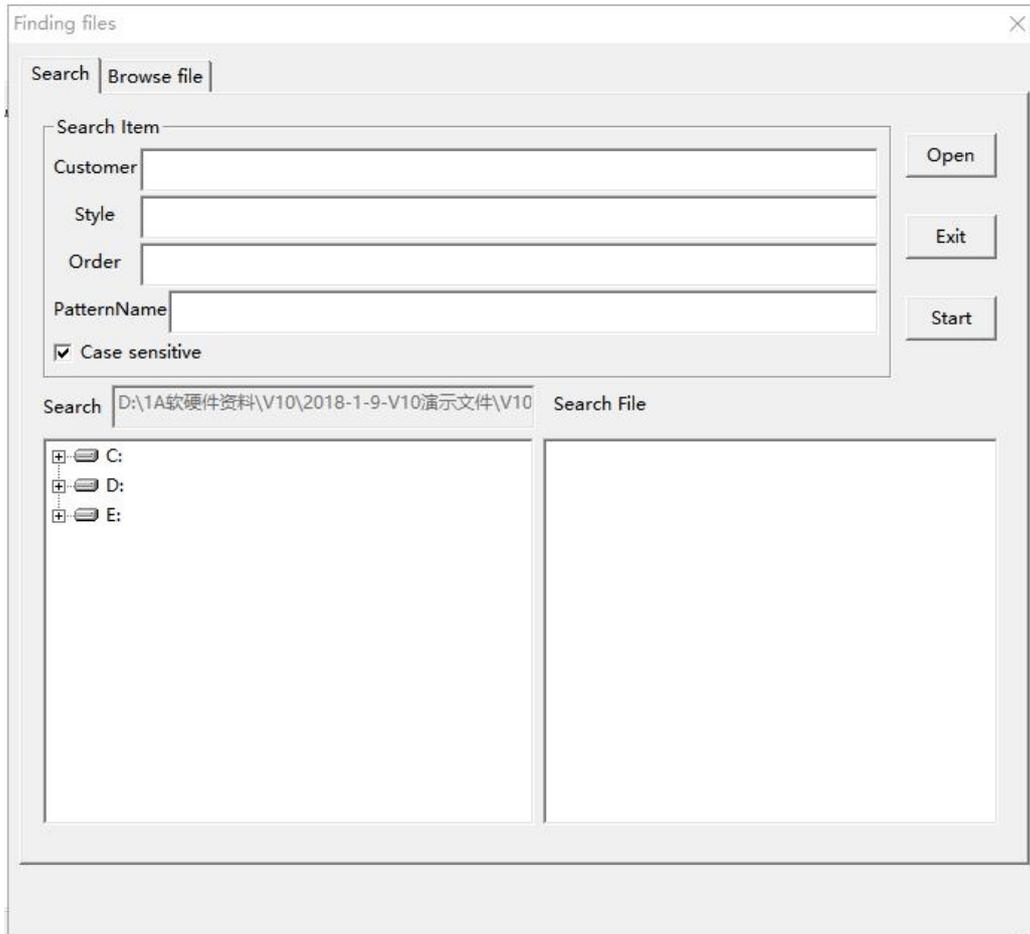


**【Preview】** : Select preview, Will appear the last time saved content of this file;

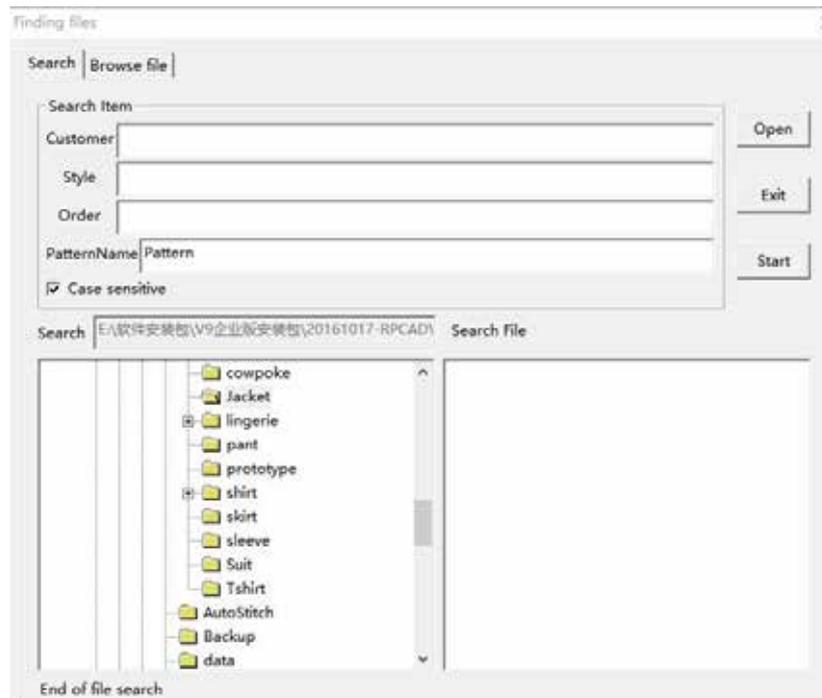
appear“**style info**”- **【comment】** , For example “shirt”;

**【Search file】** Click search file button, You can see **【search file dialogue table】** ;

**【Search file】** parameter:



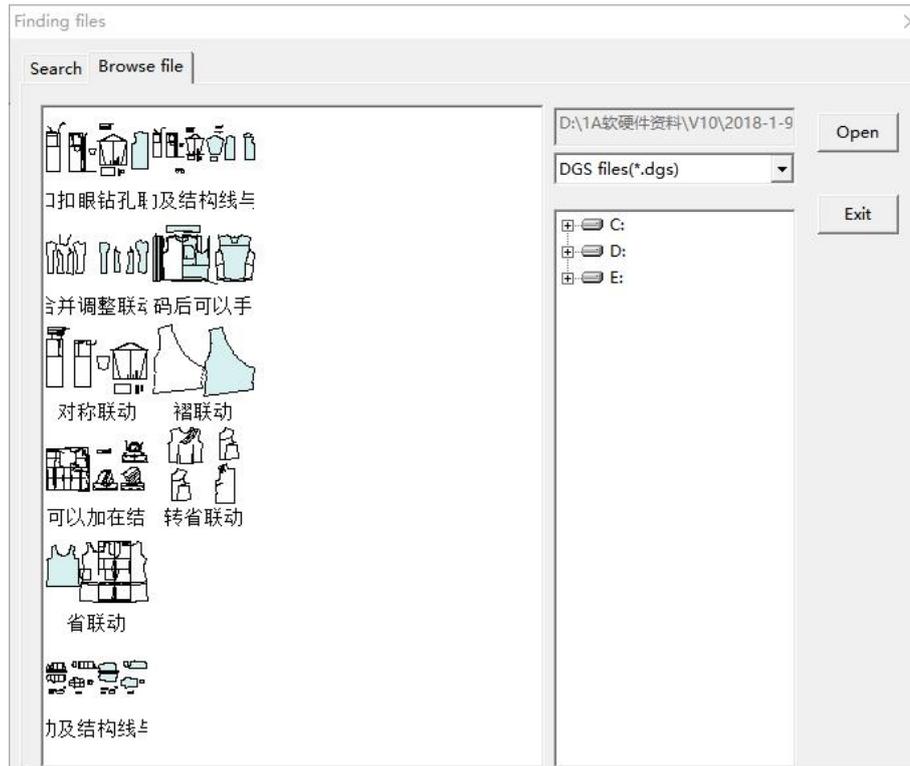
## 【Search】



Check above item according to above cue, Click dialog table, Input words, Press disk under [search], Click [start], When file name appear under [search file], Click [open].

## 【Browse】

Select file according to path, All the file show on browse dialogue table, No style, Appear with sign "x".



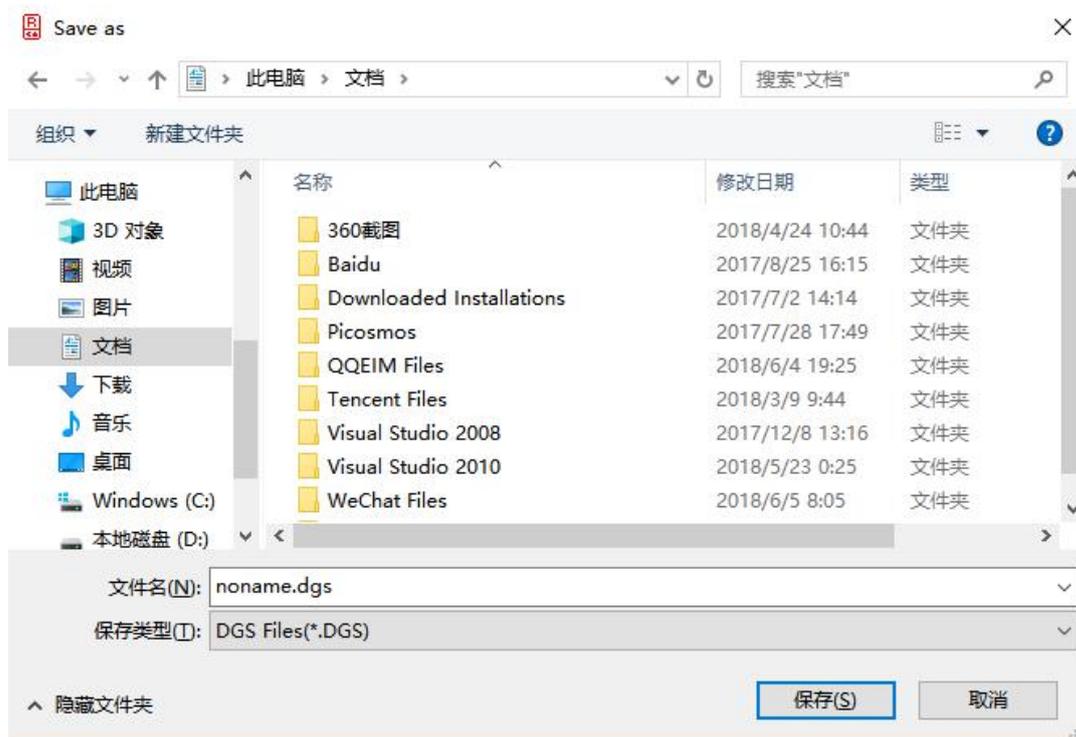
## Save As (S)      Ctrl+S

### Function:

It is used to save an existing file.

### Operation:

1. Click icon  or press Ctrl+s, Will appear **【save as】** dialogue table, Find a path, Input file name in **【file name】**, Click **【save】**;



2. Save the file again. Click the icon and press Ctrl+S. The file will be saved according to the original path and original file name.

#### Presentation:

1. Before the file is saved for the first time, the model name is entered in the style name of the style data, and then the style name is automatically saved as the file name when saving.
2. If the file has not been changed, the icon is gray and is inactive.



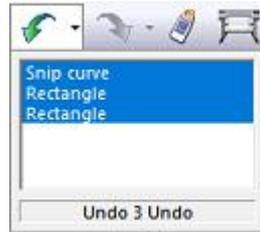
**Undo**     **Ctrl+Z**

#### Function:

Cancel before command in order, Press one time, You can cancel one step.

#### Operation:

1. Click this icon, Or press Ctrl+z, Or click right, Then click **【Undo】** .
2. Click on the lower triangle of the tool and click on the recorded operation steps to return to the corresponding operation position.


**Note:**

When the icon of **Undo** is gray, It means there is no operation can be undone.


**Redo**
**Ctrl+Y**
**Function**

Redo operation which have been undone, Press onetime ,You can come back one step.

**Operation:**

1. Click this icon, or Press Ctrl+Y.
2. Click on the lower triangle of the tool and click on the recorded procedure to return to the revoked location.


**Input pattern**
**Function:**

Input manual made pattern and overlap pattern to computer with digitizer and digitizer mouse.

**Operation: Read basic size**

1. Paste pattern on digitizer;
2. Click  input pattern Icon, You can see **input pattern** dialogue table, Put digitizer cursor on inputting point(Refer 16 key mouse Button setup function), Input order point in clockwise, Click 2 to finish;

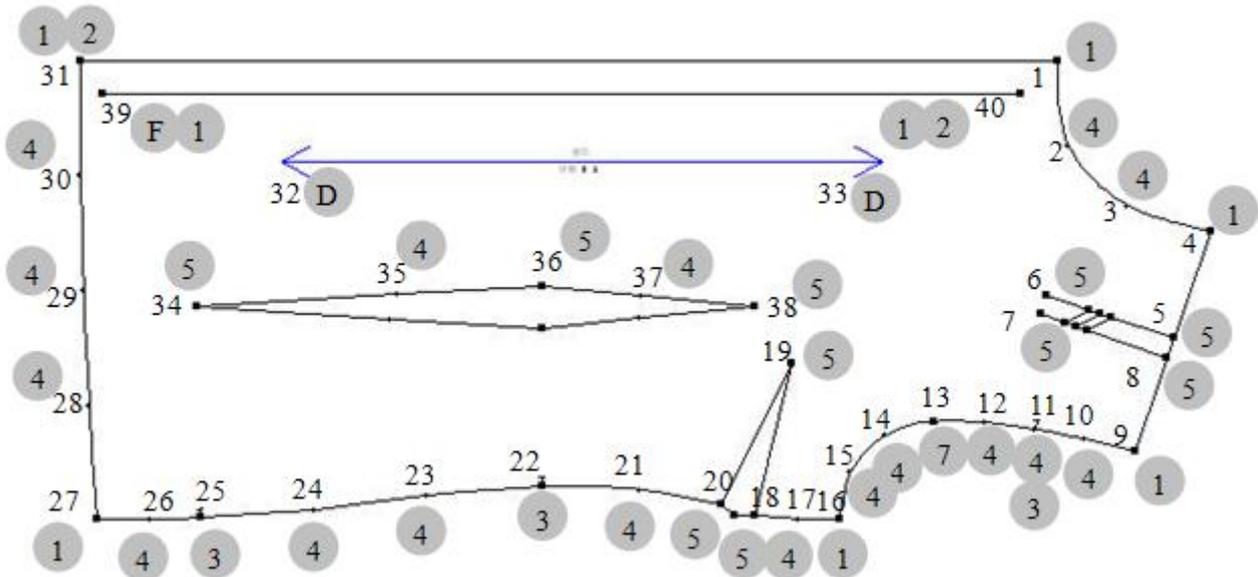
3. Opened assist line is selected automatically  (If you want to input close line , Click icon , If It is hollow pattern, Click ,Press corresponding button according to point parameter, every time finish one assistant line or hollow place or closed line, Press 2 to finish;
4. According to attached table ,Input other inner sign;
5. Click **【New pattern】** on dialogue table, before pattern appear on pattern list, [Input pattern] dialogue table blank, now you can read another pattern.
6. When finish all pattern, Click **【End】** .

**Note:**

Drill, button hole, Grain line, dart/Pleat can be input after inputting border line.

For example, Number in circle is digitizer mouse, is not in circle is order of inputting. Following is important place presentation.

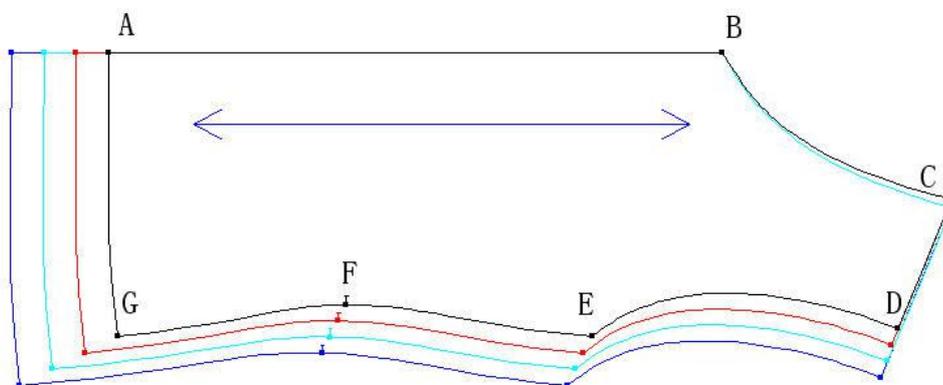
1. Number 1, 2, 3, 4 in order to read with 1 key, 4 keys, 4 keys and 1 key;
2. Use the mouse 1 key to select the corresponding knife pleat on the menu and read the pleat with the 5 key. Use the 1 key and 4 key to read the corresponding point, and use the corresponding key to read the corresponding point in order;
3. Point 11, If it is **【curve point】**, Press 4 then press 3 on digitizer mouse, Press 3 directly on digitizer mouse on point 22 and;
4. After reading point 17, read dart border point with digitizer mouse 1, Then read dart;
5. Point 31, Press 1, Then press 2 on digitizer mouse;
6. When read fastigate dart, select fastigate dart on menu with digitizer mouse button 1, Because it is symmetry, So we only read half part;
7. After reading opened assistant line, each time finish one opened assistant line, press 2 to finish.



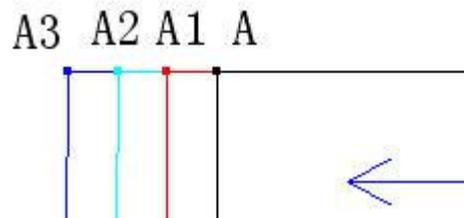
### Read grading pattern:

1. Click [size]-[Edit size and measurement], Insert or Add size, Then confirm basic size, Click ok.
2. Arrange pattern from small to big size, Align with one side, Then fixed on digitizer.
3. Click  input pattern icon, You can see **【input pattern】** dialogue table, Input basic size grading point with button1, Then Press E from small size to big size( leap over big size), Input corresponding grading point of this grading point.
4. Refer to this method, Input other grading point, Input basic size only when met non grading table.
5. Press button 2 to finish.

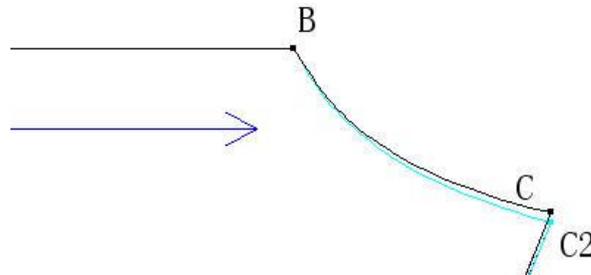
### EXAMPLE:



1. Input four size in **【size】 - 【edit size and measurement】** , For example S、 M、 L、 XL, Set size s as basic size.
2. Arrange pattern from small to big size, Align with one side, Then fixed on digitizer.
3. From point A, Read pattern clockwise, Press on basic size with digitizer mouse 1, Click A1,A2, A3 with digitizer mouse E.



4. Click on point B with digitizer mouse 1(B non grading), Press 4 read basic size collar curve.
5. Click on point C with digitizer mouse button 1, Then Click on point C with digitizer mouse button E,Then click two times on point C2 with digitizer mouse E.(Collar with is two size one dispersion)
6. Process of inputting point D is same as point A, Then read armhole with button 4, Other grading point and non grading point read process same as before.


**Note:**

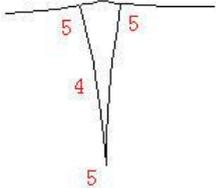
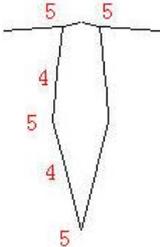
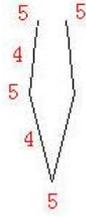
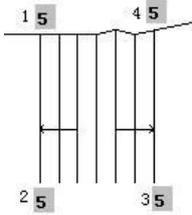
Standard digitizing can be read in with present function in 16-key mouse through the attribute of different points. If it is a 4-key mouse in which don't contain the preset function, you can click the options of Key 1 in the dialog box Read Patterns, and then press the Yellow button (Key 1) to read in the points. The usages for these keys are introduced in the annexed table below. (Shown as the following pic).

**The attributes for each key in 16-key mouse are described as below (the relevant key of 4- key cursor is attached after the function):**

- |                                  |                     |           |
|----------------------------------|---------------------|-----------|
| 1: Grading point on one line     | 2:Close/Finish      | 3:Notch   |
| 4: Non grading point on a curve  | 5: Dart/Pleat       | 6: Drill  |
| 7: Grading point on a curve      | 9: Button hole      | 0: Circle |
| A: Non-grading point on one line | B: Read new pattern | C: Undo   |
| D: Grain line                    | E: Graded           |           |
- F: Assistant button (Switch  selected status)


**Attachment:**

Type	Operation	Picture
Opened Assistant line	After reading border line  , Opened assistant line tool is selected automatically, Input one side, Middle point with digitizer mouse button 1,( As point property, If beeline, input 1,If curve line, input 4), Input another side with button 1, Press 2 to finish.	
Closed Assistant Line	After reading border line,Click  , Input according to point property, input 2 to finish.	
Inner border line	After reading border line, Click  , Input according to point parameter, Press 2 to finish.	

<p>V dart</p>	<p>When read v dart ,Select v dart on menu with digitizer mouse 1( Default is v dart, If you did not ever read other dart, No need to select). Press 5 on dart first point, Press 4 on middle line, Press 5 on dart tip point, Press 5 on end point. Because dart is symmetry, So only press 5 on end point ,No need to press 4 on another side curve.</p>	
<p>Fastigate Dart</p>	<p>When read fastigate dart, Select fastigate dart on menu with button 1, Then press 5 read dart first point, dart waist point, Dart tip point ,dart end point, If there are curve, Press 4, Because dart is symmetry, So only press 5 on end point ,No need to press 4 on another side curve.</p>	
<p>Inner V dart</p>	<p>When finish border line, Select v dart on menu with button 1, Operation is same as v dart.</p>	
<p>Inner fastigate dart</p>	<p>When finish border line, Select fastigate dart on menu with button 1, Operation is same as fastigate dart.</p>	
<p>Rhombus dart</p>	<p>After reading border line, Select Rhombus dart on menu with button 1, Read dart point,dart waist point, dart tip point, Press 2 to finish. f there are curve, Press 4, Because dart is symmetry, So only press 5 on end point ,No need to press 4 on another side curve.</p>	
<p>Pleat</p>	<p>Same operation for reading box pleat(show、H ide)、 knife pleat, When read border and reach pleat, Press 1 on menu select pleat type and direction, Then press 5 read pleat first point and pleat deep. Order is 1, 2, 3, 4.</p>	
<p>Notch</p>	<p>type of point property from 1, 4, 7, A, Then press 3. If select Curve grading point, press 7 ,then press 3.</p>	

Grainline	Before or after finishing border line, Press <b>D</b> to read Grain line two side point , If you did not input grain line, System will create a grainline automatically.	
Button hole	Before or after finishing border line, press <b>9</b> to input button hole two side point.	
Drill	Before or after finishing border line, Press <b>6</b> on drill center	
Circle	Before or after finishing border line, Press <b>0</b> on drill center	
Style name	Use the <b>1</b> key to first click on the "style name" on the menu, and then click on the number or letter that represents the style name. A file name can be read only once.	
Brief description , customer name, order number	Same as above	
Pattern Name	After reading a pattern, use the <b>1</b> key to click on the "pattern name" on the menu, and then click on the corresponding name.	
Material, Pieces	Same as above	
Text string	After reading the pattern, click "Text String" on the menu with the <b>1</b> key, then click two points (determine the text position and direction) on the pattern, click the text content, and finally click "Enter" on the menu	

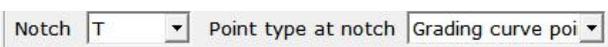
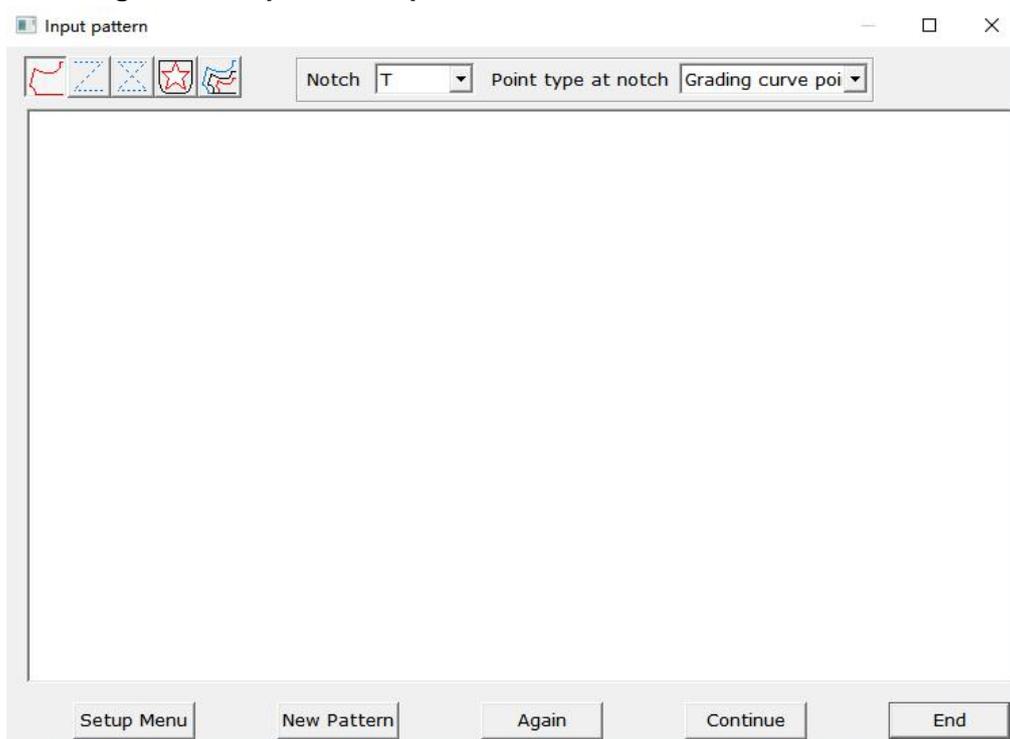
**Read pattern presentation:**

1. When read border and inner closed line, Read in clockwise;
2. Dart pleat
  - When read dart or pleat, Read one border line at least.
  - When read v dart, did not read other dart or pleat, No need to select on menu.
  - When read same type dart and pleat, Only select one time.

### 3. Material, Pieces

There is a variety of fabrics on a pattern. If there are two copies of a paper pattern, there is one copy of the pattern, first click on the "fabric" with a button, then the name of the fabric "face", then click on the "number of copies", and then click The corresponding number "2", then click "Cloth", then another cloth name "Park", then click "Copies", and then the corresponding number "1".

#### 【Input pattern dialogue table】 parameter presentation:



There are several types of notches in the drop-down box for selection. The selected notches type is shown when reading a drawing. There are four types of points in the drop-down box after the notches type, which is selected as shown in the figure. Curve grading point, then read the clipping on the curve grading point, the line can be used 3 key;



Like picture, When you read curve grading point, You can only use 3 button of digitizer mouse. When menu is moved or read pattern first time, You need to set up menu. Operation, Put menu on effective area, Click [setup menu], Then click "yes". Click menu left up corner, Left bottom corner, Right bottom corner.

**New Pattern**

After finish one pattern, Click this command, before read pattern go back to packing list, You can start reading next pattern.

**Again**

More error process when reading pattern, Using this command.

**Continue**

When pattern go back to packing list, Click this button can read continuously, For example Notch, Assistant line etc. Operation, Select this pattern, Click continue command, Selected pattern will appear in dialogue table, Then read continuously.

**End**

It is used for closing dialogue table.

**Plot****Features:**

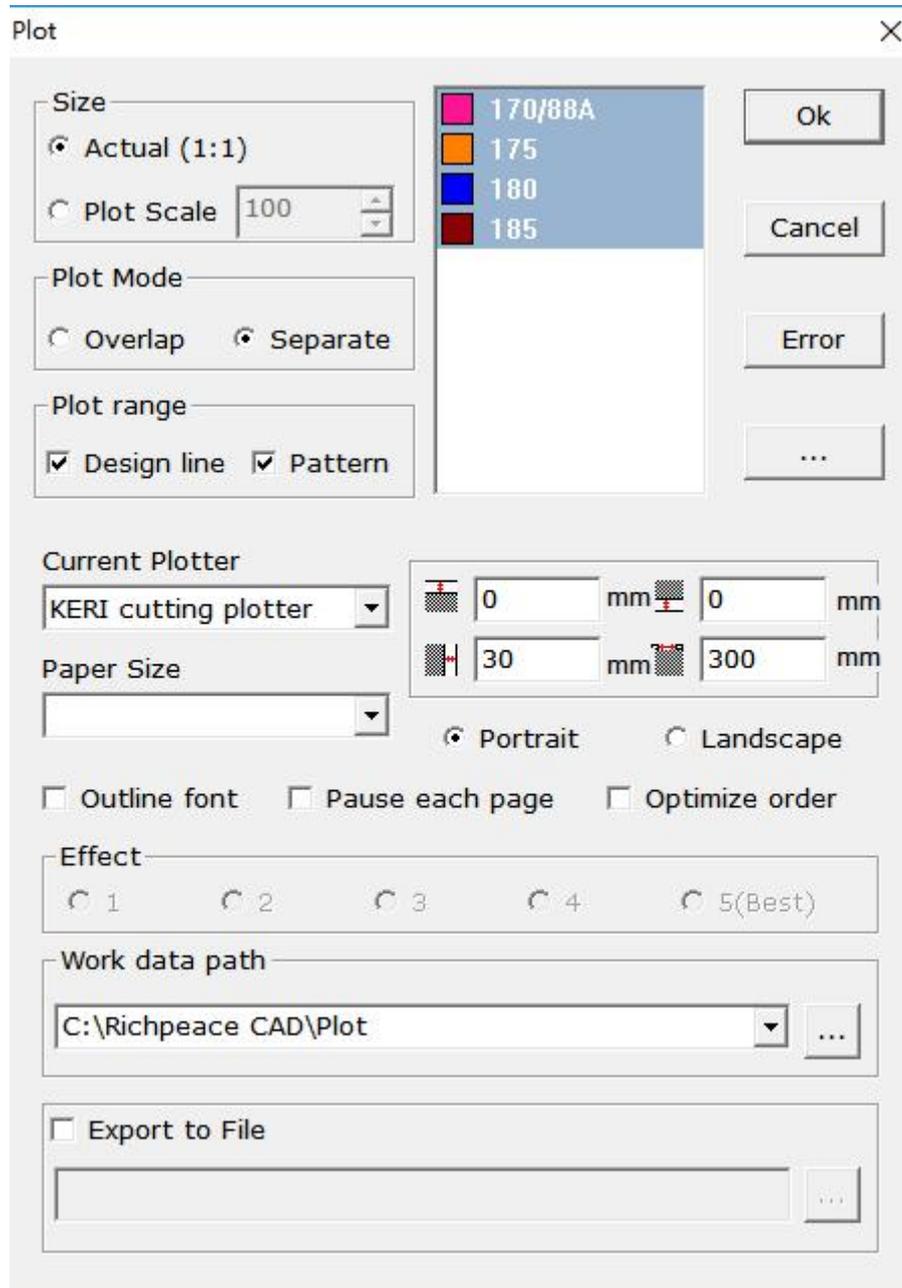
Plotting patterns or design lines in proportion.

**Operation:**

1. Arrange the pattern or structure to be drawn in the work area. If it is a pattern, you can click [Edit] menu--automatically arrange the drawing area; Select Actual or Plot scale, Click on size which do not plot, No need plot size will no color.
2. Press F10 key to display the paper width boundary (if the paper pattern is out of bounds, there is a round red warning on the cloth line, you need to move the paper pattern into the sector); Preserve Border, work data path etc, Click **【Ok】**, It will turn back **【plot】** dialogue table.
3. Click this icon to bring up the [Plot] dialog box.
4. Select the required drawing scale and drawing method, click on the size of the drawing to make it no color fill;
5. Set the current plotter model, paper size, reserved margins, working directory, etc. in the dialog box;
6. Click OK to draw.

**Prompt:**

1. Set the port to connect the plotter in the drawing center;
2. To change the pattern of the output line pattern inside and outside the paper pattern, cloth lines, cut lines, etc., you need to set in [Options] - [System Settings] - [Print].

**【Plot】 dialog box parameter description:**


**【Actual】** It is used to plot pieces in real size(1:1)

**【Plot scale】** Select this option, dialogue table will turn light, You can input proportion of plot and real size.

**【Overlap】** is used to print Grading pieces as overlapped mode.

**【Separate】**Is used for print grading pieces in separate mode, Right dialogue table is size selection,It is used for outputting size,Blue color is outputting size, White is not output size, Default is selecting all.

**【Drawing Range】** You can select whether to draw the structure line or the pattern.

**[Current Plotter]** Used to select the model of the plotter. Clicking on the small triangle next to it will pop up the drop-down list and select the currently used plotter name.

**[Paper Size]** Used to select the paper type, click on the small triangle next to the pop-up drop-down list, select the paper type, you can also choose to customize, in the pop-up dialog box, enter the page size, click [OK] to;

 Left margin of plotter paper

 Right Margin of plotter paper

 Space between two plotting

 Set space between the contrcaosition sign

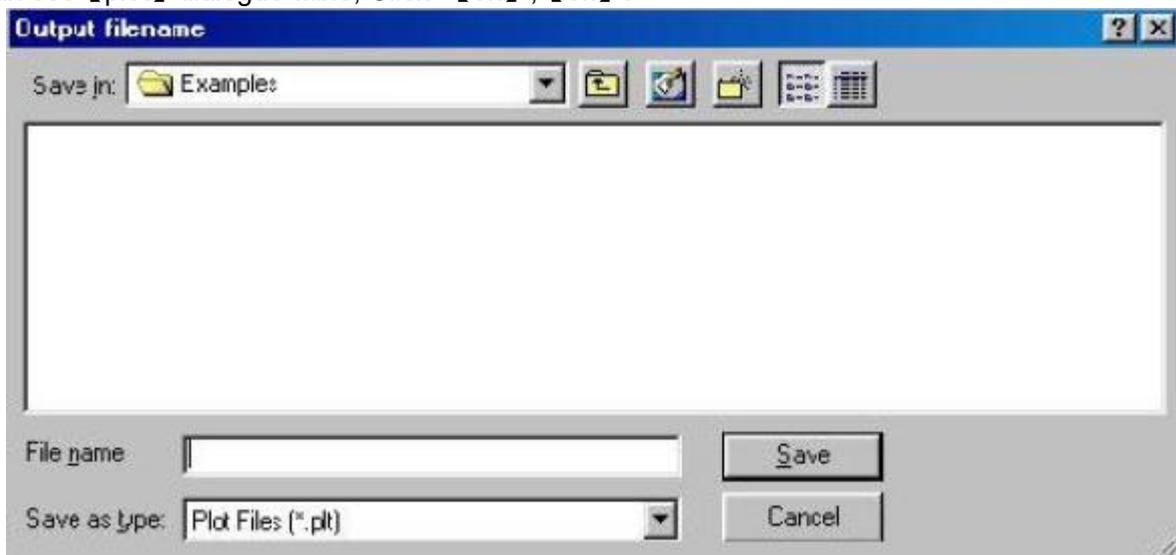
**【Portrait】 【landscape】** It is used for set plot direction

**【Export to file】** Select, You can save pattern to plt file, open plt file in plot center directly, You can Plot even no software.

**Operation:**

1. In **【plot】** dialogue table, Select **【output to file】** .
2. Click  You can see **【export file name】** dialogue table, Input file name, Click **【save】** ,

You can see **【plot】** dialogue table, Click **【ok】** , **【ok】** .



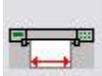
**【Work Data Path】** It refer to path of current plotter, It is data path of plot center which is used for connecting plotter. For example, There are two computer A,B. Computer B connect with plotter, Computer A need to be connected with web. Select Computer B-plot center-Data path, Select plot folder. (Also you can establish folder yourself). Plot on computer B, select plot directly.

**Note:** The plot port is set in the plot center.

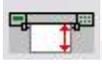
**【Error】** It is used for check the size after plotting is actual size or not;

**Operation:**

1. Click[Error], You can see [password] dialogue table, Input password, Click [Ok], If you need password, Please ask for Richpeace.
2. You can see 【correct plotting error】 dialogue table:



Here you can input real measurement plotted for 1m in width;



Here you can input real measurement plotted for 1m in length;

3. Plot a 1mx1m rectangle, For example, Actual size is 998mmx998.2mm,You need to input 998 on width, 998.8 on length, Click[ok].

**Note:**

Please do not change the setup freely.



Edit size table

**Function:**

1. Edit size and color, Easy for grading;
2. Can enter the size of the garment, to make it easy to use the data, it is convenient to design and automatically grading. At the same time, it also back-up the detailed size data, and can quickly open the size table that edited in EXCEL before.

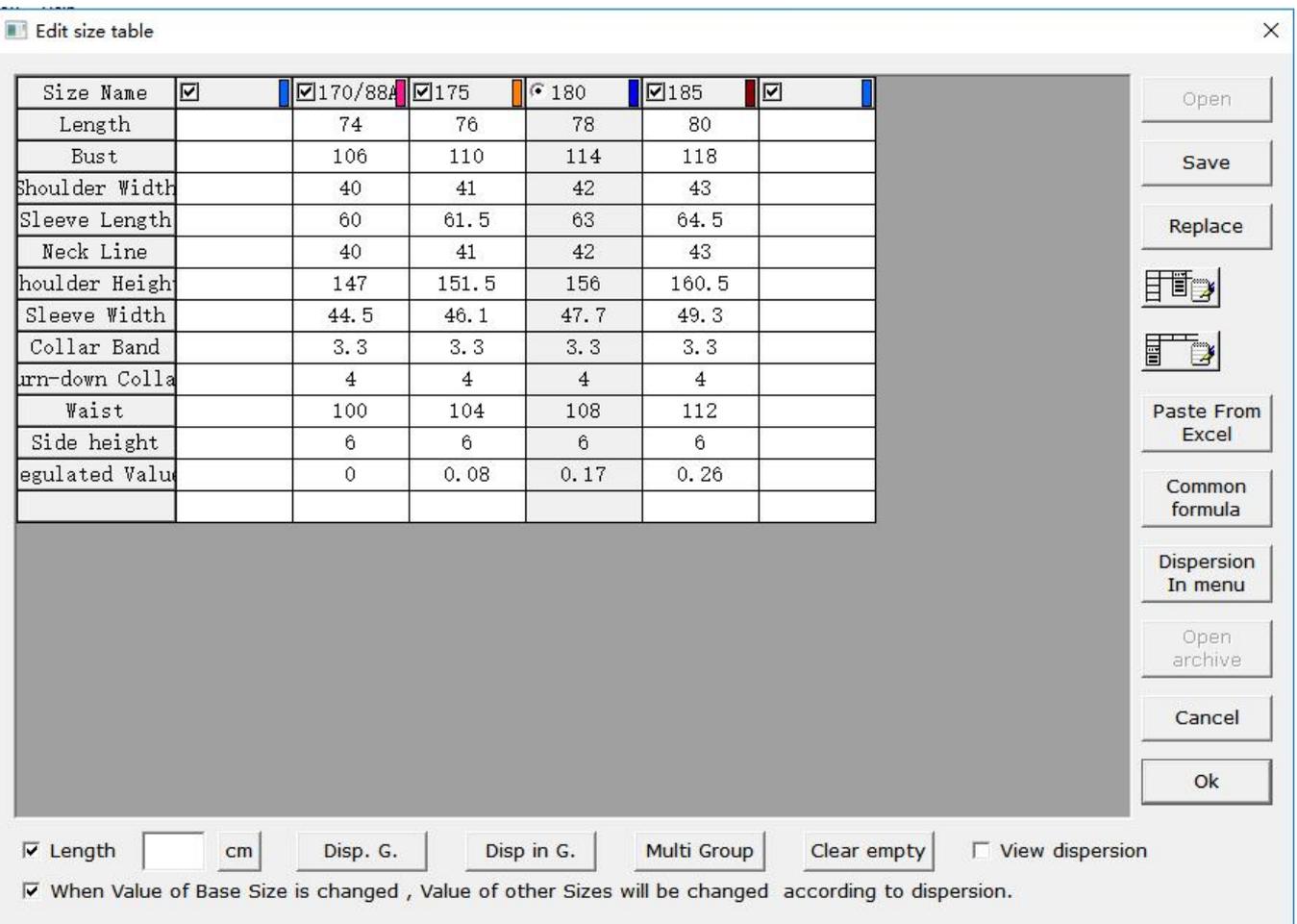
**Operation:**

1. Click this tool, then “Edit size table” dialog box will pop up;



2. Default is single group, Click on size name, System can add line automatically(Click on second line, System can add third line automatically), Input part name in first line;
3. Click on the base code (M in the diagram), it will automatically add code (click in the third column, will automatically add the fourth column ...), in the first line can enter the type name;
4. Input different part size under size name, Can set different size color after size.

**【Edit size table】** parameter presentation:



Size Name	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/> 170/88A	<input checked="" type="checkbox"/> 175	<input checked="" type="checkbox"/> 180	<input checked="" type="checkbox"/> 185	<input checked="" type="checkbox"/>
Length		74	76	78	80	
Bust		106	110	114	118	
Shoulder Width		40	41	42	43	
Sleeve Length		60	61.5	63	64.5	
Neck Line		40	41	42	43	
Shoulder Height		147	151.5	156	160.5	
Sleeve Width		44.5	46.1	47.7	49.3	
Collar Band		3.3	3.3	3.3	3.3	
Turn-down Collar		4	4	4	4	
Waist		100	104	108	112	
Side height		6	6	6	6	
Regulated Value		0	0.08	0.17	0.26	

Length       View dispersion  
 When Value of Base Size is changed , Value of other Sizes will be changed according to dispersion.



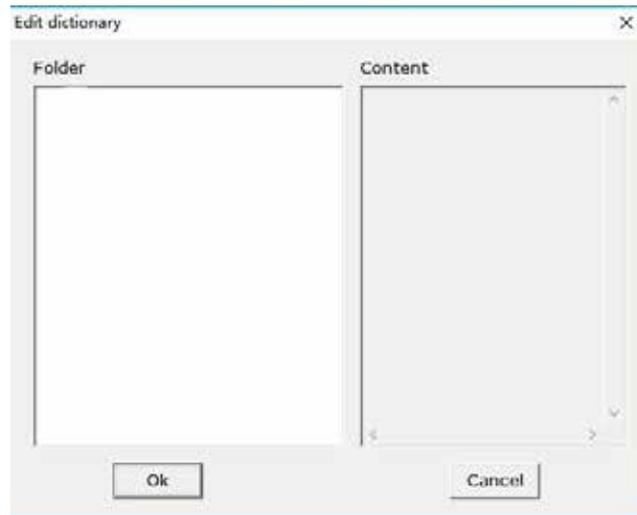
Dictionary is used for saving size name, for example, Can save size name by sort;



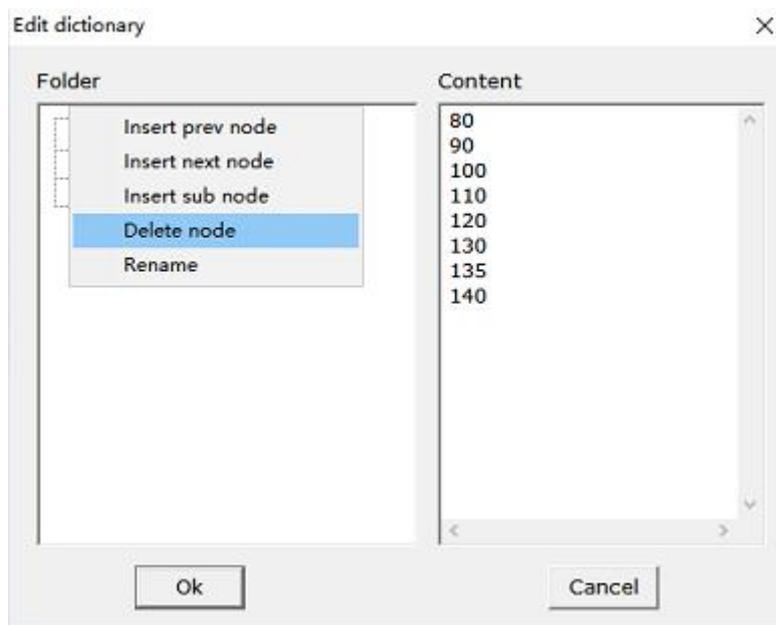
This dictionary can saving part name, Can save size name by sort;

Both of the above tools have editorial dictionaries, using the editing of the part dictionary dialog as an example:

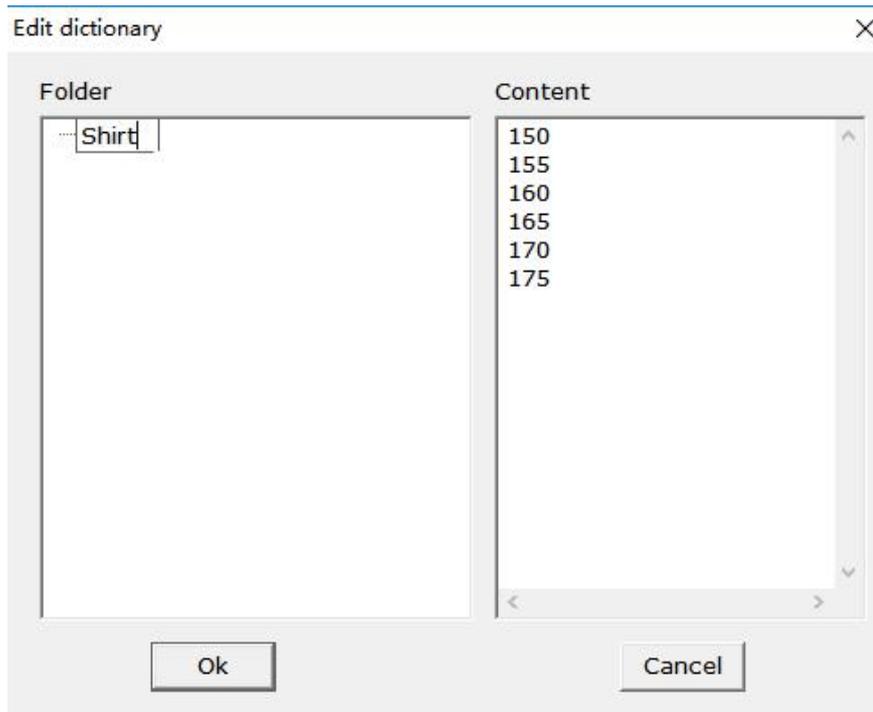
(1) Click “Edit dictionary”, pop up:



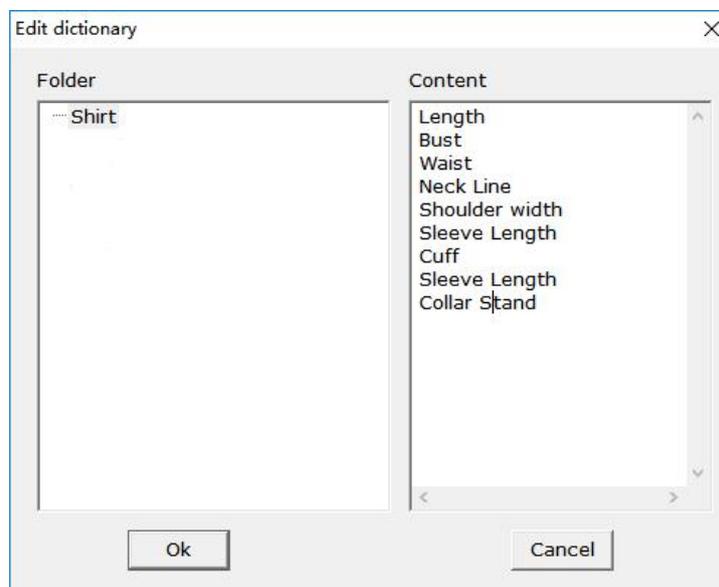
(2) Right click under the Folder, pop up:



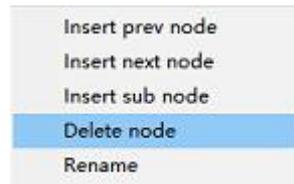
(3) Input the name:



(4) After inputting the name, select an item in the directory edit box and enter the corresponding text in the content edit box (press Enter to wrap):



(5) If you need to create another directory, select the location where you want to add the directory, and click the right mouse button.



(6) Insert a previous node: insert one before the selected node;

(7) Insert a later node: Insert one after the selected node;

(8) Insert child node: Insert a child node at the selected node;

(9) Delete node: delete the selected node. If the node has a child node or the node has data content, it will be deleted.

Change the name: Rename the selected node;

note:

If the node has data, it is not allowed to increase the child node;

If there is a child node in the node, the node cannot add data;

The name of each node cannot be empty, and the node name of each layer cannot be the same;

The node selected before the determination must be a node with data.

**【Open】** Open the file with the format .xls/xlsx (Excel file), .siz (Richpeace format file), and if the body size already exists in the table and it is used by the current style, this function cannot be used.

**Note:**

Reading Excel files needs to meet the following requirements:

1. If the number type is not grouped: The first column of the number type line (the column in which the body size name is located) must not be empty;

	A	B	C	D	E
1	Size	M	L	XL	2XL
2	BUST	128	136	140	144
3	BOTTOM	118	126	132	138
4	CENTER BACK LENGTH	74	76	77	78
5	SMALL SHOULDER	17.4	17.9	18.15	18.4
6	SLEEVE LENGTH	66	67	67	68
7	CUFF	31	32	32.5	33
8	SLEEVE WIDTH	26	26.5	27	27.5
9	ARMHOLE	26.5	27.5	28	28.5
10	NECK WIDTH	20	21	21.5	22
11	FRONT NECK DROP	10.5	11	11.5	12
12	BACK NECK DROP	2.5	2.5	2.5	2.5
13	COLLAR LENGTH	56.5	58.9	60.1	61.3
14	COLLAR STAND	6.5	6.5	6.5	6.5

2. If it is a group number type: the first column of the group name row (the column where the human body size name is located) must be empty, and the first column of the number type row (the column where the human body size name is located) must not be empty.
3. If there are multiple pages in the Excel file, you must place the first table (including the hidden table) that needs to be read in.
4. When edit Excel, the data in the table is best stored as text,

**【Save】** Save the body size in the current table, the format is .xls/(Excel file), .siz (Richpeace format file).

**【Replacement size】** Replace the size data in the current table with the data in the read file.

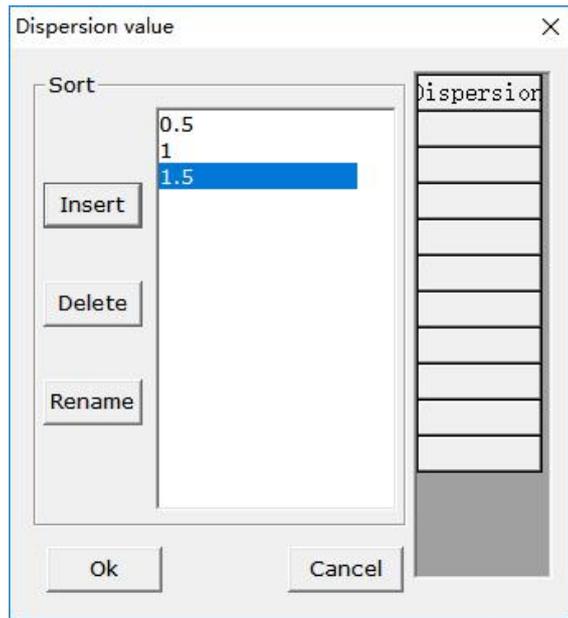
Replace file requirements:

1. The number of body size in the current size table is equal to the replace file.
2. The name of the human body size in the current specification table can be found in the body size of the read-in file, and none of them can be replaced, including the length or non-length not shown;
3. After reading in the base code, the number type color, number type name is used in the current specification table.

**【Dispersion in menu】** This function is used to set the right menu data in the table.

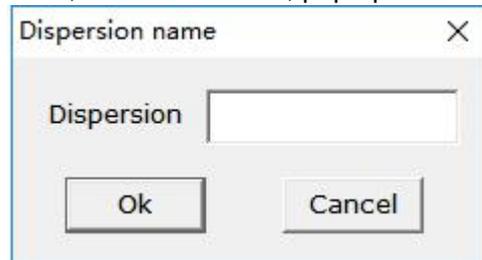
Auto Calculate Size
0.5
1
1.5
2
2.5
3
3.5
4
4.5
5

Can set some common Dispersion value to the menu.

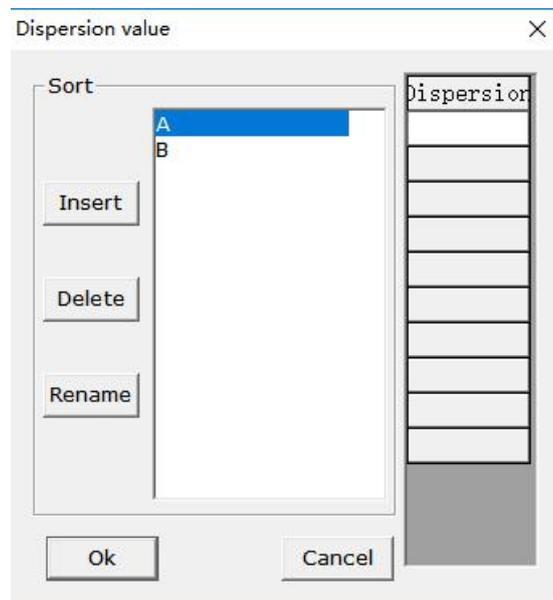


Use of this dialog:

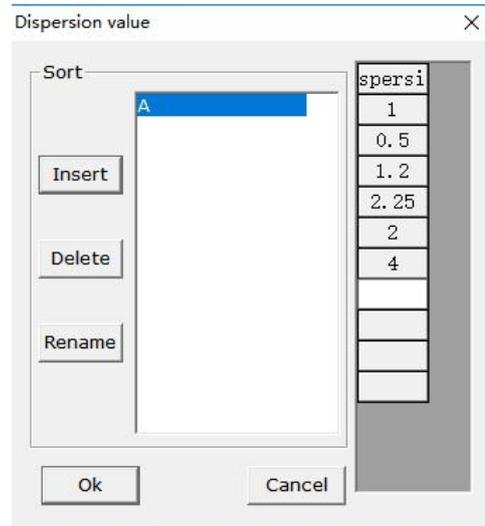
1. First must give a name to Dispersion, click , pop up the name edit dialog.



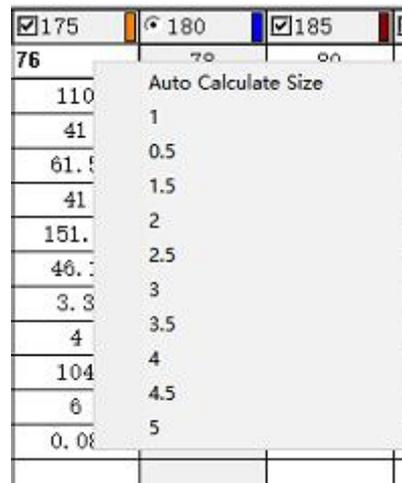
Next, Choose the name and input the Dispersion value



Before click ok, need to choose one Dispersion



Right-click in the table to display the edited menu:



**【Open Archive】** It is used for importing size summaries file(\*.SML);



Check this box to indicate that the data in the current table is the length of the body size, such as: length, length, etc.; does not check the item, the data in the current table is the angle, constant body size; for example: shoulder angle , proportions, etc. **Note: The table data will be saved when the item is operated, so you need to ensure that the current table data is correct.**



Input the file data in the edit box. This data needs to be used for the range difference between the group and the file in the group.



The current form unit, click this button to pop up the unit modification page, you can modify the unit differences between groups, within the group, the preconditions: **Must select a valid data frame in the table.**

**Disp. G.** Its control can only be used after the grouping of the table number type; for each group of the condon, according to the data of the range difference file edit box, according to the total condon, the condon of each group is assigned (except for the total condon).  num , The range difference of codon is edit box data.

**Disp in G.** For the selected type group, edit the data according to the condon and range difference in the group  num , Assign a value to this group of non-condon data. All non-condon range difference files are edit box data.

**Multi Group** Group the table numbers.

**Clear empty** Clear row and column with no data, no type name and no human size name.

**View dispersion** Selected, indicating that the data in the table is displayed by Dispersion, the total condon is displayed according to the actual data.

**When Value of Base Size is changed , Value of other Sizes will be changed according to dispersion.**

Selected, indicating that when the condon is modified, the non-condon of the group changes according to the original range difference. Right-click on the selected number type table, pop-up menu, as shown:

**Edit size table**

Size Name	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/> /002	<input checked="" type="checkbox"/> 1.75	<input checked="" type="checkbox"/> 1.80
Length		740		
Bust		1060		
Shoulder Width		400		
Sleeve Length		600	615	630
Neck Line		400	410	420
Shoulder Height		1470	1515	1560
Sleeve Width		445	461	477

Context menu options: Insert, Delete, Base size

Type can be inserted, deleted, set the base code;

Right-click in the selected size variable name table, pop-up menu, as shown:

Edit size table

Size Name	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/> 170/	<input checked="" type="checkbox"/> 175
Length		740	760
Bust		1060	1100
Shoulder Width		400	410
Sleeve Length		600	615
Neck Line		400	410
Shoulder Height		1470	1515
Sleeve Width	Insert	45	46
Collar Band	Delete	33	33
Turn-down Collar	Base size	40	40
Waist		1000	1040
Side height		60	60
Regulated Value		0	0.8

You can insert and delete dimension variables.

Right-click in the data editing table, pop-up stall menu, as shown:(mm)

Edit size table

Size Name	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/> 170/88A	<input checked="" type="checkbox"/> 175	<input checked="" type="checkbox"/> 180	<input checked="" type="checkbox"/> 185
Length		740	760	780	800
Bust		1060	1100	1140	1180
Shoulder Width		400	410	420	430
Sleeve Length		600	615	630	645
Neck Line		400	410	420	430
Shoulder Height		1470	1515	1560	1605
Sleeve Width		445	461	477	493
Collar Band		33	33	33	33
Turn-down Collar		40	40	40	40
Waist		1000	1040	1080	1120
Side height		60	60	60	60
Regulated Value		0	0.8	1.7	2.5

Auto Calculate Size

choose the dispersion needed.

No grouping:

The selected base size and non-base size will be in accordance with the base size.

Non-base size changes according to a given dispersion, as shown (mm)

Size Name	<input checked="" type="checkbox"/> 170/88A	<input checked="" type="checkbox"/> 175	<input checked="" type="checkbox"/> 180	<input checked="" type="checkbox"/> 185
Length	740	760	780	800
Bust	1060	1100	1140	1180
Shoulder Width	400	410	420	430
Sleeve Length	600	615	630	645

Grouping:

Choose:

Edit size table

Group Name	<input type="checkbox"/> A				<input checked="" type="checkbox"/> AA		
Size Name	<input checked="" type="checkbox"/> 170/88A	<input checked="" type="checkbox"/> 175	<input checked="" type="checkbox"/> 180	<input checked="" type="checkbox"/> 185	<input checked="" type="checkbox"/> 1801	<input checked="" type="checkbox"/> 1802	<input checked="" type="checkbox"/> 1803
Length	72	75	<b>78</b>	81	78	80	82

Total base size

Edit size table

Group Name	<input type="checkbox"/> A				<input checked="" type="checkbox"/> AA		
Size Name	<input checked="" type="checkbox"/> 170/88A	<input checked="" type="checkbox"/> 175	<input checked="" type="checkbox"/> 180	<input checked="" type="checkbox"/> 185	<input checked="" type="checkbox"/> 1801	<input checked="" type="checkbox"/> 1802	<input checked="" type="checkbox"/> 1803
Length	72	75	78	81	78	<b>80</b>	82

Base size in Non-base size group

Right click choose the dispersion as 3, the result is the following:

Edit size table

Group Name	<input type="checkbox"/> A				<input checked="" type="checkbox"/> AA		
Size Name	<input checked="" type="checkbox"/> 170/88A	<input checked="" type="checkbox"/> 175	<input checked="" type="checkbox"/> 180	<input checked="" type="checkbox"/> 185	<input checked="" type="checkbox"/> 1801	<input checked="" type="checkbox"/> 1802	<input checked="" type="checkbox"/> 1803
Length	72	75	<b>78</b>	81	79	81	83

All groups base size according to dispersion to change.

If :

When Value of Base Size is changed , Value of other Sizes will be changed according to dispersion.

Non-base size in non-base size group, according the original dispersion change.

If :

When Value of Base Size is changed , Value of other Sizes will be changed according to dispersion.

Non-base size in non-base size group, don't change.

Choose Non-base size in base size group:

Edit size table

Group Name	<input type="checkbox"/> A				<input checked="" type="checkbox"/> AA		
Size Name	<input checked="" type="checkbox"/> 170/88A	<input checked="" type="checkbox"/> 175	<input checked="" type="checkbox"/> 180	<input checked="" type="checkbox"/> 185	<input checked="" type="checkbox"/> 1801	<input checked="" type="checkbox"/> 1802	<input checked="" type="checkbox"/> 1803
Length	74	76	78	<b>80</b>	78	80	82

Choose Non-base size in non-base size group:

Edit size table	
Group Name	<input type="checkbox"/> A <input checked="" type="checkbox"/> AA
Size Name	<input checked="" type="checkbox"/> 170/88A <input checked="" type="checkbox"/> 175 <input checked="" type="checkbox"/> 180 <input checked="" type="checkbox"/> 185 <input checked="" type="checkbox"/> 1801 <input checked="" type="checkbox"/> 1802 <input checked="" type="checkbox"/> 1803
Length	74      76      78      80      78      80      82

Right click choose the dispersion as 1, the result is the following:

Edit size table	
Group Name	<input type="checkbox"/> A <input checked="" type="checkbox"/> AA
Size Name	<input checked="" type="checkbox"/> 170/88A <input checked="" type="checkbox"/> 175 <input checked="" type="checkbox"/> 180 <input checked="" type="checkbox"/> 185 <input checked="" type="checkbox"/> 1801 <input checked="" type="checkbox"/> 1802 <input checked="" type="checkbox"/> 1803
Length	76      77      78      79      78      80      82

The group which in the selected edit box according the given dispersion change, the other group keep the original.



### Show/Hide design line

("Option"-System setup-Define Hot key)

#### Function:

Select this icon, It show design line, Otherwise it is hide line.

#### Operation:

Click this icon,When down, design line will show, Click again, When up,Design line will hide.



### View/Hide Pattern

("Option"-System setup-Define Hot key)

#### Function:

Select this icon, It shows pattern, Otherwise it is hide pattern.

#### Operation

Click this icon,When down, Pattern will show, Click again, When up, pattern will hide.



### Only display one piece

---

#### Function:

1. Select this icon, Only one pieces appear on work area in full screen, Means pieces is Locked, If did not select this icon, More pieces can be shown on work area.
2. When pattern is locked, Only can operation this pattern, Can avoid other pattern disturbing, Also can avoid wrong operation to other pattern.

#### Operation:

- a. Select this pattern, Click this icon, When icon down, Pattern is locked.
- b. Click other pattern, Can lock new pattern.
- c. Click this icon, When icon up, Can cancel locking.



### Switch Formula or Free Model

---

#### Function:

Switch Free design and Formula design.

#### Operation:

Press down to formula design and play it up for free design.



### Display lines types according different colors

---

#### Features:

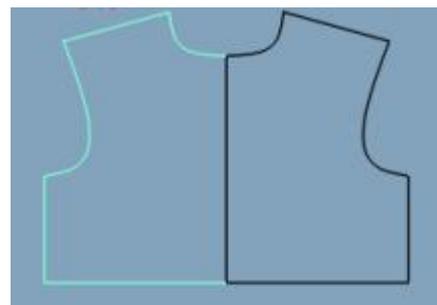
For the formula method, the colors of the special curves are displayed, such as parallel lines, rotation lines, and symmetry lines.

#### Operation:

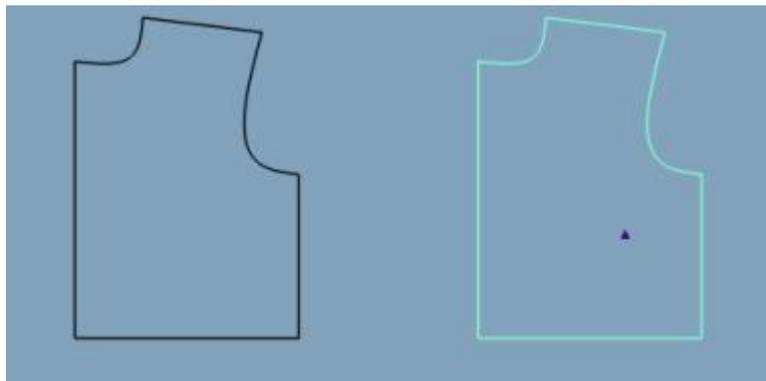
- 1) The formula method parallel lines, symmetry lines, rotation lines, fixed length lines, and group replications display one color, which is the color of the formula's special curve.



parallel lines

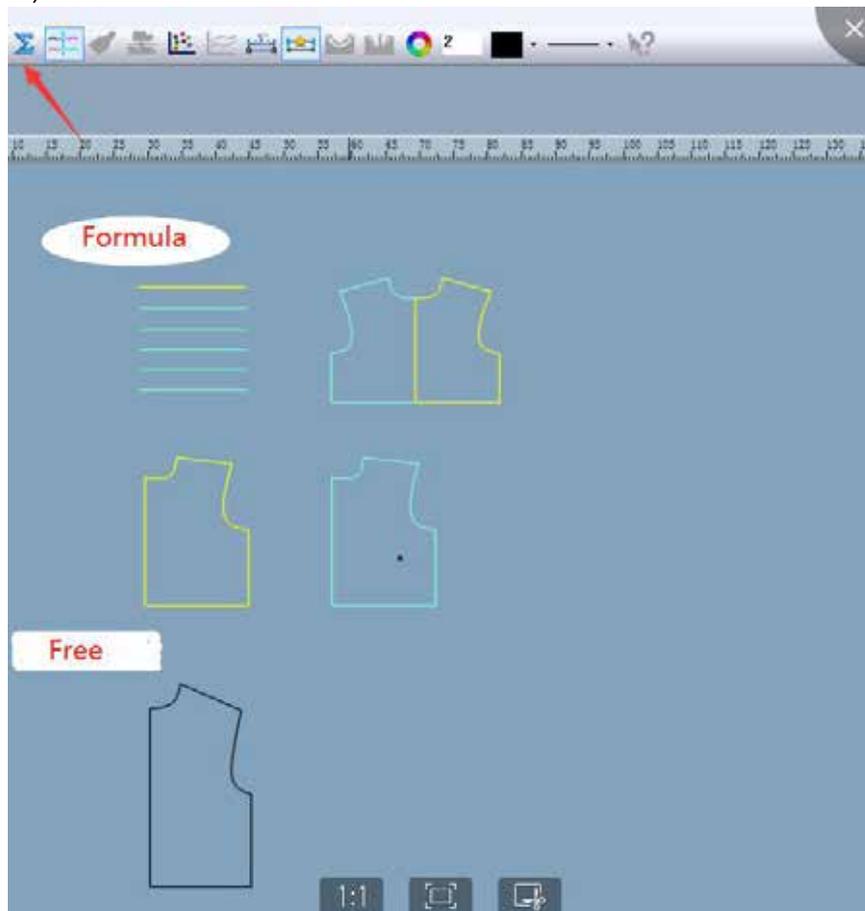


symmetry lines



group replications

2) If the current formula method, then the free method will show another color (for the current non-pattern line color), if the current is the free method, then the formula method will show another color (for the current non-pattern line color).



Note: The display color of the line must be displayed when this function  is enabled, otherwise it will not be displayed.



### Hang up select pattern

#### Function:

Moving pattern from work area to pattern list.

#### Operation:

1. Select pattern control point tool  select the patterns that need to hang up.
2. Click this icon, Pattern go back to pattern list.



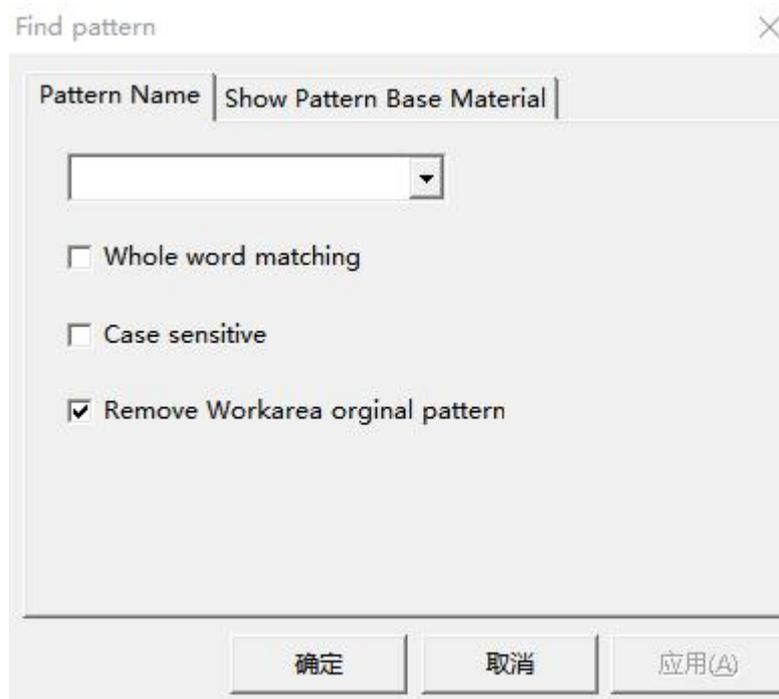
### View same material pattern

#### Function:

Put pattern on work area according to pattern name or material, Easy for checking pattern.

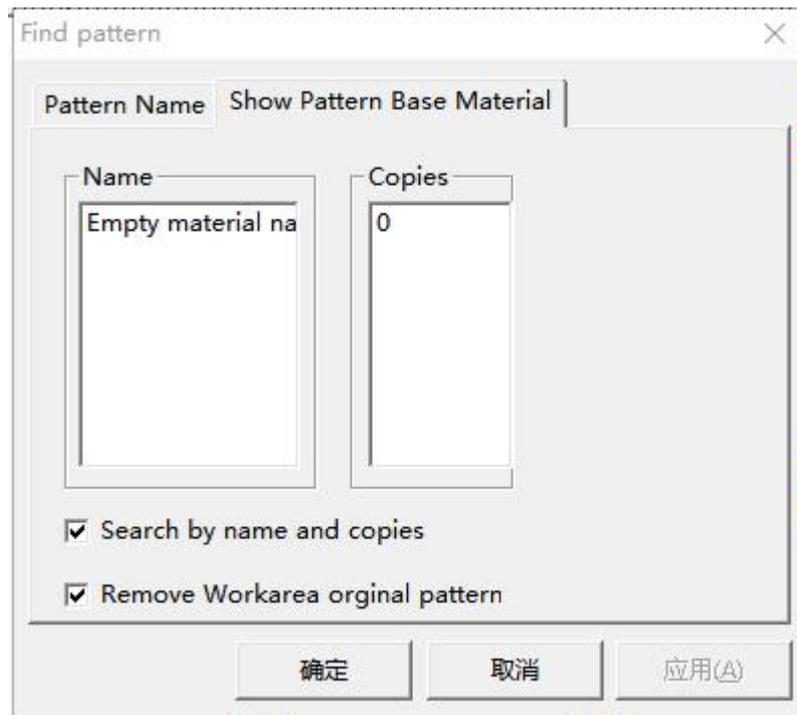
#### Operation:

1. Click this icon, U can see 【Find pattern】 dialogue table;



2. If checking according to pattern name, Click 【pattern name】 , Input name, Then click ok, This pattern will be put work area.

3. If checking according to material, Select 【show pattern base material】 Click corresponding material and put to work area.



【Pattern name】dialogue explanation:

【Match whole word only】: For example, There are pattern name front, front center, front side, If input front in This dialogue and select [match whole word only], Only pattern with front name come to Work area. If do not select[match whole word only], All the pattern with front word will Come to work area.

【Show pattern base material】dialogue explanation:

Material name: Pattern with same material name was put to work area;

Material copies: Put pattern to work area according to selected material copies;

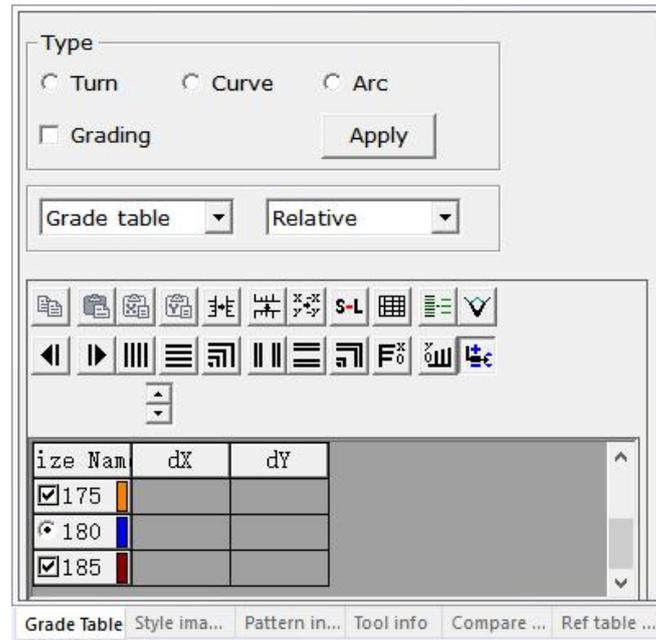


Grade table

---

**Function:**

Grade for one or more point, also can choose the point attribute.



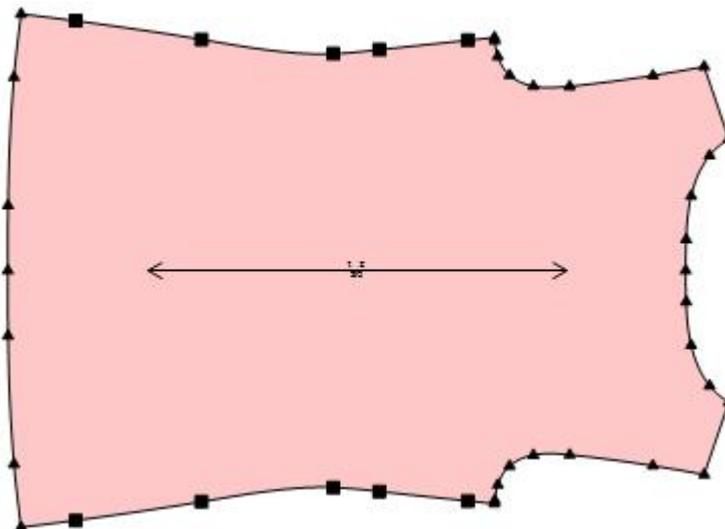
### Operation:

One: point type

As shown below: The four triangle points are the turning point and the grading point at the corner, the box point is the grading point, and the triangle point is not the curve point at the corner (this curve point is the correlation point, only when the point is a triangle, it can Structure Line Association).



Select tool change the point properties.



Two: Grading operation

1. Click Table-Edit size & measurement, or click the tool icon  directly, Set the model and color of each size;
2. Click this icon  , You can see Grade table;
3. Use  , Click or make a square to select more Grade table with “select pattern control point” , dx and dy is active.
4. Input Grade value in other size except base size.
5. Click  (Equal x),  (Equal Y) or  X equal Y etc to finish grading.

### **Grading skills (blind):**

1. If you need to grading in both the X direction and Y direction, select one or more grading points with the left mouse button  of the selected pattern control point tool, and tap the X direction file amount directly with the keyboard. Press Enter and then press Y direction. The number of gradings on the press again to enter the selected grading point can be grading;
2. If you only need to grading in the X direction, select one or more grading points by left-clicking on the tool selection control point tool  . Enter X first and then enter the difference amount and press Enter to select the grading point. Be grading
3. If you only need to grading in the Y direction, select one or more grading points with the left button  of the Select Sample Control Point tool. Enter Y and then enter the difference amount and press Enter. The selected grading point can be selected. It is grading.
4. Enter the amount of grading in the point grading table and press ENTER to perform equidistant grading.

**[Grading table] parameter description:**

Under the number column, there is a number type name, and the number type name is preceded by a non-base code number type, and the box is displayed as a play, and no play is hidden. In front of the type name, ○ is the base code, and the base code in the circle is the display state. The base code in the circle is hidden. If the number type is a single group, the data can only be entered in the non-base code. If the number is divided into groups, the data can be entered in the base code of the non-base code group.

**Copy Grading****Function:**

It is used for coping grade value of grading point ,You can copy grading value from one point or one group point.

**Operation:**

1. Select grading point with“Select pattern control point”tool  , Click or make a square to select point already graded, Grading value show on Grade table.

2. Click copy grading icon  , All grading value is saved , Will be used for paste.

**Paste grading****Function:**

It is used for pasting x and y direction value to appointed grade point.

**Operation:**

1. After finishing[copy grading] command, Click or make a square to select graded point;

2. Click paste grading icon  , you can paste XY grading value.

**Paste X****Function:**

It is used to paste the Dx value from the copied grading point to the selected points.

**Operation:**

1. After you copied the grading value, click the point need to be graded.

2. Click  to paste the DX value to the selected point.

**Paste Y****Function:**

It is used to paste the DY value from the copied grading point to the selected points.

**Operation:**

1. After you copied the grading value, click the point that needs to be graded.

2. Click  to paste the DY value to the selected point.

 **Neg X**

**Function:**

It is used to reverse the grading values for a graded point in the X direction. That is to say, if the X value for a grading point is +X, you can click this tool to change it to -X or from -X to +X.

**Operation:**

Click to select a grading point and then click this icon.

 **Neg Y**

**Function:**

It is used to reverse the grading values for a graded point in the Y direction. That is to say, if the Y value for a grading point is +Y, you can click this tool to change it to -Y or from -Y to +Y.

**Operation:**

Click to select a grading point and then click this icon.

 **Neg XY**

**Function:**

It is used to reverse the grading values for a graded point in the X and Y direction. That is to say, if the X and Y value for a grading point is +X and +Y, you can click this tool to change it to -X and -Y or from -X and -Y to +X and +Y.

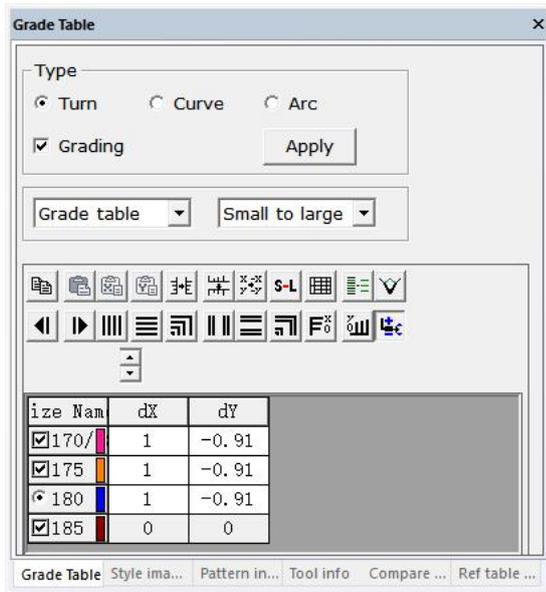
**Operation:**

Click to select a grading point and then click this icon.

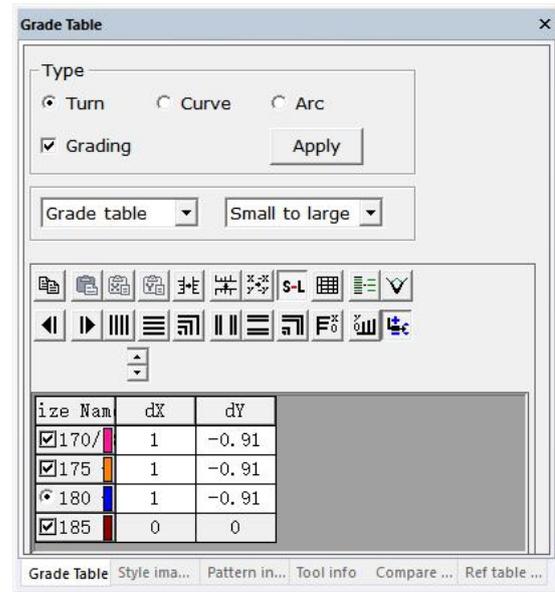
 **According the dispersion types to display size name**  **Display method**

**Function:**

When this button is not selected, the number type name displayed below the number type is the same as the number type name in the number specification sheet. Select this button, for example, there are S, M (condon), L, XL, XXL five types, and select the relative range difference, the table below each line type display this type and adjacent type ( Except for the condon), such as SM, M, LM, XL-L, and XXL-XL. If the absolute file is selected, the table with the base number and the condon is displayed in the table below the number type, such as SM, M, LM, XL-M, XXL-M; If selected, SM, ML, L-XL, XL-XXL, and XXL under the size type are selected.



Picture 1



Picture 2

As shown in Picture 1 above, this display mode lists the difference between the previous size and the next size. The grading quantity of the last size cannot be modified. When the button **S-L** is pressed, as shown in Picture 2 above, the system will indicate which of the two types are used to dispersion.

In this dispersion model, the system ignores whether to press “Automatically determine the plus or minus of the amount of grading”. If  $dx < 0$ , it means leftward in the horizontal direction, and vice versa, if  $dy < 0$ , it means downward in the vertical direction, and vice versa. If the current angle is grading, the direction of  $dx, dy$  is determined according to the axis displayed in the screen. These three types only have different display modes and the grading effect is the same.

### **All Group**

#### **Function:**

It is used for group. When grading value is same, if did not select this value, it is effective to this group only. If select this icon, input grading value in any group, then grade, it is grading to all size group, improve efficiency.

### **Only group basic size**

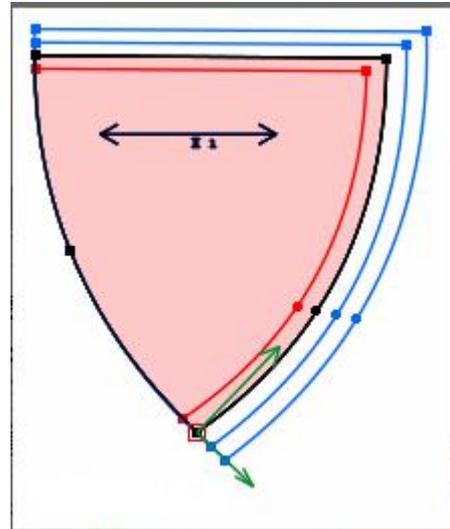
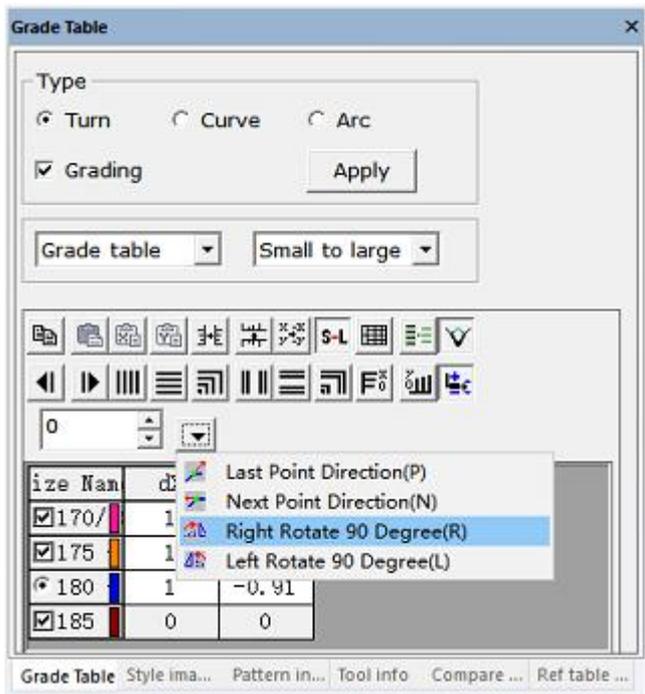
#### **Function:**

It is used for group. When select this icon, click this icon, only appear basic group size, do not select, all the size appear.

### **Angel grading**

### Function:

In grading, Coordinate can be defined freely, So you need this icon to control "Angel". Arrow direction is coordinate positive direction, Short arrow is x direction, long arrow is Y direction, Following is tangent direction.



Next Point Direction(N)

### Operation:

1. Click 【Grade table】 , Select Angel button .
2. Click button  , You can see some menu, Select one, set coordinate.

### Parameter Presentation:

**【Last Point Direction】:** The X direction is defined by connecting the current grading point with the last grading point;

**【Next Point Direction】:** The X direction is defined by connecting the current grading point with the next grading point;

**【Right Rotate 90 Degree】:** It is used to rotate the XY axis in the direction of right 90 degree;

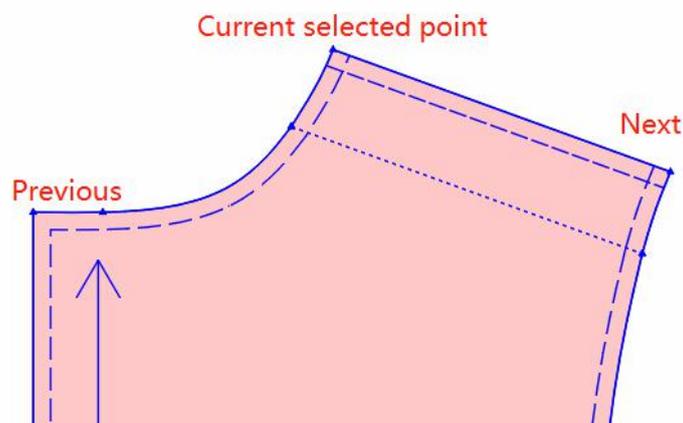
**【Left Rotate 90 Degree】:** It is used to rotate the XY axis in the direction of left 90 degree.

 **Previous Grading Point****Function:**

It is used to select the previous grading point.

**Note:**

The points in the pattern contour are ordered by clockwise direction.

**Operation:**

1. Click to select a grading point with “select a pattern point” tool ;
2. Click  to select the previous point of the current point.

 **Next Grading Point****Operation:**

1. Use  to click a point to select it.
2. Click  to select the next point of the current point.

 **Equal X****Function:**

This command can make selected grading point grade equally in x direction.

**Operation:**

1. Select grading point, [Grade table] is active;
2. Input disperse in dialogue table;

3. Click this icon.

 **Equal Y****Function:**

This command can make selected grading point grade equally in Y direction. Operation is same as equal x.

 **X Equal Y****Function:**

This command can make selected grading point grade equally in X and Y direction. Operation is same as above.

 **X non equal grading****Function:**

This command can make selected grading point grade non equal in X direction.

**Operation:**

1. Click to select a grading point, the text box of **【Grade Table】** will be bright to show that you can input grading value to the selected point.
2. Input different value according to different size in dx, Click this icon.

 **Y non equal grading****Function:**

This command can make selected grading point grade non equal in Y direction. Operation is same as x non equal grading.

 **X、Y non equal****Function:**

This command can grade for both equal or non equal value input in grade table.

**Operation:**

1. Click grading point, Input available grading value in text box of [Grade table];

**Note:** Input value according to dialogue table number, Except grading value is 0.

3. Click this icon.

** X Equal to 0****Function:**

It is used to change all the X grading values for a graded point to Zero. That is to say that no grading is ready for a grading point in X direction.

**Operation:**

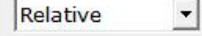
Click to select a grading point and then click this icon.

** Y Equal to 0****Function:**

It is used to change all the Y grading values for a graded point to Zero. That is to say that no grading is ready for a grading point in Y direction. Operation is same as x equal to 0.

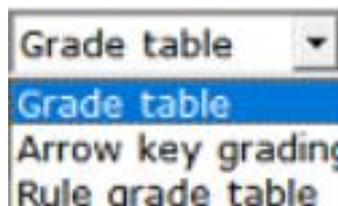
** Auto confirm sign****Function:**

Select this icon, What ever you input positive or negative, When use grade table function, computer can identify + or -.

** Relative  Display method****Function:**

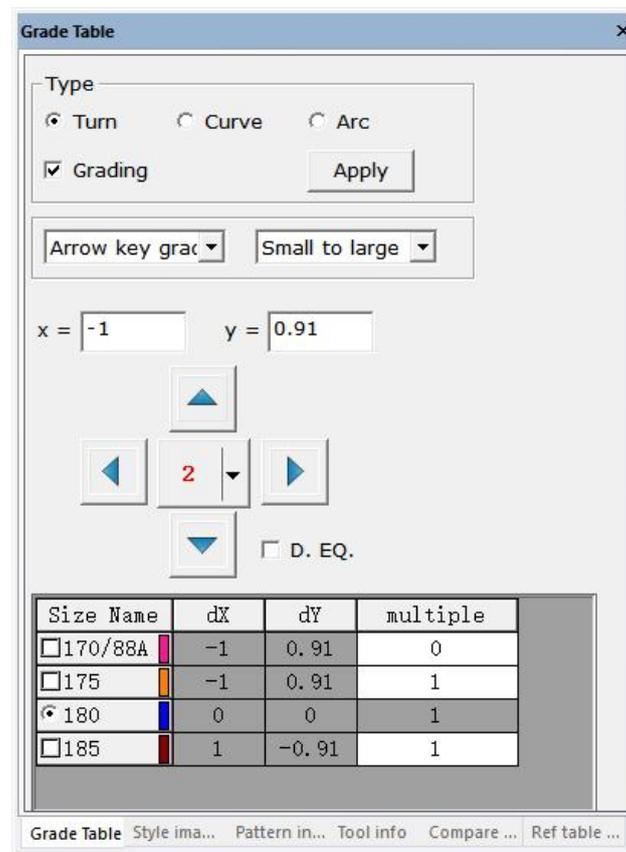
It is used to control the grading display, can according actual requirements choose Relative, Absolute and Small to large.

Can choose different grading ways.

**Arrow key grading****Function:**

Grading with up,down,left, right button of keyboard.

**Operation:**



1. Click  size menu/ Edit size & measurement, Set each size and colour.
2. Choose Arrow key grading.
3. Click or make a square to select grading point with  , You can press up, down, left, right button of keyboard or arrow in dialog, Big size will move one step according to arrow key direction(You should select in  The SELECT tool default grade large size option/system setup/switch setup), Press two times, size will move two step;
4. Press TAB , Select point will turn to next grading point in clock wise, Press SHIFT+TAB, Select point will turn to next grading point in anti- clock wise.

**【Arrow key grading】 Dialogue table parameter presentation:**

1. Switch grading point: Press Tab or Shift+Tab, You can switch to next grading point;
2. Delete grading value: Press Delete button on key board , You can delete grading value;
3. Edit: Input grading value in edit box X,Y or DX, DY, multiple, Press Enter, Also you can grade;

4. Modify step  : You can select the step size in the combo box, or press the button step button to switch to the next step value;
5. Step group: If you select **...** , You can define step by yourself, You can insert new step, Or delete exist step;
6. Dispersion group: You can select Relative or Absolute;
7.  D. EQ. : Select, When grading, Each size difference is similar, Other wise, keep current difference, Only move step is similar;
8. Ratio: Shows the current grading, you can also modify grading, and then press Enter to grading.

### Note:

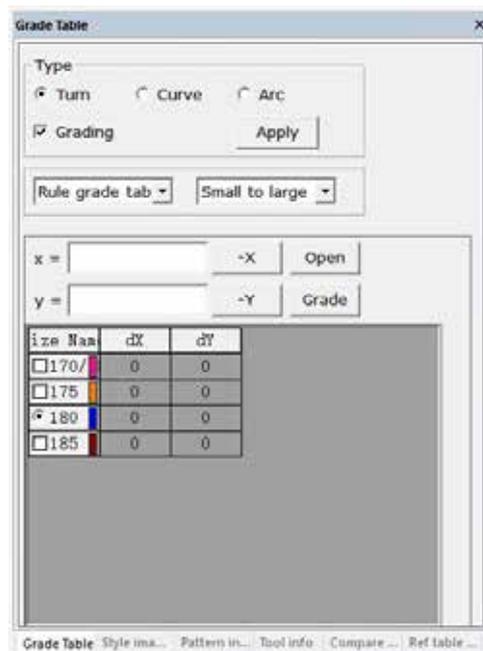
1. If each size difference is not similar, Do not select **【D.EQ.】** , Input each size grading value, Press enter to close.
2. Put grading cursor out of dialogue is better.

## Rule grade table

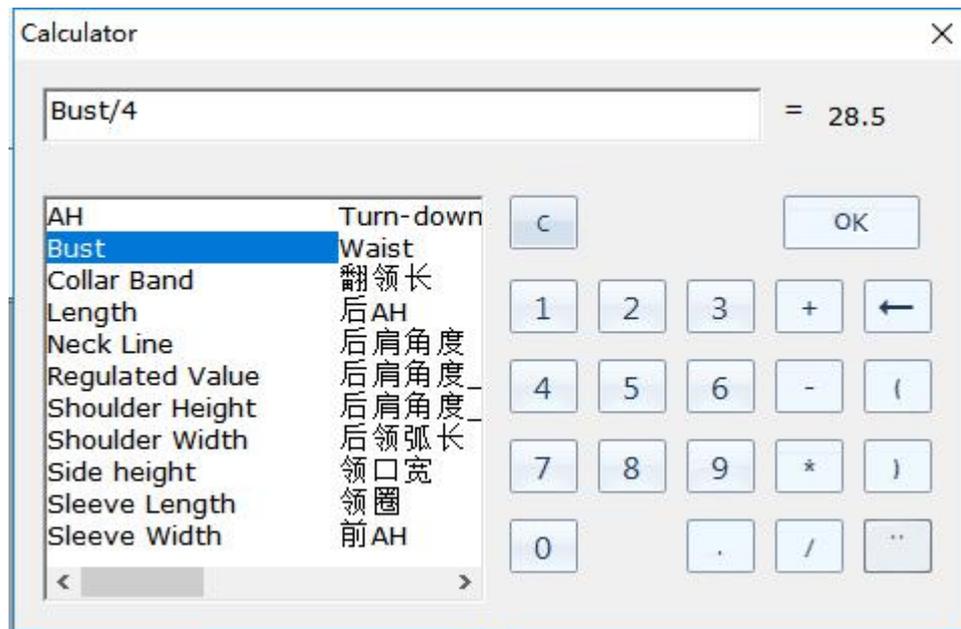
### Features:

It can be graded according to size table.

### operation:

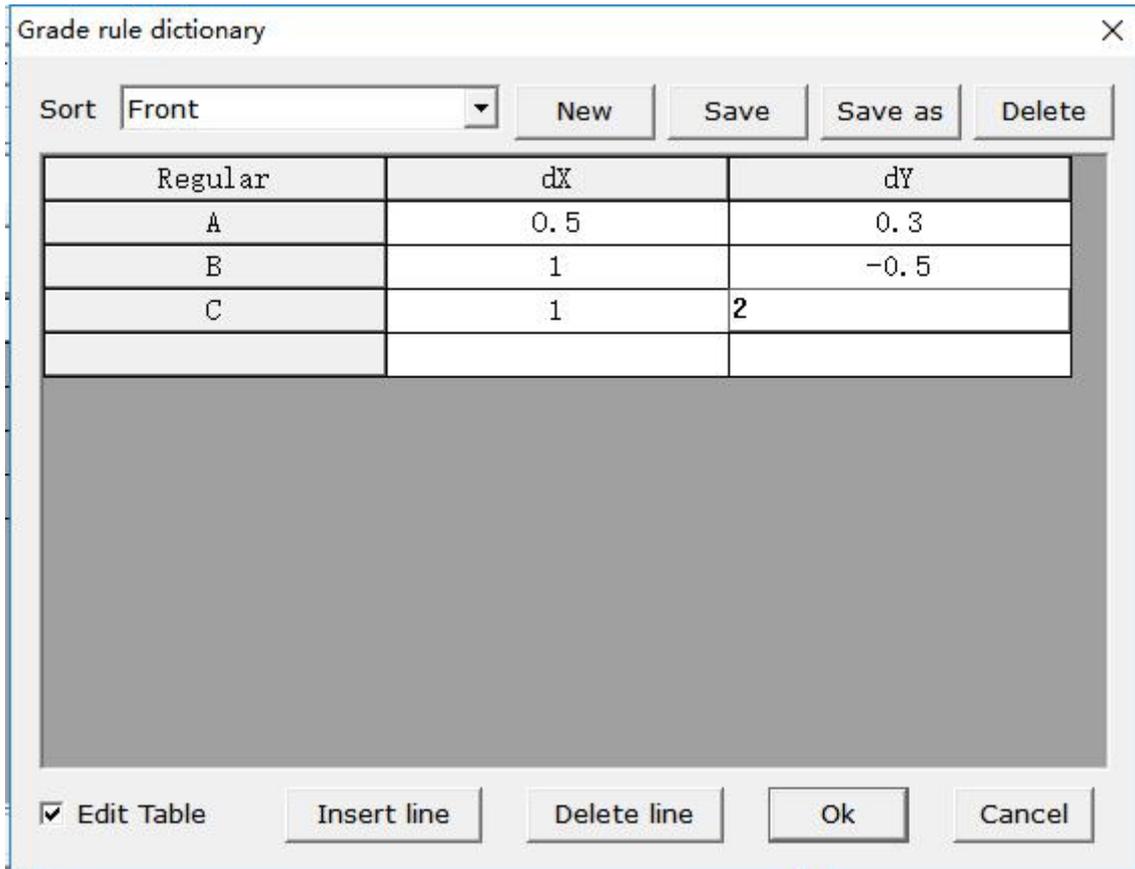


1. Table-Edit size & measurement, or Click  the tool directly, Set each size and colour.
2. Choose Rule grade table.
3. Use  tool, click or box select the grading point, input X, Y value directly, click grade.
4. Use  tool, click or box select the grading point, right click on X, Y, pop up calculator, for example, select Bust/4 and click grade.

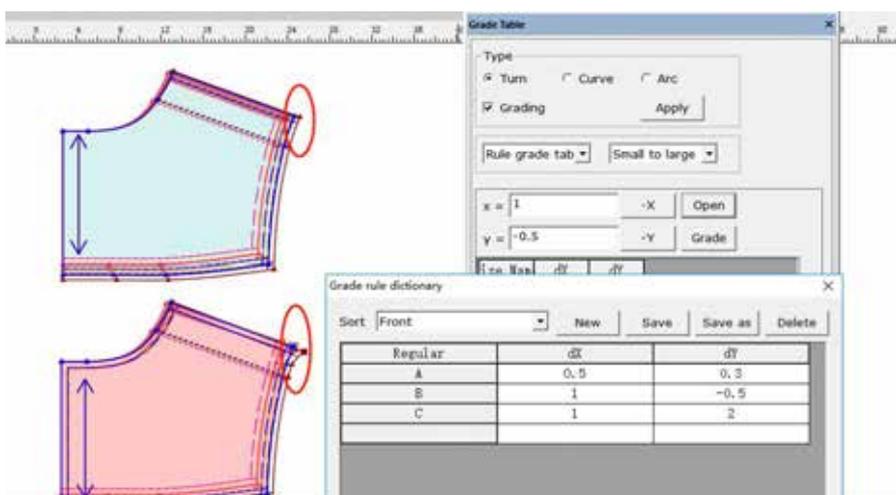


5. Grade rule table:

(1) For example, three points in the front pattern is shown in the following figure. We can create a new rule in the rule dictionary, such as A, B, C, and save it after it is established.



(2) Use the grading value for other patterns. As shown below, we click B, click grading, then the selected point can be pressed by B the value to grading.



 View body measurement

Function:

Show or hide body measurement.

Operation:

The icon  shows the label in the selected state and hides it if it is not selected.

 View measurement variable

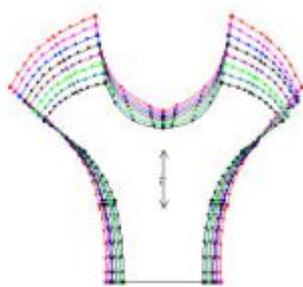
Function:

Show or hide remark.

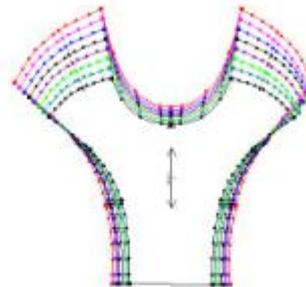
Operation:

1. Size which measured by compare length tool, and record size which measured by two point measurement tool;
2. Click this tool, Select is show, No select is hide.

 Keep shape Grade



**No use keep shape grade in collar**



**Use keep shape grade in collar**

Function

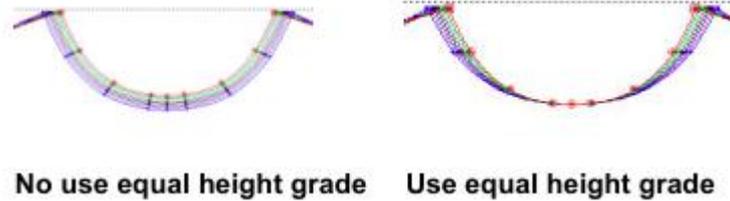
Use this tool can keep other size curve shape is same as basic size shape.

Operation:

1. With "Select pattern point tool", Drag from one point to another point to select curve which need to deal with.
3. Click Keep shape grade icon.



## Equal height grade



## Function:

It is used to make their height equal for the curves between two grading points after graded.

## Operation:

1. With "Select pattern point tool", Drag from one point to another point to select curve which need to deal with.
2. Click equal height grade icon.



## Color Setup

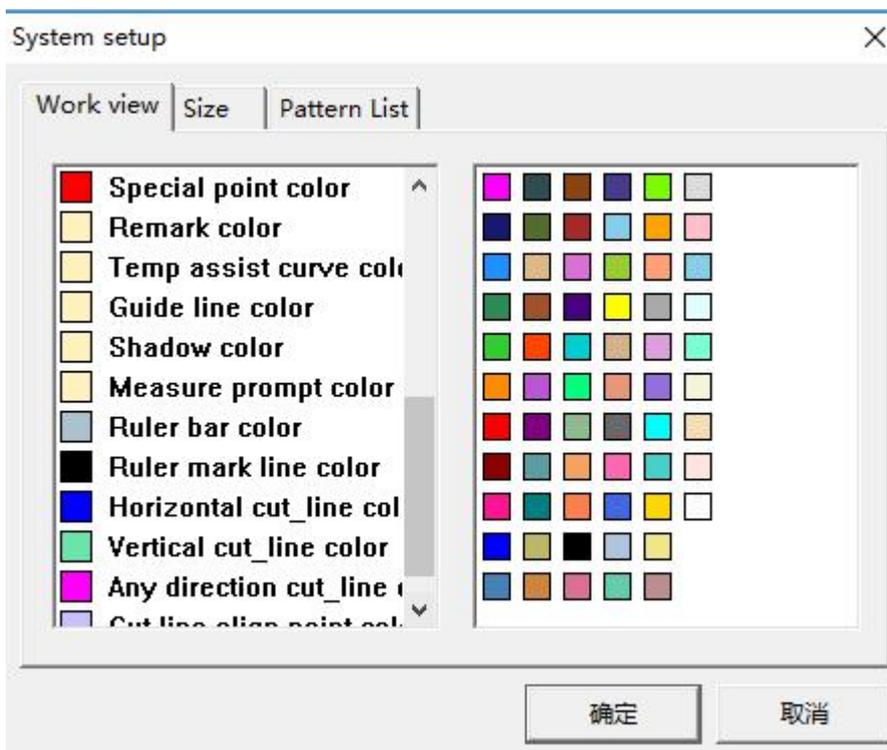
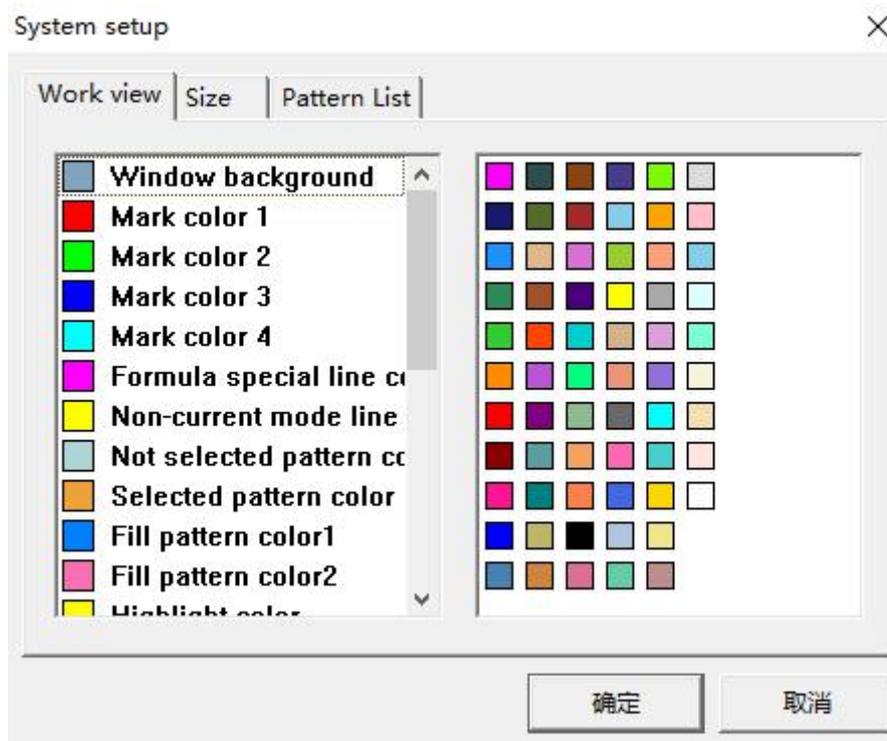
## Function:

It is used to set the color for Pattern list box, working area and sizes.

## Operation:

1. Click the icon to get the dialog box of **【Setup Color】**. There are three options in the dialog box.
2. Click to select one option and then select one item, and then click to select a color, click **【Apply】** to change the color for the selected item. After set new colors for all the necessary items in the three options, click **【OK】** to confirm.

**【Color Setup】** Parameter:

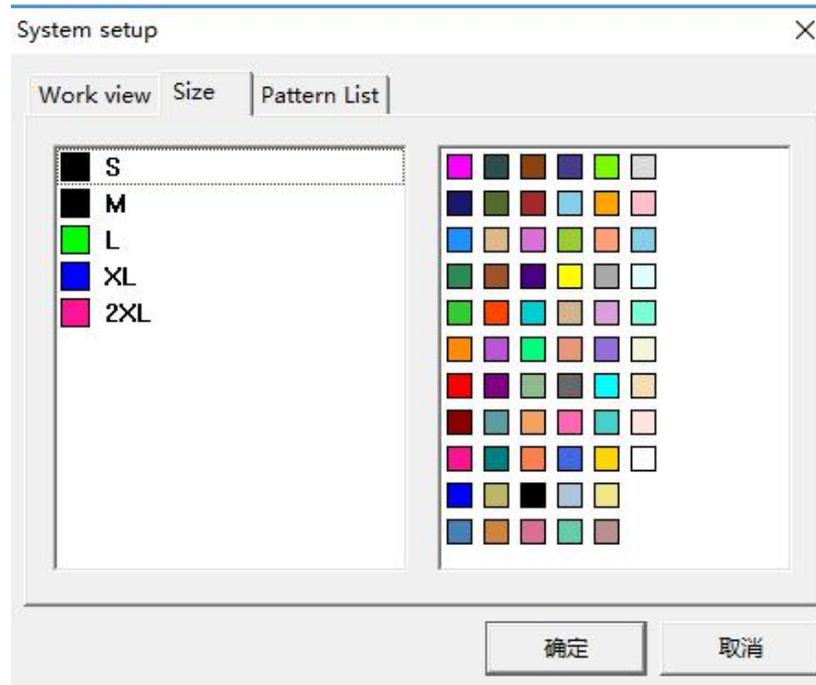


#### 【Work view】 items

- Window background: It is used to set the color for the working background.
- Marker color 1 It is used to set the prompt color for the first operation.

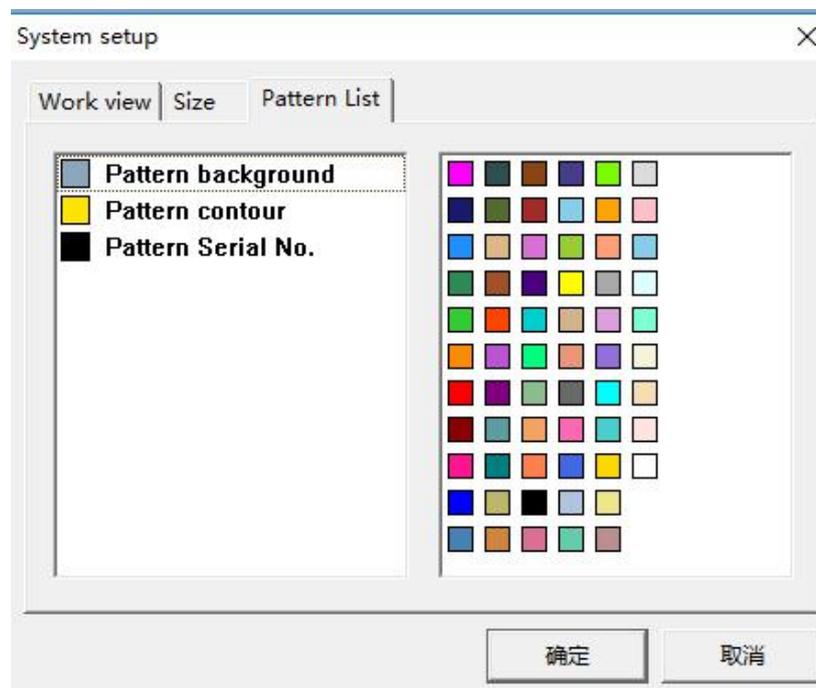
- Marker color 2 : It is used to set the prompt color for the second operation by right click.
- Marker color 3: It is used to set the prompt color for the third operation by right click.
- Marker color 4: It is used to set the prompt color the fourth operation by right click.
- Formula Method Special Line Color: For the formula, for example, parallel line, rotation line, and symmetry line color display;
- Non-current mode line color: If you select this tool , if you start making pattern with formula, but suddenly switch to free design, Then the lines will be displayed in this selected color.
- Special point color: For example, when cut apart or transfer dart with formula, There is a point that can be linked to the modified part, which refers to the display color of a similar point.
- Measure prompt color: When draw line, line length color
- Remark color: It is used to set the color for all remarks.
- Temp assist curve color: Use this tool  to hold down the SHIFT + left key to set the color of the temp assist curve. This line does not participate in drawing.
- Guide line color: The color of the baseline selected by the modify tool;
- Not selected Pattern color: It is used to set the color for the not selected pattern
- Selected Pattern color: It is used to set the color for the selected pattern.
- Fill pattern color 1: When do “compare path work”, Fixed pattern color.
- Fill pattern color 2: When do “compare path work”, Walking pattern color.
- Ruler bar color: The color of the ruler bar in the work area;
- Ruler mark line color: The color of the ruler mark line in the work area;

【Size】 items:



It is used to set the color for sizes. Select size ,then click color.

【Pattern List】 items:



- Pattern background: It is refer to pattern list background color.
- Pattern contour: It is refer to pattern list pattern contour color
- Pattern serial No. It is refer to pattern serial No.color in pattern list.

## 2 Divide Parameter Edit

---

Function:

It is used for equal divide line.

Operation:

How much in that dialogue table, Line will be divided to corresponding number.

 Line color

---

Function:

It is used for setting or changing design line color.

Operation:

a. Click the pull down list to select one color, and then you can draw design line by the selected color.

b. Change line color: you can click the small triangle of the tool  of to get its pull down list and then select a color. And then click to select  to click right mouse on line or make a square to select line.

 Line type

---

Function:

It is used for setting or changing line type.

Operation:

a. Click the pull-down list to select one line type, and then you can draw design line by the selected line type.

b. If you need to change the line type for designed lines or assistant line, you can click the small triangle of the tool of  to get its pull down list and then select a line type. And then select , click the line to change its type.

c. Set dash line distance : Select this line type, Then select line type tool , Cursor will change  , Input L value, Then press enter, Input D value, Then press enter, After setting click or make a square on modified line.

d. Set  circle radius and distance between two circle. Same operation as 

 Set curve shape

---

Function:

It is used for changing line type.

Operation:

Select【Set curve color and type】 tool , Click 【Set curve shape】 tool  by click arrow, You can set line width and height, First width, then height, After input width, Then press enter, Input height, Click left on changed line.



Set assist curve output type

Function:

It is used for setting assist curve output type.

Operation:

Select 【Set curve color and type】 tool , Click 【Set assist curve output type】 tool  by click arrow. Click left on changed line, If you set whole knife cut, One side of assist line will appear whole knife sign. If set half knife, One side of assist line will appear half knife sign.



Adaptive stretch

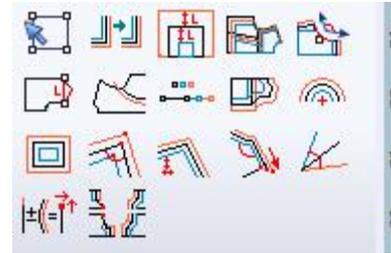
Function:

Select this icon, When draw user-defined line with intelligent pen, System can adjust drawing (like triangle) height and distance of two drawing to make sure the line is complete. If not select this icon, System will calculate according to defined height and distance, We can not draw complete drawing, some (triangle) will be delete.



The left picture is two equal length lines, the upper line is drawing by selected  adaptive stretch, and the lower line is not selected.

## Section 4 Toolbar



**Modify**

**Shortcut toolbar A**

### Function:

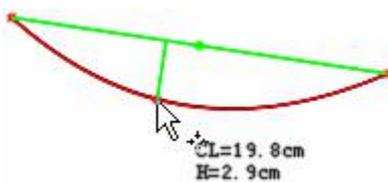
It is used for adjusting curve shape, check the line length, Modify control point number, Convert curve point and turn point.

### Operation:

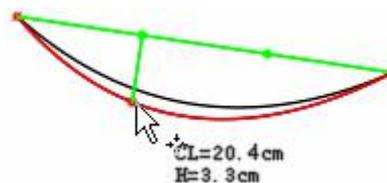
#### 1. Adjust single control point

1) Click on curve with adjust single control point tool: Line is selected, Click control point and drag to suitable place, Then click. When chord height line appear, Press number button of small key board can change equal number, Move control point can adjust to chord height, Cursor data is curve line length and chord height .

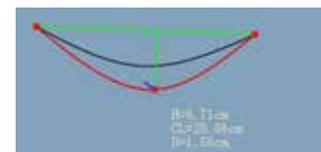
(Show /Hide chord height: Ctrl+H, Show/Hide the distance between moving points: Shift+H )



Adjust control point on curve

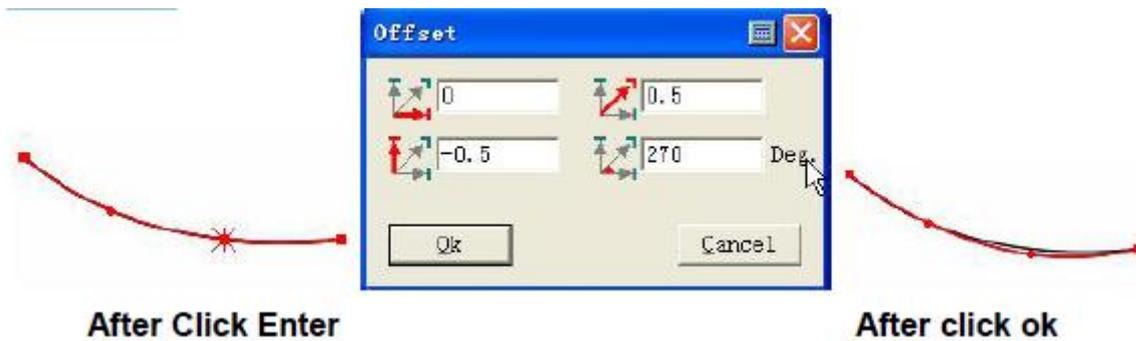


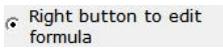
Press keyboard number  
and adjust control point place

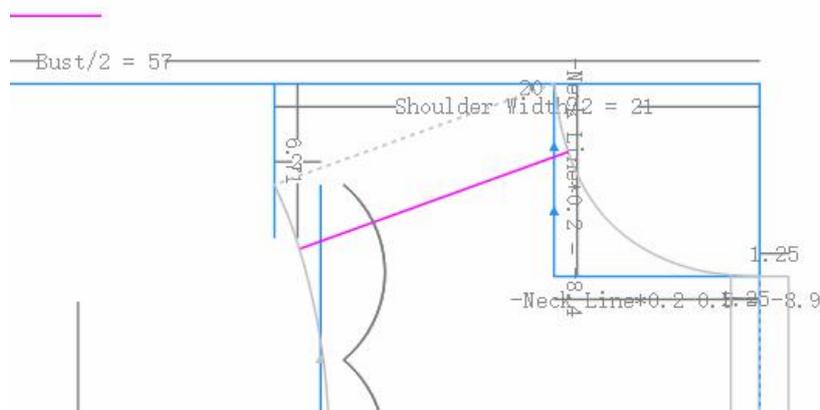
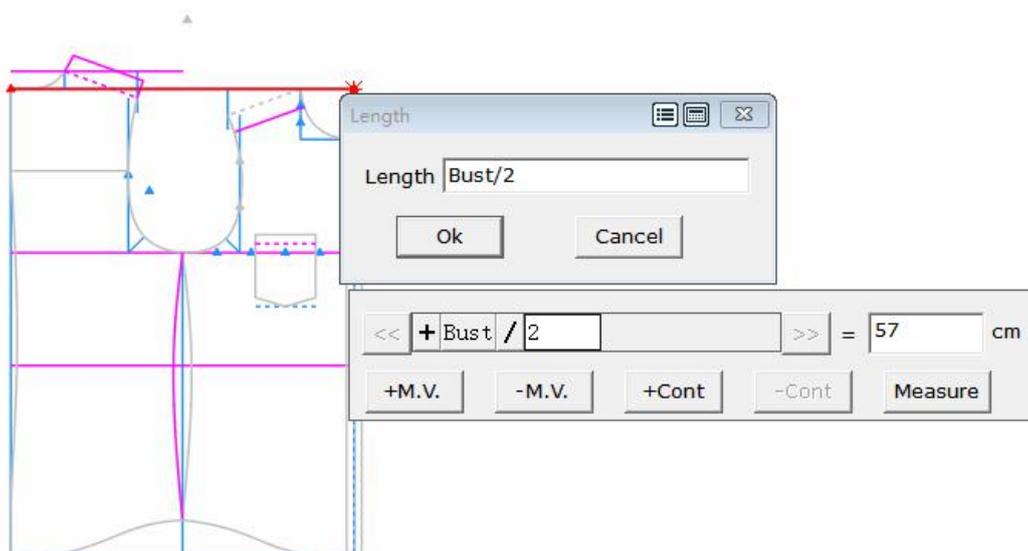


2) Adjust control point by value: After selecting line, put cursor on control point, Then press enter.

(Only applicable to free design).



3) After the line is selected, select it in the toolbar  and right-click on the point to modify the formula. Place the mouse over the point where there is a formula to display the point formula. This applies to the formula method.



4) Add control point, Delete control point on curve line or turn line: Click curve line or turn line, Make it selected status, Add point in no point place by clicking left, (or press insert) .

After choose **Right button to delete** in the tool information bar, Put cursor on control point, click right to delete (or press Delete button).



Original line

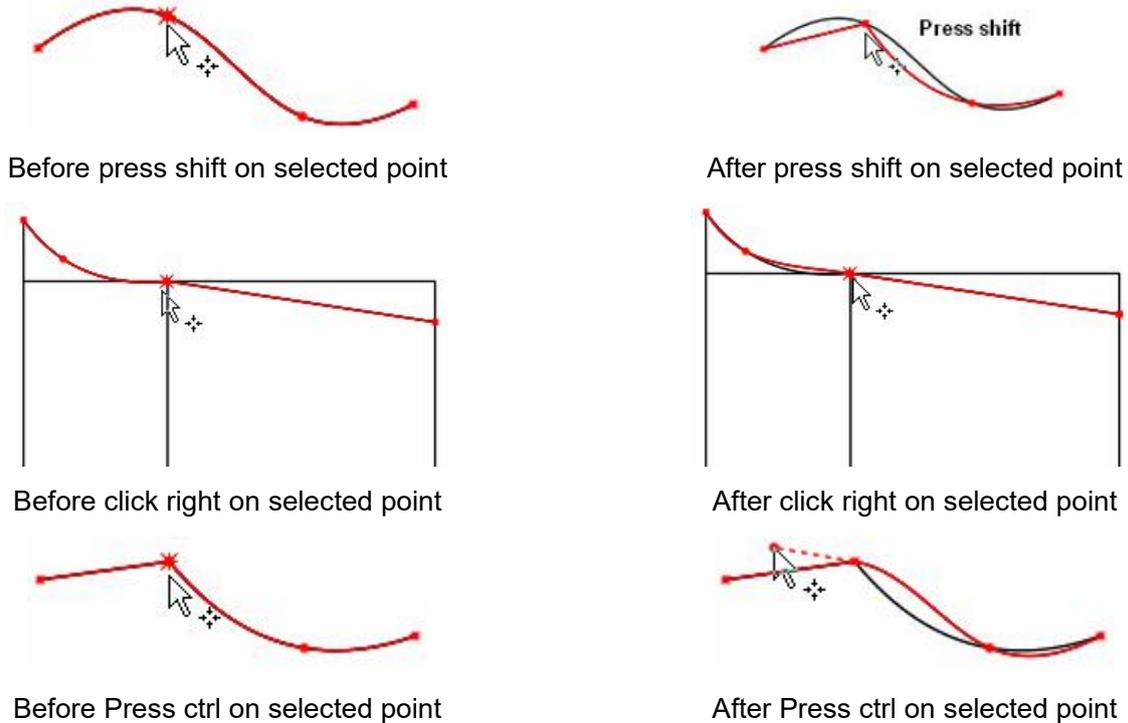


Process (press insert)



Result

5) Select line, Put cursor on control point, Then press shift, You can convert between curve point and turn point. On turn point, Put cursor on turn point, then click right, Curve line and beeline smooth automatically. Press ctrl on control point, Smooth tangency at the intersection of curves and straight lines.



6) Click on curve, Line is selected, Press number on small keyboard, You can change line control number.



## 2. Adjust more control point

(1) Adjust more control point in proportion

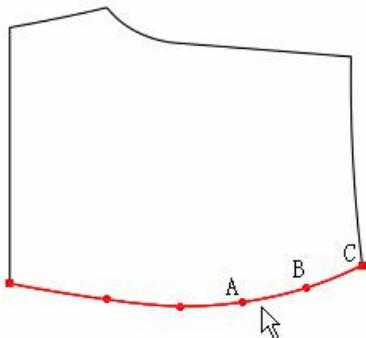
As shown in picture 1, when adjust Point C, Point A and Point B are adjusted proportionally. (This condition applies to the free design design line.)

Operation:

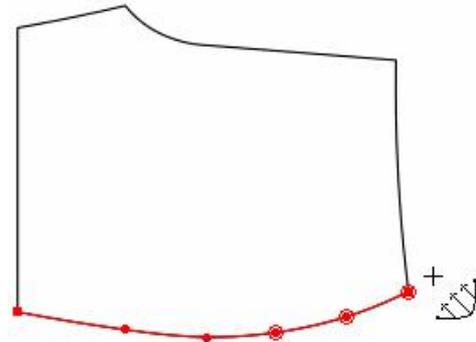
1) If adjust design line, Put cursor on line, drag from point A to point c, Cursor turn to , Check picture 2;

2) Press shift change to proportion adjust cursor  , Check picture 3, Click and drag point C, You can see **【offset】** dialogue table(if it is key point, move point c to key point directly, if want to Adjust on horizontal or vertical direction or move 45 degree, press shift);

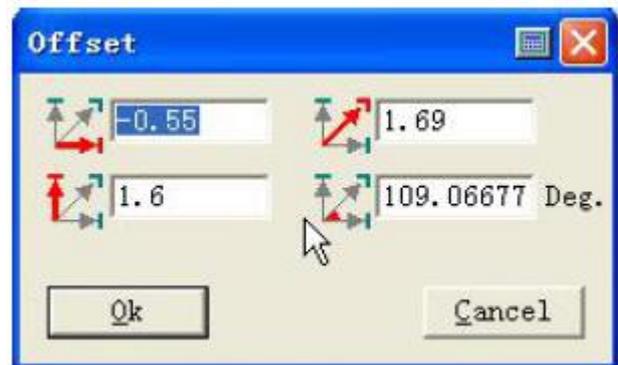
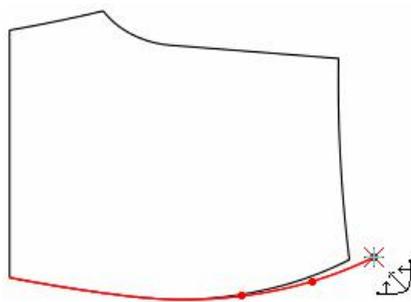
3) Input offset value, Click **【Ok】** .



Picture 1

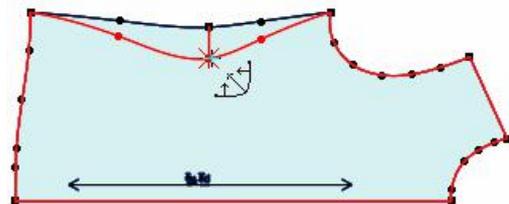
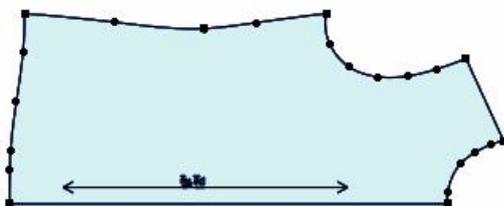


Picture 2



Picture 3

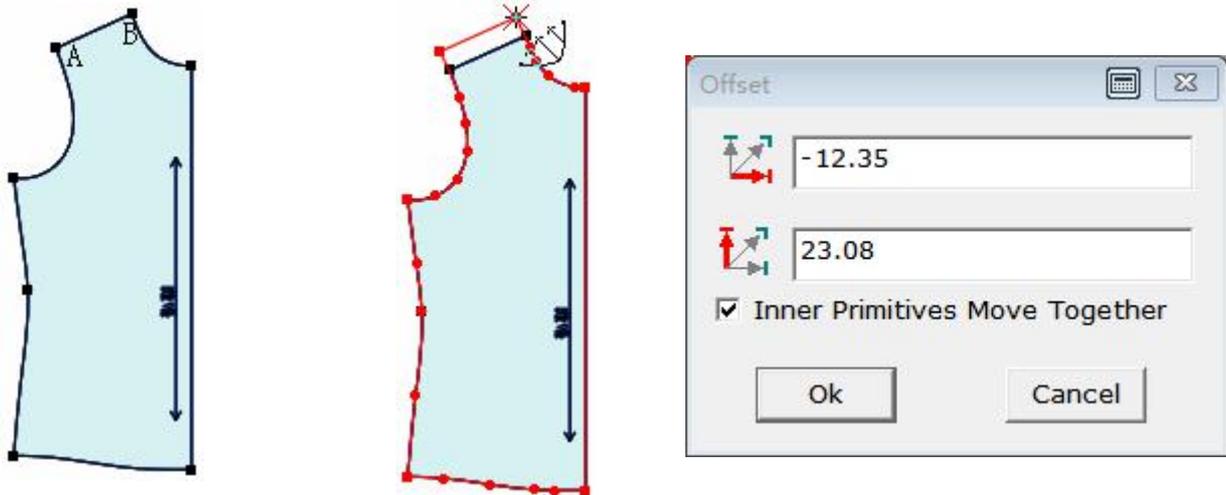
When adjust in proportion on pattern, Mae control point show, Operation is same as above.



Press shift adjust in horizontal,  
vertical or 45 degree adjust

(2) Adjust more control point in parallel:

**Operation:** Drag adjusted point, when cursor turn to , Select one point and move, You can see [offset] dialogue table, Input value.

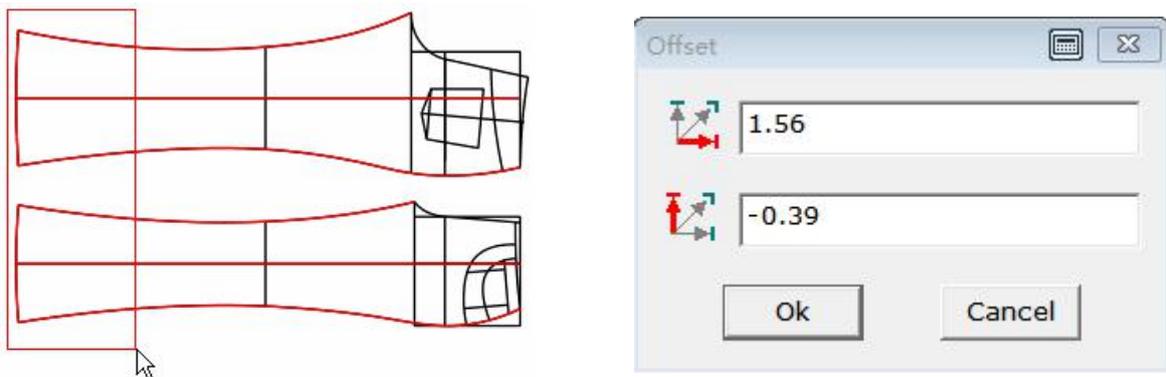


**Note:** When use “Parallel adjust”, “proportion adjust”, if not choose “View offset dialog” under the Option, the “Offset” will not appear.

(3) Adjust all control point in square-Only used for free design

**Operation:** Make a square on object line, Press [enter] You can see [offset] dialogue table,Input value in dialogue table.

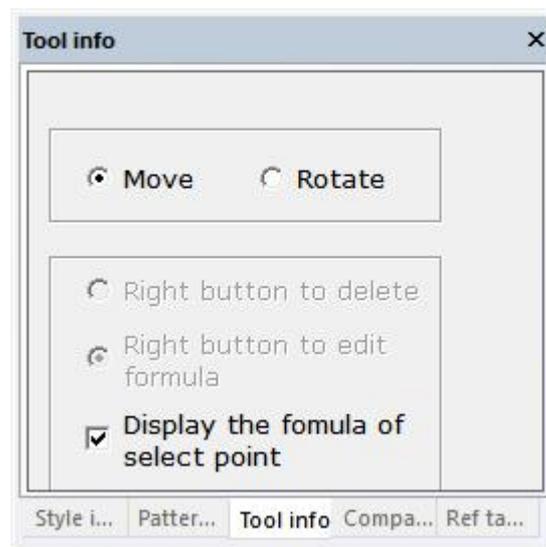
**Note:** The first time the box select is selected, the second box select is unchecked.



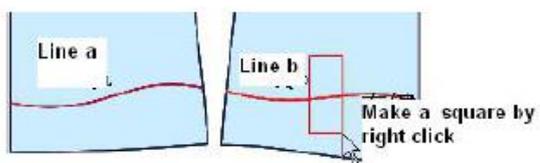
**Note:** If select grading pattern, you can also adjust the display of only a single frame (except for the base code).

(3) Only move all the selected line-Only used for free design

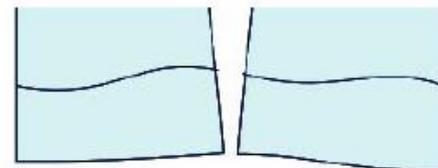
**Operation:** 1) Right click to select the lines and choose Move or Rotate in the Tool information;



2) If choose Move, press Enter, can input value and click Ok, also can move freely.

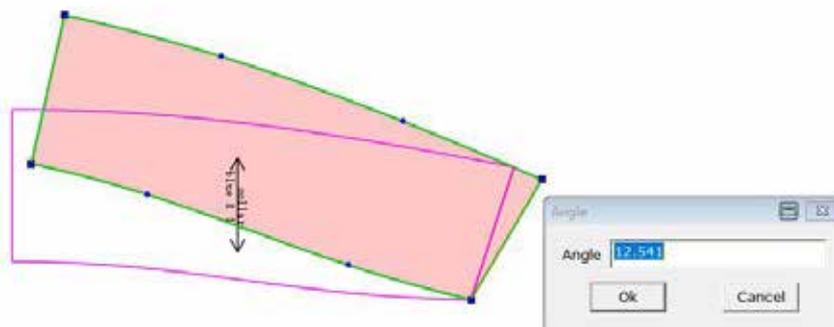


After marquee line with right mouse



Offset result

3) If choose Rotate, first select the rotation center point, then select the rotation start point, press Enter to display the angle dialog box.



**Note:** If select grading pattern, you can also adjust the display of only a single frame (except for the base code).

### 3. Check the length of the line

Move the cursor over the line to display the length of the line.

### 4. Right click on the associated point to modify the pattern.



## Move and Rotate Adjust

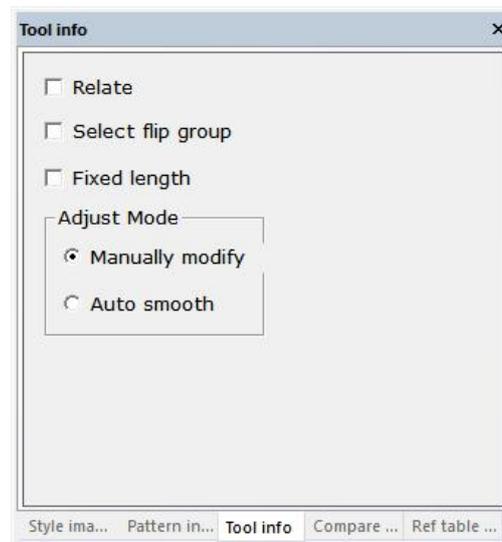
## Shortcut toolbar N

### Function:

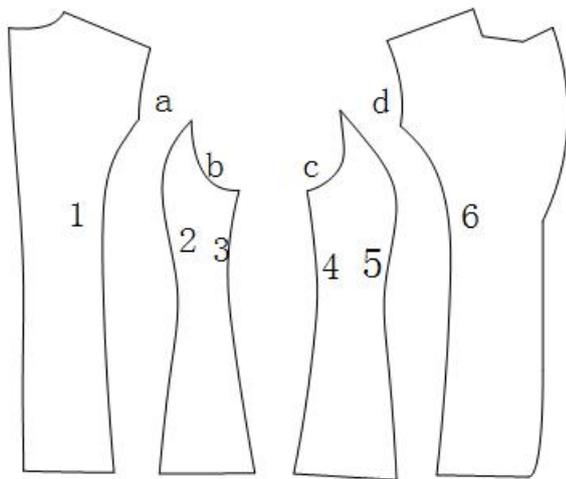
Adjust line after moving and rotating, Usually used in adjusting front and back armhole, bottom, dart, front and back collar and should compare, Can be used both in pattern And design line.

### Operation:

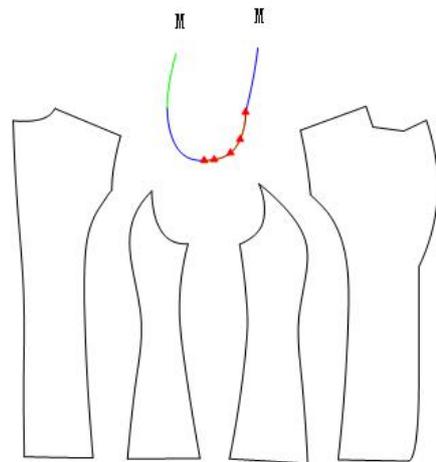
1. Choose “Move and Rotate Adjust” tool, its dialog box appears on the right.



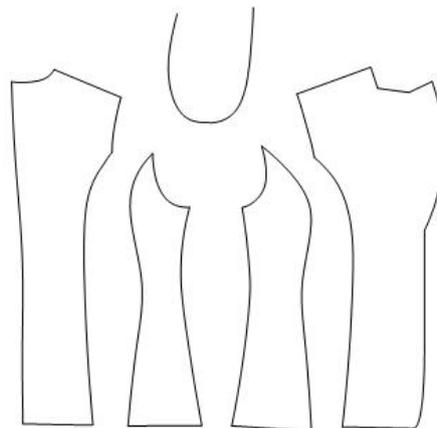
2. Check picture 1, Click or make a square to select line a、 b、 c、 d, Click right to finish.
3. As shown in picture 2, click or box select the line which connected with the curve 1 line 2, line 3 line 4, line 5 line 6, and then right-click to move the stitched line out of adjustment.
4. Check picture 3, Armhole is combined together, Click left to adjust control point.
5. When line smooth, Click right to finish.



Picture 1



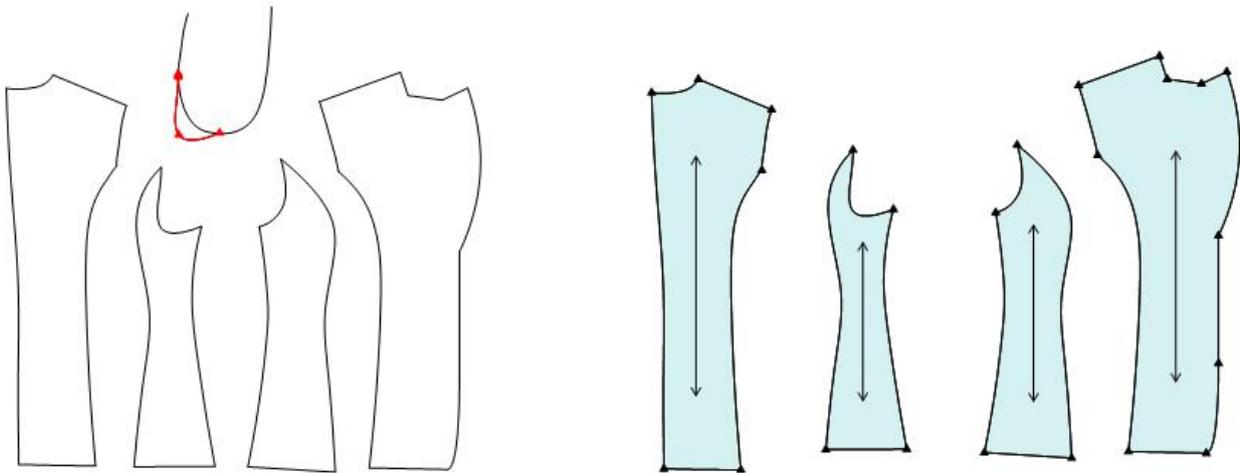
Picture 2



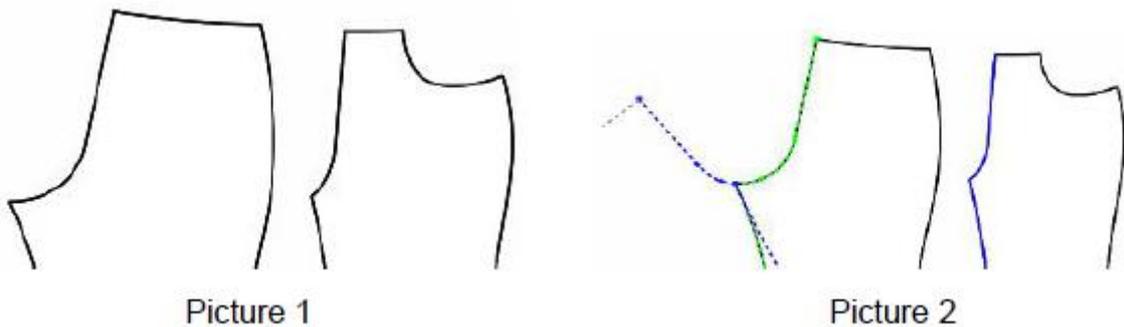
Picture 3

### 【Move and Rotate Adjust】Parameter presentation

【Linkage adjustment】like the following picture: The linkage adjustment was selected, and the armhole arc moved out can be adjusted by the tool and then readjusted. The pattern and the design line are adjusted at the same time. In order to see clearly, the adjustment is relatively large.



【Select rotate Group】 Like picture 1, if front and back rise in same side, select this item and select border, line can rotate automatically, picture 2.



Picture 1

Picture 2

【Keep form manually】 Select this item, Can adjust line freely.

【Auto smooth】 Select this item, system can create smooth line automatically, No need to adjust.



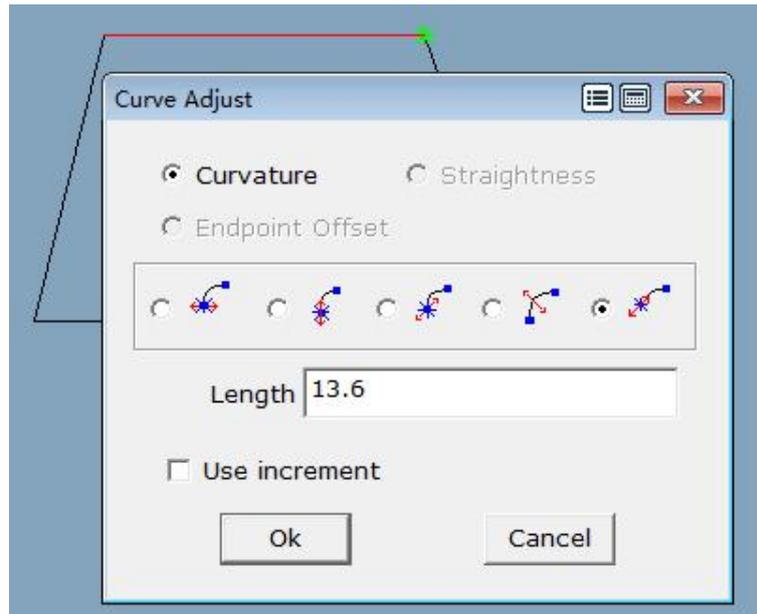
Curve adjust

Function:

Check or adjust curve length and straight line of two point, can be used for both design line and pattern.

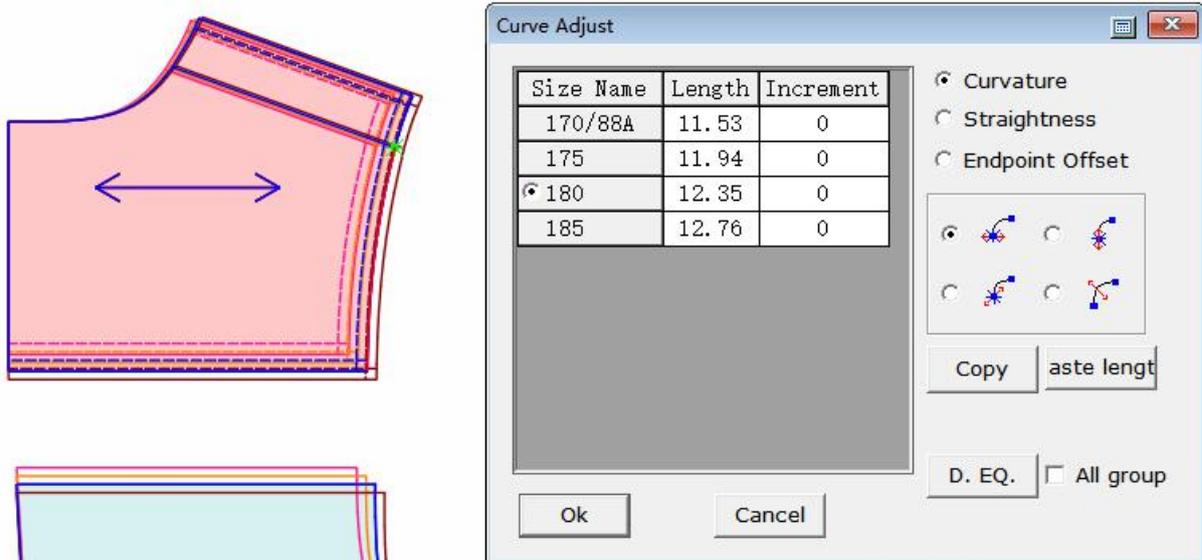
Operation:

One: Click on the line to extend the length of the line and there are six options available.



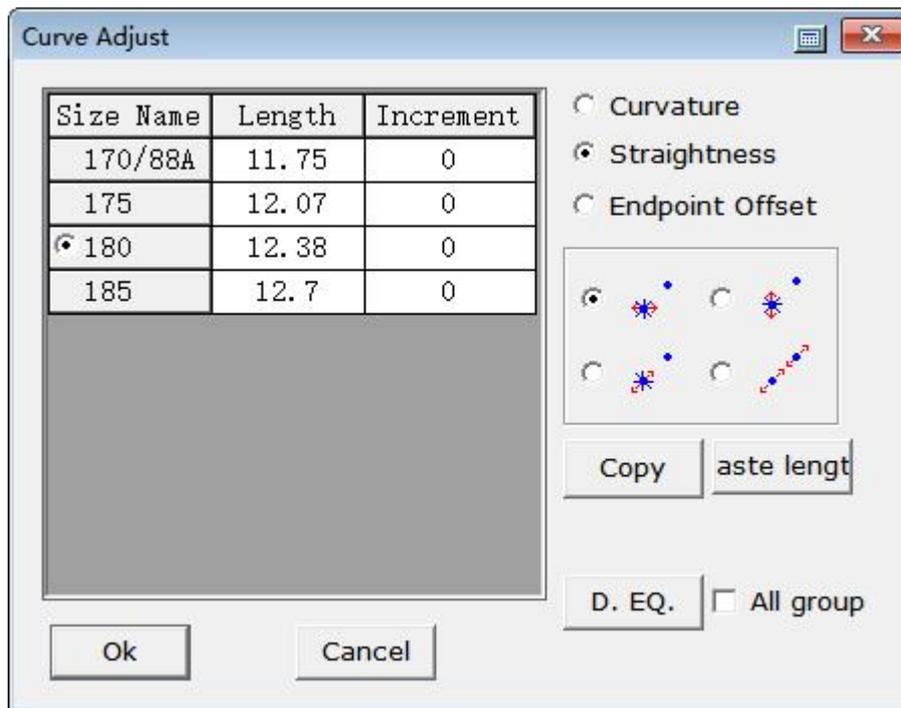
Two: Adjust the grading pattern

1. Select this tool, click or make a square to select one line, You can see curve adjust dialogue table;



2. Select the adjustment item, input the appropriate value, and confirm to adjust.

**【Curve Adjust】** Parameter presentation:



Select **【Curvature】**, left is length increase or decrease value, new length or increment can be entered here;  
 Select **【All group】**, the increase or decrease is displayed as variation, which can be entered with variation way.



\* Point move horizontally;



\* Point move vertically;



\* point move as two point joined line;



Side point do not move, curve length change.

Select **【Straightness】**, L Left Show length increase or decrease value, new length or increment can be entered here;

Select **【All group】**, the increase or decrease is displayed as variation, which can be entered with variation way.



Point move horizontally;



\* Point move vertically;



\* point move as two point joined line;



Two point move as two point joined line.

Select **【End point offset】**

All EQ.

Input value in DX, Then click this icon, All x direction data equal;

Input value in DY, Then click this icon, All Y direction data equal;

D. EQ.

Input data in near size, Click this icon, All the size appear data equally;

Copy

Click can copy current value;

Paste dx dy    Paste dispersion

When copy different size value, Can select another line and paste. Can copy one line length or dispersion to another line.



Intelligent Pen F

Function:

Draw line, Make rectangle, Adjust, Adjust line length, Corner, Dart line, Delete, One way extend, Two way extend, Move(copy)point line, Transfer dart, Snip(connect)line, Shrink dart, Not cross isometric line, Cross isometric line, Compasses, Set square, Offset point (line), Horizontal and vertical line etc.

Operation:

1. Left-Click

- 1) Click the left button to enter the line drawing operation in the space/key point/intersection;
- 2) After confirming first point, Click right to change T tool (Draw horizontal/vertical/45 degree beeline), any direction beeline.
- 3) Press the SHIFT key during the line drawing process to switch the broken line and curve;
- 4) Press the SHIFT key, and then left-click to enter the [Rectangle] tool (usually used to draw rectangles from visible points).



Horizontal/vertical/45 degree line



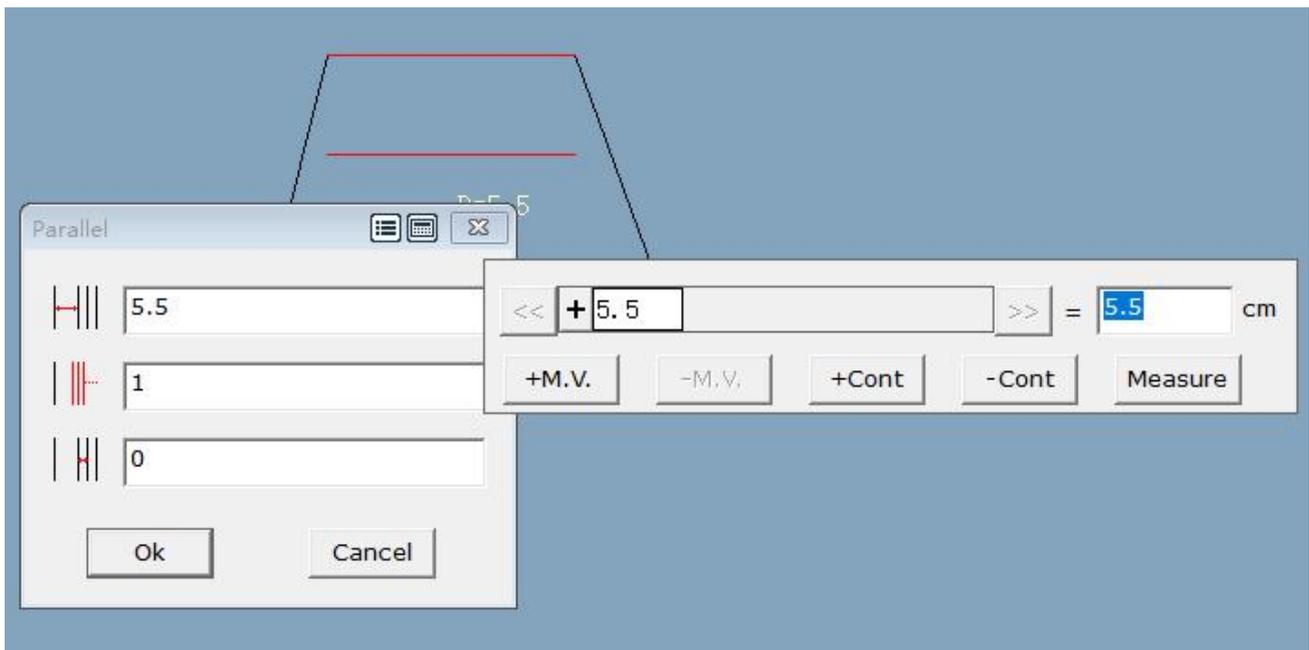
Any direction beeline and curve



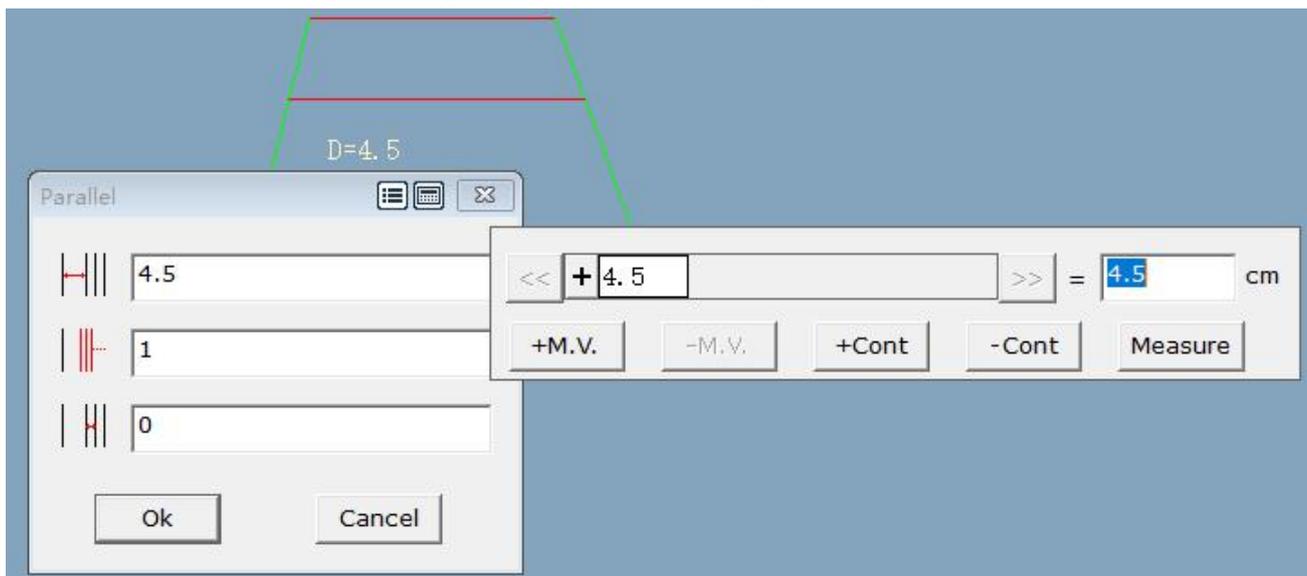
Turn line(Broken line)

2. Drag with left button

- 1) Press left button and drag on blank place, Go to **【rectangle】** function;
- 2) Left-click on the line and drag it , Go to the **【isometric line】** function: In the blank space, click the left button again, the dialog box will pop up as the **【Not cross isometric line】** function; Click two cross side line directly, then enter Go to **【cross isometric line】** function;

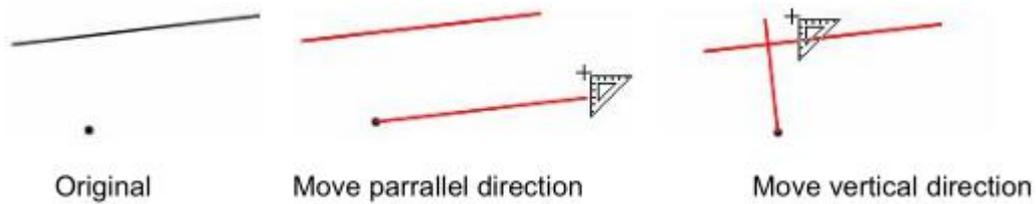


【Not cross isometric line】 function



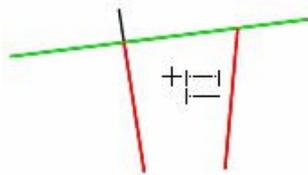
【Cross isometric line】 function

- 3) Press the left key on the key point and drag it to a line to release it and enter 【Single compass】 ;
- 4) Press the left button on the key point to drag it to another point and release it to enter the 【 double compass】 ;
- 5) Press shift, Drag and select two point, Go to 【set square】 ,Click another point and drag mouse ,Make parallel or vertical line.



3. Left click to make a square to select

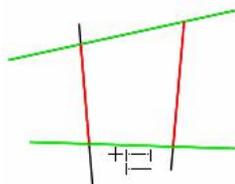
- 1) In the blank box, Left click to make a square to enter the **【rectangle】** tool;
- 2) Press left and make a square on two line, Click right is **【corner connection】**
- 3) Make a square to select on or more line, Click on another line, Go to **【one way or two way extend】** function, Click right on reserve line, It is **【one way extend】**; Click on another two line, It is **【two way extend】**;



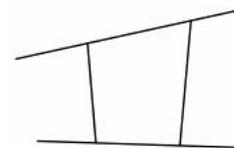
Before use one way extend



After use one way extend

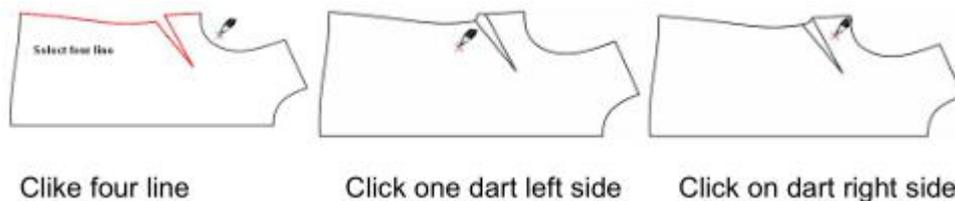


Before use two way extend



After use two way extend

- 4) Make a square to select one or more line, Then press Delete can delete all selected line;
- 5) Press left and make a square to select four line, Click right is [Dart line]Presentation: Click right in which side, Dart direction is that side;

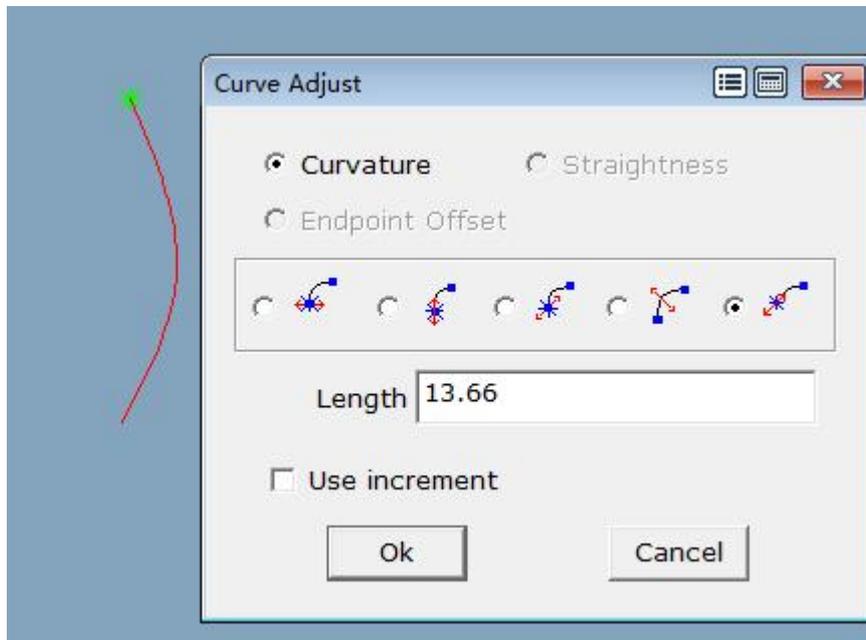


- 6) Press shift, Make a square to one or more line, Click right is **【Move】** function, Convert move or copy with shift, Press Ctrl, it is move or copy in any direction;
- 7) Press shift, Make a square to select one or more line, Click left, Go to **【Transfer dart】** function.

4. Click right mouse

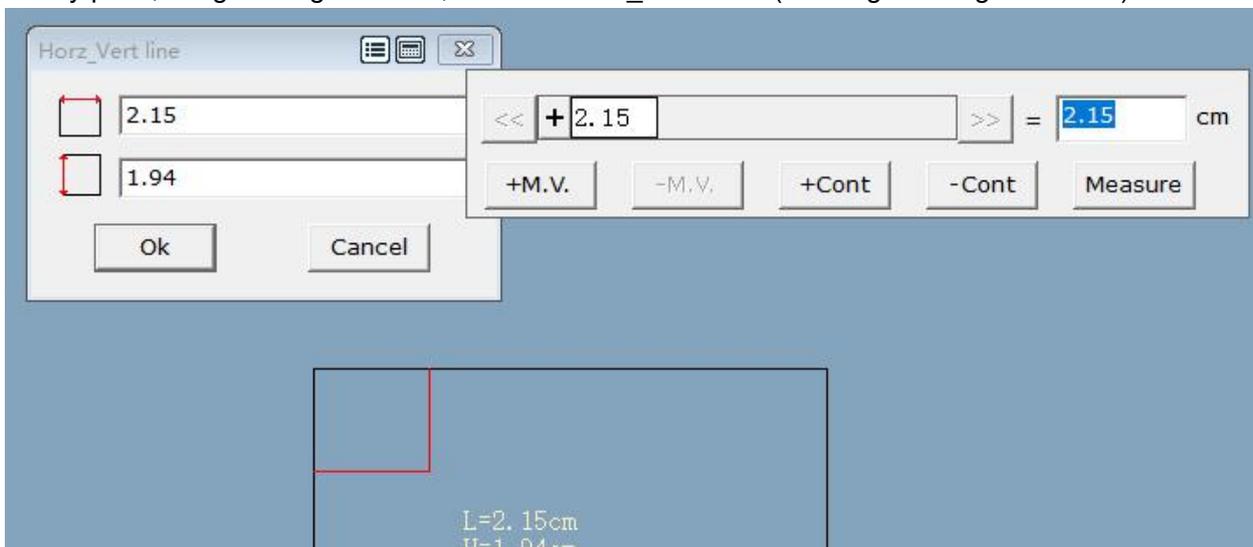
- 1) Click right on line and become **【Modify】**

2) Press Shift, Click right on line and become **【Adjust curve】** Click right on middle of line, it is two side did not change, Adjust curve length. Click on one side point, Adjust from one side Point.

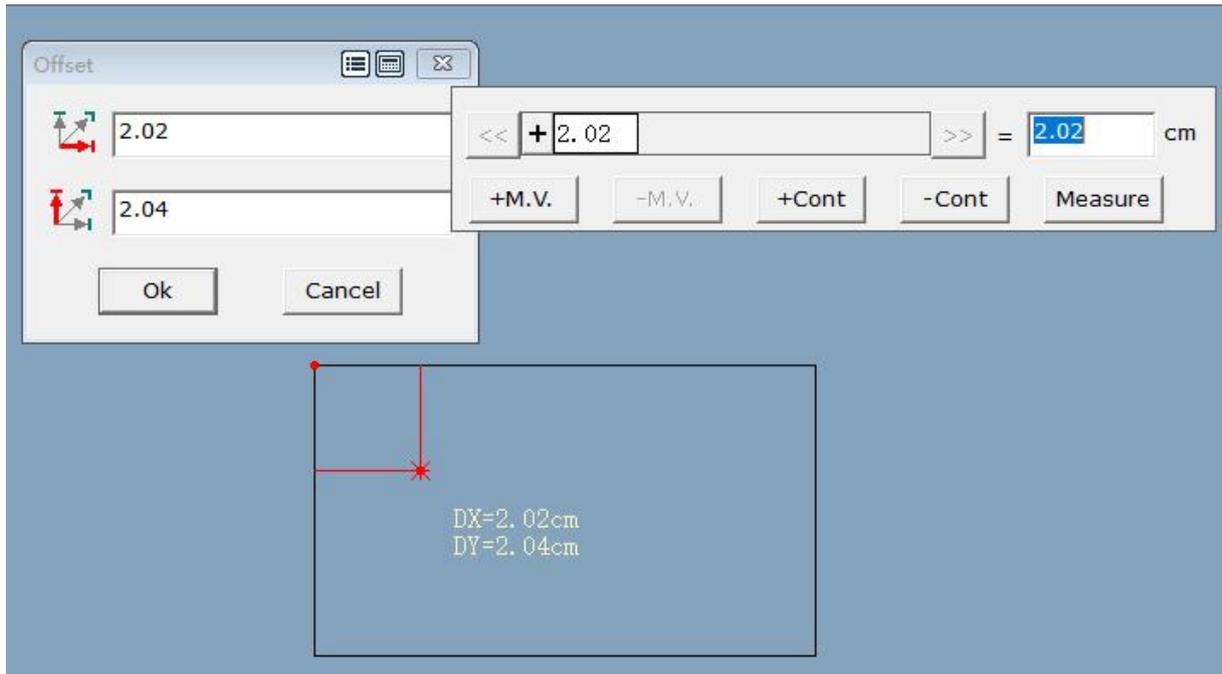


5. Drag with right button

1) On key point, Drag with right mouse, Go to **【Horz\_Vert line】** (Click right change direction)



2) Press shift, Click on key point ,Click right Go to **【Offset】** function(click right change reserve point/line or not)



6. Right click to make a square to select

- 1) Make a square with right mouse on line, Go to **【snip(connect) line】** function;
- 2) Press shift, ,Make a square with left mouse on line, Go to **【Shrink dart】** function.

7. Enter key: The cursor is placed at the key point/intersection ,Press Enter, Get **【Offset】** .



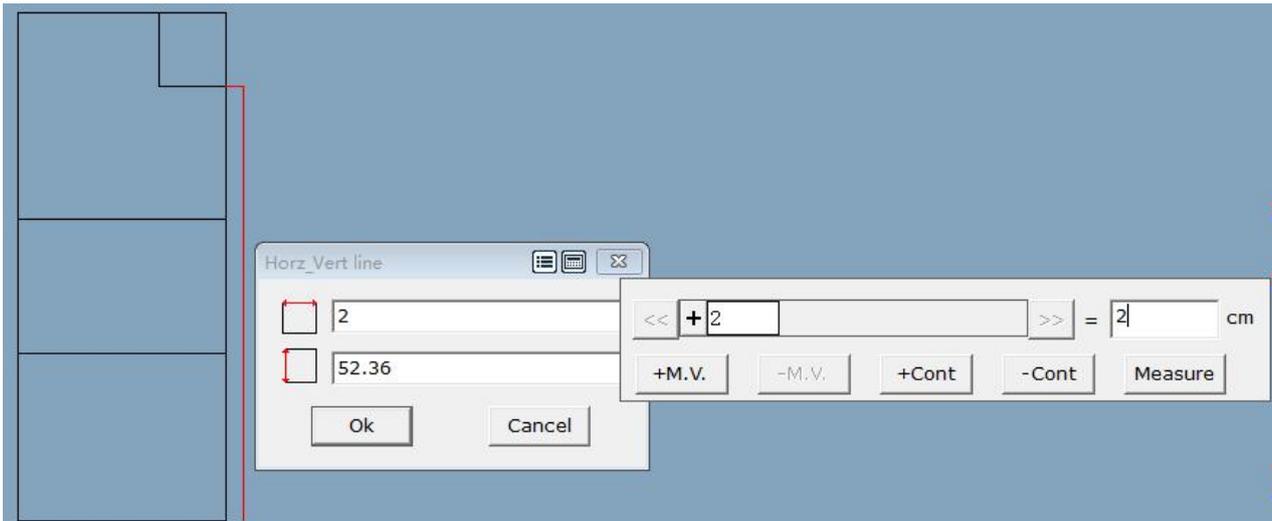
Horz and vert line |

Function:

At the two key points (including the intersection of the two lines or the end of the line), connect a right-angled line, such as a front placket and a wide collar depth.

Operation:

Click one point, Then click right to switch horizontal or vertical line location, Then click another point.



**Eraser E**

Function:

It is used to delete points, lines, patterns on the pattern, notches, drills, pictures, pleats, stitches, quilting lines, grading lines, reference points (line grading), etc.

Operation:

1. Click on line or point;
2. If need to erase the points and lines that are grouped together, use left make square to select object.
3. When grabbing the control point on the edge, if the point has seam data or associated notch, it will give a hint at the cursor.


**Part eraser**

Function:

Used to delete part of the line .

Operation:

1. Use the tool to left-click on the key point on the line, click on any point on the line, and finally click the end point of the line you want to delete;
2. Left-click the online equalization point, and then click the end you want to delete.

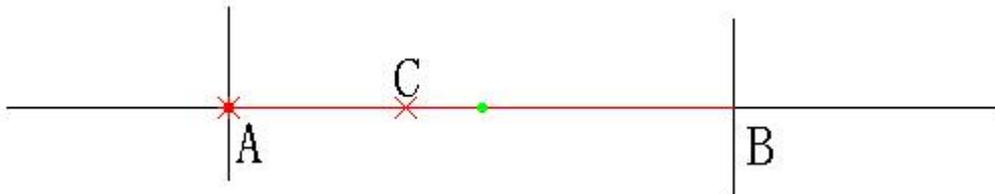

**Point P**

Function:

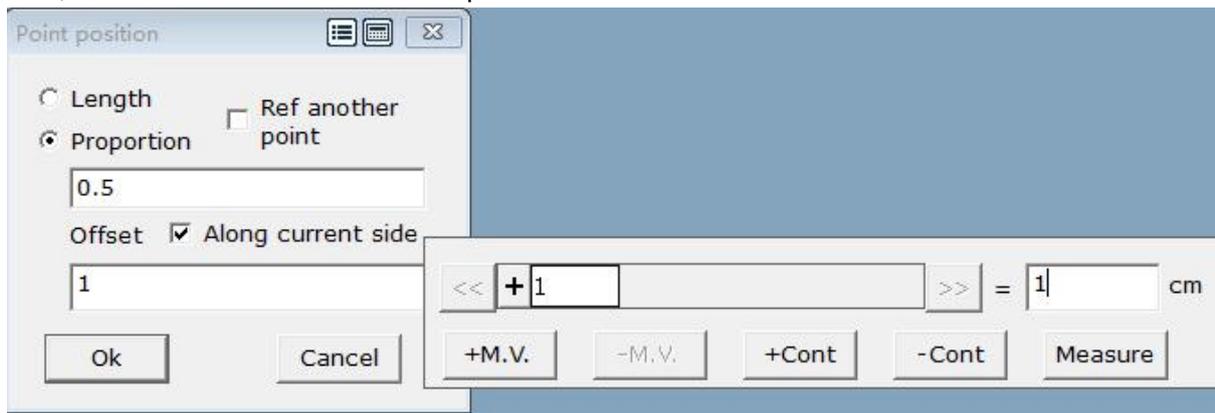
Add point on line or blank place. Can operate on design line and pattern.

Operation:

1. Click on line which need to add point, Near side point will turn light, add appear **【Point position】** dialogue table. Input value, Then click OK.
2. Click the left button directly on the key point to increase the point;
3. Sometimes, U can not fix the reference point at what u need, Check following picture,Add a 2cm Point from Point A. Put cursor on point what u need, Then press and hold left button and drag to point B, Then click on line.



4. In the case of selecting the proportion, you can set it to move, for example, the proportion is 0.5, then offset is 1, then it will move 1cm at the midpoint.



### Relevant /Irrelevant

#### Function:

When adjust cross line with modify tool, If you use relevant, Line can be adjusted together, If you use irrelevant , Line can not be adjusted together, Can be used both in design line and assistant line, Default cross point is relevant.

#### Operation:

 Relevant ,  irrelevant, Press Shift to convert

1. Click or make square to select two line with  , Can relevant cross point of two line.



Original



After using relevant. Ajust one point of line  
Another point of line move accordingly

2. Click or make square to select two line with , Can irrelevant cross point of two line.



Original



After using Irrelevant. Ajust one point of line  
Another point of line do not move

Note: Use Shift to switch Relevant  / Irrelevant 

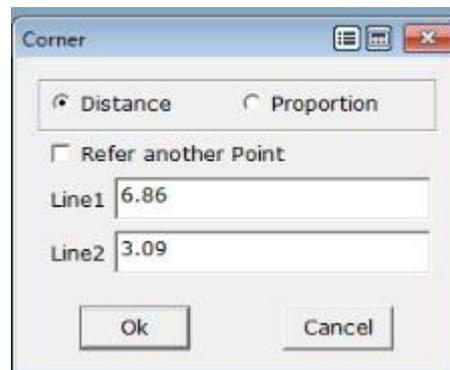
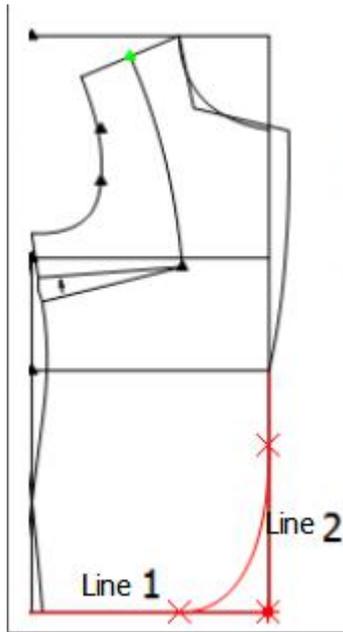


Function:

Make equal distance or non equal distance Arc corner. Can make bottom of uniform, Pocket etc, Can be used in design line and pattern.

Operation:

1. Select Arc Corner, Click or make square to select two line need to make arc corner;
2. Move the mouse on the line, Press shift can convert curve round corner or Arc Corner, Click right can convert from  and ,  means that preserve corner,  is delete corner;
3. Click again, You can see corner dialogue table, Input value , Click OK to finish.



4. In the formula method, the pattern can be linked with the design line, and use the Modify tool ,right click on the linkage point.



3P arc

Function

Draw Arc or circle through 3 point, Can draw design line, assistant line of pattern.

Operation:

1. Press shift can convert between three point circle  and three point ARC  ;
2. After changing to cursor , Click three point can make three point circle;
3. After changing to cursor , Click three point can make ARC.



CSE arc

Function:

Draw Arc or Circle, Can draw design line, assistant line of pattern.

Operation:

1. Press shift can convert between three point circle  and three point ARC  ;
2. After changing to cursor , Click any point to set center point of circle, Then you can see **【Radius】**

Dialogue table;

3. Input proper Arc length, Click **【OK】** .

Note: The operation of CSE arc is same as CSE circle .


 Forfex W

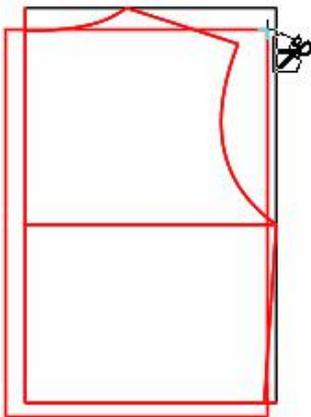
Function:

It is used for picking up pattern from design line or assistant line.

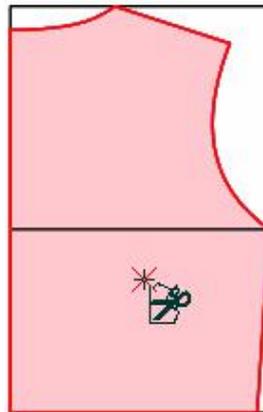
Operation:

1. Click or make a square on line formed pattern , Click right, System will create pattern according to big area, Like picture 1.
2. Click one point, Click border line in clockwise until close, If line turn green when pick up, Click right can select later line, finish picking up, Like picture 3.

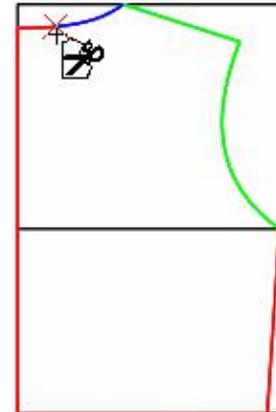
Note: Click line, Make a square on line, Press shift and click color area, once operation is selection, Second time operation is cancel selecting. Above three operation is click right to finish pattern, Tool turn to picking up assistant line tool.



Picture1



Picture2



Picture3

3. Select forfex, Click right can turn to pick up assistant line tool, Picking up assistant line from design line.

- 1) Select forfex tool, Click right cursor turn to , Design line turn blue color.
- 2) Click or make square on needed line, click right.
- 3) If scissor border line to assistant line, Click two point , If curve line, click 3 point.

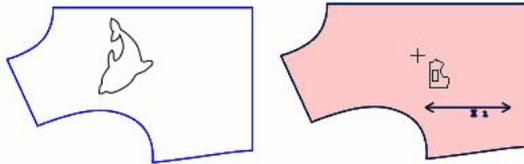

 Inside border

Function:

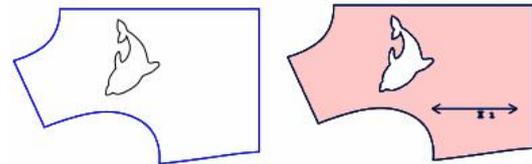
Make hollow graph in pattern, Also can pick up on design line, Can hollow out the area of the assistant line formed in pattern.

### 1. Pick inside border on design line

- 1) Use Inside border tool, right Click on select pattern, its original design line will change color. Like Picture 1;
- 2) Click on or box select the inside border line;
- 3) Right click to finish, Picture 2.



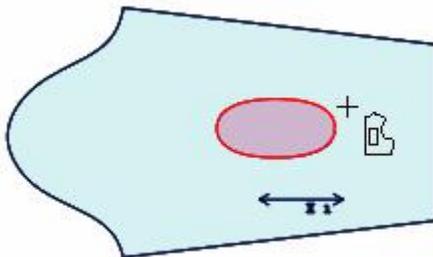
picture1



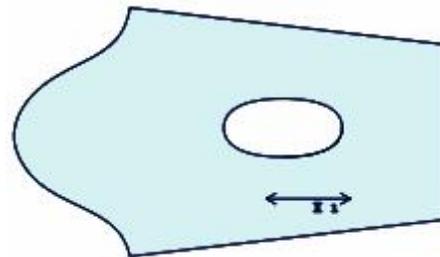
picture2

### 2. Pick inside border on pattern

- 1) Click on or box select the auxiliary lines in pattern;
- 2) Right click to finish.



After making square before click right



After click right



### Divider N

#### Function:

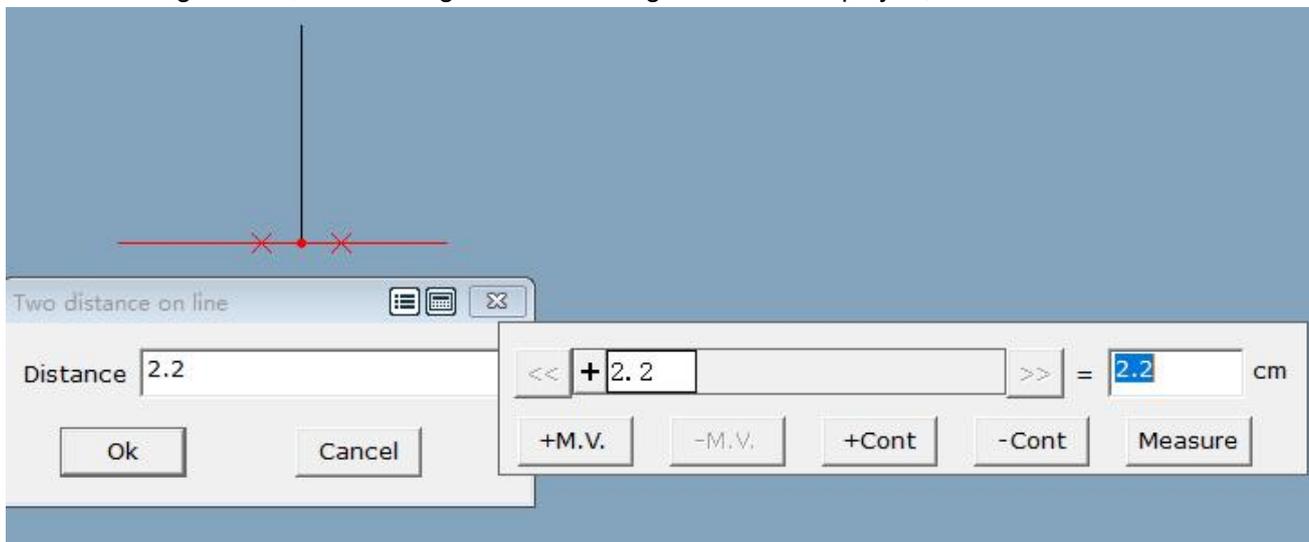
Add equal point on line, Add equal distance point in opposite direction on line, Can operate on design line and pattern.

#### Operation:

1. Equal divided function  (Click right to convert  , have equal line on point or not) Note: The form of the point, should click the point then right-click to switch.

- 1) Left-click directly on the line to divide the entire line;
- 2) Click on the starting point on the line - click on the middle point - click on the end point, can divide a segment on the line;
- 3) Click on the starting point on the line - click on the ending point to equally divide the straight line distance between the two points.

2. Press the SHIFT key to switch to the line distance function,  left click the key point on the line, move the mouse along the line, and click again. In the dialog box that is displayed, enter the data and confirm.



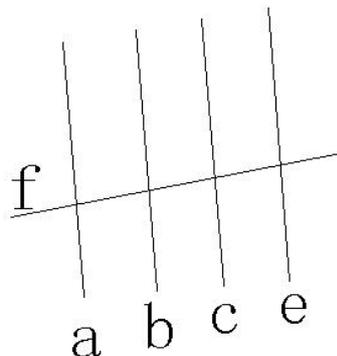
### Snip curve

Function:

Snip line from appointed place, It will turn to two line. Or connect more line to one line, Can operate on pattern and design line.

Operation:

1. Click on line, Line turn red, Click on line again, You can see **【point position】** dialogue table;
2. Input proper value, Click OK.
3. If it is key point you select (for example equal point or cross point or point already exist), Click on these place, No dialog table appear, Snip from the point directly.
4. Group cut line operation:  : Select this tool, Press shift change cursor to , Check following picture, Cut line a、b、c、d with line f. Make a square or left click line a、b、c、d, Then right click, Then click line f.



5. Connection operation: Click or click the line to be connected, and right click.

6. If the cut (or connected) curve is referenced, give a hint that the curve has been referenced:

If a line is involved in forming a pattern, measured length, drilled hole, etc., it has been referenced, Such a curve does not advise the customer to cut it.

If it is determined to cut, the new line will be set to "Special Point Display Color" and the original curve still exists.



Angel line L

Function:

Can make any angel line, Make vertical line ,tangent (parallel line )through point out of line, Can be used in design line and pattern.

Operation:

1. Make corner line on beeline or curve line

1) Like picture, C is one point on line A and B, Click AB first, Then click c, Two vertical reference line appear, Press shift, two vertical line convert between in picture 1 and picture 2.

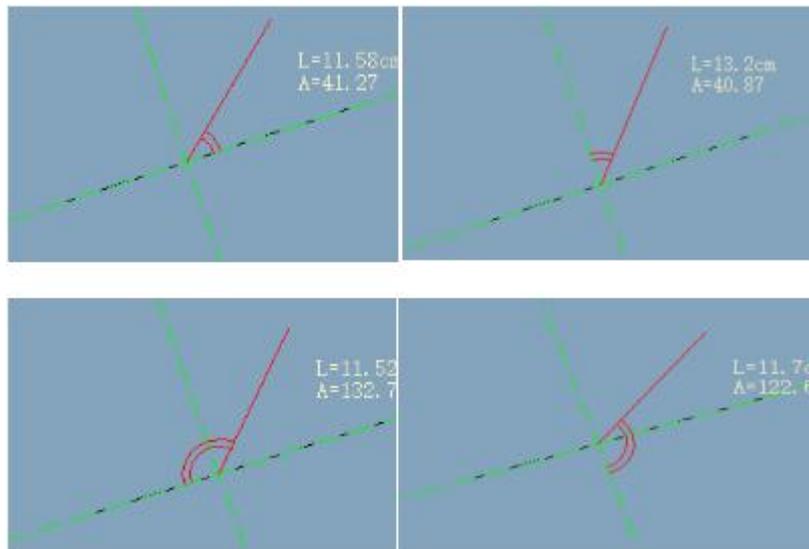


Picture 1

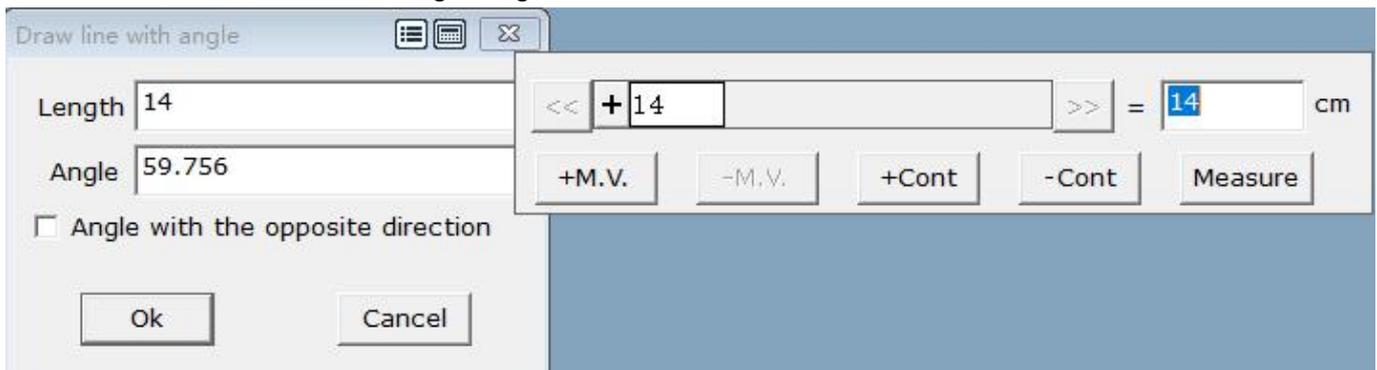


Picture 2

2) Above situation , Press right to covert Angel start line. Following is convert picture of picture 1.



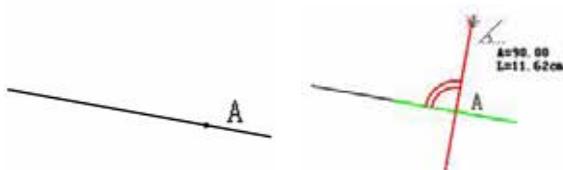
3) Click left, You can see following dialogue table;



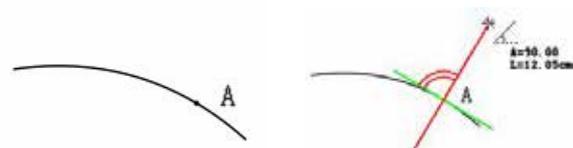
4) Input length and Angel, Click OK

2. Make vertical line through point out of line or on line.

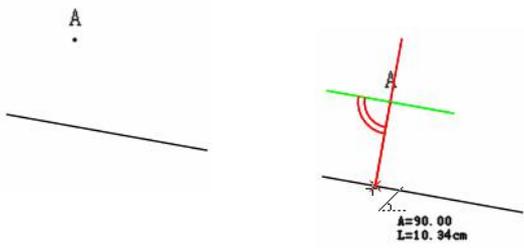
1)Please check following picture, Click line first, Then click point A, Two vertical reference line appear, Press shift,two vertical line convert between reference line and selected line.



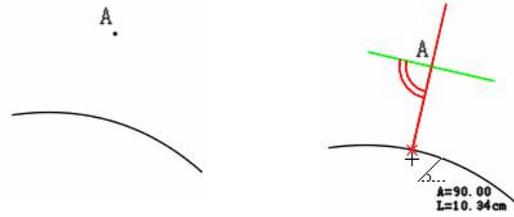
Picture 3



Picture 4



Picture 5



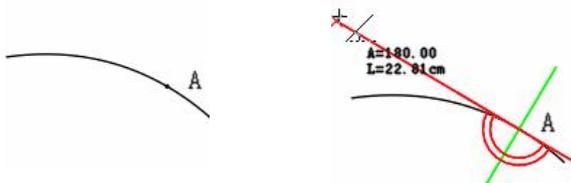
Picture 6

2) Move cursor, make it near to selected vertical line, Cursor will adhere to reference line, You can see dialogue table;

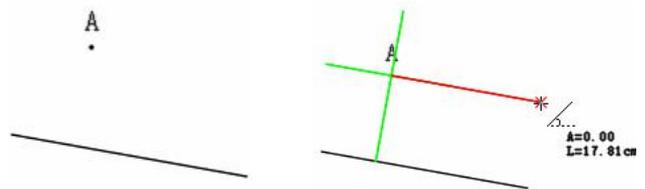
3) Input vertical line length, click OK.

3. Do tangent through point on line or do parallel out of line

1) Check following picture, Click line, Then click point A, Two vertical reference line appear, Press shift, two vertical line convert between reference line and selected line.



Picture 7

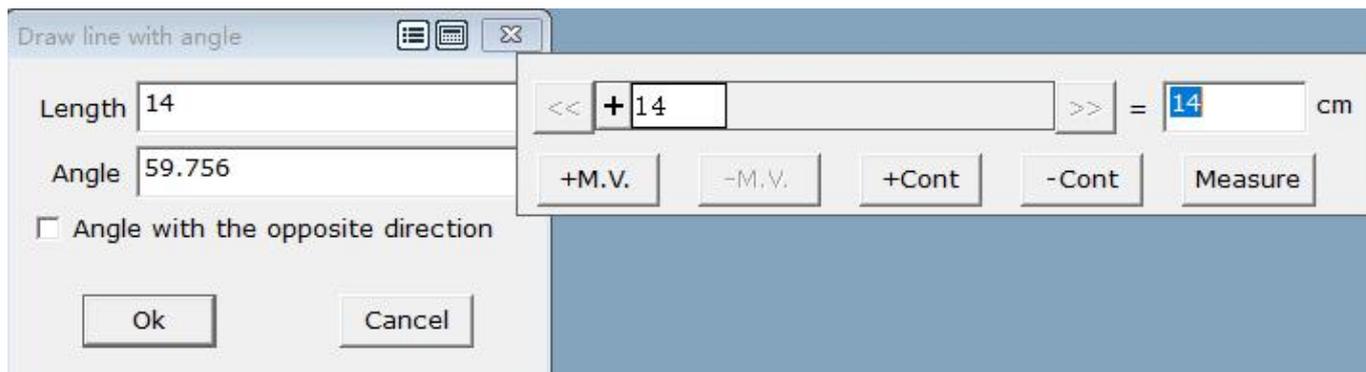


Picture 8

2) Move cursor, make it near to selected vertical line, Cursor will adhere to reference line, Click, You can see following dialogue table;

4) Input parallel length or tangent line length, Then click OK.

【Draw line with Angel】 parameter description:



【Length】 Refers to the length of the line;

【Angle】 refers to the angle made;

【Angle with the opposite direction】 Check the angle in 【Angle】 to the difference between 360 and the original angle.

### **Compasses C**

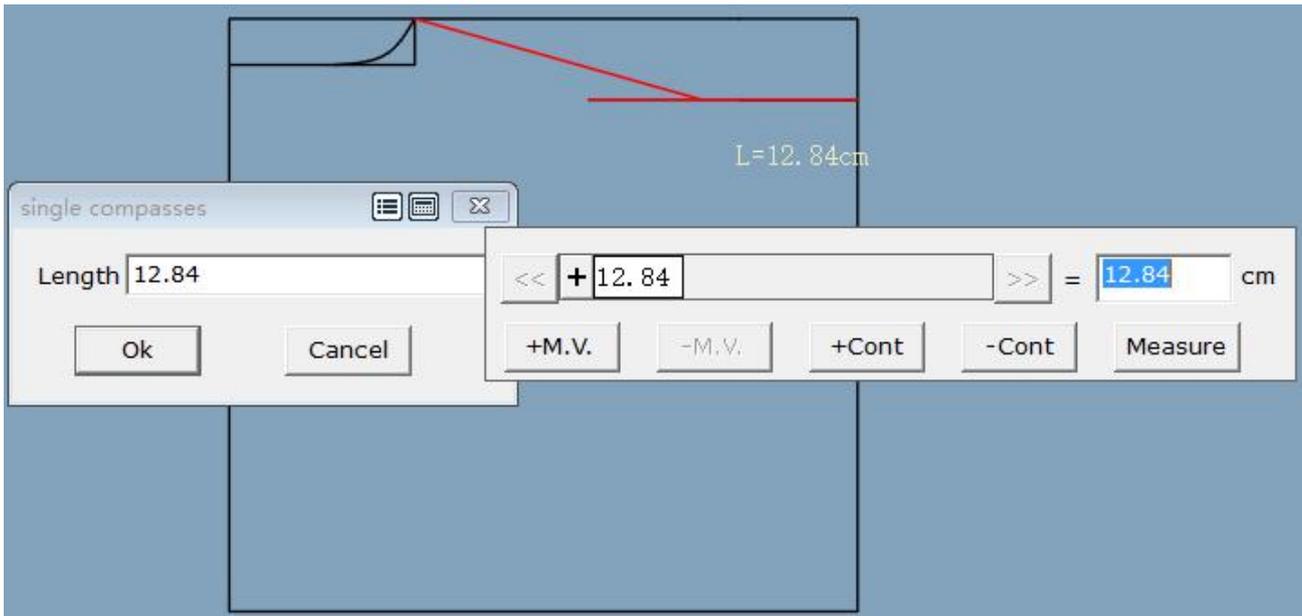
#### **Function:**

**Single compasses:** Make a straight line from a key point to a line, Usually used in drawing shoulder, straight armhole, Waist, bias line of sleeve Arc.

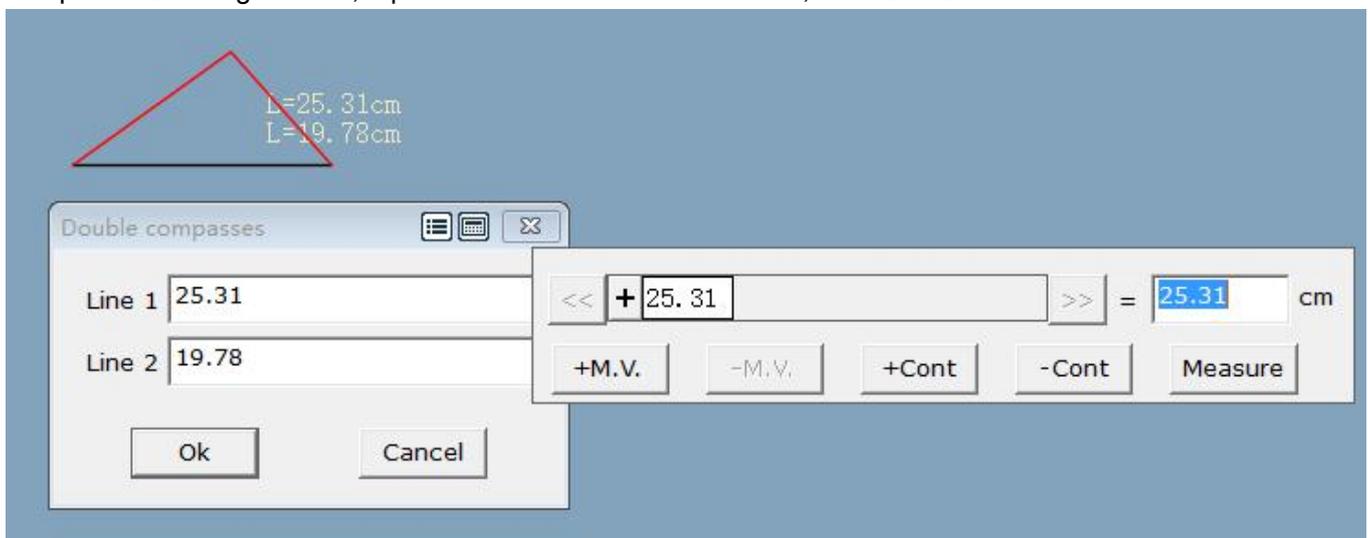
**Double compasses:** By specifying two points, two lines of the specified length are made at the same time. Usually used in bias line of sleeve arc、 peak lape of custom fashion etc, Can operate on design line and pattern.

#### **Operation:**

1. Single compasses: Take shoulder bias line as example, Select this tool, Click collar width point, Release mouse, Click shoulder down line, You can see【single compasses】dialogue table, Input small shoulder length, click 【OK】 .

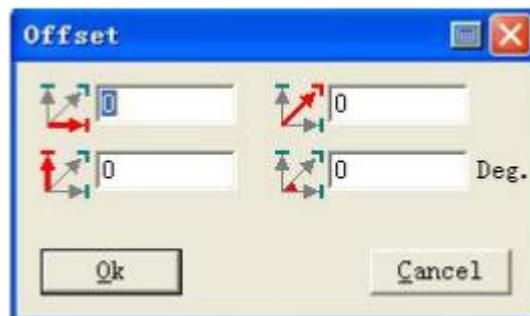
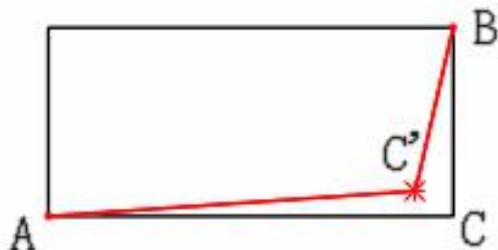


2. Double compasses: (sleeve width fixed, confirm sleeve arc point according to front and back sleeve arc line), Click point A,B, Then drag mouse towards one side of line then Click, You can see **【Double compasses】** dialogue table, Input value on first and second line, click **【OK】**.



**SKILL:**

Double compasses offset function, Make back pocket of trousers. Like following picture, select point A、B, Put cursor on point c, Press Enter, Input value in **【offset】**, Click Ok to make AC' and BC'.



## Compare length R

### Function:

It is used to measure the length of a line, the total length of the lines added, the difference between the lines, and the length of the notch to the point. It can be operated on the pattern and design lines.

### Operation:

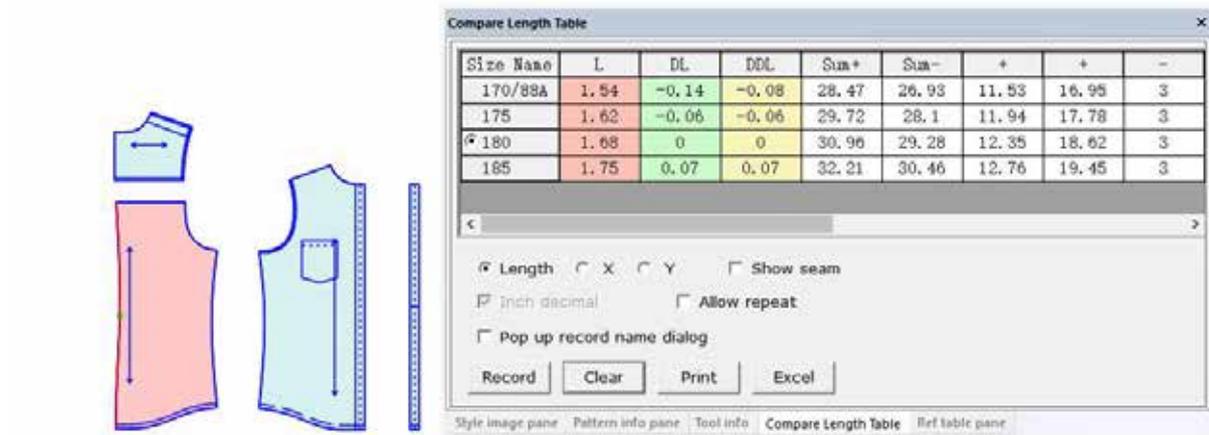
The line selection method is click selected (left click on the line), frame selection (frame selection with left click on the line), click one point (click the key point, click any point in the line, end point on the line).

1. Measure the length of a line or the sum of lines:

- 1) Select this tool and pop up **【Compare length】** dialog box.
- 2) Select the required options in length, horizontal X, vertical Y;
- 3) Select the line to be measured, the length can be displayed in the table;

2. Compare the difference between more lines, as shown in the figure below, and compare the difference between sleeve ARC and armhole:

- 1) Select this tool and pop up **【Compare length】** dialog box.
- 2) Select **【Length】** option;
- 3) Click or make a square to select first group(sleeve), Then right click, Select or make a square to select another group(front and back armhole).The **【L】** in the table is the capacity.



3. When the line is the entire line, press F9 to measure the length of the line.

【Compare length】Parameter Presentation: as above

1. L is dispersion of 【sum+】 and 【sum-】
2. DL (absolute dispersion) dispersion of other size with basic size
3. DDL (Relative dispersion) :dispersion between near size.
4. 【sum+】 :Length summation before click right mouse
5. 【sum-】: Length summation after click right mouse
6.  **Length** If select curve,It is curve length,If select straight line, It is straight line length
7.  **X** It is horizontal distance of selected line
8.  **Y** It is vertical distance of selected line
9.  **Show seam** shows the seam length corresponding to the selected line;..
10.  **Inch decimal** When the system unit is displayed in inches, check to increase the displayed decimal value **10"7/8(10.875)** ;
11. **Record** Click can record dispersion under L in "measurement", when record two or more line, You can see 【Measurement var】 dialogue table.
12. **Clear** Click clear,Can delete data in text box.
13. **Print** Can print dispersion of current dialogue table
14. **Excel** Click to export the corresponding length comparison table to save in Excel format.

**Note:**

- 1.The tool defaults to Compare length  ,Press shift, Can turn to measure two point distance tool  .
- 2.When the outline points and assistant line points coincide, hold down the Ctrl key while using the tool to match the assistant line points, and do not press the matching outline points.

## Measure two point distance

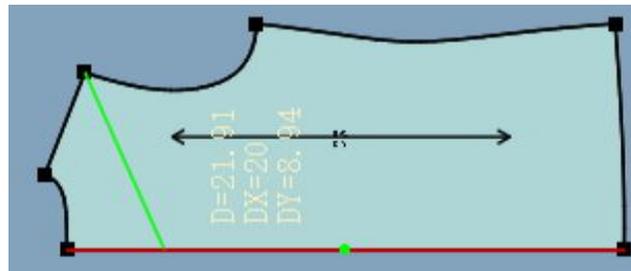
### Function:

Used to measure the difference between two points (visible or non-visible points) or point-to-line straight-line distance or horizontal distance or vertical distance, the sum of distances between two groups of points, or the distance between two groups. It can be operated on pattern and structure lines. Any pattern can be matched on the pattern.

### Operation:

**a As shown below, measure the vertical distance from the shoulder point to the center line.**

After switching to the tool, click on the shoulder point and the center line respectively. The measurement dialog box will show the distance between the two points, the horizontal distance, and the vertical distance.



**Tool info** ✕

Size Name	Distance	Horizontal distance	Vertical distance	+
S	55.15	21	51	55.15
• M	55.15	21	51	55.15
L	55.15	21	51	55.15

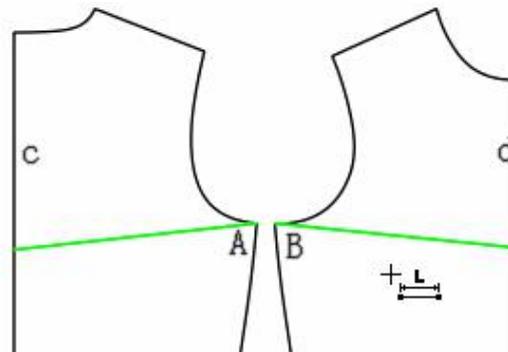
Dispersion   
 Record   
 Export to Excel

Style image pane
Pattern info pane
Tool info
Compare Length Table
Ref table pane

### **b As shown below, measure half bust**

1. Switch to this tool ;
2. Click point A and center line c respectively;

3. Then click point B and center line d. The measurement dialog box will show the distance between two points, the horizontal distance, and the vertical distance.



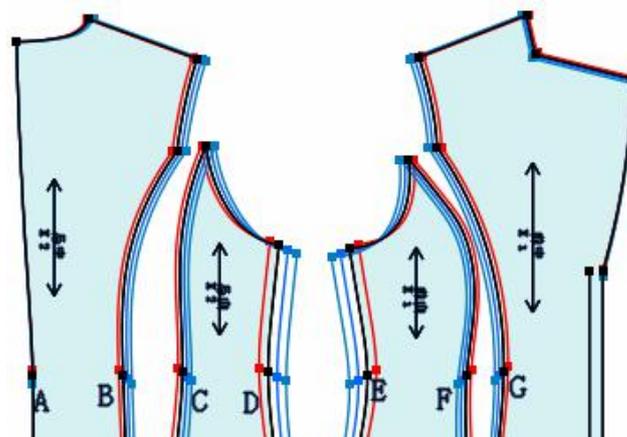
**Tool info** [X]

Size Name	Distance	Horizontal distance	Vertical distance	+	+
S	60.74	57	20.84	29.94	30.8
<b>M</b>	60.74	57	20.84	29.94	30.8
L	60.74	57	20.84	29.94	30.8

Dispersion    Record    Export to Excel

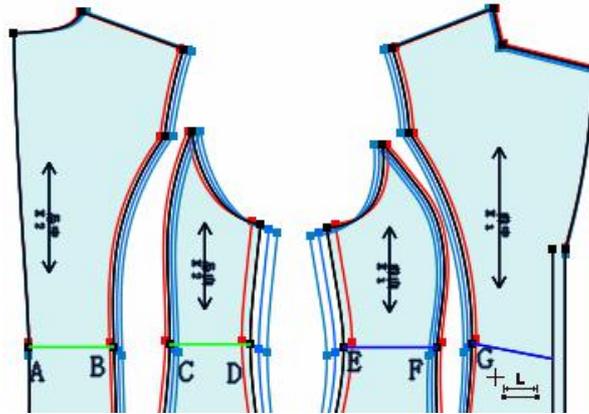
Style image pane   Pattern info pane   **Tool info**   Compare Length Table   Ref table pane

**c** As shown below, measure the difference between the front and back waist circumferences.



1. Use the tool to click point A, point B, point C, point D respectively, and right click;

2. Then click point E, point F, point G, front center line, and the measurement dialog box will display the distance, horizontal distance, and vertical distance between the two points.



**【Measure】** Parameter description: as above

**【Distance】:** It is refer to straight line length of two point,like Picture, It is AB length;

**【Horizontal distance】:** It is horizontal distance of two point

**【Vertical distance】:** It is vertical distance of two point

**【Dispersion】:** Select, the size outside the base size shows the data by dispersion;

**【Record】:** Click can record data in measurement var



Protractor

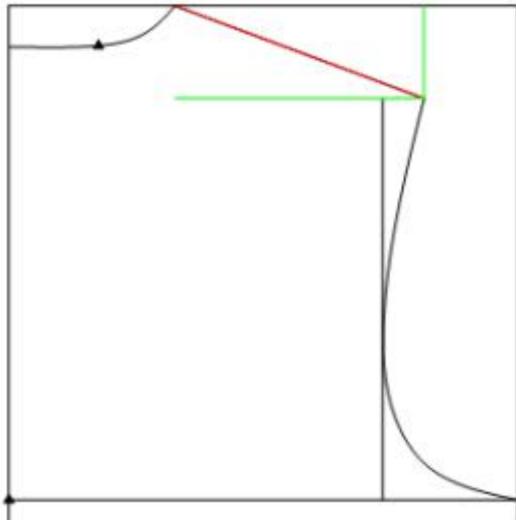
### Function:

Can operate on pattern and design line

1. Measure one line horizontal and vertical degree;
2. Measure two line degree;
3. Measure three point degree;
4. Measure two point horizontal or vertical degree

### Operation:

1.Click or make square on measured line, Click right, You can see **【Angel】** dialogue box.Check following figure, Measure shoulder bias degree.

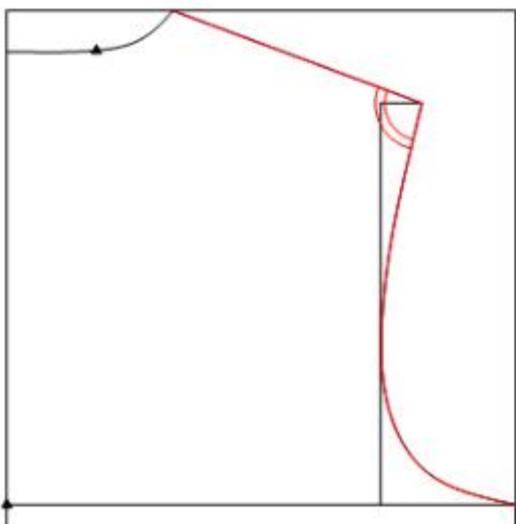


Angle

Size Name	X angle	Y Angle
S	17.14	72.86
<input checked="" type="radio"/> M	17.14	72.86
L	17.14	72.86

Close Record

2. Click or make square to select measured two line, Click right to finish, You can see **【Angle】** dialogue table, Check following figure, Measure degree of shoulder bias line and armhole.

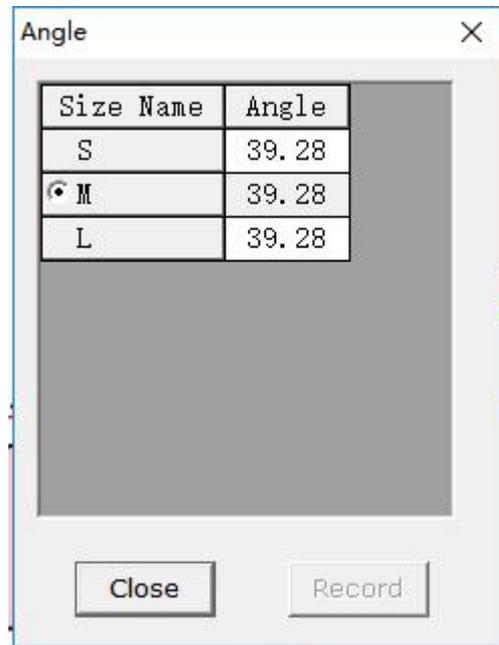
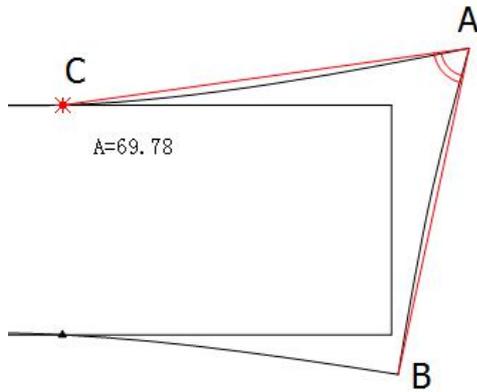


Angle

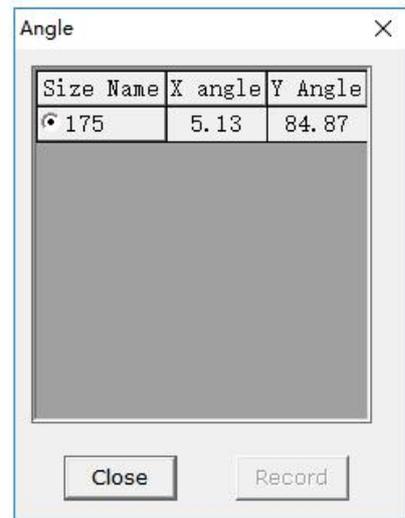
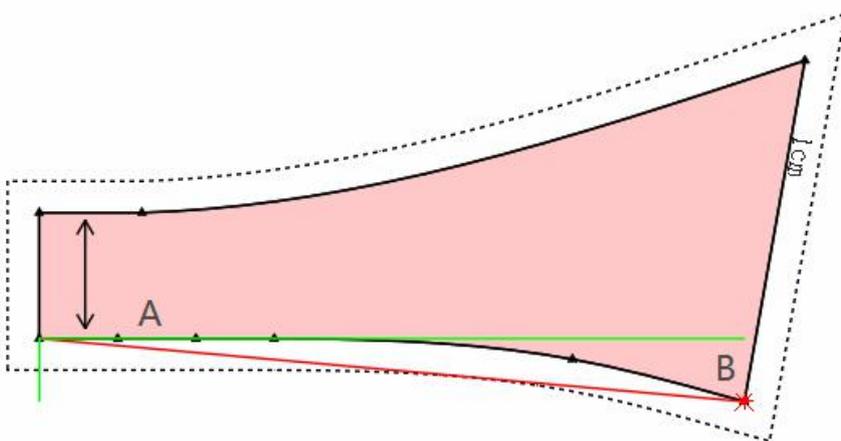
Size Name	Angle
S	39.28
<input checked="" type="radio"/> M	39.28
L	39.28

Close Record

3. Check following figure, Measure degree of point A,B,C, Click point A, Then click point B and c, you can see **【Angle】** dialogue table.



1. Press the Shift key, and click on the two points that you need to measure, then will bring up the Angle Measurement pop up window. The following figure measures the angles of points A and B.



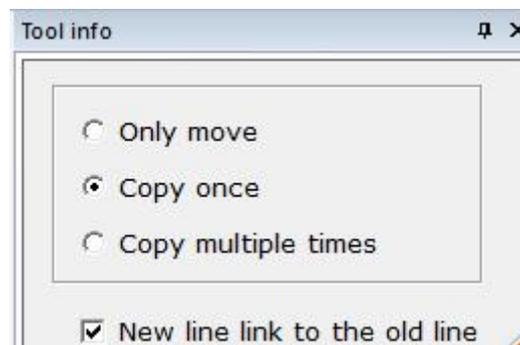
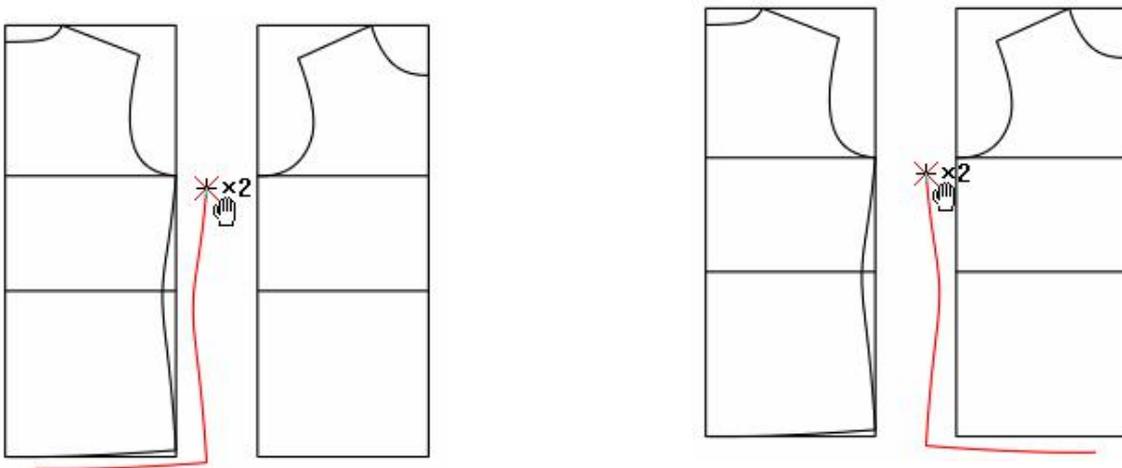

 Group copy/move      G

**Function:**

It is used for coping or moving one group point、line、Drill、 button hole and so on.

**Operation:**

1. Left Click or make a square to select copy or move line ,Click right;
2. Click reference point (After selecting reference point, Click right, Selected line mirror on horizontal or vertical direction. Check following figure) Drag to object position then click;


**Presentation:**

- 1.The tool defaults to [single copy]  Can be changed from the tool property bar.[move]  or [multiple copies] , You can also directly press the Shift key to switch;
- 2.The curve that is copied after the check is related to the original curve;

New line link to the old line

3.Press the Ctrl key to move in the horizontal or vertical direction

4.Press Enter when copying or moving, and the position offset dialog box will pop up.

5.Edges of the pattern can only be copied and can't be moved. Edges of the original pattern will not be deleted even if the edge is moved under the move function.

 Mirror K

**Function:**

According to symmetry axis Symmetrically duplicated (symmetrically moved) structure lines, elements, or patterns

**Operation:**

- 1.The tool can either click on two points or click two points in the space as an axis of symmetry.
2. make a square to select or click the point line or pattern that you want to copy, right click to finish.

**Presentation:**

- 1.The tool defaults to , Press the Shift key to switch to ;
2. The default axis of symmetry draws a horizontal or vertical line at 45 degrees. Right click can be switched to any direction.

 Rotate CTRL+B

**Function:**

Used to rotate to copy or rotate a set of points or lines or text. Applicable to structure lines, drawing elements or pattern auxiliary lines.

**Operation:**

1. Click or box to rotate the point, line, and right click;
2. Click a point, and click the point as the pivot point, click any point as the reference point, and drag the mouse to rotate to the target position;

**Presentation:** The tool defaults to , Press the Shift key to switch to 

 Move and rotate Shortcut key J

**Function:**

Used to connect one set of lines to another.The following figure 1,Match the back line to the front line.

**Operation 1:**

1. As shown in Figure 2,Use this tool to position the cursor near the neckline and click the back shoulder slash.

2. Click on the front shoulder slash, The cursor is close to the collar wide point, Right click.
3. Select or click the dotted line that needs to be docked, and finally click the right button to finish.

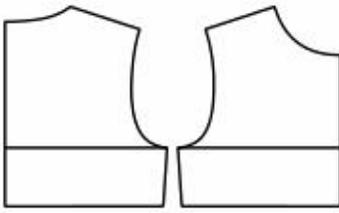


figure 1

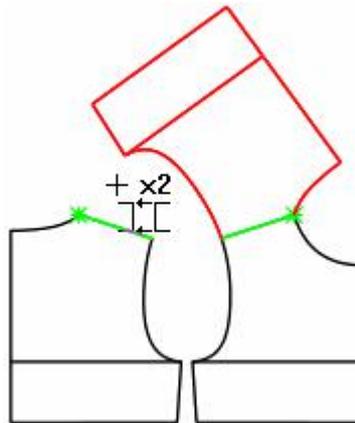


figure 2

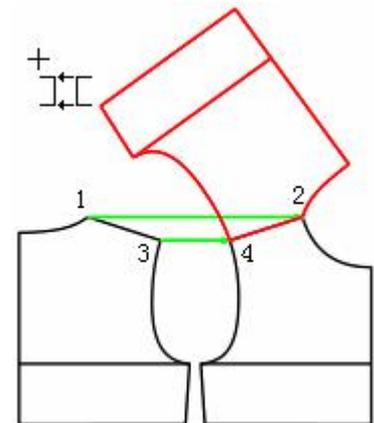


figure 3

### Operation 2:

1. As shown in Figure 3, Use this tool to click 1, 2, 3, 4 points in sequence;
2. Re-frame or click on the next point to connect to Point, line, right click to finish.

### Presentation:

The tool defaults to docking replication with the cursor as , Docking copy and docking use the Shift key to switch, the docking cursor is .



Set curve colour and type

### Function:

It is used to modify design line color, Line type、 Assistant line type and output type

### Presentation:



Set solid line thick or thin ,set solid or dashed line;

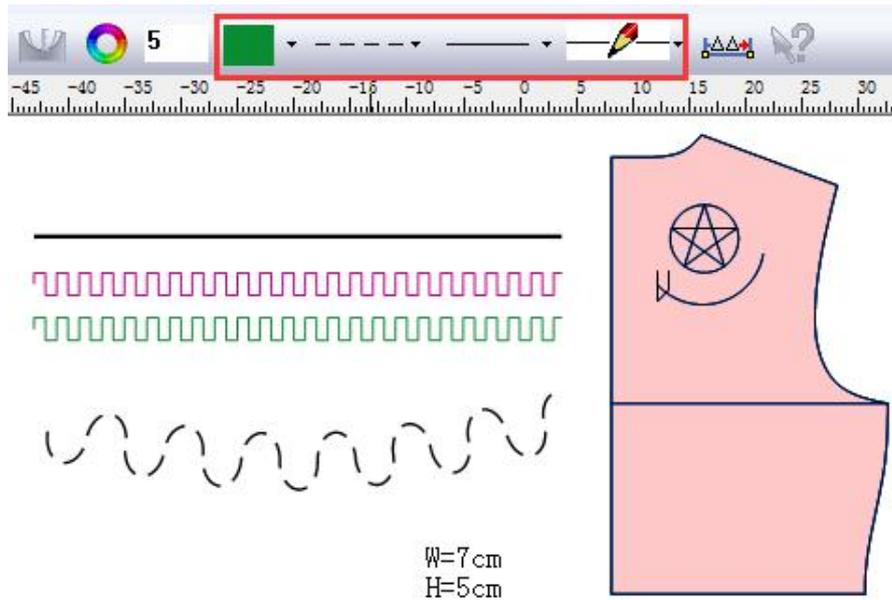


Set various line

Type;  Set inside line is plot or cut or half blade cut.

### Operation:

1. Select this tool, There are curve colour, Curve type, Set curve shape ,Set assist curve output type on the right of shortcut toolbar
2. Select color, line type etc
3. Left Click or make square on line; Set line type, cut status
4. Right Click or make square on line, Select colour



5. Direct keyboard input value can change the setting of line size:

1) Only for special lines such as wavy lines, folding lines and Great Wall lines.

Select one type line, Cursor appear length and width, Keyboard input data can be changed the length and width, First input is line length, Press enter, Input line width, Then press enter to confirm;

2) Left Click or make square on need to modified line.



Insert dart

#### Function:

Insert dart on pleat on selected line, Can be used in design line and pattern, Often used to make Hubble-bubble sleeve, three-dimensional pockets, etc.

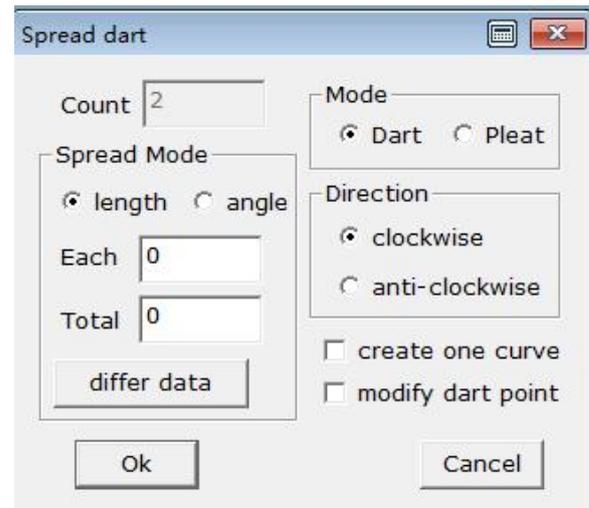
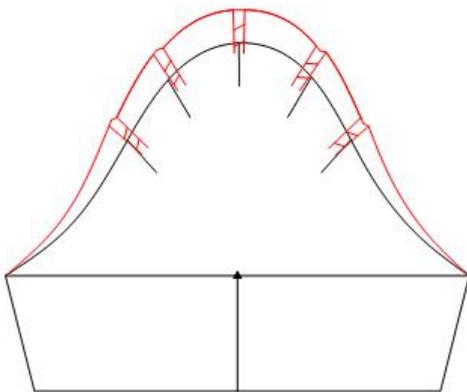
#### Operation:

1. Have spread line:

1) Click or Make a square on selected line ,then click right

2) Make a square or click dart line ,Click right, You can see **【spread dart】** dialogue table.

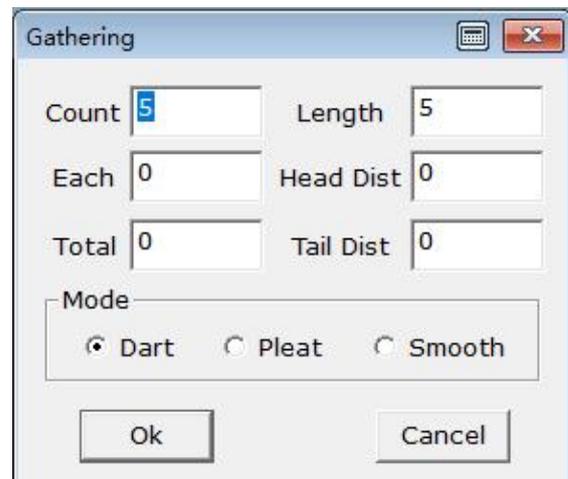
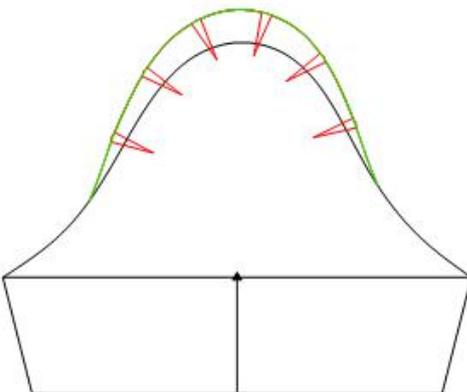
3) Input value in dart or pleat in dialogue table, Select the way you want to handle it. Click



## 2. No spread line:

1) Click or Make a square on line which will insert dart, Click right two times, You can see 【Gathering dialogue】 table.

2) Input value in dart or pleat in dialogue table, Select the way you want to handle it, Click ok.



## Transfer dart

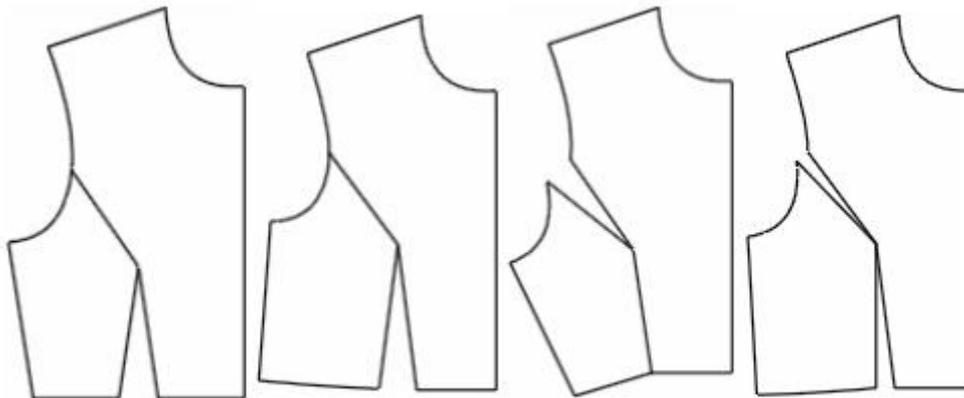
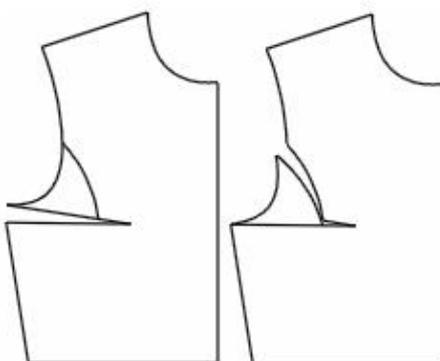
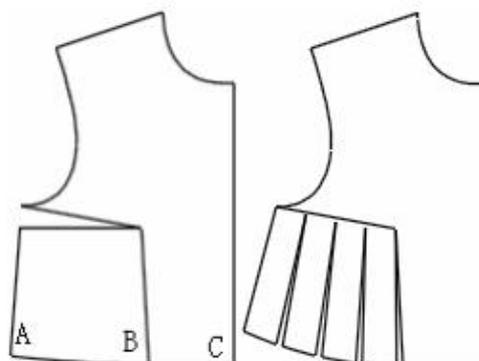
### Function:

It is used to transfer dart of structural lines and pattern, Can Transfer in same circle center, Also not in same circle center, Can transfer part, Also Can transfer all, Also can transfer equally, **New dart point can in original place, also can not in original place, and can Linkaged adjustment.**

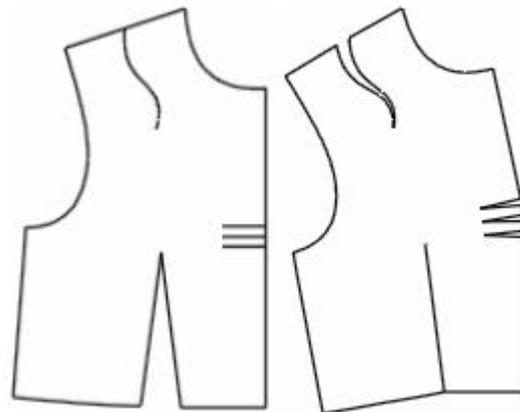
### Operation:

1. Make square to select all line need to transfer, Then Right click

2. Click or Make square a new dart line, Then Right click.
3. Click a line to determine the starting edge of the combine dart, Or click on the key point as a rotation center of transfer dart
  - 1) Transfer whole dart, Click another line of combining dart (left click another line, Dart length equal after transferring, if click right mouse on another side, New dart point place do not change)
  - 2) Transfer part dart: Press Ctrl, Click another side of combing (Click another side with left mouse, Dart length equal when after transfer dart, If click right on another side, New dart point do not change)
  - 3) Equal divider dart: Input number, Then click another side of combining dart (Click another side with left mouse, Dart length equal, If click right on another side, New dart point do not change)

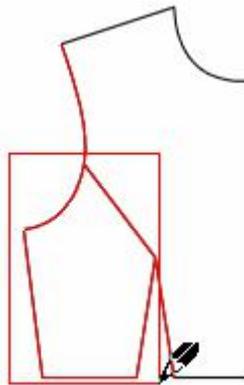

**Transfer whole dart**
**Transfer part dart**

**Circle Center point is not same**

**Equal divider dart**

**(The bifurcated line AB is an independent segment)**



**One dart Transfer to more place**

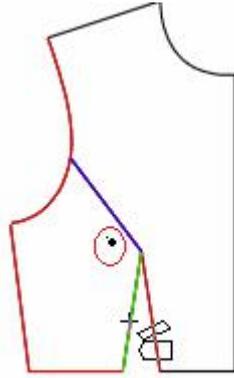
Please check following whole process :



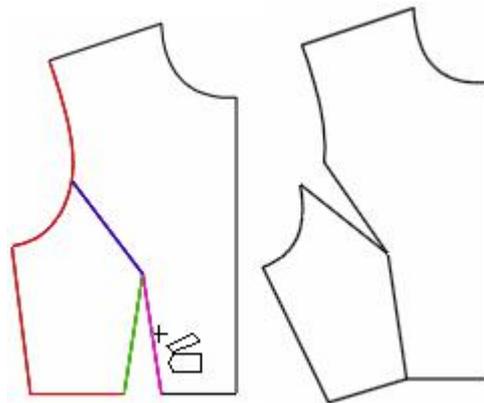
Step 1 (Make square to operation line, Line turn red)



Step 2 (Click new dart line, Dart line turn blue, Click right)



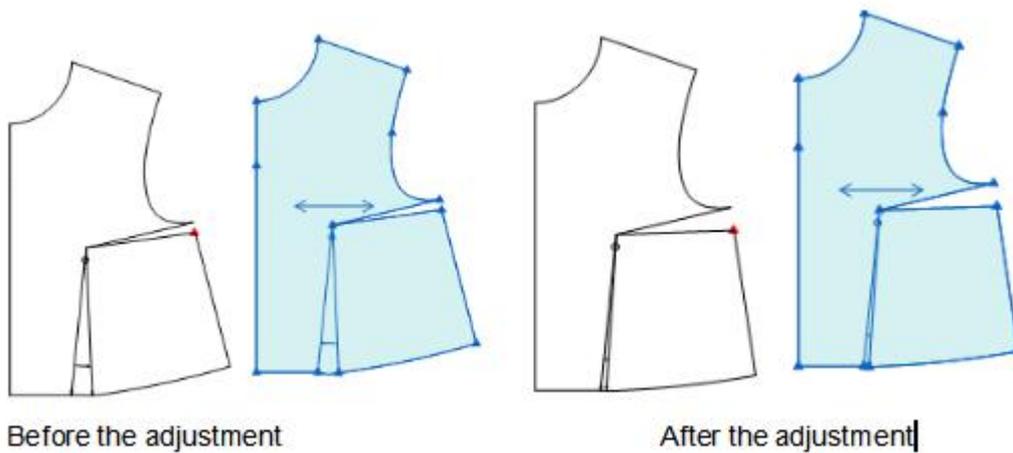
Step 3 (If the dart point is in other locations, click on the dart point. Click start line of combining dart, Line turn Green)



Step 4 (Click end line of combining)Result

#### 4. Linkaged adjustment:

Right click the red linkage point with the adjustment tool, adjust the structure line, and adjust the pattern at the same time.

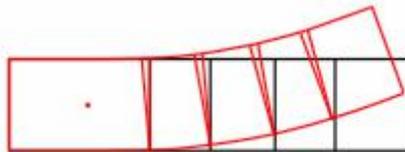


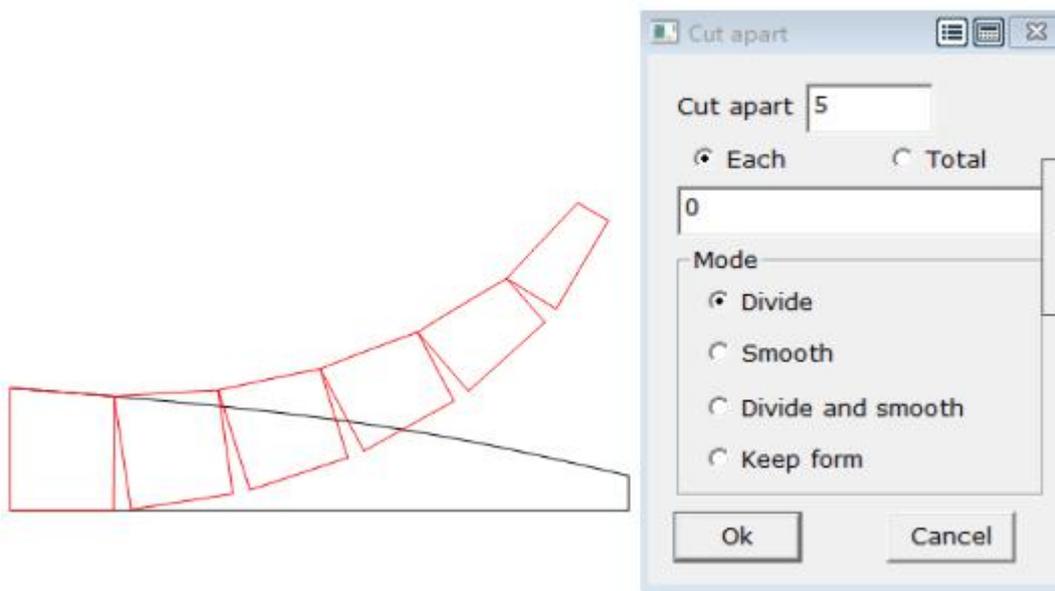

**Cut Apart**
**Function:**

Can be unfolded in one direction/remove margins and can be expanded or removed in both directions. It is used to collar, lotus leaf, large swing skirts, etc. It can be operated on the pattern and structure line and can be adjusted in linkage.

**Operation:**

1. Use SHIFT to switch  and 
2. Make a square (or click) all operation line, click right;
3. Click no spread line (If more line, Make a square, then click right), In the case of two-way expansion, it is the top line.
4. Click spread line (If more line, Make a square, then click right), In the case of two-way expansion, it is the below line.
5. If there are divide line, Click or make a square on divide line, click right to confirm fixed side, You can See **【cut apart】** dialogue table. (If have not divide line ,click right to confirm fixed side
6. Input proper data, select suitable item, click Ok.
7. If operate on a pattern, don't need to operate the second step above.


**Spread according to appointed line**



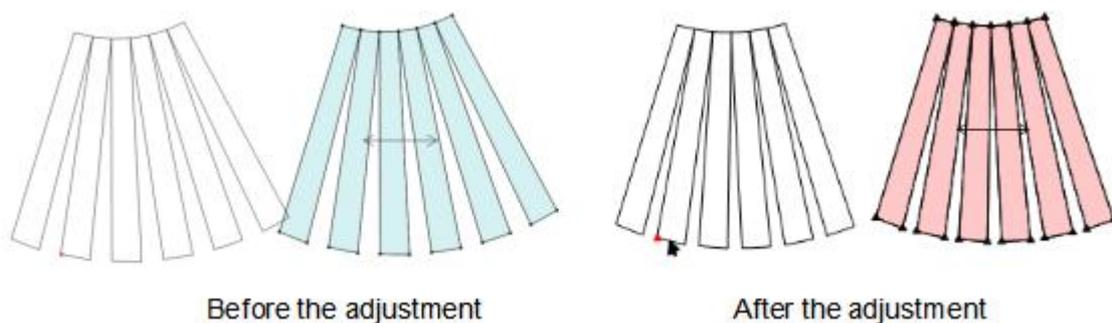
**【Cut apart】** Dialogue table presentation: As above

1. In the amount of contraction, + is spread,- is deduct surplus;
2. Handling in the dialog
  - a) Select “divide”, Input total expansion and lines, Spread line apart but did not connect.
  - b) Select “smooth”, elect “divide”,Input total expansion and lines, Spread line apart but connect Automatically.
  - c) Select “keep form” Input output total expansion and lines, line connect from spread place

The operation of two - way expansion or removal of the remainder is the same as one - way expansion or removal of the remainder.

### Linkaged adjustment

Right click on the red linkage point with the adjustment tool, adjust the structure line, and adjust the pattern at the same time.

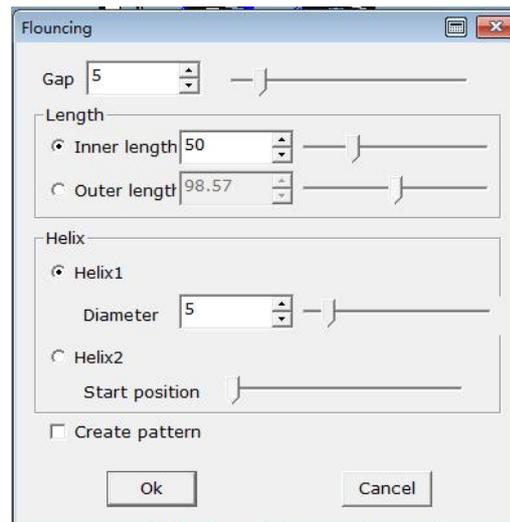
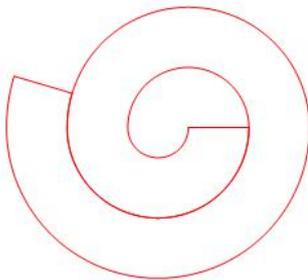



**Flouncing**
**Function:**

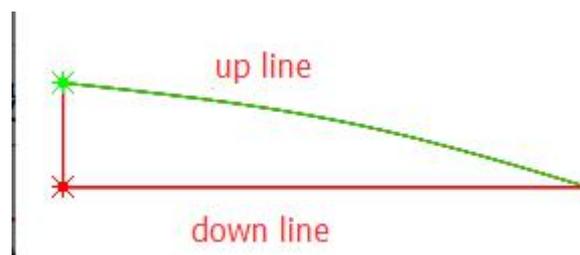
Make helical flouncing. Only available for design line.

**Operation:**

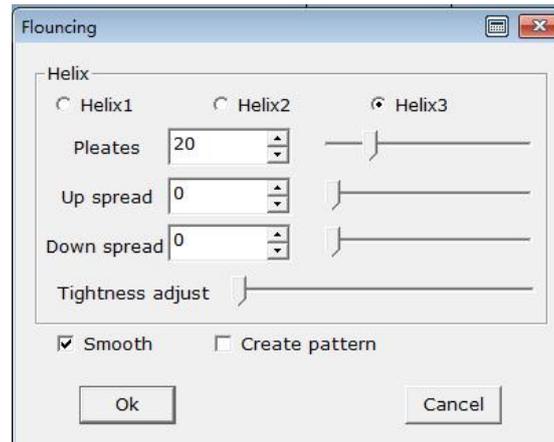
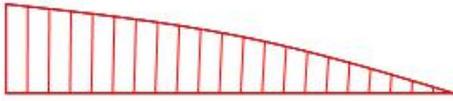
1. Click on blank place, You can see **【Flouncing】** dialogue table (Can input new data), Click **【ok】**



2. Left Click or Make square a operation line, Then click right, Click first segment line, Click another segment line, You can see **【Flouncing】** dialogue table, There are three type, Select one type. The click ok.



3. The spiral 3 can manually input the amount of development of the upper stage and the amount of development of the lower stage to control the shape of the flouncings.



Text

### Function:

It is used for add text, Move text, modify or delete text on design line or pattern, And text on different size can be different.

### Operation:

#### 1. Add text

1) Click on design line or pattern with this tool, (Press and hold mouse then drag, Confirm text angle according to line direction.) you can see **【text】** dialogue table;

2) Input text, Click **【ok】**

#### 2. Move text

Click on text, text is selected, Move mouse to suitable place then click again.

#### 3. Modify or delete text

1) Put cursor on need to modified text, text turn light, Then click right, You can see **【text】** dialogue table, After modify or deleting, Click ok.

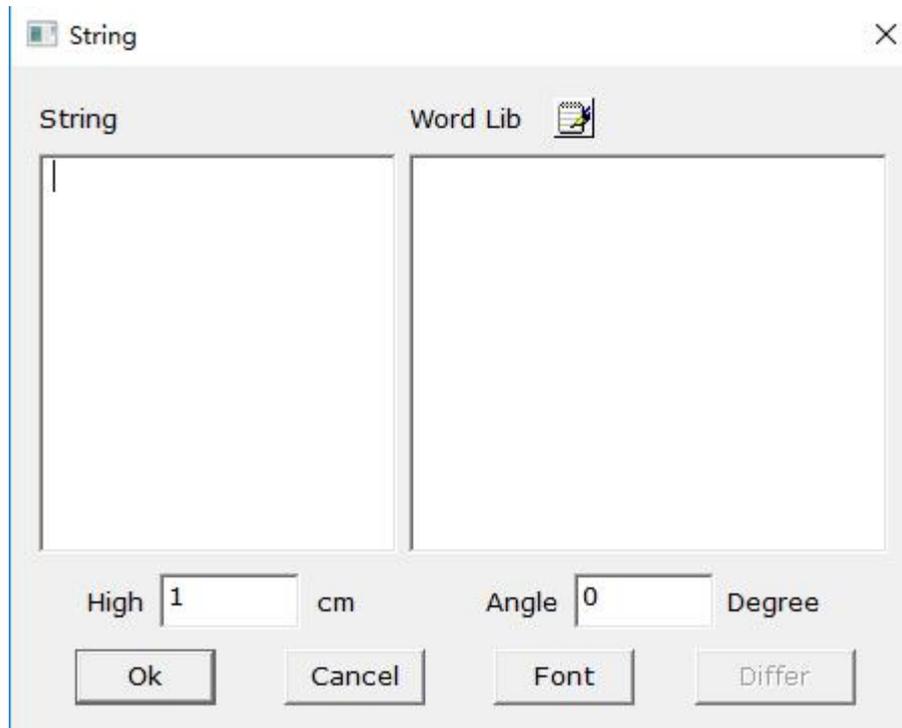
2) Put this tool on text, Text turn light, Press Enter, You can see **【text】** dialogue table, Select words need to modify and modify it, Press delete, Can delete words, Press direction keyboard, Can move text direction

#### 4. Adjust text direction

Put this tool on text which need to modify, Left click and do not leave hands, move Mouse to destination direction.

5. Add different words on different size, For example s “add Rubber line 6cm”, L and XL “add Rubber line 8 cm”

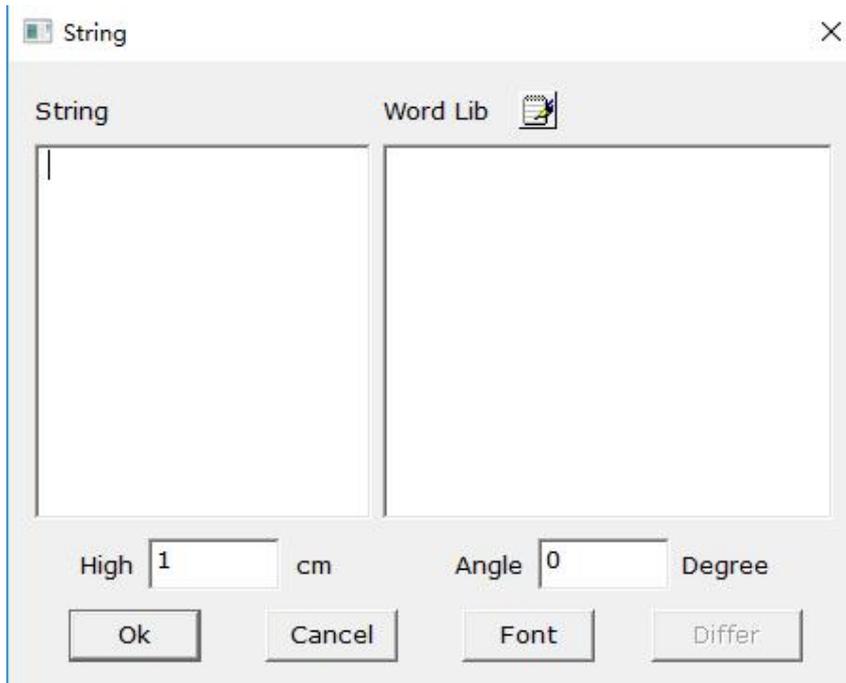
1) Click on pattern, You can see [text] dialogue table, Input "Add rubber line 6cm".



2) Click [Each code is different], In the dialogue [Each code is different] dialog, If change the text string in S to "Add rubber line 5cm", Change the text string in L code to "Add rubber line 7cm";

3) Click OK, Return to [text] dialog, click ok again.

## 【TEXT】 dialogue table presentation



【TEXT】 : Input text

【word lib】]:To create a tree-category vocabulary, you can display all history inputs under the categorization by selecting the desired categorization.Double-click directly to apply to the [Text] box on the left without having to repeat the input every time.

【High】 : Set text size

【Angel】 : Set text angle

【Text】Click【Font】,Can set T text font、 font type、 color etc ( Only for the design line ) And uniformly modify all T text fonts in the style, height.

【Each code is different】 : Apply only when the text added to different size is not the same

### Special presentation:

Text place grading operation,Select “select pattern control point”  tool to select words,Grade with Grading table.



Pic lib

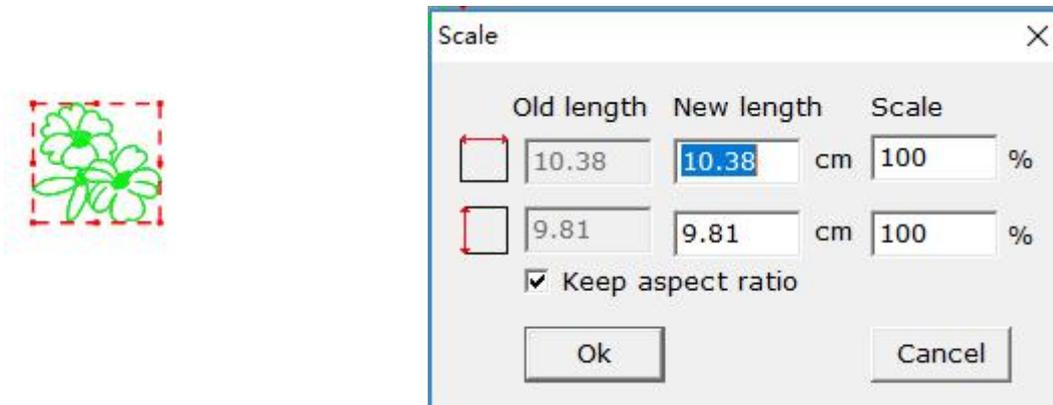
**Function:**

1. To make the craft picture with **【Save to picture lib】** under the menu **【File】**;
2. open and adjust the craft picture.
3. Copy bitmap picture to office.

**Operation:**

1.Insert (save)craft picture:

- 1) Select the tool; Separately click or marquee select the figure (Click on the selected line again to deselect it); Click right, You can see craft picture is framed by a dashed frame.Right-click again, then appear the [Proportional] adjustment dialog, input the new length or ratio to adjust the size.



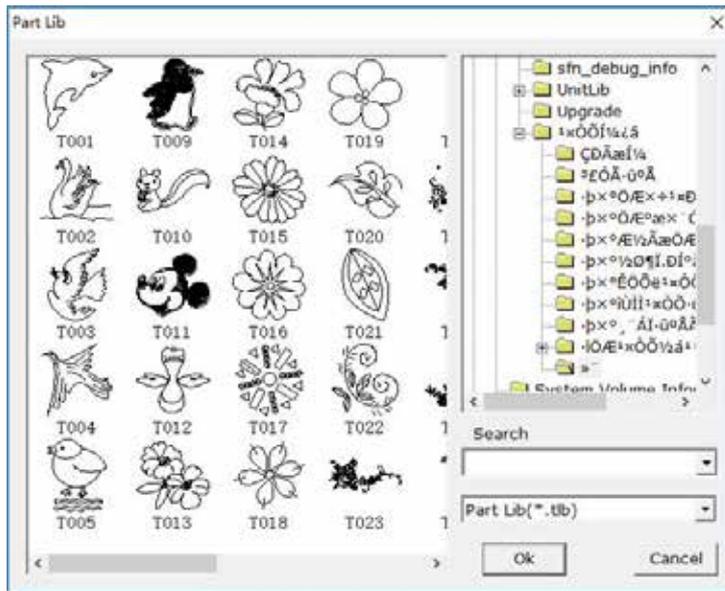
2) Click the **【File】** — **【Save to picture lib】**

3) Pop up dialog box **【Save to picture lib】** , then choose the path, input the picture name in the file name bar, click **【Save】** to add a craft picture.

2.Open and adjust the craft picture:

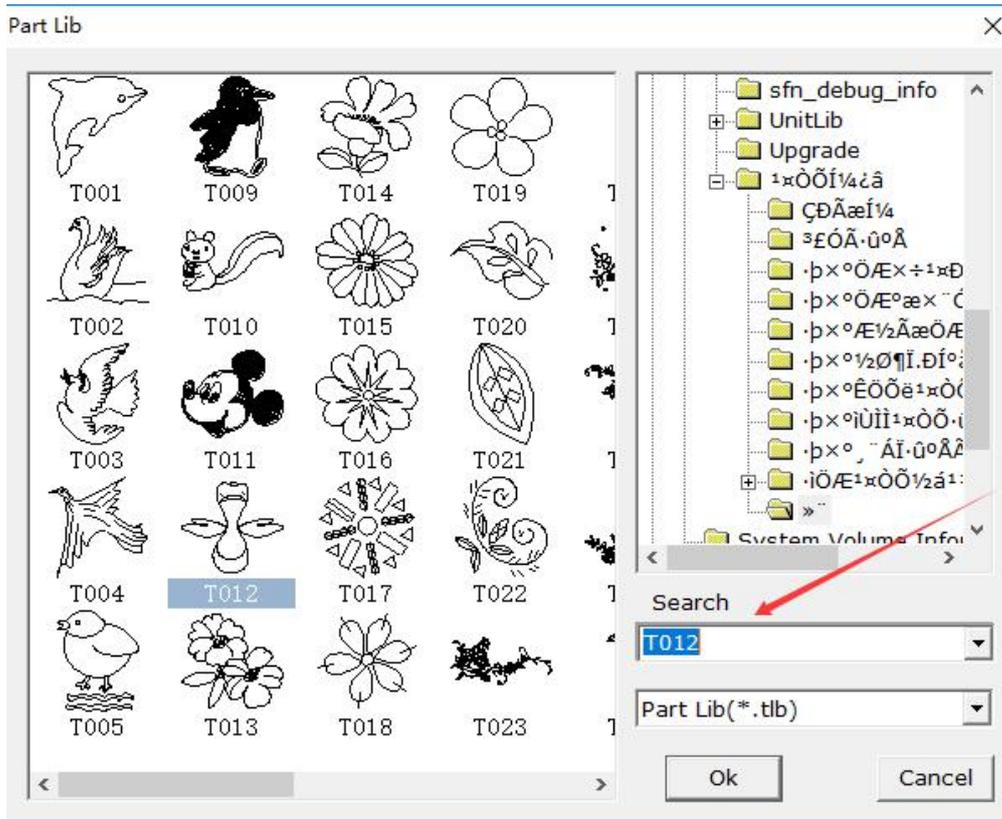
1)Open in blank place

A. Left Click on blank place,You can see **【Part lib】** dialogue table (Right-click the selected image to modify the file name);



B. Double click on picture, You can open ;

C. Enter a pattern name at search, you can search for;



D.You can left click to move or resize:



Move

When you put the mouse cursor in the dashed frame, the cursor change the shape as the picture shown then click, and drag the mouse to proper position and click again.



Horizontal Stretch

When the cursor is put on the right/left side frame, it will turn the shape as the picture shown, then click and drag the mouse to proper position and click again.



Vertical Stretch

The operation is same as above.



Rotate

When the cursor is put on the four corners of dashed frame, it will turn the shape as the picture shown, then click and drag the mouse to proper position and click again.



Proportion stretch

When cursor is put four side corner of dashed frame,Press Ctrl, Cursor turn to shape as picture shown,Drag mouse to suitable place, Click left.

E. Right Click on blank place, You can see **【proportion】** dialogue table, Click Left on blank place is confirm,

2) Open on pattern:

A. Select this tool on pattern, You can see picture lib dialogue table

B. Double click on needed picture, You can open.

3. Copy bitmap

1) Select design line, Click right,

2) Copy bitmap command is active, left Click,

3) Open WORD, EXCEL and other file to copy



### **Add seam**

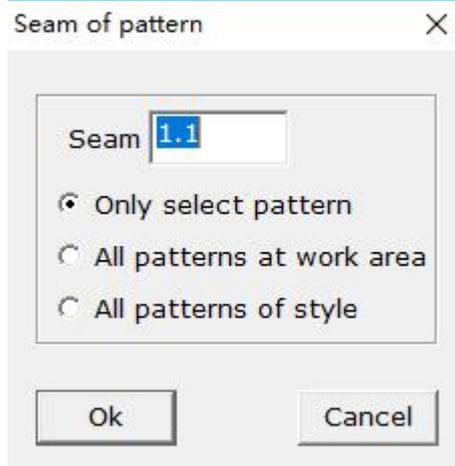
#### **Function:**

It is used for add seam or modify seam and cut corner.

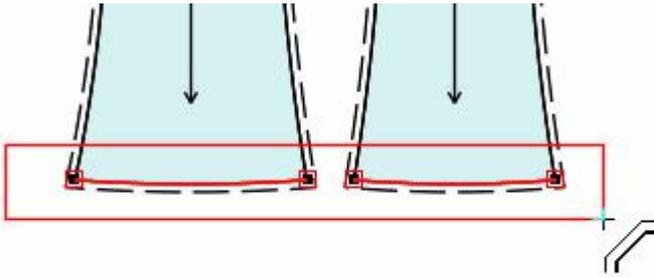
#### **Operation:**

1. Add (Modify) same seam allowance to all side of pattern: Click on any border point, You

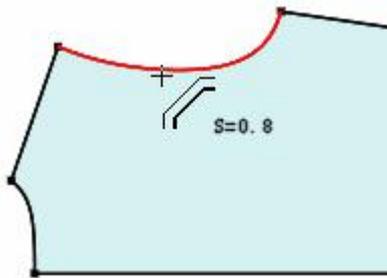
can see **【Seam of pattern】** dialogue table, Select proper option, Click ok.



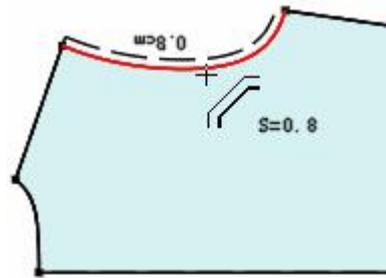
2. Add (Modify) same seam allowance to more side of pattern: make a square select same seam allowance line, Click right, You can see **【Add seam】** Dialogue table; Input seam value, Select proper cut corner type, Click ok.



5. Add seam allowance first, Then click border line modify seam allowance: Select tool, Input number, then press enter, Then click border line, Seam value is changed.



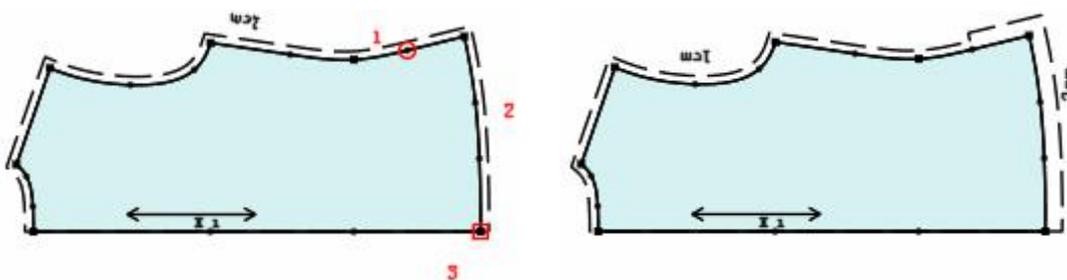
Before clicking



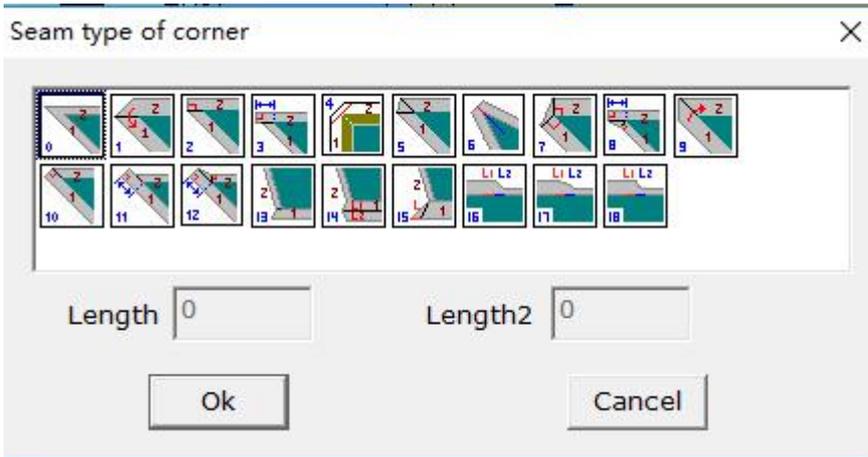
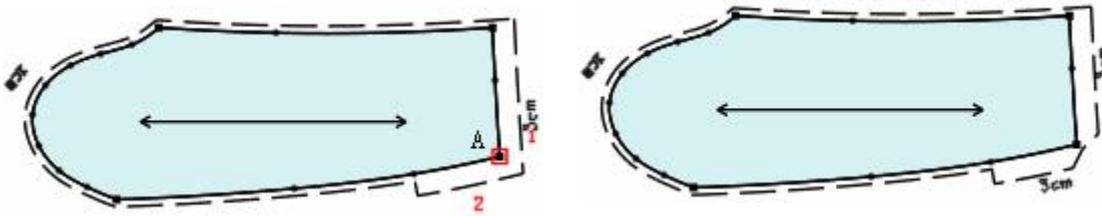
After clicking

4. Click border line: Click border line with add seam tool, Input value in **【Add seam】** dialogue table, click ok.

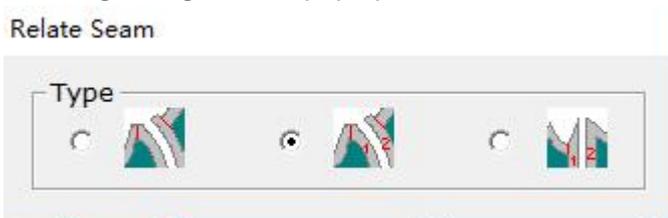
5. Drag border point add (modify) seam line: Press on point 1, then drag to point 3 and loosen mouse, You can see **【Add seam】** dialogue table, input value, Click ok.



6. Modify seam cut corner :Click right on modifying point, You can see **【Seam type of corner】** Dialogue table, Select proper cut corner, Then click ok.



7. Modify the equal length cut angle of the two sides: press the Shift key while the tool is selected, the following dialog box will pop up.



### Difference of three icon:

As shown in the following figure 1, there is no pattern of cut corners, the pattern in the former princess line extended to the seam allowance  $AB = 1.96 \text{ CM}$ , the length of the pattern of the side princess line extended to the seam allowance to the length of the  $CD = 1.78 \text{ CM}$ , If selected , Whether you click on the front or middle princess line or the front princess line first, the effect is shown in Figure 2.  $A'B=C'D=1.96 \text{ CM}$ , All the length of one side is subject to correction. When selected , First click on the front side and click on the

front side. The result is shown in Figure 2.  $A'B=C'D=1.96\text{CM}$ , If you click on the front side and click on the front middle, the effect is shown in Fig. 3  $A'B=C'D=1.78\text{CM}$ , After clicking the length of the previous point to determine the length. When selected  Click on the front princess line and click on the front princess line. The result is shown in Figure 4.

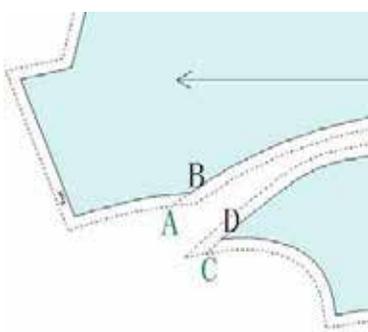


Figure 1

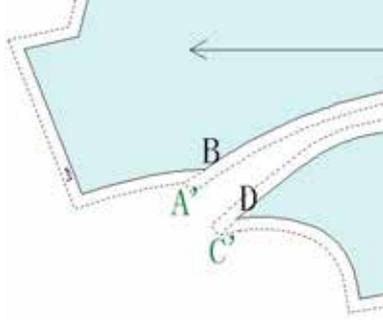


Figure 2

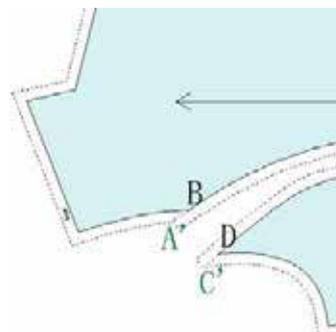
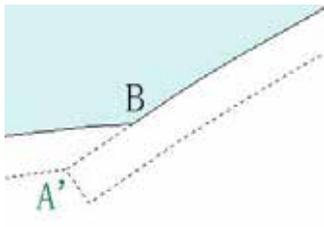
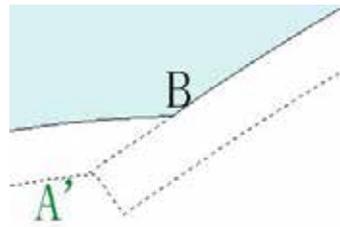


Figure 3



Enlarge picture 2 effect



Enlarge picture 3 effect

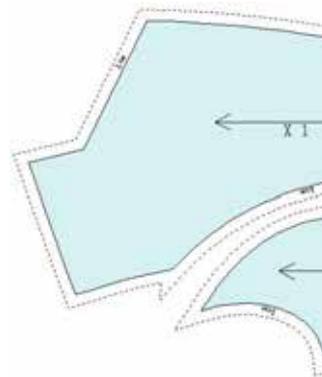


Figure 4



#### Function:

Add seam lines to the edges of the pattern, modify the line type and the width of the dotted line.

#### Operation:

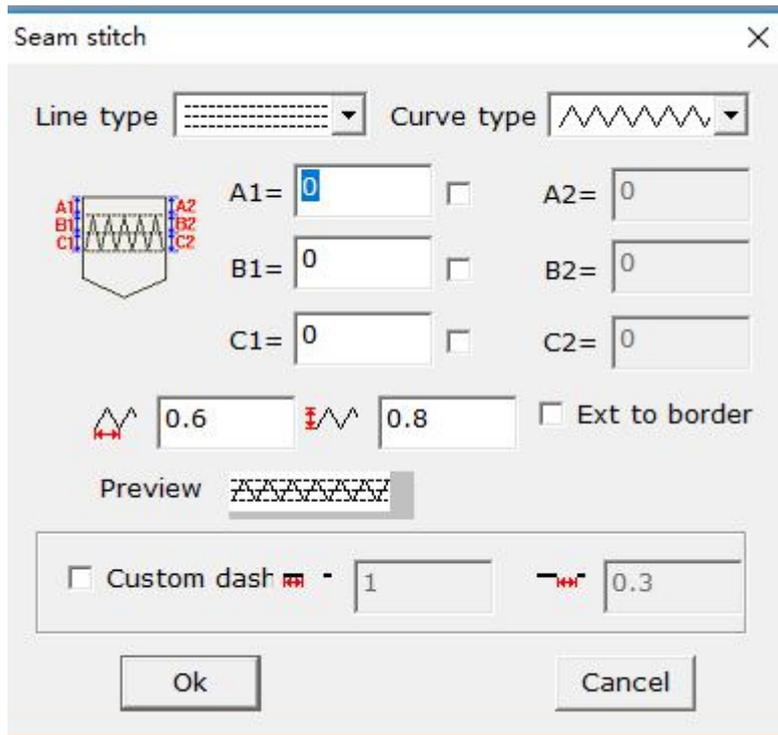
1. Add fixed length sew line; Click point of border line on pattern, You can see **【sew line】** dialogue table, Select needed sew line, Input sew line length and distance, Click ok, If this point have sew line, then the sew line Value will appear on current dialogue table, Modify directly;
2. Add sew line on one or more line, Click or make a square more line, then click right, Select needed curve type, Input value of line distance, Click ok.
3. Add equal sew line on the hole pattern: Use this tool to click on an edge point of a pattern, In the dialog box, select the desired stitch line. Enter 0 in the length of the stitch line. Or use the method of operation 2 to select

all lines and right click.

4.Add not equal width sew line:Select one line in clockwise, Press and hold mouse on first point ,Then drag and move to second point,You can see 【Sew line】 dialogue table,Select needed line,Input distance,Click ok. If there are sew line in two point,It will appear current data in dialogue table.

5.Delete sew line: Click with eraser, Can select blank line type in line type or curve type.

【Sew line】 Parameter presentation:



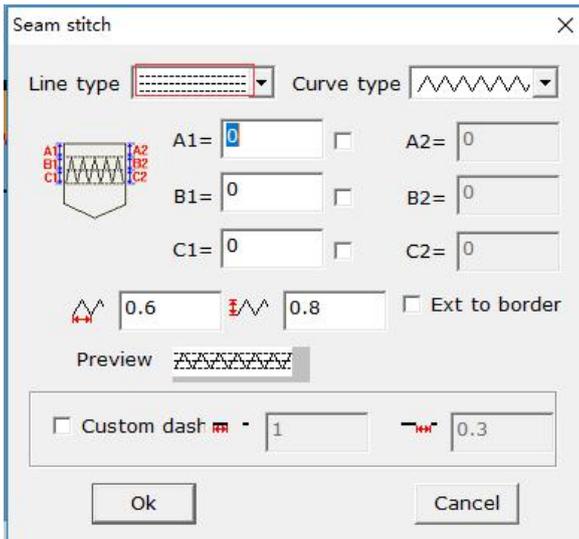
A. is distance of first line with border line,If  $A > 0$ ,Sew line is inside pattern,  $A < 0$ ,sew line is out of pattern;

B.It is distance of first line and second line,Get absolute value;

C.is distance of third line and second line distance, Get absolute value

Custom dashed lines:  Is the length of the line,  The distance between the line and the line

【Sew line】 Parameter presentation:



**【A1】【A2】** :A1>0 it is sew line inside pattern, Sew line <0,It is sew line outside pattern, A1、 A2 is distance of first line with border line;

**【B1】【B2】**: It is distance of first line and second line,Get absolute value;

**【C1】【C2】**: It is distance of second line and third line,Get absolute value;

The third line is inside border or outside border, When add sew line between two point,can make not equal sew line of start point and end point,And curve height is same, can not stretch.



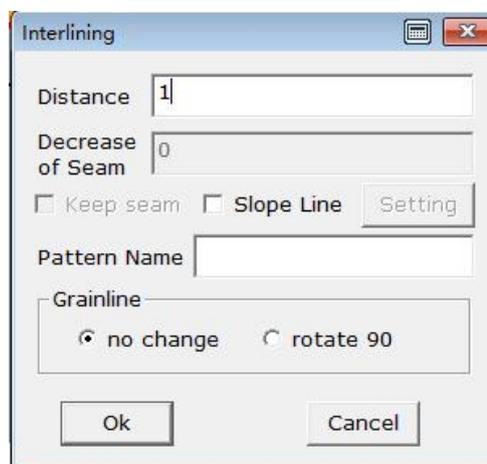
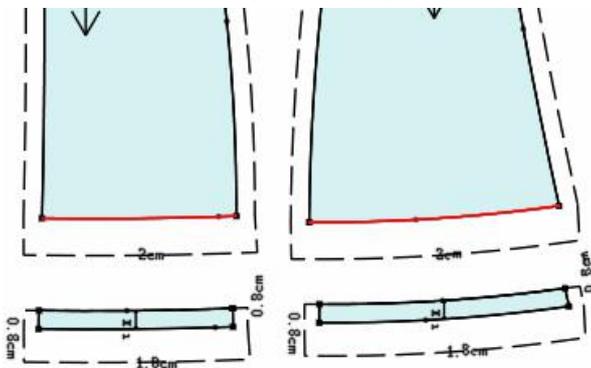
### Make Interlining

#### Function:

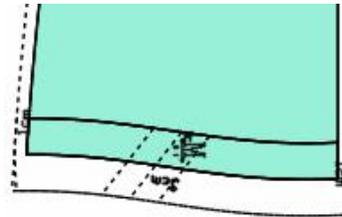
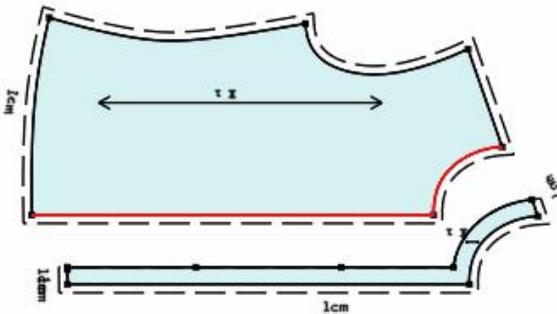
It is used to make interlining on the pattern

#### Operation:

1. Add equal value interlining on more pattern: Make a square on border line ,then click right,Input proper value in **【Interlining】** dialogue table.



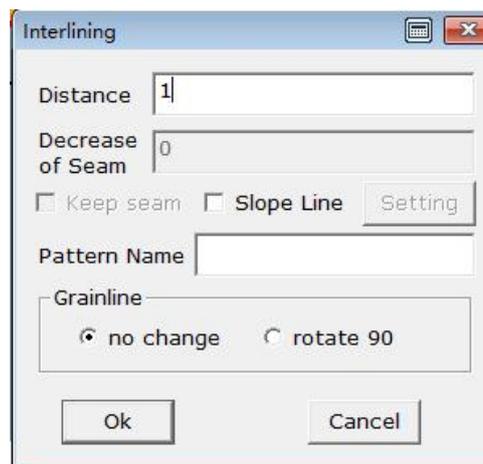
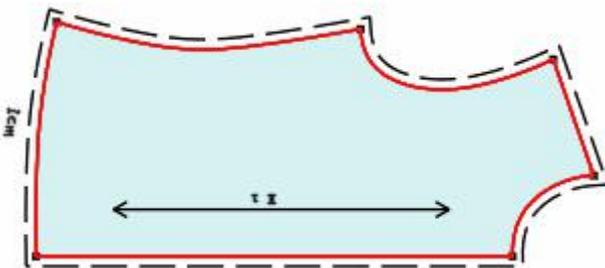
Add equal value interlining on more pattern:



Add interlining on more border

slope line is interlining

2. Add interlining on whole pattern: Select this tool and click pattern, Pattern border turn gray, You can see interlining dialogue table, Input value.



**【Interlining】 Parameter presentation:As above**

**【Distance】:** Input "+", it is inside distance of interlining from selected line, If input "-" it is outside distance of interlining from selected line

**【Decrease of seam】:** Input "+", New pattern seam decrease, Input "-", New pattern seam increase.

**【keep seam】:** Select, All new pattern have seam, otherwise, new pattern is no seam

**【slope line】:** Select, Slope line appear on original pattern, Otherwise no slope line appear on original pattern.

**【Pattern name】:** If input interlining on dialogue table, Original pattern name is front, New pattern name is Front, and add “front” text in original pattern.

**【Grain line direction】 :** Select“ no change”,New pattern grain line is same as original pattern.Select “Rotate 90 degree”,New pattern grain line rotate 90 degree basing on original Grain line.



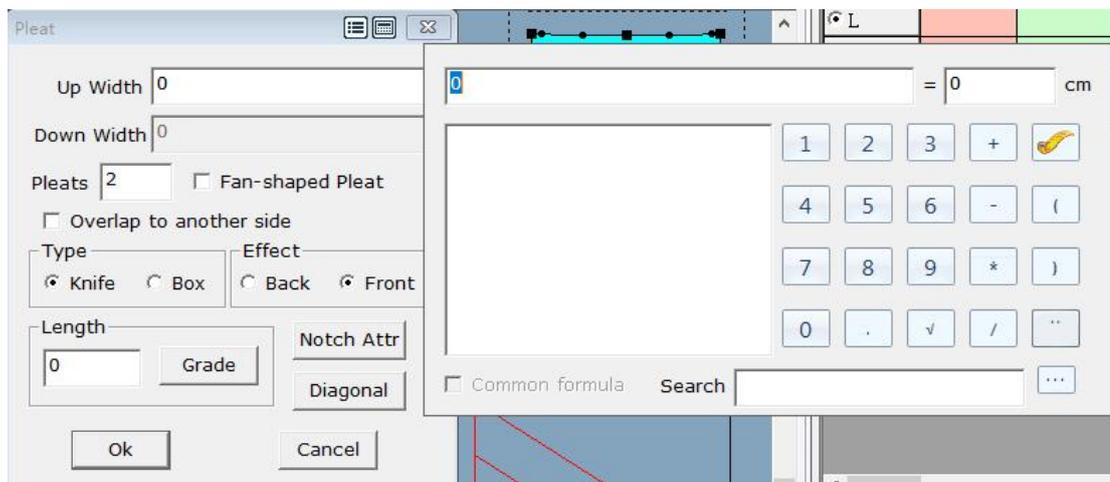
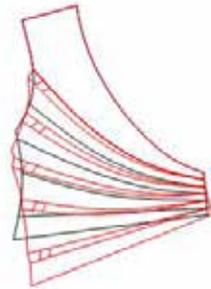
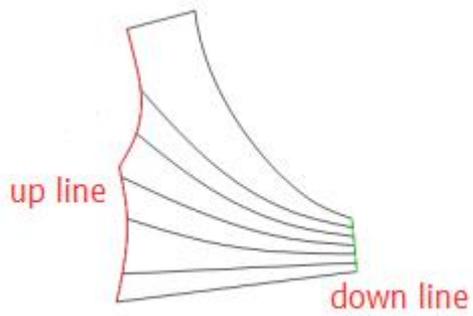
**Function:**

Add or modify box or knife pleat on pattern border, Also can change pleat on design line to pleat element.When make whole pleat, add pleat on original pattern, Pattern size will change, If add half pleat, only add pleat sign, did not change pattern size.

**Operation:**

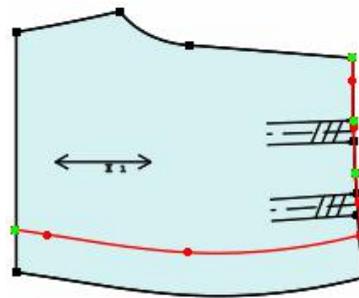
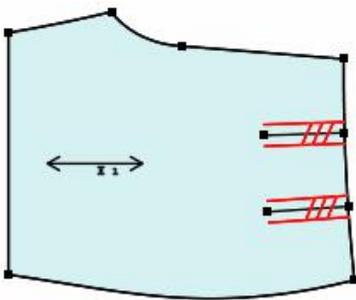
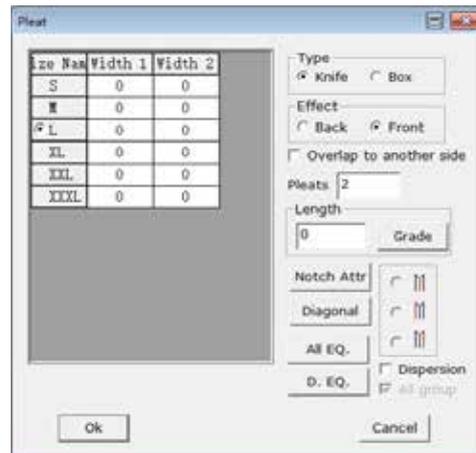
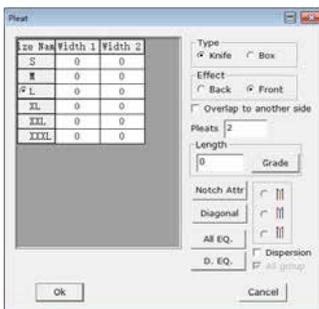
**1.Have pleat line on design line**

1. Click or make square on pleat line, click right
2. Click on the upper line, if there are more then Marquee select and press the right button to end (operation should be close to the fixed side, the system will prompt);
- 3.Click on the under line, if there are more then Marquee select and press the right button to end (operation should be close to the fixed side, the system will prompt);
- 4.Click or Marquee select line,then click right,appear **【 Pleat 】** dialogue table.(you need not select the expansion line, you need to enter the number of inserted pleats in the dialog box)
5. Enter the data in the appear dialog box and press "OK" to end.



Two. Have pleat line on pattern, Check following picture:

1. Click or make square on pleat line, click right, You can see **【Pleat】** dialogue table;



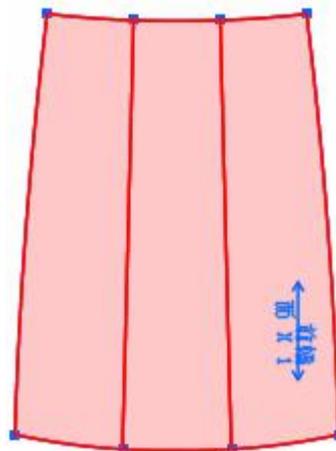
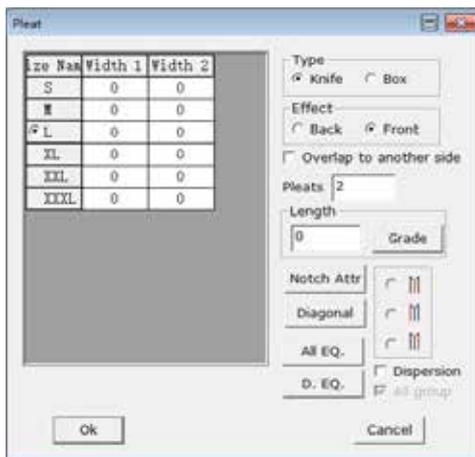
2. Input up and bottom pleat width, Select pleat type;
3. Click [ok], Pleat combine;
4. Adjust pleat until satisfy, Click right mouse.

Note: This pleats can be hole pleated or Half-pleated.

### Three. The average pleats on the pattern

1. Select this tool, Click line which will add pleat, Like following picture AB (make a square more Line ,then click right)
2. Click other side of boarder line, Click right you will see

【Pleat】 dialogue table;



3. Input pleat width and quantity and so on, make sure Pleat combine;

4. Adjust under of pleat, until to satisfy.

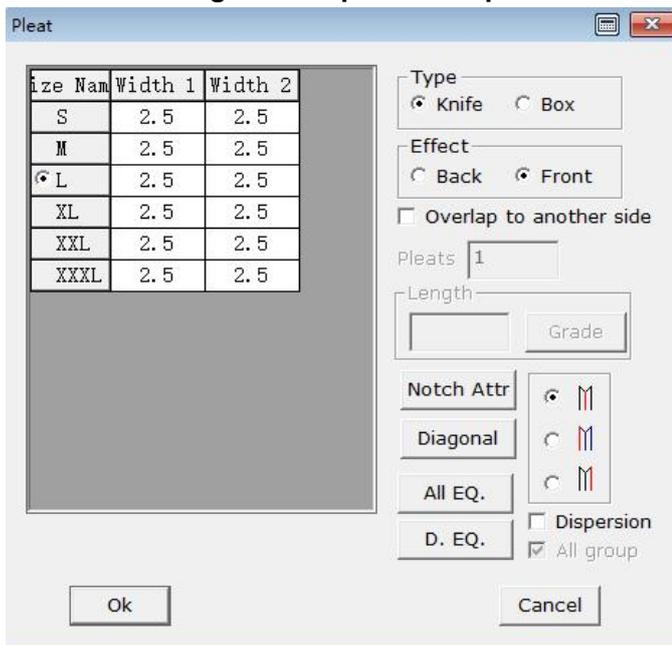
#### Note:

Right click position decide open pleat direction, At the same time decide up and under, (right click position is fixed position, right click position is up.)

#### Four. Modify box pleat or knife pleat

1. Modify a pleat: Select this tool, Move cursor on box or knife pleat, When pleat line turn red, Click right mouse, You can see **【Pleat】** dialogue table.

2. Modify multiple pleat at the same time: Select this tool, left click Selected separately need to modified pleat. then Right click, You can see **【Modify Pleat】** dialogue table (The selected pleat must be on the same pattern).

**【Pleat】 dialogue table parameter presentation**


The hole pleat

**【Width 1】:** When each size pleat equal, Click **【Width 1】** table, This line table is selected, Can input pleat value one time, **【Width2】** **【pleat length】** is same as **【Width 1】** ;

**【Notch Attribute】:** Set notch type, width, depth etc;

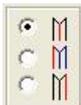
**【Slash Attribute】:** Set pleat sign bias and distance;

**【All size EQ】:** Effect to actual value, Current table value is benchmark, Other group size turn to equal;

**【AVE.size】:** Set adjacent size dispersion equal;

**【Dispersion】** Select will appear in actual dispersion, Otherwise will appear in actual value;

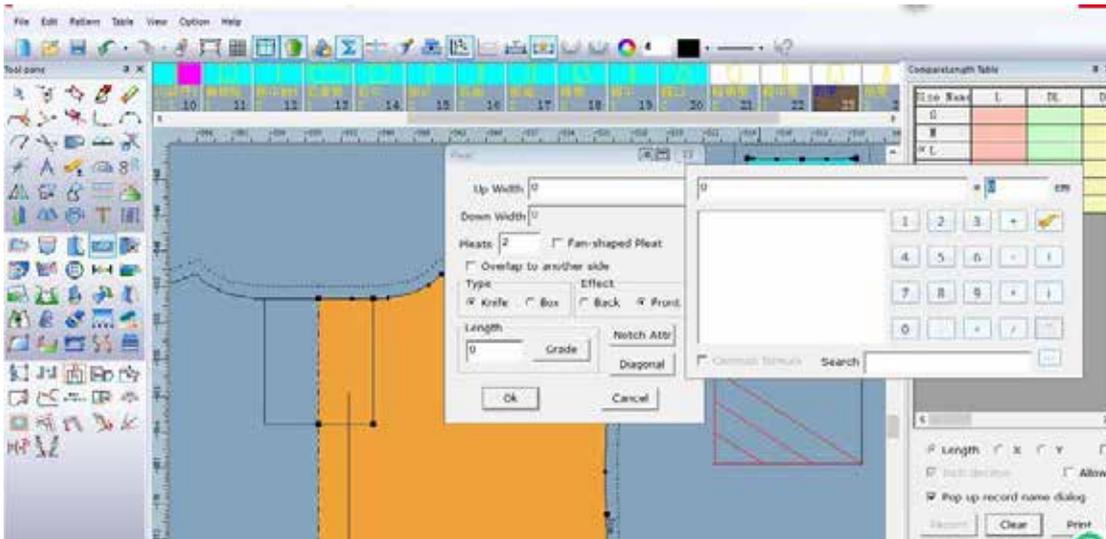
The hole pleat: pleat length: If the value is 0, it is displayed in full length; if the length is not equal to 0, it is displayed according to the given length. Click the button of [different code], you can set the pleat length of each code is not equal;



The half pleat: Make pleat type, First show pleat start from middle, Second and third is from one side to another side.

**Four. Design line pleat modification, automatic modification of the pattern**

Operation: Right click on the design line pleats



### Function:

Add or modify V dart on pattern border line, Also can change dart on design line to dart element

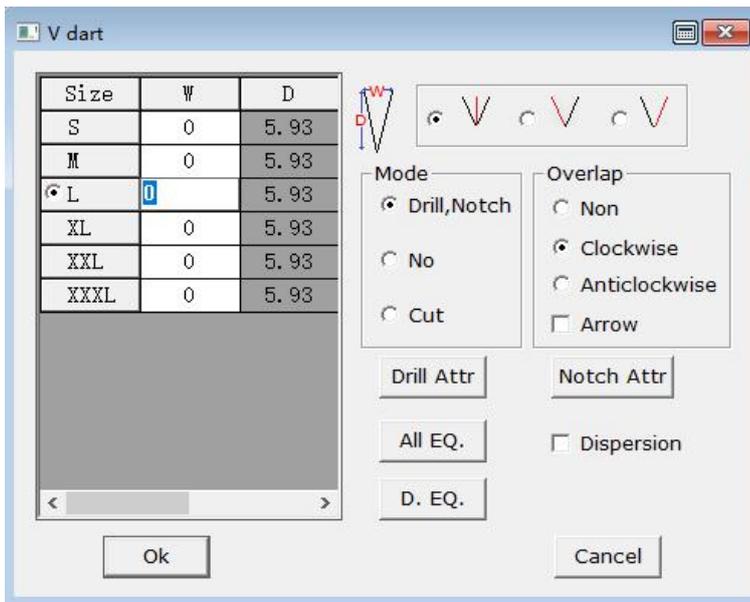
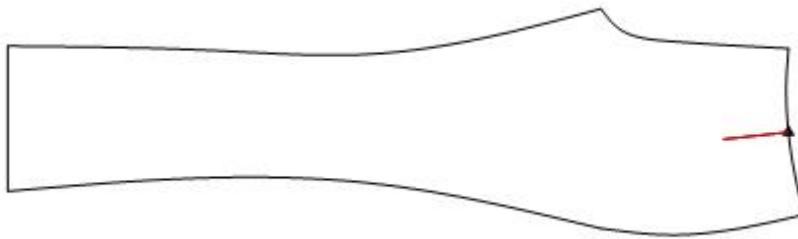
### Operation:

一. There are V dart- design line on pattern, see following picture

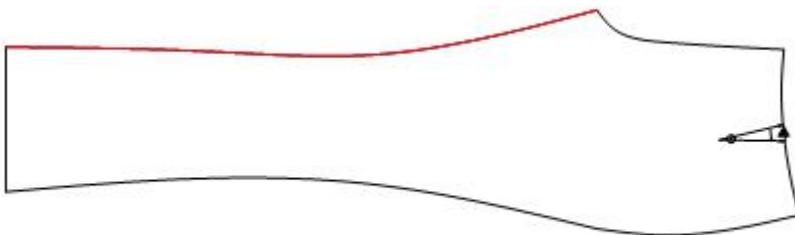
1) Click on V dart this tool, You can see the below dialogue table;



2) Select generate V dart, click or make a square border line, right click to end, click or make a square dart line, right click to end.



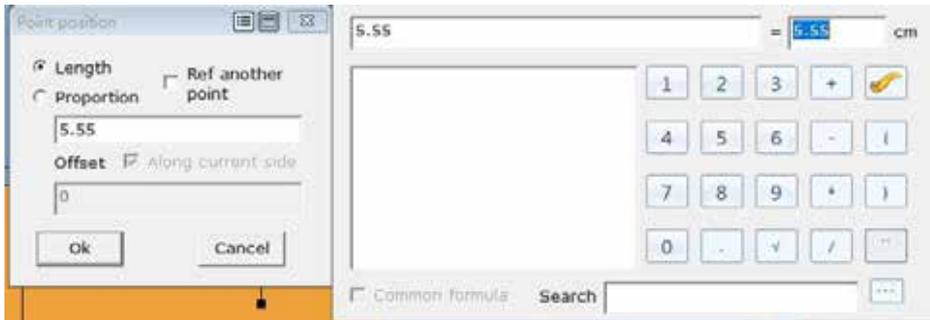
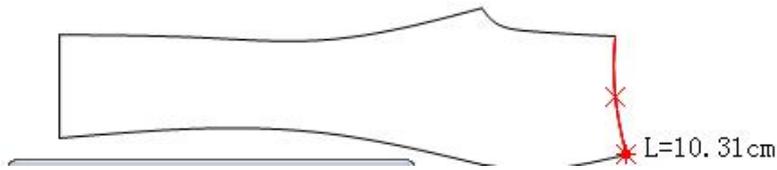
Enter relevant options and click OK



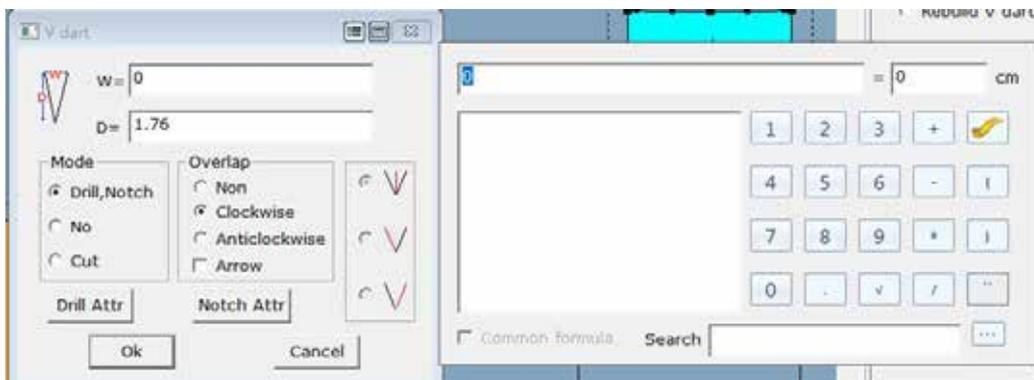
Two. Generate V dart, No dart line on pattern, See following picture

1.The first step is the same as above

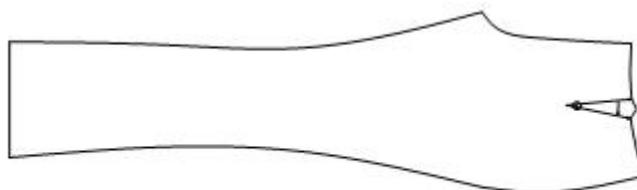
2.Click on the border line with this tool to set the position of the dart;



3. The default dart line is perpendicular to the border line. Hold down the CTRL key to move the dart line direction.



4. Select the suitable options and enter the suitable dart value;



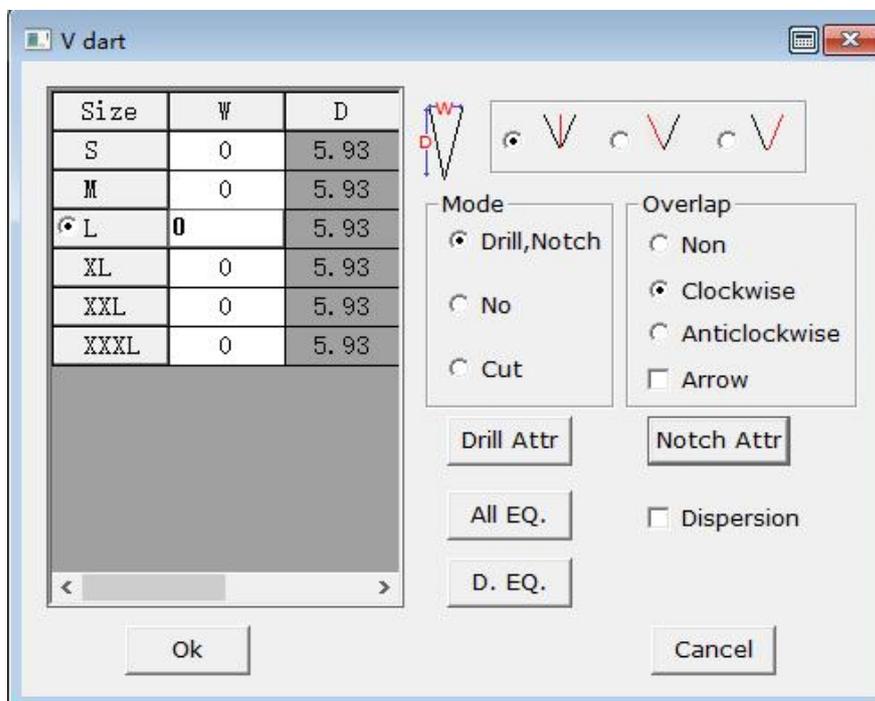
### Three. Modify V dart

Select this tool, Move cursor to v Dart, When line turn red ,Click right, You can see **【V dart】** dialogue table.

#### Note:

After adding the dart, if you need to modify the dart value and notch, drill properties, you can use the modify tool to right-click on the dart, pop the pleat dialog to modify.

四、 the pattern on the operating method is same with design line, the dialog box more than the same code, Dispersion and base code.



### **【V dart】 dialogue table parameter presentation**



When add dart on the pattern, you can choose whether the dart expands from the middle to the sides or from the side

**【All EQ】** **【D.EQ】** **【Dispersion】** Reference **【pleat】** Dialog box parameter description;

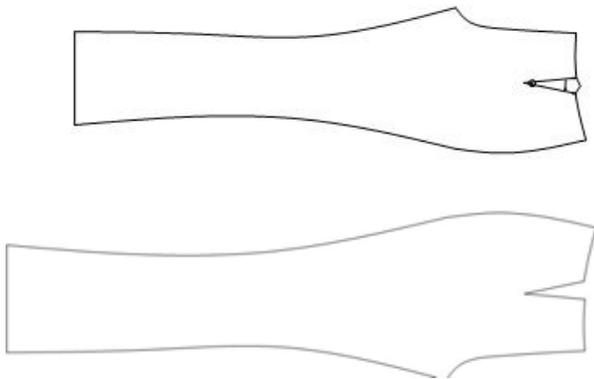
**【Drill property】** Refer to **【drill】** Dialogue table parameter presentation: **【Notch property】** Refer to **【notch】** Dialogue table parameter presentation:

**【Use arrow】** Use arrows to indicate the direction of the dart.

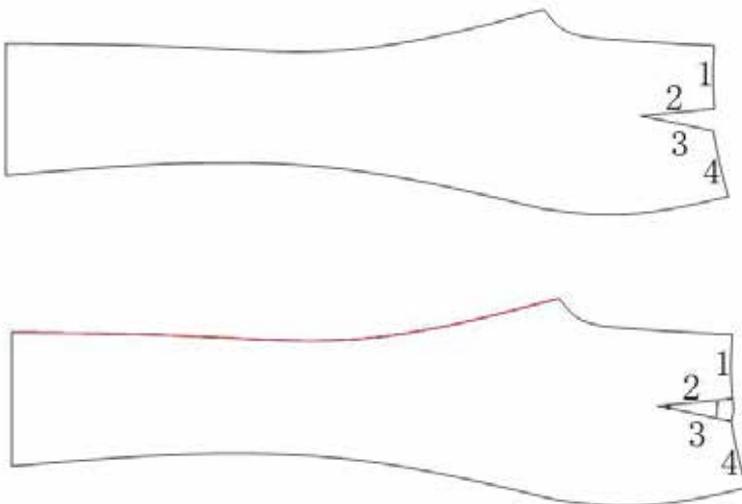
### 四: Split V dart

Function: Split the generated V dart, In order to transfer dart and other operations.

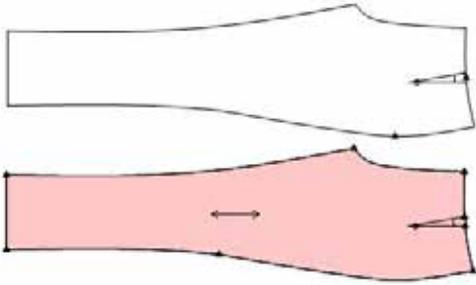
Operation: Click directly on the dart.



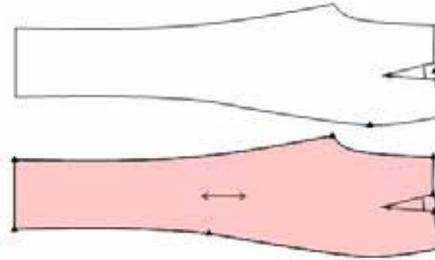
**Reconstruction of the V dart: Click on lines 1, 2, 3, 4 in order.**



5. Linkage adjustment: design line adjustment of dart and Simultaneous adjustment of pattern dart. Right click on dart and input new dart wide.



Before adjust



After adjust



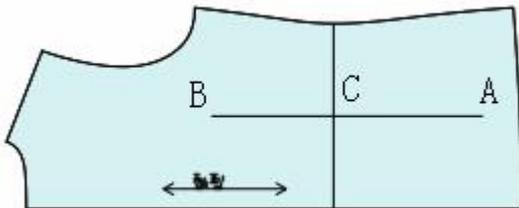
Fastigate dart

**Function:**

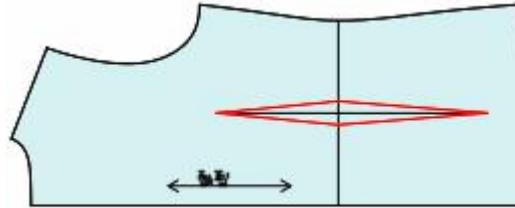
Add fastigate or rhombus dart on the design line or pattern.

**Operation:**

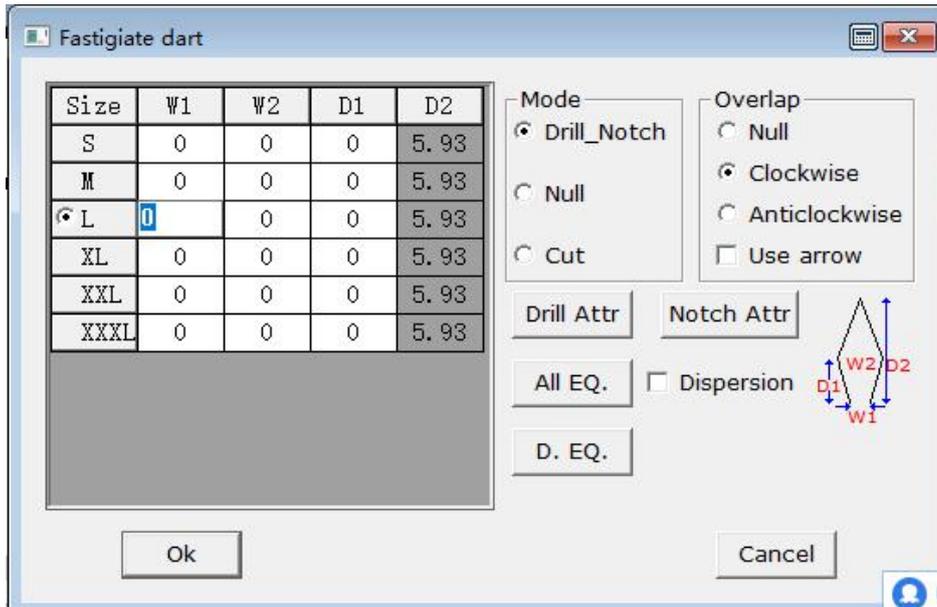
1. See following picture 1, Click point A,B,C, You can see 【Fastigate dart】 dialogue table;
2. Input dart value, Click 【ok】 ;



picture1



picture2

**【Fastigate dart】 dialogue table parameter presentation**


W1、W2、D1、D2: dart bottom width、dart waist width、length from dart waist width to dart bottom width、total length;

【All EQ】【D.EQ】【Dispersion】 Refer to 【Pleat】 Dialogue table parameter presentation:

【Drill property】 Refer to 【drill】 Dialogue table parameter presentation: 【Notch property】 Refer to 【notch】

Dialogue table parameter presentation:

**Note:**

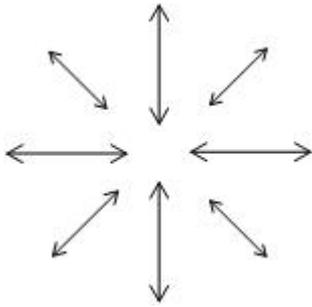
If do not add fastigate dart or rhombus dart on appointed line, D1、D2 is active,Input value.


**Function:**

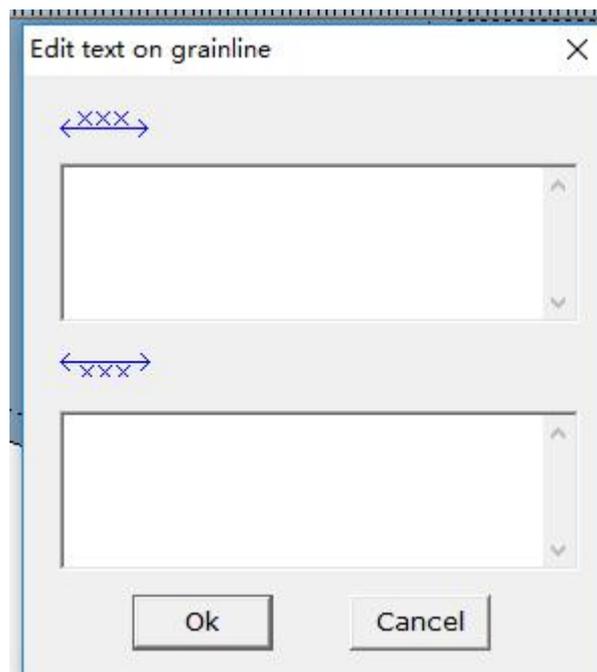
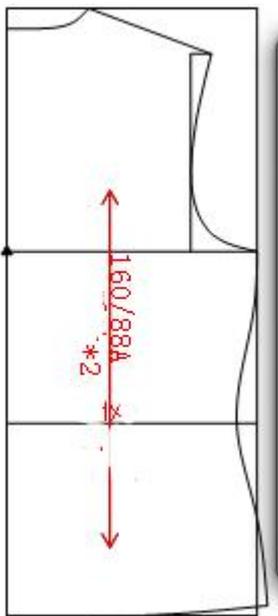
It is used for adjust Grain line Direction,located, length and info on weave line.it can be operated on the design line or on the pattern.

**Operation:**

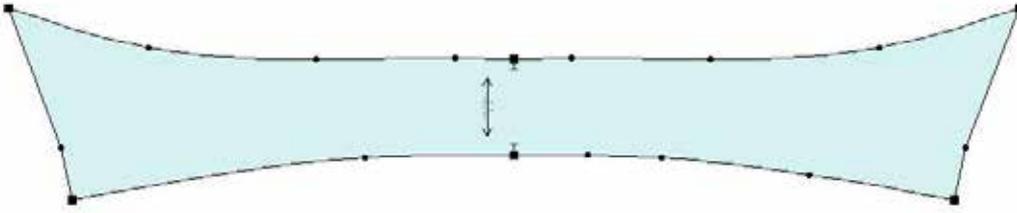
1. Left click in pattern outside of not grain line can create grain line, click ctrl key can do vertical/horizontal/45° eight direction grain line; left click in pattern inside can change grain line direction according two points designated direction.



2. Left Click end point in grain line, it can changed the length of grain line.
3. Left click on middle grain line can move the grain line.
4. Right click can rotate grain line by clockwise,
5. Ctrl + right click can rotate grain line by counterclockwise,
6. Ctrl + left click can edit text of design line in grain line.



7. Shift + left click can change text direction location in grain line;
8. Shift + right click can make grain line text perpendicular to grain line place.



Drill

**Function:**

Add drill(button) on design line and pattern, Modify drill(button) attribute and number. On grading Pattern, Different size drill number can equal also can not equal.

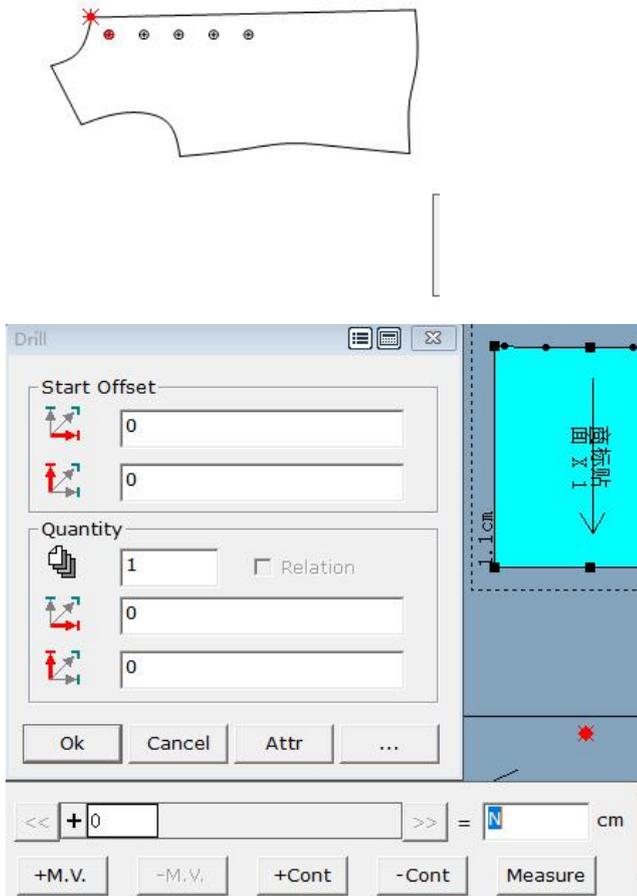
**Operation:**

—: add notch in design line

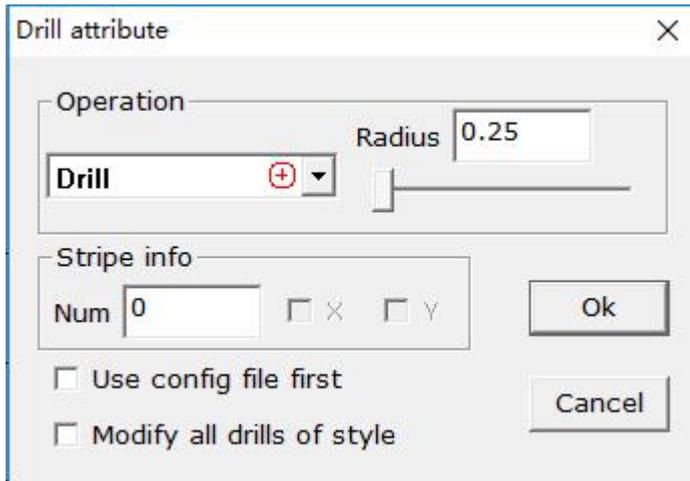
**1. drill/button number and distance, System can draw drill/button place automatically.**

1) such as click front collar depth, 【Drill】 dialogue table

2) click start point offset and number, click ok.

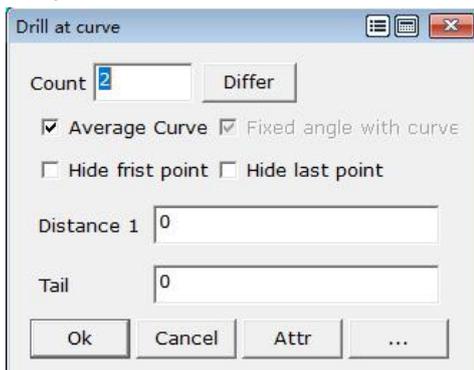


2. After add drill in design line, use forxex tool to pick up in pattern, and drill adjust in design line, the pattern also adjust at the same time.

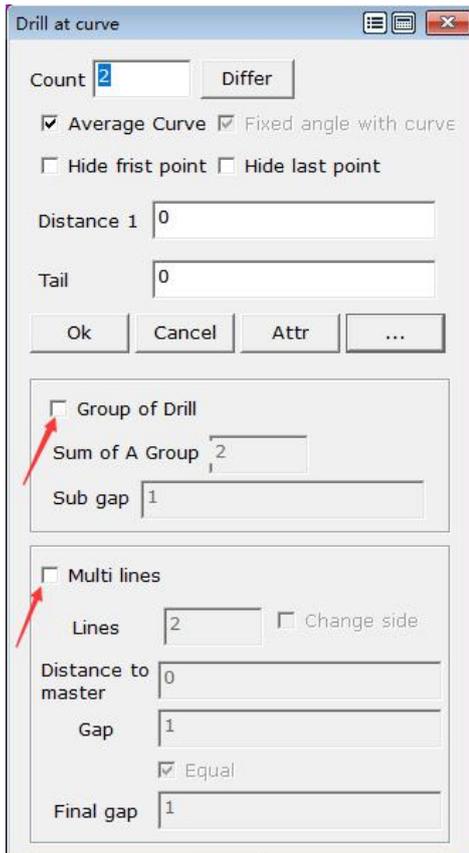


#### 4. Add drill in line:

1. Click with Use drill tool in line, 【Drill】 dialogue table;
2. Input the number of drill and the distance from start and end, click ok.



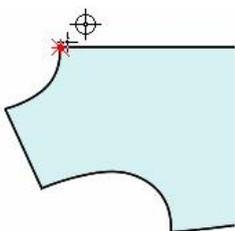
#### 6. Add Multi-row drill(button) -usually used shoe punching-explained with custom drilling.

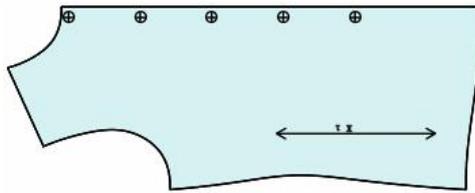


## Two. Add drill(button) on pattern

**1. According to drill/button number and distance, System can draw drill/button location automatically.**

- 1) Like picture, Click front collar depth with this tool, You can see 【Drill】 Dialogue table
- 2) Input offset value, Number and distance, Click[ok].





### 【Drill】 dialogue table parameter presentation

【start offset】: It is refer to distance of first drill and reference point

【linkage】 : choose,Add drill is related,only grading start and end drill, other drill will auto grading. in contrast need to grading lonely.

【Quantity】: It is refer to add drill number at the same time.

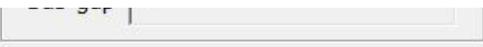


It is refer to horizontal distance of adjacent drill

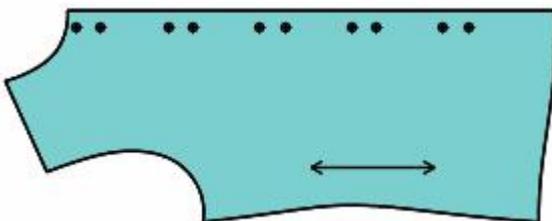


It is refer to vertical distance of adjacent drill



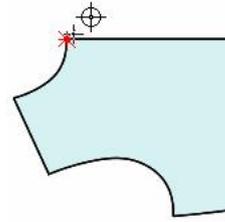
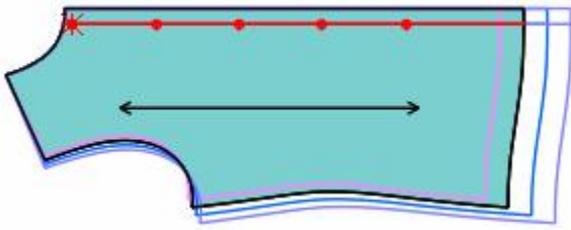
Click this button, U can see the dialogue , Select group of drill,

input sum of group and Sub gap, Click ok and result as following picture.

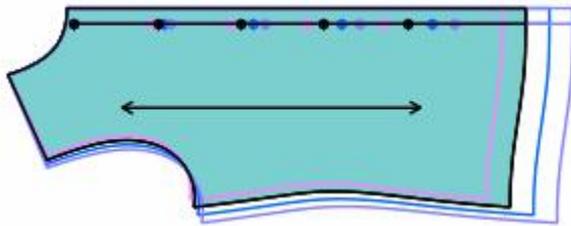


≡. **Add drill(button) on line, System will add button on line equally, Only grade for assistant line start and end point.**

- 1) Click by drill tool in line, 【Drill】 Dialogue table;
- 2) Input drill Number and distance from start to end, Click[ok].



Select pattern Auxiliary line, Bright star point is the first point



#### After add Drill

**【add Drill in line】 parameter presentation:**

The drilling distance from the first point of the auxiliary line, Bright star point is the first point;

The auxiliary line is at the opposite end of the first point;

Hide the first drill: choose, first drill is hide

Hide the tail drill: choose, tail drill is hide

Bisector: choose, Add drilling in the bisector, not choose, Drill spacing can be set.

#### Note:

After adding drill or button on line, If adjust shape with modify tool, drill or button distance is still equal, And 1st and 2st point distance did not change.

#### ≡: Add different quantity drill(button) on different size

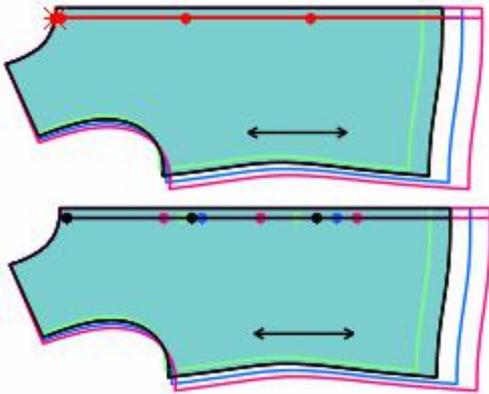
There are two different situation: add on line or did not add on line, take add different quantity button as example, Add three button on small three size, Add four on the biggest button.

1. Select drill button, Click on line, You can see **【Add drill at curve】** dialogue table;

2. Input button number 3, Click **【size】**, you can see **【select size】** dialogue table;

3. Select last size XL, Input button number 4, click ok, back **【Add drill at curve】** dialogue table;

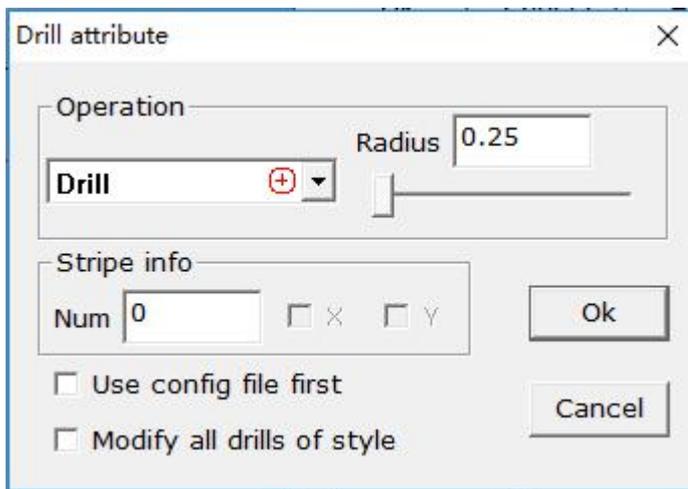
4. Click ok; such as the below picture.



### Five. Modify drill(button) property and number

**Operation:** Click right on button, You can see **【Drill attribute】** dialogue table.

**【Drill attribute】** dialogue table presentation:



#### **【Operation Way】**

- Select as drill, When connect cutting plotter; This drill is cut
- Select only draw, When connect with cutting plotter or plotter, Only draw drill.
- Select DrillM43 or Drill M44 or Drill M45, When connect with cutter, Hole size.

**【Radius】:** drill circle radius.

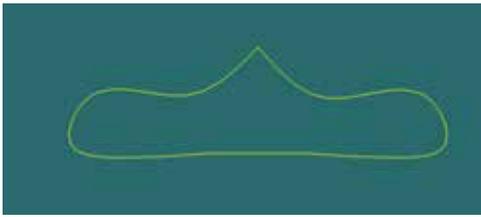
**【Strip info】:** Set strip number, Select this option, When make marker ,will strip automatically

**【Modify all drills of style】:** Select all the drill operation , radius is same.

### 五: punching

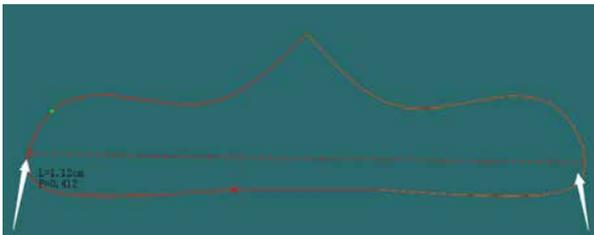
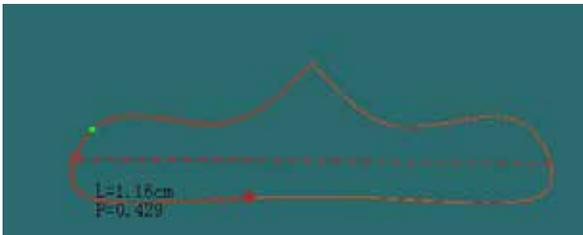
#### 一: drill library establish and command setting

1. Use intelligent pen draw the punching style of you need



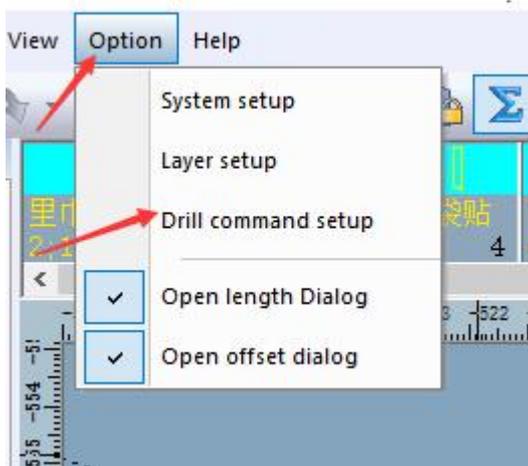
(Only reference)

2. use drill tool  click shift key to change( establish drill library tool), select intelligent pen draw punching, right click, select the vertical of the punching and drag the dotted line to the end point.

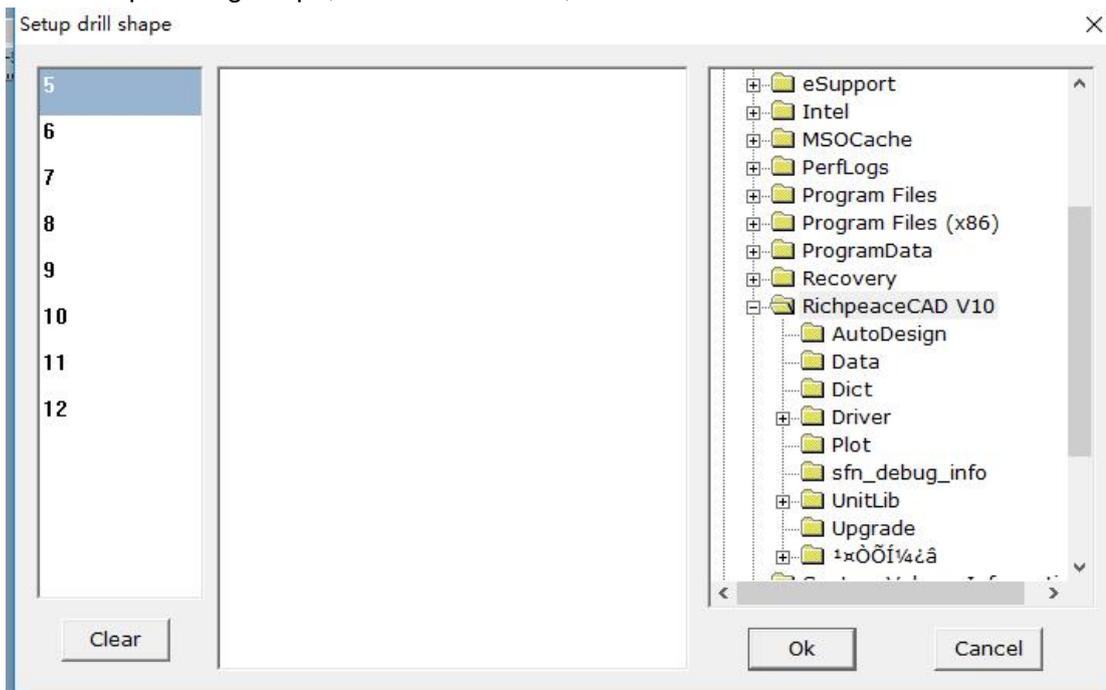


3. After the appear dialog box, note the file name, save.

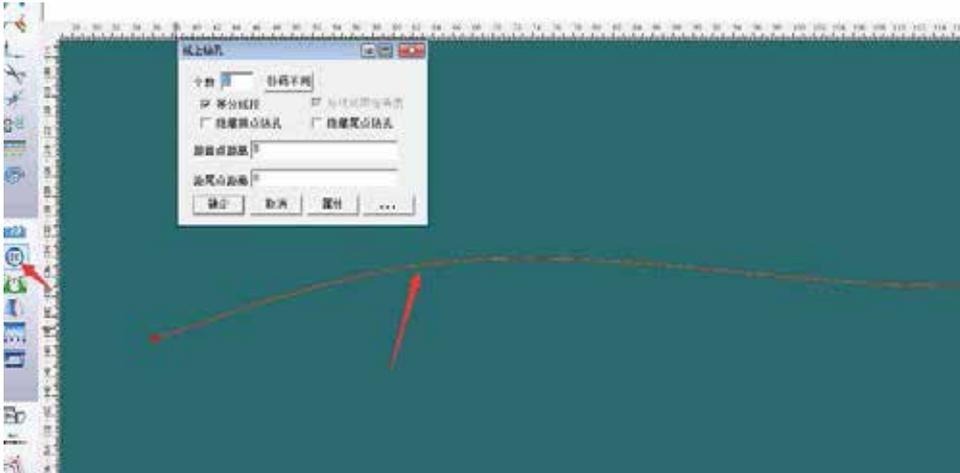
- 4 .Click Options,drill command setting.



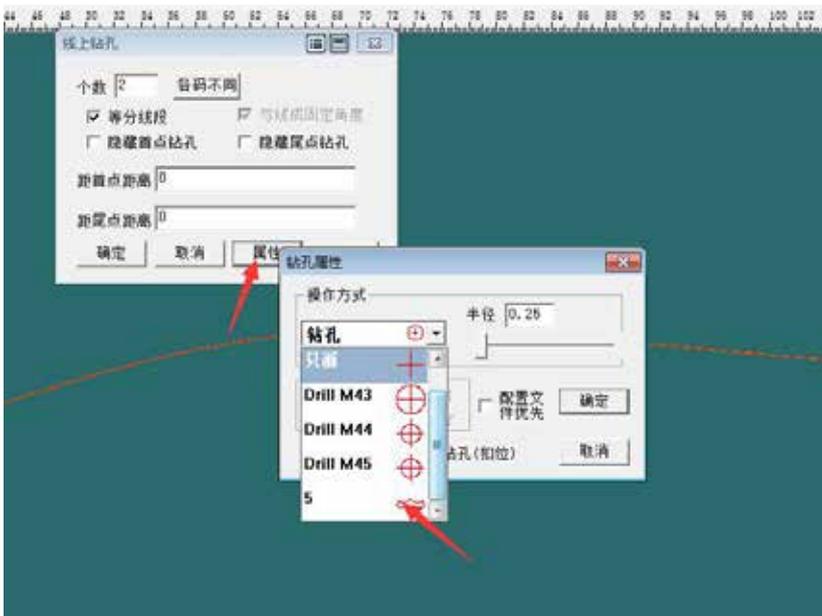
7. select punching shape, set command is 5, ok



8. use drill tool, click the line of need to add punching.

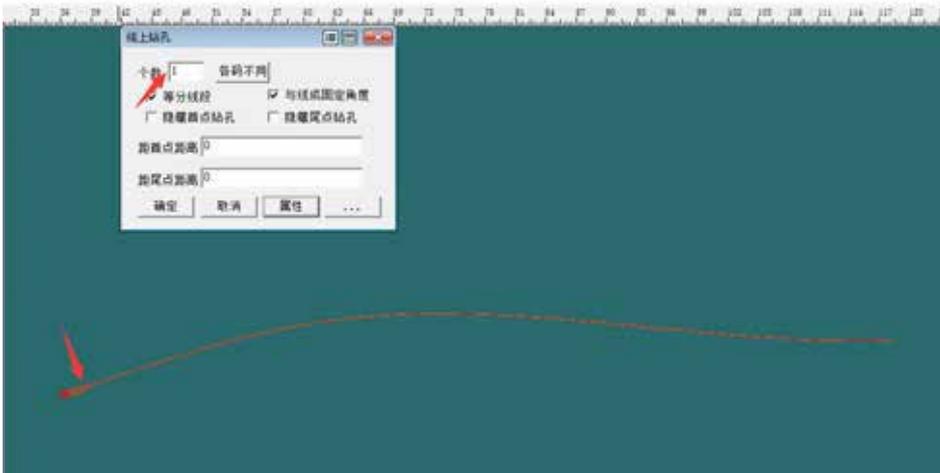


9. Appear dialog box, select attributes, drill select command is 5, ok

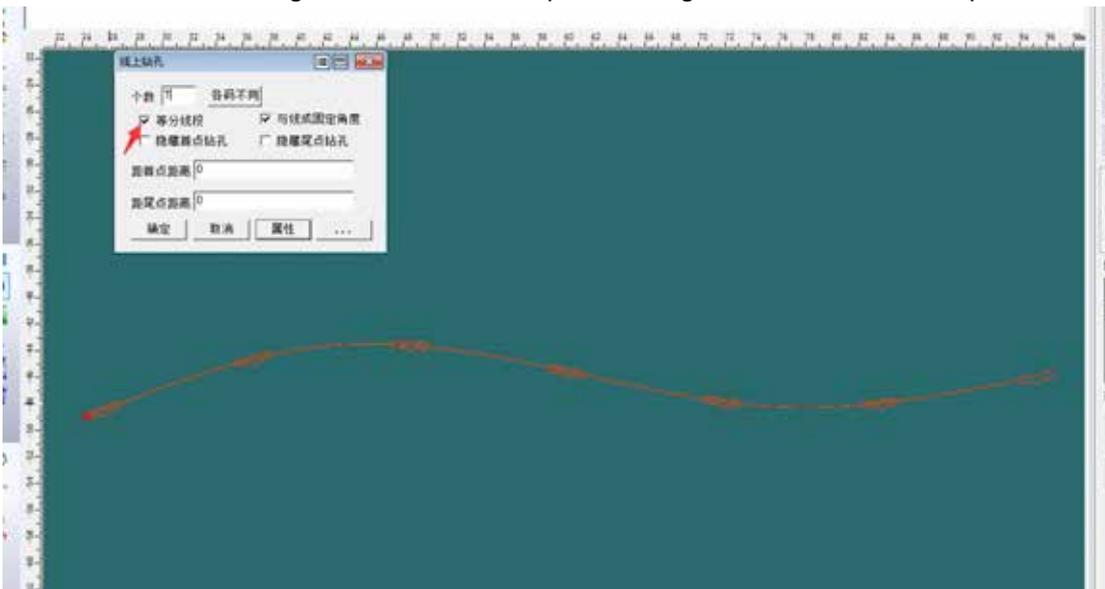


### Custom drilling generation (Single、single row on line、Multi-row on line)

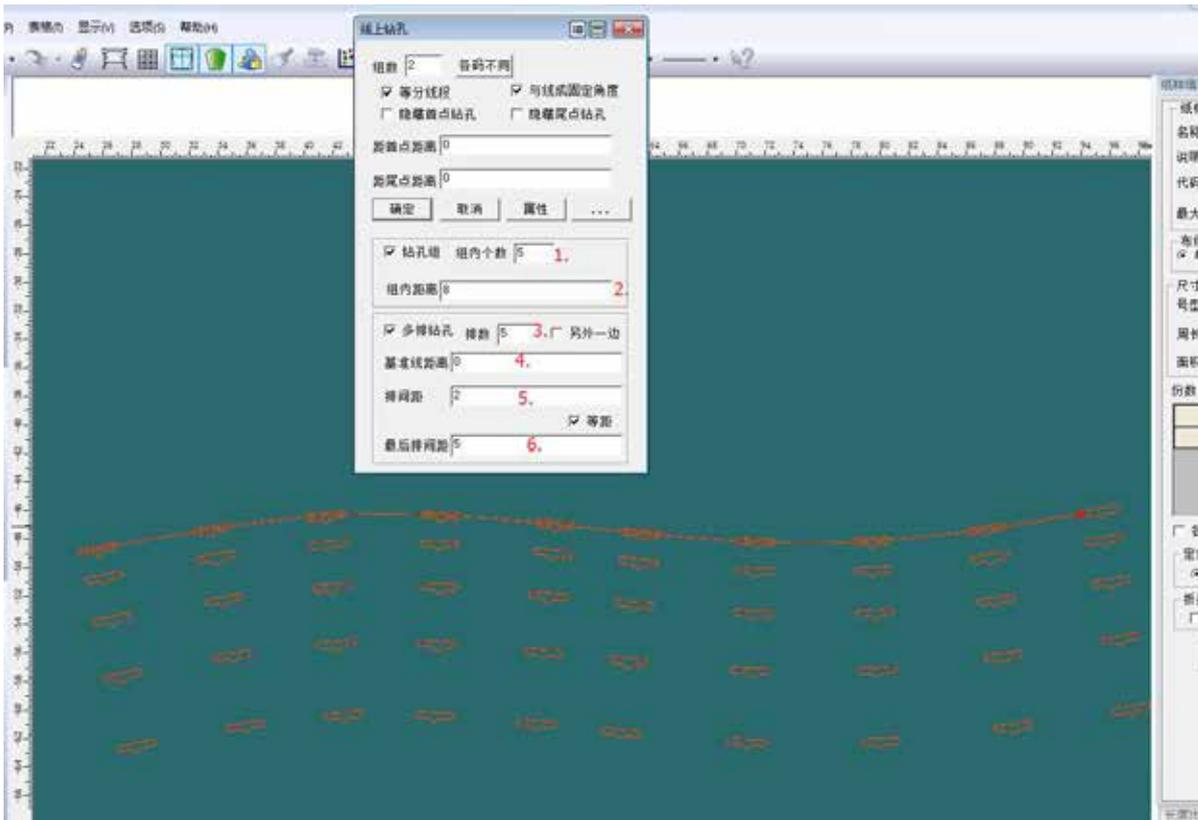
1. Choose it by according to yourself demand, this is a single setting.



2. After the line is single-rowed and the equal line segment is ticked, the output value will be in equal parts.



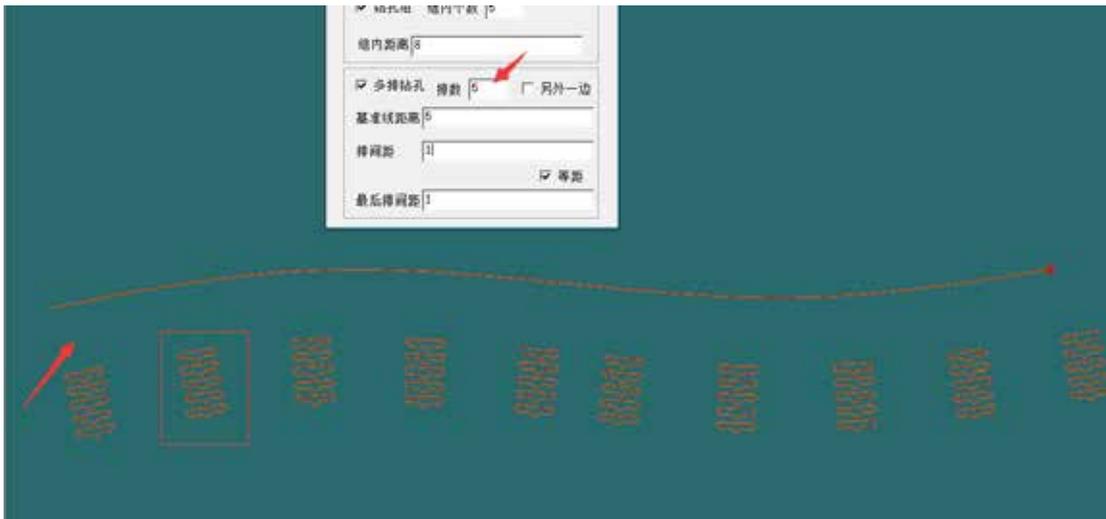
3. Multi-row on the line (Multi-row on the line need to select the property next to the "..." can be Multi-row on the line.



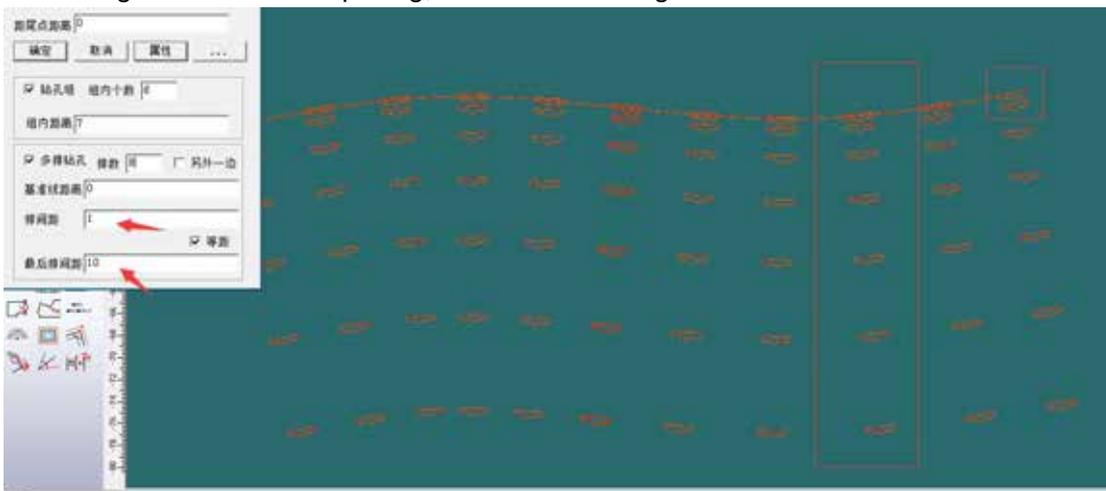
1.2. Is the punching number and distance before and after the line segment.



3.4. Distance between the number of punched rows and the baseline. . . . ,



5.6 If 5 is selected 1, the last distance is not selected, the effect is cycled, and if the distance between the last row is larger than the row spacing, then the effect is gradual.



## Button hole

### Function:

Add button hole on pattern or design line, Modify button hole. On grade pattern, Different size button hole can equal ,also can not equal.and also can add buttonholes. Explanation: add the button hole on the design line is the same as the drilling, it can also be modified by linkage.

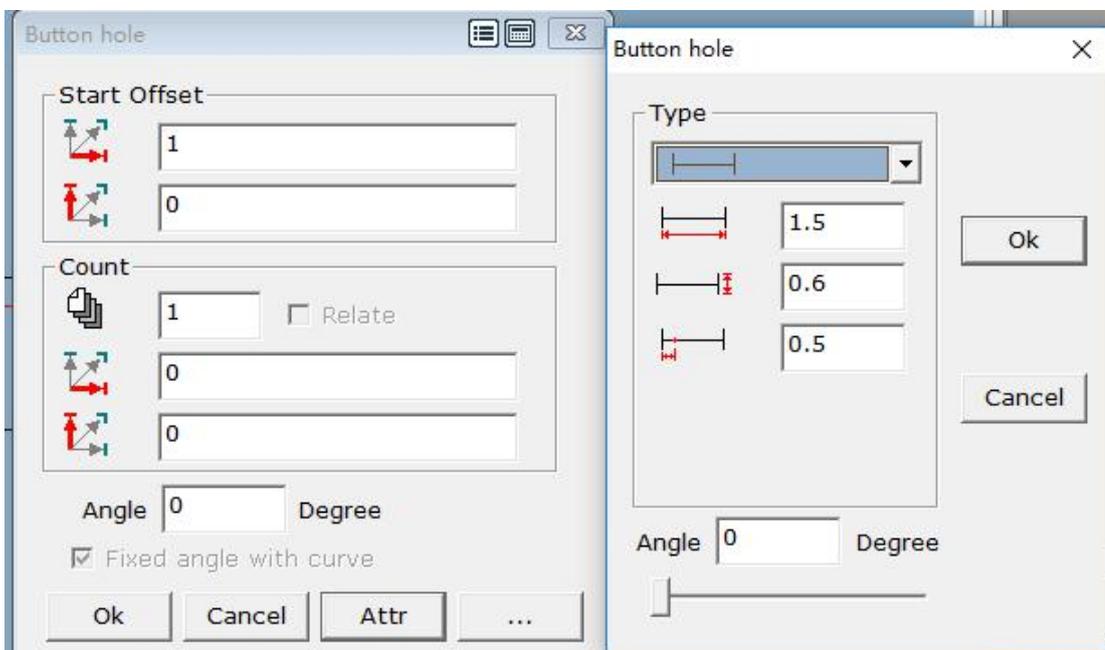
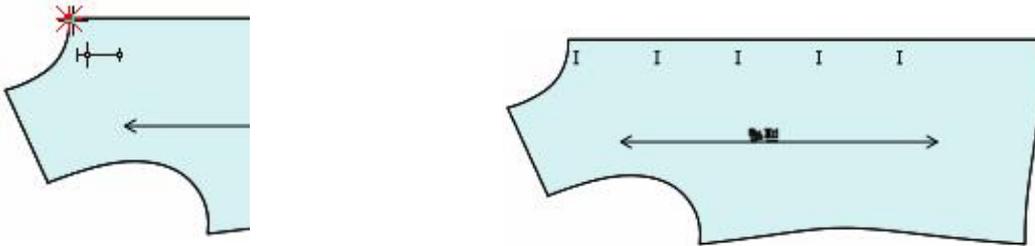
### Operation:

一. According to button hole number and distance, system will draw button hole automatically

Like picture,

1) Click front collar depth, You can see **【Add button hole】** dialogue table;

2) Input offset value, Number and distance, and attributes Click[ok].



**【Add button hole】** dialogue table parameter presentation

**【Offset of start】:** It is refer to distance of first button and reference point

**【Quantity】:** It is refer to button number



It is refer to horizontal distance of adjacent button hole,If button hole on the right of reference point, Input "+", f button hole on the left of reference point,input"-".



It is refer to horizontal distance of adjacent button hole,If button hole on the top of reference point, Input "+", f button hole on the bottom of reference point,input"-".

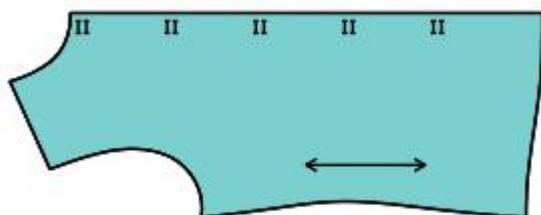
**【Angel】** Angel degree, Can set button hole according to requirement.

**【Type】** It is refer to button different appearance,Select different button appearance under pull down menu.

... Click grading button, U can see this dialogue

Group Of ButtonHole  
 Sum of A Group   
 Sub gap

Select group of buttonhole, Sum of A group and Sub gap, U can see following picture.



(Two) Add button hole on line, When grading, only the first and last points of the auxiliary line can be Refer to add drill.

(Three) Add did not equal number button on different size.  
Refer to add drill.

(Four) Fix notch angel according to mouse move direction

Operation : See following picture, Select reference point and press and hold left button then drag.After loosen , u can see dialogue table.



(Five) Modify button hole

Operation: Click right on button hole, You can see **【Button hole】** dialogue table



Function:

Align grading value by point or line or restore original align.

Operation:

1. Click one point on pattern, Grading value horizontal or vertical align with this point;
2. Select part of line, Grading value align with connection line of this line two point,
3. Press X before click point, It is horizontal align;
4. Press Y before click point, It is Vertical align;
5. Press Shift, Click right on pattern, Will restore original align.

Noted:

Use  select pattern control point tool select grading point, Each time you press the Z key on the keyboard, the amount of grading is vertically aligned with the point, vertically aligned, and horizontally aligned. This is more convenient to check the amount of grading.



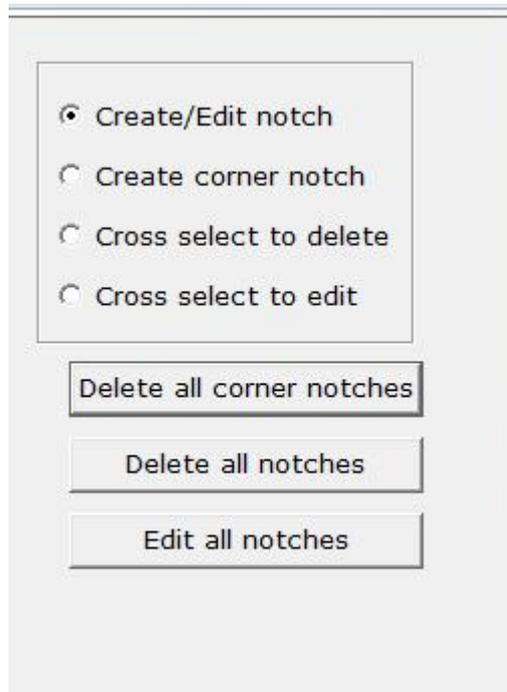
**Function:**

Add notch on the pattern Sideline or design line, turn corner notch on pattern and the auxiliary line points to the position of the sideline, Adjust notch direction, Grad to notch, Modify

Notch position size and property.

**Operation:**

One. Select notch tool, the notch dialog appears in the right toolbar properties:



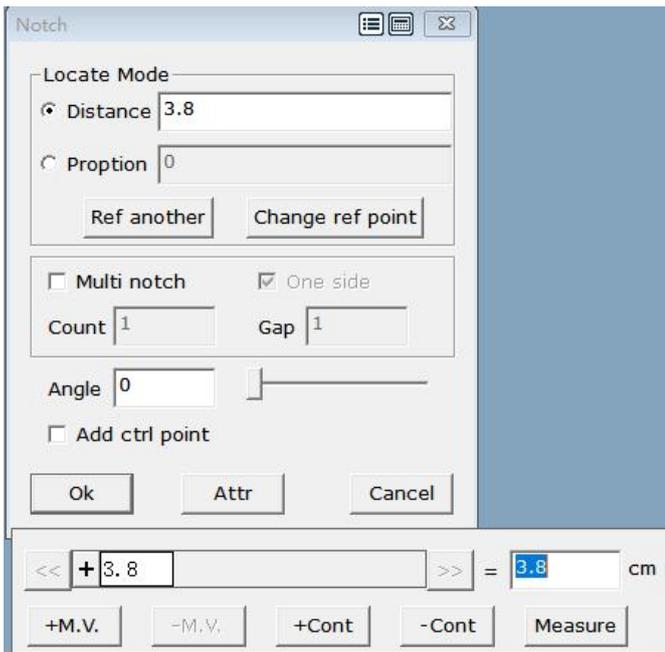
One. Select “Create/Edit notch”

1) Add notch on control point of pattern or design line

Use notch tool click in the control point

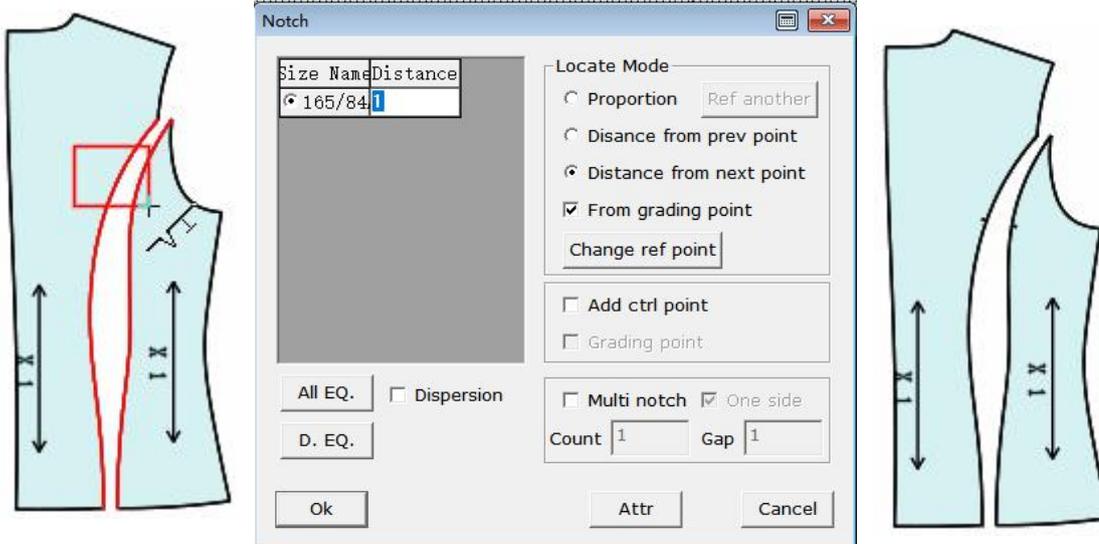
2) Add notch on one line of pattern or design line:

Use notch tool, Click or Make a square line, You can see【Edit notch】dialogue table, Select proper option, Input value, Click 【ok】



3) Add equal distance notch on more line:

Make a square one need to add notch line, Click right, You can see 【Edit notch】 dialogue table, Input proper option and value, Click 【OK】

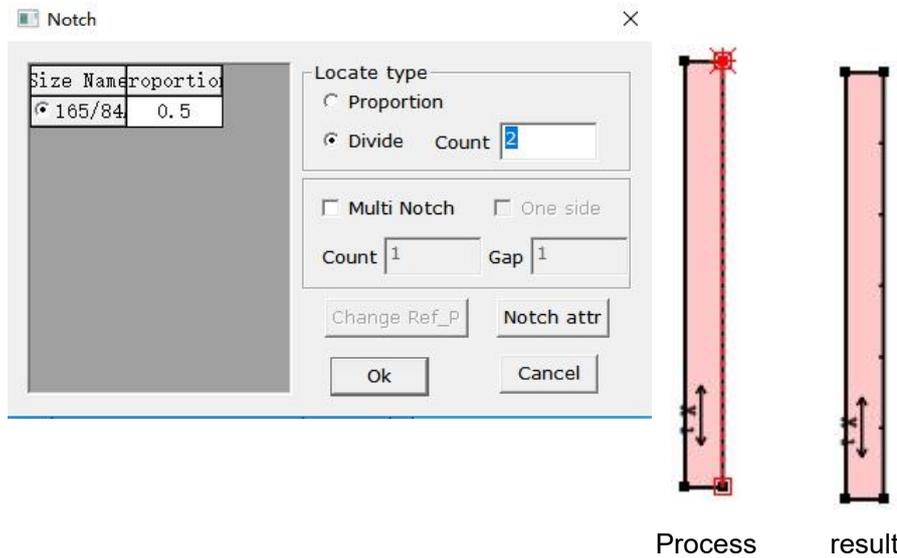


Process

result

Add equal notch between two point:

Drag mouse from one point to another point, You can see **【Proportion notch、Divider notch】** dialogue table, Select divider, Input quantity, Input ok.

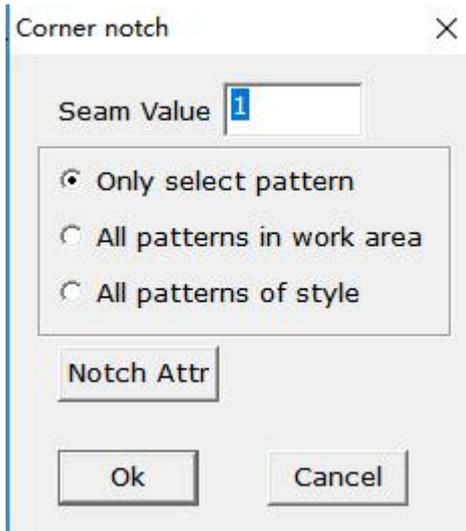


Process

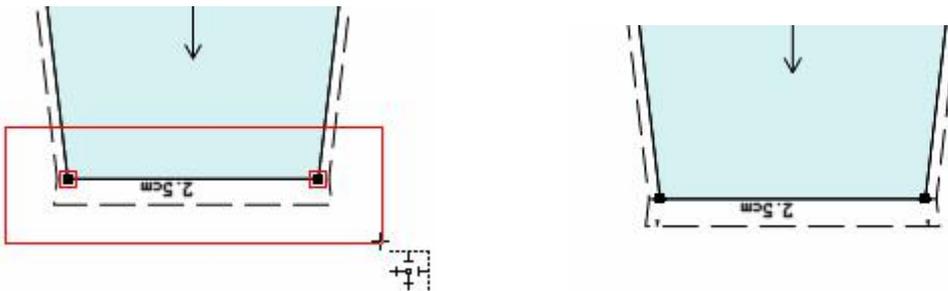
result

### One. turn corner notch :

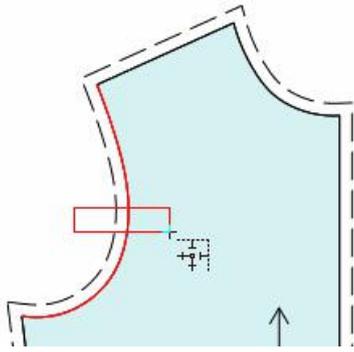
a. Press Shift , Cursor turn to  ,Click turn point, Input seaming value, Click ok, All the turn corner is added notch.



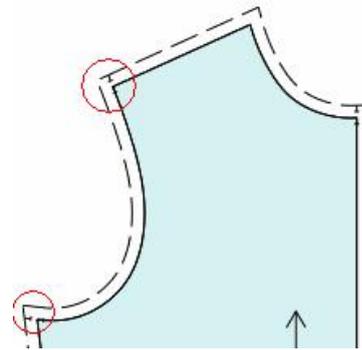
b. Make square on turn corner, Can add notch on turn corner, Can add turn corner notch on more corner at same time.



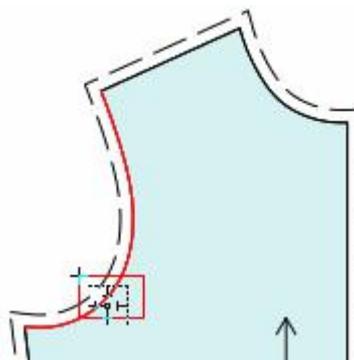
c. Make a square select or click middle of line, Two side is added notch automatically, If make a square or click one side of line, Add notch on one side of line.



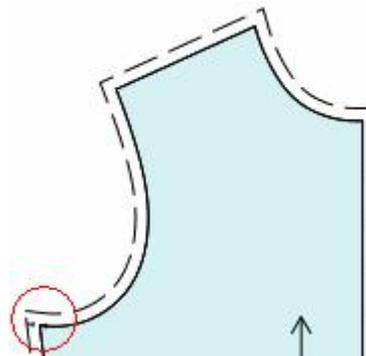
Make a square select middle of line



result



Make a square select on one side of line



result

#### Corner notch explanation:

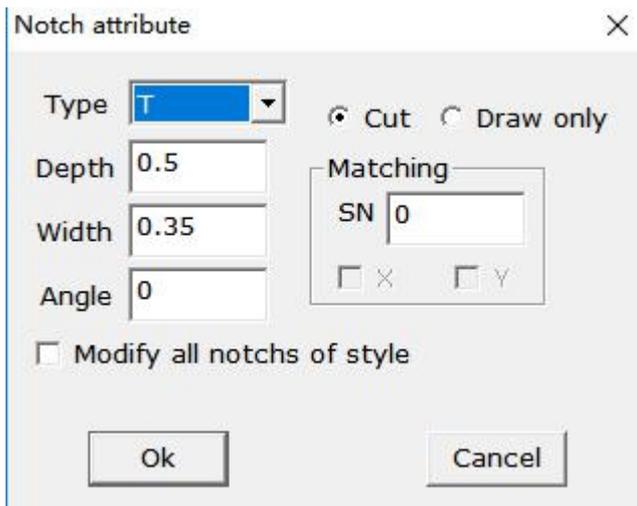
Notch added with corner notch tool, Can change notch degree  $0^{\circ}$ 、 $90^{\circ}$ 、 $180^{\circ}$ 、 $270^{\circ}$  with notch tool.

One. Make a square select Delete notch-used design line and pattern

Select, make a square select, delete notch, use notch tool make a square select, then right click, the notch will be deleted.

One. Make a square select modify notch

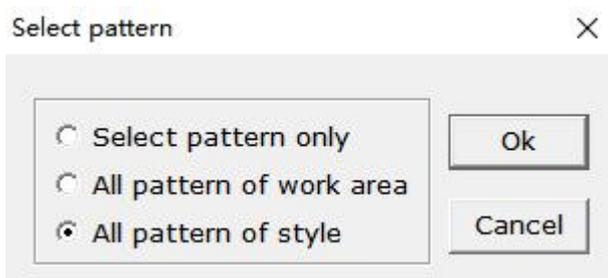
1) Select, make a square select, modify notch, use notch tool make a square select, appear notch Properties dialog:



2) Select the appropriate parameter.

一. Delete all Corner notch-used design line and pattern

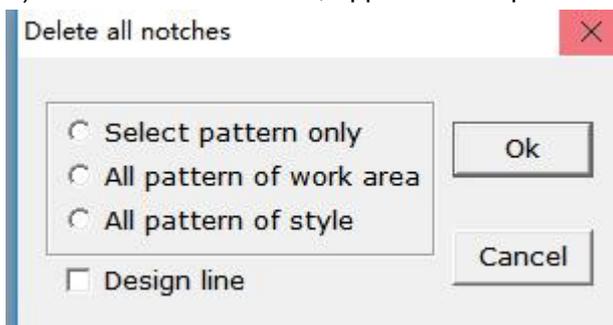
1) select delete all Corner notch, appear select pattern Properties dialog:



2)select Options will delete corner notch

Six. Delete all notch-used design line and pattern

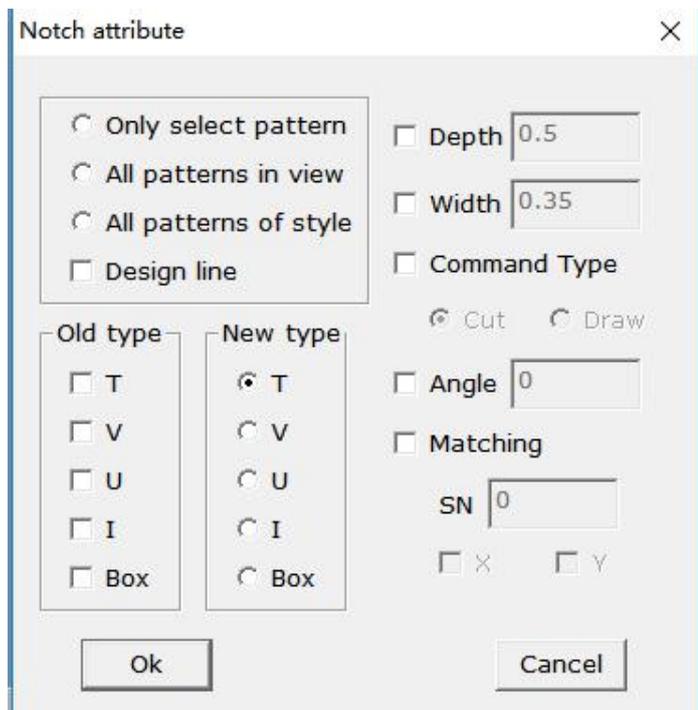
1) select delete all notch, appear select pattern Properties dialog:



2)select Options will delete notch

Seven. Modify all notch-used design line and pattern

1) select modify all notch, appear notch attribute Properties dialog:



3) Select the relevant options to change all the notch

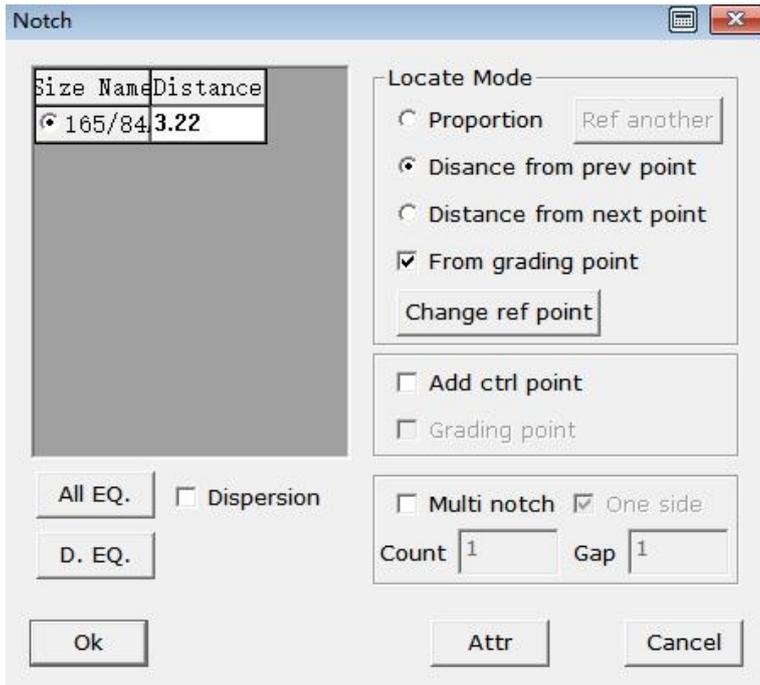
Eight. Adjust notch angle-used design line and pattern

Use this too click in the notch, it will drag a line, drag to proper degree.

Nine. Grade for notch, Change notch position and property

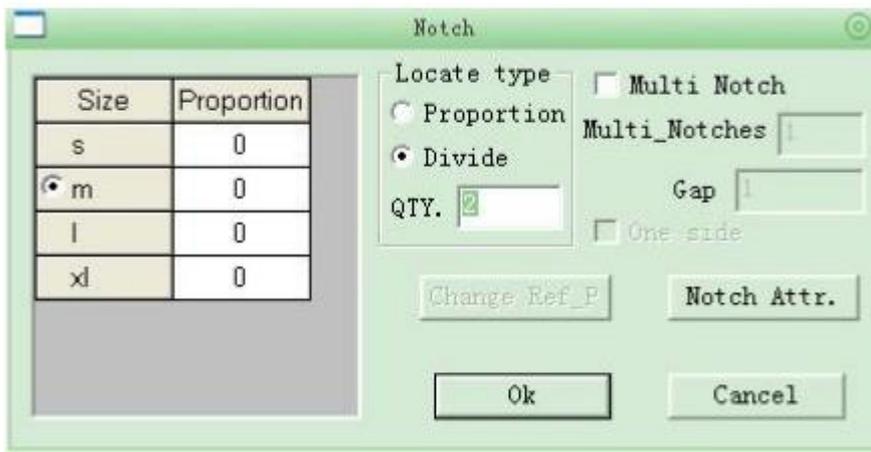
Click right on notch, You can see **【Edit notch】** dialogue table, Input value, Select Notch attribute, Click **【Apply】**

**【Edit Notch】** dialogue table presentation:



1. 【 locate type 】 When select distance, Add notch base on distance, Value is notch to reference point length (\* point)When select proportion, Add Notch base on proportion, Proportion is notch to \* point length and selected length.
2. 【locate type】 Can be grading point,also can be non grading point.
3. 【Multi notch】 Add more notch one time, It is whole
4. 【single direction Multi notch】 select,The value below the distance is the value from the reference point to the nearest notch, and not the value from the reference point to the midpoint of the notch;
5. 【Multi notches】 Can be two or three, gap is two near notch distance.
6. select 【 Dispersion 】,whatever cursor in which size under distance , Click **All EQ.** ,The distance from each size to the point of reference is the same as the base size.
7. Did not select 【 Dispersion 】, whatever cursor in which size under distance , Click **All EQ.** , Distance from Other size notch to reference point is same as cursor located size.
8. Select 【Dispersion】 , What ever input dispersion in which size, Click **D. EQ.** All size grading equally base on cursor locating .
- 9.Did not select 【Dispersion】 ,Input value out of basic size, Then click **D. EQ.** ,Other size grade base on dispersion of this size with basic size.

【Proportion notch 、 Equal divide notch 】 dialogue parameter explanation:



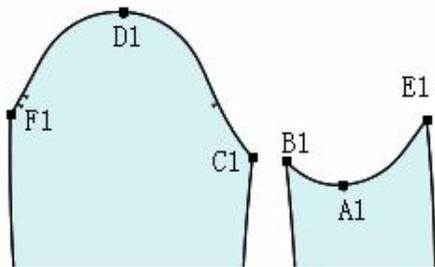
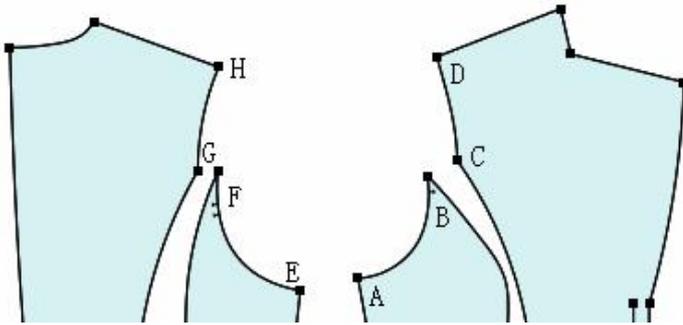
1. **【Locate type】:** Proportion means that add notch in proportion (can be two point of more line); Equal notch means add equal divide notch for two point (like divider)
2. **【Change Ref\_p】:** When select proportion, click this button, Reference point will change to other point.



### Sleeve crown and armhole notch

#### Function:

It is used for adding notch on armhole and sleeve crown at the same time, Front Armhole and sleeve crown add single notch, Back armhole and back sleeve crown add double notch.



Operation : Click front armhole, front sleeve crown, back armhole and back sleeve crown )

1. Near point A、 C,Click or make a square select front armhole AB、 CD,Click right to finish;
2. Near Point A1、 C1,Click or make a square front Sleeve crown A1B1、 C1D1,Click right to finish;
3. Near Point E、 G,Click or make a square back armhole EF、 GH,Click right to finish.
4. Near Point A1、 F1,Click or make a square front Sleeve crown A1E1、 F1D1,Click right to finish;You Can see 【Add notch together】 dialogue table.
4. Input proper value, Click 【ok】

Size	A.H.L	S.C.L	S.G	F.A.H.D	F.S.C.G	B.A.H.D	B.S.C.G
<input checked="" type="checkbox"/> s	41.68	41.21	-0.47	0	0	0	0
<input type="checkbox"/> m	44.28	44.39	0.11	0	0	0	0
<input checked="" type="checkbox"/> l	45.18	45.94	0.76	0	0	0	0
<input checked="" type="checkbox"/> xl	46.97	48.25	1.28	0	0	0	0

All EQ.     D.EQ.     Dispersion  
 Start form another endpoint

**【Sleeve crown and armhole notch】** Dialogue parameter presentation

**【Size】:** Select size, This size appear, notch will appear,Data will change freely in dialogue table.

**【A.H.L】:** It is total line length of first step and third step.

**【S.C.L】:** It is total line length of second step and fourth step.

**【S.G】:** It is dispersion of total sleeve crown length and total armhole length.

**【F.A.H.D】:** It is refer to length from front notch to under armhole or shoulder point.

**【F.S.C.G】:** It is refer to dispersion of front sleeve crown notch distance and front armhole notch distance;

**【B.A.H.D】:** It is refer to length from back notch to under armhole or shoulder point.

**【B.S.C.G】:** It is refer to dispersion of back sleeve crown notch distance and back armhole notch

**【Start from another endpoint】:** If select line from under armhole, Select this option, Notch distance will calculate from shoulder point.

**【All EQ】 【D.EQ】 【Dispersion】** Refer to [pleat]dialogue table.



### modify pattern

#### Function:

Modify existing patterns

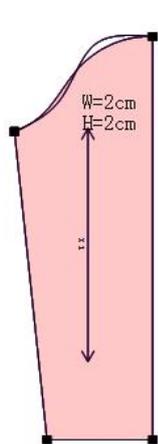
#### Operation:

One:

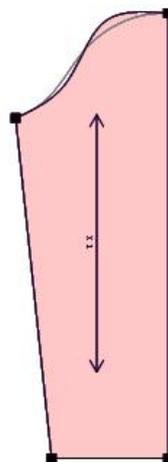
1. Click border line ( if have many line need to make a square, right click)
2. Click replace line ( if have many line need to make a square, right click)

Two:

make a square replace line, Right click on the location you want to Reserved



Before replacement



After replacement


**Pattern rotate**
**Function:**

It is used for rotating one or more pattern

**Operation:**

For a single pattern

1. If grain line is horizontal or vertical, Click right on pattern, Pattern will rotate 90 degree. Shift+ Click right on pattern, Counterclockwise rotate 90 degree , If grain line is not horizontal or vertical, Click right on pattern, Pattern rotate to grain line horizontal or vertical direction;
2. Click selected two point, move mouse, Pattern rotate horizontal or vertical in selected point;
3. Press Ctrl, Click two point on pattern and move mouse, Can rotate pattern in freely;
4. Press Ctrl, Click right on pattern, Pattern rotate in appointed degree;

For multiple patterns

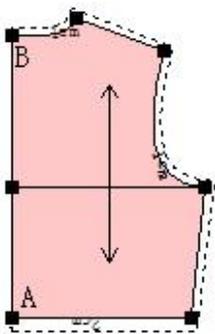
1. after make a square pattern, right click can Clockwise rotate 90 degree
2. after make a square pattern, press shift, right click can Counterclockwise rotate 90 degree
3. Left click on the blank space or press ESC to exit the operation.

Note:

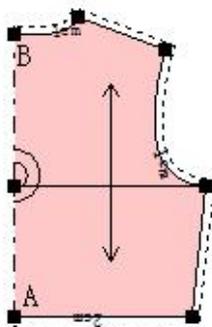
When rotate pattern, Grain line and pattern rotate at the same time.


**Pattern symmetry**
**Function:**

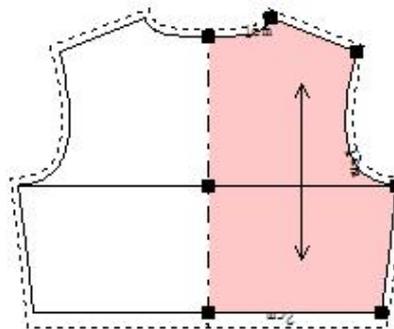
The following picture1-4 , can set the pattern in the relationship of symmetry, not related symmetry, only show half of the state.



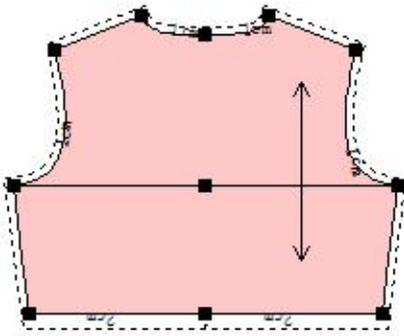
Picture1



picture2



picture3



Picture4



Relevant symmetry : All sides of the pattern are displayed, half of the pattern is filled with color (adjusting the side of the fill, the other side is adjusted in the same time), and the entire pattern is drawn when drawing.



Relevant symmetry :Only the symmetrical side is shown. When drawing in grading, only one half of the drawing is made (the whole pattern is automatically expanded in the nesting).

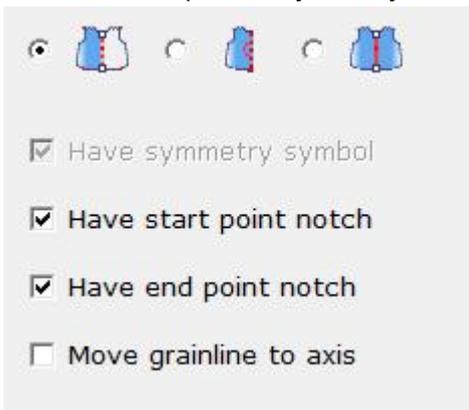


Irrelevant symmetry:Show all the patterns. When adjusting one side of the pattern, the other side will not follow the adjustment

### Operation:

Example, Figure 1 (asymmetrical pattern) to Figure 2 (only half of the symmetrical pattern) is set

1. select  pattern symmetry tool,The corresponding options appear in the toolbar properties

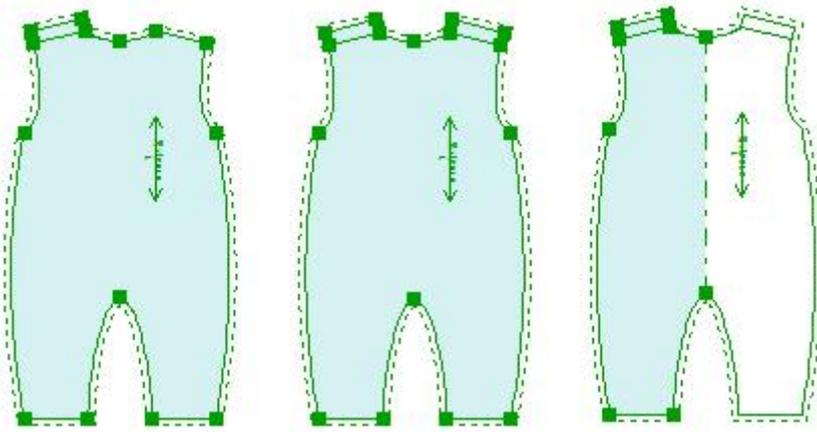


2. Select with mouse ,Click on the pattern line AB and as required to check the appropriate option in the dialog box , will change to a symmetrical pattern.

Figure 2 to Figure 1 settings: After selecting the pattern, click on the "Delete symmetry axis" button In short, the symmetry axis have not be set symmetrically before setting the pattern. It needs to be selected  pattern symmetry tool, Click two points on the axis of symmetry on the pattern, and select or click the corresponding button in the dialog. If there is an axis of symmetry before of set pattern, select the pattern first and click the corresponding button in the dialog.

Note:

If pattern two side is not symmetry, When select symmetry axis, Reserve big area side. Check following picture.



### Pattern Flip

#### Function:

It is used for flip pattern

#### Operation:

For single pattern

1. Switch horizontal flip  and vertical flip  with shift;
2. Click on pattern directly;
3. If pattern have left and right, There are a cue "do u flip the pattern"?
4. If you want to flip, click yes.



For Flip on multiple patterns

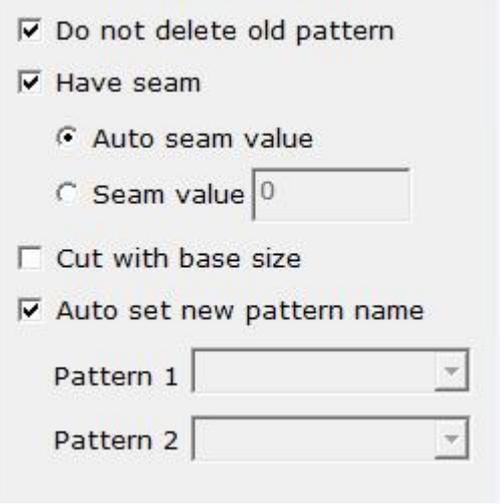
Make a square to select rotate pattern and right click, the select pattern will flip. Left click on the blank space or press ESC to exit the operation.

 **Divide pattern****Function:**

Cut pattern along assistant line.

**Operation:**

1. Select divide pattern tool; the corresponding dialog box appears in the toolbar properties.



The dialog box contains the following options and fields:

- Do not delete old pattern
- Have seam
  - Auto seam value
  - Seam value
- Cut with base size
- Auto set new pattern name
  - Pattern 1
  - Pattern 2

1. Select the appropriate option, Click assistant line on pattern.
2. The pattern will split.

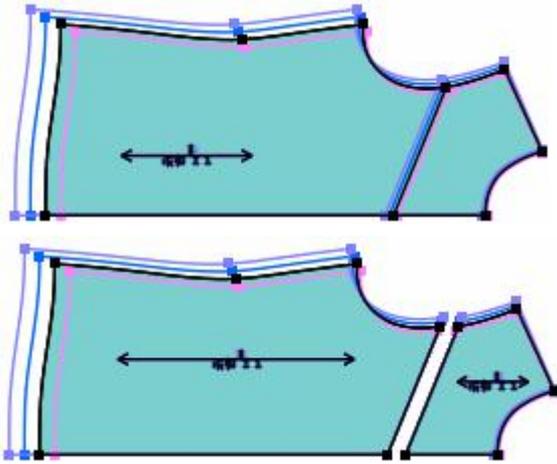
**【Separate pattern】** parameter description:

**【do not delete old pattern】** After selection, the sample is cut after the original pattern is cut

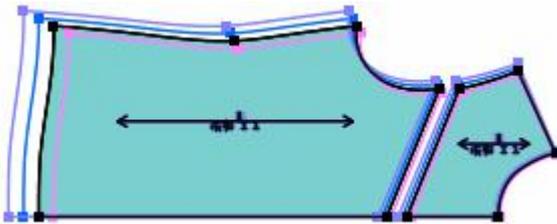
**【have seam】** Select the appropriate option and Click on the pattern's auxiliary line;

**【cut with base size】**

1. After selection, the base size state unfold



## 2. Don't select, Cut in display state



【 Auto set new pattern name 】 after select, the split paper will automatically be based on the original file name,generate file name.



pattern join

### Function one:

Join two pattern to one pattern, To merge the two endpoints of the merge line.

Function two:

Combine two patterns to display

Function one operation:

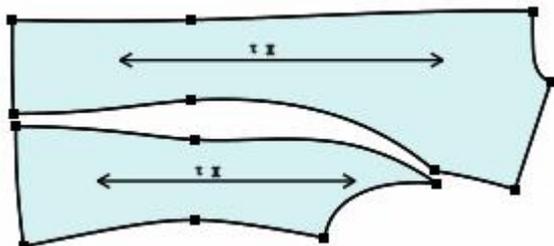
When click on first pattern, Then press shift will change between reserve combined line  and not reserve combined line 

There are four operation way after selecting cursor

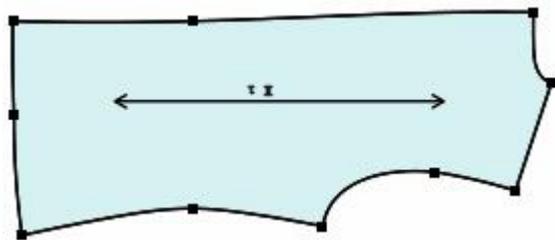
a. Click blank place of two pattern directly;

- b. Click two corresponding point separately;
- c. Click border line of two pattern separately;
- d. Drag two point of one pattern, Then drag two point of another pattern, can combine;

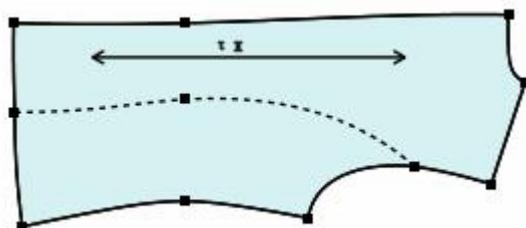
Before joining



After combining with 

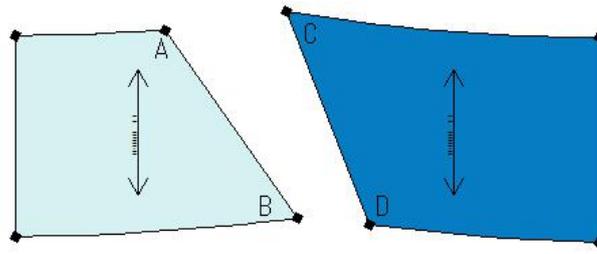


After combining with 

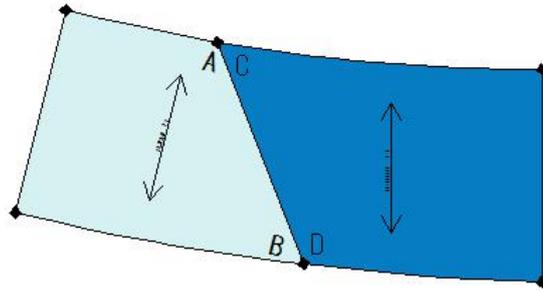


### Operation 2:

Check picture 1, Select this tool, Press Ctrl and click point A,B,C,D, Left side pattern will combine to right , But still two pattern, Check picture 2.



Picture 1



Picture 2



Shrink

**Function:**

Can shrink to whole pattern according to material, Can part shrink selected line .

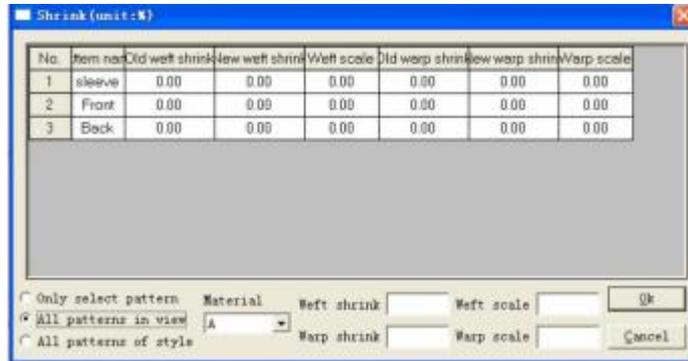
Whole pattern shrink operation

1. Select shrink tool;
2. Click on blank or pattern, Then click right, You can see 【shrink】 dialogue table;

The pattern will automatically indicate the direction of the warp



1. Select shrink material, select proper option, input weft and warp shrink, then click Ok.



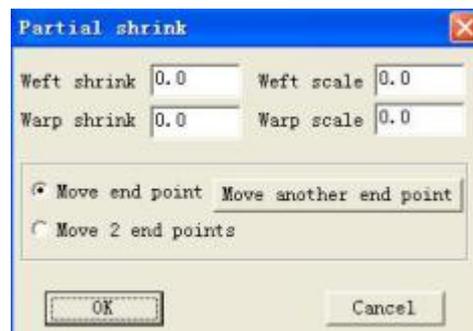
#### Presentation:

1. Whole shrink can record old shrink, Also can change or delete shrink. For example, Add 5% shrink, After changing new material, shrink is 7%, Input 7 directly, delete shrink, input 0;
2. Change or clear shrink, Table color will filled, it is alert function;
3. Shrink and scale is relevant, Input value on shrink, System will calculate scale automatically, Also, Input value on scale, there are corresponding value in shrink. Take size is 100 as example, When add shrink, Formula is:

$100 + 100 * 10\% + 100 * 10\% * 10\% + 100 * 10\% * 10\% * 10\% \dots \approx 111.11$ , If add 10% scale, Formula is  $100 + 100 * 10\% = 110$ .

#### Part shrink operation:

1. Click or make a square select shrink border line or assistant line, click right, You can see **【Partial shrink】** dialogue table;



2. Input shrink, input proper option; ,

3. Click **【ok】**

Special noted:

Part shrink can't record old shrink, Everyone must pay attention when applying

Shrinkage is Irrelevant with grain line:

If the pattern has already been shrunk, you must adjust the grain line again: Press SHIFT, when the cursor appears X, click the pattern, and then right click, appear

Press Yes, to cancel the relevance, that is, adjust the grain line, the original shrinkage does not change.



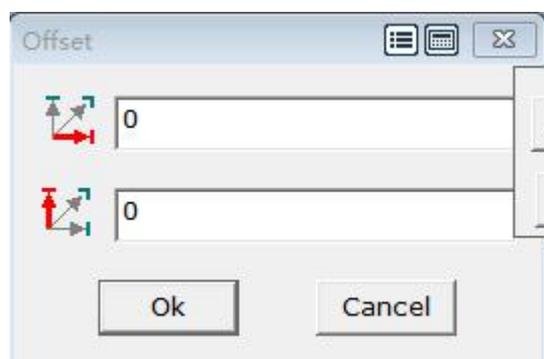
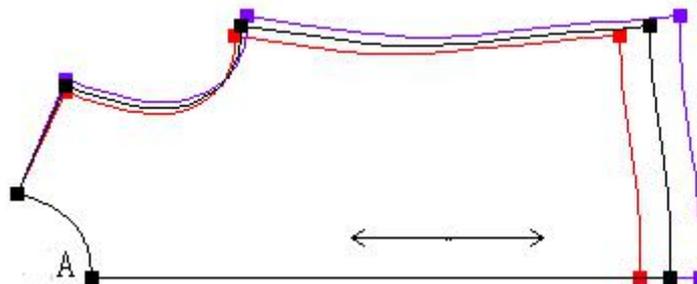
### **Insert or Edit Image**

**Function :** Put picture like logo, designed line on pattern. and it can be drawn with the pattern.

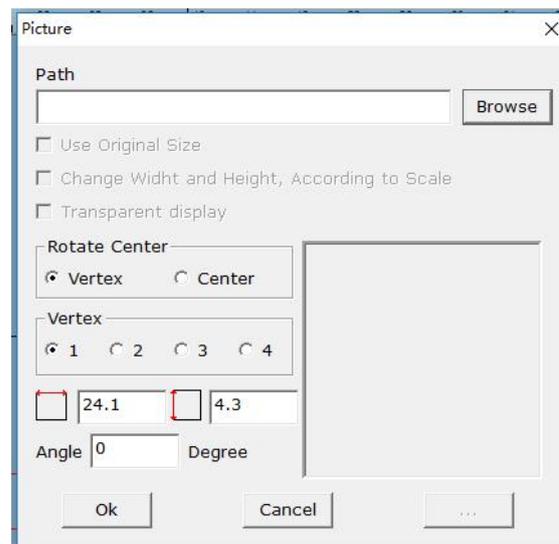
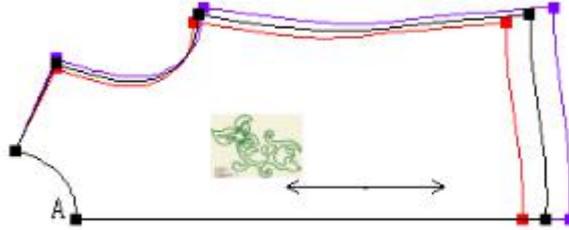
**Operation:**

Add picture,( format is \*.BMP , \*.JPG , \*.GIF, \*.PNG , \*.TIF , \*.DST , \*.DSZ, , \*.DSB ). can open this format file.

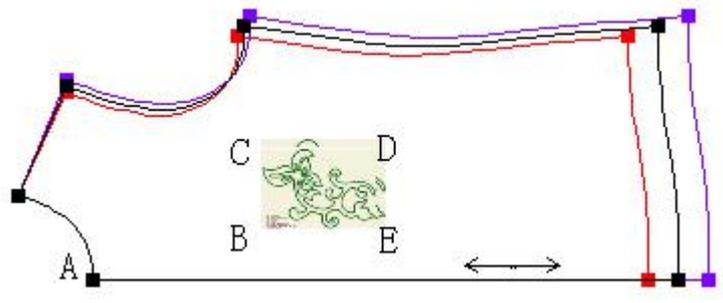
1. Select the tool, as shown in the figure below, move the cursor on the point A and click enter key. In the pop-up **【offset】** dialog box, enter the offset of the image and click **【ok】**



2. Drag a square on pattern, Click browse to load a picture.



1. use  Select the pattern control point, Optional image corner control point, use point grading table grading, only put one of the points, as shown below. (Or click on the lower right corner of the [Image] dialog box, you can also gradate the image)



[picture] dialog box description:

1. Browse: Open the location of the picture;
2. Length and width change according to the proportion of the original picture: check this item, the picture will change according to the proportion of the original picture;
3. Transparent display: select, transparent display of pictures;
4. Size/Angle origin:

Rectangular vertical: The fixed position of the rotation of the image is a rectangular vertex

Rectangular center: rotates and fixes the position according to the center of the displayed rectangle;

5. Vertex: The four vertical of the rotated picture can be freely selected;

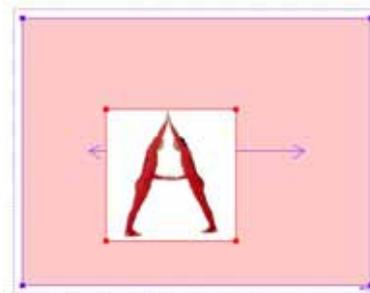
6. Angle: refers to the degree of rotation.

### Modify picture

1. use this tool or adjust tool, right click in the picture. Appear [picture] dialog box.

Can replace picture, modify picture size, angle and others information.

2. Left click in the picture, select picture, As shown below,



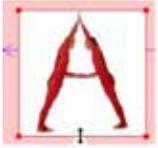
3. According to the different positions of the mouse, different cursors perform different operations on the picture:



When the mouse moves into the red rectangle, the mouse changes to the shape shown in the figure. Click the mouse to move to the appropriate position and click the left button.



When the mouse is placed on the left and right border lines of the rectangle box, the mouse becomes the shape shown in the figure. Click and drag the mouse to the appropriate location and then click the left button.



The method is the same as above.



When the mouse is placed on the four vertical of the rectangular frame, the mouse becomes the shape shown in the figure. Click to move the mouse. The picture is rotated with the selected vertex at a fixed point. Rotate to the appropriate angle and click the left button.



When the mouse is on the four vertical of the rectangular box, press the Ctrl key at the same time, the mouse will change to the shape shown in the figure, click to move the mouse, and then click the left button at the appropriate angle

After the picture is modified, click the left button in the blank area to cancel the selection of the picture.



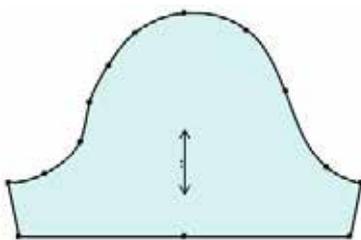
**Resmooth curve**

Function:

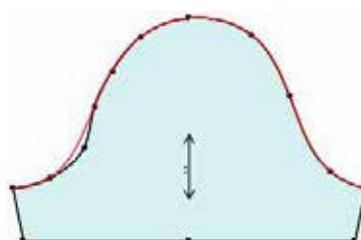
It is used for adjusting curve and key point is reserved at original place. commonly used to handle pattern by digitizer.

Operation:

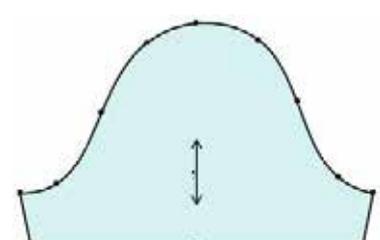
1. Click curve need to adjust, There are a new curve appear on original place (if there are no grading point, New curve is straight line, If there are grading point, New curve through grading point as default);
2. Click control point on original line, New curve will adhere to this point (Click this point again, will separate from new curve);
3. When satisfy, Click right on blank place.



**Original picture**



**process**



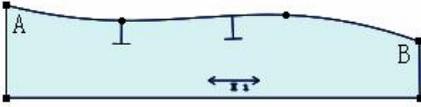
**Result**



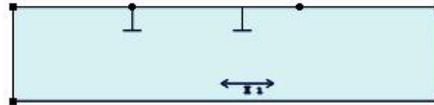
**Horz/vertical adjust**

**Function:**

Adjust line to horizontal or vertical status, Adjust line AB to picture 2, usually used for adjusting inputting pattern.



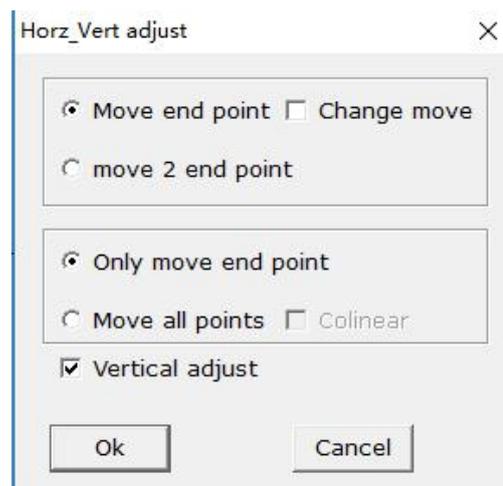
picture 1



picture 2

**Operation:**

1. Press shift switch cursor to horizontal adjust  (vertical adjust is  );
2. Click or make a square line AB, You can see click or make square on line AB, Then click right, You can see **【Horz\_vertical adjust】** dialogue table;
3. Select proper option, Click ok.


**Note:**

It is adjusting pattern, Is not horizontal or vertical pattern, Pattern size will change, It is used for adjusting A little.

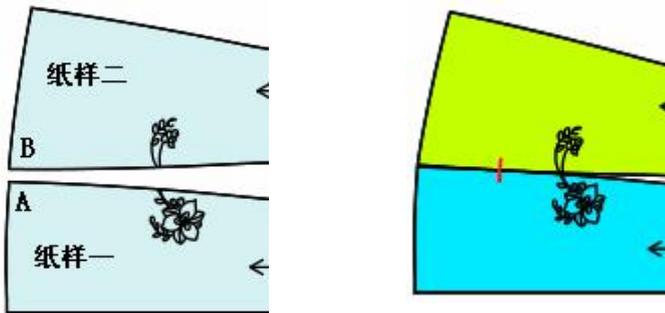

**Compare path work**
**Function:**

One pattern border line walk on another pattern border line, Can adjust inner line is smooth or not, also can

add notch.

**Operation:**

1. See following picture, Click point B、 point A, Pattern 2 is combined on pattern1;
2. Click pattern border again, pattern 2 will walk on pattern one, You can add notch, Also can adjust assistant line;
3. Click right to finish.

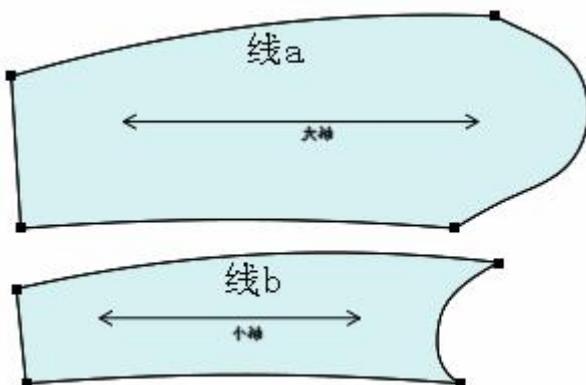


Before using this too

comparing

**I presentation:**

1. If compared and walked two line is in same side ,Like line a and b, Pattern is overlap, Press Ctrl before operation;



1. Among comparing, Press shift, Click control point or notch can compare from starting point. 【 Compare path work 】 Dialogue table parameter presentation:



1. **【Fixed pattern、Stepped pattern】** It is refer to add equal length notch from start point
2. **Offset behind 【Fixed pattern、Stepped pattern】** It is refer to casing when add notch;
3. **【Flip pattern】** When select flip pattern, Stepped pattern flip once time, Did not select, Stepped pattern flip one more time
4. **【Skip casing val, dimension】**Select, behind dialogue table is active, when match two notch, Two notch can match automatically within dimension
5. **【Go back when finish】** Select, after comparing, stepped pattern go back to before place , Other wise, will Stopped finished place.



### **Change border segment**

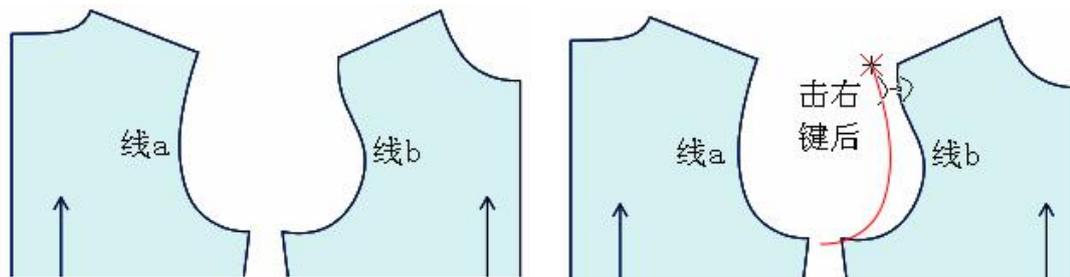
#### **Function:**

一. change assistant line to border line

#### **Function-Operation**

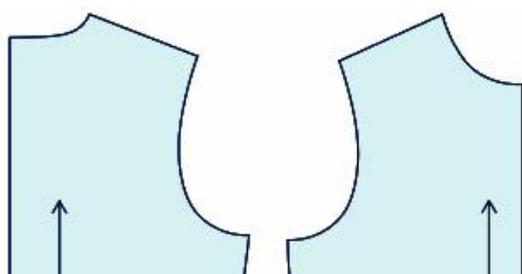
1. Click or make square on one side of line,Line is selected(If select more line,The first must make a square select, Then click right);
2. Click right can flip on horizontal or vertical direction;
3. Move the cursor on the target line and left click.

One pattern border line replace another pattern border line.



Before changing

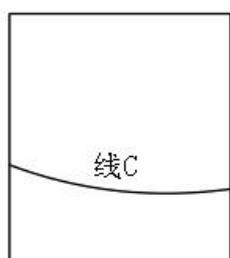
Among changing



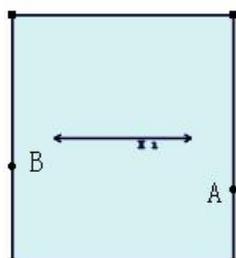
After changing

Note : On pattern, You can drag to point. Check following picture:

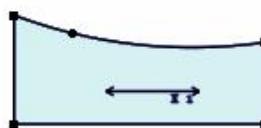
Change picture one to picture 2, Select this tool and select line c, Drag from point A to point B; Change picture one to picture 3, Select line c, Drag from point B to point A.



Picture 1



Picture 2



Picture 3



Down Content

(1) Select Down Content  tool

(2) Click or make a square Splitting Auxiliary line in pattern, Input density, click application.

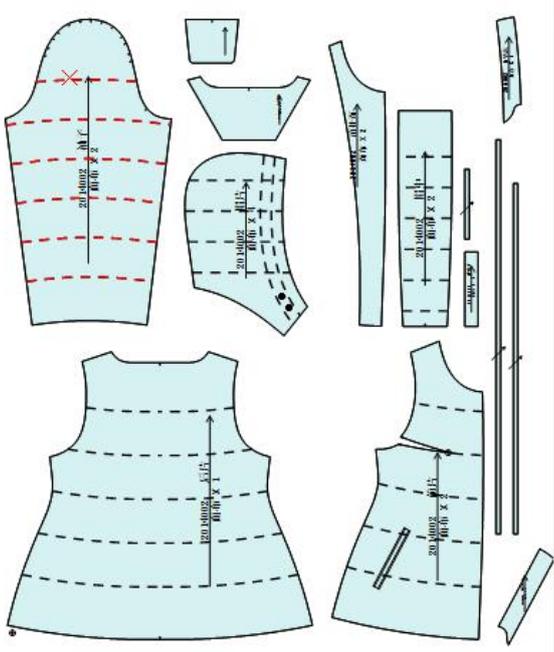
Note: In the Options - System Settings - Switch Settings, you can set the density units and output content.

Down content density

Area/Weight  /

Display down content

Density  Area  Weight



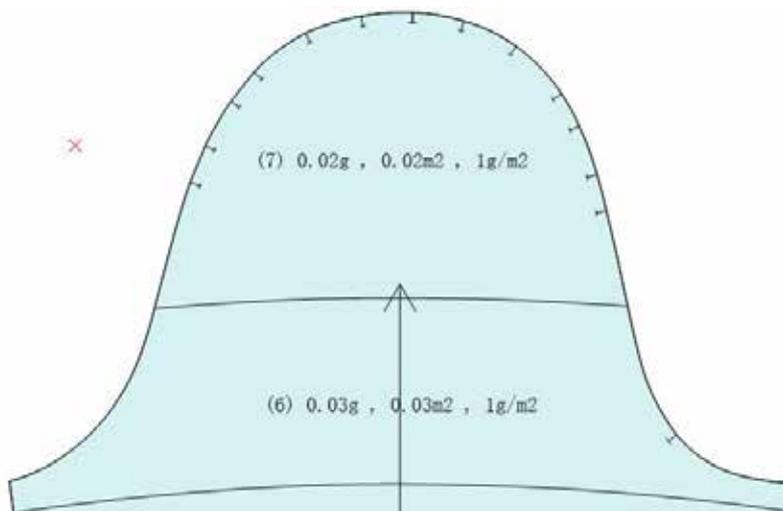
Tool info

Density  g/m2

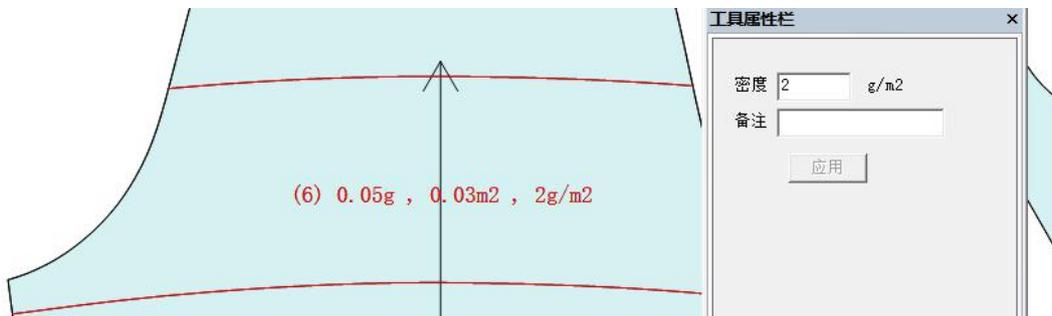
Comment

Pattern... Grade... Read in... Copy... Ref Pa...

(3) Pattern will automatically show the density, area and weight of the velvet filling.



(4) Shift + left click on the auxiliary line, select the velvet area where the mouse is located, and after changing the density, the corresponding velvet filling will be automatically modified.



(5) shift + right modified velvet dividing line

(6) Ctrl+left key can move the text of the filling area

(7) Click on the form - Calculate Velvet, select the desired output, for example "Total Partial Filling" can output the result to the EXCEL form.



Select pattern control point

Function:

It is used to select pattern, Select border point of pattern, Select assistant line point, Modify point parameter

Operation:

1. Select pattern : Click pattern, If you want to select more pattern, Make a square grading point of each pattern.

2. Select point of border:

Select one grading point, Click on grading point or make a square select grading point.

Select more grading point, Make a square select grading point or press Ctrl, click grading point one by one

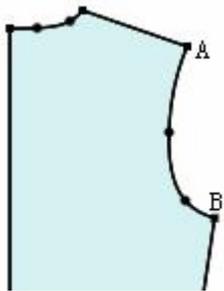
Select non grading point, Click on point;

Select more non grading point, Press Ctrl and click on non grading point one by one.

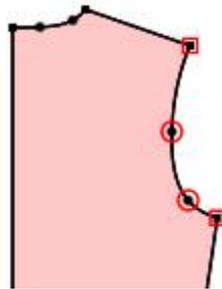
Press Ctrl, First click on point is selected, Second click is cancel selecting

Cancel selected point one time, Press ESC or click on blank place;

Select two point, Press A then drag to point B, Picture 2 is selected status.



Picture 1



Picture 2

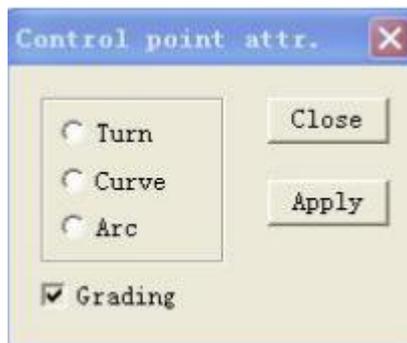
### 3. Assistant line and border line overlap:

Click on overlap point, Selected is border point;

Make a square selected overlap point,Both border point and assistant line grading point are selected together;

Press shift,Click on make a square overlap point,Selected is grading point;

4. Modify point property : Double click on modified point,You can see【Control point Attribute】 dialogue table, Check following picture, After modifying,Click apply,if select if more point, Press enter can see following dialogue Table.



Skill:

If convert only in grading point and curve point, Click right.

If convert between turn and Arc, Press shift+ right.



### **Copy grading value**

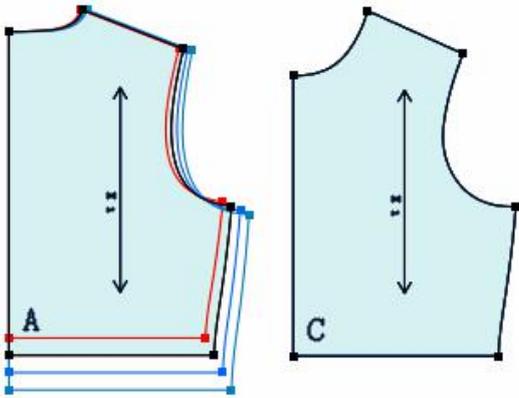
**Function:**

Copy grading points, clipping points, intersection points to other grading points.

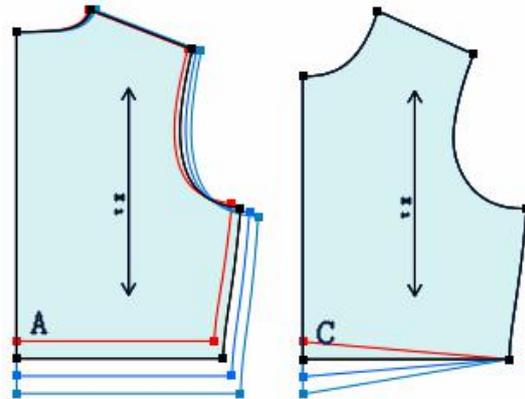
**Operation:**

Situation one,Copy single grading point: Picture 1 to picture 2

Click or make a square select grading point with grade value (If you want to check the box, right click to end.) The click or make a square select did not grade point (If you want to check the box, right click to end.)



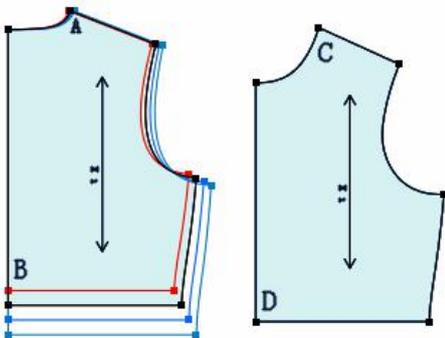
Picture 1



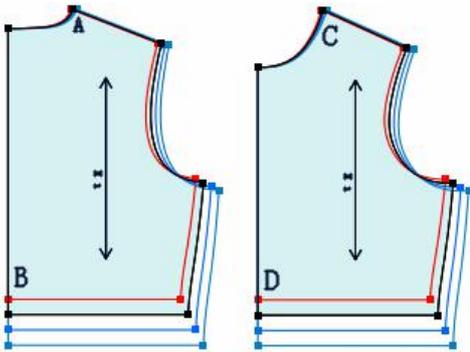
Picture 2

Situation 2 , More grading point copy: Picture 3 to picture 4

Make a square select or drag on grade pattern, (Like picture 3, A to B), Then make a square or drag on not grade pattern (like picture 3, From point c to point D)



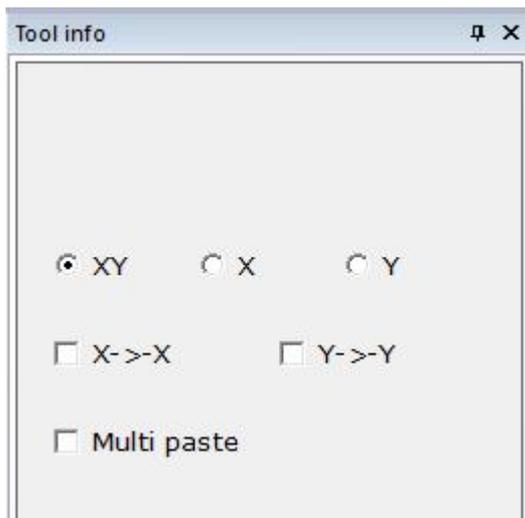
Picture 3



Picture 4

Situation 3 , Copy same grading value,Paste to more grading point continuously:

Press Ctrl, make a square select or drag or graded pattern, Then select or drag on not graded pattern;



Situation 4 The same value of grading, continuous copy of a number of grading points:

Select "Paste many times", use this tool to click or make a square or drag and drop on the grading pattern, and then click or drag or click on the not grading pattern.

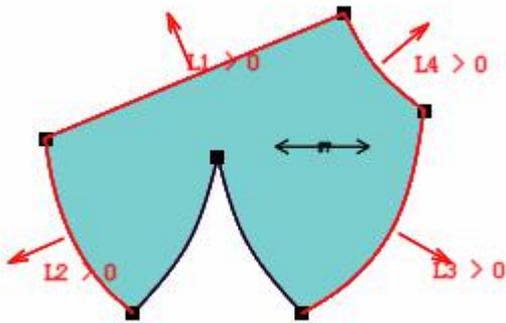
**Note:** after make a square, must right click to end.



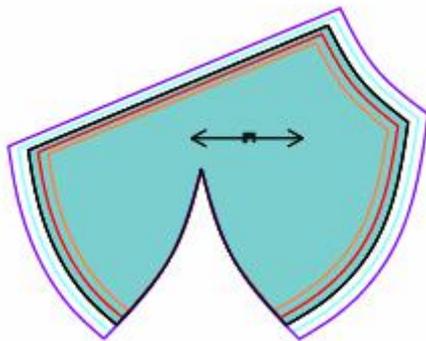
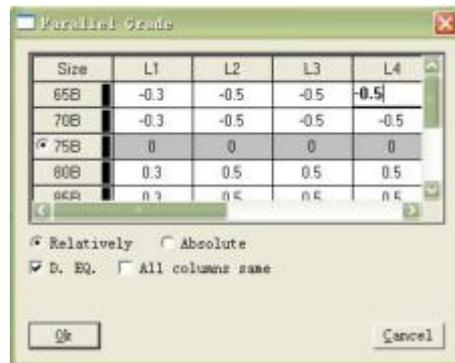
**parallel grading**

### Function

Grade for border line, pattern assistant line, Usually used for lingerie grading.



Picture1



Picture2

Operation:

1. Select or make a square to select line need to parallel grading, right click. U can see parallel Grade dialogue.

1. Input distance of each parallel line, Click ok.

[Parallel grading] dialogue parameter presentation

1. Parallel grading is refer o curve (border line and assistant line) similar as base size shape, And u can set value.

2. [D.EQ] is refer to distance is same between different size.

3. [All columns same] After select this option, Each column value is same.

4. [Relatively] and [Absolute], Because base size do not move, So distance is 0, Each size have Offset distance, U can think it is dispersion. Relative is dispersion of neared size, is Dispersion compared with base size.

5. Distance have positive and negative , U can see the arrow on pattern,  $>0$  means offset according to arrow direction, Other wise offset another direction.

6. If input 0 means this size shape is same as base size

7. For non selected line, Extend current shape.



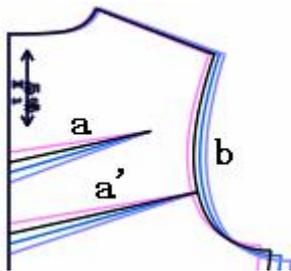
### Assist curve parallel grading

#### Function:

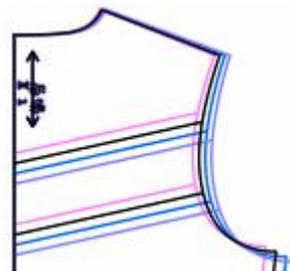
Grading for inner line of pattern, After using this tool, inner line size will parallel and intersect with border line.

#### Operation:

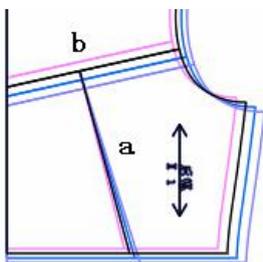
1. Use this tool to click or make a square the Auxiliary line(line a);
2. Click again on the line near the Mobile line (line b). Changes from Figure 1 to Figure 2 and Figure 3 to Figure 4.



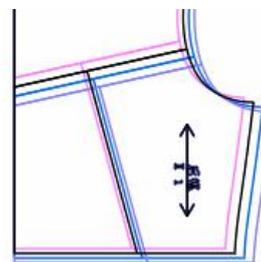
Picture 1



Picture 2



Picture 3



Picture 4



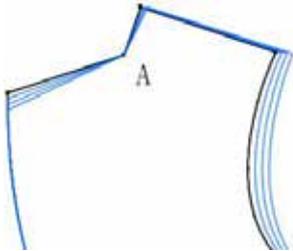
Intersection of two parallel

Function:

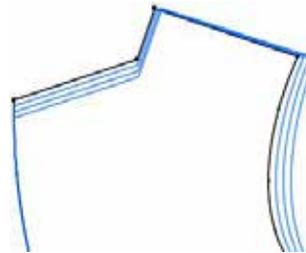
It is used for grading for pattern border,After using this tool,parallel with intersection side,  
Usually used in grading for collar of custom fashion.

Operation:

From picture one to picture 2, Click point A directly.



Picture 1



Picture 2



### Grading by parallel and distance

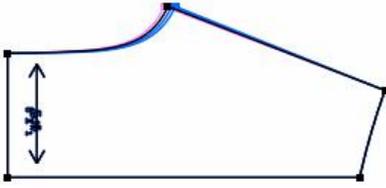
**Function:**

Make different size shoulder parallel.

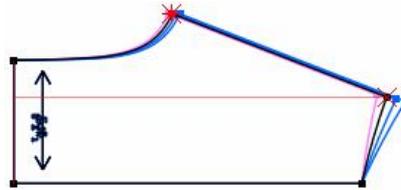
**Operation:**

Shoulder did not grading,Grade according to actual value.

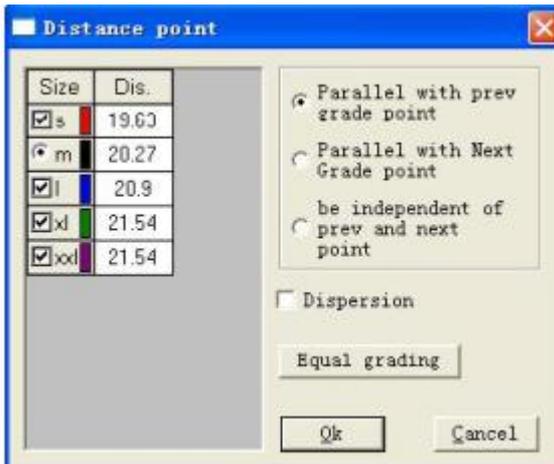
1. Click two point of back center with this tool;
2. Click shoulder point,You can see 【 Distance point 】 dialogue table, Input proper value, Select proper option,Then click ok.



Shoulder did not grade

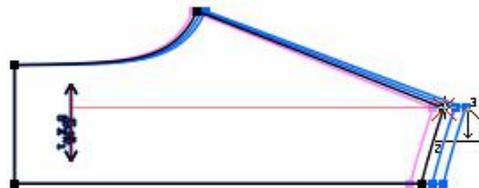
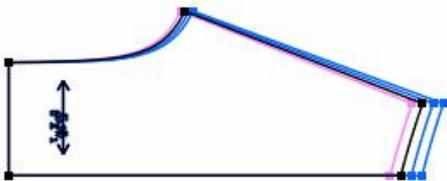


After grading shoulder

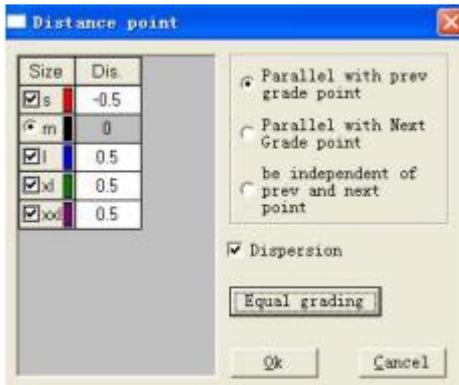


Shoulder Grade operation: Check following picture

1. Click grain line (can click two point of back center);
2. Click shoulder, You can see 【 Distance point 】 dialogue table, Check following first option, Click ok.



【 Distance point 】 parameter presentation:



1. **【Dis】** It is refer to shoulder to reference line distance;
2. **【Parallel with before grade point】:** It is refer to grading point before selected point;
3. **【Parallel with Next Grade point】:** It is refer to grading point after selected point;
4. **【Dispersion】:** It is refer to dispersion of two adjacent size,Did not select,It is refer to distance of appointed point to reference line;
5. Select **【 Dispersion 】** ,Whatever input grading value in which size,Then click **Equal grading** ,Each size grade by cursor locating size.
6. Did not select**【Dispersion】**Input value out of basic size, Then click **Equal grading** , All size grade equally by dispersion of this size and basic size.



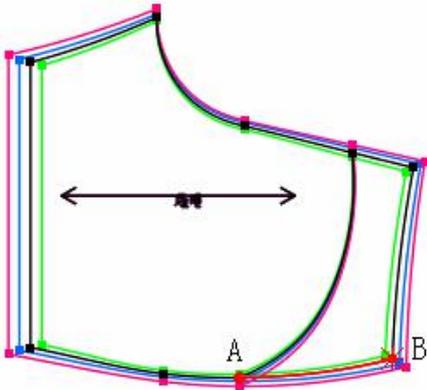
### **Grading of assistant curve**

#### **Function:**

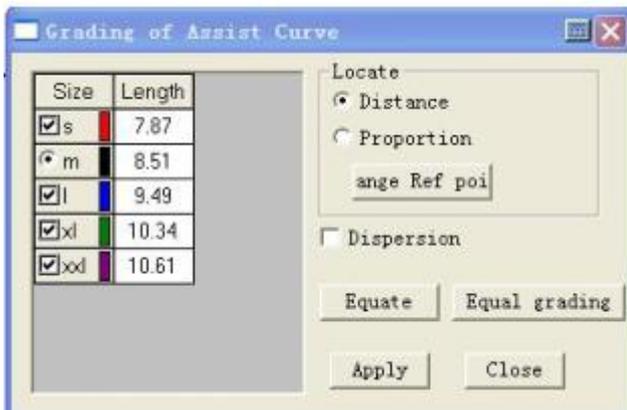
Assist line side point which intersect on pattern will grade according to border line appointed point length. (like AB curve length)

#### **Operation:**

1. Double click on assistant line point A,You can see **【Grading of assistant curve】** dialogue table;
2. Input proper value, Select proper option;
3. Click **【Apply】** .



### 【 Grading of assistant curve 】 Dialogue table parameter presentation



1. **【length】**: It is refer to length from selected point to reference point;
2. **Location**: There are two location.Angle ref poi,Click this button, Cursor change to  ,Can click objective point
3. **【Dispersion】**: It is refer to dispersion of two adjacent size, Did not select,Value is distance from appointed point to reference line.
4. **Equate** Input value in any size, Then click this icon,All size grade by this size value
5. Select **【 Dispersion】** ,Whatever input grading value in which size,Then click **Equal grading** ,Each size grade by cursor locating size.
6. Did not select**【Dispersion】**Input value out of basic size, Then click **Equal grading** , All size grade equally by dispersion of this size and basic size.

 **point grading by segment**

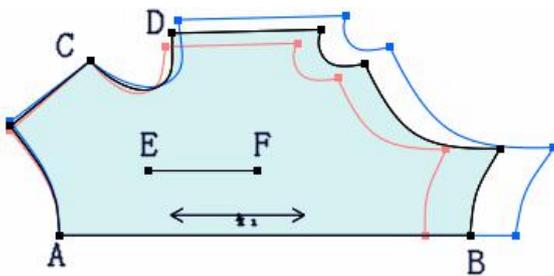
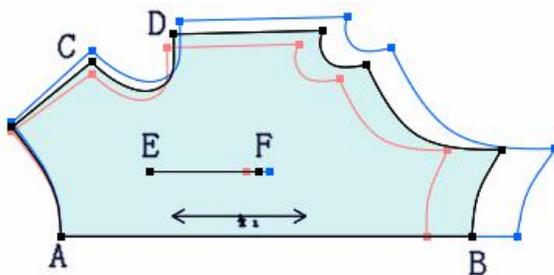
**Function:**

Grading the designated point according to the grading ratio of two points. Can be used to pet clothes to grading.

**Operation:**

As shown in the figure below, the point F of the line segment EF is grading according to the length of the garment length AB.

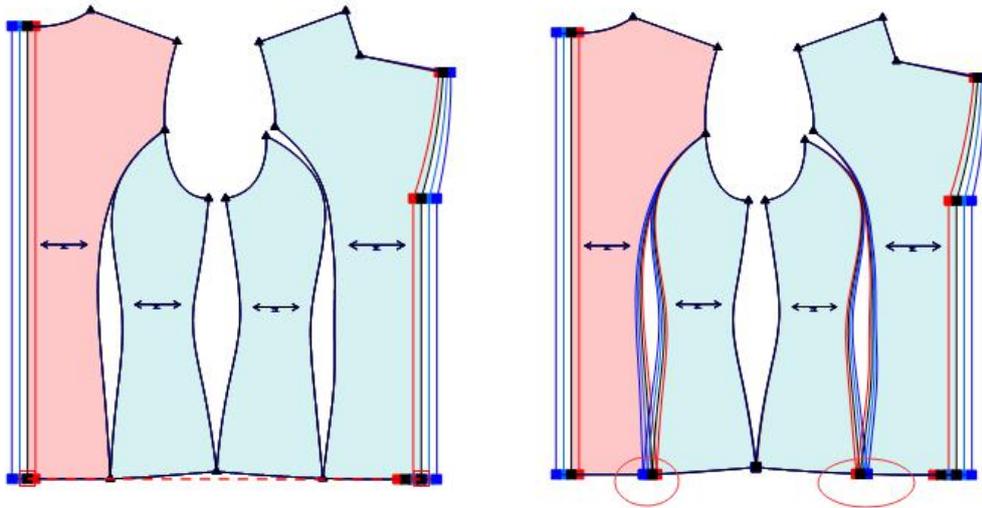
1. Use this tool to click point A and point B respectively;
2. Then click or make a square to select point F.


**Before using this tool to grading**


after using this tool to grading

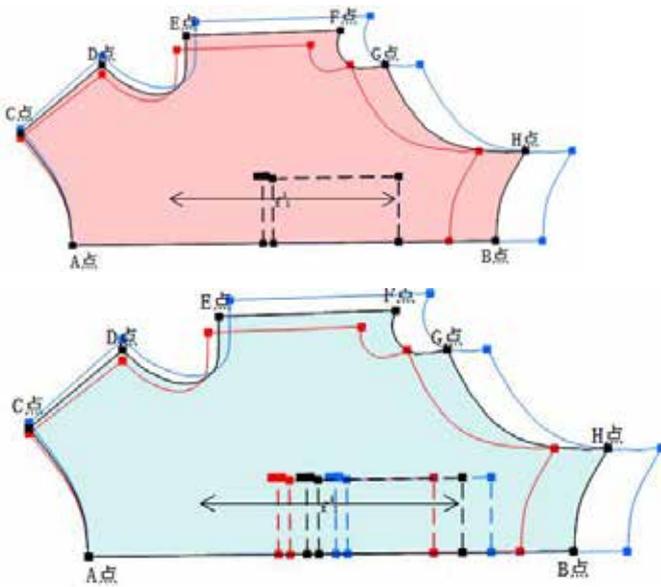
As shown above, 1. Put point C according to the grading ratio from point D to line AB.

- (1) Click on point D with this tool and click on line AB;
- (2) Click or make a square C again.
2. Multiple pattern operations
  - (1) Use the tool to click two points respectively;
  - (2) Select the points on each pattern that need grading.

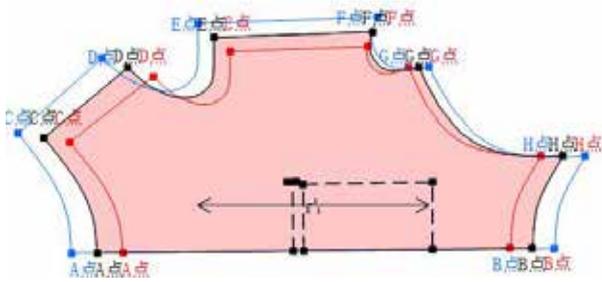


### 3.whole

- (1) Press SHIFT to toggle the cursor
- (2) Click point A and point B respectively with this tool;
- (3) Click or to select the point to be grading, and right click to end.



- (5) After aligning, it can be found that the actual whole pocket is not grading.



### assistant curve auto grading

Function:

1. Assistant curve auto grading with border
2. Assistant curve do not auto grading with border

Operation:

Assistant curve auto grading with border

1. Press shift, Change cursor to  , Assistant curve auto grading with border.
2. Select or click middle of line, Assistant two side will grading with border.
3. Select one side of assistant line, Only one side grading with border

Note:

After use this operation, If u modify border grading value or grade border point, assistant line will grading automatically.

Assistant curve do not auto grading with border

1. Press shift change cursor to  , Assistant curve do not auto grading with border
2. Select or click middle of line, If u modify border grading value or grade border point, Assistant line do not grade with border line.
3. Select one side of assistant line, If u modify border grading value or grade border point ,Only one side do not grading with border

Special presentation:

If u want to grade whole pattern, U can click pattern-assistant curve auto grading with outline or join border and assistant curve.



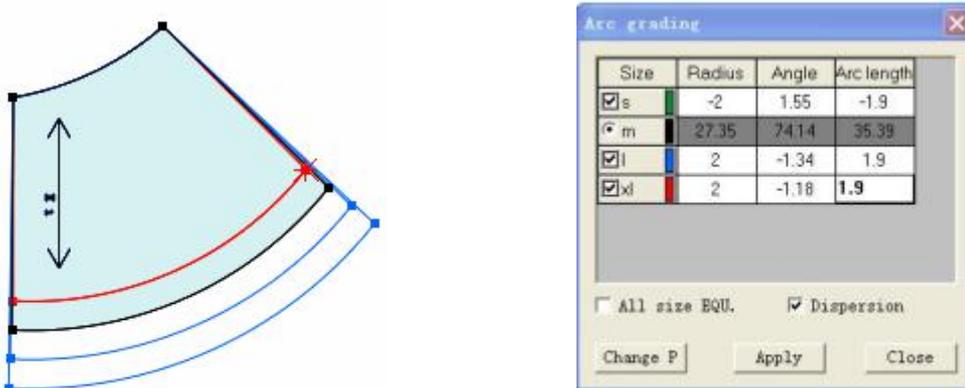
### Arc Grading

Function:

Can grade to angel、radius、 Arc length.

Operation:

1. Click arc with this tool, You can see following picture, Circle center point will appear, You can see **【Arc grading】** dialogue table;
3. Input proper value, Click **【Apply】** **【Close】**



**【Arc Grading】** Dialogue table parameter presentation

**【All size EQU】**: Select, All size equal at click place with mouse

**【Dispersion】**: Select, Other size will appear with dispersion except basic size, Otherwise will appear with actual data;

**【Change p】**: Click one time, \* Point change to another side of arc, \* point is unmoved point;



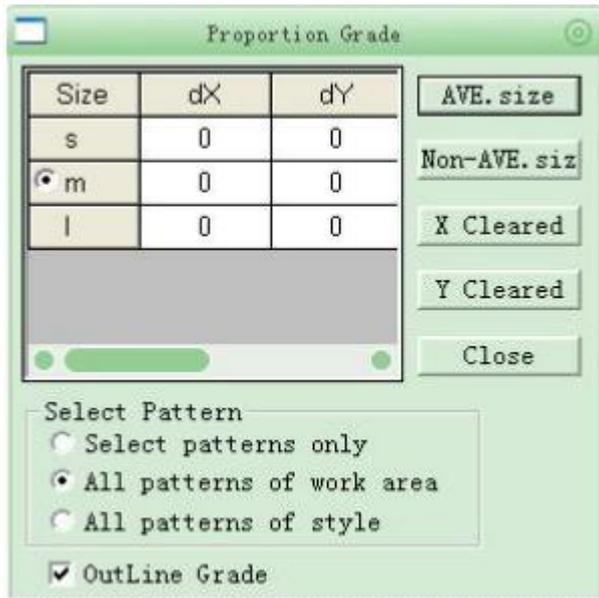
Proportion grade

Function:

Input whole pattern horizontal and vertical direction margin, Can grade border line, Inner line, Normally used for bed product company.

Operation:

1. Click size- edit size & Measurement;
2. Click this icon, Click on pattern, then right click, If margin is different, Input each size margin, Select corresponding option, Click Non-AVE.SIZE, Pattern can be grade according to input margin;
3. If margin is same, Input margin in neared basic size, Select corresponding option, Press "AVE.SIZE", Pattern can be graded according to input value;
4. When use proportion grade, U can do not grade outline. Just grade assistant line, Circle, String table, Button hole, drill. Select **【outline grade】**, Can make outline grade according to input value.



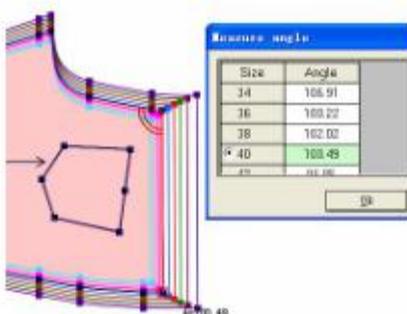
 Keep angle apex grading

Function:

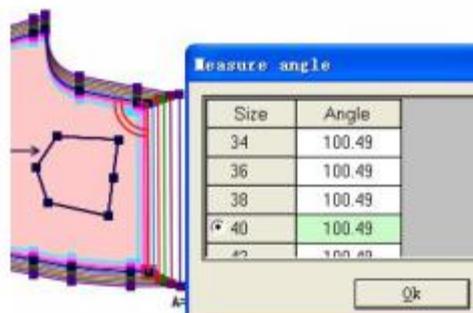
Adjust corner grading and keep different size angle apex grading equally. Usually use for adjusting back rise and collar corner.

Operation:

Click on corner, U can see the degree change.



Before operation



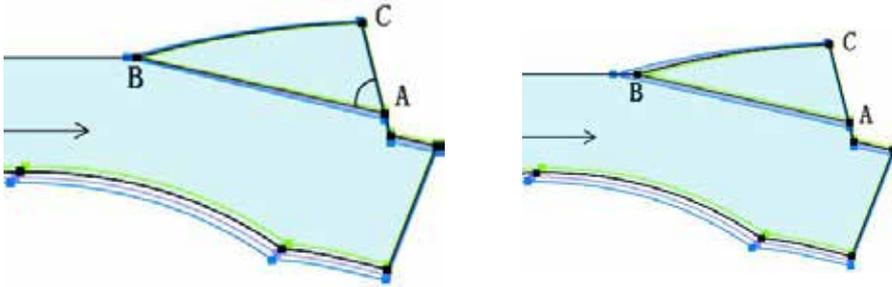
after operation


**Keep angle edge xy grading (Adjust XY)**

Function:

Adjust corner one side grading point and make each size angle equally. Like following picture,

Adjust X and Y direction grading value of point B, Make corner A different size corner degree same.



Before operation

after operation

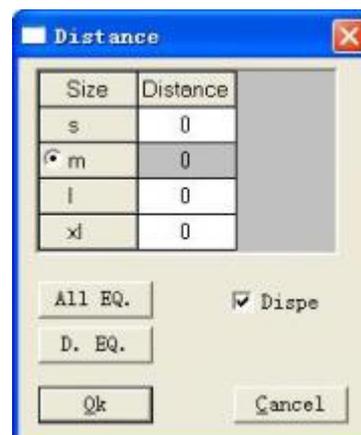
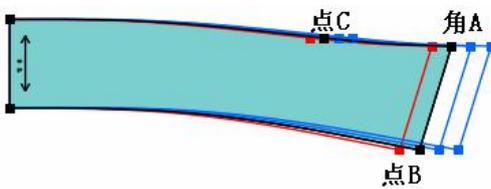
Operation:

1. Select this tool, Press shift switch adjust x  or Y  direction.
2. Click point B, Then click point A, Then click another side grading C.


**Keep angle edge ext grading**

Function:

Extend corner one side line, Make different size angle same.



See above picture, Extend point B on line AB, Make corner A different size degree same.

Operation:

1. Click point B、 Point A、 Point C, U can see Distance dialogue table;
2. Input proper value, Click ok.

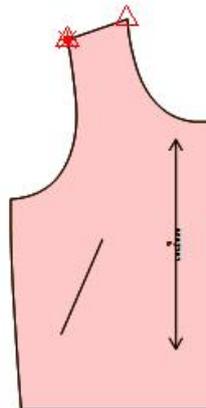
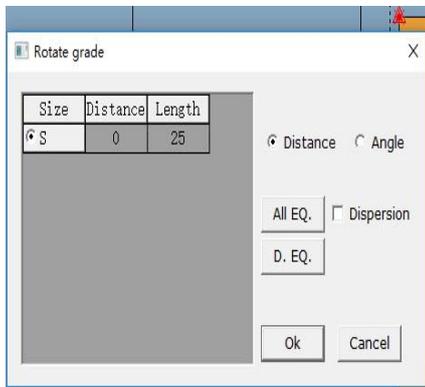


Function: It can be used for shoulders and other places at the same time to put the angle and length, but also on the side of the bag and other distance and length at the same time grading.

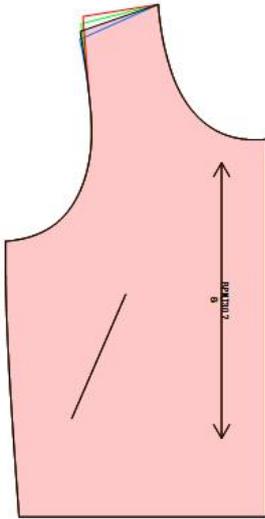
Operation:

一. angle and length grading operations

1. Click on the point you want to grading, click on the center of rotation:

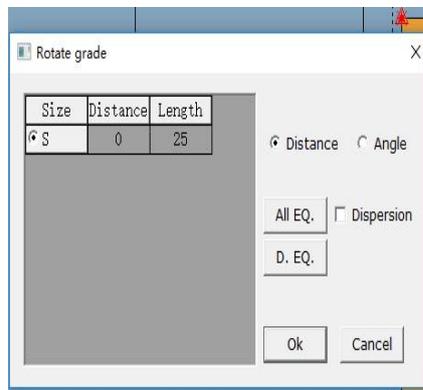
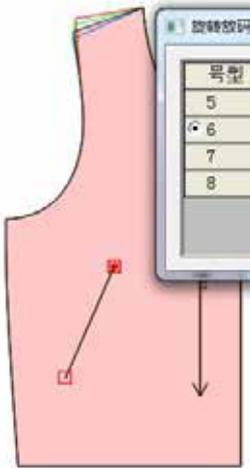


2. input the angle and length value, or enter one of the angles or lengths.

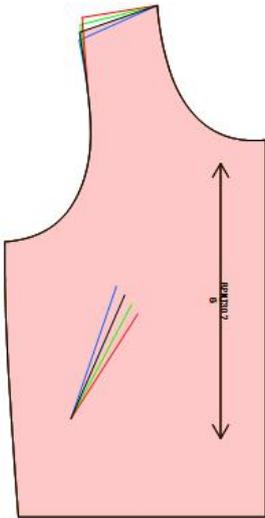


Two. distance and length operations:

1. Click on the point you want to grading, click on the center of rotation



2. Input distance and length, can also input distance or length separately.



 corresponding length/adjust XY

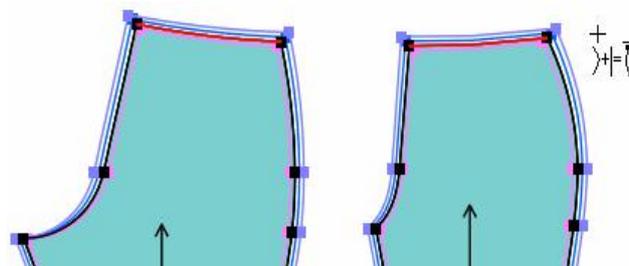
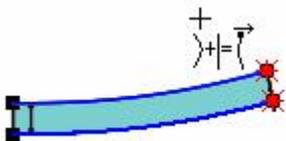
Function:

Use Multiple line of grading sum or difference to grade single point. The following figure shows how to weigh the waist with the front and back waistline.

Operation:

—: sum operation

1. Select this tool and use the SHIFT key to change between grading in the  direction and grading in the  direction.
2. Click or to select respectively the line segments to be grading. The star point is the point that needs grading, and right click, as shown in Figure 1.
3. Click or select the reference line segment, right click, (if more than two, and then right) as shown in Figure 2;
4. Figure 3 shows the final effect.



Picture1

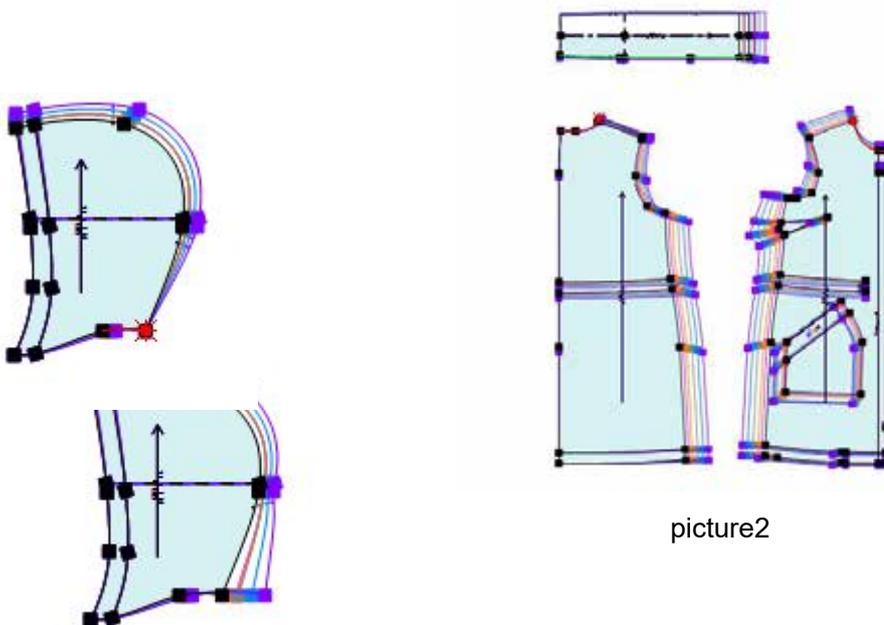
picture2



Picture3

### Difference operation

1. Select this tool and use the SHIFT key to switch between grading in the X  direction and grading in the Y  direction.
2. Click or to select the line segment to be grading. The star point is the point that needs grading, and right click, as shown in Figure 1.
- 3 respectively click or make a square to select the need to add the line segment, right click, then click on the need to reduce the line segment, right click, as shown in Figure 2;



picture2

Result



### Assembling grade

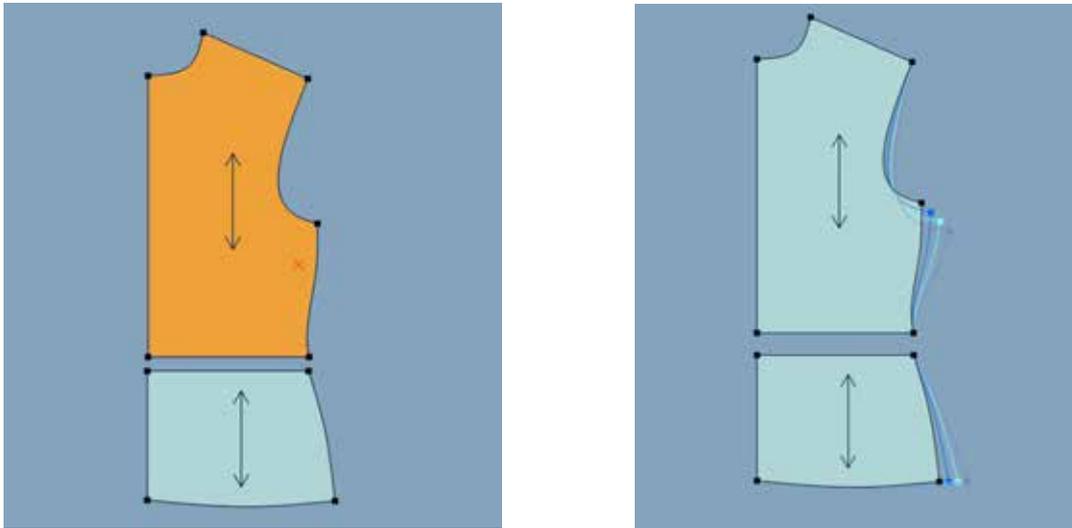
Function: It is mainly used to divide the position grading point by smooth grading of the pattern after the pattern is divided.

(The amount of grading is not released correspondingly to the entire pattern or the position is smoothly divided according to other positions.)

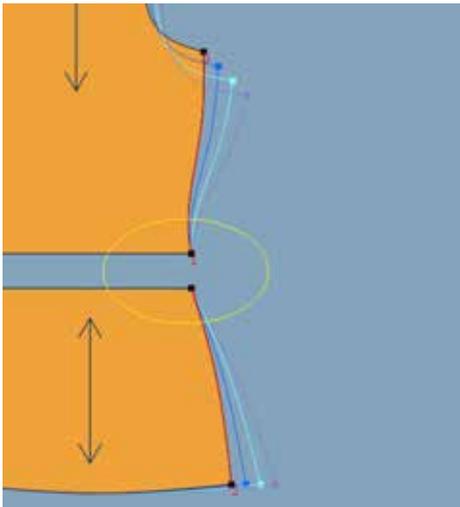
operation:

First use a split front piece as an example:

1. First grading the divided paper samples, one line segment, the previous point, and the next point;

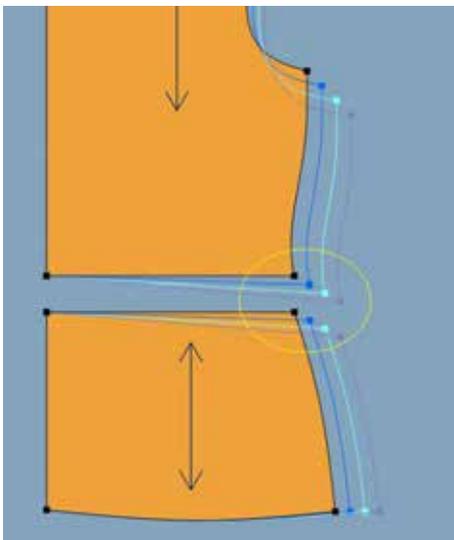


2. Click on the line segments to be merged in order.



3. According to the number 0, the number 2 is the value of the reference merge segment, so that the two ends of the digit 1 are smoothly divided (the two digits are the same as the merge position). If there are still other merges, continue clicking.

4. After selecting in order, right click to end;



## Section 5 Hide toolbar



 Zoom in          Shortcut toolbar space

Function:

It is used for zooming in or full screen appear work area object.

Operation:

Click outside need to zoom in, Drag mouse to form a rectangle, make zoom in part within rectangle, Click can zoom in. Full screen: Click right on work area.

Skill:

When use any tool, Press and hold space, Can convert to zoom in tool, scroll mouse wheel in front direction ,it is zoom in according to cursor center location, scroll mouse wheel in back direction ,it is zoom out according to cursor center location

 Parallel

Function:

Used draw a parallel line

Operation:

1. Use this tool to click on a line, then solve the edge that intersects with it, drag the cursor and click again, and the [Parallel Line] dialog box pops up.
2. Enter the value and click OK.

 Move pattern          Shortcut toolbar space

Function:

Move pattern from one place to another place, Or two pattern overlap with on point.

Operation:

1. Move pattern: Click on pattern with this tool and move to suitable, Then click.
2. two pattern overlap with on point: Click this tool, Click on pattern, Drag mouse to another pattern, When this point is selected, Then click ok.

Skill:

1. When select any tool, Move cursor on pattern, Press space, Cursor turn to move pattern , Drag to proper place then click
2. use  Select a pattern control point tool to select multiple patterns, "press" the space bar, you can become a moving pattern cursor, drag to the appropriate location and click again.



Curve

Function:

Draw curve or straight line freely.

Operation:

Draw straight line: Click two point, Click right, You can see **【 Length and angel 】** dialogue table , Input length and angel.

Two pint connection line: Click right on two point, Then click right.

Draw curve line: Click at least three point, Then click right.



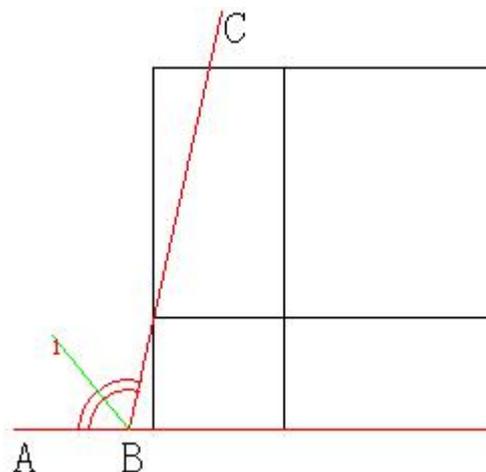
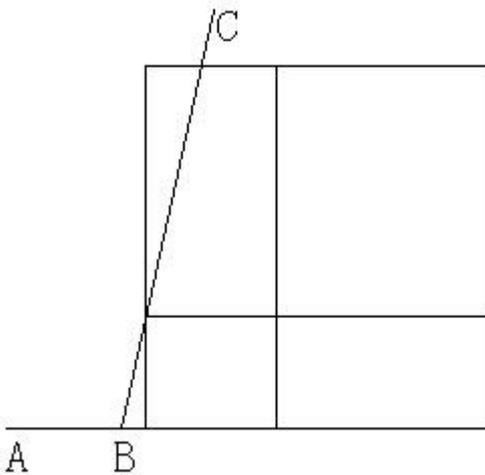
**angle bisector**

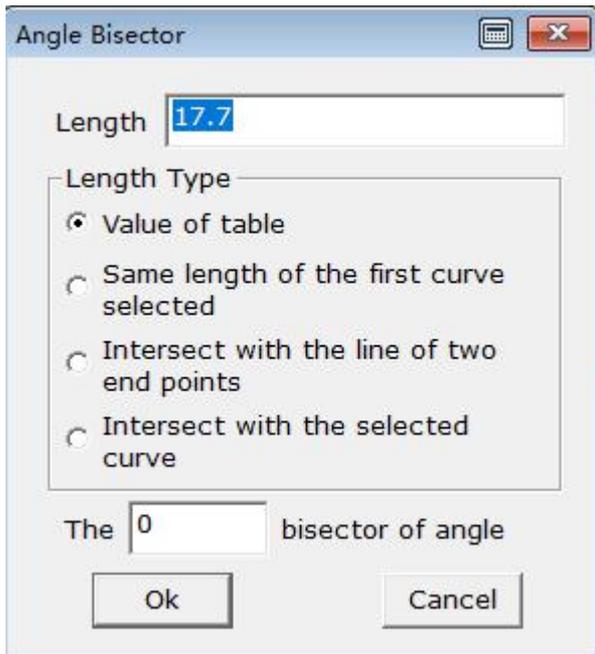
**Function:**

Divide diagonally. Both the design line and the pattern can be performed and the operation is the same.

operation:

1. make a square to select or click on two intersecting lines;
2. In the shortcut toolbar, enter the number of equal parts in the "equal box", and drag the cursor to click, and the "Angular Bisector" dialog box will pop up;





3. Enter the angle bisector length, select the appropriate option, and confirm.

[Angle Bisector] dialog box description:

Form input value: indicates that the length of the angle bisector is processed according to the data entered in the form;

Equal to the first line selected: the length of the first line selected during the point selection, and the length of any line between the two lines is selected as the angle bisector length;

Intersection with the two ends of the angle: the end of the angle bisector will fall on the line connecting the two ends of the line;

Intersect with the selected line: The end point of the angle bisector is on the selected line (only used when left-click to select the line);

The 0th angle bisector is drawn: If there are multiple angle bisectors, only one can be drawn.

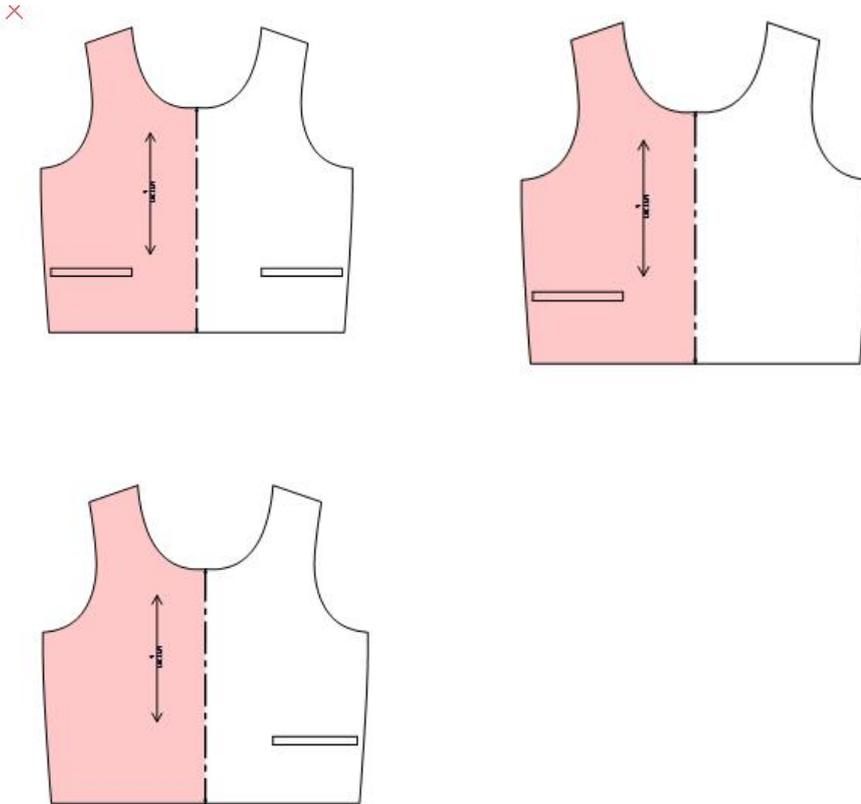


**draw symmetry side**

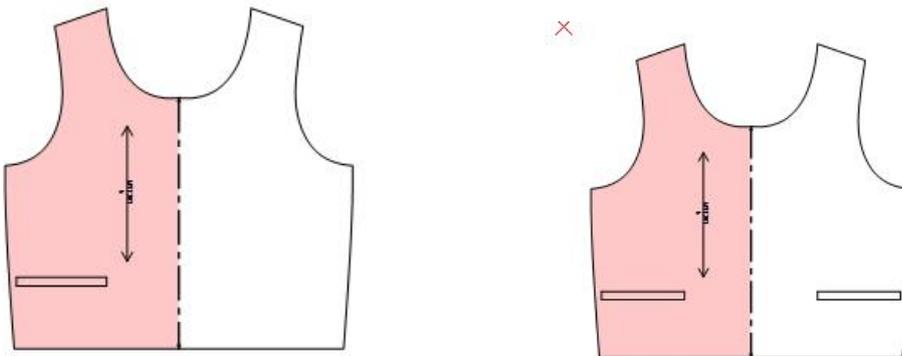
**Function:** Set whether or not the elements in the pattern after symmetry are displayed on both sides

**operation:**

1. Click on the internal graphics, auxiliary lines, drill holes, buttonholes, cuts, etc., to display them on one side.



2. Click on the one-sided display element guides, drill holes, buttonholes, cuts, etc. to make both sides symmetrical.




**Rectangle**

**Function**

Draw a rectangle in work area

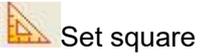
**operation:**

In the workspace, enter a value.



**Function:** Draw horizontal, vertical, or 45-degree angle lines.

**operation:** Click two points to enter data.


**Function:**

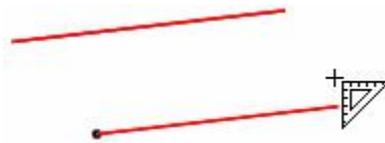
It is used for making any direction vertical or parallel line(extend line)

**Operation:**

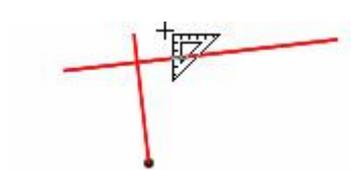
1. Click two side of line with this tool;
2. Click another point, drag mouse, Make selected line parallel line or vertical line



Original picture



Move in parallel direction



Move in vertical direction



**Function:** draw slashes at any angle.

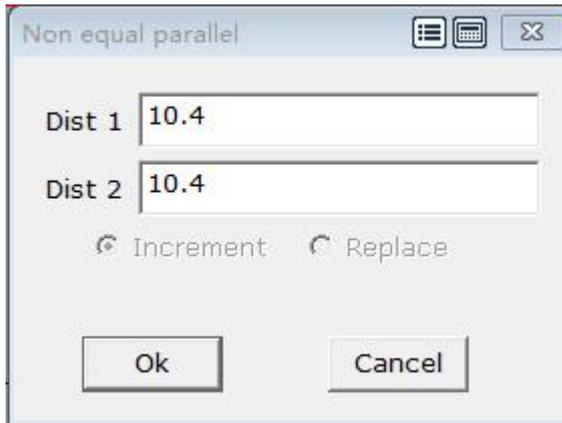
**Operation:** Click two points and enter the length and angle.



**Function:** used to draw a line of unequally spaced intersecting parallel lines

operation:

1. Use the tool to click on a line such as the line a below, drag the cursor and then click line b, line C, and the [Not Equal Parallel Line] dialog box pops up;
2. Enter the value and click OK.



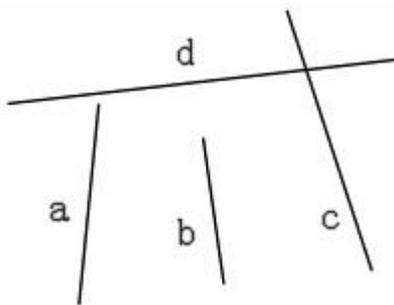
Curve align Shortcut toolbar T

Function:

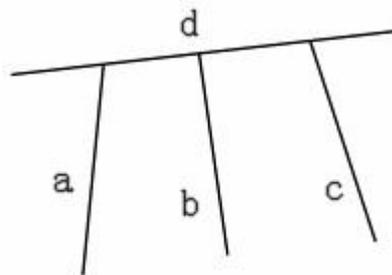
There are one way-extend and two way- extend. One way extend, extend more line to one line, Two way extend, Extend more line to two line.

Operation:

One way extend, Click or mark a square to select line abc, Then click right, Then click line d, Move cursor to proper place, Click right;

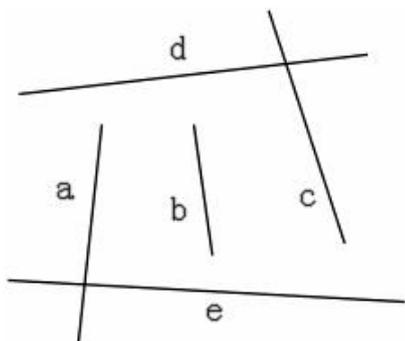


Before one way extend

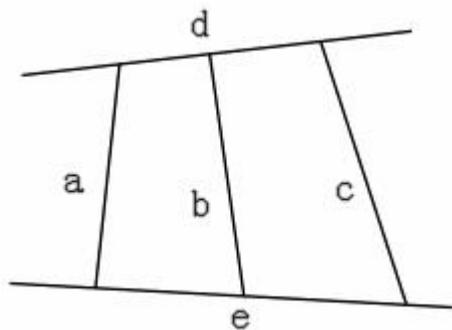


After one way extend

Two way extend, Click or marqueen select line abc, Then click right, Then click line d, e.



Before Two way extend



After two way extend

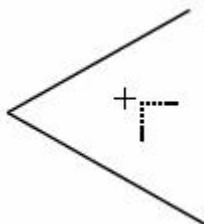
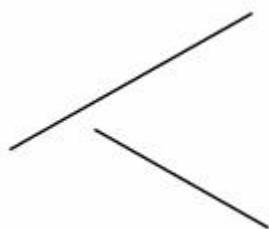


Corner

Shortcut toolbar V

Function:

Extend line until cross and delete not selected part. See following picture.



Operation:

1. Select this tool, Click one line,
2. Put on another line, Cursor colour will change, changed line is reserved line;
3. Click left or right.



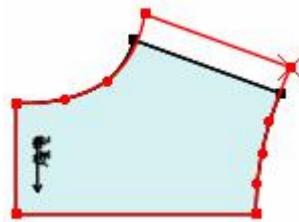
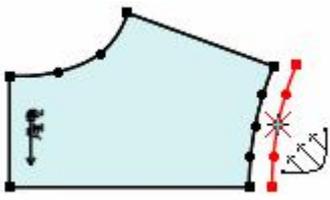
Parallel modify

Function:

Parallel modify one or more line

Operation:

1. Click or drag more point, Click blank place, You can see【Offset】dialogue table, Input Adjust value ,Click ok.
2. When drag, If move to key point, No dialogue table;
3. When drag, Press shift can adjust in horizontal ,vertical ,45 degree direction.



**Proportion adjust**

Function :

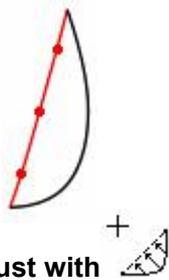
Drag one or more line in proportion, Press shift, Cursor will change

between  and 

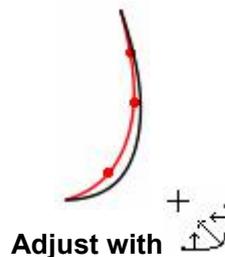
Operation:



**Original line**



**Adjust with**



**Adjust with**

1. Select this tool, Switch to proper cursor, Click one point on curve and drag (or drag one group of control point, Click key point and drag), Click on blank place, You can see **【 Offset 】** dialogue table, Input adjust value, Click ok;

2. When drag, if move to key point, do not appear dialogue table;

3. When drag, Press shift can adjust in horizontal ,vertical ,45 degree direction


**offset point**

Function:

Make a reference point offset point.

Operation:

Click on the reference point and drag it to enter the offset size.

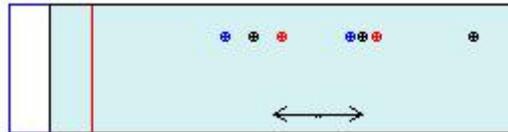
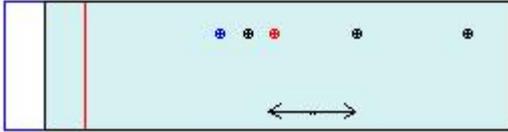

**Split** (drill , buttonhole)

Function:

It is used for split related drill or button hole group. After splitting, Each button hole or drill can be graded separately.

Operation:

Click buttonhole or drill.



Grade button after splitting

Grade button no split


**Custom curve**

Function:

1. It is used for saving curve which is defined by user
2. It is used for modifying “ custom cuve” property( height、 distance), Like star shape, triangle shape curve.

Operation:

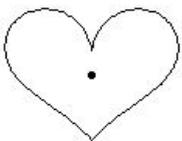
Save “custom curve”:

1.Draw line type which need to save and confirm the line type point (must appoint) ,Checking following picture: 

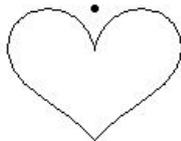
2.Click or make a square to select above shape, Then right click ,then click point, U can see following **【Save as】** dialogue table

3. Input file name then click ok.

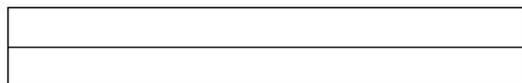
Different point place , Line place is different.



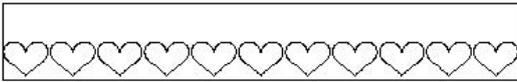
Picture A



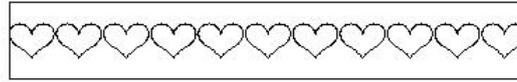
Picture B



Picture C



Picture A'



Picture B'

After checking picture C with line A, U can see the result of picture A;

After checking picture C with line A, U can see the result of picture B;

Note: If you want to open the saved curve type, click "Custom" under the "Line Type" drop-down menu in the shortcut bar.

Modify user-defined curve property:

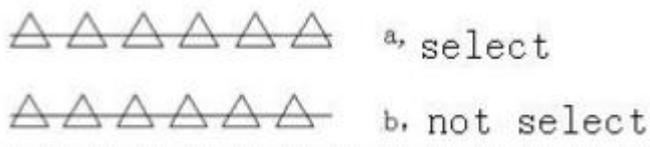
1. Click user-defined curve, U can see **【Custom curve】** dialogue;



2. Input height and Gap etc, Then click ok.

**【Custom curve】** Dialogue parameter explanation:

1. Height: The highest height of curve;
2. When "adaptive stretch" is not select, The minimum distance of two figure;
3. Adaptive stretch: Following picture is equal length line. Straight line is for showing stretch or not stretch. Line a : Stretch, Line b: Not stretch ( For checking difference)



4. Gradient: The custom curve can be from large to small, from small to large, from the beginning to the end of the line.

5. Disperse: If unchecked, the designed curve is an integral one, which is performed as a whole when adjusting or grading.



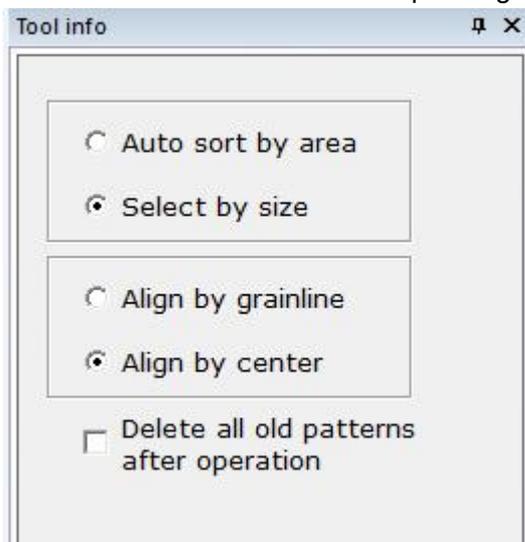
Graded nest of patterns

Function:

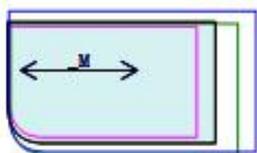
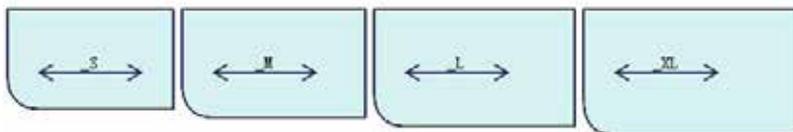
Overlap more separate pattern to nest pattern. For example, Pattern is read to dgs with digitizer, you can overlap to nest pattern.

Operation:

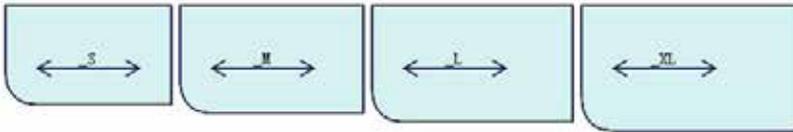
1. Select this tool and the corresponding content will appear on the toolbar.



2. Select the pattern selected by area. At the same time, select to align the endpoints of the grain lines. Then use this tool to click or select the pattern to merge the endpoints of the grain lines.

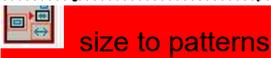


3. Select the pattern by area, and select the center of the pattern by clicking Align. Then use this tool to click or frame the pattern to align the center point.



Select the pattern type by number, choose to align the endpoints of the grain lines, click the basic size M, and then click respectively in the order from the smallest to the largest (excluding the S-L-XL base size).

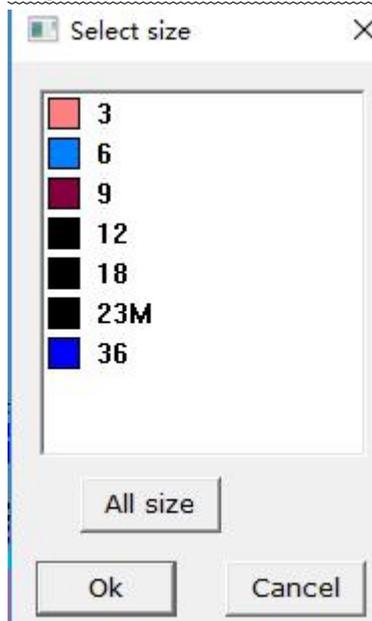
4. Select the pattern type by number, press to align with the center point, click the basic size M, and then click one by one in order (except S-L-XL base size).



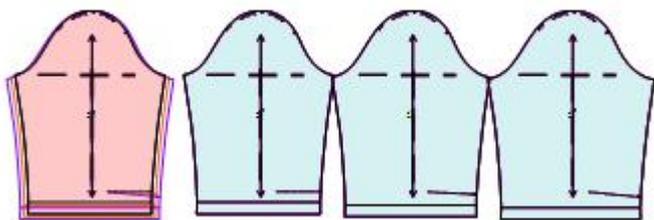
Function:

Mesh patterns (grading patterns) are separated by a single size display. This function is often used for plot operation:

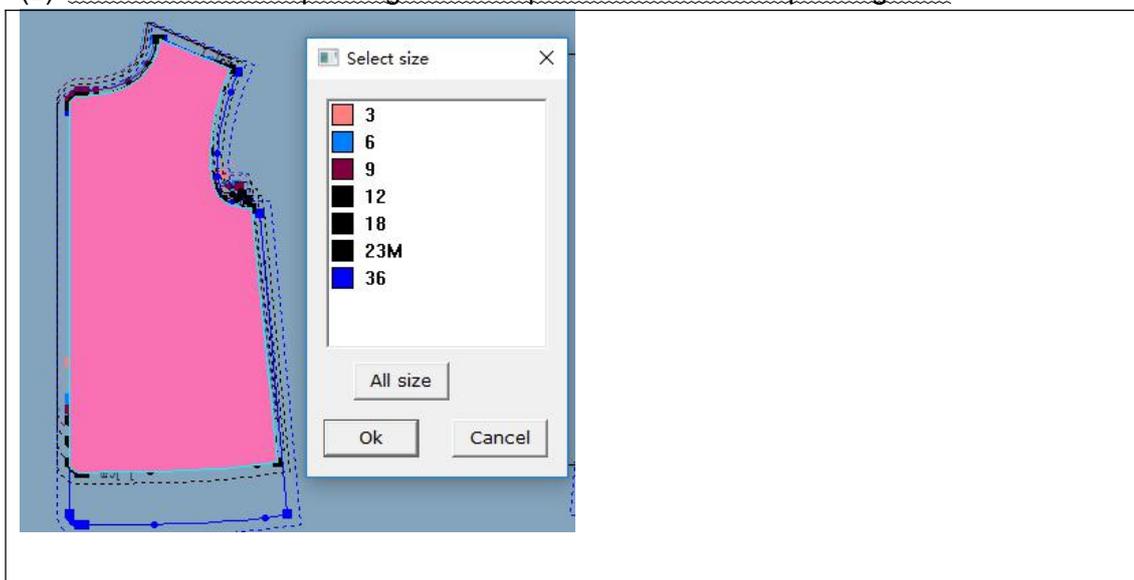
1. Select the mesh pattern that requires a single size display;
2. Use this tool to click on the pattern, a dialog box appears;



(1) If all size are selected, the grading pattern will be displayed in descending order.



(2) Click on the corresponding size to separate out the corresponding size.



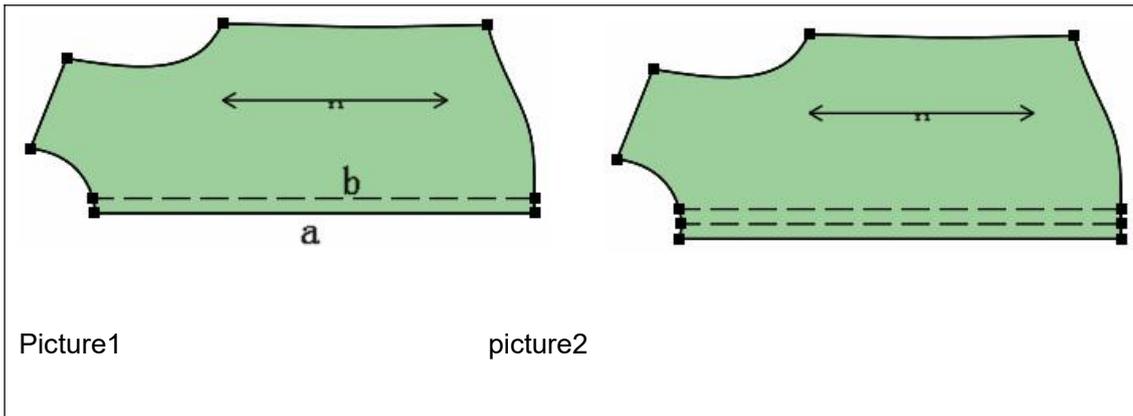
### Fold out pattern

#### Function:

Symmetrically copy the part pattern.

operation:

As shown in the figure below, Symmetrically copy the threshold.



1. As shown in Figure 1, use this tool to click the center line a or the center line on both ends;
2. Then click the line that needs symmetry, as shown above a line b;
3. Figure 2 is the result of symmetric replication.



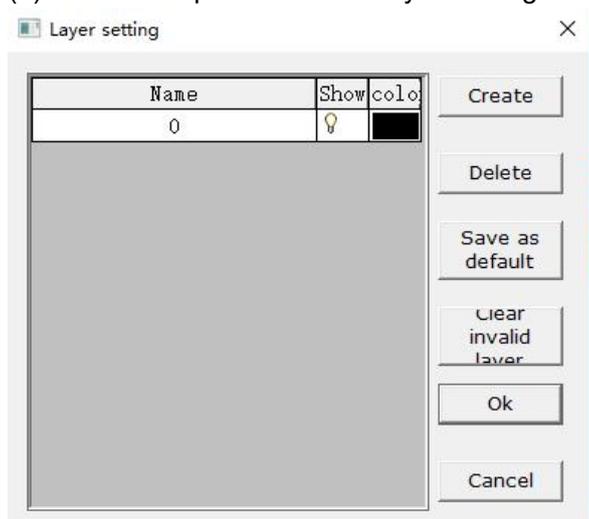
Set layer

1. Function:

Individually set to show/hide each layer and line color and line type; when there are too many design lines, it can be set to partially hidden and used only for design lines.

2. Layered concrete operation

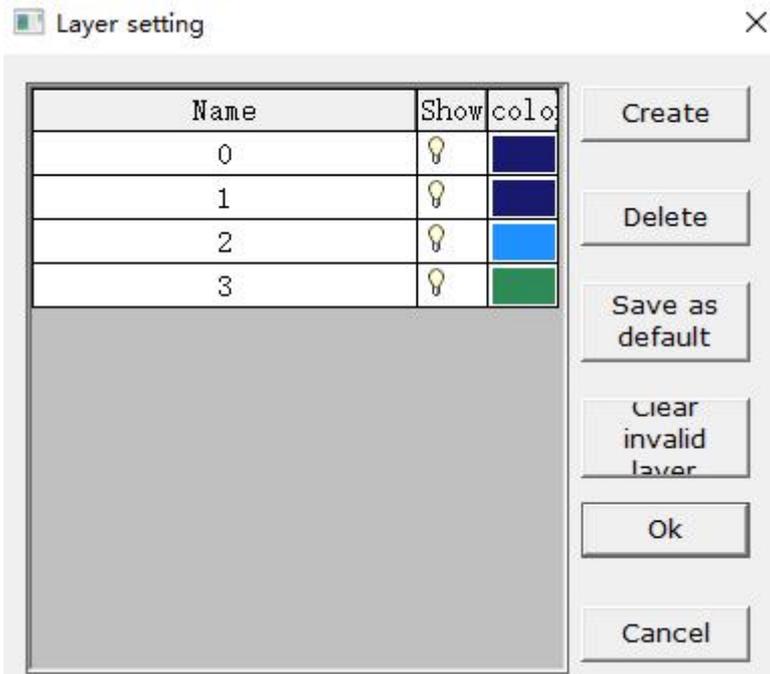
(1) Click the Options menu - Layer Settings. The Layer Settings dialog box appears.



(2) Layer Settings dialog box explains

- a. Click create layer, you can add multiple layers, you can enter the desired name in the layer name
- b. Click on the color behind the layer to modify the color

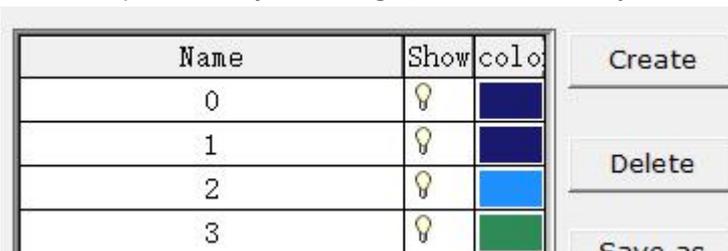
C. Click on the display, when , display the corresponding layer, when it is  |, Hide the corresponding layer.



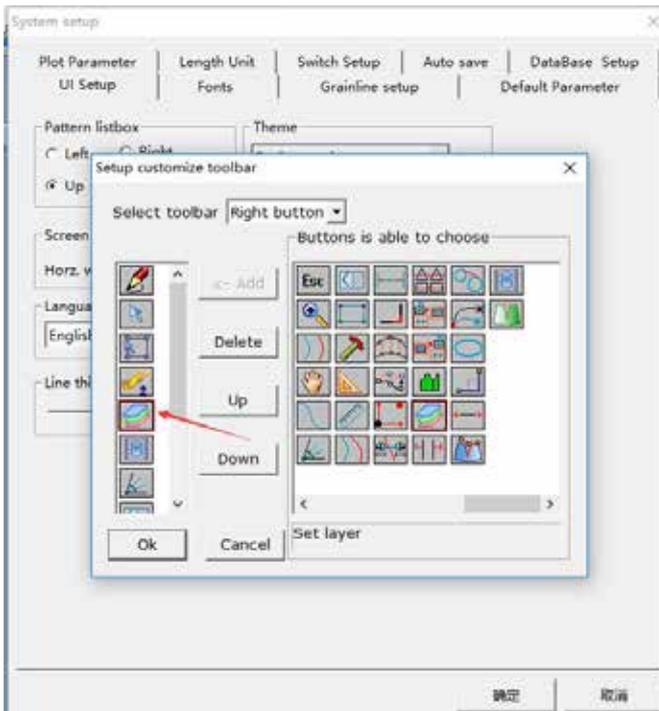
d. Click the corresponding layer name, select Delete Layer or Clear Invalid Layer to delete the layer.

(3) Set the existing line to the corresponding layer

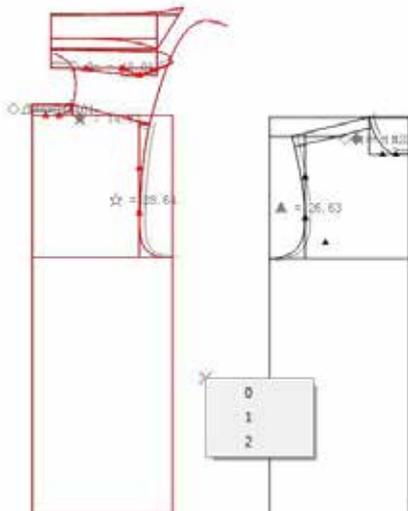
a. Click Options - Layer Settings , create a new layer



a. Click Options - System Settings - Toolbar Configuration - Add Layer Settings Tool to the right key. Right key to Select Layer Settings Tool 



C. Use this tool , Select the desired line, right click, select Layer, and place the line on the corresponding layer.

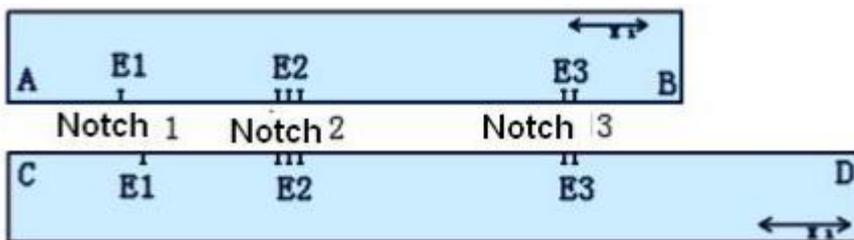


 Equal notch

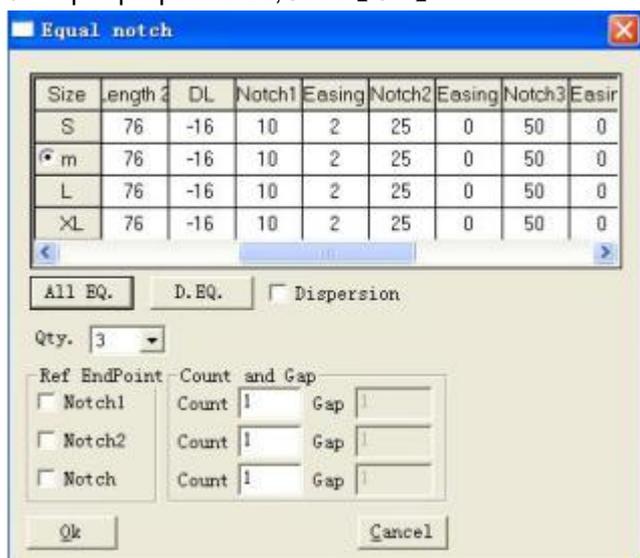
Function:

Add notch at two group line, Also can add easing.

**Operation:**



1. Click or make a square select line AB near point A with this tool,Click right;
2. .Click or make a square select line CD near point C,Click right,You can see **【Equal notch dialogue】** table;
3. Input proper value,Click **【OK】**



**【Equal notch】** Dialogue table parameter presentation

**【length 1】:** Select line length before clicking right

**【length 2】:** Select line length after clicking right

**【DL】:** Dispersion of two group line

**【Notch 1】:** For example, Value 10 is AE1 Length in notch 1,CE1 length is sum of notch and easing,total is 12

**【Notch 2】:** Check above picture, Notch two value is 25,AE2 length;CE2 length is sum of notch 2 value and easing ,total is 25;

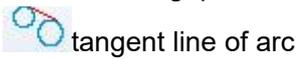
**【Notch 3】:** Check above picture, In notch 3, Value 50 is length of AE3, CE3 is sum of notch and casing.

**【ALL EQ.】 【】 【D.EQ.】:** Refer pleat dialogue table

**【 Qty 】:** When select 1, Only open one group notch, When select 2, Can open two group notch, When select 3, Can open three group notch;

**【Ref End point】:** Before click Notch 1、Notch2、Notch 3, Set place with selected line starting point, Select, Set place with selected line end point;

**【Count and gap】:** Set different notch number and gap.



tangent line of arc

Function:

Make a point to the tangent between circles or circles. It can be operated on the design line or on the auxiliary line of the pattern.

Operation:

1. Click on a point or circle;
2. Click another circle to make a point to circle or tangent between two circles.



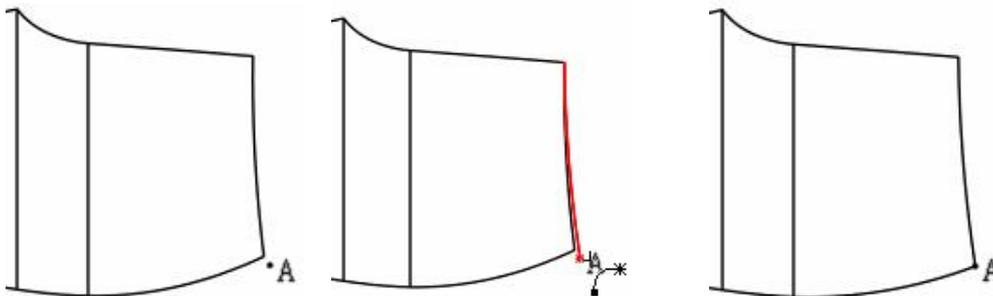
**Stretch**

Function:

Freely stretch a curve or line to a location

Operation:

1. make a square to Select or click on the line, one end of the line can be moved freely (the target point must be visible), as shown below.



Original picture

In operation

result

Move point description:

In the case of make a square or click line, The end point that is closer to the make a square select or click is

the modification point (the bright star is displayed).If you adjust two lines on a pattern, drag the first and last points of the two lines. The first selected point is the modification point (shown with a bright star).



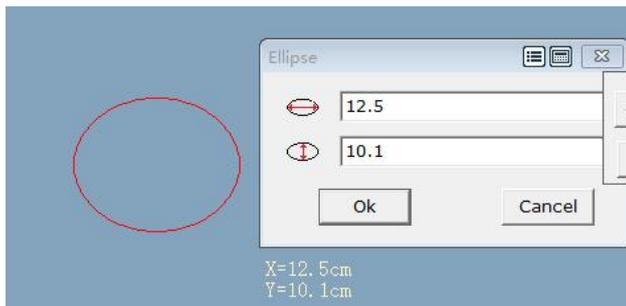
Ellipse

Function:

Draw an ellipse on a sketch or a pattern.

Operation:

1. Use this tool to click and drag in the workspace and click again to pop up the dialog box;



2. Enter the appropriate value and click "OK"



Horz or vertical line

Function:

Formed a right-angle line on two point(include cross point or outside point)



Operation:

Click one point, Then click right to switch horizontal or vertical line location, Then click another point



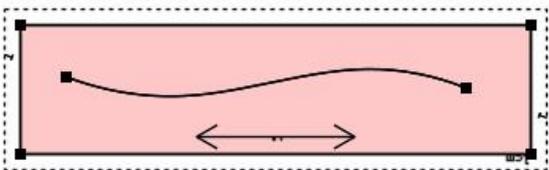
Assistant curve notch

Function:

Add notch on the auxiliary line pointing to the edge,When adjusting the direction of the end of the auxiliary line, the position of the notch is adjusted accordingly

**Operation:**

1. 5. Use this tool to click or make a square select one end of the auxiliary line, and only add a notch to the edge near this end;
2. If the middle section of the auxiliary line is make a square selected, both ends of the line are added with a notch, as shown below
3. Use this tool to right click on the auxiliary line clip to change the notch properties.



**Note:** use this tool add notch on seam allowance pattern, notch will appear in seam line.



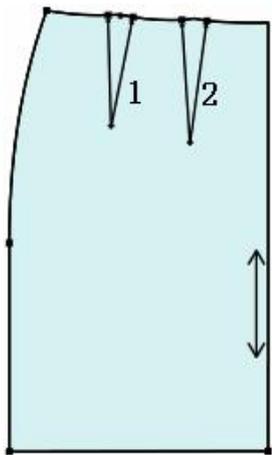
Adjust with dart or pleat merged

**Function:**

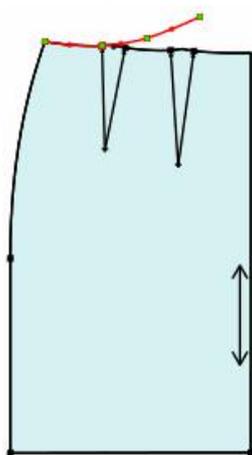
It is used to combine dart and pleat, then adjust, Only suitable pattern

**Operation:**

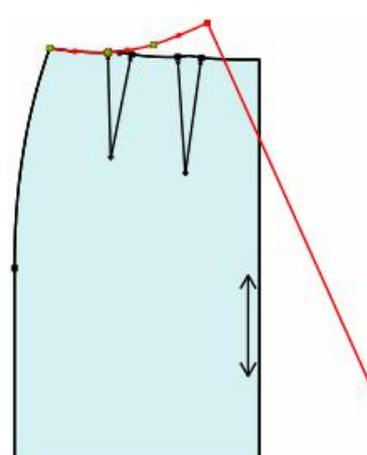
1. Like picture 1, Click dart 1 and dart 2, then click right to finish, like picture 2;
2. Click center line, Click picture 2, Adjust waist line with this tool, click right to finish.



Picture1



Picture2



Picture3



Unit lib

**Function:**

Transfer a part from one style to another without repeating

Part I: Saving Unit lib

**Operation:**

1, select the curve or pattern, click the right to end

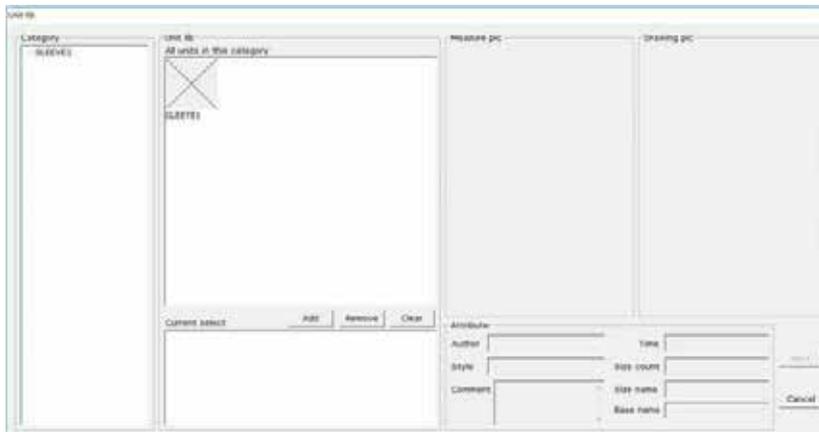
2, fill in the data in the dialog box, ok

the description of the choice of content

1. Parts can be collars, sleeves, or other parts. Only those lines and patterns related to the parts need to be selected. Unrelated elements are not selected.

2. Not selected curves and patterns will not appear in the parts library

the description of the various functions of the dialog box


**Dialog function description**

- 1、 Parts should belong to a certain category, such as men's, women's, children's wear, etc., can have sub-categories
- 2、 in any of the categories, you can press the right mouse button pop-up menu, perform insert, delete, rename
- 3、 Default is the default component library provided by richpeace Software. The official components will appear here.
- 4、 Default can not be deleted or renamed by right click menu, other categories can be.
- 5、 The name of each category is the name of the folder. They are all in the Unit Lib folder.
- 6、 When inserting a category, the software will use that name to create a folder with an invalid character

- 7、 When deleting a category, if there is no Unit lib in the category, delete it directly; otherwise, a dialog box pops up to confirm deletion
- 8、 The deleted Unit Lib is located in the recycle bin. If it is deleted by mistake, the customer restores itself.
- 1、 this is a picture, used to indicate the actual effect of the componen
- Classification chart 2、 when loading the component Unit lib, the picture will appear in the list box
- 3、 This picture can be made smaller because it will be reduced to 80\*80 pixel display in the list box
- 1、 A picture showing the names and locations of parts in various parts
- Size chart 2、 this picture can be done a little bigger, the contents of the picture may be many
- 3、 The aspect ratio of the display is 3:2. Making the picture into this ratio will make it look better
- 1、 the list box shows all the sizes in the file
- Select the relevant size 2、 Select the size related to the current component, the unrelated size is not recommended to choose, to avoid the file is too large
- 【name】 Is the name of the Unit Lib , and also the file name of theUnit Lib file. It is forbidden to include“? \* / <> : " |”Etc., If there are illegal characters in the name, a prompt will pop up
- Attributes 【author】 【size】 Optional, can not fill in
- 【Note】 This paragraph can have more than one line, you can not fill in

## Part II: Loading the Unit lib

### One. Operation

- 1, click the [File] menu → [Unit lib]
- 2, in the pop-up dialog box to select parts (you can select multiple parts), click [Next]
- 3, click each part, select the size of the treatment, click [OK]
- 4, each part is displayed in the work area, distinguish by color, and display the part name in the upper left corner, drag the location, press the right end

### Two. the interface (Dialog 1)

#### the interface (Dialog 1)

- classification
1. Select the category in this window. After selection, all components in the category will be displayed on the right
  - 2, the dialog box will default to the last selected category
  - 3, the displayed category does not provide a right-click menu, only select

**【All parts of this category】**

- 1, shows all the components, if you specify the classification picture when generating the Unit lib, then display it, otherwise show X
2. Click on a part whose dimension and design picture are shown on the right (if present)
3. Click on a part whose name is shown in parentheses and above the list box. If the part name is long, it cannot be displayed in the list box, customers can view it here
- 4, click the [Add] button to select the parts
- 5, Double click on the component can also be selected

Unit lib

**【Selected parts】**

1. Selected parts are displayed here
- 2, can switch classification, select the different components under the classification
3. Click on a part, its dimension and structure will be displayed on the right side (if any)
- 4, click [Remove] button, the part is unchecked
- 5, double click parts can also be removed
6. Click [Empty] button, no parts are selected
1. If you specify a dimension drawing when creating a unit lib, it will be displayed here

Dimensions

2. If it is an old component with an extension of fgs or pds, the software will look for the bmp file with the same name and display it (if it exists).

Design picture

1. When the part is generated, select the curve and pattern on the screen
  2. This picture is automatically generated and is not allowed to specify
- The contents of this category are read-only, can only be viewed, cannot be edited

Attributes

- 【author】【size】【Note】** It is the content when the component is saved
- 【save time】【size amount】【size name】【Base size name】** Generated automatically

next step

- Select several parts and click [Next]. If no part is selected, this button is disabled.

Three:the interface (Dialog 2)

the interface (Dialog 2)

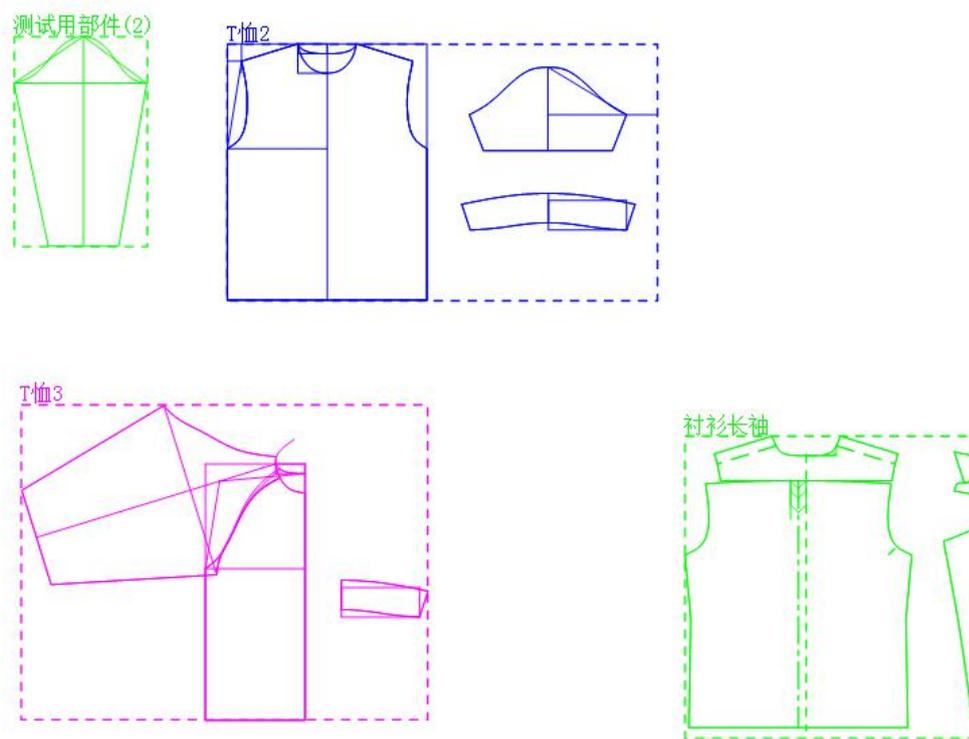
**【Keep unit lib size】**This means that these dimensions must be equal to the values in the unit lib. If the name already exists in the current style, it will be renamed

Size

**【Use the size of the style】** Refers to the fact that these sizes are already present in the current style, the values in the style are used directly, and the dimension names are not modified

- Last step      If the selected part is not required by the customer, you can click [Back] to add or remove it.
- Ok                1. Click [OK], the selected part is loaded into the current style and displayed in the workspace
2. For each component, if its number and base number are different from the current style, the software will automatically add/delete type numbers.

Four: the interface (work area)



- 1, the loaded parts are displayed in the workspace, you can zoom the screen to view
- 2, use the second, third, fourth operation color alternate display parts
3. On the outside of each part, use a dashed line to display a rectangle identifying the range of the part
- 4, in the upper left corner of each rectangle, the name of the component is displayed

5, grab parts, will be displayed in the first operation color, click to drag the location

6, the end of the unit lib



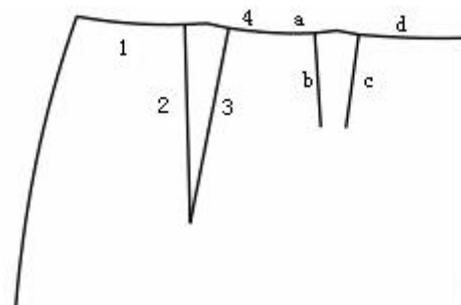
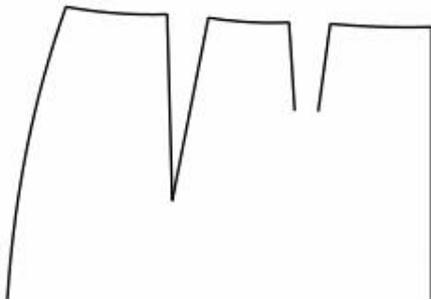
### Dart line

**Function:** Add dart line to dart, Can be used in design line

**Operation:**

1. Select this tool, Click curve or fold line which is close to one side( As below figure, First click line 1, Then click line 2);

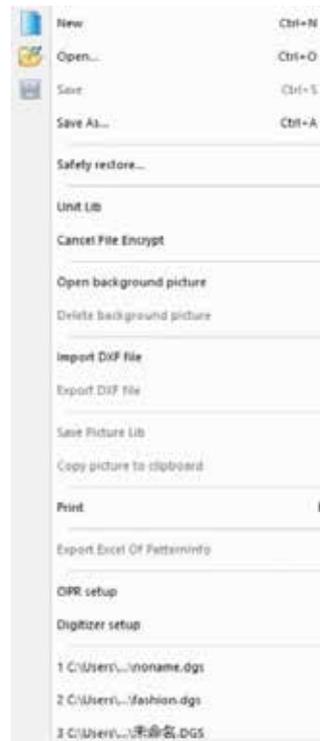
3. Select this tool, Click curve or fold line which is close to another side As below figure, First click line 3, Then click line 4);If dart direction towards middle, You can click 4、3、2、1, d、 c、 b、 a.



## Section6 Menu Bar

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### File menu



- **Save as (A) Ctrl+A**

#### Function:

It is used for back up current file.

#### Operation:

Click **【File】** menu- **【Save as】** ,You can see **【Save as】** dialogue table, Input new file name and change path ,You can save current file, For details,Please refer  **【Save】** explanation

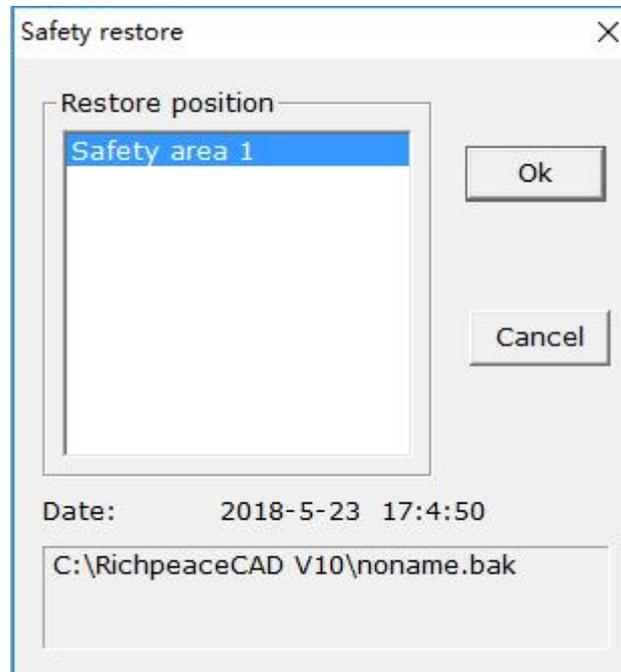
- **Safety restore**

#### Function:

There is no time to save the file due to power failure. Use this command to get it back.

#### Operation:

1. Open the system;
2. Click **【File】** menu- **【Safety restore】** ,You can see **【Safety restore】** dialogue table;
3. Select the appropriate file and click OK.

**Note:**

If want to safety restore effect, Must click **【Option】** Menu- **【System setup】** - **【Auto save】** , Select **【Use Auto Save】** option.

- **Cancel File Encrypt**

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**Function:**

Need to be canceled by the Richpeace company's professional personnel.

- **Open Background picture**

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Function: Open the picture scanned with a digital camera or scanner, and then trace in DGS.

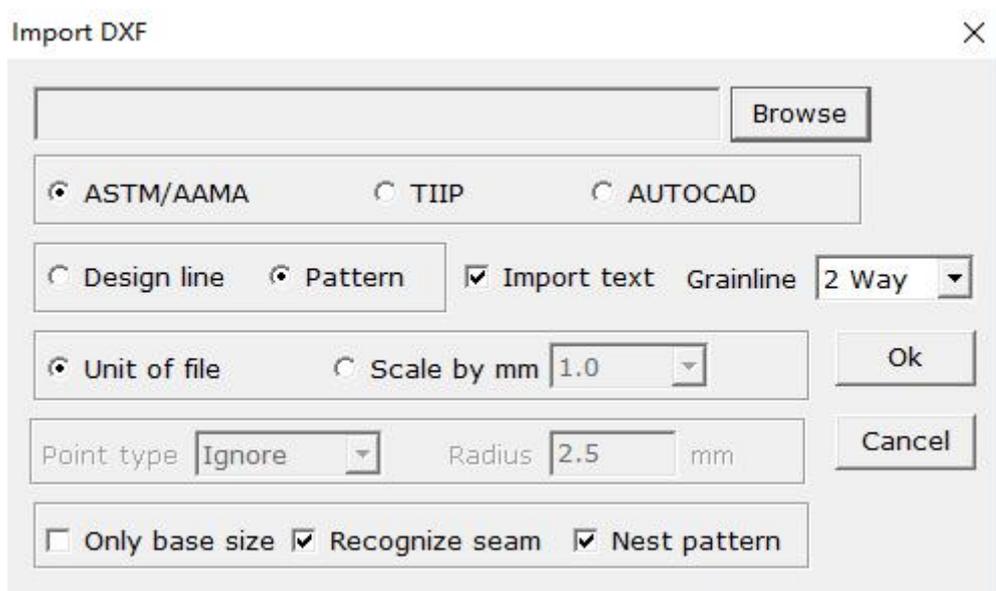
- **Import DXF file**

**Function:**

Open the international standard format DXF file converted by other software.

**Operation:**

Click on File - Import DXF file and the following dialog will appear:


**【Import DXF】 Parameter Description:**

**ASTM/AAMA:** AAMA/ASTM format file, this format is an international common format, click browse, select the file path, click on the file name .All the pattern were read.

**Scale by mm:**According to the actual situation, different proportions can be selected to input in this software;

**Import text:**Select, the original text exists after imported the file , otherwise only the pattern is imported;

**Only base size:** select, even if import a grading file, there is only the base size, otherwise all the sizes of the original file are imported;

**Recognize seam:** Select,there is a seam display after the seamed files are imported (the position of the original seams is indicated by shadows below the seams). Otherwise, the file is displayed as an auxiliary line.

**Nest pattern:** For all patterns, there is no rul file in the dxf file. If you choose to nest, the software will nest the non-base size into the base size.If there is no choice, all the sizes are read in according to the file data, and of adjust the base size,other sizes will not follow .

**Grain line:** The optional grain line after reading is1-way,2-way, Any way, etc.

**TIIP:** Used to open Japanese \*.dxf pattern files, TIIP is Japanese file format. Click Browse, select the file path, and click on the file name. All the paper samples were read.

**Note:** Read the string font default system settings T text fonts, such as reading Japanese files, T text can be set in advance to Japanese font (Option menu - System setup-Fonts - Text- Set - MS Gothic, character set selected Japanese) .

**【Auto CAD】** : To open the DXF file exported by Auto CAD, you can select to open the pattern or design line, select the file path, and click on the file name.

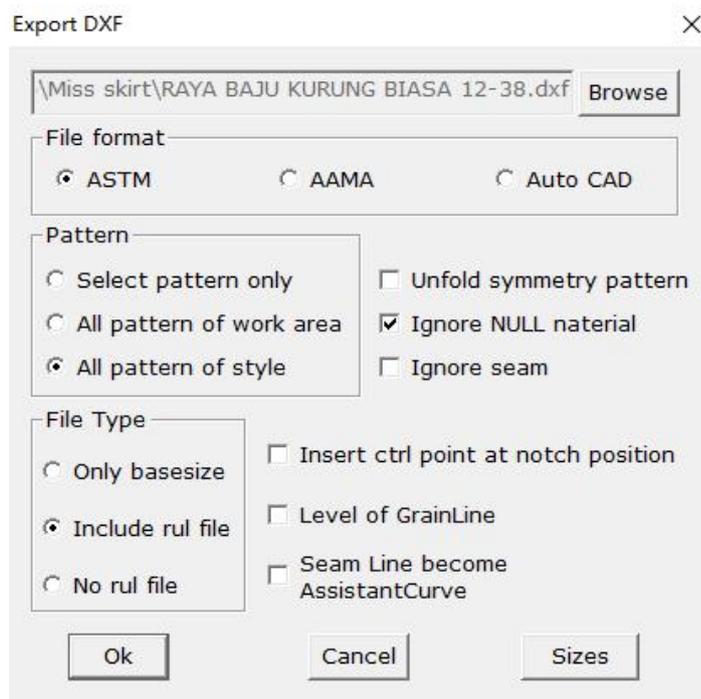
- **Export DXF file**

**Function:**

Convert this software file to AAM or ASTM format file.

**Operation:**

1. Click **【File】** menu-- **【Export DXF file】** ,You can see **【Export DXF】** dialogue table;
2. Select the appropriate option, click Browse, enter the saved file name, and click OK.



**【Export DXF】 Parameter Description:**

File format:

**ASTM/AAMA:** International standard format for output standards.

**Auto CAD:** Export DXF files in AUTO CAD format.

**Export Pattern:**

You can choose to export the selected pattern, the pattern of work area , or all pattern of style.

**Unfold symmetry pattern:** Check this option,the symmetric pattern will export after unfolded, otherwise only half of the symmetric pattern will be export (with an axis of symmetry).

**Ignore NULL material:** Check this option. Patterns without a fabric name will not be export, otherwise they will be export.

**File type:**

**Only base size:**Select this option to export only the base size even when exporting a grading file.

**Include rul file:**When this option is selected, the exported file contains a RUL file with the same name in addition to the DXF file. If the number of drill or button hole for each size of the grading file is different, the output is based on the number of base sizes. This option does not output quilt or sew line;

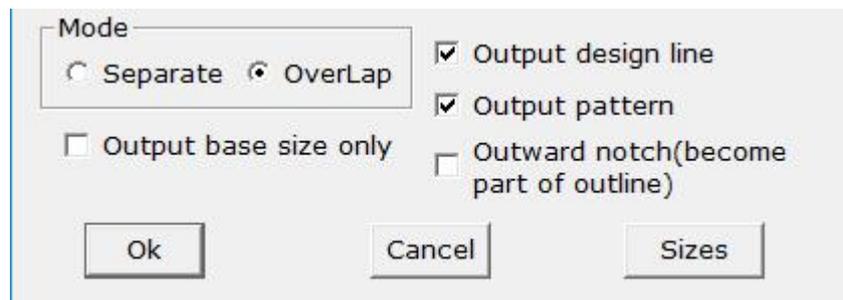
**No rul file:**Select this option to have all the contents of the output file in the DXF file. This option is for quilt, and sew line output;

**Insert Ctrl point at notch position:** Select, when export notch, there are control points below the notch; otherwise there is no control point under the notch;

**Level of Grain line:** Select, the exported pattern is a pattern rotated horizontally by grain line;

**Seam line become Assistant Curve:** check this item when exporting. When reading with Lectra software, seam line become Assistant Curve.

After selecting AUTO CAD dxf:



**Can choose to separate or overlap, can also choose to output the design line or pattern;**

**Outward notch(become part of the outline):** When this option is checked, the inner notch of the exported pattern becomes "outward notch", and the outward notch actually becomes part of the outline.

## ● Save Picture Lib

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### Function:

Use together with with 【pic lib】 tool .

### Operation:

1. Make a square to select objective line with  tool ,Then click right,See following picture;



2. Design line is surrounded by a dashed frame.

3. Click the 【File】 menu——【Save Picture Lib】, Pop-up 【Save Picture Lib】 dialog box, Select the storage path and input name, click 【Save】

## ● Copy Craft picture lib to clipboard

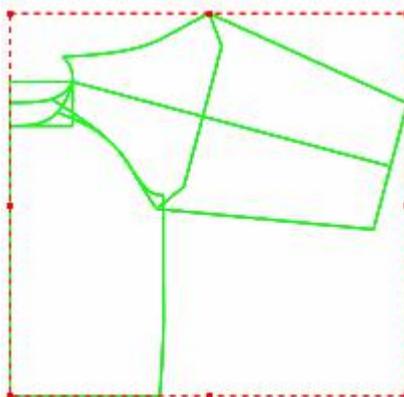
---

### Function:

This command works with  Pic Lib,copy the selected design line as a picture on the clipboard.

### Operation:

1. Choose  Pic Lib tool,make a square to select the design line,click right,check following picture;



2. Design line is surrounded by a dashed frame.

3. Click **【File】** menu - **【Copy Craft picture to Clipboard】** , and the selected design line is copied.
4. Open the OFFICE software, such as EXCEL or WORD, and use the paste commands in these software , copy the bitmaps and paste them into the software, can assist in filling out the process sheet.

### ● **Print- measure table**

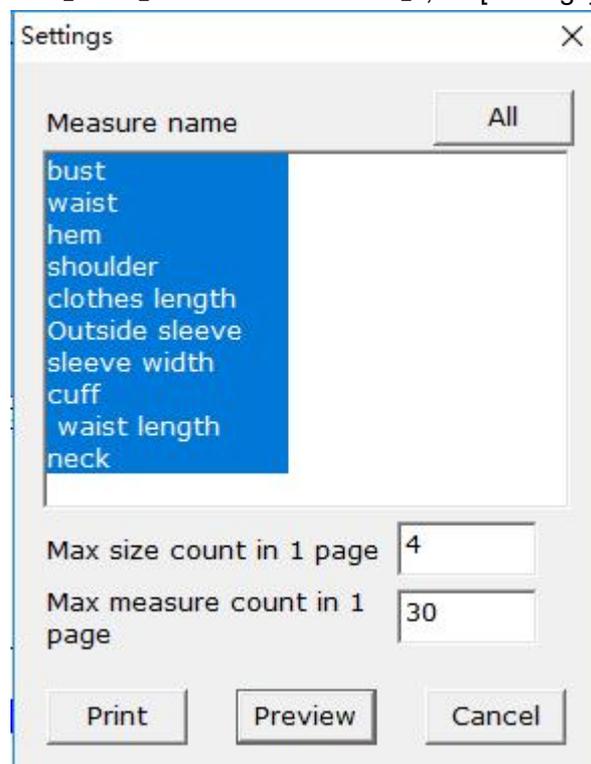
---

#### **Function:**

This command is used to print measure table.

#### **Operation:**

1. Click **【File】** menu ---- **【Print】** - **【Print measure table】** ,the [Settings] dialog box appears.



2. You can select the size you want (blue is the desired size), and you can also select all sizes
3. Set the maximum number of sizes to be output per page. For example, if there are 10 sizes, input 5, then the first page and the second page have 5 sizes respectively.
4. The maximum number of human body size to be output per page: For example, there are 40 body sizes ,input 30.Then the first 30 body sizes, such as bust, waistline, etc. are displayed on the first page, and the remaining 10 body sizes are displayed on the second page.

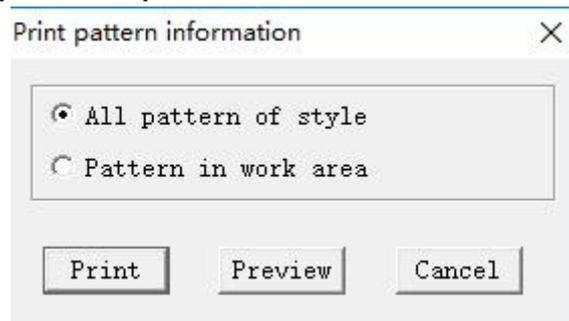
### ● **Print-pattern info**

**Function:**

It is used for print pattern detailed data, For example pattern name, Comment, material, Quantity etc.

**Operation:**

Click **【file】** menu-- **【Print pattern info】** ,You can see **【print pattern information】** dialogue table,Select proper option, Click **【print】**

**【print pattern information】 parameter presentation:**

**【All pattern of style】** This command is the default value of dialogue table ,Press **【Print】** ,Can Print all the pattern and pattern information one by one.

**【Pattern in work area】** This option only print pattern in work area.First Put all the pattern that need to print information in the work area, Then select this option, Click**【Print】** ,Can print pattern and pattern information in work area.

**【Preview】** Click to pop up the preview interface.

Noted:

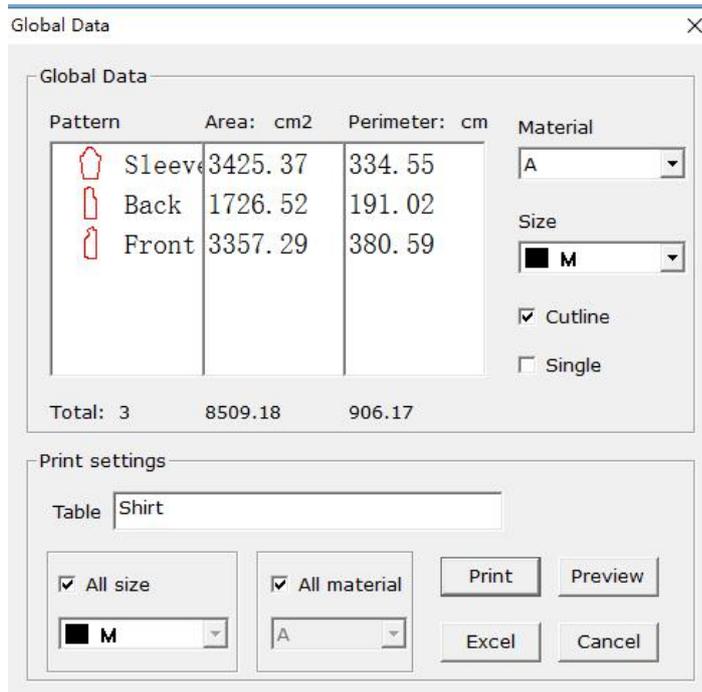
If the printed text is garbled, please check the "Options" menu - "System Setup" - "Interface Setup" - "Language ", select the language corresponding to the version you use.

- **Print-Style info**

---

**Function:**

It is used for printing all the pattern style information,and display them together.

**【Global data】 parameter presentation:**


Global Data

Pattern	Area: cm2	Perimeter: cm	Material
 Sleeve	3425.37	334.55	A
 Back	1726.52	191.02	
 Front	3357.29	380.59	
Total: 3      8509.18      906.17			

Material: A

Size: M

Cutline  
 Single

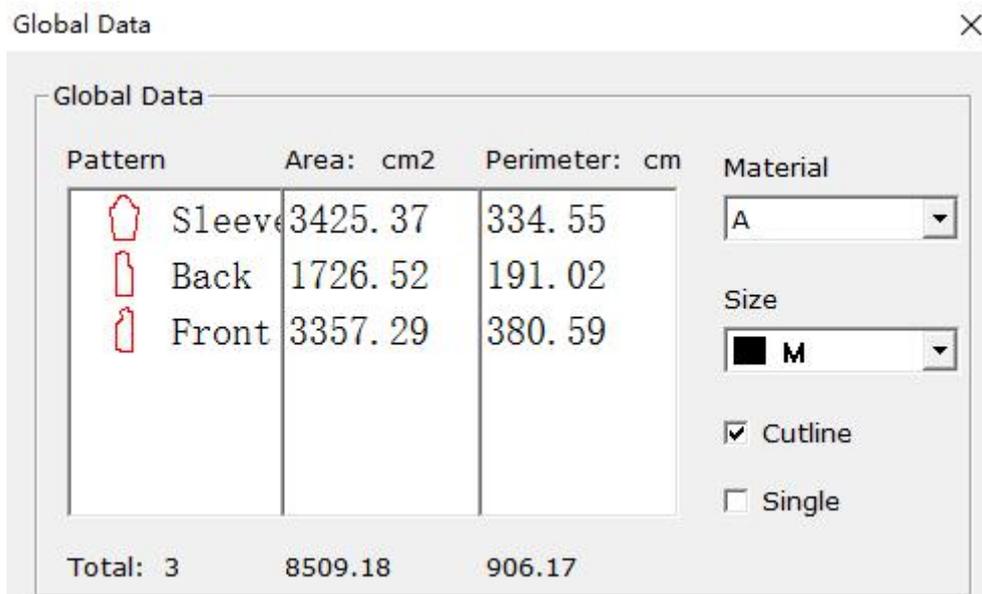
Print settings

Table: Shirt

All size       All material

Buttons: Print, Preview, Excel, Cancel

As shown below: Check the total area or perimeter of different fabrics and sizes of patterns, check the area and perimeter of single patterns:



Global Data

Pattern	Area: cm2	Perimeter: cm	Material
 Sleeve	3425.37	334.55	A
 Back	1726.52	191.02	
 Front	3357.29	380.59	
Total: 3      8509.18      906.17			

Material: A

Size: M

Cutline  
 Single

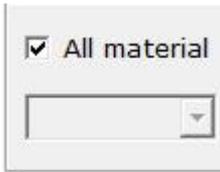
**【Single】** When selected, the area and perimeter of each pattern is calculated by one pattern. Unchecked, Will calculate with actual quantity.

**Print output setup**

**【form name】** refers to the title of the print or export file, the name of the form can be changed.



Default is select  All size pattern value,click to remove the check,then click to select the size  in the drop-down list, Only one pattern of all sizes can be printed at a time.



For patterns with different fabrics, the default is to print pattern info for  All material. Click to remove the check and select the pattern of which fabric to print in the drop-down list.

**【Preview】** Can see the list of the data for the selected pattern .

**【Export Excel】** All the pattern info will export to excel.

#### **Operation:**

Click **【File】** menu- **【Print】**- **【Print style info】** dialogue box,and make the appropriate settings. Choose preview or print.

Noted:

If the printed text is garbled, please check the "Options" menu - "System Setup" - "Interface Setup" - "Language ", select the language corresponding to the version you use.

## ● **Print-Pattern**

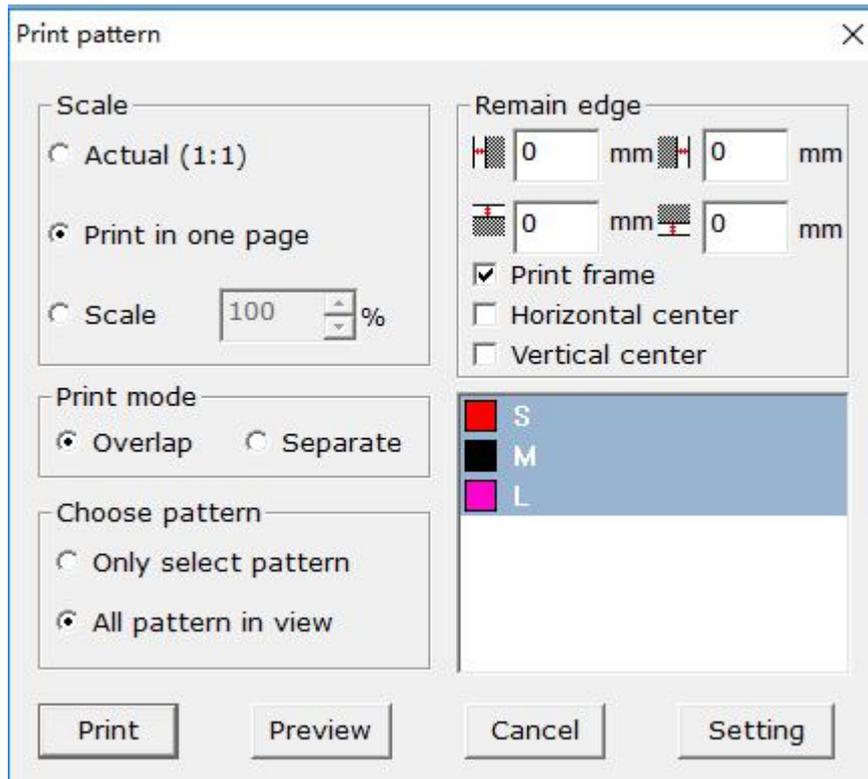
---

#### **Function:**

It is used to print pattern or design line on the printer.

#### **Operation:**

1. Display the pattern or design line that needs to be printed in the work area;
2. Click **【File】** menu- **【Print】** - **【Pattern】** dialogue box,Pop up **【Print pattern】** dialog box.



3. Select the appropriate option and click Print.

### 【Printer setup】instructions:

#### Function:

Used to set the printer model ,paper size and orientation. Select the appropriate printer model type, print direction and paper size, OK.

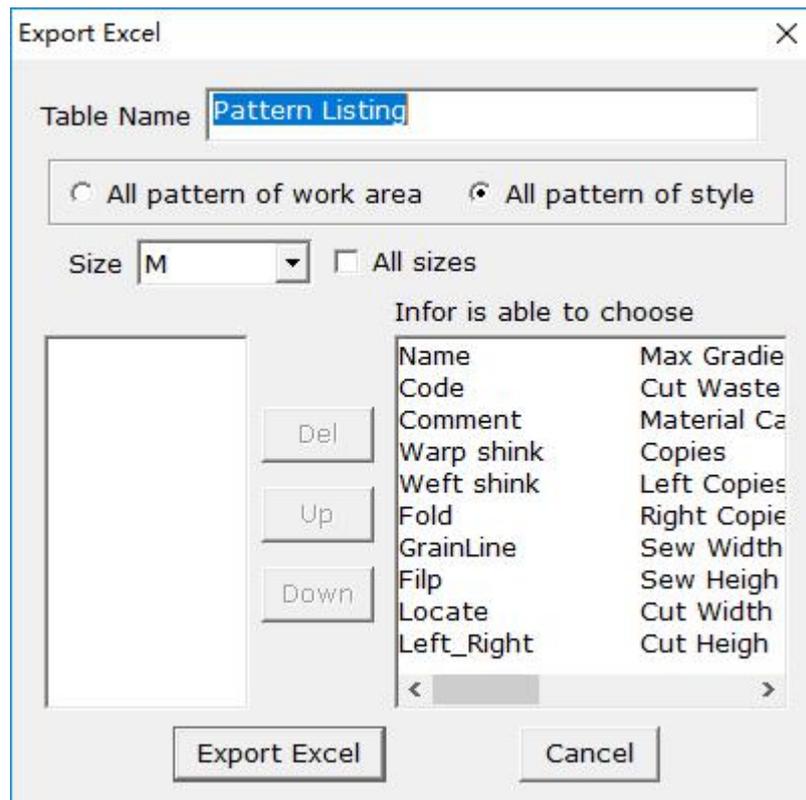
### ● Export Excel of pattern Info

#### Function:

Information related to the pattern, such as the pattern name, code, description, number of copies, shrinkage, perimeter, area, pattern, etc. is entered into the Excel table, and a .xls format file is generated.

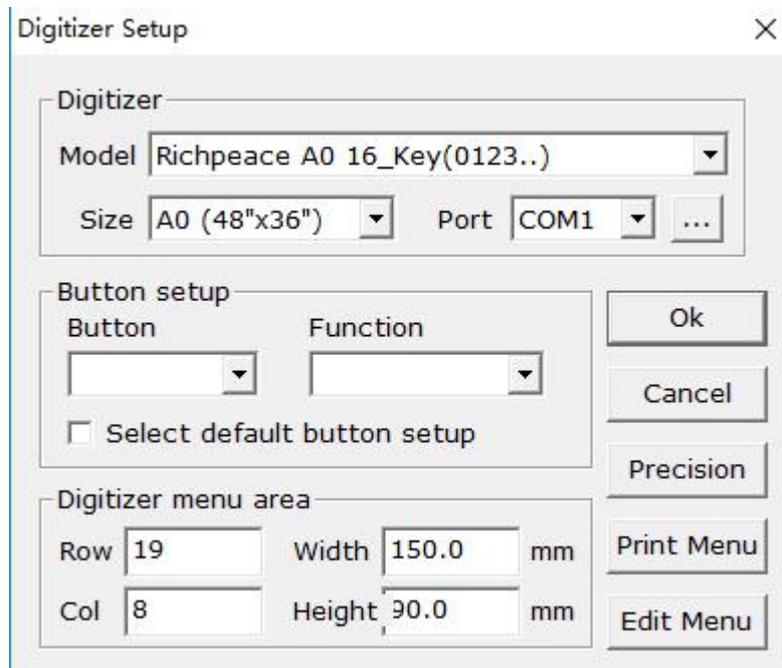
#### Operation:

1. Click 【File】 menu- 【Export Excel of pattern Info】 , Pop up 【Export Excel】 dialog box.



2. Select the pattern you want to output, and select the output information, click "Export Excel" to export

● **Digitizer setup (E)**



**【Digitizer Setup】Parameter Description**

**Digitizer Model:** This column does not need to select the model. Before the software is shipped from the factory, the manufacturer has set up according to the digitizer model used by the user.

**Digitizer size:** It is used for setting up digitizer size;

**Port:** It is used for select the name of the port to which the digitizer is connected

**Button setup:** Is used to set the function of each key on the sixteen-button mouse

**Select default button setup:** After checking, the corresponding key of the digitizer mouse will adopt the system default setup;

**Digitizer menu area:** It is used to set up the row and column of the menu area of the digitizer.

**Precision:** It is used for adjusting digitizer precision. Method: Manually draw a rectangular frame of 50CM X 50CM, read it into the computer through the digitizer, and input the length and width of the actual measurement into the dialog box for adjusting the accuracy.

**Print menu:** After setting the row and column of the menu area, click this button, system will print **【digitizer menu】** automatically.

**Edit menu:** Click edit menu, will pop up several free edit areas. Here, you can set the name of the commonly used pattern, so that you can read the pattern name directly. An edit area sets a pattern name;

**Presentation:**Digitizer menu is a pattern inputting menu set by this system, It is printed out and attached to the corner of the digitizer,It is easy for inputting pattern info on digitizer directly.Please refer to input pattern.

- **Latest used 10 file**

---

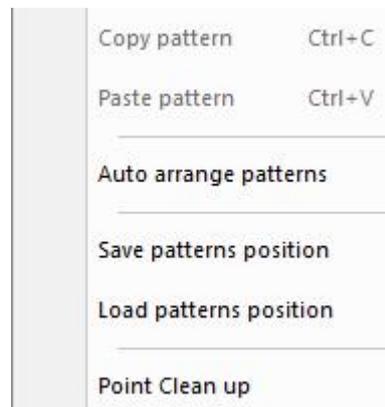
**Function:**

Can open up to 10 recently used files quickly .

**Operation:**

Click **【File】** ,Click to select a file name,Can open this file.

## Edit menu



- **Copy pattern**                      **Ctrl+C**

---

**Function:**

This command is used together with paste pattern, Copy selected pattern onto the clipboard.

**Operation:**

- 1.Choose  select pattern control point tool to select pattern need to copy;
- 2.Then click **【Edit】** - **【Copy pattern】**

- **Paste pattern**                      **Ctrl+V**

---

**Function:**

This command is used together with paste pattern, Paste the pattern copied on the clipboard in the currently open file.

**Operation:**

1. Open the file to which the pattern is to be pasted.
2. Click **【Edit】 - 【Paste pattern】**

- **Auto arrange patterns**

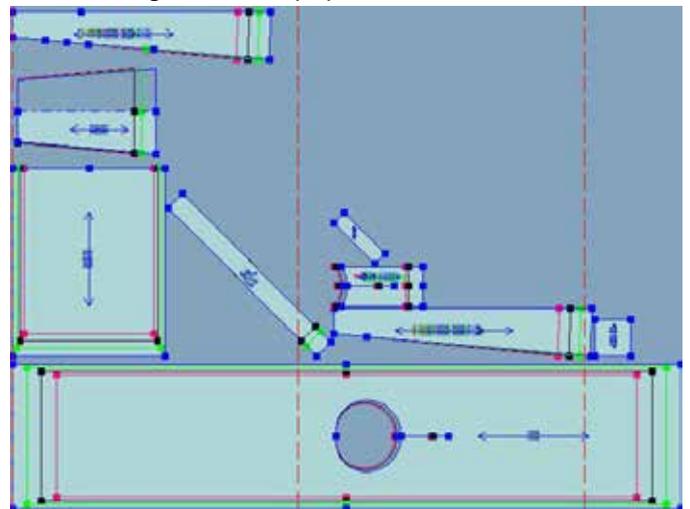
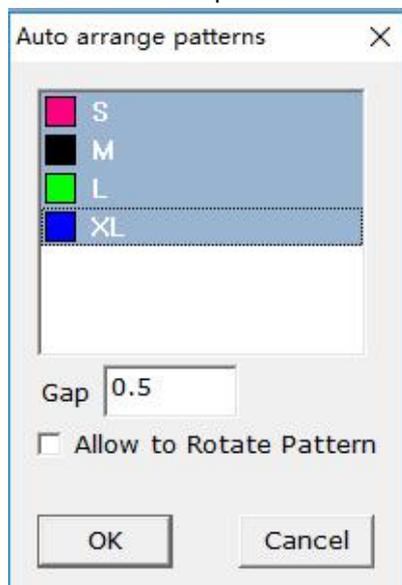
---

**Function:**

The patterns in the work area are arranged according to the width of the drawing paper, Save the trouble of manual arrangement.

**Operation:**

1. Put the pattern you need to arrange into the workspace.
2. Click **【Edit】 manual-- 【Auto arrange pattern】** ,Pop up **【Auto arrange】** dialogue box.
3. Set the pattern gap, click on the non-arranged size to make it no fill color, as shown in the figure S size, click OK
4. The pattern in the workspace is automatically arranged according to the set paper width.



- **Save patterns position**

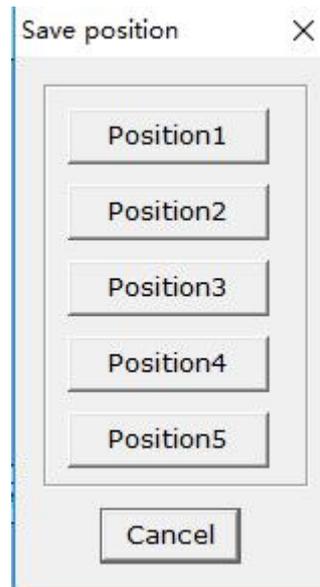
---

**Function:**

When the paper patterns in the work area are arranged,Click 【save patterns position】 ,System will record pattern position in work area.Easy to apply again.

**Operation:**

1. Arrange patterns in the workspace
2. Click 【Edit】 menu- 【save patterns position】 ,pop up 【Save position】 dialogue box;
3. Select storage area



---

**● Load patterns position****Function:**

If the file which have implemented 【 Save patterns position】 ,When opening the file again,use this command to restore the last position of the pattern in the workspace.

**Operation:**

1. Open file which have implemented 【Save pattern position】 command
2. Click 【Edit】 menu- 【Load patterns position】 ,pop up 【Restore position】 dialogue box
3. Click on the correct storage area.

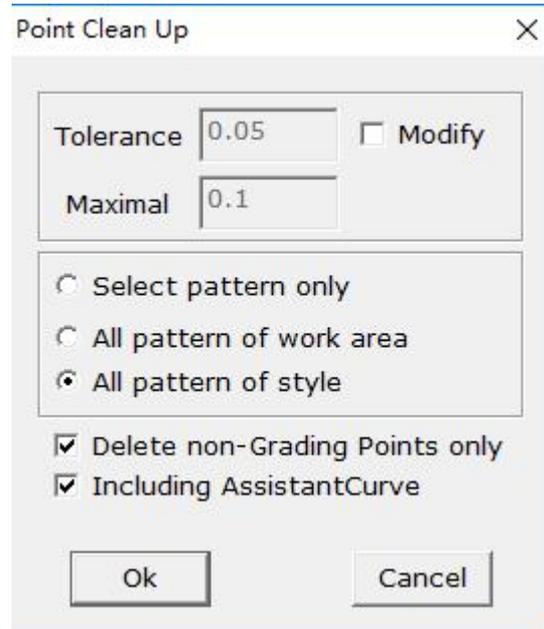
---

**● Point Clean Up****Function:**

Remove extra points on the pattern or add a few points when there are too few control points on the pattern. It is often used to process imported other files.

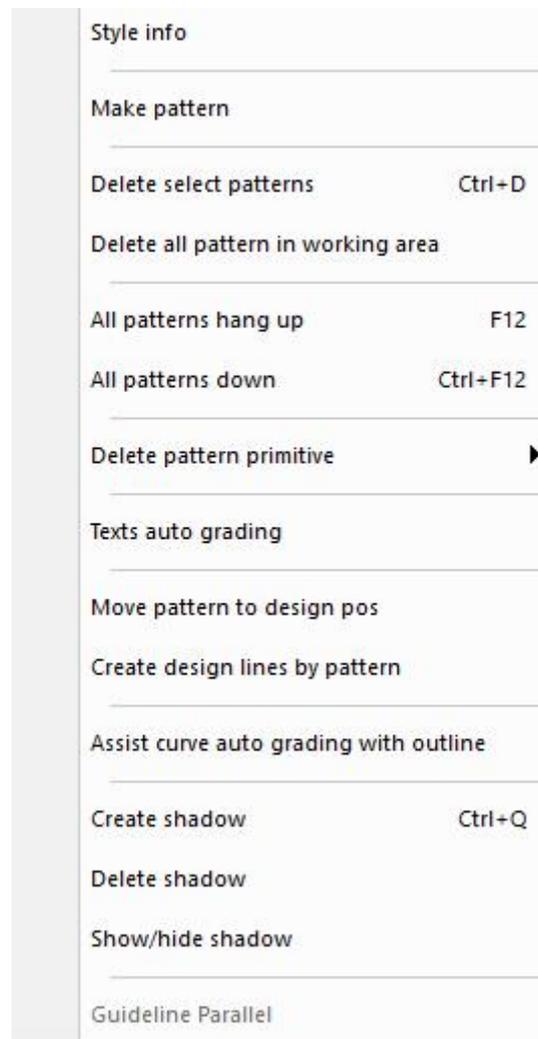
**Operation:**

1. Open the file to be processed;
2. Click **【Edit】** menu- **【Point Clean Up】** ,pop up **【Point Clean Up】** dialogue box.



3. Select the appropriate option and click OK.

## Pattern menu



- **Style info (S)**

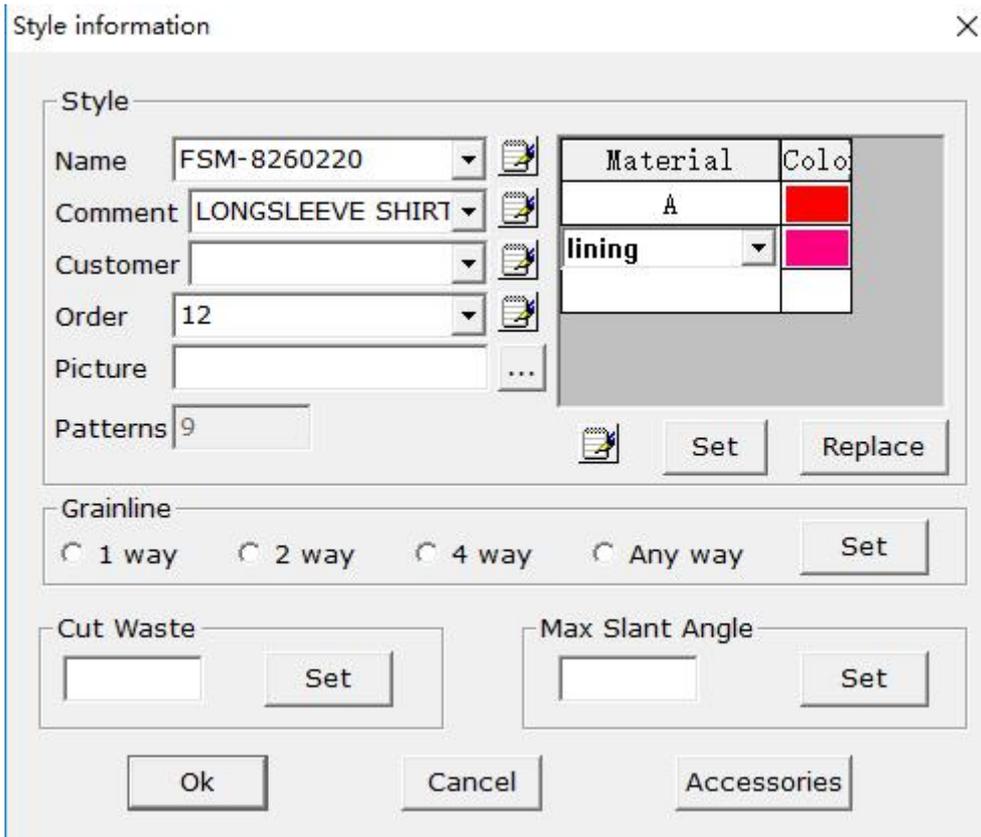
---

### Function:

Used to enter common information of all patterns in the same file. The information entered in the style info can be displayed on the grain line. Can export to marker system together with pattern.

### Operation:

Click **【Pattern】** menu- **【Style info】** ,

**【Style information】 parameter presentation:**


Style information

Style

Name

Comment

Customer

Order

Picture

Patterns

Material	Color
A	
lining	

Grainline

1 way  2 way  4 way  Any way

Cut Waste

Max Slant Angle


**Edit dictionary:**

Click matched dictionary , Enter frequently used information and save, Click next to the triangle button when using, Click the desired text in the drop-down list.

**【Style name】** Refers to the style name of the open file.

**【Comment】** Refers to a brief description of the file, info is not displayed on the pattern;

**【Customer】** Indicate that this file is for which customer.

**【Order】** Input original order name of opening file.

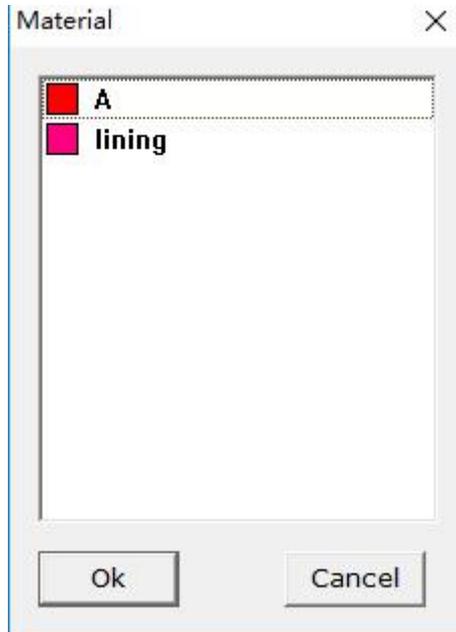
**【Picture】** Display style picture storage path;

 Click this icon, Find out the corresponding style picture, After opening file, Select style picture under view menu, Style picture will appear.

**Material** : If enter all the fabric names used in the file under the fabric, can select from the pattern info.

**Color** : Click the table under color, can set the showing material color of the corresponding fabric of the pattern list box;

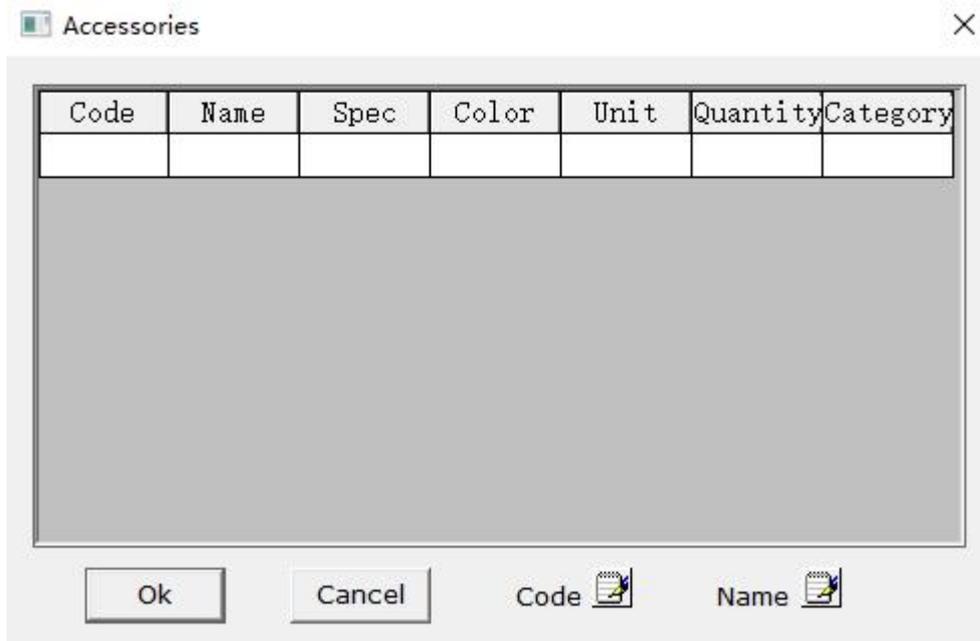
**Under the fabric 【Set】:** Click 【Set】, pop up 【material】 dialogue box, Set the material for all patterns in a unified way. Select "A" as shown in the following figure, the fabric of all the patterns in the file is "A". If an individual pattern is a different fabric, set it in the "Pattern Info "dialog box.



**Grain line:** Select 1way, 2way, 4way or any way, click set, Then all pattern grain line in the style are the direction of the selection point.

**Accessories:**

1. Click accessories, the following dialog box appears.



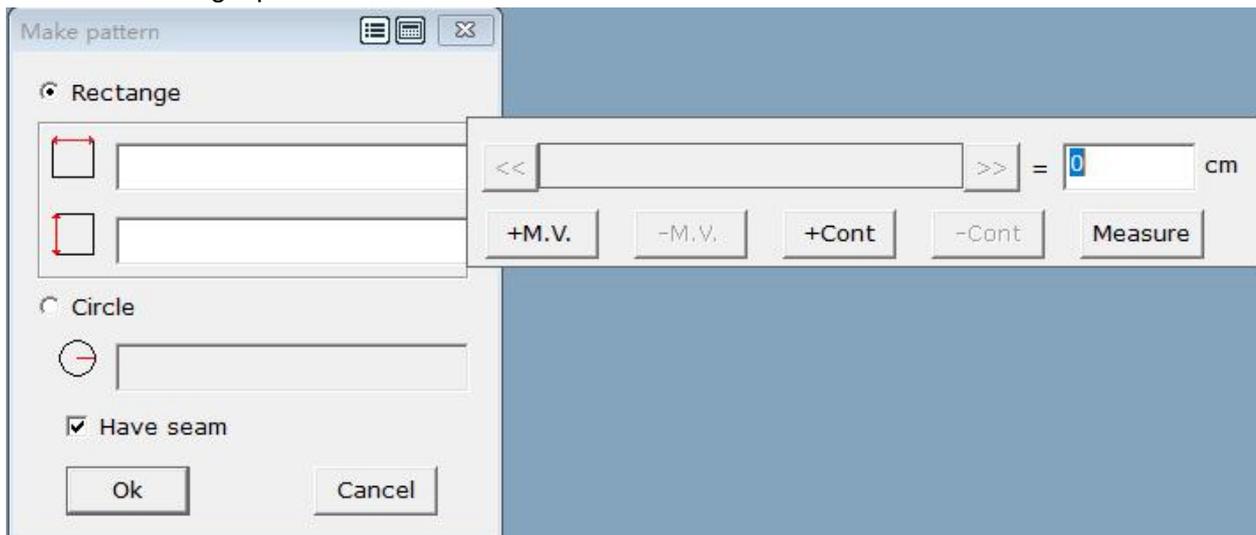
2. Enter in the corresponding options, you can view the accessories at any time.

**【Replace】**

● **Make pattern**

**Function:**

Make circle or rectangle pattern.



**Operation:**

1. Click **【Pattern】** -- **【Make pattern】** , pop up **【Make pattern】** dialogue box;
2. According to the desired selection option, enter the corresponding value, click **【OK】** , and a new pattern can be generated.

● **Delete selected Pattern (D)                      Ctrl+D**

**Function:**

Delete selected pattern on pattern list in work area.

**Operation:**

1. Select the pattern you want to delete;
2. Click **【Pattern】** - **【Delete selected pattern】** ,Or use shortcut toolbar Ctrl+D,pop up dialogue box;
3. Click **【Yes】** , the selected pattern is deleted from the file, click [No] to cancel the command, and the pattern is not deleted.

- **Delete all pattern in working area**

---

**Function:**

Delete all pattern in work area from pattern list table.

**Operation:**

1. Put the pattern to be deleted in the workspace.
2. Click **【Pattern】** Menu- **【Delete all pattern in working area】** ,pop up a dialogue box.
3. Click **【Yes】** , all the patterns in the workspace will be deleted from the file, click **【No】** to cancel the command, and the pattern is not deleted.

- **All pattern hang up (U) F12**

---

**Function:**

Remove all pattern in work area

**Operation:**

Click **【Pattern】** - **【All pattern hang up】** ,Or use shortcut toolbar F12;

- **All pattern down (Q) Ctrl+F12**

---

**Function:**

Put all pattern in pattern list to work area.

**Operation:**

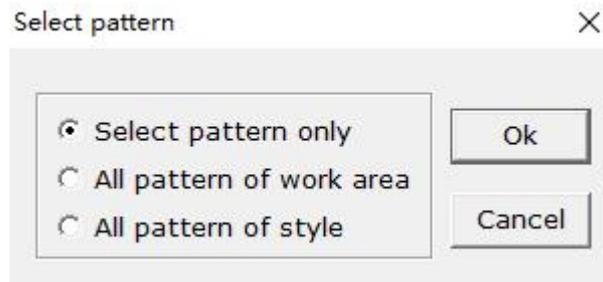
1. Click **【Pattern】** - **【All pattern down】** ,Or use shortcut toolbar Ctrl+F12
2. Click all pattern in pattern list, All pattern will go to work area.

- **Delete pattern primitive-All assistant curves**

---

**Function:**

It is used for deleting assist curve of pattern.


**Operation:**

1. Select pattern which will deleting assist curve;
2. Select【Pattern】menu--【Delete pattern primitive】-【All assistant curves】,pop up【Select pattern】dialogue box;
3. Select first option,Click 【OK】

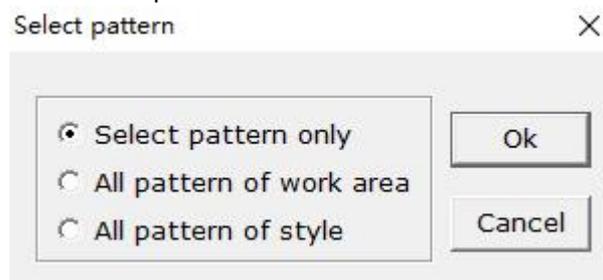
**Presentation:**

If you operate this command for the workspace pattern or all patterns, click on the command.

- **Delete pattern primitive-All temp assistant curves**

**Function:**

It is used for deleting temp assist curve in pattern.


**Operation:**

1. Select pattern which will deleting temp assist curve.
2. Select【Pattern】menu--【Delete pattern primitive】-【All temp assistant curves】,pop up【Select pattern】dialogue box;
3. Select first option,Click 【OK】

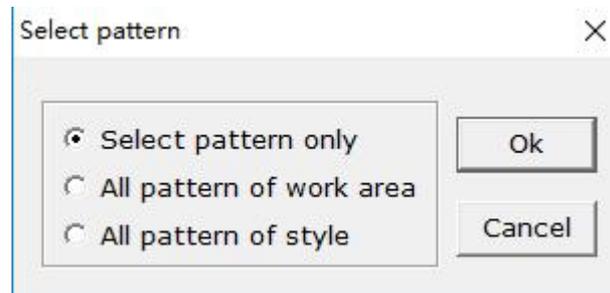
**Presentation:**

If you operate this command for the workspace pattern or all patterns, click on the command.

## ● Delete pattern primitive-All texts

### Function:

Clear the text written in the pattern with the T tool. (Note: This does not include information texts on the grain line.)



### Operation:

1. Select pattern which have "T" text
2. Select **【Pattern】** menu-- **【Delete pattern primitive】** - **【All texts】** ,pop up **【Select pattern】** dialogue box;
3. Select first option,Click **【OK】**

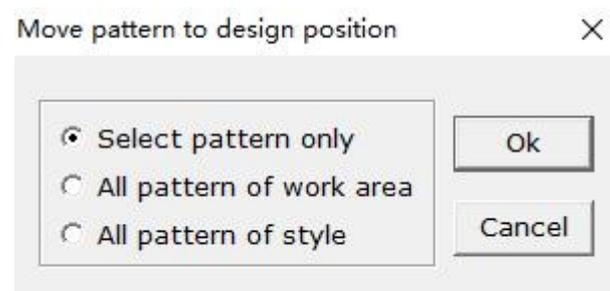
### Presentation:

If you operate this command for the workspace pattern or all patterns, click on the command.

## ● Move pattern to design position

### Function:

Move the moved pattern to the position of the design line.



### Operation:

1. Select pattern need to operate;
2. Select **【Pattern】** menu-- **【Move pattern to design position】** ,pop up **【Move pattern to design position】** dialogue box;
3. Click first option,Click **【OK】** .

**Presentation:**

If you operate this command for the workspace pattern or all patterns, click on the command.

**● Create design lines by pattern****Function:**

Click pattern will create new design line.

**Operation:**

1. Select pattern which will create design curve;
2. Click **【Pattern】** -- **【Create design lines by pattern】** , pop up **【Create design line】** dialogue box;
3. Click first option, Click **【OK】** .

**Presentation:**

Pattern link to design line: After selecting this option, adjust the design line , the pattern will be adjusted at the same time.

Inter elements link to design line: When this option is selected, adjust the elements on the design line, such as notch, drill, etc., the pattern will be adjusted at the same time. Otherwise, it can not adjust link to the design line.

**● Assist curve auto grading with outline****Function:**

Grading for assistant line connected with border line

**Operation:**

1. Select pattern which will grading along with border line;
2. Click **【Pattern】** -- **【Assist curve auto grading with outline】** , pop up **【Select pattern】** dialogue box;
3. Select the option and click OK.

**Presentation:**

1. If you operate this command for the workspace pattern or all patterns, click on the command.
2. By default, the assist curve auto grading with curve line.

**● Create shadow      Ctrl+Q**

---

**Function:**

All the point and line on the pattern will be selected to generate shadows, It is easy for looking shadow before modifying pattern.

**Operation:**

1. Select pattern which will create shadow;
2. Click **【Pattern】** menu- **【Create shadow】** ;

**● Delete shadow**

---

**Function:**

Delete the shadow on the pattern.

**Operation:**

1. Select the pattern which need to delete the shadow;
2. Click **【Pattern】** menu- **【Delete shadow】** ;

**● Show or hide shadow**

---

**Function:**

It is used for showing or hiding shadow.

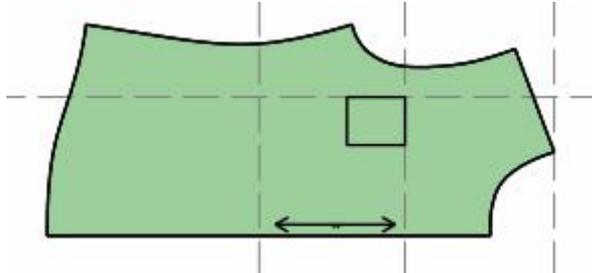
**Operation:**

Click **【Pattern】** menu— **【Show or hide shadow】** , If the shadow is displayed before this command is used, the shadow will display the hidden state when the command is used. If the shadow is hidden before, the display is then followed.

- **Guideline parallel**

**Function:**

Position on the pattern. For example, pockets and waistline positions on the pattern.



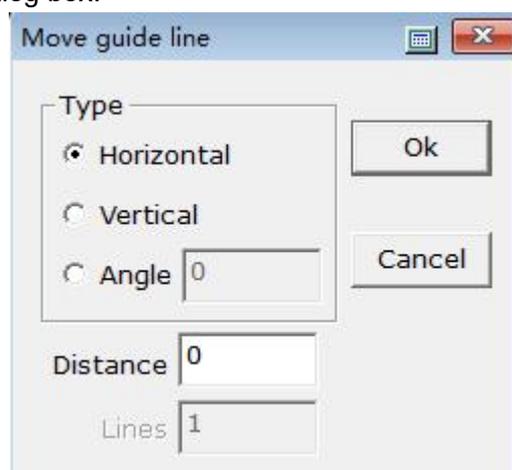
**Operation:**

1. Add the guide line

- ◆ With the ruler displayed, hold down the left mouse button and drag directly from the position of the ruler.
- ◆ Select the two points on the pattern with "select pattern control point" tool, Click **【pattern】** menu-**【Guideline parallel】**

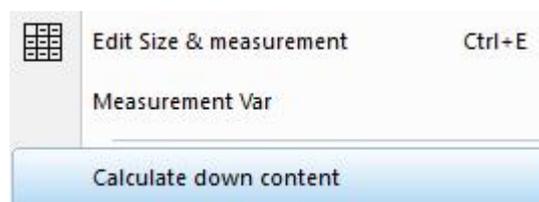
2. Move the guide line

- ◆ Select "modify" tool  to click the guide line to move to the target location
- ◆ Specify the distance to move the baseline: Double-click the guide line with the modify tool , will pop up the guide line dialog box.



3. Copy the guide line: Hold down the Ctrl key, click on the guide line with the modify tool, and the guide line dialog box pops up;
4. Delete the guide line:
  - ◆ Move the baseline with the modify tool  to the boundary of the workspace to disappear.
  - ◆ Click or frame the guide line with the eraser tool 
  - ◆ Hold down Ctrl + Alt + Shift + G to delete all guide lines in the workspace.

## Table menu



### ● **Edit Size & measurement (E) Ctrl+E**

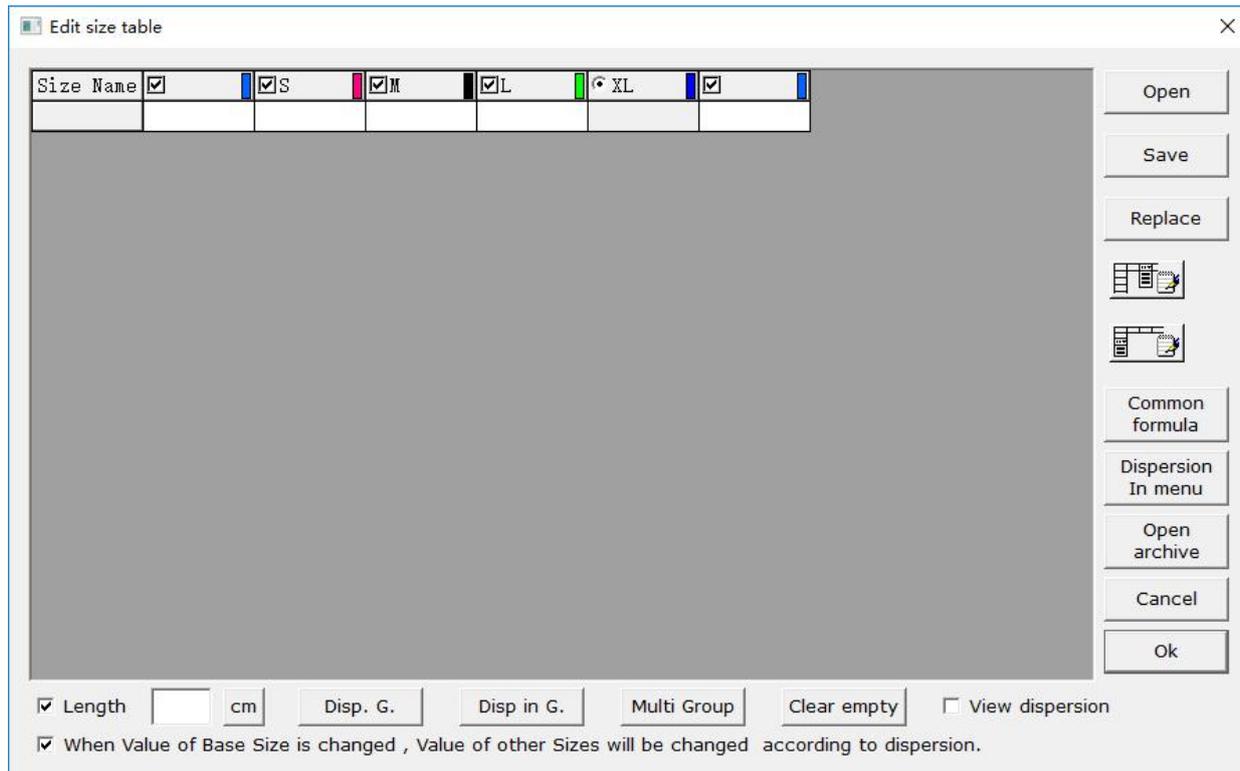
---

#### **Function:**

1. Edit size and color, Easy for grading;
2. Input fashion size, Easy for making pattern, Adopt value when auto grading and back up detailed size data.

#### **Operation:**

1. Click **【Table】** -- **【Edit Size & measurement】** , pop up **【Edit size table】** dialogue table;



2. Default is single group, Click on size name, System can add line automatically (Click on second line, System can add third line automatically), Input part name in first line;
3. Input different part size under size name, Can set different size color after size.

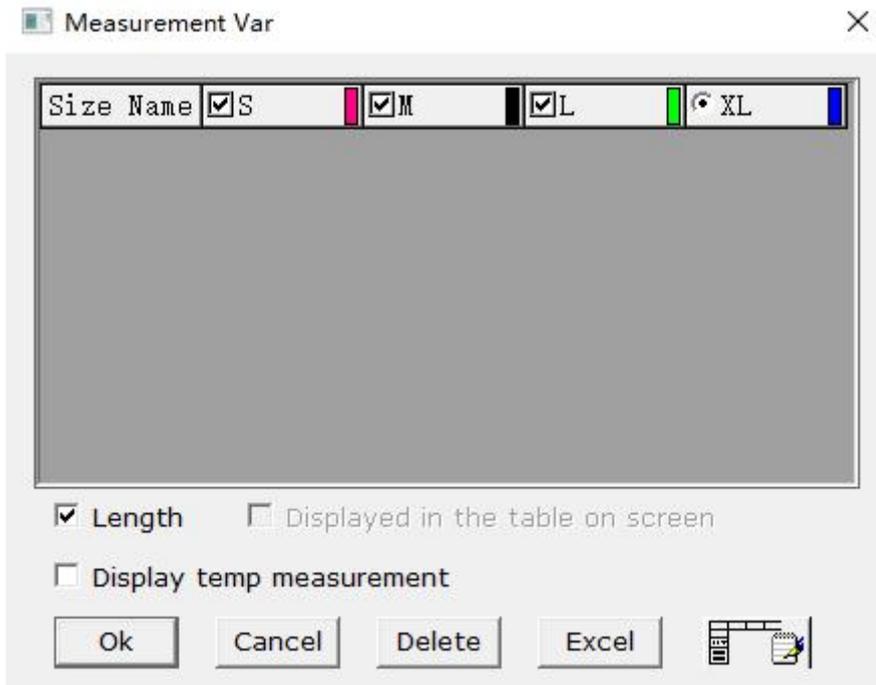
### ● Measurement var

#### Function:

It is used for saving record measurement var.

#### Operation:

Click **【size】** — **【Measurement var】**, pop up **【Measurement var】** dialogue box, Can check different size data, Can modify measurement symbol, Way: Click Measurement var symbol, When It is light, Click the triangle button next to the text box, Select measurement var sign, Can also input measurement var name directly, Change the measurement var symbol to a var name. Click **【OK】**.



## ● Calculate down content

1. Click table menu-Calculate down content,the following dialog box will appear.

Calculate down content X

Whole down content Clear

2 NOTCH SIDE PANEL

4 NOTCH SIDE PANEL

ARM PANEL

BODY

BTN PANEL

COLLAR

FRONT PANEL

POCKET

SLEEVE

Exist local down content Clear

Density  g/m2

Loss  % Start Cancel

2. Under the whole down content, select the pattern need to be down content, enter the density and loss, click start, and the down content data table will appear.

Down content data X

Down content whole data

Name	density	Loss (%)	Copies	Area				Single sheet filling				Down content			
				S	M	L	XL	S	M	L	XL	S	M	L	XL
2 NOTCH SIDE PANEL	1	0	2	0.02	0.03	0.03	0.03	0.02	0.03	0.03	0.03	0.04	0.06	0.06	0.06
4 NOTCH SIDE PANEL	1	0	2	0.02	0.03	0.03	0.03	0.02	0.03	0.03	0.03	0.04	0.06	0.06	0.06
ARM PANEL	1	0	2	0.004032	0.004032	0.004032	0.004032	0.004	0.004	0.004	0.004	0.008	0.008	0.008	0.008
BODY	1	0	1	0.21	0.23	0.26	0.29	0.21	0.23	0.26	0.29	0.21	0.23	0.26	0.29
BTN PANEL	1	0	1	0.002581	0.002581	0.002581	0.002581	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003
COLLAR	1	0	1	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01
FRONT PANEL	1	0	1	0.008248	0.008231	0.009528	0.009528	0.008	0.008	0.01	0.01	0.008	0.008	0.01	0.01
POCKET	1	0	1	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03
SLEEVE	1	0	2	0.07	0.07	0.08	0.09	0.07	0.07	0.08	0.09	0.14	0.14	0.16	0.18

Density unit: g/m2    Area unit: m2    Weight unit: g

Output each page

Down content     Each piece     Local

Excel    Back

3. Left click on the pattern name underneath the down content sheet to see the specific pattern shape.

Down content data

Down content whole data

Name	density	Loss (%)	Copies	Area				Single sheet filling				Down content			
				S	M	L	XL	S	M	L	XL	S	M	L	XL
2 NOTCH SIDE PANEL	1	0	2	0.02	0.03	0.03	0.03	0.02	0.03	0.03	0.03	0.04	0.06	0.06	0.06
4 NOTCH SIDE PANEL			2	0.02	0.03	0.03	0.03	0.02	0.03	0.03	0.03	0.04	0.06	0.06	0.06
ARM PANEL			2	0.004032	0.004032	0.004032	0.004032	0.004	0.004	0.004	0.004	0.008	0.008	0.008	0.008
BODY			1	0.21	0.23	0.26	0.29	0.21	0.23	0.26	0.29	0.21	0.23	0.26	0.29
BTN PANEL			1	0.002581	0.002581	0.002581	0.002581	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003
COLLAR			1	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01
FRONT PANEL			1	0.008248	0.008231	0.009528	0.009528	0.008	0.008	0.01	0.01	0.008	0.008	0.01	0.01
POCKET	1	0	1	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03
SLEEVE	1	0	2	0.07	0.07	0.08	0.09	0.07	0.07	0.08	0.09	0.14	0.14	0.16	0.18

Density unit: g/m2    Area unit: m2    Weight unit: g

Output each page

Down content     Each piece     Local

4. According to the need to choose down content or each piece and so on. The output form comes with a formula. After the content is changed, the related content is automatically calculated.

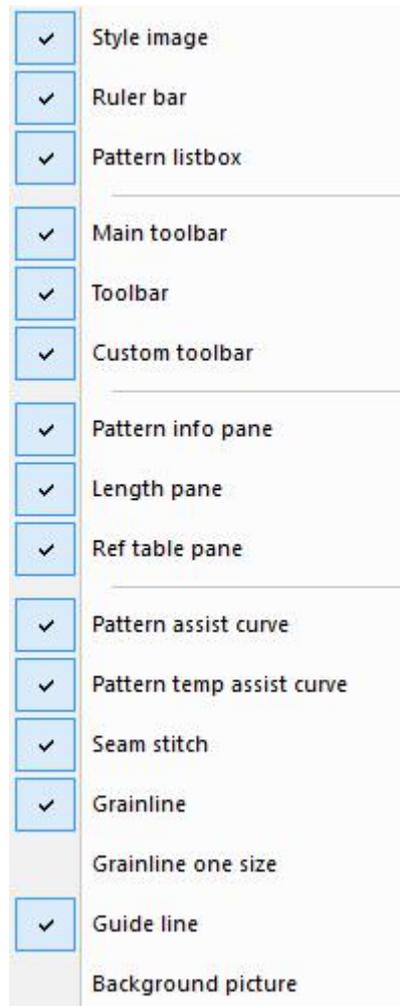
Name	density(g/m2)	Loss(%)	Copies	Area(m2)				Single sheet filling(g)				Down content(g)			
				S	M	L	XL	S	M	L	XL	S	M	L	XL
2 NOTCH SIDE PANEL	1	0	2	0.025	0.026	0.027	0.029	0.025	0.026	0.027	0.029	0.05	0.052	0.054	0.058
4 NOTCH SIDE PANEL	1	0	2	0.025	0.026	0.027	0.029	0.025	0.026	0.027	0.029	0.05	0.052	0.054	0.058
ARM PANEL	1	0	2	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.008	0.008	0.008	0.008
BTN PANEL	1	0	1	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003
COLLAR	1	0	1	0.012	0.012	0.012	0.013	0.012	0.012	0.012	0.013	0.012	0.012	0.012	0.013
POCKET	1	0	1	0.027	0.026	0.028	0.031	0.027	0.026	0.028	0.031	0.027	0.026	0.028	0.031
SLEEVE	1	0	2	0.067	0.074	0.081	0.088	0.067	0.074	0.081	0.088	0.134	0.148	0.162	0.176
BODY_1	1	0	1	0.219	0.244	0.27	0.297	0.219	0.244	0.27	0.297	0.219	0.244	0.27	0.297
BODY_2	1	0	1	0	0	0	0	0	0	0	0	0	0	0	0
BODY_3	1	0	1	0	0	0	0	0	0	0	0	0	0	0	0
FRONT PANEL_1	1	0	1	0.008	0.008	0.01	0.01	0.008	0.008	0.01	0.01	0.008	0.008	0.01	0.01
FRONT PANEL_2	1	0	1	0	0	0	0	0	0	0	0	0	0	0	0
FRONT PANEL_3	1	0	1	0	0	0	0	0	0	0	0	0	0	0	0
FRONT PANEL_4	1	0	1	0	0	0	0	0	0	0	0	0	0	0	0
FRONT PANEL_5	1	0	1	0	0	0	0	0	0	0	0	0	0	0	0

Note: Changing the density, loss, etc., needs to be changed in the first overall data table. Other subsequent tables will be automatically changed.

Each piece: In the single filling table, the total amount of filling of each size is shown.

Download content: The amount of filling for each piece of each size shown.

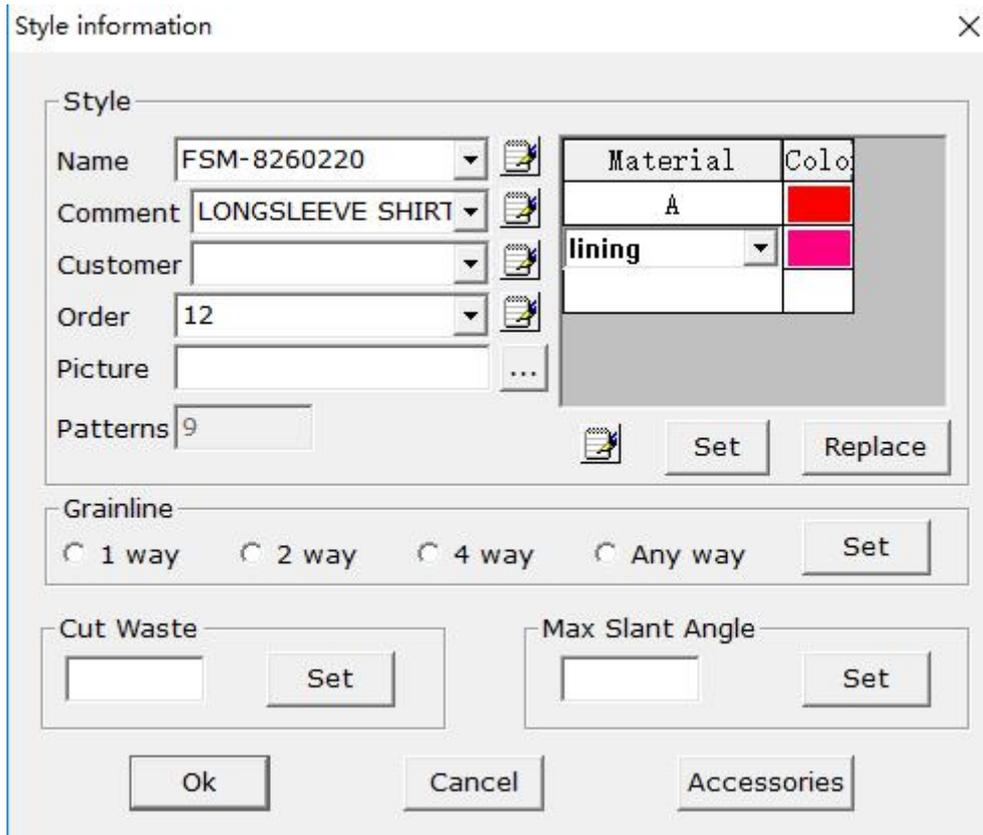
## View menu



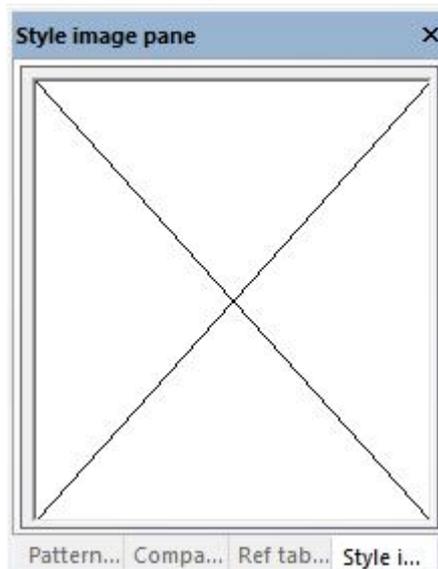
### ● style image (T)

---

If there is a ✓ check mark before the execution of the command, and the file opened in the following figure sets the path of the style image in the style data.



The style image will be displayed on the interface, otherwise, even if there is a  $\checkmark$  check mark before executing the command, only the following picture will be displayed on the interface.



**Noted:**

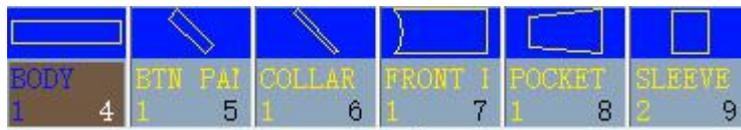
Put the cursor in the lower right corner of the style picture, can enlarge or reduce the figure proportionally.

- **Ruler bar (R)**

If there is a ✓ check mark before the execution of the command, the ruler bar will be displayed, otherwise it will not be.

- **Pattern list box (L)**

If there is a ✓ check mark before the execution of the command, the pattern list box will be displayed on the software interface as shown below.



otherwise it will not be.

- **Main toolbar**

If there is a ✓ check mark before the execution of the command, the following tool bar appears on the software interface, otherwise it does not.



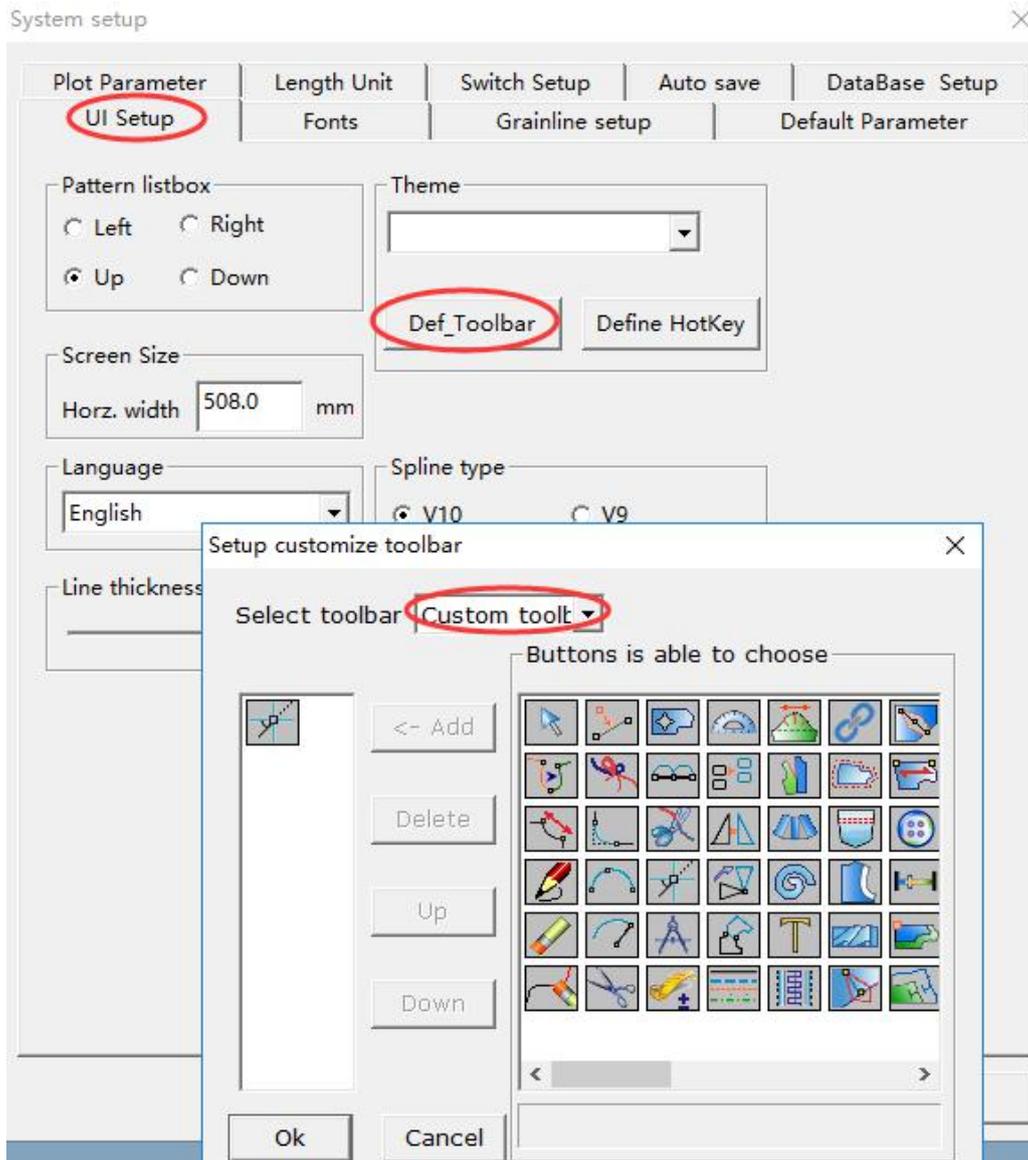
- **Toolbar**

If there is a ✓ check mark before the execution of the command, the following tool bar appears on the software interface, otherwise it does not.



## ● Custom toolbar

If there is a  check mark before the execution of the command, the tool icon is set in the software Options menu- System Setup - UI Setup - Def\_Toolbar, then the software interface has the toolbar tool displayed above, Otherwise the two are missing one,cannot display tool icon.



## ● Pattern info pane

If there is a  check mark before the execution of the command, pattern info pane will be displayed on the right side.

- **Length pane**

---

If there is a  $\checkmark$  check mark before the execution of the command,length pane will be displayed on the right side.The Compare Length tool has already introduced this.

- **Ref table pane**

---

If there is a  $\checkmark$  check mark before the execution of the command,ref table pane will be displayed on the right side.

- **Pattern assist curve**

---

If there is a  $\checkmark$  check mark before the execution of the command,pattern assist curve will be displayed, otherwise it will not be displayed.

**Noted:**

Assist curve refer to common lines on a pattern.

- **Pattern temp assist curve**

---

If there is a  $\checkmark$  check mark before the execution of the command,pattern temp assist curve will be displayed, otherwise it will not be displayed.

**Noted:**

To create a pattern temp assist curve, hold down the SHIFT key and use  Set curve color and type tool to left-click or make a square on the guideline.

- **Seam stitch**

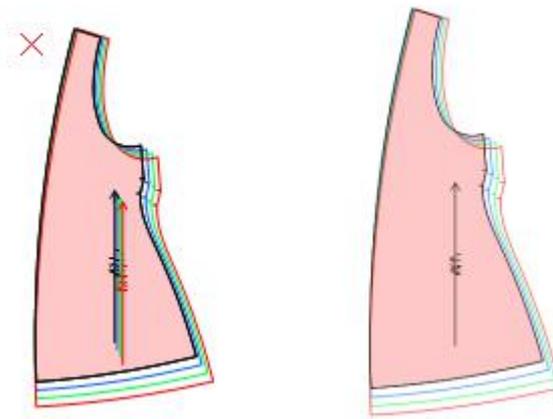
---

If there is a  $\checkmark$  check mark before the execution of the command, seam stitch will be displayed, otherwise it will not be displayed.

- **Grain line one**

---

If the grain line is graded on the pattern, only grain line of a size is displayed after selection.



## ● Guide line

---

If there is a ✓ check mark before the execution of the command, guide line will be displayed, otherwise it will not be displayed.

### Noted:

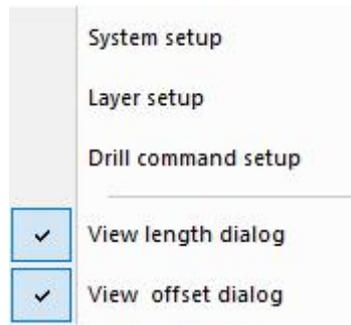
The guide line can be dragged from the ruler bar with the modify tool  , or it can be generated by selecting the two points on the pattern using the Select Pattern Control Point tool  and clicking on the Pattern menu - Angle guide line.

## ● Background picture

---

If there is a ✓ check mark before the execution of the command, the picture opened in the File - Other-Open background picture will be displayed in the work area, otherwise it will not be displayed.

## Option



- **System setup**

---

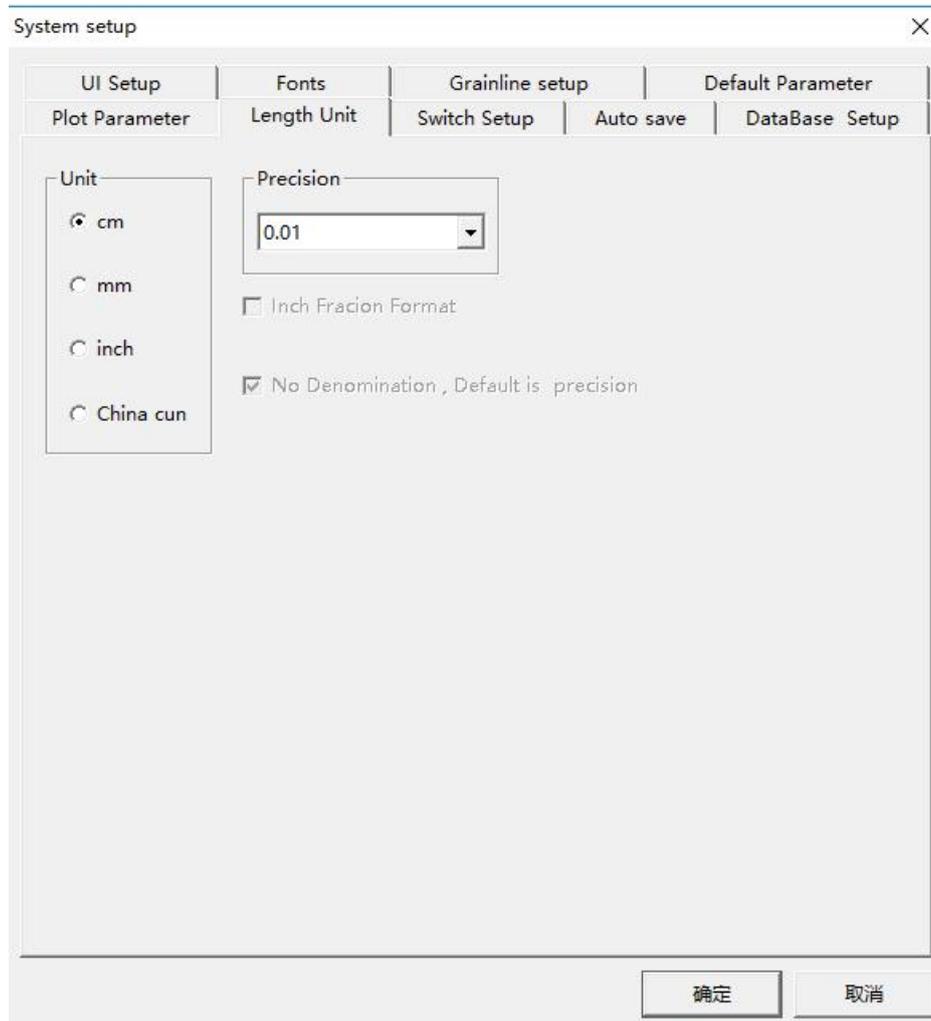
**Function:**

There are more option card, Can setup different option

**Operation:**

Click **【Option】** menu- **【System setup】** , pop up **【system setup】** dialogue box, There are eight option card, Set one of parameter, Need to click apply button .

## 【Length unit】 Option parameter presentation



Used to determine the unit of measure used by the system. Click on one of the four units of centimeters, millimeters, inches, and market units, and select the desired accuracy in the **【precision】** drop-down list box. When you select inches, you can choose the fractional format and decimal format.

### 【Inch fraction format】

When checking this item, use the fractional format. When not checked, decimal format is used.

### 【No Denomination, Default is precision】

If you set the precision to 1/16, When select this option, 10.3 and 10(3/16) is same.

**【Default parameter】 Option presentation:**

System setup X

Plot Parameter	Length Unit	Switch Setup	Auto save	DataBase Setup
UI Setup	Fonts	Grainline setup	Default Parameter	

**Notch**

Type T Command Cut

Width 5 mm Depth 3.5 mm

Angle 0 Deg. 2Notch Gap 10 mm

Digitizer Notch Type Noggrading curve point

Multi notch create one side

Allow tool modify notch default value

**Drill Distance of dart**

Top 15 mm

Waist 5 mm

Bottom 5 mm

**Seam Value**

View seam value

Add seam value auto 10 mm

**Drill Attribute**

Command Drill

Radius 2.5 mm

Display radius when the radius=0 1.5 mm

Allow tool modify drill default value

**Dot Size (Pixels)**

● 2 ✶ 5 ■ 3

Pattern count 1

Capture radius 10 Pixels

**Down content density**

Area/Weight g / m2

**Display down content**

Density  Area  Weight

确定
取消

**【Notch】:**

Can change the notch type, size, angle, and command (operation mode). Command:When select cut,If connect with cutting plotter, Outside border notch will cut; When select draw, Will appear in drawing if connect with plotter or cutter.M68, It is notch type when connect with cutter.

**2Notch Gap:** Refers to the default distance between adjacent notch when you make more notch

**Digitizer Notch Type:** This is set as the default point in the **【Read Pattern】** dialog box. If you select a grading curve point, press the notch button and there will be a grading curve point below the notch.

**Multi notch create one side:**When checked, the distance in the notch dialog is the distance from the reference point to the nearest notch. Otherwise, the distance in the notch dialog is the distance from the reference point to the midpoint of the notch.

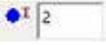
**【Seam value】 :**

Checked, the value of seams will be displayed after the pattern add seams.

**【Add seam value auto】**

You can change the default value of seams added. After checking the Add seam val auto,When create pattern,system will create seam for each pattern automatically.

**【Dot size (Pixels)】**

    Used to set the size of the control point on the design line or pattern;   When positioning, it is used to set the reference point size.

**【Drill Distance of dart】**

Top  mm It is used for setting distance from drill on top to dart top;

Waist  mm It is used for setting distance from drill on waist to dart waist;

Bottom  mm It is used for setting distance from drill on bottom to dart bottom.

**【Drill distance of dart】**

Operation:Set commonly used the drill distance of dart, double-click the text box you want to modify, and input the value and press the **【Apply】** key to take effect.

**【Drill】**

Select drill,It is refer to drill is cut when connect with cutting plotter;Select draw only,It is refer to draw when connect with plotter or cutting plotter;Select drill M43 or drill M44 or drill M45,It is refer to drill size when connect with cutter.

Radius  mm It is used for setting drill size

Allow tool modify drill default value :For drilling, for example, the default radius is 2.5mm. If this option is not selected, the default radius of each new drill hole is 2.5mm; after selection, if the radius of one of the drill holes is modified with a drilling tool to be, for example, 5mm, Then the default radius is changed to 5mm, and the newly drilled hole is 5mm.

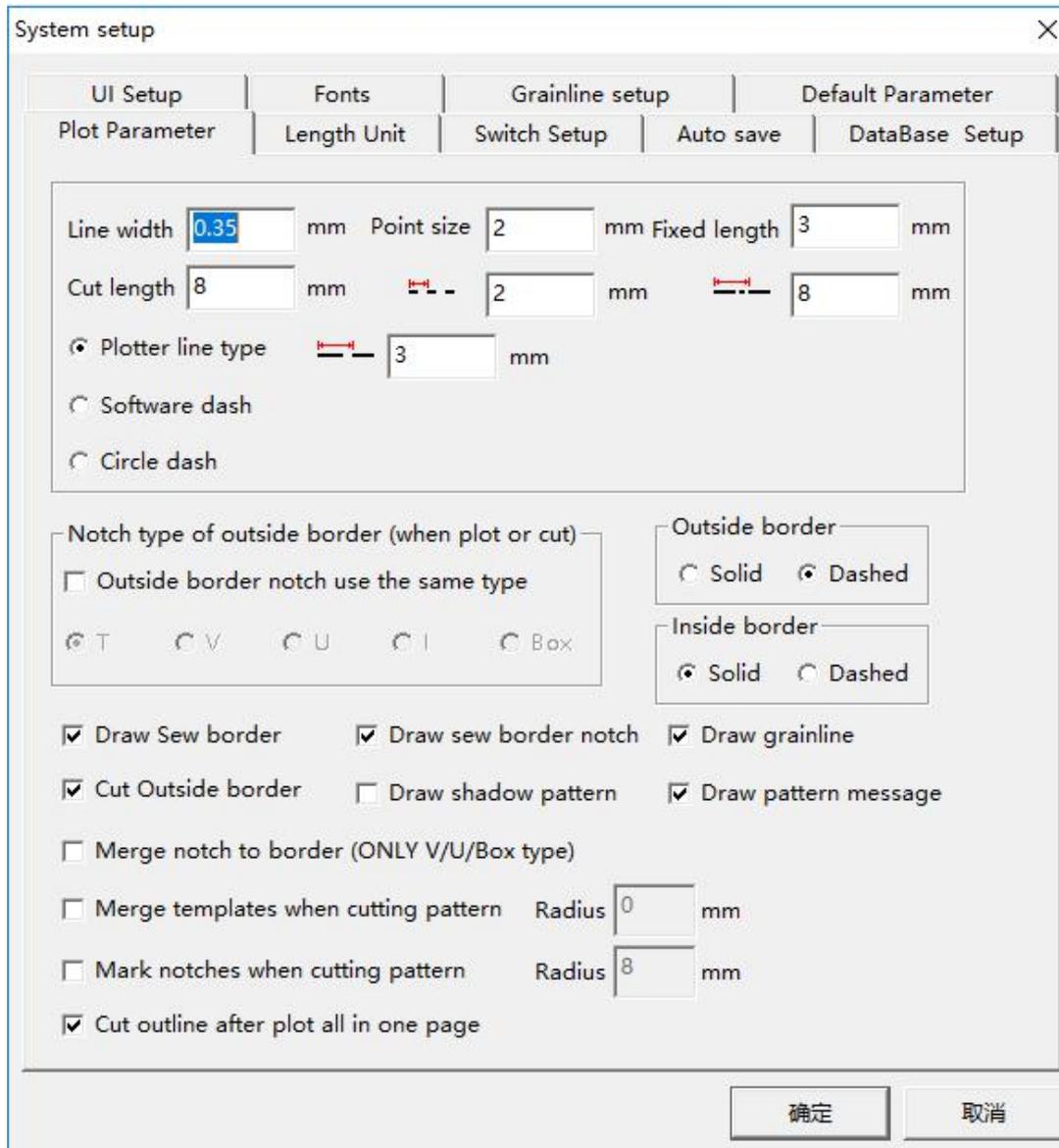
**【Capture radius and Pattern count】:**

Capture radius:It is used to set the mouse capture sensitivity. The mouse capture sensitivity refers to the circle with the center of the capture point and the radius in pixel. The larger the pixels, the larger the range, generally set between 5 and 15 pixels.

Pattern count::This is the default setting for the count of the pattern when make pattern or when the pattern is read with the digitizer.

**【Down content density】** :The unit selected when calculate down content.

**【Display down content】**: When down content, select which ones need to be displayed on the pattern.

**【Plot parameter】** option presentation


**【Line width】** It's be used to set the width of inkjet plotter lines;

**【Point size】** It's be used to set the size of inkjet plotter points;

 3 mm It is used for setting distance of dashed line

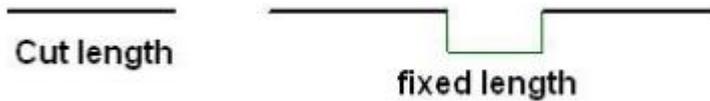
 2 mm It is used for setting distance between point and line

 8 mm It is used for setting distance of dash dotted.

**【Fixed length】** It is to ensure that the pattern is connected to the original paper when cutting, and the length required for this line is set here;

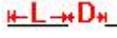
**【Cut length】** It is used for setting cutting length one time;

Cut shape please refer to following picture when cut pattern border.



Plotter line type, software dotted line, circle dotted line

The system provides seven kinds of line types. When different types are selected in the plot function, the plot effects of various line types are as follows:

Name	Icon	Select plotter line type	Output icon	Select software dotted line	Output icon	Select circle dotted line	Output icon
solid line		solid line		solid line		solid line	
dotted line1		dotted line1		Drawn according to the set length and interval		Drawn according to the set diameter, interval	
dotted line2		dotted line2					
dotted line3		dotted line3					
customize dotted line		The shape is the same as the shape shown on the screen		The shape is the same as the shape shown on the screen		The shape is the same as the shape shown on the screen	
Circular curve							
Customize curve							

**【Outside border notch use same type】**

Select **【Outside border notch use same type】** ,You can use same notch property when plot or cut;

**【Outside border】** Refers to the outermost line of the pattern. Can choose solid or dashed lines when plot.

**【Inside border】** Refers to the design line of the pattern. Can choose solid or dashed lines when plot.

**【Draw sew border】** Select,Will draw sew border;

**【Draw sew border notch】** Select,Will draw sew border notch;

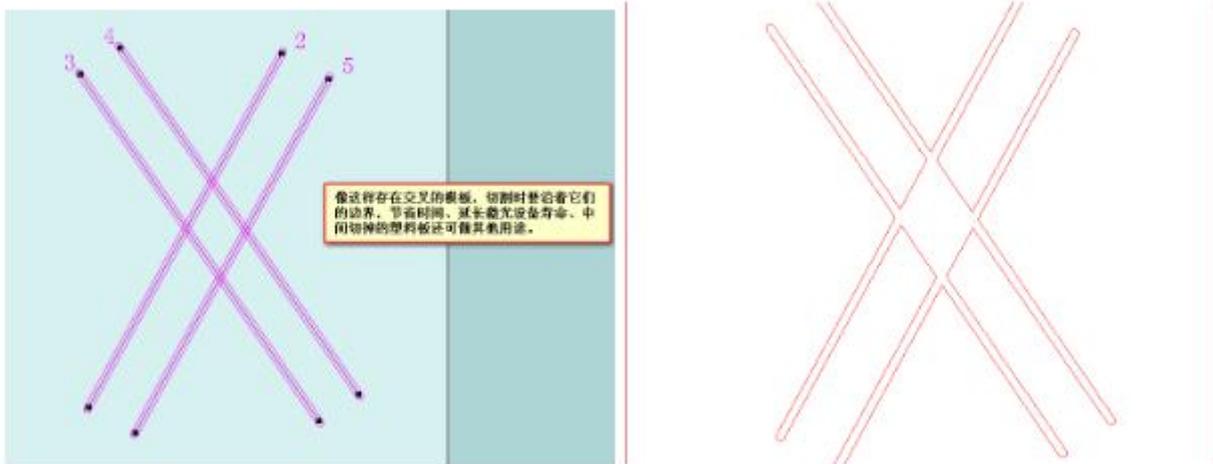
**【Cut Outside border】** Select,when use cut and plotter,Cut outside border line, Now fixed length and cut length is activated;

**【Draw grain line】** Select,When plot or print,Draw grain line.

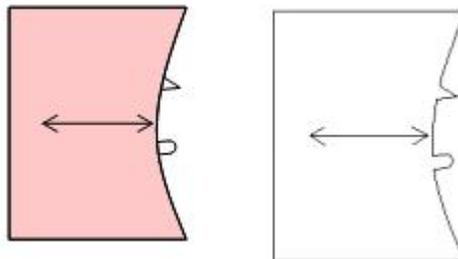
**【Mark notches when cutting pattern】** Sometimes it is necessary to mark when cutting the grid of the bag.

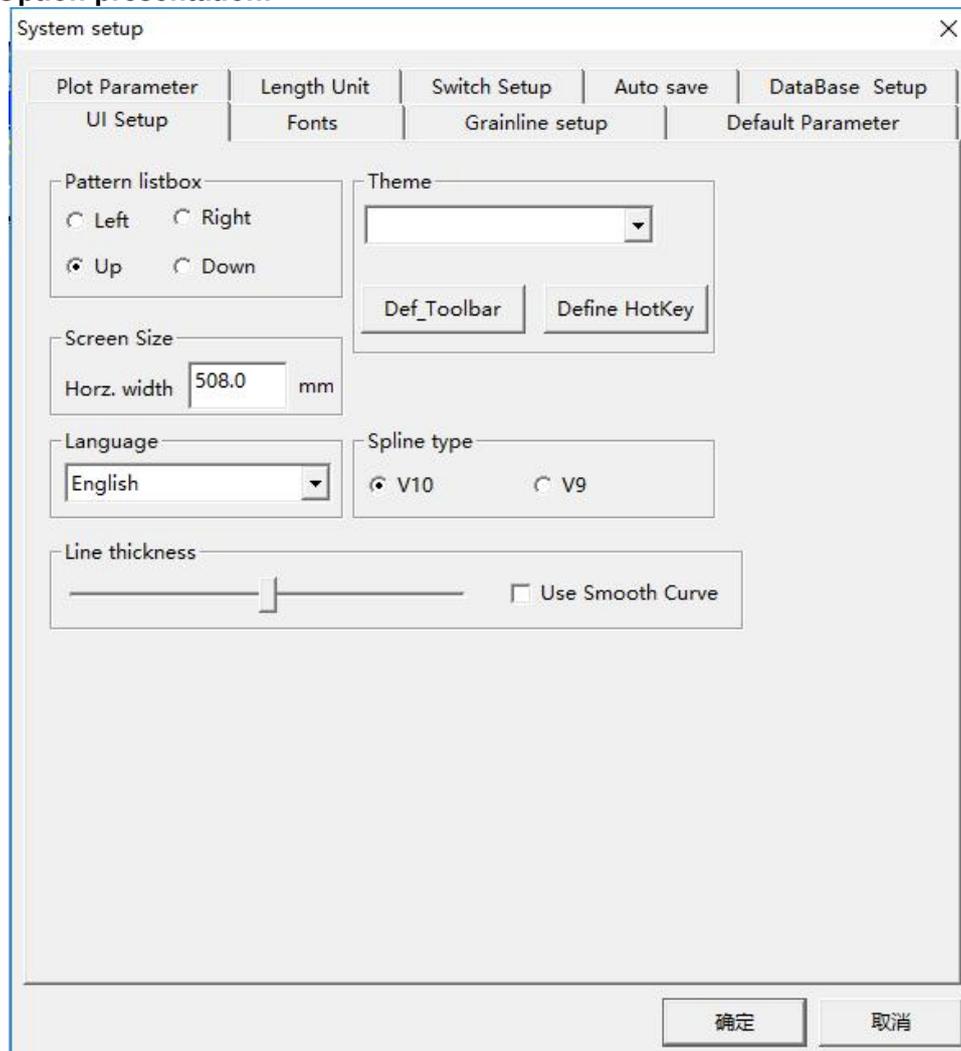
【Cut outline after plot all in one page】 Select, After using the pen to draw one page when link the cutting machine , then use a knife to cut the pattern.

【Merge templates when cutting pattern】 Use when cutting the templates, as shown in the figure below, cut along the boundary when cutting, this will save time. The middle remaining board is used for other purposes.



【Merge notch to border (ONLY V/U/Box type)】 :For the case where the notch is an outer notch, combine the notches into edges.



**【UI Setup】Option presentation:**

**【Pattern listbox】**

Click any button in 【Up、down、left、right】,Pattern list will put to corresponding place.

**【Screen size】** Input according to actual size,can 1:1 shown when you press Ctrl+F11.

**【language selection】**

Used to switch language versions, such as Chinese (GB) for Simplified Chinese, Chinese (BIG5) for Traditional Chinese.

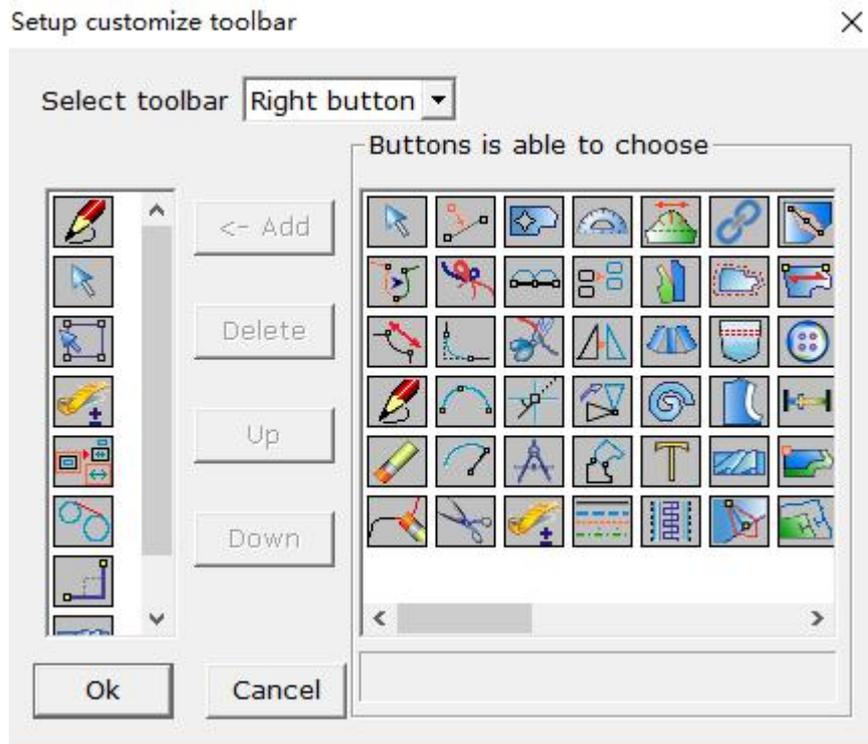
**【Line thickness】**

It is refer to thickness of design line ,border line, assistant line, Left will turn more thick, right will turn more thickness.Select use smooth curve line, Line is smooth showing,If do not select, It is sawtooth line showing.

**【Theme】**


The stored theme can be selected in the drop-down menu.

**Def\_Toolbar** For user's convenience, only used tools can be displayed on the interface as required. Click this button to set your own custom tool and right key tool.



**Note:**

In work area ,Click right can appear.

**【Auto save】 Option parameter:**

System setup

UI Setup | Fonts | Grainline setup | Default Parameter

Plot Parameter | Length Unit | Switch Setup | Auto save | DataBase Setup

Use Auto Save     Disable Undo Data

Save Interval    10    Minute     Save Each Step

Bakup with same DGS file

Fixed Path(Only allow saving files to the path)

Files only can be Saved to fixed directory

   Browse

Save another DGS file

Save another Backup DGS file

   Browse

确定    取消

**【Use Auto save】** Select will use Auto save;

**【Save interval】** It is used for setting up interval of saving time;

**【Save each step】** It is refer to save each operation step, Each file have corresponding file name, Suffix is bak, Saved by people will save in same path,If make more process,And did not save one time, Please use safety restore.

**【Bakup with same DGS file】** Selected, each file has a corresponding backup in the directory where the file is saved. For example, if you save a file named NV003.dgs in a directory, then there is also an NV003.bak in the same directory.

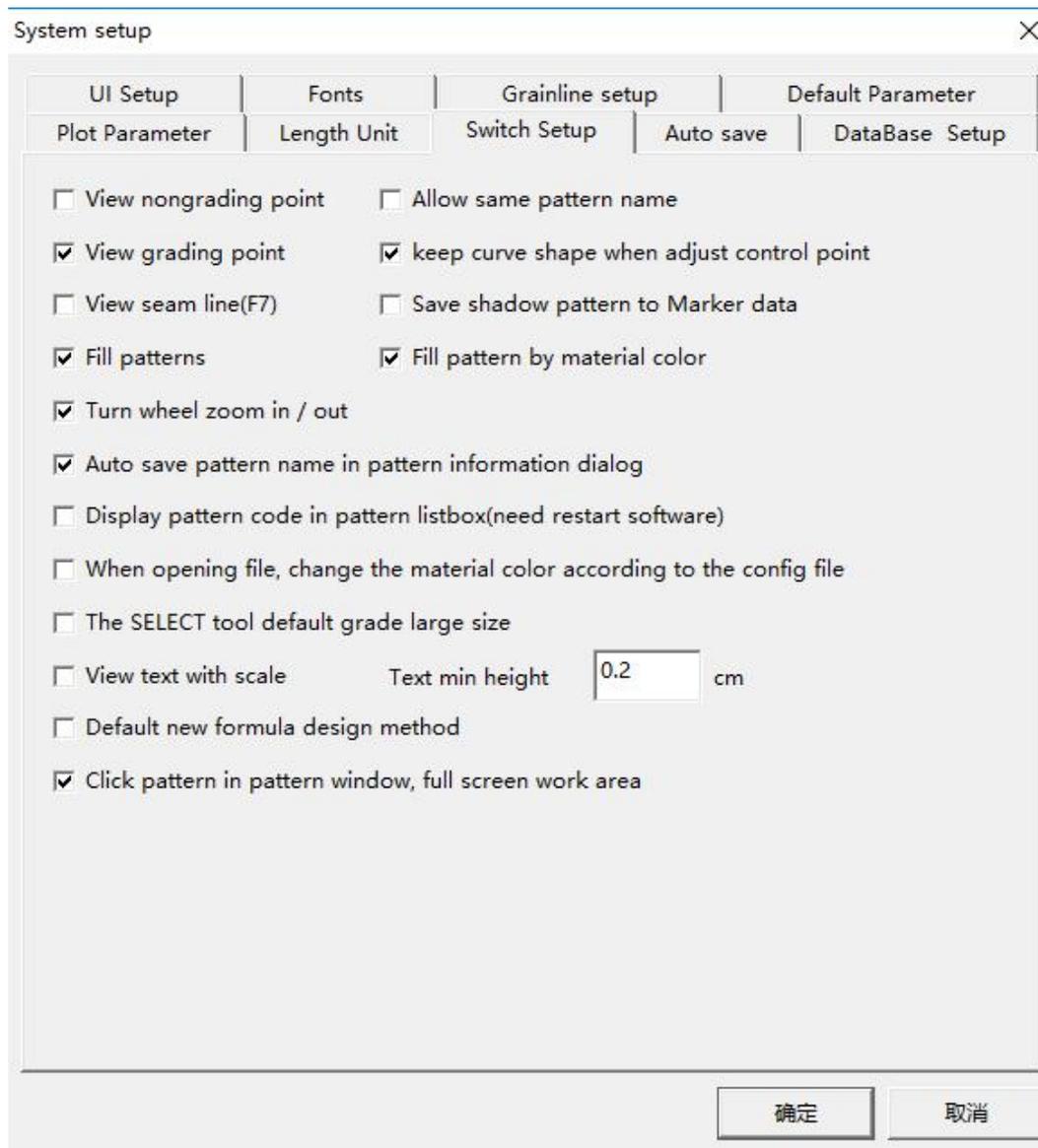
**【Fixed path】** (Only allow saving file to the path)

Select **【Files only can be Saved to fixed directory】** ,All file is saved to fixed directory,and the file will not be

found due to improper operation. Select this option,the pattern can no longer be stored in other directories, The system will prompt you to save it to the fixed directory. In this case,it can be saved only select the specified directory .Select

**【Save another Backup DGS file】** : While saving the file normally, select this option to save another file as a backup in other drive letters.

### **【Switch setup】 Option parameter presentation:**



**【View non-grading point】** Ctrl+K

Select, it will show non grading point, Otherwise do not appear

**【View grading point】** Ctrl+F

Select, it will show grading point,Otherwise do not show

**【View seam line(F7)】** F7

Select,it will show seam line,Otherwise do not show.

**【Fill patterns】** Ctrl+J

Select ,it will have color filled,Otherwise do not show.

**【Turn wheel zoom in/out】**

If selected, the mouse wheel scrolls backward to zoom in, scroll forward to zoom out, otherwise move the screen.

**【Auto save pattern name in pattern information dialog】**

If this option is selected, the newly entered pattern name will auto save pattern name in pattern information dialog, otherwise it will not be saved.

**【Display pattern code in pattern list box(need restart software)】**

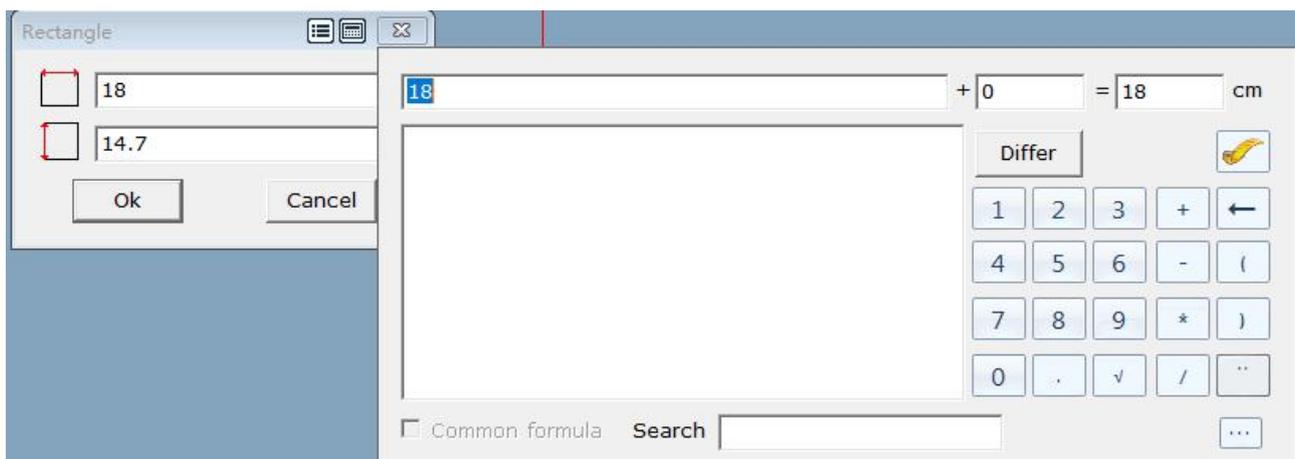
Select this option. After restarting the software, the pattern code entered in the pattern info dialog box will be displayed in the pattern list box, otherwise it will not be displayed.

**【When opening file,change the material color according to the config file】**

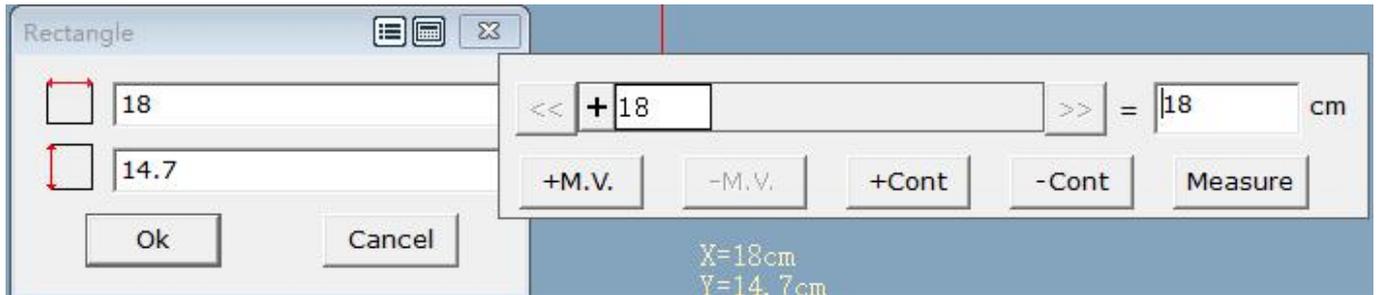
Set the fabric color of computer A, copy and paste the MaterialColor.dat file in the DATA file under the computer's richpeace installation directory into the DATA file in the richpeace installation directory of computer B, and select this option in the system setup,the color of the material displayed in computer B will be the same as the color of the fabric in computer A.

**【The SELECT tool default grade large size】** :When arrow key grading, select this option, the default is to operate the large code.

**【Default new formula design method】**: Select this option, the default interface is as shown below:

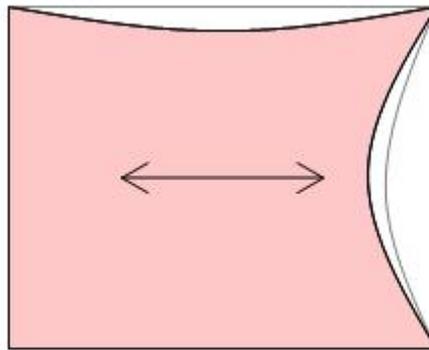


Do not choose, the default is the previous V6 formula interface:



**【Allow same pattern name】** : After selecting, the pattern in the pattern list box can be renamed, otherwise it cannot be repeated.

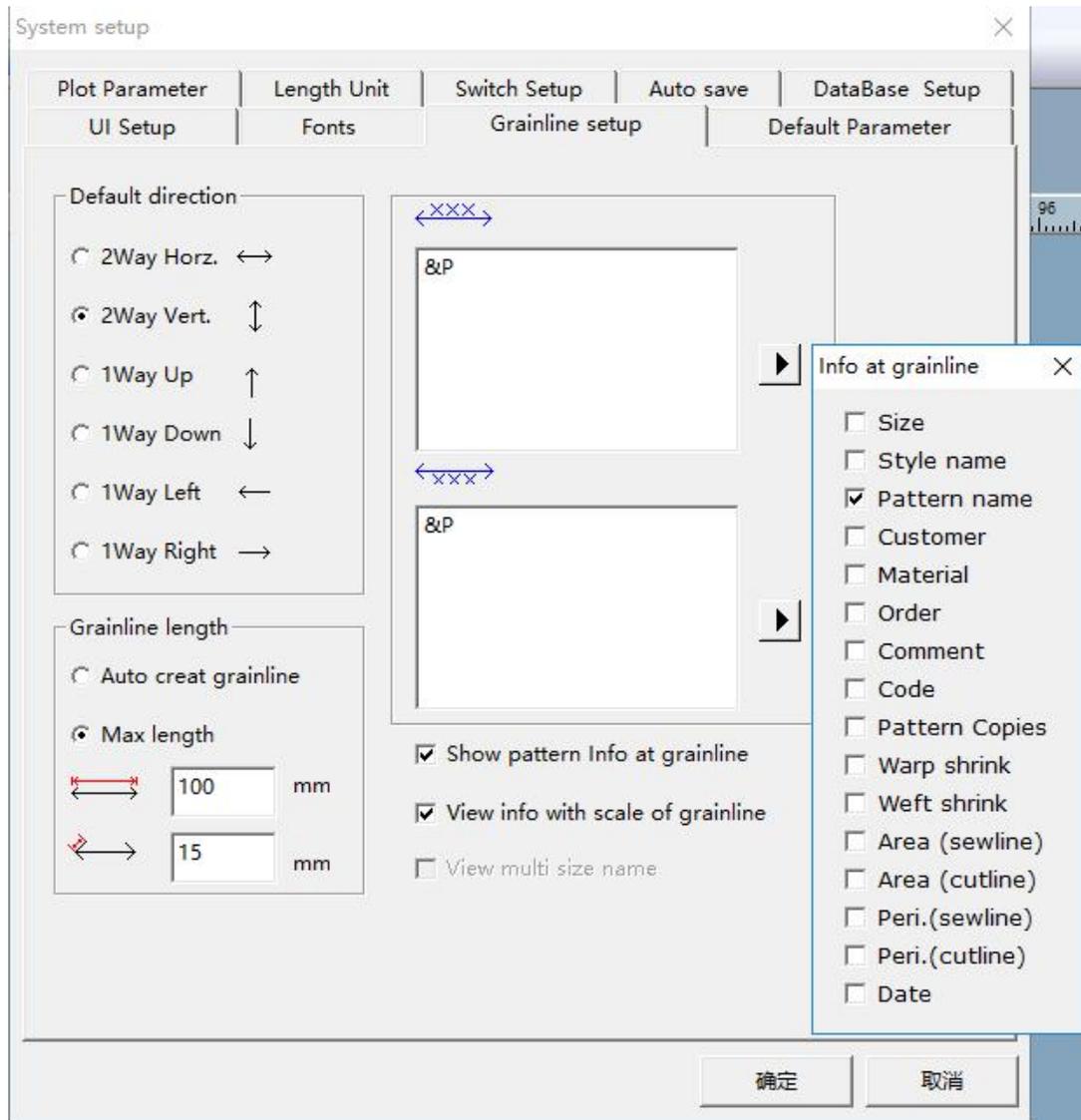
**【Save shadow pattern to Marker data】** : After selecting this option, you can see the shadow of the pattern in the marker.



**【Click pattern in pattern window,full screen work area】** Select the pattern in the patternlist box and the workspace will be displayed in full screen.

**【Fill pattern by material】** After selection, the pattern color in the workspace is the same as the fabric color; otherwise, it is the color of the selected or unselected pattern.

**【Grain line setup】 Option presentation:**



### 【Default Direction】

Grainline direction is selected direction here;



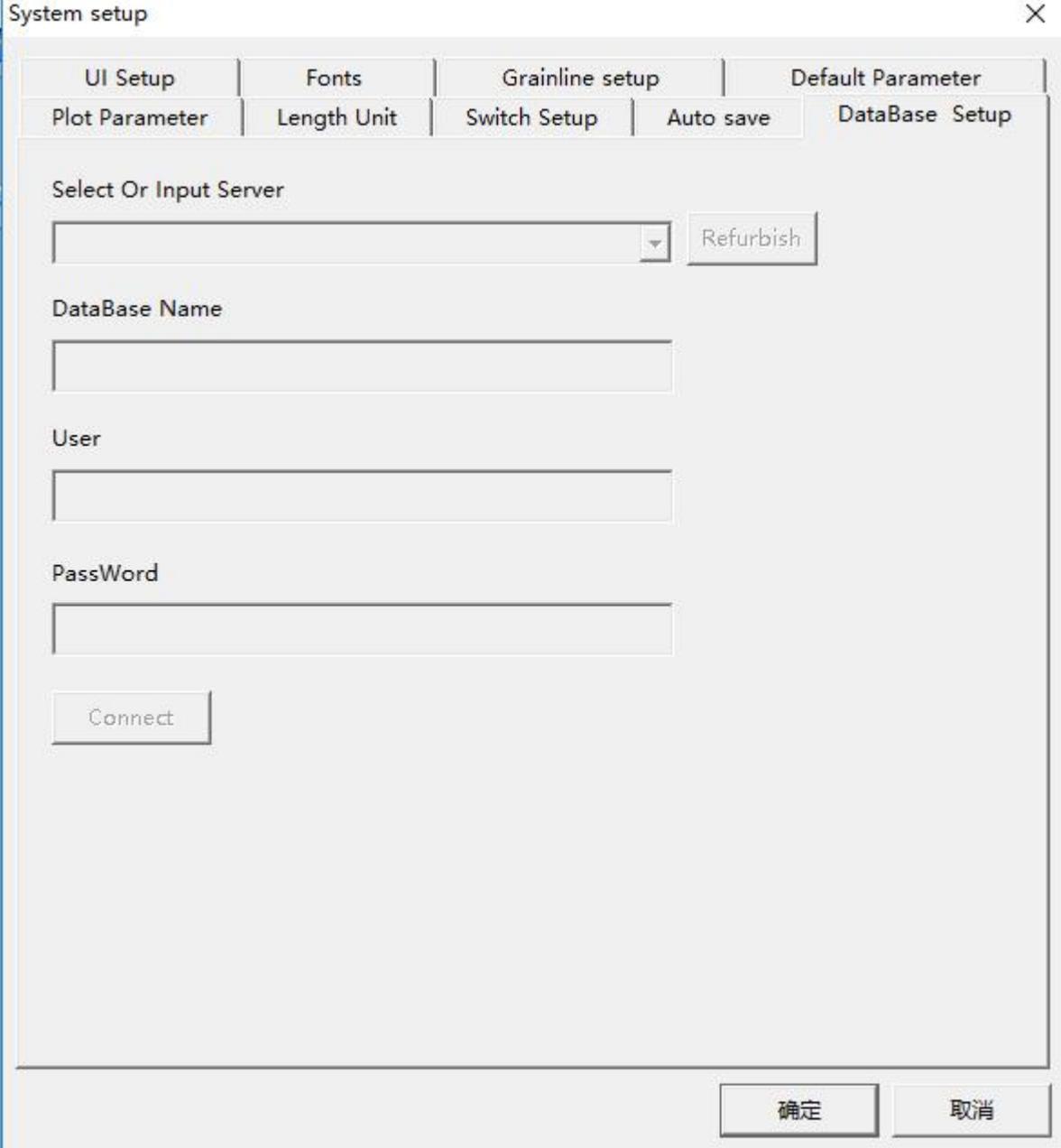
Click the right triangle button, select the desired option in the pop-up menu, and the corresponding code appears in the text box. Finally, click **【Apply】** , **【OK】** .

**【Show pattern Info at grainline】**: When selected, the information set in **【Pattern Info】** **【Style Info】** will be displayed on the pattern line below.

**【View info with scale of grainline】**: When selected, the size of the text on the grainline is displayed by the length of the grainline, otherwise it is displayed in the same size.

**【View multi size name】:** Select. When displaying all the sizes or drawing nets, the pattern of each size can be displayed on the grainline.

**【Data Base Setup】** option presentation:



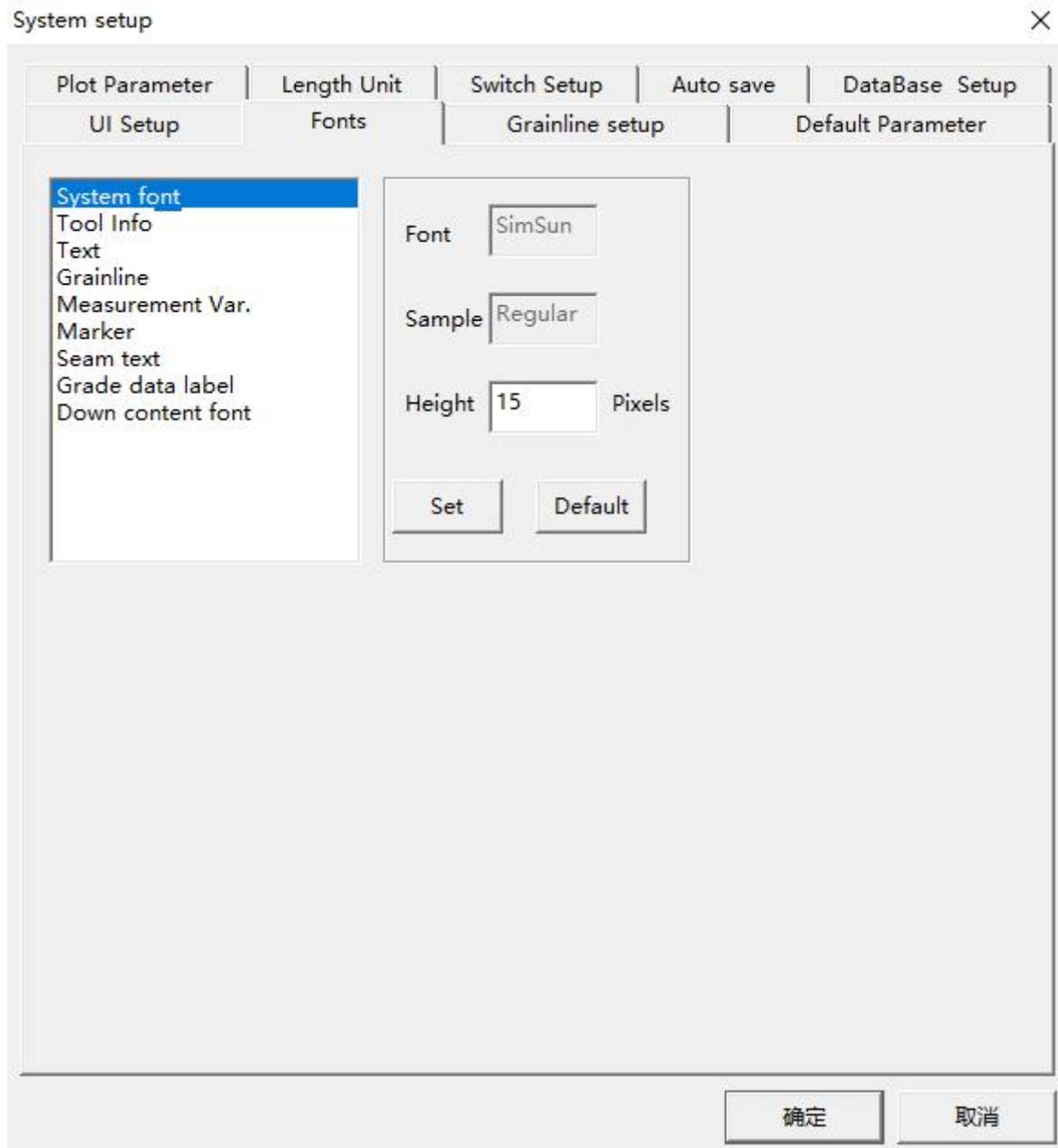
First, the database encryption function must be added to the software dongle. This option is activated.

**【Select Or Input Server】** : eg: GCAD-SERVER\SQLEXPRESS;

**【User】 【Password】** : input the user name and password here;

**Note:**

1. Database transmission can only use network cable, can not use wireless network card transmission;
2. The local computer and the database computer must be in the same local area network.

**【Fonts】 Option presentation:**

It is used for setting tool info cue、T text、Font on grainline、text shape and size of measurement var,Also go back to default font which have set before.

**Operate:**

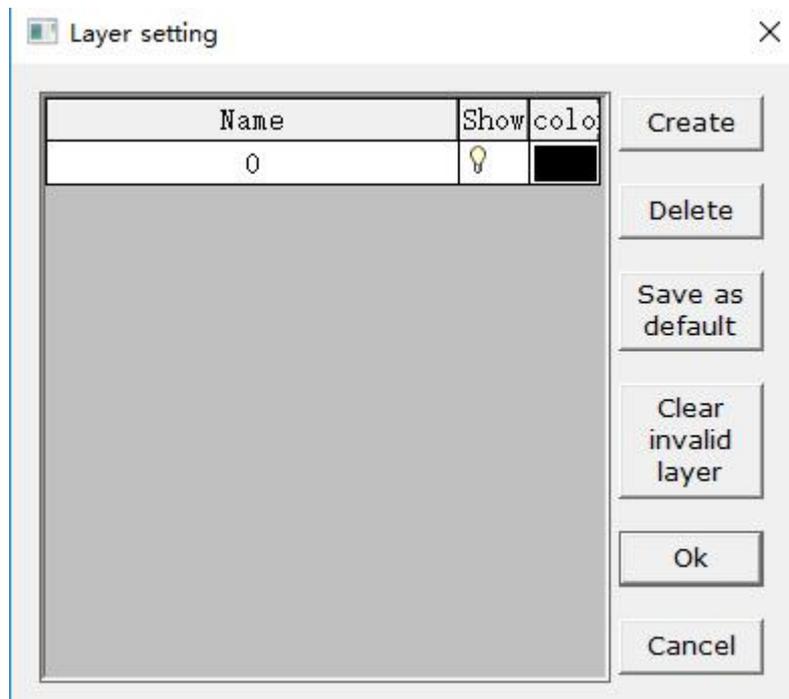
1. Select the content to be set,Click【Set】,pop 【Font】dialogue table, Select proper font,size,Click【OK】,Result will appear in 【Fonts】 dialogue table
2. If you want to go back default font,Only need to press on 【Default】 ;
3. Click OK,Corresponding font will change.

Note: Grade data label,In addition to the grade data label, there is the serial number of the auto sewing template slot.

**Layer setup(S)**

**【Layer setup】 Dialog box description**

- a. Click “Create”, can add multiple layers, can input the desired name in the layer name.
- b. Click “color” can change the color of the layer
- c. Click Show icon. When it is  , show the corresponding layer. When it is  , hide the corresponding layer.



- d. Click the corresponding layer name, select Delete or Clear invalid layer to delete the layer.

## Help menu



- **About Richpeace DGS**

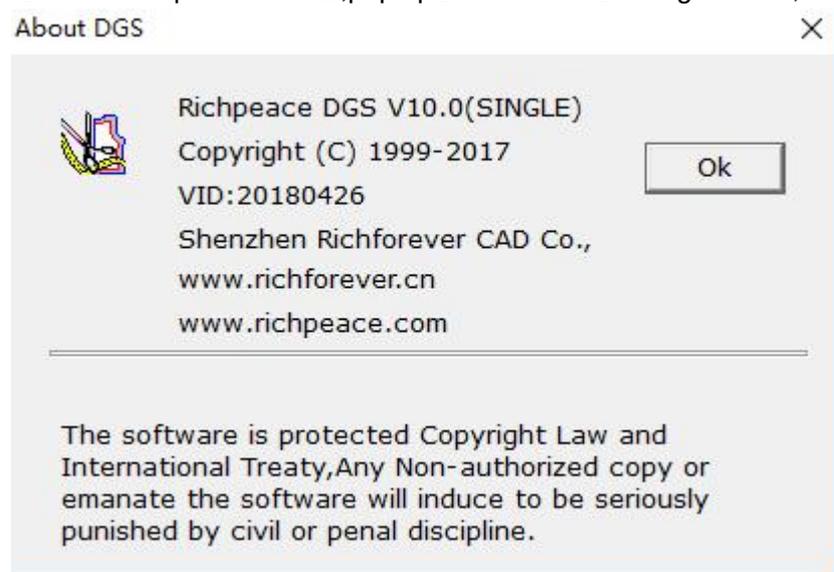
---

**Function:**

It is used for view program version, VID, Copy right etc

**Operation:**

Click **【Help】** Menu-- **【About Richpeace DGS】** ,pop up **【About DGS】** dialogue table,after viewing,Click **【OK】**



## Section 7 Tool attribute bar

**Pattern info pane** ✕

**Pattern**

Name

Comment

Code  Cut waste

Max Slant Angle  Degree

**Grainline**

1way  2way  4way  Anyway

**Copies**

Material name	Material code
	1

Copies Differ  LRCopies Differ

**Size info**

Size   Outline

Perimeter

Area

**Orientation**

No def  Left  Right  left right

**Fold**

Up down  Left right  Allow flip

Pattern i... Grade Ta... Compare ... Ref table ... Style ima...

**Function:**

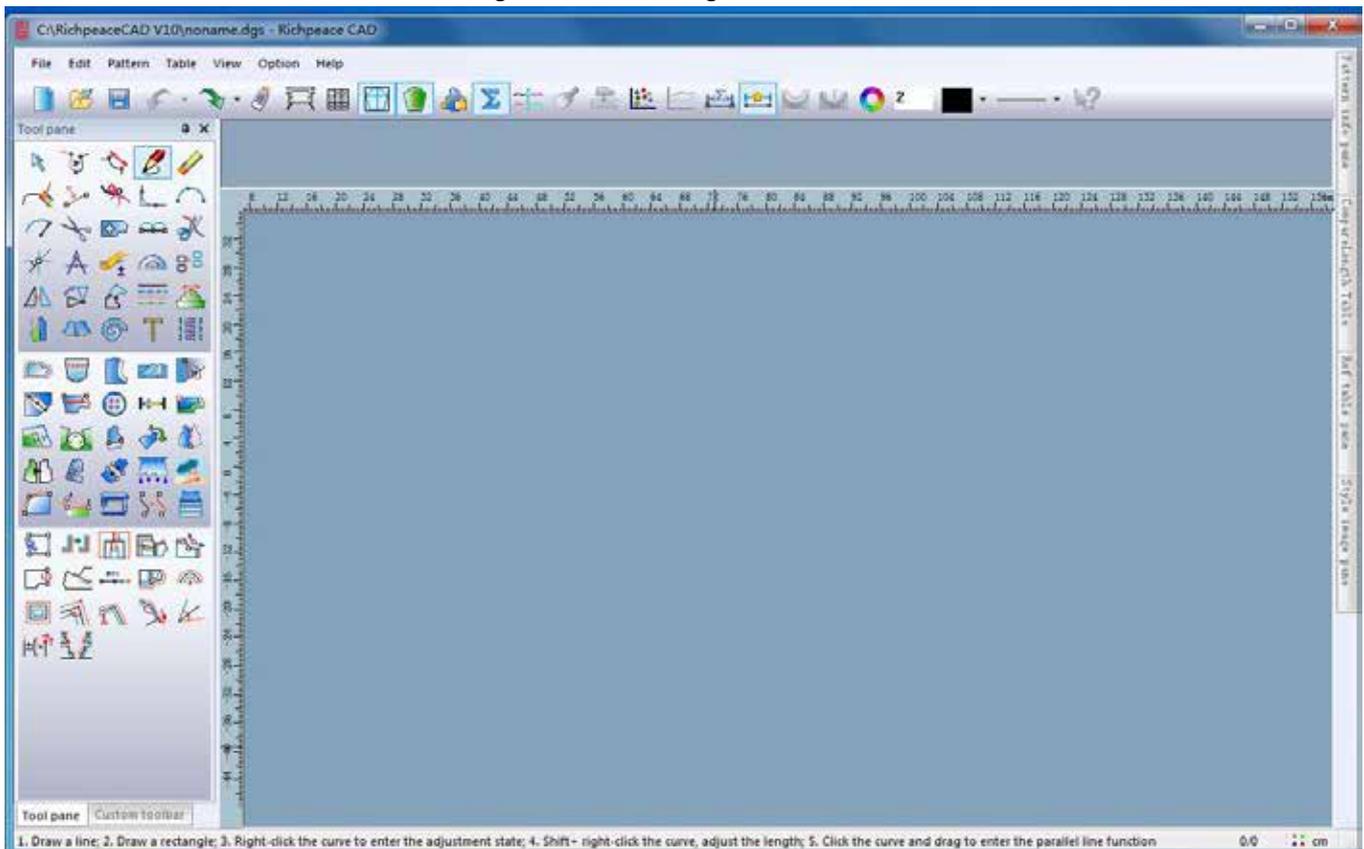
Edit the details of the currently selected pattern.

**Operate:**

Click to display the menu. Select Pattern info pane, the Pattern info pane dialog appears on the right.

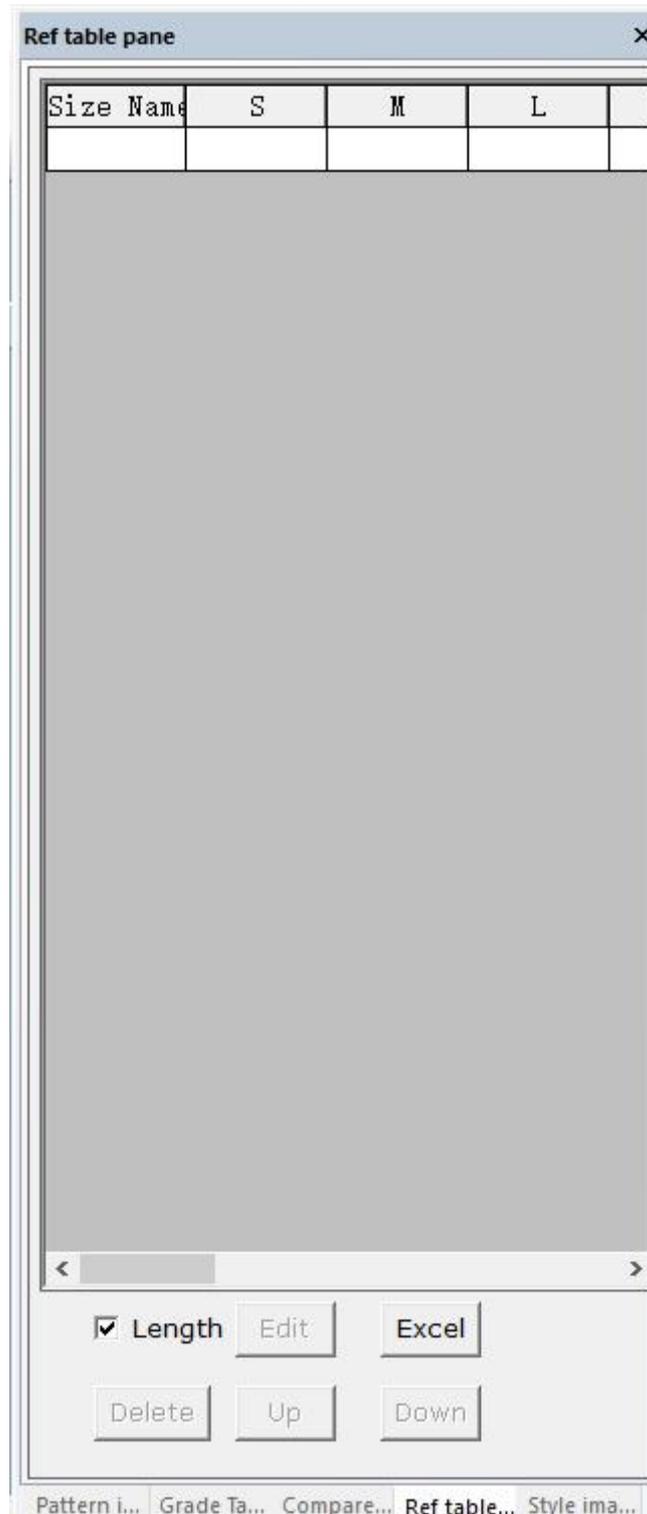
**【Pattern info pane】 Presentation:**

1. : Click the icon to hide the dialog box to the far right.



2. **【Name】**: Refers to the name of the selected pattern;
3. **【Comment】**: Special instructions for the selected pattern can be entered here,if there is embroidery;
4. Newline: If the pattern name ,pattern description is too long, it can be used to change the line. Move the cursor to the position where you want to change the line and press Enter.
5. **Material name**:If input the material name in the style info, select it in the pattern info.
6. If **【Material copies】** is even, select left and right in the [Position] column, the left option is automatically selected, then another pattern in the nesting is the right one;
7. **【Copies Differ】**: Select, each size can input different copies;

8. 【LR Copies Differ】: Select to input different copies for left and right piece.



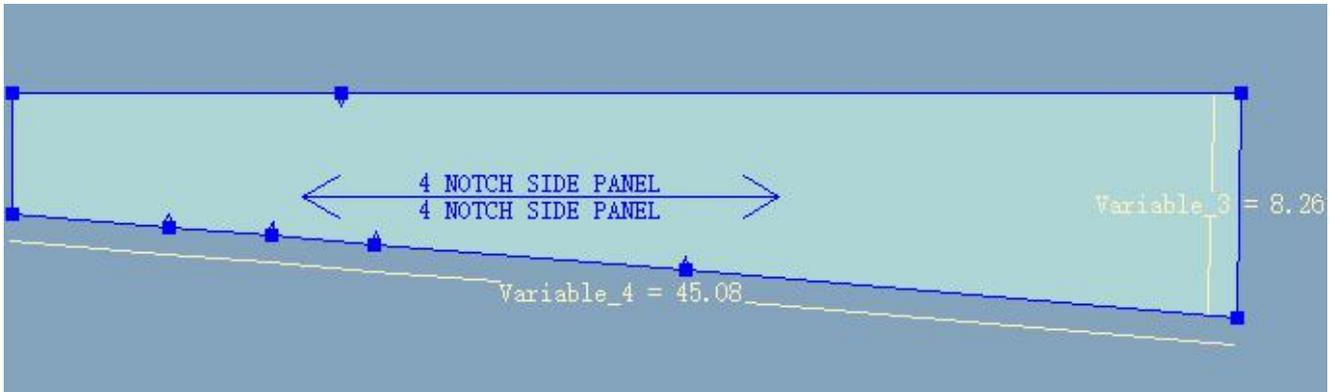
If there is a  check mark before the command, the software interface has the column display, otherwise it will not be.

**Function:**

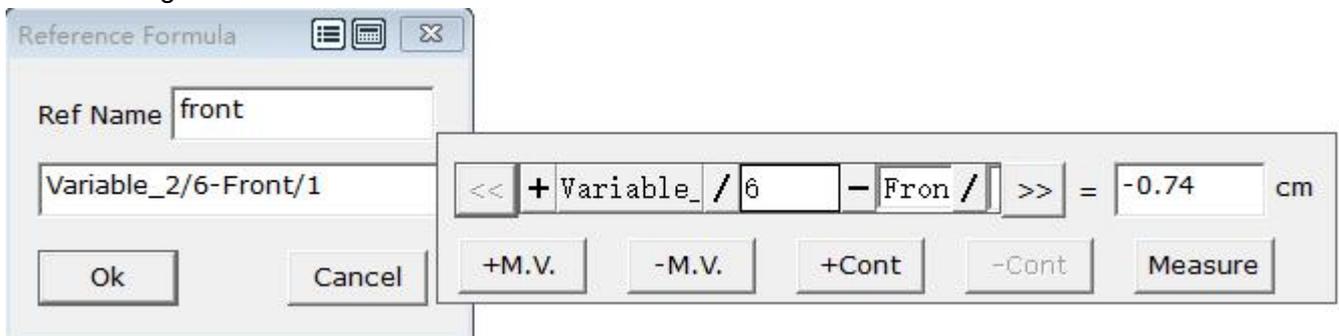
Compare the data, such as comparing the size in the Edit Size table with the actual size.

**Operate:**

1. Measure and record the actual size with  compare length tool or  Measure two point distance tool, as shown below;



2. As shown in the above figure, click on the blank of Size name in the Ref table pane, pop up **【Reference Formula】** dialog box. Input the Ref name and the formula ,Can see the difference between the actual and measured length.



**Note:** The same formula can be established only once, and the formula can be used in different files. In other documents, it is only necessary to use  compare length tool or  Measure two point distance tool to measure and record the actual size.

3. At this time, the ref table pane will display the difference of each size.

Size Name	S	M	L	XL
front	-1.7	-1.38	-1.06	-0.74

### 【Ref table pane】 Presentation:

**Edit reference data:** Click on the blank row of the table to pop up the formula edit box, write the data to be compared according to the formula, and input the comparison result name. At this time, the ref table pane will display the difference of each size.

**Edit button:** Select a row with data in the table and click Edit to modify the written reference information.

**Delete button:** Select a row with data in the table, click Delete, delete the row of reference information;

**Up button:** Select a row with data in the table, and click Up, move the row up one row.

**Down button:** Select a row with data in the table, and click Down, move the row down one row.

**Excel:** Export the data in the table to an Excel table.

## Chapter 3

# Garment Marking System

### Section 1 keyboard shortcut instruction

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- Ctrl + A:** Save as
- Ctrl + C :** Put pattern on work area to size list table
- Ctrl + I :** Piece info
- Ctrl + M:** Define marker
- Ctrl + N:** New
- Ctrl + O:** Open
- Ctrl + S:** Save
- Ctrl + Z:** Undo
- Ctrl + X:** Redo
- Alt + 1:** File toolbar
- Alt + 2:** Marker toolbar1
- Alt + 3:** Marker toolbar 2
- Alt + 4:** Piece window
- Alt + 5:** Size list box
- Alt + 0:** Status bar
- Space Tool** switch(Under “Move selected pieces”tool, Space button switch between zoom in and “Move selected pieces”, If select other tool, It switch between “zoom in” and other tool
- F3:** Arrange Aided marker pattern according to size set
- F4:** Rotate 180 degree for selected pattern
- F5:** Refresh
- Delete:** Delete selected pattern
- Double click:** Double click ,Select pattern go back to piece list, Double click on size list

box, Can put pattern on marker.

**8 2 4 6:** Click move pattern up **【8】**, Bottom **【2】**, Left **【4】**, Right **【6】** Direction until touch other pattern

**5 5 7 7 9 9:** Can rotate selected pattern 90 degree **【5】**, Vertical flip **【7】**, Horizontal flip **【9】**  
 Can rotate selected pattern clockwise **【1】**, Can rotate pattern anti-clockwise **【3】**

**Note:** The 9 numeric keys correspond to the 9 leftmost letters of the keyboard and have the same function; corresponding to the following figure.

1	2	3	4	5	6	7	8	9
Z	X	C	A	S	D	Q	W	E

The **【8】** & **【W】**, **【2】** & **【X】**, **【4】** & **【A】**, **【6】** & **【D】** keys are related to the **【NUM LOCK】** key. When using the **【NUM LOCK】** key, This button move is one step by one. When the **【NUM LOCK】** key is not used, pressing these keys will move the selected pattern directly to the top, bottom, left, and right parts of the marker.

▲ ▶ ← → Can move selected pattern up direction **【↑】**, Bottom direction **【↓】**, Left direction **【←】**, Right direction **【→】**, No matter touch other pattern or not.

## Section 2 Marking System interface introduction

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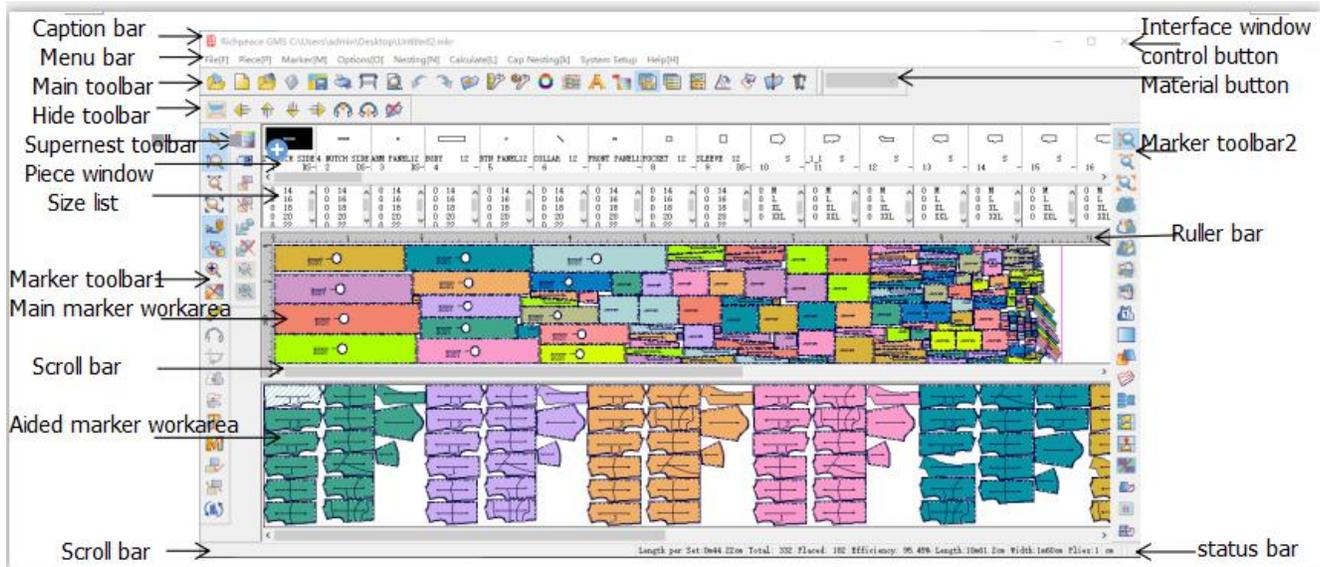
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### Function Overview

GMS is a professional marker-making system specifically for garment industry. It has a very simple and user friendly interface, all marker tools are powerful and convenient. This system can help you to improve cutting room efficiency, shorten the production cycle, increase productivity and add additional value to the garment. So as to strengthen user's capacity of competition. The system features in:

- Supernest、Automatic, manual and interactive, You can select as requirement
- Make markers quickly and conveniently through keyboard.
- Automatically calculate material length, efficiency, total pieces, total sets.
- Depart markers manually or automatically according to size.
- Depart markers manually or automatically according to material.
- Depart markers manually or automatically according to different material number.
- Automatic stripes matching.
- Connect with printer or plotter for printing small size patterns or plotting and cutting patterns at 1:1.

## Interface instruction



- **Caption bar**

It is positioned in the top of window showing the file name, type and file saved path

- **Menu bar**

Below the title bar is a menu bar consisting of 9 groups of menus. As shown in the figure below, the usage of the GMS menu conforms to the Windows standard. Clicking one of the menu commands can perform the corresponding operation. The shortcut key is Alt and the alphabet of the bracketed.

 Richpeace GMS Untitled

File[F] Piece[P] Marker[M] Options[O] Nesting[N] Calculate[L] Cap Nesting[k] System Setup Help[H]

- **File Toolbar**

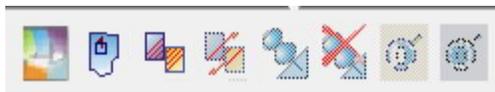
The common commands are placed in this column, which provides great convenience for quick completion of the nesting work.



- **Hide Toolbar**



- **Supernest toolbar**



- **Piece Window**

All patterns for marker file are placed in the piece window, and each individual pattern is placed in a small frame. The size of the pattern frame can be adjusted by pulling the right and left borders. You can also click the right mouse button on the pattern frame, change the value in the pop-up dialog box, adjust its width and height.

- **Size List Box**

Each small piece box corresponds to a size list in which the size corresponding to the pattern and the piece number corresponding to each size are stored;

- **Ruler**

It is used for showing the unit of current marker.

- **Marker Toolbar 1**



- **Main marker work area**

The main marker area can be arbitrarily arranged according to their own needs, in order to achieve a highly efficient marker.

- **Scroll bar**

It includes horizontal or vertical scroll bar, Drag can browser main and aided marker whole work area, Pattern in piece window, the different size for pattern .

- **Auxiliary marker**

The patterns are arranged separately on the auxiliary marker according to the size, it is convenient for nesting main marker pattern.

- **Status Bar:**

The status bar main item is located at the bottom left of the system interface. If you move the mouse over the tool icon, the status bar main item will display the tool name; if you move the mouse over the main marker pattern, the status bar main item will display the width, height, style name, pattern name, size, piece, and X coordinate Y coordinate of the cursor position of the pattern. According to personal needs, the items to be displayed can be set in the Set parameter;

- **Interface window control button**

Can control the window to maximize, minimize display and close;

- **Material Toolbar**



- **Marker Toolbar 2**



- **Status Bar**

The status bar is located at the bottom right of the system interface. It shows the total quantity of current marker patterns, the total quantity of patterns placed in the main marker area, marker efficiency, the length of the current marker, width, marker layers, and length units.

## Section 3 Quick Start

### Nesting

1. Click , pop up **【Marker Definitions】** dialog box . You can setup parameters in the dialog box and the marker border. The marker width in the dialog box can be defined as per the real width of cloth; Length is suggested longer slightly.

Marker Definitions ✕

Commen   Marker selection

Width	Length	Description
160	21.49	
160	21.49	
160	21.49	
160	21.49	
160	21.49	

Width:  cm  Main Length  m

Zoom

Shri  % Shri  %

Prop  % Prop  %

Widt  cm Leng  m

Plies  Total pieces area: 0sq. cm

Layout mode  Single  Faced

Folded mode  Top folded  Bottom folded  Left folded

Marker border (cm)

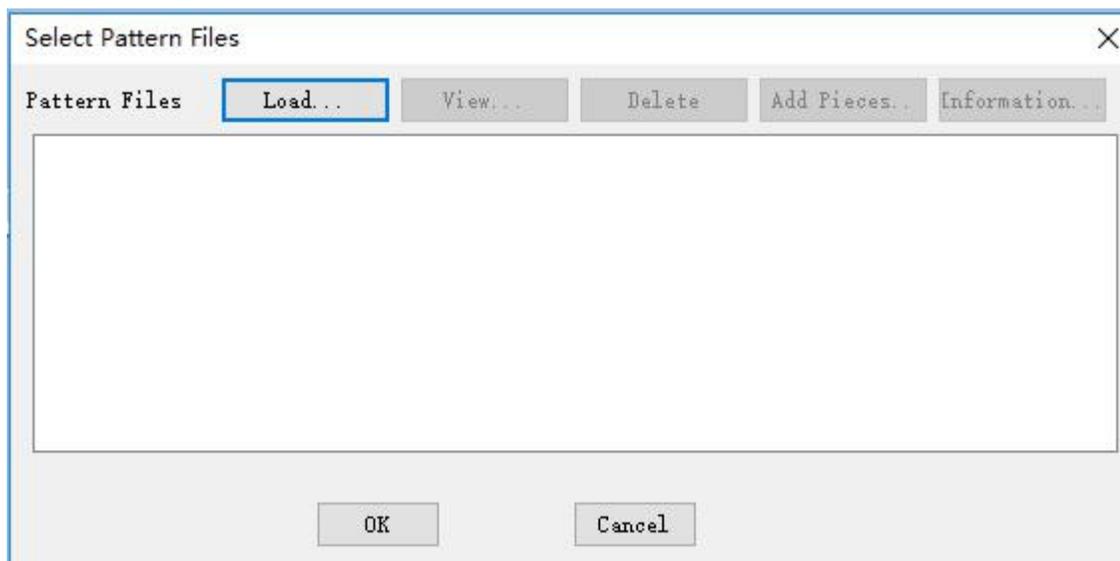
Left  Top

Right  Bottom

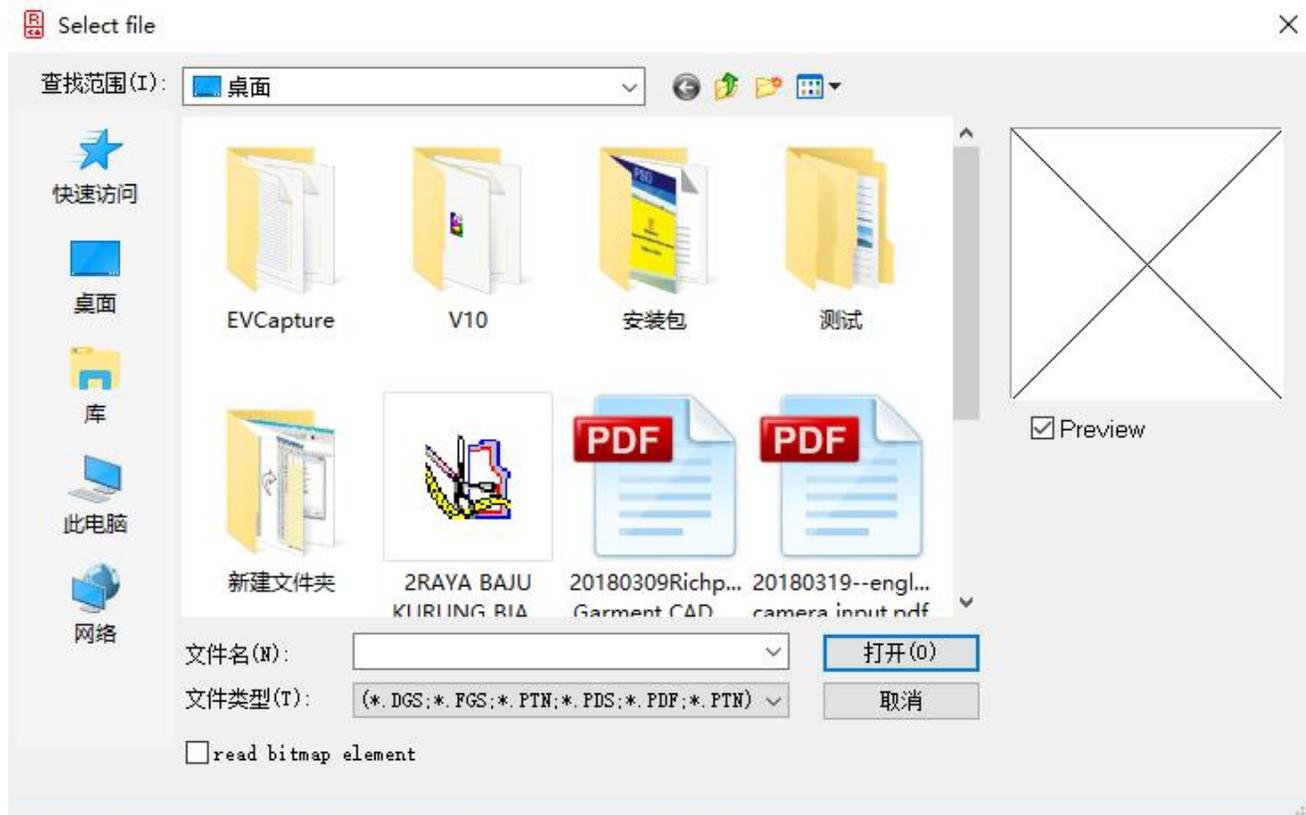
Other

Maximum overlap:  mm

2. Click **【OK】** ,pop up **【Select Pattern Files】** the dialog box.



3. Click **【Load】** pop up **【Select file】** dialog box, and then Click the triangle button next to the file type text box. File Format is DGS, FGS, PTN, PDS, PDF, PTN.



4. Click the file name and click **【Open】**, pop up **【Order for Marker Making】** dialog box. According to actual needs, additional input or modification can be made by clicking on the text box to be modified.

**Order for Marker Making** ×

File: C:\Users\admin\Desktop\RAYA BAJU KURUNG BIASA 12-38.dgs

Order:  Pattern:

Custom:  Material:

No.	Piece Name	Description	Quantity	Material	Side	Both	Horz Shrinkage(%)	Horz Scalin
<b>Piece 1</b>	<b>2 NOTCH SIDE PANEL</b>		<b>2</b>		<b>Left</b>	<b>Yes</b>	<b>0</b>	<b>0</b>
Piece 2	4 NOTCH SIDE PANEL		2		Left	Yes	0	0
Piece 3	ARM PANEL		2		Left	Yes	0	0
Piece 4	BODY		1		None	No	0	0
Piece 5	BTN PANEL		1		None	No	0	0
Piece 6	COLLAR		1		None	No	0	0
Piece 7	FRONT PANEL		1		None	No	0	0
Piece 8	BACK		1		None	No	0	0

Set shrinkage for all pieces with same material

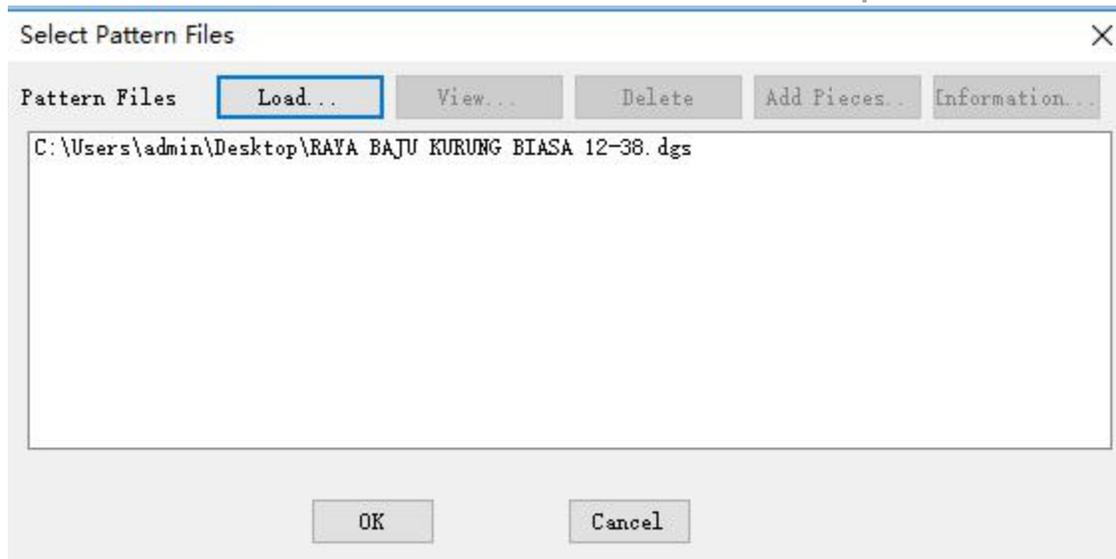
Set even pieces to Both-Attribute  Keep this setup

Set all Material

Order	Size Name	Sets	Reverse Sets
<b>Size, 1</b>	12	<b>1</b>	<b>0</b>
Size, 2	14	1	0
Size, 3	16	1	0
Size, 4	18	1	0
Size, 5	20	1	0
Size, 6	22	1	0
Size, 7	24	1	0
Size, 8	26	1	0
Size, 9	28	1	0

42.25 \* 10.35 cm

5. Check the piece of each pattern, and input the sets of each size in the **【Sets】** bar.
6. Click **【OK】** to go back to the previous dialog box.



7. Click **【OK】** again, and you will see that the pieces with their sizes list have been displayed in piece window and size list bar.
8. At this time, the parameters of the pattern display and printing need to be set. Click **【Options】** - **【Pieces on Marker】**, pop up the **【Show Pieces on Marker】** dialog box, and click the triangle arrow to the right of **【Top】** and **【Bottom】**, select **【Piece name】** and other content that needs to be displayed ;

**Show Pieces on Marker** X

<b>Piece</b>			
<input checked="" type="checkbox"/> Border	<input checked="" type="checkbox"/> Virtual Border	<input checked="" type="checkbox"/> Fill color	<input checked="" type="checkbox"/> Color of Set
<input checked="" type="checkbox"/> Weave Line	<input checked="" type="checkbox"/> Auxiliary Line	<input checked="" type="checkbox"/> Text	<input checked="" type="checkbox"/> NetBorder
<input checked="" type="checkbox"/> Sewing line	<input checked="" type="checkbox"/> Quilted line	<input checked="" type="checkbox"/> Bitmap	<input checked="" type="checkbox"/> Temporary assistant line
<b>Internals</b>			
<input checked="" type="checkbox"/> Drill	<input checked="" type="checkbox"/> Button	<input checked="" type="checkbox"/> Out Border	<input checked="" type="checkbox"/> InsideBorder Notch
<input checked="" type="checkbox"/> Lacing Eye	<input checked="" type="checkbox"/> Cutting Line	<input checked="" type="checkbox"/> Pleat	<input checked="" type="checkbox"/> Dart
<b>Mode</b>			
<input checked="" type="checkbox"/> Draw	<input checked="" type="checkbox"/> Cut/Drill	<input checked="" type="checkbox"/> Drill M43, M44, M68	
<b>Description</b>			
Top:	<input type="text" value="@T"/> <span style="float: right;">▶</span>		
Bottom:	<input type="text" value="@P"/> <span style="float: right;">▶</span>		
Reverse Piece Mark	<input type="text"/>	<input type="checkbox"/> Font on woveling upwards always	
<input type="button" value="OK"/>		<input type="button" value="Cancel"/>	

9. Nest with auto nest, Manual nest or super nest until get better efficiency. Also you can adjust overlap with direction button or rotate with button 1 and 3(If no colour means overlap).

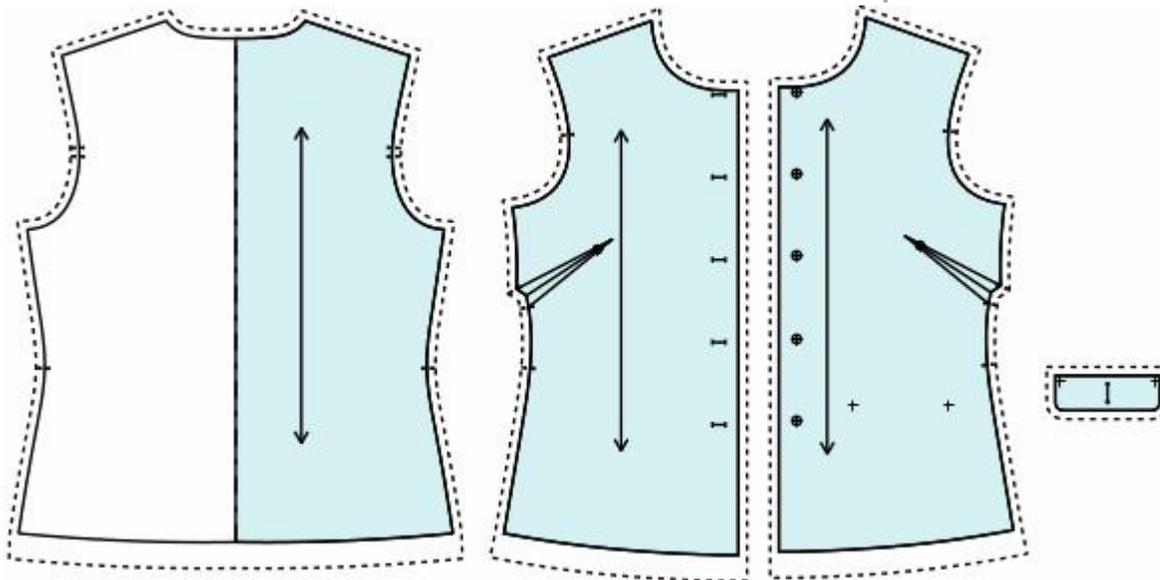
10. Can view the marker-related information in status bar, **【Length】** will show the real used material.

Length per Set:0m75.42cm	Total: 182	Placed: 182	Efficiency: 95.94%	Length:10m55.83cm	Width:1m60cm	Plies:1 cm
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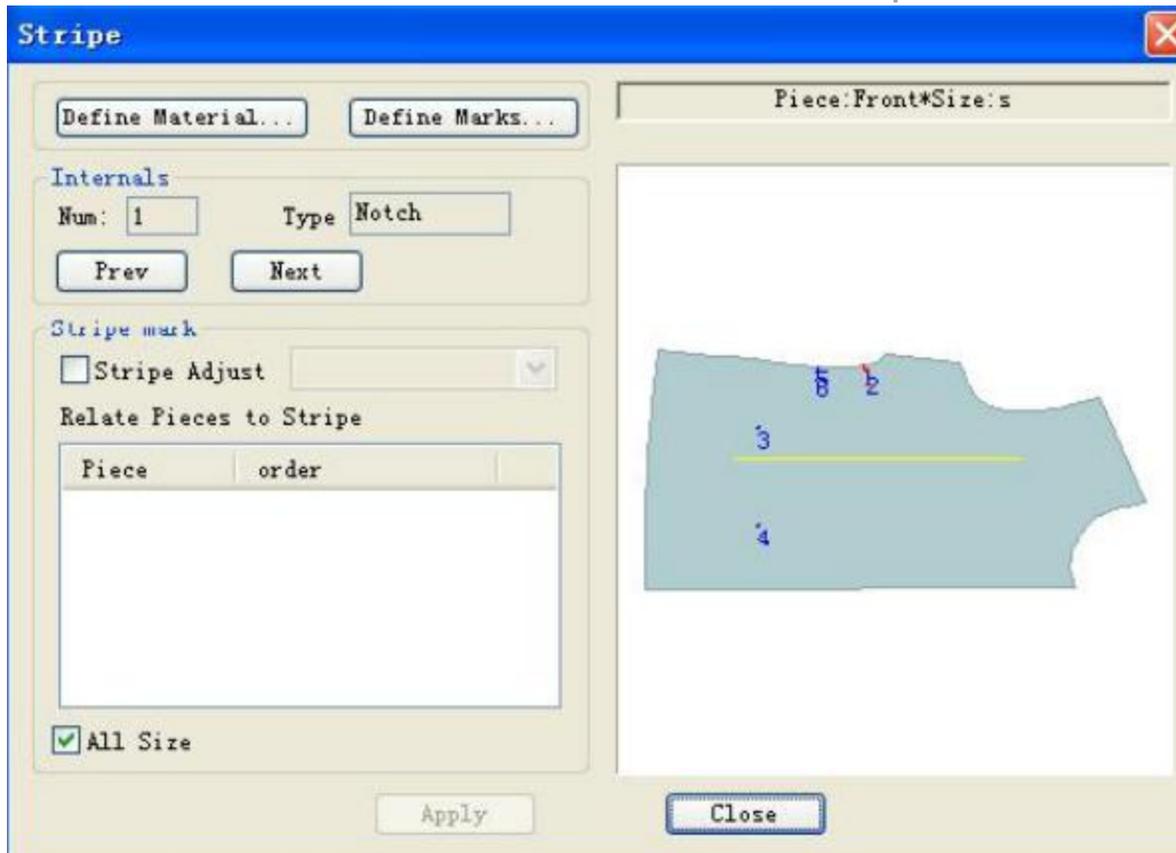
11. Click **【File】** — **【Save as】** , pop up **【Save as】** dialog box , save marker file.

### Stripe adjust

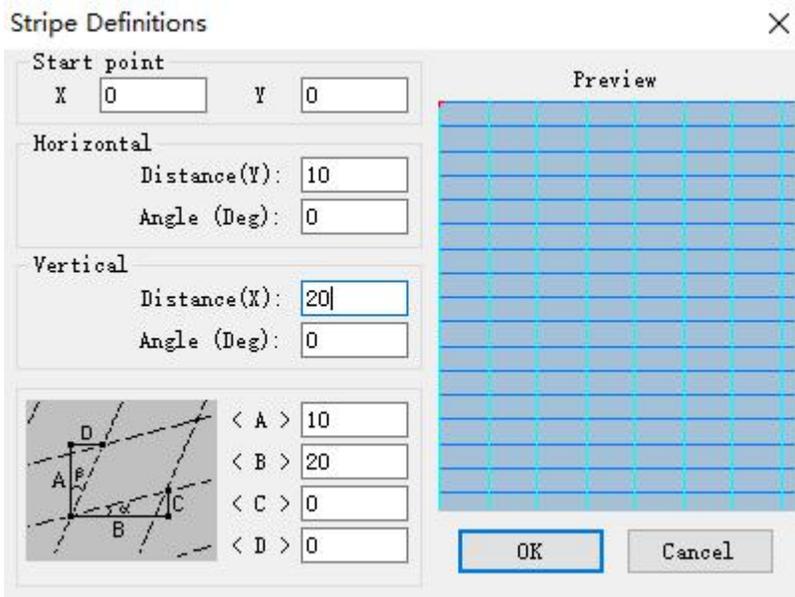
Before making stripe, First need to make notch or drill mark on pattern where matching is required , For example shirt, Waist need Vertical match, Pocket and front need to match.



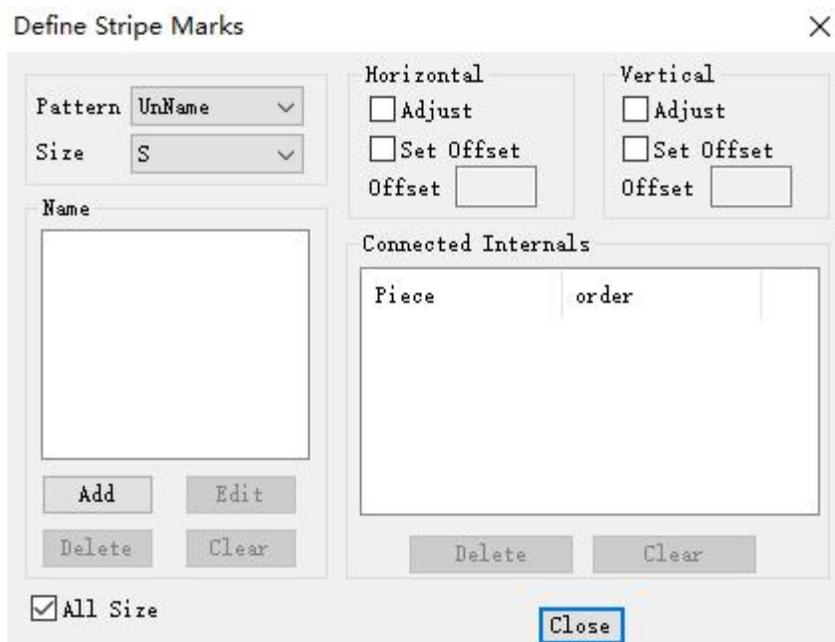
1. Click on the tool  and follow the dialog prompts to create a new marker--load a file. If you are still not familiar with the above steps, please review the beginning of this chapter.
2. Click **【Options】** , Select **【Adjust Stripes】**
3. Click **【Options】** , Select **【Show Stripe】**
4. Click **【Marker】** -- **【Define Stripes】** , You can see following dialogue table.



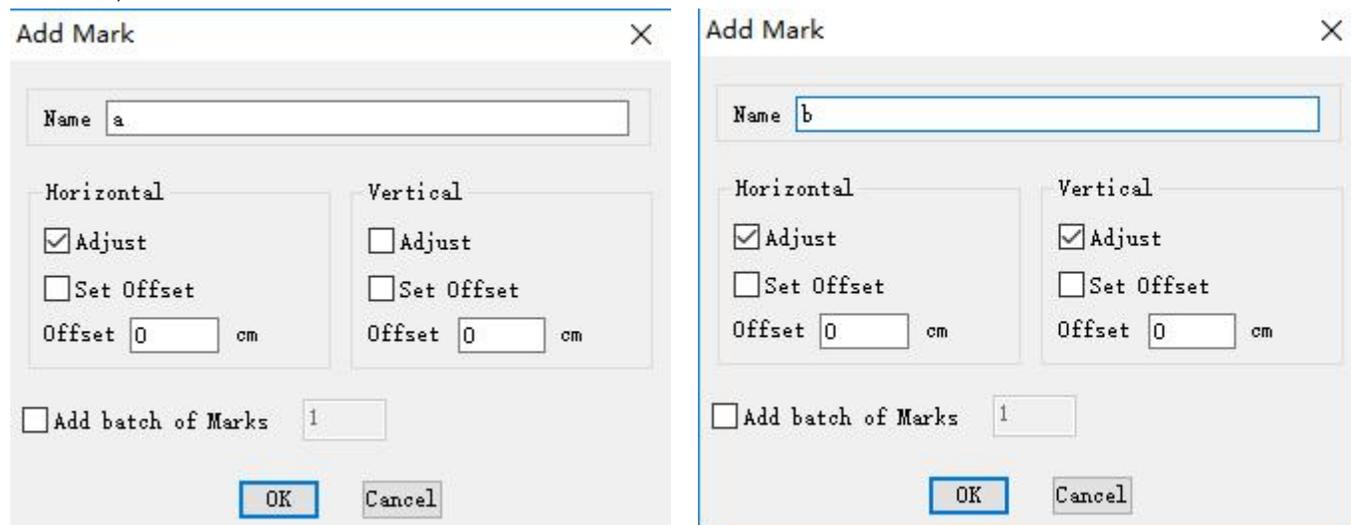
5. Click **【Define Material】**, to get the dialog box of **【Stripe Definitions】**, then set stripes and grids according to the real material. After defining setting, click **【OK】** to return the previous dialog box.



6. Click **【Define Marks】** in the **【Stripe】** dialog box, pop up **【Define Stripe Marks】** dialog box.

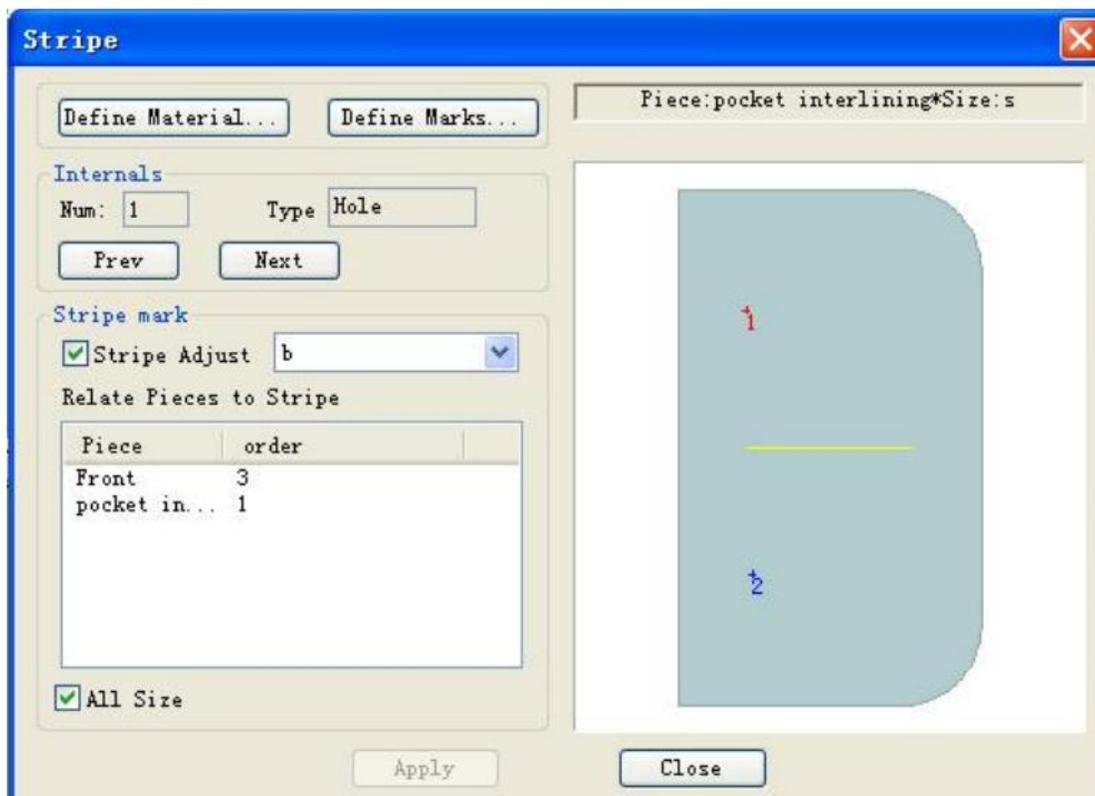
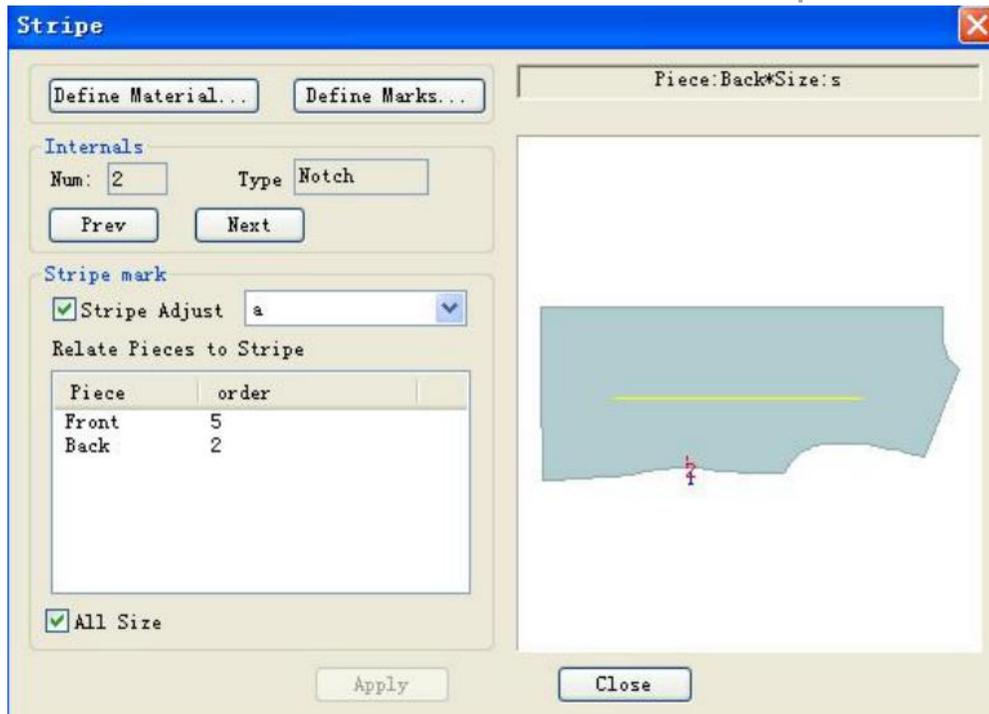


7. Click **【Add】** in the **【Define Stripe Marks】**, pop up **【Add Mark】** dialog box , Name the mark freely referring to the following, then click **【OK】** to return to the previous dialog box; if you need more marks, continue to click **【Add】** , otherwise click **【Close】** .

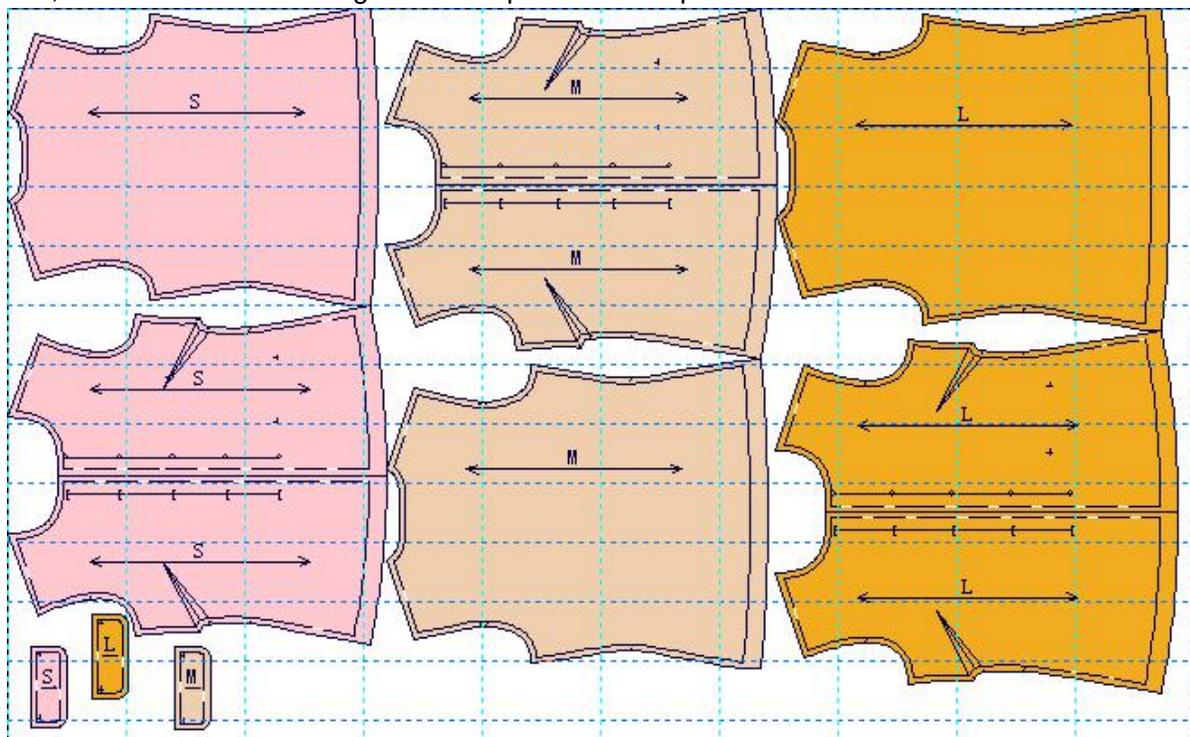


8. Refer to **【Internals】** in the **【Stripe】** dialog box .Click **【Prev】** or **【Next】** until select Marked notch or drill, For example, front select notch 6.Select **【strip adjust】** in **【strip dialogue】** table, Then select marked sign a, Then click**【Apply】**. Click**【Prev】**or **【Next】** , Select sign 3, Select Marked sign b, Then click**【Apply】**.

9. Select back, Select notch 2,Then click sign a, Click **【Apply】** . Select pocket, Select drill1, Click **【Apply】**



10. Click and drag pattern from pieces window to work area, Then loosen mouse, Then put other pattern to work area, Pattern match according to the first pattern which put in work area.

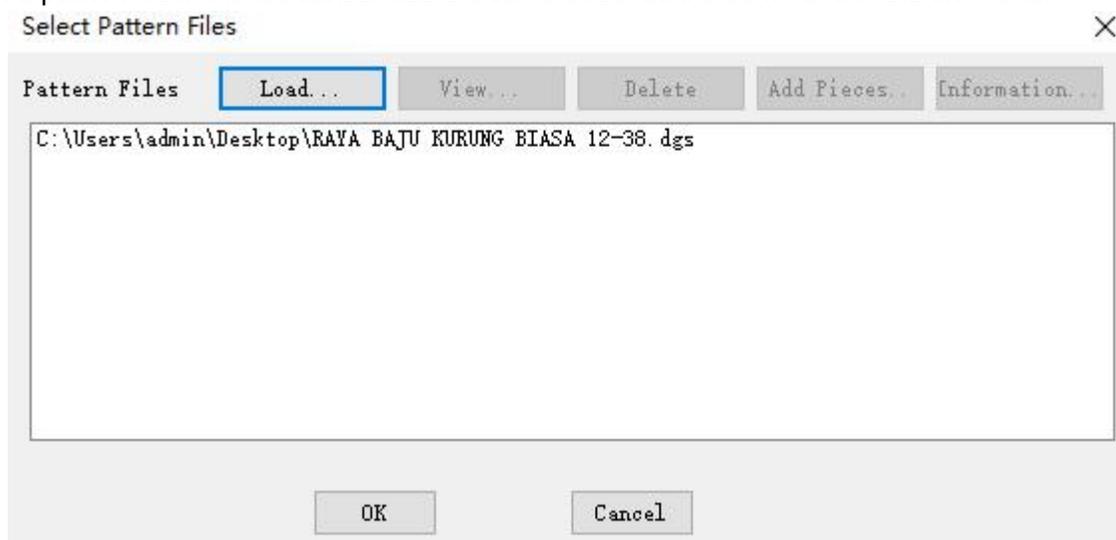


## Section 4 Main Toolbar



### Open a pattern file (D)

The open a pattern file in the file toolbar has the same effect as the command in the file menu.



#### Function:

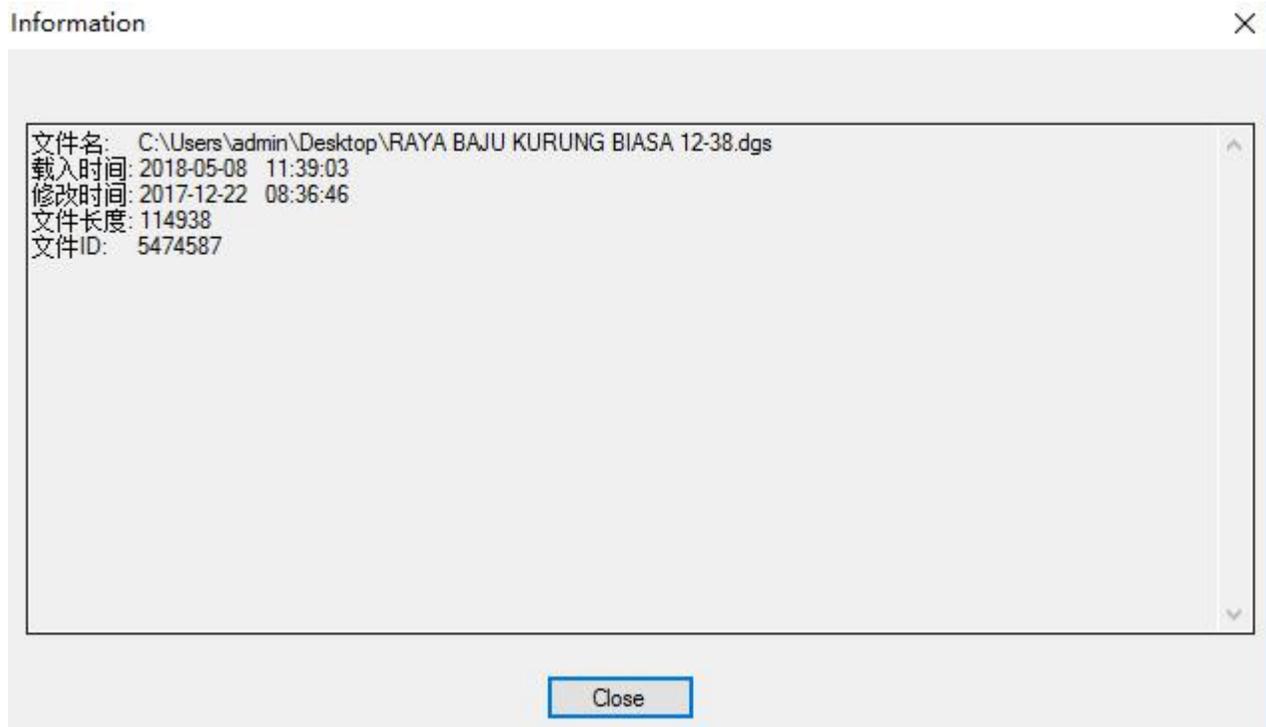
【Load】 is to select the nest files such as DGS,PDS or .PTN

【View】 is to check all the content of 【Order for Marker Making】 .

【Delete】 is to remove the selected pattern file.

【Add pieces】 is to add other files with the same sizes and load to the marker.

【Information】 It is used for checking file information.



**File name:** Shows where DGS File is saved and file name

**Load time:** Shows dgs loading time

**modify time:** Shows dgs saved time before loading

**File length:** File Bits

**File ID:** DGS modification and number after association

If Dgs modified and ever associate in GMS,File ID will modify.

#### **Operation:**

##### **Load**

1. Click **【Load】**, pop up **【Order for Marker Making】** dialog box;
2. Refer to the dialog box instructions to set up, then click **【OK】**.

##### **View**

1. Select the file name and then click **【View】**.
2. Pop up **【Order for Marker Making】** dialog box, and alter changed the content, then click **【OK】**.
3. Turn back to the first dialog box, and click **【OK】**.

**Delete**

Click the file name and select **【Delete】** .

**Add pieces**

1. Select file after loading, Click **【Add pieces】** button, pop up **【Select file】** dialogue table;
2. Select DGS、PTN、PDS file, Double click file name, pop up **【Add pieces】** dialogue table
3. Select pieces you want to add and click **【OK】** .(Can add more pattern one time)

It is used to add another piece from the same file or from another pattern file to the current marker.

**Tips:**

Double-click on the file name and pop up **【Order for Marker Making】** dialog box. Can modify the options.

**【Order for Marker Making】** Parameter Instruction:

**Order for Marker Making** [X]

File: C:\Users\admin\Desktop\RAYA BAJU KURUNG BIASA 12-3

Order:  Pattern:

Customer:  Material:

No.	Piece Name	Description	Quantity	Material	Side	Both	Horz Shrinkage(%)	Horz Scalina
Piece 1	2 NOTCH SIDE PANEL		2		Left	Yes	0	0
Piece 2	4 NOTCH SIDE PANEL		2		Left	Yes	0	0
Piece 3	ARM PANEL		2		Left	Yes	0	0
Piece 4	BODY		1		None	No	0	0
Piece 5	BTN PANEL		1		None	No	0	0
Piece 6	COLLAR		1		None	No	0	0
Piece 7	FRONT PANEL		1		None	No	0	0
Piece 8	DOCKET		1		None	No	0	0

Set shrinkage for all pieces with same material

Set even pieces to Both-Attribute  Keep this setup

Set all Material



42.25 \* 10.35 cm

Order	Size Name	Sets	Reverse Sets
Size, 1	12	1	0
Size, 2	14	1	0
Size, 3	16	1	0
Size, 4	18	1	0
Size, 5	20	1	0
Size, 6	22	1	0
Size, 7	24	1	0
Size, 8	26	1	0
Size, 9	28	1	0

### 【File】

It lists the path and filename of the current pattern.

### 【Order, Pattern, Customer and Material】

You can enter the respective content. If you have defined the names of these three items in Global Info dialog box, you no longer need a new name.

### 【Piece Name】

Is used to define the name of the piece. If the pattern name is changed here, the original name is replaced by the new name.

### 【Description】

It is used to give supplementary instructions for the pattern.

**【Quantity】**

It is used to define the cut quantity of the piece on marker. This number will be displayed in size list in the form of counter and it will reduce during marker making until all pieces are completed or placed in the marker. If the number in **【Quantity】** is 0, its piece will not be read for marker making.

**【Material】**

It is used to define the material of the selected piece.

**【Side】**

Monolithic, left, and right attributes can be defined for the pattern in this column. If there is only one piece of pattern, the system defaults to a single piece. If it is 2 or even, it can be left or right.

**【Both】**

This defines whether the pattern is symmetrical. If the piece of the patterns is 2 and the symmetry attribute is **【Yes】**, you will have two symmetric pieces for right and left; If the pattern number is 2 and the symmetry attribute is **【No】**, then you will get two identical patterns;

**【Horz Shrinkage】 , 【Horz Scaling】 , 【Vert Shrinkage】 , 【Vert Scaling】**

When you input the percentage, piece will shrink relatively before they are placed on the marker.

**【Code】**

It is used to define the code of the piece. You can define a series of number or a code of the piece type

**【Size name】**

It displays the size name for all sizes.

**【Set】**

You can input the set number for all sizes in this column.

**【Reverse sets】**

It is used to f or nesting using the concept one size one direction .It shows the quantity for reversed pieces.

**Note:**

1. Sets, reverse sets: click on the column head to set the sets;
2. The contents of this dialog box, if you want to display on each pattern on the marker, you must click **【Options】** — **【Pieces on Marker】**, pop up **【Show Pieces on Marker】** dialog box. then click the black triangle by **【Top】** or **【Bottom】** under **【Description】**. Select the items that have been entered in the pop-up menu.

**【Print preview】**

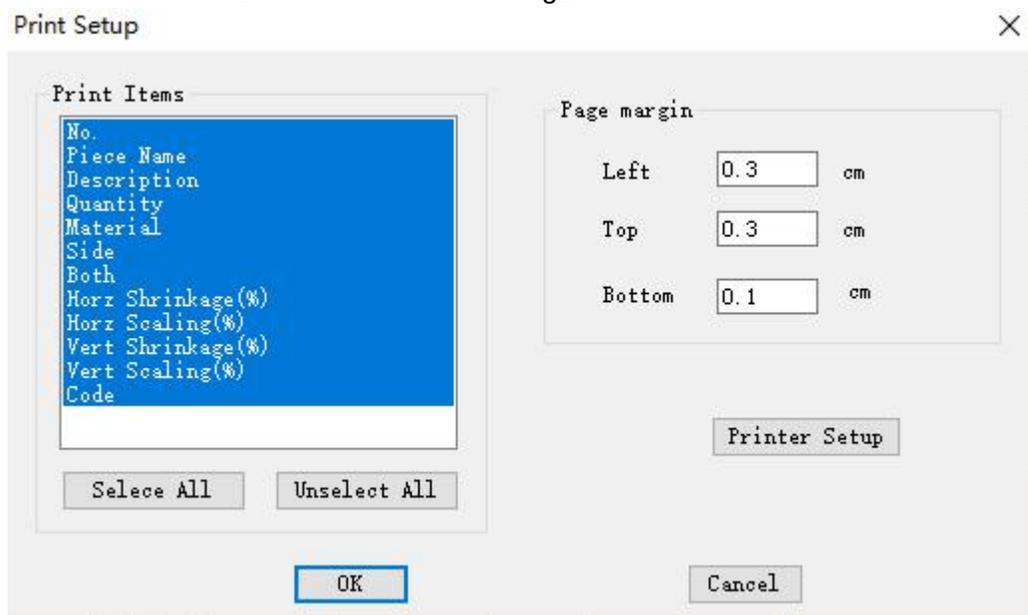
It used for previewing **【Order for Marker Making】** before printing.

**【Print】**

It is used for printing **【Order for Marker Making】**

**【Print setup】**

This is used for set contents in **【Order for Marker Making】**



The blue print in the "Print Items" is the selected print content.


**New (N)**
**Ctrl +N**

The "New" in the file toolbar has the same effect as the command in the file menu.

**Function:**

It is used to create a new marker file.

**Operate:**

1. Click the icon  or click **【File】** menu-- **【New】**, pop up the dialog box **【Marker Definition】** where you can set the marker.
2. Click **【OK】** to pop up the dialog box **【Save changes to “untitled.mkr”?**】, if you click **【OK】**, it will display the dialog box **【Save as】**, click **【Save】** after you input the path and filename, then pop up **【Select pattern files】**.
3. Click **【Load】**, pop up **【Select file】** dialog box, and then select DGS、PDS、PTN File. Double-click on the selected file name, pop up **【Order for Marker Making】** dialog box
4. Follow the dialog box instructions to set, and then click OK.
5. Return to the first dialog box, click **【OK】** to build a new marker.

**【Marker Definition】** Presentation:

**Marker Definitions** ✕

Commen:   Marker selection

Width	Length	Description
160	21.49	
160	21.49	
160	21.49	
160	21.49	
160	21.49	

Width:  cm  Main Length:  m

Zoom

Shri:  % Shri:  %

Prop:  % Prop:  %

Widt:  cm Leng:  m

Plies:  Total pieces area: 0sq.cm

Layout mode:  Single  Faced

Folded mode:  Top folded  Bottom folded  Left folded

Marker border (cm): Left:  Top:   
Right:  Bottom:

Other: Maximum overlap:  mm

### 【Comment】

Input the profile related to this marker, which can be displayed in the head or tail of the marker;

### 【Marker selection】

When this item is valid, it allows to select the marker size from the marker library table in the **【Marker Definition】** dialog box. The size of the last marker can be used as the default size for the next marker. You can use the above instructions to store the contents of the marker description that you think are most commonly used in the marker library table;

### 【Width】

The width (width of the fabric) required to input the marker is used to define the width of the marker;

### 【Length】

This window is used to define the marker length. The value is only a reference value of the longest length of the cutting machine, and you can change it during the marker making process as you need.

**【Zoom】**

It is used for adding shrinkage or scaling to a marker which has been already made.

**【Plies】**

It means the total plies of material on marker.

**【Layout mode】**

It means the mode for the material placed on the marker, such as single or face.

**【Total pieces area】**

It is used to display the total area of pieces on marker.

**【Marker border】**

If the material has damaged borders, you need define them to assure the pieces will not enter the damaged,

**【Left】** is used to define the left margin of the marker borders.

**【Right】** is used to define the right margin of the marker borders.

**【Top】** is used to define the top margin of the marker borders.

**【Bottom】** is used to define the bottom margin of the marker borders.

**【Maximum overlap】**

This function is used when compact marker.

**Open (O)****Ctrl+O**

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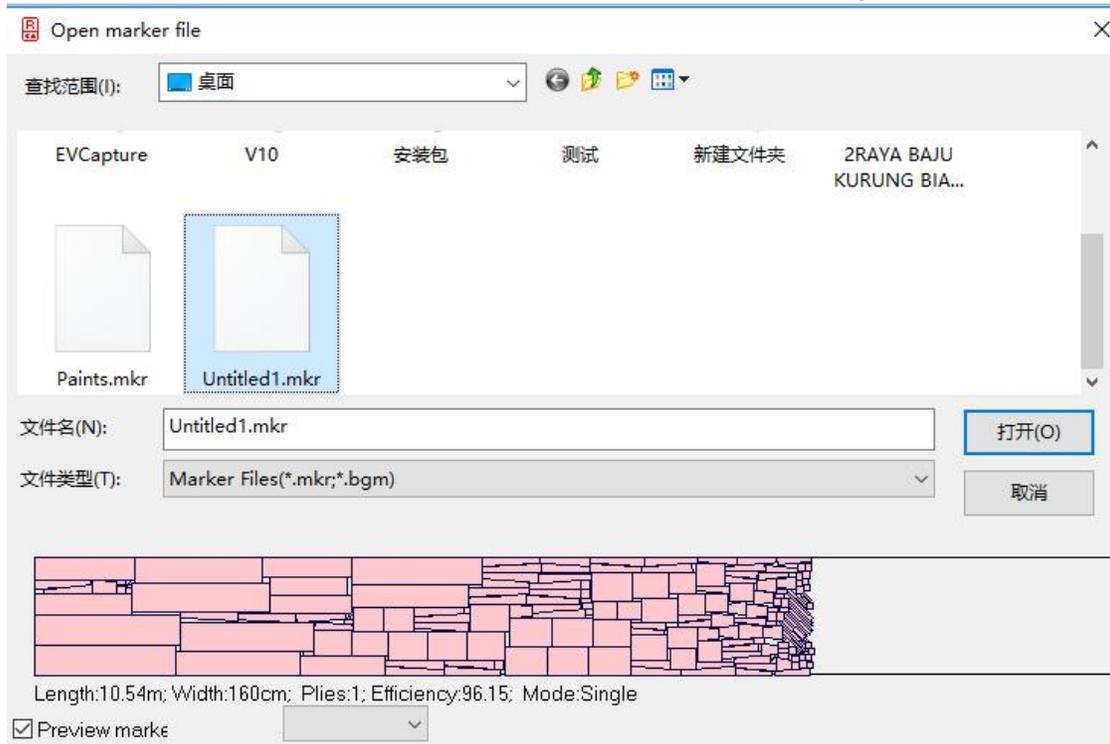
The open command in the file toolbar has the same effect as the command in the file menu.

**Function:**

Open a saved marker document.

**Operate:**

1. Click the icon  or click **【File】** menu-- **【Open】** , pop up the dialog box **【Open marker file】** .
2. Select an existing marker file, each marker file has the same format .MKR, then press return button or click **【Open】** , or double click the filename.



## **Save(S) Ctrl + S**

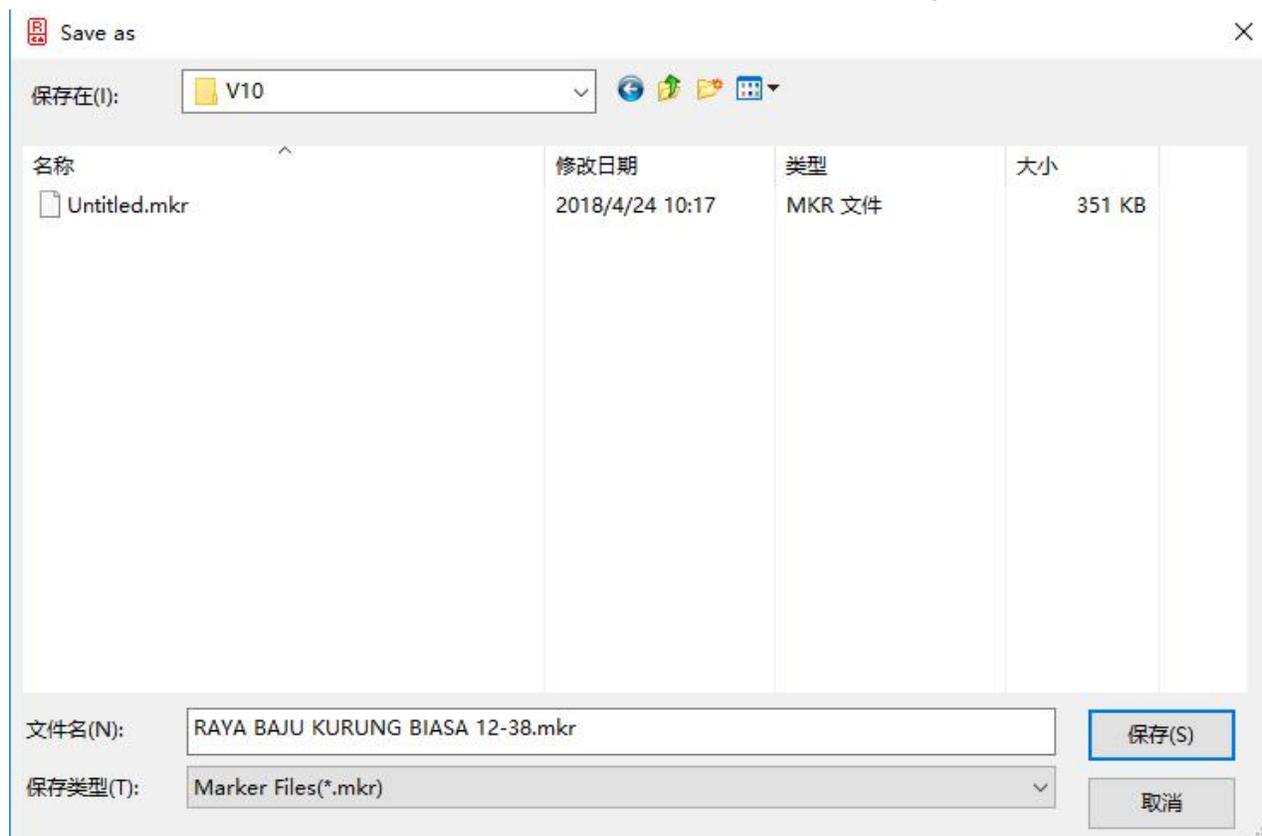
The save command in the file toolbar has the same effect as the command in the file menu.

### **Function:**

This command is used for saving marker in appointed path, Easy for later use.

### **Operate:**

1. Click  Save or click **【File】** menu-- **【save】** . If the .mkr (marker) file displayed on the screen has been saved, the file will be saved under the current file name of the current path; if you save the file for the first time, the "Save as" dialog box appears.



2. Select the appropriate save path;
3. Input the name of the marker file in the 【File name】 text box and click Save.

**Note:**

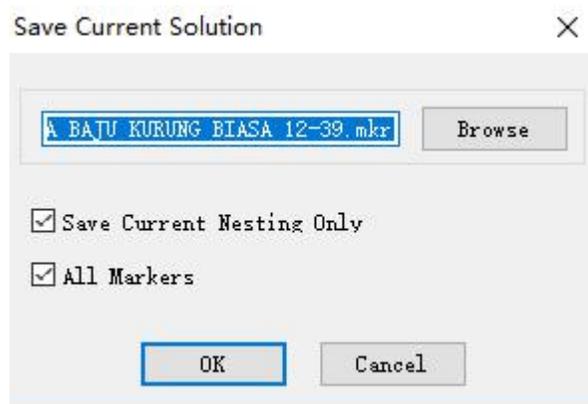
Name the file, and after saving it, .mkr will automatically be the suffix of the file.

**Save Current Nesting****Function:**

For a file, when make marker, and put it in different marker, the command 【Save Current Nesting】 will be used. When saving this marker, a new marker is taken with a similar file name to the original marker, except that the last two letters are changed to a dash (-) and a number. For example, if the initial file is named 2035.mkr, other marker files will be named 2035-1.mkr, 2035-2.mkr, and so on.

**Operate:**

1. Click the icon  ,pop up the dialog box **【Save Current Solution】**
  2. You can input a file name in the dialog box, or you can click **【Browse】** to select filename,then click **【OK】**
- 【Save Current Solution】 Presentation:**

**【Browse】**

Use this button to specify the path and file name for the marker.

**【Save Current Nesting Only】**

After you tick the option, it will save the nesting on current marker, and the non-nested pieces will not be saved.

If you don't tick the option, the whole parts (including nested and non-nested pieces will be saved).

**【All Markers】**

If you tick the option, it will save all markers.

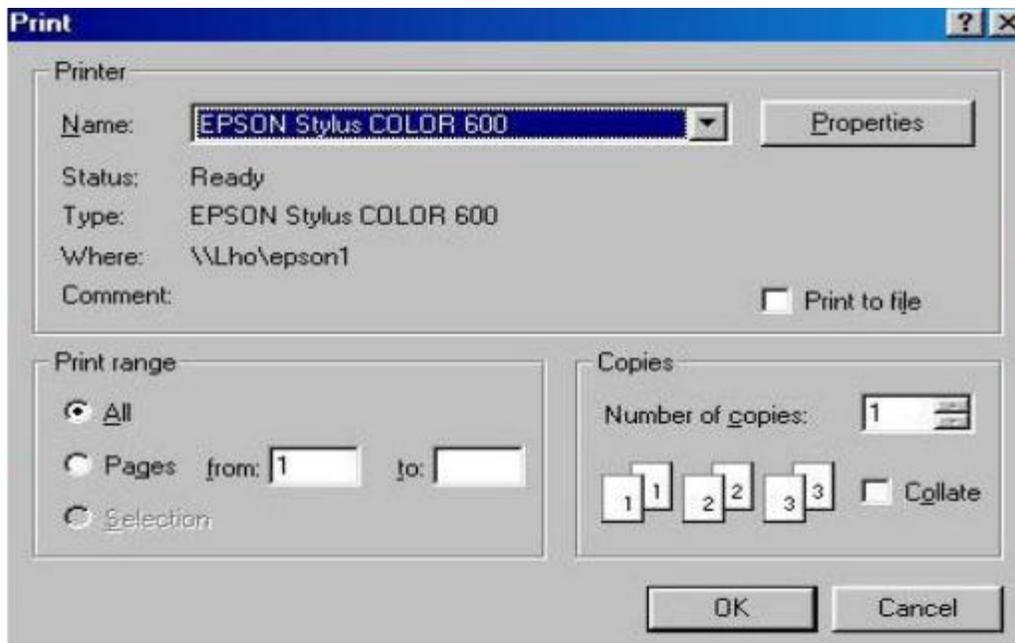
If you don't tick this option, it just saves the current marker.

**Print Marker****Function:**

This command works with the printer to print marker or marker instructions.

**Operate:**

Click the icon  to pop up the dialog box **【Print】** , and select the corresponding printer model , then click **【OK】** .


**Note:**

Click **【Properties】** Click **【Print paper】** ,Select print direction


**Plot**
**Function:**

It is used to plot the pattern in real size (1:1). Only the computer with the plotter connected with the Serial Port and the LPT in computer or the computer with plotter in network can plot the pattern.

**Operation:**

1. Click  icon,pop up **【Plot】** dialogue table;
2. Do the setting for the **【Current plotter】** , **【Page Size】** , **【Edge】** , and **【Port】** , then click **【OK】** .

**【Plot】** Parameter instruction:

Plot ×

No.	Plotter	Page Size	Working Directory
1	KERI cutting plotter		C:\Richpeace CAD\Plot

Size

Actual Size(100%)
  Proportion  %

mm
  mm
  mm
  mm

Portrait
  Landscape
 
 One page one file

Use Outline Character
  Pause Each Page
  Optimize Plot Order

Plot Quality:
  Bad
  Nomal
  Good
  Better
  Best

Export to File

Number of copies: 
 Cut Frame
  Cut pieces
  Cut paper

【Actual Size】 is to plot pieces at 1:1 proportion.

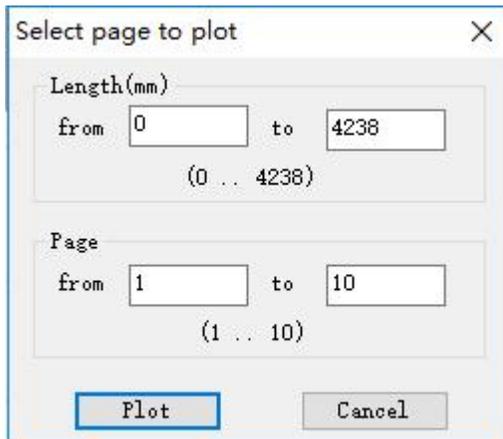
【Proportion】 is to plot piece by the percentage between the scale size and real size.

【Cut Frame】 is to cut the frame of the marker when computer connect with the Cutting Plotter.

【Cut pieces】 is to cut piece automatically when computer connect with the Cutting Plotter.

【Cut paper】 is to cut the paper when computer connect with the Cutting Plotter.

Click 【Plot selected pages】 , pop up 【Select page to plot】 dialog box,can set the plotting length and page.



Select **【One page one file】** to the file is output in the set paper size. For example, select the "portrait" plot, the marker is 900mm wide, 3200mm long, the width of the paper size setting is 901MM, the group length is 1200MM, then it will output 3 PLT files . This function is generally used for the "Group AutoNest" file output.

**【Plotter】** It is used to select the plotter model. You can click the plotter name to pop up the pull-down list, and select the current plotter in it.

**【Page size】** It is used to select the paper type. You can click the paper size to pop up the pull-down list, and select the paper type or self-define it by clicking Custom to input the size in the dialog box. Then click **【OK】**

 is used to set the left margin for the plot paper.

 is used to set the right margin for the plot paper.

 is used to set the space between two plotting.

 is used to Set the alignment mark spacing

**【Portrait】** , **【Landscape】** orientation is used to select the plotting direction.

**【Export to File】** It is used to consolidate the plotting files and save them in a special folder,

#### Operate:

1. Click to select the **【Export to File】** in the dialog box **【Plot】** .
2. Click the **【Browse】** to pop up the dialog box **【Save as】** , you can select a path to establish a new folder for printing and input the filename, and then click **【Save】** to return to the **【Plot】** dialog box, then click **【OK】**

**【Working Directory】** It refers to work path of current plotter.

For example, to plot on this computer, you must share the PLOT in "Richpeace Garments CAD V 8.0" on the computer. The working directory can select PLOT shared by the computer. If there are two computers of AB,

computer A is connected with the plotter, and computer B is to plot through the network, first share the PLOT under the "Richpeace Garments CAD V 8.0" in computer A, and In the working directory of computer B to select PLOT in computer A.. If you have more computers, you can directly enter the IP address here in order to quickly find the computer that is connected to the plotter.

Note: The plot port is set in the plot center.

**【Correct Error】** It is used for revising size after plotting , Not actual size.

#### **Operation:**

1. Click **【Correct Error】** ,Input password, After inputting,click **【OK】** ,

2. Pop up **【plot plot error】** dialogue table;



Actual plotting size of 1m in width direction;



Actual plotting size of 1m in length direction;

3. Make a 1mx1m rectangle, For example, the actual plotting is 998mmX998.2mmIt is 998mmX998.2mm, You input 998mm in width direction,Input 998.2 in length direction, Click **【OK】**

Note:

Please do not modify easily, If you ever modify is dgs, No need to modify in GMS

#### **Print Preview**

---

##### **Function:**

It is used to preview the marker will be printed.

##### **Operate:**

Click the icon  to pop up the interface **【Print preview】** , if you are satisfied with it, click **【Print marker】**



**Undo**

**Ctrl+Z**

---

##### **Function:**

It is used to return to the previous operation for more times.

**Operate:**

Click this icon  or press the keyboard combination Ctrl+Z ,can return to the previous operation.

**Ctrl+X****Function:**

It is used to resume the previous operation for more times.

**Operation:**

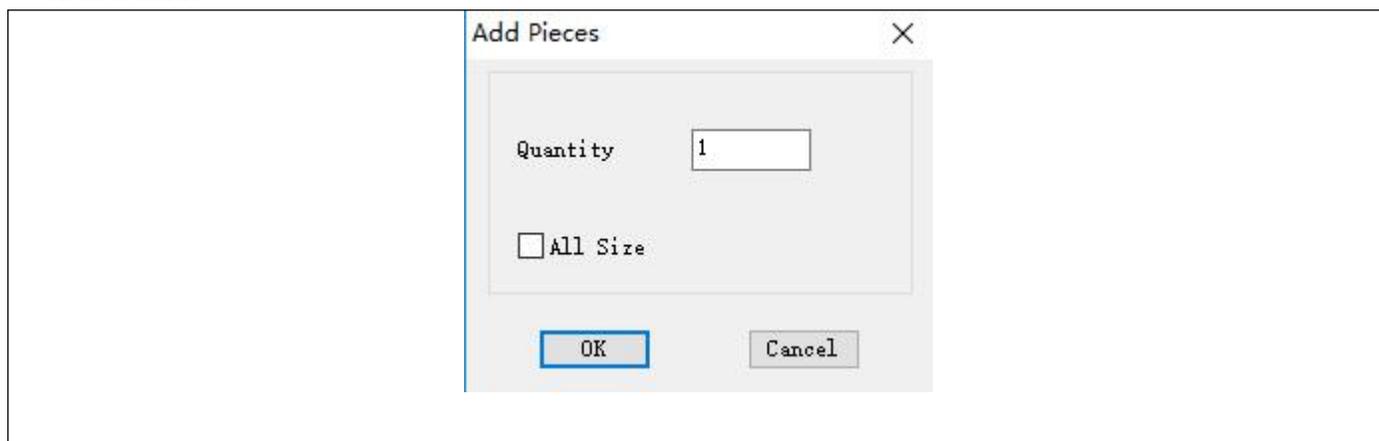
Click this icon  or press the keyboard combination Ctrl+X, and you can resume the previous operation.

**Add Piece****Function:**

It is used to add or decrease the quantity for certain pieces. It can increase or decrease the quantities for one size only, and also can increase or decrease quantities for all sizes.

**Operation:**

1. Select the piece size in Size box.
2. Click the icon , pop up a dialog box **【Add Pieces】**, and type the amount in **【Quantity】**, “+”is increase, “-”is decrease.



3. Select all size,Can add quantity for all size;

4. Click **【OK】**

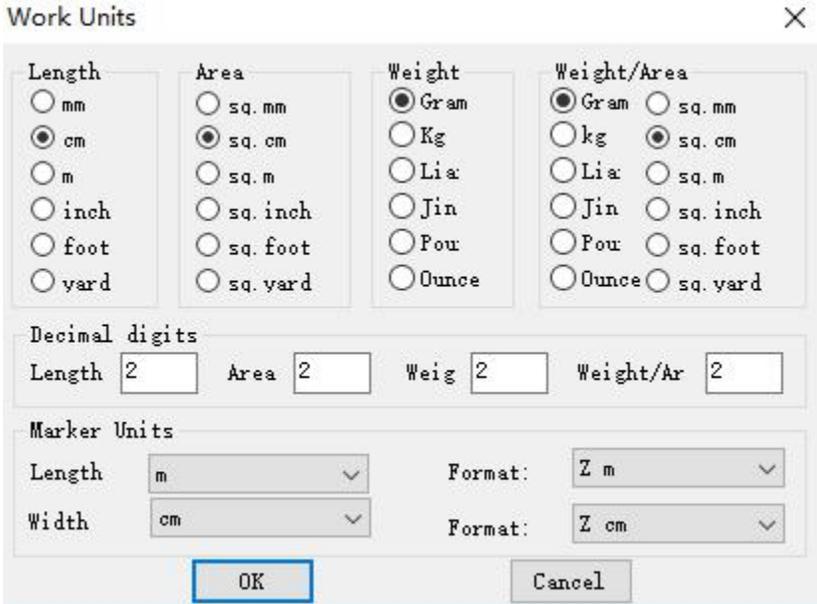
## Working Units

### Function:

This tool can be used to set the work unit for the marker.

### Operate:

Click the icon  or click **【Marker】** menu—**【Work Units】**, or use the shortcut key Alt+M+W ,pop up **【Work Units】** the dialog box to set the unit.



Length	Area	Weight	Weight/Area
<input type="radio"/> mm	<input type="radio"/> sq. mm	<input checked="" type="radio"/> Gram	<input checked="" type="radio"/> Gram <input type="radio"/> sq. mm
<input checked="" type="radio"/> cm	<input checked="" type="radio"/> sq. cm	<input type="radio"/> Kg	<input type="radio"/> kg <input checked="" type="radio"/> sq. cm
<input type="radio"/> m	<input type="radio"/> sq. m	<input type="radio"/> Lia	<input type="radio"/> Lia <input type="radio"/> sq. m
<input type="radio"/> inch	<input type="radio"/> sq. inch	<input type="radio"/> Jin	<input type="radio"/> Jin <input type="radio"/> sq. inch
<input type="radio"/> foot	<input type="radio"/> sq. foot	<input type="radio"/> Pou	<input type="radio"/> Pou <input type="radio"/> sq. foot
<input type="radio"/> yard	<input type="radio"/> sq. yard	<input type="radio"/> Ounce	<input type="radio"/> Ounce <input type="radio"/> sq. yard

Decimal digits

Length  Area  Weig  Weight/Ar

Marker Units

Length  Format:

Width  Format:

## Setup Parameters

### Function:

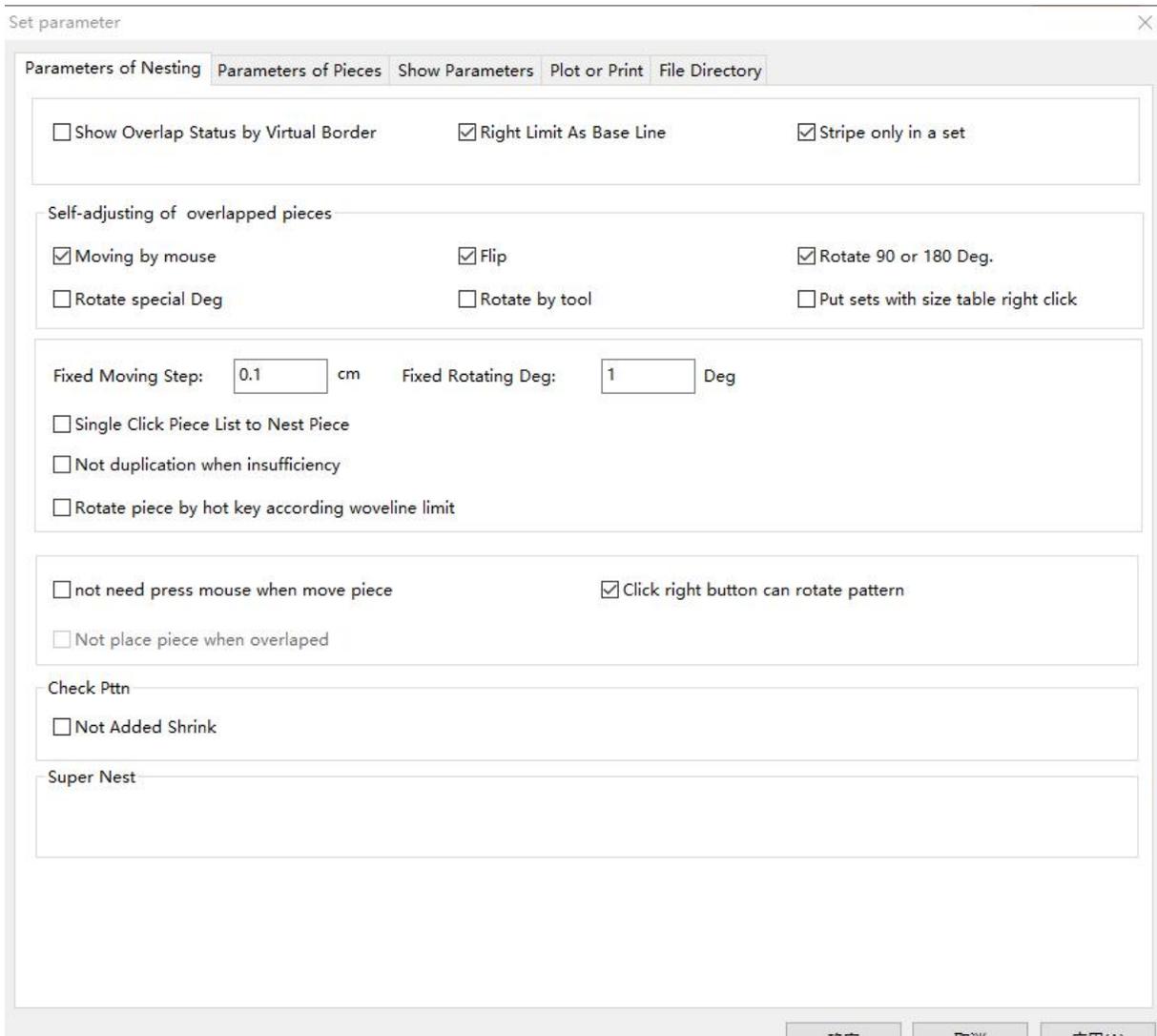
It can be used to set some defaults of this system. Including **【Parameters of Nesting】**, **【Parameters of Pieces】**, **【Show Parameters】** and **【Plot or Print】**, **【File Directory】**.

### Operate:

1. Click the icon  or click **【Options】 — 【Parameter】** , or you can press the shortcut key Alt+O+P to pop up the dialog box **【Set Parameters】** .

2. After you complete the revision, press **【Apply】** . Revise other options in the same way, then click **【OK】** .

**【Parameters of Nesting】** parameter instruction:

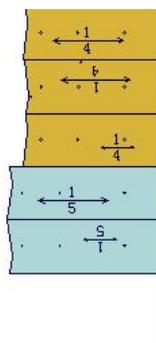


**【Show Overlap Status by Virtual Border】**

Select this option, Pattern add virtual border then overlap, If virtual border overlap, pattern color will change, No color fill pattern.

**【Right Limit As Base Line】**

When select this option,When it is end of making marker manually,Marker right border will align.



**【Stripe only in a set】**

If there are several sets for one size, Select this option, Each size can stripe separately, Improve efficiency.

**【Self-adjusting of overlapped pieces】**

Ticking this option then the overlapped pieces will be flicked automatically when you make your marker manually.

**【Fixed Moving Step】**

It means that you can move pieces a step length for each click of the ←↑↓→ in the keyboard.

**【Fixed Rotating Deg】**

It is used to control the angle of rotation for each press through the 1 or 3 key, or Z and C in keyboard.

**【Single Click Piece List to Nest Piece】**

Tick this option, you can click the piece name by single click in the Size list, otherwise you need to double click. It is optional individually.

**【Not duplication when insufficiency】**

Tick this option is used that if the quantity is not sufficient, you can not duplicate the marker, and duplicate reverse.

**【Rotate Piece by hot key according wove line limit】**

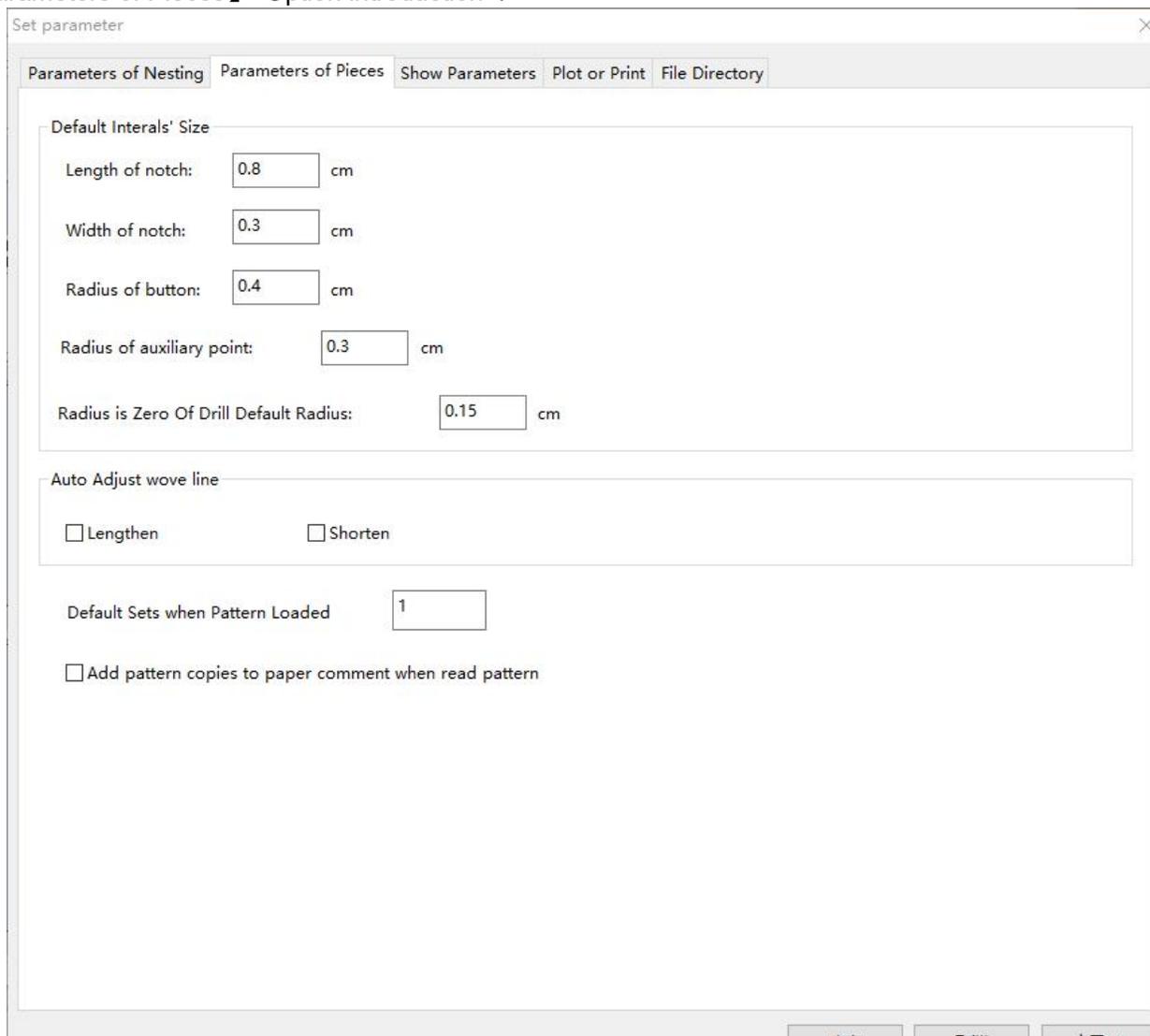
When “rotate limited” unselected, Do not select “Rotate Piece by hot key according wove line limit” , Press keyboard 5 or right click, Pattern rotate 90 degree; Select “Rotate Piece by hot key according wove line limit”, Press 5 or right click, Pattern rotate 180 degree.

**【Not need press mouse when move piece】**

When checked, the pattern can be moved to the position you want to move without holding down the mouse.

**【Not place piece when overlapped】**

You can set up this option only after you tick **【Not need press mouse when move piece】** . It means you are not able to overlap piece when aligning the marker.

**【Parameters of Pieces】** Option introduction :

Set parameter

Parameters of Nesting Parameters of Pieces Show Parameters Plot or Print File Directory

Default Internals' Size

Length of notch: 0.8 cm

Width of notch: 0.3 cm

Radius of button: 0.4 cm

Radius of auxiliary point: 0.3 cm

Radius is Zero Of Drill Default Radius: 0.15 cm

Auto Adjust wove line

Lengthen  Shorten

Default Sets when Pattern Loaded 1

Add pattern copies to paper comment when read pattern

The option contains the defaults just like length of notches, width of notches, radius of buttons, and radius of auxiliary point, radius of Zero of drill default radius and the default set when pattern upload into the marker as well as auto adjust wove line. You can edit them here by inputting new value in dialog box to create new defaults.

**【Show parameters】 option introduction:**

Set parameter ×

Parameters of Nesting   Parameters of Pieces   **Show Parameters**   Plot or Print   File Directory

**Default System**

SimSun-ExtB ▼

**Piece Window**

Show zero Piece

Show Size at Head

Show Piece's Description

**Window Size**

Piece  ▲▼

Piece  ▲▼

Size List  ▲▼

**Marker**

Marker Text above pieces    Show last right limit

Show folded border of piece    Show pleat and dart with line

Only change current piece's status    show aided point

Show Marker text According to Proportion

Show bottom limit

Set number using letter

Status main Item:  ▶

**【Default System】**

Click the drop-down list box, click to select one font is the system's new default font.

**【Window Size】**

It contains **【Piece width】** , **【Piece height】** and **【Size List】** .You can input new values by double clicking the box following each item, or click the fine adjusted slider to revise the default.

**【Piece Window】**
**【Show zero piece】**

Select the option to display the piece whose quantity is 0 in piece window. If you don't tick this option, pieces can not be shown in the Piece window and Size box.

**【Show Size at Head】**

Tick this option means size number comes before the quantity of piece in the Size box.

**【Show Piece's Description】**

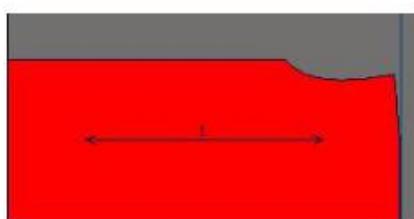
Tick this option, description can be shown on the piece.

**【Marker】****【Marker Text above pieces】**

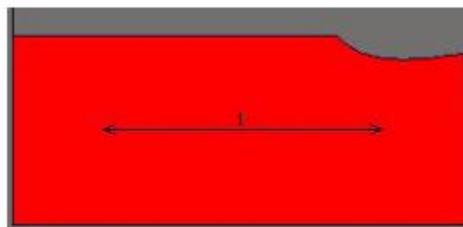
Use tool  **【Marker text to mark the text on the marker】** , if tick this option, texts will not be covered by pieces. This option can be selected as required.

**【Show folded border of piece】**

Tick this option, the folded line in the piece can be displayed.



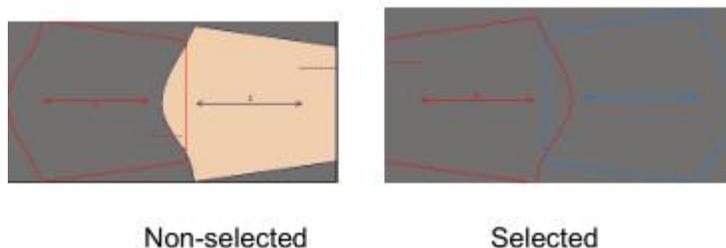
Non-selected



Selected

**【Only change current piece's status】**

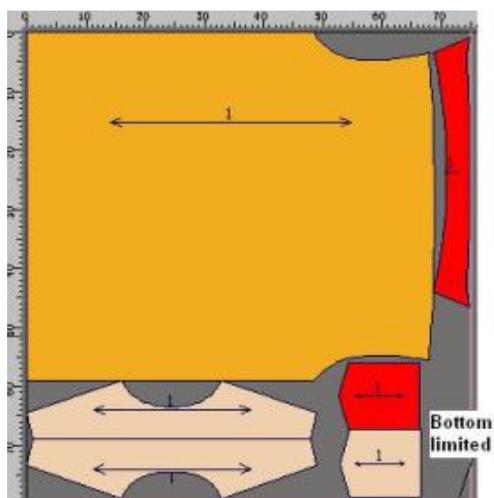
This option can be selected as required. If you select it, when nesting, the later placed piece overlap the former placed piece, then this piece will be shown hollow with outline blue, but the former piece is still in filled status. If you don't select it, when nesting, the later placed piece overlap the former placed piece, then this piece will be shown hollow with outline blue, but the former piece is shown hollow with outline red as well.


**【Show Marker text According to proportion】**

Tick this option, marker text and piece text will be displayed according to the proportion. Non tick, it can be shown by the real size.

**【Show bottom limit】**

Tick this option to display bottom limit.



**【Set number using letter】**

Tick it, the name of Set is shown by letter, otherwise by number。

**【Show last right limit】**

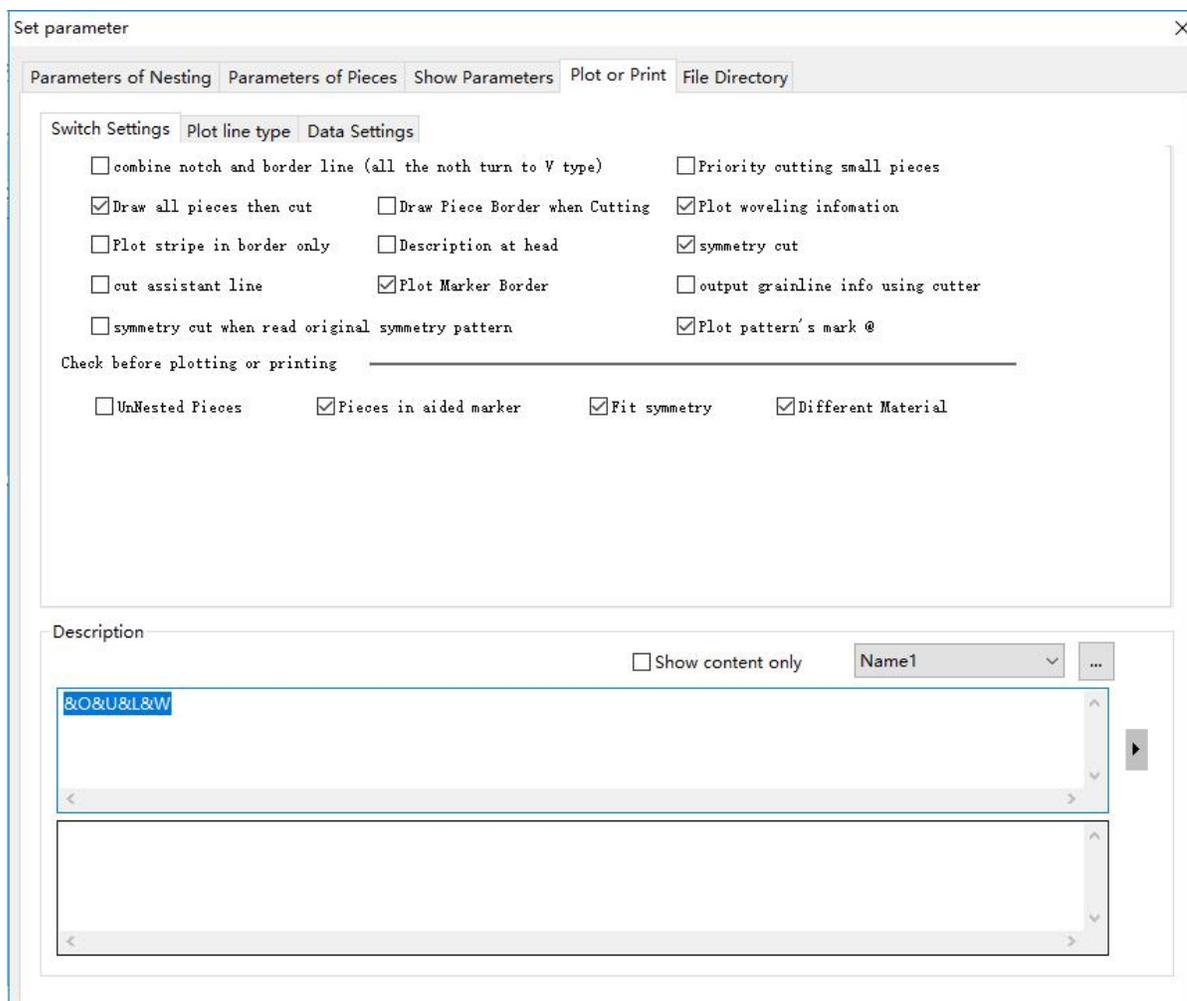
Tick it, after nesting, save the marker, then adjust the pieces to nest by the second time, then you can view the limit line at the end and the marker turns green and stop in the original position. In this case, you can compare with the maker length between the first time and the second time to see which one is better.

**【Show pleat and dart with line】**

Tick this option, dart or pleat is displayed with line; non tick, the dart or pleat line can not be shown.

**【Status main】**

Click the little triangle button next to the text box, it pop up many options. You can select some as required and make it shown on the Status Bar.

**【Plot and Print】 option introduction:**

**【Combine notch and border line (All the notch turn to V type)】**

Select,Marker connect with auto cutter,Border line is not V type, will appear with V type,Otherwise cut with original notch type.

**【Priority cutting small pieces】**

Select,when using the cutter, priority cutting the set small piece;

**【Draw all pieces then cut】**

Select the option to draw the piece line then cut.

**【Draw pieces Border when Cutting】**

Select the option to draw the piece border when cutting, if not, it will not draw piece border when cutting.

**【Plot stripe in border only】**

Select the option to plot the stripe line on the marker.

**【Description at head】**

Select, the description of the marker can be plotted in front. Otherwise, the description is plotted after the marker is plotted.

**【Symmetry cut】**

Checked, cut symmetrically when the cutter cuts the symmetrical pattern, otherwise it will not be symmetry cut even if the “cutter” menu is set to symmetry cut.

**【cut assistant line】**

Tick it, when the marker is attached to the cutting machine, the assistant line for cutting is set to be cut. If it is not tick, it will not be cut even if the assistant line is set for cutting;

**【Plot Marker Border】**

Select the option to plot the marker with its border.

**【Output grainline info using cutter】**

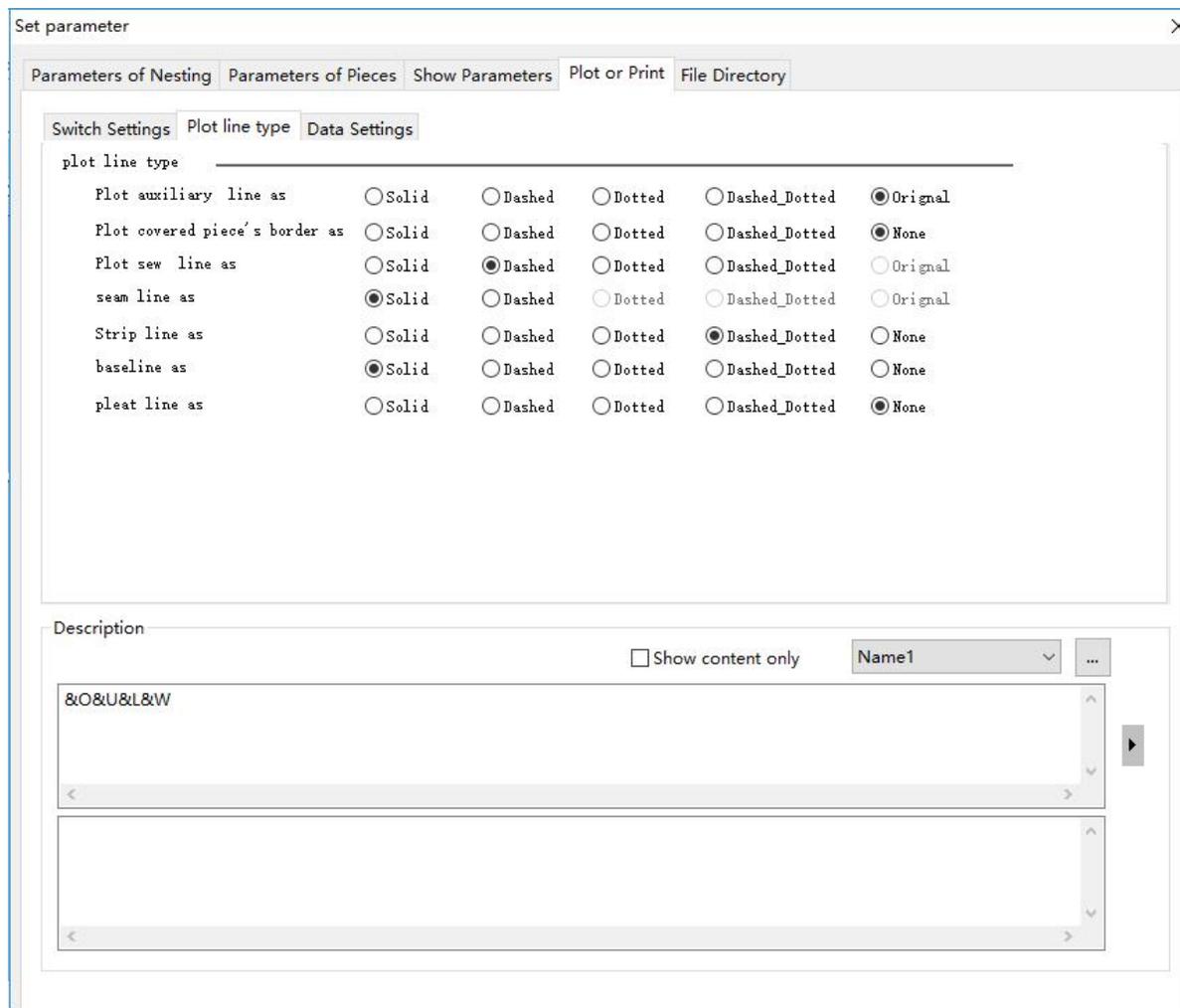
**【Symmetry cut when read original symmetry pattern】**

**【Check before plotting or printing】**

**【UnNested Pieces】 , 【pieces in aided marker】 , 【Fit symmetry】 , 【Different Material】 .**

In above four options, you can select one or some as needed, and then the system will send a reminder to check if you want to plot before plotting.

**Plot line type**



**【Plot auxiliary line as】**

You can change the auxiliary line as Solid, Dashed, Dotted, Dashed-Dotted and Original if necessary.

**【Plot covered piece's border as】**

You can plot covered piece's border as Solid, Dashed, Dotted, Dashed-Dotted and None as required.

**【Plot sew line as】**

You can plot sew line as Solid, Dashed, Dotted, Dashed-Dotted as required.

**【Seam line as】**

You can plot seam line as Solid, Dashed as required.

**【Strip line as】**

You can plot strip line as Solid, Dashed, Dotted, Dashed-Dotted and None as required.

**【Baseline as】**

You can plot baseline as Solid, Dashed, Dotted, Dashed-Dotted and None as required.

**【Pleat line as】**

You can plot pleat line as Solid, Dashed, Dotted, Dashed-Dotted and None as required.

**Data Setting:**

Set parameter X

Parameters of Nesting Parameters of Pieces Show Parameters Plot or Print File Directory

Switch Settings Plot line type Data Settings

Cut starting pos:

All the noth sam height:  cm Width  cm

optimize public border: Knife width:  cm

Small piece length:  cm width:  cm area:  sq.cm

Output small notch

Notch command  instead of oblique line  Combine notch and border

instead of drilling(diameter:  cm)

No Cutting Seg.  Cutting Seg.  (cm)

Plot type

Software dash line  Circle dash line

Description

Show content only Name1 v ...

&O&U&L&W

**【Cutting starting pos.】**

It is used to define the cutting starting position. The red dot in the figure indicates the position of the head when the cutter starts.

**【Optimize public border】**

When the two sides of the two patterns are coincident, the cutter will only cut once..

**【Knife width】**

Refers to the cutting width of the cloth when cutting.

**【Small piece length】**

Small pattern are cut preferentially. Small pattern can easily be pulled by a large pattern during the cutting process, causing the small pattern to be deformed, so this function is used when there are small pattern.

**【Output small notch】**

It is for cutter. This option is active when **【Combine notch and border line (All the notch turn to V type)】** is unchecked.

**【No Cutting Seg.】**

It is used to cut pieces in the terms of above line shape. By inputting value to define the length that how long can be cut, and how long can be remained.

**【Cutting Seg.】**

Set the length of each cutting.

**【Dashed interval】**

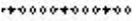
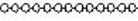
 0.3 It means length between dashed line and interval.

 0.2 It means length between dot line and interval.

 0.3 It means length between dashed line, dot line and interval.

### Plotter line type, software dotted line, circle dotted line

The system provides seven kinds of line types. When different types are selected in the plot function, the plot effects of various line types are as follows:

Name	Icon	Select plotter line type	Output icon	Select software dotted line	Output icon	Select circle dotted line	Output icon
solid line		solid line		solid line		solid line	
dotted line1		dotted line1		Drawn according to the set length and interval		Drawn according to the set diameter, interval	
dotted line2		dotted line2					
dotted line3		dotted line3					
customize dotted line		The shape is the same as the shape shown on the screen		The shape is the same as the shape shown on the screen		The shape is the same as the shape shown on the screen	
Circular curve							
Customize curve							

#### 【All the notch same】

When the multiple check boxes in front of the “All the notch same” are selected, the width and height of all notches will be set to the specified value. If it is a Gerber cutter, if the width of the notch is smaller than its own height, the width of the notch will be automatically modified to its own height value. Cut finished, the original cut data of all patterns unchanged.

#### 【Software dash line】

Select this option, If the plotter itself cannot plot a dotted line, use the software to draw a dotted line for the pattern. It will plot a dotted line when plotting.

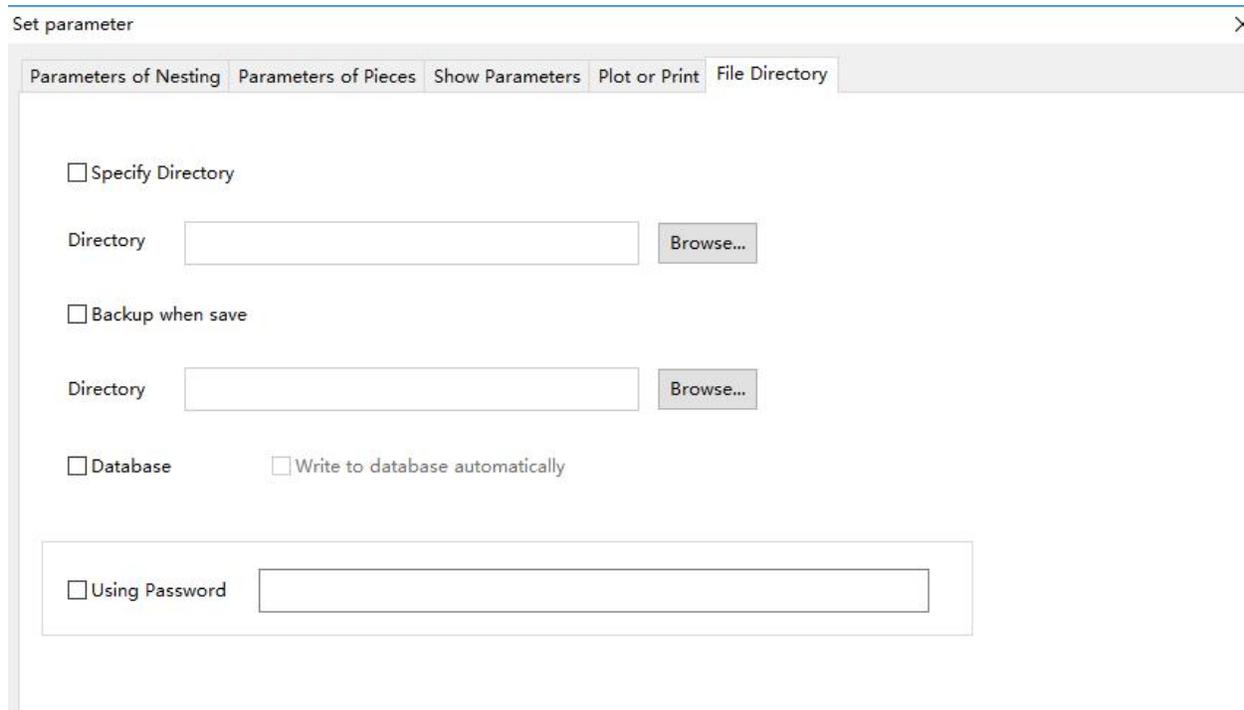
**【Marker Description】**

Marker Description
✕

<input checked="" type="checkbox"/> Customer (U)	<input type="checkbox"/> Date (D)	<input type="checkbox"/> averageweight (g)
<input checked="" type="checkbox"/> Order (O)	<input type="checkbox"/> Material Length per Set (B)	<input type="checkbox"/> Horz Shrinkage (h)
<input type="checkbox"/> Style Name (T)	<input type="checkbox"/> Total Material Length (Z)	<input type="checkbox"/> Vert Shrinkage (v)
<input type="checkbox"/> Size (S)	<input type="checkbox"/> Sets (b) <input style="width: 40px; text-align: center;" type="text" value="1"/>	<input type="checkbox"/> Marker horizontal zoom (a)
<input type="checkbox"/> File Name (F)	<input type="checkbox"/> Gross area (Y)	<input type="checkbox"/> Marker vertical zoom (c)
<input type="checkbox"/> Pattern File (I)	<input type="checkbox"/> Net area (J)	<input type="checkbox"/> Piece horizontal zoom (d)
<input checked="" type="checkbox"/> Marker Length (L)	<input type="checkbox"/> Total perimeter (K)	<input type="checkbox"/> Piece vertical zoom (e)
<input checked="" type="checkbox"/> Marker Width (W)	<input type="checkbox"/> Weight per unit (X)	<input type="checkbox"/> unplaced pieces (x)
<input type="checkbox"/> Plies (P)	<input type="checkbox"/> Net weight (R)	<input type="checkbox"/> Total pieces (f)
<input type="checkbox"/> Set Count (A)	<input type="checkbox"/> Weight (G)	<input type="checkbox"/> Set Pieces Count (s)
<input type="checkbox"/> Surface Piece Count (H)	<input type="checkbox"/> Total blade (p)	
<input type="checkbox"/> Placed pieces (N)	<input type="checkbox"/> marker horizontal shrink (u)	
<input type="checkbox"/> Efficiency (E)	<input type="checkbox"/> marker vertical shrink (t)	
<input type="checkbox"/> Comment (C)	<input type="checkbox"/> Material (M)	

Click the triangle button next to the text box to select the description in the drop-down list, it will be printed or plotted at the marker head or marker end. Need special explanation is that the column can also edit text, change the line, delete, directly enter text, etc., in the preview column below you can see the results.

**【File Directory】** Option introduction:



### 【Specify Directory】

Select, Can save all the file to appointed directory.Can find file because of wrong operation, Pattern do not save to other directory, System will remind you save to appointed Directory, Can save in appointed directory.

### 【Backup when save】

Select ,When save manually, Can back up in appointed directory. Only backup the last time saved, Replace of before file when backup each time.



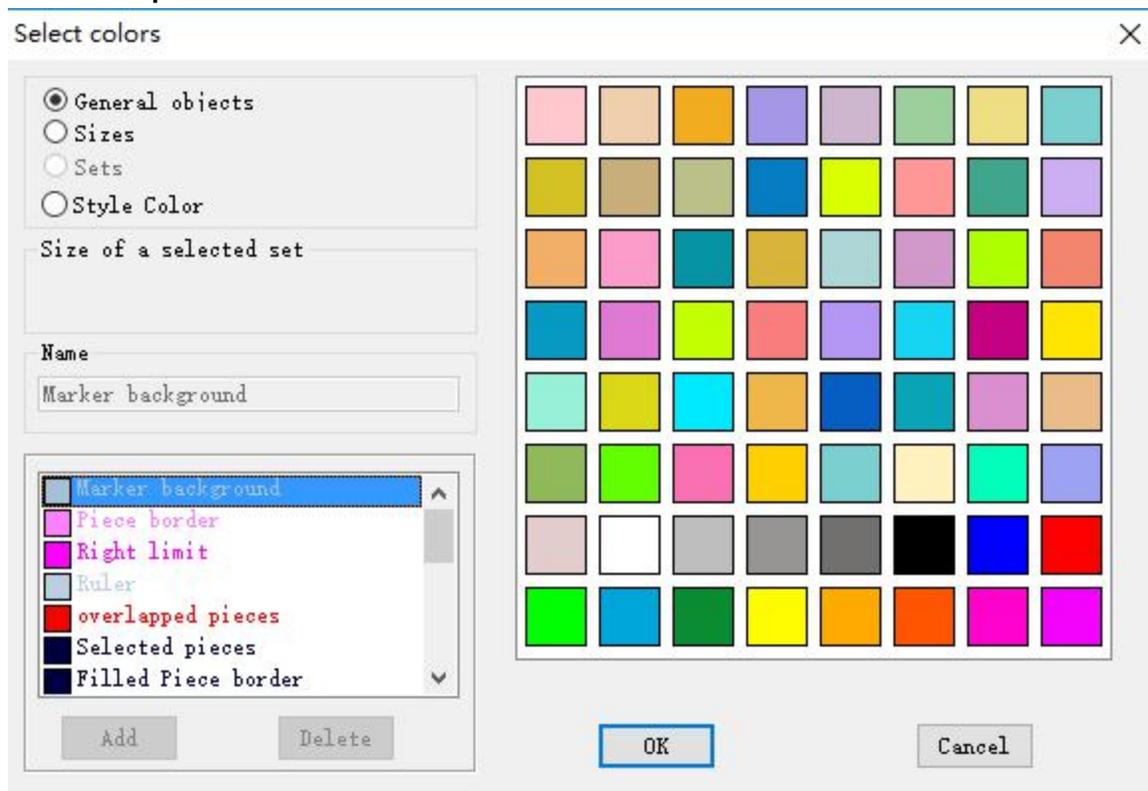
## Select colors

### Function:

It can be used to specify different colors for the system interface, all sizes and all sets.

Operation:

1. Click the icon , or click **【Options】** — **【Colors】**, or press the shortcut key Alt+O+C to pop up the dialog box **【Select colors】**.

**【Select colors】 parameter instructions:**


1. Select color for general objects:

- ①. Click **【General objects】** .
- ②. Drag the slipper bar under **【Name】** box, and select a object.
- ③. Select color for the object in the color box..
- ④. Click **【OK】**

2. Select color for size:

- ①. Click **【Sizes】** ;

Drag the slipper bar and select a size name, then the selected size name can be shown in the **【Name】** box.

- ②. If there is no desired name in the box, you can click **【Add】** and add a “??” in the **【Name】** box to input the size name using the keyboard.
- ③. Select color for the size;

- ④. Click **【OK】** ;
3. Define the names and colors of several sets.:
  - ①. Click **【Sizes】** ;
  - ②. Input or select size name in the **【Name】** box;
  - ③. Click **【Sets】** ;
  - ④. Input the name of the first set in the **【Name】** box
  - ⑤. Click **【Add】** ;
  - ⑥. Input the name of the second set in the **【Name】** box and select a color for it.
  - ⑦. Add several sets in the same way
  - ⑧. Click **【OK】**
4. Define the color of Style color:
  - ①. Click **【Style color】** ;
  - ②. Click **【Add】** ;
  - ③. Select a color for it;
  - ④. Click **【OK】** ;
  - ⑤. To change to another color, click on another color directly, the new color will replace the old color.

**TIP:**

Double click any of the color block, pop up a color dialog box. You can define more colors

**Define Marker****Ctrl+M****Function:**

It can be used to edit or change the parameters about current marker such as marker size, plies and marker border etc.

**Operate:**

Click  icon, or click **【Marker】** menu—**【Define Marker】**, pop up **【Marker Definitions】** dialog box, the marker can be set in the dialog box.

**【Marker Definitions】 Parameter instruction:**

Marker Definitions ✕

Commen   Marker selection

Width	Length	Description
160	21.49	
160	21.49	
160	21.49	
160	21.49	
160	21.49	

Width:  cm  Main Length:  m

Zoom

Shri:  % Shri:  %

Prop:  % Prop:  %

Widt:  cm Leng:  m

Plies:  Total pieces area: 162070.74sq.cm

Layout mode:  Single  Faced

Folded mode:  Top folded  Bottom folded  Left folded

Marker border (cm): Left:  Top:   
Right:  Bottom:

Other: Maximum overlap:  mm

**【 Comment 】** : It is used to fill in the marker description. After typing the information and tick the **【Comment】** in the Triangle button next to the **【Description】** text box in **【Plot or Print】** in **【Parameter】**, when plotting or print, this comment can be output.

**【Marker selection】**: Select the option to pick up the reference marker which you used before under the Comment.

**【Width】** : it is used to define the width of marker (material)

**【Length】** : It is used to define the length of marker (material)

**【Plies】** : The plies of material

**【Layout mode】** : You can select the **【Single】** or **【Faced】**, When **【Faced】** is selected, the **【Folded mode】** next to it will become an optional mode. You can select the Top, Bottom, and Left directions as needed.

**【Marker border】** : It is used to define a marker border to avoid the defect on the material border.

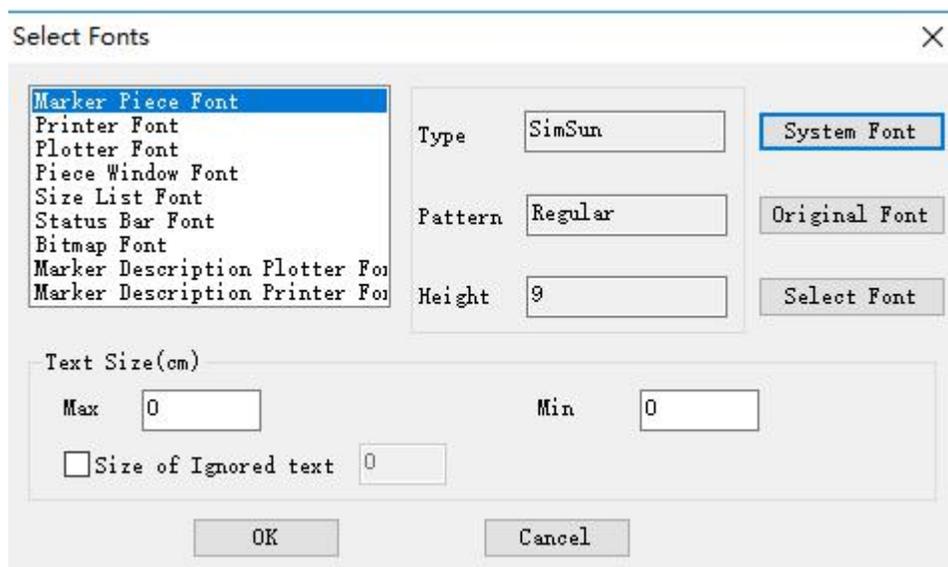
## **Select fonts**

### **Function:**

This command can be used to select fonts of the interface shown on the marker, and to decide the fonts when print and output.

### **Operate:**

1. Click  Select fonts or click **【Options】** menu— **【Fonts】**
2. Pop up a dialog box **【Select Fonts】**
3. Select the items in the left box to setup the font.
4. Click on the right side of **【Select Font】** , pop up font dialog box, and choose the needed font , then click **【OK】** .
5. You can limit the font size by set up the parameter in **【Text Size】** .
6. Tick **【Size of Ignored text】** to input the size.
7. Click **【OK】** .
8. If you click **【System Font】** , the system will select the default Simsun, Regular, and 9.



**Tip:**

Plotter font:It refers to grainline up and down font when use plotter.

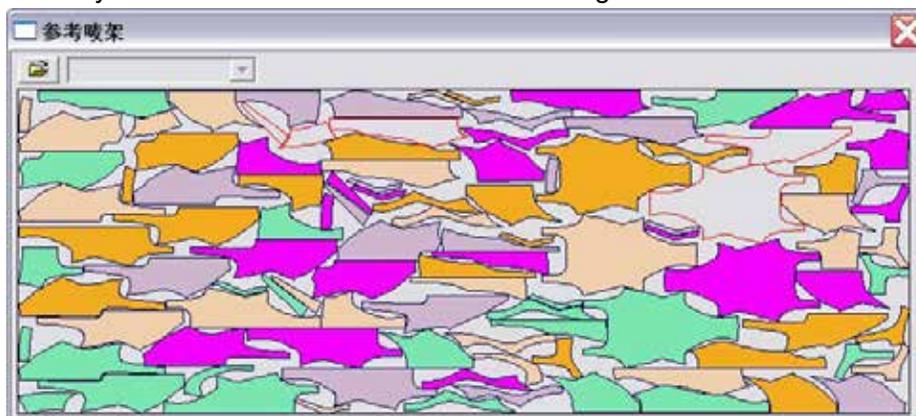
Maker description plotter font:It refers to marker head and end length,width ,sets font when plotter marker.

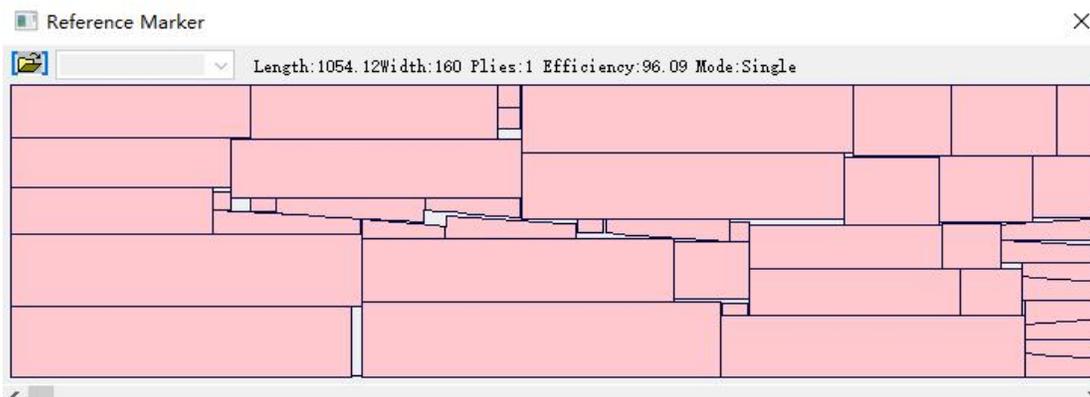
 **Reference Marker****Function:**

It is used to open a finished marker for reference.

**Operate:**

1. Click  Reference Marker or click **【Marker】** menu--**【Reference Marker】** , pop up**【Reference Marker】** dialog box.
2. Click this icon  to pop up a dialog box of **【Open marker file】** .
3. Open a marker which you need to make reference. You can align a new maker based on it.



 **Close Pieces Display Bar****Function:**

It is used to open and close Piece Window.

**Operate:**

When the tool icon is recessed, the piece window is opened. When the tool icon is raised, the piece window is closed.

 **Open/Close Size List box****Function:**

It is used to open and close Size List Box.

**Operate:**

When the tool icon is recessed, the Size List Box is opened. When the tool icon is raised, the Size List Box is closed.

**Note:**

Only if the Piece Window is open, this tool is activated.

**Piece Info****Ctrl + I**

The command includes three tabs:

**Piece Info****Function:**

It is used to place the information for the current size of the current piece

**Operate:**

1. Click one size of a pattern in size list.
2. Click  Piece Info or click the **【Piece】** menu - **【Information】** , pop up **【Piece Info】** dialog box;
3. The tab is displayed by default. The tab has the defined pattern information in DGS or PDS. View the contents and modify before nesting. The nesting will start according to the modified information.
4. Click **【Apply】** , the contents in this option will be confirmed, click **【Close】** after the three options are all confirmed.

**Tip:**

You can select the next pattern or size to be revised on the piece window or size list without closing the dialog box. The contents in the option are valid for the selected size of the selected pattern.

**【Piece Info】 Parameter instruction:**

Richpeace GMS ? X

Piece Info **All Size Info** Total Piece Info

Order:  
 Pattern:  
 Size: 12  
 Material:

Quantity:   
 Plies: 1      Remainder 2

Piece Name:   
 Piece Code:   
 Comment:

Area: 350.32 sq.cm  
 Perimet 101.08 cm

Virtual Border

Top      Left   
 Bottom      Right   
 equal     Rectangle border

Attribute  
 Single     Left     Right     Pairing

Folded mode  
 None     Top     Bottom     Left     Right

Limit Marking  
 1-way     2-way     4-way     Any  
 Flip Allowed

Auto Nesting  
 Normal     Final     Lock Piece

### 【Order】【Pattern】【Size】【Material】

These four items have been set in the style information and piece information of PDS or GGS. You can't change them here, but you can change them in the dialog box **【Order for marker making】**.

### 【Piece Name】【Piece Code】【Comment】

These three items have been set in the style information and piece information of PDS or GGS. You can input or revise them in **【Order for marker making】** during loading pattern files or change them in this dialog box

### 【Area】

It shows you the pattern area.

**【Perimeter】**

It shows you the pattern perimeter.

**【Virtual Border】**

When nesting, two patterns need to be separated, can be set with virtual bits. The rectangular virtual position is generally used to make embroidery pieces.

**【Quantity】**

It shows the quantity of the selected piece for the selected size. You can change the quantity, the new quantity will be displayed in the size list after you click **【Apply】**.

**【Plies】**

Refers to the plies of the spreading. This parameter can be set or modified by clicking the icon .

**【Remainder】**

It shows you the quantities of the pieces that have not been put on marker.

**【Attribute】**

It can be used to define the piece attribute such as single piece, left piece, right piece, and pairing or folded mode.

1. If the quantity of identical patterns is 2, and defined as pairs, then you will get two patterns for left and right, select Left to indicate that the current pattern is the left and the other is the right;
2. If the quantity of identical patterns is 2, but the pairing is invalid (no ticking), you will have the two same patterns.

**【Folded mode】**

When **【Top】** or **【Down】** is checked, the option specifies that the pattern can be folded up or down; while you align for the tubular material, some pieces will be folded along its left border or right border. When checking **【Left】** or **【Right】**, the option specifies that the pattern can be folded left or right.

**【Limit Marking】**

During making marker, you can rotate the piece and optimize the piece layout on marker for higher efficiency of the material. You can select **【Any】** to rotate the piece randomly. Generally, it is not selected because you have to consider the yarn direction. Besides, you can tick the option **【Flip allowed】**, which means that you can flip this piece during marker making. In some cases, such as **【1-way】** material or the arrangement is strictly

limited by the requirement of stripes and grids and you don't hope to rotate pieces, then you can specify **【1-way】** to limit the direction of the piece. In the same way, you can rotate the piece by 180° when you specify **【2-way】** and rotate it by 90° when you specify **【4-way】**.

#### **【Auto Nesting】**

**【Normal】** refers to the system will nesting according to the priority that has been set in **【Nesting】**—**【Setup Parameters】** during auto marker making. **【Final】** means that the selected pattern is placed last on the marker, when auto nesting, **【Lock Piece】** means that the selected pattern will not be placed on the marker during auto nesting.

**All Size Info:**

Richpeace GMS ? ×

Piece Info **All Size Info** Total Piece Info

Order:  
Pattern:  
Material

Name:

Code:

Commer:

Plies:     Remainder:

Quantity:

Virtual Border

Top      Left

Bottom      Right

equal     Rectangle border

Attribute

Single     Left     Right     Pairing

Folded

None     Top     Botton

Left     Right

Limit Nesting

1-way     2-way     4-way     Any

Flip Allowed

Auto Nesting

Lock Pieces

Normal     Final

slant angle allows  angle

This tab can set all the size attributes of the selected pattern at the same time. This item has many of the same options as the **【Piece Info】** tab. Please refer to the description of the **【Piece Info】** tab.

**Note:**

The content of this tab is valid for each size of the selected pattern.

**Total Piece Info:**

Richpeace GMS ? X

Piece Info All Size Info **Total Piece Info**

Current Size only

Quantity:

Limit Nesting

1-way  2-way  4-way  Any

Flip Allowed

Auto nesting

Lock Pieces

Normal  Final

slant angle allows  angle

Virtual Border

Top   Left

Bottom   Right

equal  Rectangle border

Set	Area	Weight
:12	6167.47	0
:14	6633.1	0
:16	7157.19	0
:18	7714	0
:20	8658.73	0
:22	9390.61	0
:24	11869.16	0
:26	12663.83	0
:28	13430.87	0
:30	14129.08	0
:32	14897.9	0
:34	15751.6	0
:36	16476.47	0
:38	17130.74	0
:12	6167.47	0

Total Area 324141.5

Gross Weighth 0

g/sq.cm

When you want to change all the pattern data in a file at the same time, you can input the data in the Total Piece Info tab so that each size of each pattern works.

Compared with the first two tabs, there are many similarities in the content, and now focuses on the following different options:

**【Current size only】**

Tick this option, then select one size from size list and return to the option for editing, the editing result is only valid for the selected size after you click the button **【Apply】**. This only takes effect for the selected size of the selected piece. For example, firstly tick the option **【Current size only】**, then select any one size in size list,

after that, you can input the value 2 in **【Quantity】** of the option **【Total piece info】** . Then you can find that all piece quantities of the current size will be changed to 2.

### **【Weight per square centimeter】**

Use this option to define the weight of the fabric. This calculates the total weight of the fabric cut according to the pattern of all sizes. If you input different weights for per square centimeter, select **【 Recalculate 】** command to recalculate the values in the above information column.

Noted: After editing every item in the quantity of patterns, limit nesting, and auto nesting, press the **【Apply】** key once.

**【Close】** : Press **【Close】** button when finish all the setup.



### **Rotate Pieces**

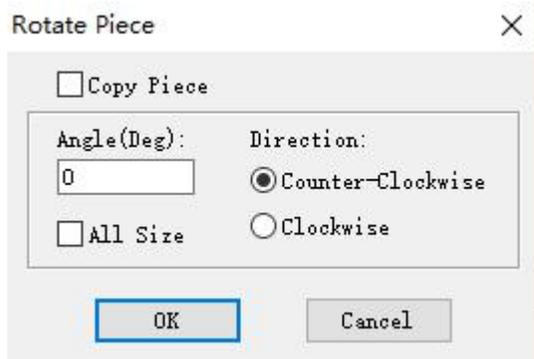
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#### **Function:**

The selected pattern can be rotated at any angle, and its rotation pattern can also be copied to create a new pattern and added to the piece window. If the selected pattern has not yet been discharged onto the marker, the pattern can be directly rotated, and the pattern can not be copied. If the selected pattern is discharged onto the marker, it can only be rotated and copied to generate the corresponding new pattern, and add it to the piece window.

#### **Operate:**

1. Click the pattern that need to be rotated in piece window.
2. Click  to cut the pattern or click the **【Piece】** menu - **【Rotate】** , pop up **【Rotate piece】** dialog box;
3. If you want to rotate and copy the pattern, you can select **【Copy Piece】** .
4. Enter the value of the angle to be rotated in the rotation angle box;
5. Select **【Clockwise】** or **【Counter-Clockwise】** under rotate direction.
6. If you want to rotate all size pieces, you can tick **【All size】** . Otherwise only rotate one size piece.
7. Click **【OK】** to finish.



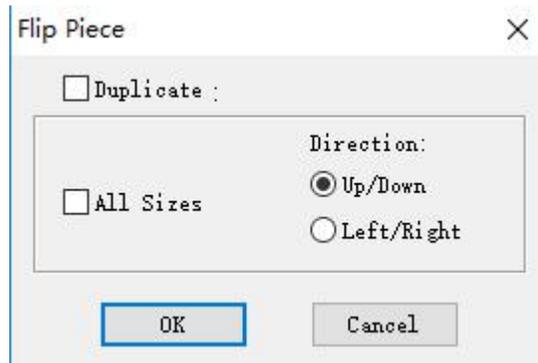
## Flip piece

### Function:

Used to flip the selected pattern. If the selected pattern has not yet been discharged onto the marker, the pattern can be directly flipped over, and the pattern can not be copied. If the selected pattern is discharged onto the marker, it can only be flipped and copied to generate the corresponding new pattern, and add it to the piece window.

### Operate:

1. Click on the pattern you want to flip in the size list.
2. Click  to cut the pattern or click the **【Piece】** menu - **【Flip piece】** , pop up **【Flip piece】** dialog box;
3. If you want to copy the pattern, click the **【Duplicate】** option.
4. Select the direction from the two options: **【Up /down】** and **【left /Right】** .
5. If you want to flip all size patterns,click the option **【All Sizes】** .
6. Click **【OK】** to finish

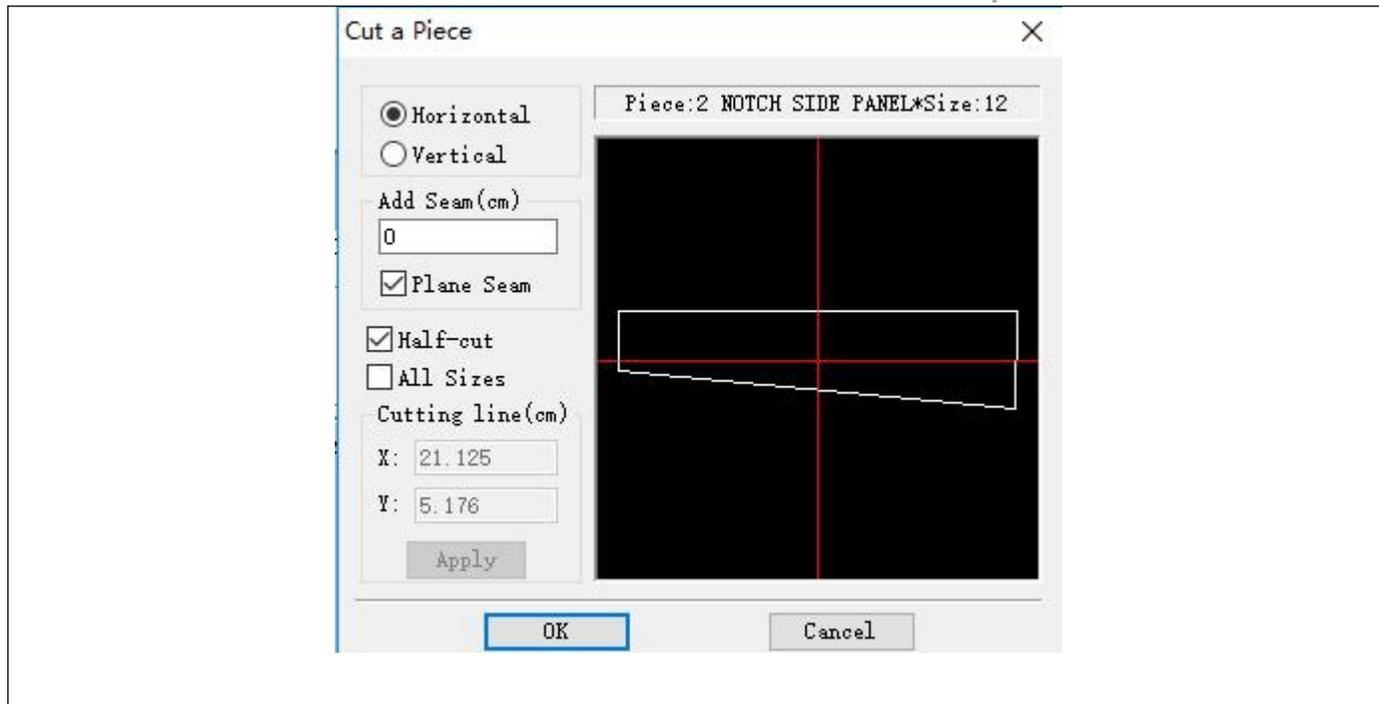


**Cut Piece**
**Function:**

You can cut the selected piece vertically or horizontally through this command. In order to save the material during marker making, you can cut the piece and place them on markers separately.

**Operation:**

1. Select the piece to be cut in the piece window.
2. Click  to cut the pattern or click the **【Piece】** menu - **【Cut】** , pop up **【Cut a piece】** dialog box;
3. Select Horizontal cut or Vertical cut.
4. If you want to cut the patterns unequally, remove the **【Half-cut】** option , can cut the piece at any position;
5. Click the position on the right pattern with the mouse to split. The red **【+】** cursor will be positioned where the mouse was clicked. Also, the position of the split will be displayed in the **【X】【Y】** of the **【Cutting Line】**. You can enter the specific amount to cut the position of the open line in the **【X】 【Y】** of **【Cutting line】** ;
6. Input the data of sewing in the **【Add seam】** text box;
7. If you want to cut the patterns equally, can select the **【Half-cut】** option;
8. Click **【OK】** to finish.



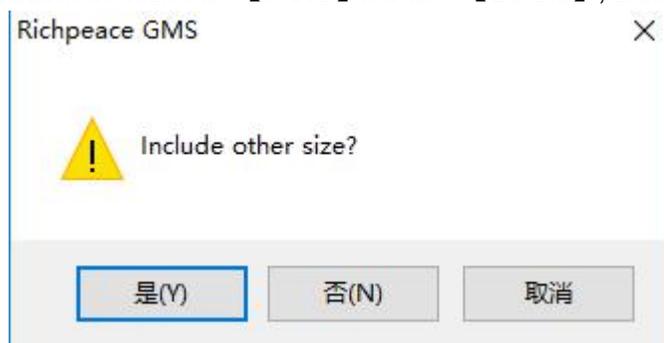
## Delete Pieces

### Function:

Delete one or all sizes in one pattern.

### Operation:

1. Select the pattern need to delete;
2. Click  to delete the pattern or click the **【Piece】** menu - **【Delete】**, a dialog box pops up;



3. Click Yes to delete the pattern of all sizes.
4. Click No to delete the pattern of the current selection size.

## Section 5 Marker toolbar 1



### Functions:

You can do the following operations for the pieces in marker: select, move, rotate, flip, zoom in, zoom out, measure and input text etc.



### Select piece

#### Function:

This tool can be used to select and move pieces.

#### Operation:

1. **Select a piece:** Click the icon and then click one piece;
2. **Select more pieces:** Click the icon, then click and drag in the blank place in the marker to drag rectangle marquee in order to select several pieces, after that loose the mouse; or press and hold **Ctrl** button, and then click the pieces that you want to select one by one.
3. **Rectangle marquee more pieces:** Rectangle marquee more piece in the **Size list bar**. You can select a certain sizes for certain pieces at one time, and right-click the mouse, then all the pieces selected in rectangle align into the marker automatically.
4. **Move:** click the icon, then click one piece, and then drag the piece to the best position, then loose it.
5. **Right click find position:** use the tool, press right key and drag to the position and then release;

6. **Right click:** The pattern copies is even number and the attribute is symmetric. When the pattern on the work area is less than half of the total, right click on the pattern, The pattern rotates 180 degrees, then right-click the pattern to flip, and then right-click to rotate 180 degrees, right click, pattern flip...

7. **Return the piece in working area to piece window:** Click this tool, double click piece, then this piece will be put back into the Piece window instantly. You also can return more pieces by rectangular selection.

8. **Pattern and Marker border:**

a) Pattern close to border: press CTRL, drag pattern to border;

b) Fixed overlap value between the pattern and border: When the pattern is close to border, and the pattern is selected, hold down the CTRL key. Each time you press the arrow key, the pattern overlaps by a “pattern step” with border( Parameter setting - marker parameter)

c) Overlap checking: press CTRL, click overlapping patterns, can show overlap value.

Under default, select the tool, when select other tool, press SPACE key can switch.

**Tips:**

1. If you want to place one piece on the marker to other blank place (the blank area will roomy enough to place the piece), you can click the right button on the piece and then drag the mouse to this blank place, then loose the mouse. The piece will be placed in the blank area close to the other pieces automatically.

2. When you want auto nest by this tool, Press **CTRL**, double click the certain size in the **size list bar**, then pieces with all size for one pattern will be placed into the working area; Pressing **SHIFT** and double click the certain size, you can put all pieces with this size for this pattern into the working area. After nesting, if there is pace to cover other pieces, system will import other piece of other size to nest in this space. For example, if the space can contain 3 little pieces, but selected pattern just have 2 pieces. In this case, system would choose the best one piece from anther pattern to cover the remainder space.



**Show marker by width**

**Operation:**

Click the icon, full width of marker is shown.

**Show all pieces**

---

**Operation:**

Click the icon, all the pieces on the marker are shown.

**Show Full length marker**

---

**Operation:**

Click the icon, full length of marker is shown.

**Limit Rotation (L)**

---

**Function:**

This command is used to limit the usage of these tools such as,  rotate piece by any angle, and  rotate 90 deg.

**Operation:**

1. Click to make the icon use toggle/ button on/off instead of concave and convex, or click **【Options】** — **【Limit Rotation】** and tick it, or press the shortcut key Alt+O+L.
2. The setting about rotating in **【Piece】 — 【Information】 — 【Limit Marking】** will do work.
3. Click to make the icon convex, and then you can rotate pieces freely.

**Tip:**

Usage of key 1(rotate clockwise) or key 3 (rotate anti-clockwise)—Make the icon convex, select the piece when it shows bias, and press key 1 or key 3. The piece will rotate at a certain angle by one time. You can set the rotation angle in **【Options】 — 【Parameter】 — 【Fixed Deg】** , then input the angle.

when the icon is concave, the above operation can not be implemented.

Usage of Key 5(rotate 90 deg)—Make the icon concave, select the piece when it shows bias, and press key 5. The piece will flip vertically if only **【Limit Marking】** is set as 2 way in **【Piece】 — 【Information】**; Make the icon convex, the piece will rotate at 90 deg in any direction.

**Limit Flip****Function:**

This command is used to limit the usage of these tools such as  flip horizontally,  flip vertically,  flip piece.

**Operation**

1. Click it to make the icon concave, or click **【Options】—【Limit Flip】**, or press the shortcut key Alt+O+T.
2. The setting about flipping in **【Piece】 — 【Information】 — 【Limit Marking】** will start functioning.
3. Click to make the icon convex and the piece will be flipped without the limits in the dialog box of **【Piece Info】** .

**Tips:**

1. Usage of key 7 (rotate vertically) or key 9 (rotate horizontally)—Make the icon concave, piece doesn't flip neither with key 7 nor with key 9 as long as **【Quantity】** shows **【1】** and **【Attribute】** shows **【single】** in **【Piece】—【Information】**; but make it convex, under this situation, piece flips vertically with key 7 and with key 9 horizontally.
2. Usage of key 7 (rotate vertically) or key 9 (rotate horizontally)—Make the icon concave or convex, piece can flip vertically with key 7 and horizontally with key 9, as long as **【Quantity】** shows **【2】** and **【Attribute】** shows **【Pairing】**, and **【Limit marking】** tick **【Flip allowed】** in **【Piece】—【Information】**.



Zoom in

---

**Function:**

It can be used for magnifying the specified area.

**Operation:**

1. Click the icon.
2. Click or click and drag a rectangle marquee to select the area to be magnified, and then loose the mouse.
3. After zooming in, you can click the right button to return to the previous state.
4. right click, do not release, and move marker.

**Tip:**

When select "select pieces" tool, Press space button can turn to "Zoom in" tool.



Clean marker

**Ctrl + C**

---

**Function:**

It can be used to clear all pieces on marker and move them from workaround to the piece list box.

**Operation:**

1. Click the icon, or click **【Marker】—【Clear marker】**, or use the shortcut key Ctrl+C to clear marker.

2. Click **【Yes】** in the coming out dialog box to clean all the pieces on the marker, otherwise click **【No】** .

 Measure**Function:**

It can be used for measuring the distance between any two points on marker.

**Operation:**

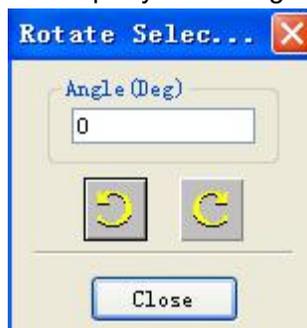
1. Click the icon.
2. Click the left button and drag the mouse from the start point to the end point on marker, and then loose the mouse.
3. The distance of DX, DY will be displayed in the status bar.

 **Rotate piece any angle**

While  is concave, you can set up the degree and direction to rotate the piece with this tool.

**Operation:**

1. Click the icon, then pop up a dialog box.,
2. Input the degree and direction in the box.
3. Click **【Ok】** , the selected piece will rotate as per your setting.



 **Rotate 90 degree****Function:**

When the icon  is concave, select **【Four-way】** or **【Any】** in **【Piece】 — 【Information】 -- 【Limit Marking】** , you can click this tool rotate the selected piece by 90 degree on marker.

**Operation:**

1. Click the piece to be rotated on marker.
2. Click the icon or click right button of the mouse or key 5 in small keypad to rotate the piece at 90°.

**Note**

Did not select "Rotate piece by hot key according weave line limit" in "set parameter", Press 5 rotate 90 degree.

 **Flip horizontally****Function:**

It can be used to flip the piece on marker horizontally when you select 2-way, 4-way, or Any in **【Piece】 — 【Information】 — 【Limit Marking】** and select the flip allowed as the same.

**Operation:**

Select the pieces, single click the icon or key 9, pieces will flip horizontally accordingly.

 **Flip vertically****Function:**

It can be used to flip the piece on marker vertically when you select the flip allowed in **【Piece】 — 【Information】 — 【Limit Marking】** .

**Operation:**

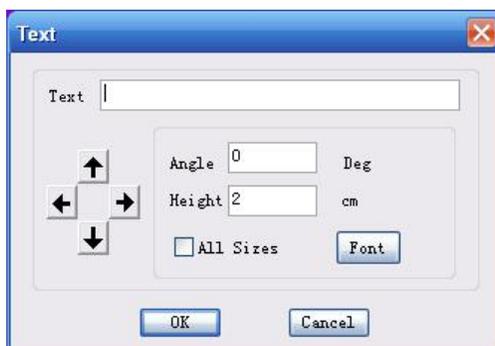
Select the pieces, single click the icon or key 7, pieces will flip vertically accordingly.

**Function:**

It is used to add the text on the marker.

**Operation:**

Select the tool, and click the piece on the marker, then pop up a dialog box of **Text** , input the text, click **OK** .



Parameter explanation inside **TEXT** :

 : It is used to adjust the position of the text. You can click the arrows for up, down, left and right movement; pressing CTRL also can accelerate the movement.

**Height** and **Angle** : They are used to adjust the height and angle of the text. If you need more fine adjustment, you can edit the **Font** .

**All sizes** : Tick it, the above texts will be added to all sizes automatically.

 **Marker Text****Function:**

It is used to input text in the blank of the marker.

**Operation:**

1. Select this tool;
2. Click the blank on marker and the dialog box **【Marker Text】** will be popped out;
3. Input the text in the dialog box, and then click **【OK】** .

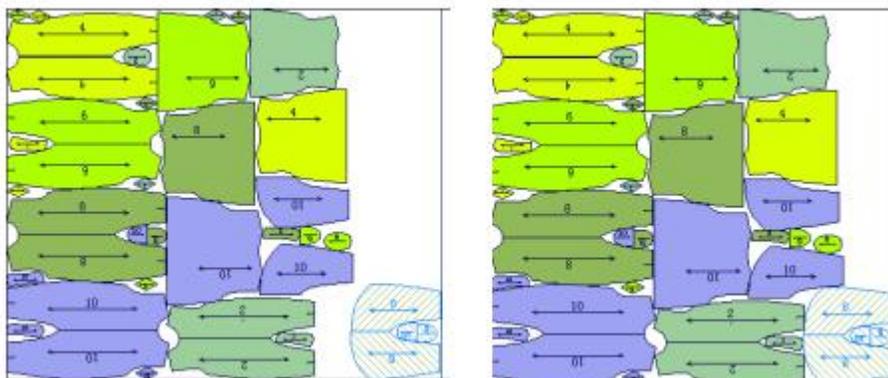
Note: You must tick **【Show Marker Text】** under **【Options】** ; otherwise, it will not be displayed.

 **Group****Function:**

It is used to form two or more piece to be grouped together.

**Operation:**

1. Rectangle marquee two or more pieces, the pieces are in the selected status.
2. Single click the icon in the toolbar, these piece group together automatically.
3. Pieces can be move as a group by the same time.



## Ungroup

---

### Function:

It is opposite to , and used to split up the group.

### Operation:

Select the grouped pieces, click this tool, then pieces can be split up.



## pieces gap

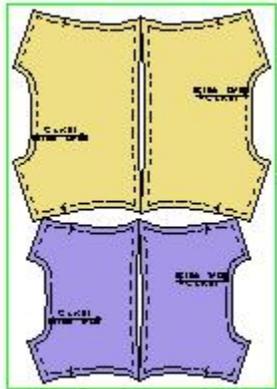
---

### Function:

Add gap between pieces

### Operation:

1. Select piece;
2. Click the icon
3. Input value, click OK.



Virtual Border

<input checked="" type="checkbox"/> Top	<input type="text" value="0"/>	<input checked="" type="checkbox"/> Left	<input type="text" value="0"/>
<input checked="" type="checkbox"/> Bottom	<input type="text" value="0"/>	<input checked="" type="checkbox"/> Right	<input type="text" value="0"/>

equal ,  Rectangle border

Apply

## Section 6 Marker toolbar 2



---

### Show width of aided marker

#### Operation:

Click  this icon, Aided maker will appear in max width.

 Show all pieces in aided marker

---

#### Operation:

Click this tool; all the pieces in the aided marker can be displayed.

 Show whole aided marker

---

#### Operation:

Click this tool; whole aided marker can be displayed

### Unfold pieces

---

#### Operation:

Select fold pattern, Click  this icon, You can see pattern folded and opened again.

 Right fold, Left fold, Bottom fold, Top fold

---

#### Function:

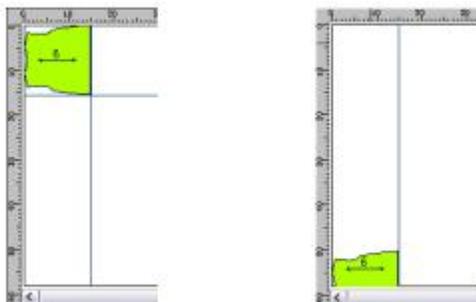
When you need to nest the tubular marker, you can fold the pieces up or bottom for which requests symmetry up and bottom; you can fold the pieces by left or right side for which requests symmetry by left and right.

**Operation:**

1. In **【Marker】 — 【Define Marker】**, set the **【Plies】** as 2, and **【Layout mode】** is **【Faced】**, then set the **【Folded mode】** as **【Bottom folded】**.

Plies	<input type="text" value="2"/>	Total pieces	94850884.52sq.mm
Layout mode		Folded mode	
<input type="radio"/> Single <input checked="" type="radio"/> Faced		<input type="checkbox"/> Top folded <input type="checkbox"/> Bottom folded <input type="checkbox"/> Left folded	

2. Click piece which requests symmetry up and bottom, then select the  Bottom fold. You can view the piece is folded half, and stay in the folded side on the marker accordingly.



3. Likewise, click piece which requests symmetry by left and right side, then pick up the  or . You can view the piece is folded half, and stay in the folded side on the marker accordingly.


**Cut order set up**

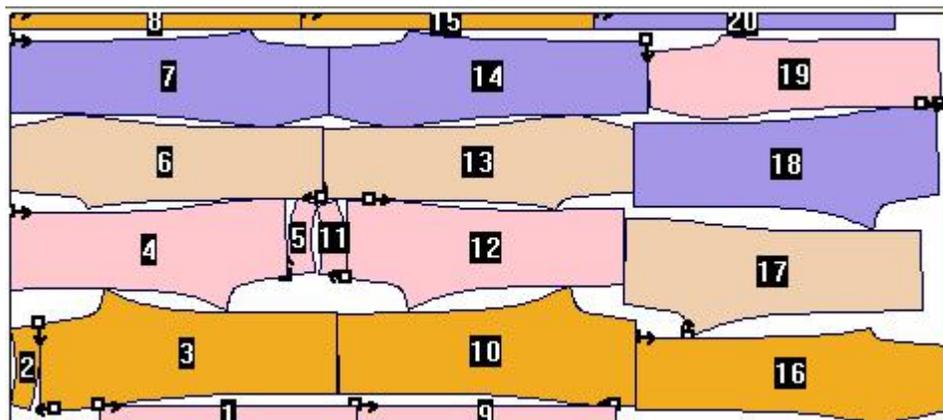

---

**Function:**

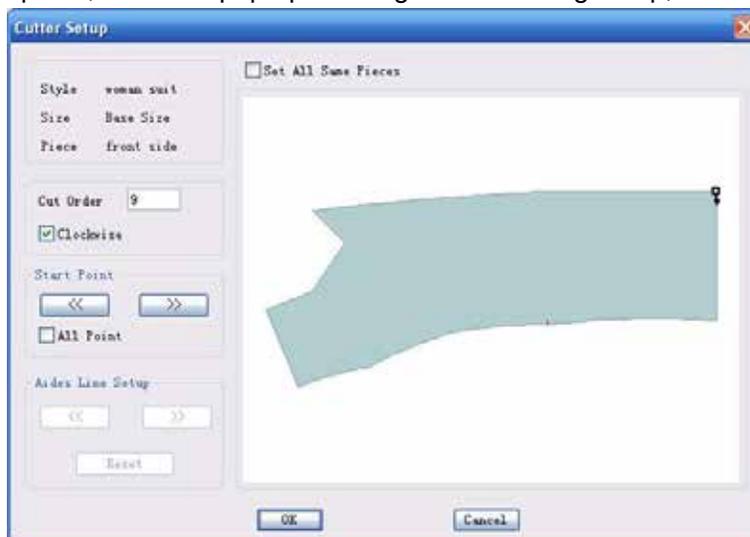
It is used to set up the cutting sequence when pieces are cut in auto-cutter.

**Operation:**

1. Click the icon, then you can see the cutting sequence on the pieces.



2. Press CTRL, click the piece, and then pop up a dialog box of Cutting setup;



3. Input the number in the **【Cut order】**, then the cutting sequence can be changed.

4. Click  or  in the **【Start Point】**, you can move the cutting starting point.

5. Tick **【Set all same piece】**, and click **【OK】**, then select the piece again. The starting point for all the pieces on the marker is the same.

 **Draw rectangle**

**Function:**

It is used to draw the rectangle, and can be printed or plotted along with the marker.

**Operation:**

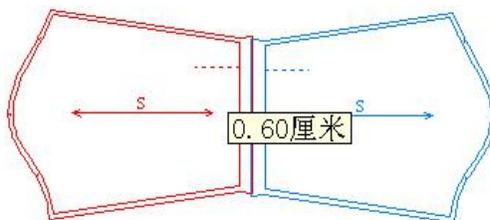
1. Select this tool, click on the marker, release and drag the mouse, and then a rectangle can be drawn.
2. Select , move the mouse to the outline of rectangle. When the cursor turn a arrow, right click, a delete box come up, click delete, then the rectangle is deleted.

**Overlapped checking****Function:**

It is used to check the overlapped value when pieces overlap together.

**Operation:**

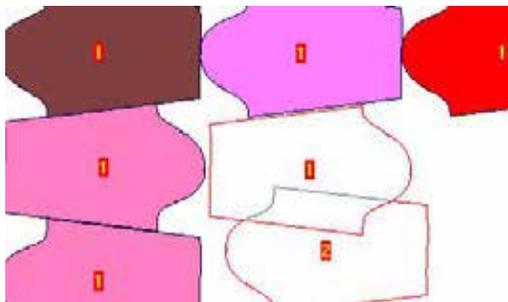
1. Click this tool, and the icon become concave.
2. Move the mouse and click the overlapped piece showed as below. Then you can see the max overlapped value to the selected piece with another piece.

**Define layer****Function:**

It is used to define the overlapped part to reserve or discard when two pieces overlapped together.

**Operation:**

1. Select this tool
2. Click the piece which you need to plot entirely and set it as 1 layer (top), then the other piece will be set as 2 layers (bottom) automatically.
3. When plotting, the piece set as 1 layer (top) can be output entirely, but for the one set as 2 layers (bottom), the overlapped part with gray line shown as below can be selected not to output or plot in dashed line.

**Note:**

You can change the number optionally for this two overlapped pieces by left click the mouse inside piece. The rule is that piece with smaller number overlay the piece with bigger number, such as No2 overlay No3, No4 overlay No8, and No 15 overlay No20.

**Cap nest****Function:**

It is used to define the nest method for pieces, such as normal, interleaving, reverse, etc.

**Operation:**

1. Select the pieces, and then click the icon.
2. Pop up a dialog box of **【Cap pieces nesting】** .

3. Define the nesting method in the **【Mode】** . You can tick **【Same distance】** , **【Nest whole row only】** , **【Show distance】** optionally.

4. Then click **【OK】** , you can do the nest for the particular size for this piece, if select [view gap], will show gap auto, if not, can select when need check.



### Same proportion marker and aided marker

#### Function:

It is used to show the major and aided marker in proportion.

#### Operation:

Click this tool and make the icon concave, then the pieces on the major and aided marker are shown in proportion. If you click the tool again, the proportion turns back as before.



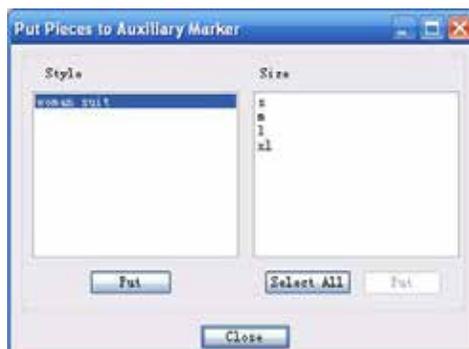
### Place pieces to aided marker

#### Function:

It is used to place the pieces in the piece box to the aided marker.

#### Operation:

Click the icon, pop up a dialog box, select the certain size or all size, then click **【Put】** , all the selected size are placed in the aided marker. Then click **【Close】** .

 **Clean aided marker****Function:**

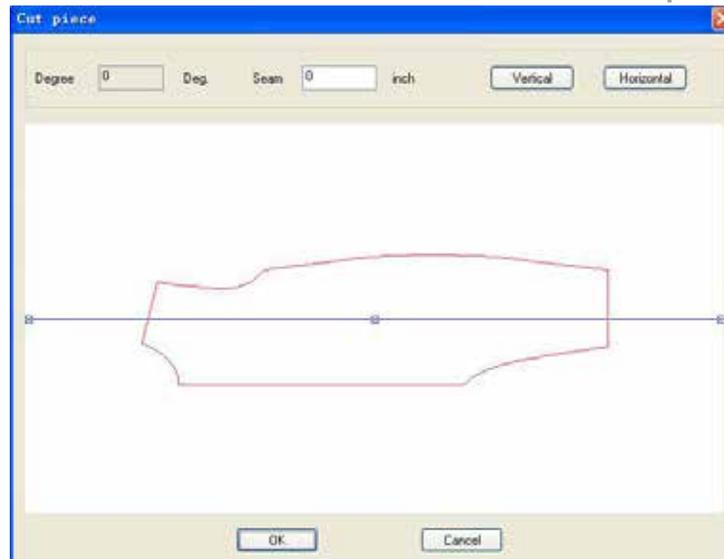
Click this tool; you can move all the pieces on the aided marker to the piece box.

 **Cut view pieces****Function:**

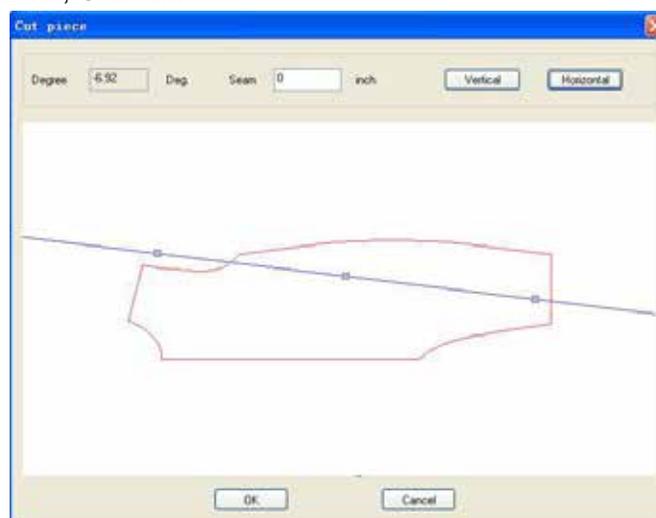
Cut piece on marker overlap part

**Operation:**

1. Select pattern which will cut, Click cut view pieces icon , See following picture, You can see a blue cut line, There are rectangle in both side and middle.



2. Click one rectangle on side, Then loose mouse, Drag mouse to required place, Outline Will rotate, The rotate center is another side rectangle, Angel will appear at [Degree], Input seam allowance. Click middle rectangle, Then loose mouse, it is move cut line, Click **【Vertically】** and **【Horizontal】**, Outline will be vertically or horizontal cut, Click ok.



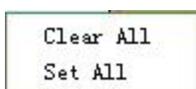
## # Cutter stripe setup

**Function:**

It is used for stripe for auto cutter

**Operation :**

1. Pattern stripe as normal process.
2. Click  this icon, Pattern which already striped in work area will appear in orange colour , Means Pattern which go to auto cutter need to strip, No stripe pattern appear in grey colour;
3. If do not want to adjust stripe, Click pattern which have striped, Pattern colour will turn form orange to blue, It means pattern need not use stripe, Click this pattern again, Pattern colour turn form blue colour to orange,Also you can right click, See following picture to set.

**Note:**

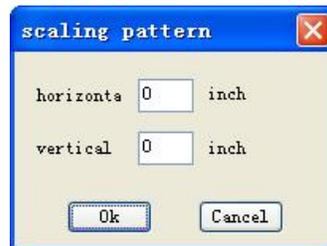
Select **【Option】 - 【adjust strip】** ,  can active.

**Zoom pieces****Function:**

Zoom in or zoom out whole pattern

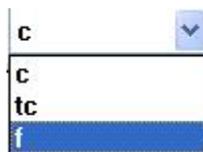
**Operation:**

1. Select pattern which need to zoom in or zoom out;
2. You can see **【Scaling pattern】** dialogue table, Input "+", Pattern will zoom out, Input "-",Pattern will Zoom in.
3. Click [ok].



## Section 7 Material toolbar

---



**Function:**

Select different material and make marker

**Operation:**

Click right arrow, You can see all the material type, Select one, It will appear all the pattern .

## Section 8 Supernest toolbar



### Supernest

The super ejectors in the Super Marker Tool are the same as the super eject commands in the Marker menu.

#### Features:

The utilization rate of the discharge in a short time is higher than that of the manual discharge.

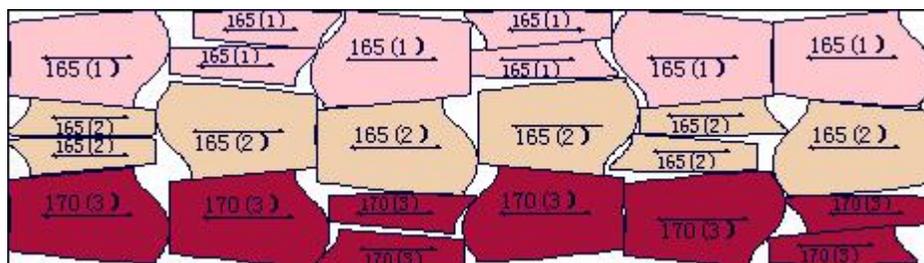
#### operating:

1. Load the pattern file and set the truss width;
2. Click **【Nesting】** -- **【Supernest】** , pop up **【Set Supernest】** ;

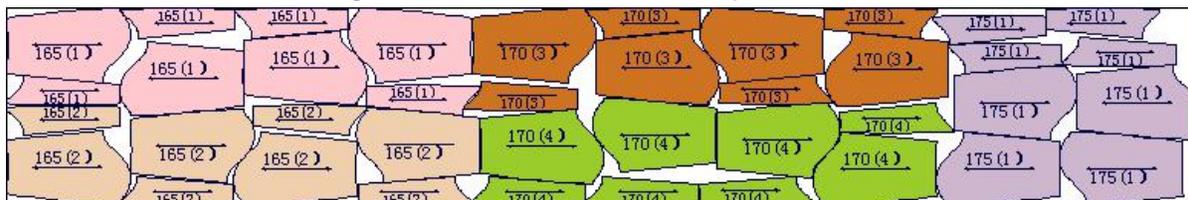
3. Time, usually input 3-10mins.
4. Click **【Ok】** , the system begin to nesting.



- ◇ **【Avoid vertical color shade】** : All pieces are arranged from top to bottom;



- ◇ **【Avoid mixed color shade(Vertical sets X sets)】** : All patterns are arranged from left to right in an X-piece set of 1 column. As shown in the figure below, there are 2 sets of portraits;



- ◇ **【According to set number】** : The default case is not selected. When the supernest is super-arranged, it is sorted from the largest number type to the smallest number type, which can be viewed with the horizontal color difference. When selected, they are sorted from small to large.
- ◇ **【Only nesting main marker pattern】** : Selected, only nesting main marker pattern when supernest; Unselected, all pieces nesting.
- ◇ **【Clear aided marker all pattern】** : Selected, it will clear aided marker all patterns and nesting with other patterns when supernest; Unselected, the patterns of aided marker don't participate in the nesting.
- ◇ **【Marker length no limited】**: Selected, When the length of the actual marker is longer than the set length, it will continue to nesting. Unselected, when the length of the actual marker is beyond the set length, it will not nesting.



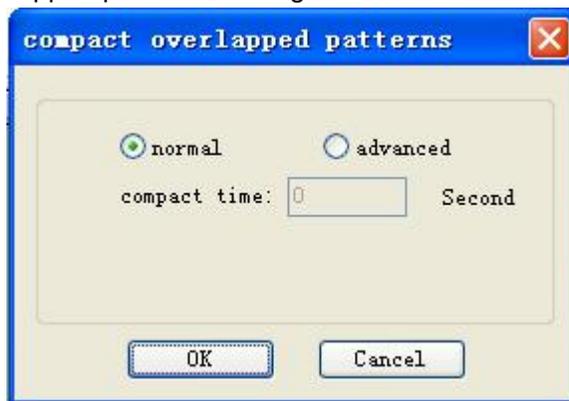
### Embedded pattern

**Function:**

For overlapped pattern, Embedded pattern to near spacing.

**Operation:**

1. There are pattern on marker;
2. Click Embedded pattern 
3. You can see **【compact overlapped patterns】** dialogue table.



4. Select one type, Then click ok.

**Instruction:**

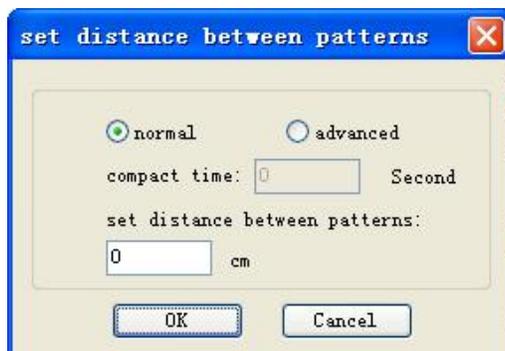
1. Normal: Can not set time, System will make marker to overlapped pattern automatically, When finish, will stop;
2. Advanced: Can set compact time, When finish, System will close, Or times out, System will finish to deal with automatically;
3. Can close by hand.

**Change distance between pattern****Function:**

Set the minimum distance for pattern

**Operation:**

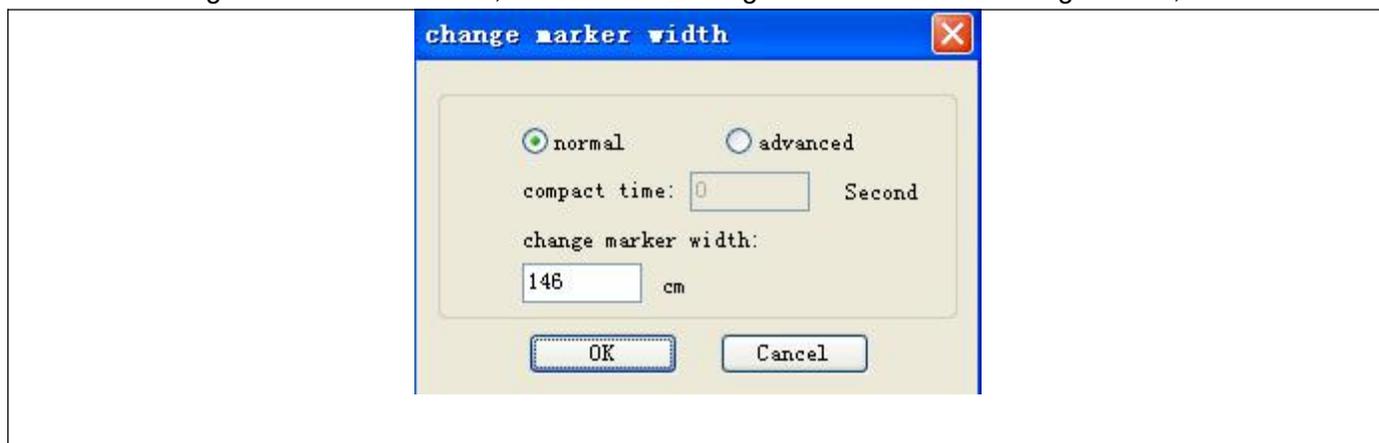
1. There are pattern on marker
2. Click “change distance between pattern” button 
3. You can see set distance between pattern dialogue table

**Change width of marker****Function :**

When change marker width, Deal with marker automatically.

**Operation:**

1. There are pattern on marker
2. Click change width of marker icon, You can see 【change width of marker】 dialogue table;



3. Select one module , Input new marker width,Click ok.



## Compact marker

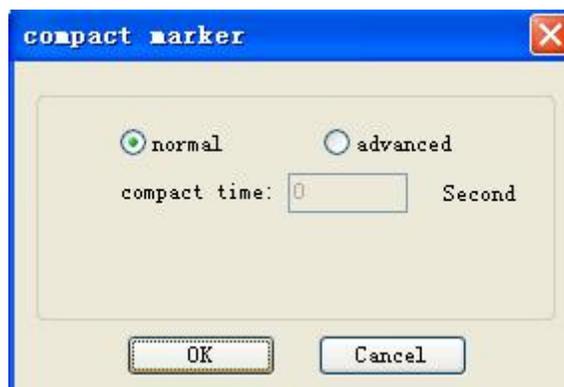
---

### Function:

Compact marker file Left direction ,It is for all the pattern compact on marker in order to improve efficiency.

### Operation:

1. There are pattern on marker
2. Click compact marker button ,You can see 【compact marker】 dialogue table;



3. Select one model, Click ok



## Bind pattern

---

### Function:

Bind any pattern on marker.

**Option:**

1. Select pattern which need to bind;
2. Click bind pattern button .

**Instruction:**

Bind pattern, Relative place do not change when make marker,It is sole group when bind solely.

**No bind pattern**

---

**Function:**

It is a opposite operation of binding pattern, Bound pattern do not have bind property.

**Operation:**

1. Select bound pattern
2. Click, No bind pattern icon

**Fix piece position**

---

**Function:**

Fix one or more pattern on marker.

**Operation:**

- 1.Select patterns which need to be fixed on marker.
- 2.Click fix pieces position icon 

**Instruction:**

Fixed pattern position, Pattern position and style do not change when make marker,  
Can not drag, Can not rotate, It is a sole group when fixed onetime.

**Unfixed pattern position**

---

**Function:**

It is Opposite operation for fixed pattern, Fixed pattern do not have fixed property.

**Operation:**

1. Select fixed pattern;
2. Click unfixed pattern position.

## **View bundled records**

---

**Function:**

Check the tied pattern.

**Operation:**

With this tool selected, the bound pattern is selected.

## **View lock history**

---

**Function:**

Check the fixed pattern.

**operating:**

With this tool selected, the fixed pattern is selected.

## Section 9 Hide toolbar



Click **【option】** - **【Custom toolbar】** ,Can show hidden tool .



### Function:

Move pattern Up、bottom、Left、 Right direction, Same as small board 8、 2、 4、 6 function.

### Option



**Remove selected pieces**

**Delete or double click**

### Function:

Remove selected pieces from marker, And go back to piece list, Different from deleting pieces.

### Operation:

1. Select pattern on marker with **【move selected piece】** tool .
2. Click[remove selected pieces]  icon, or select **【marker】** - **【clear selected piece】** or press delete.
3. All the selected pattern go back to piece window.

### Tip:

Select “move selected pieces” tool  and double click pattern on marker place.



**Round After Rotation**

**Function:**

Command which used for rotating pattern by mouse.

**Operation:**

Click **【option】** -- **【Round after rotation】** Hollow, pattern rotat 0°, 90°, 180°, 270°  
Four direction,(About 6 degree), Rotate degree will near the similar degree, Heave, NO.

**Show marker Gauge****Function**

Open or close marker Gauge.

**Operation:**

Click this icon, Gauge appear, Click again, Gauge hide.

**Merge****Function:**

Merge two marker to one marker, marker width for both markers should be same

**Operation:**

1. Open a marker file
2. Click **【File】** Menu-- **【Merge】**, you can see **【union marker file】** dialogue table;
3. Open a mkr file in file list, Opened marker will be added after current marker.

**Context help****Function:**

It used for shortcut when using help.

**Operation:**

Select this tool, Then click any tool,You can see **【Help】** dialogue table.

 **Zoom Out****Function:**

Make pattern in main marker zoom out to before proportion

**Operation:**

Under the zoom in status, Click zoom out  icon, Click one time, will come back before proportion one time until icon turn gray, Mean finish.

 **zoom out aided marker****Function:**

Make pattern in aided marker zoom out to before proportion

**Operation :**

Under the zoom in status, Click zoom out  icon, Click one time, will come back before proportion one time until icon turn gray, Mean finish.

 **Rotate 90 degree anti-clockwise****Function:**

**【pieces info】** -- **【limited marking】** , when select **【Four way】** or **【Any】** Or select other option, When  not selected, Can rotate selected pattern 90 degree .

**Operation:**

Select this pattern, Click this icon  can rotate 90 degree.

**Tip:**

If it is **【Double-way】** , right click or click number 5, Can rotate 180 degree.

 **Rotate 180 degree****Function:**

When grain line is **【Double way】** **【Four way】** or **【Any way】** , Can rotate pattern 180 degree.

**Operation:**

Select icon which need to rotate, click this icon  pattern can rotate 180 degree.

**Note:**

hollow, Right click or click number 5, Can rotate 90 degree.

 **Specific rotation****Function:**

1.  Not select, Use specific tool can rotate pattern any way in the clicked axis point
2.  select, When grainline is **【Double-way】**,Can rotate pattern 180 degree in click axis point, Grain line is **【Four-way】** ,rotate 90 degree, **【Any】** rotate in anyway.

**Operation:**

1. Click specific rotation tool 
2. Click pattern ,Press and hold then rotate;
3. When rotate degree meet requirement, Then loosen mouse.

 **Center rotation****Function:**

1.  not select, Use specific tool can rotate pattern any way in the clicked center point
2.  select, When grainline is **【Double-way】**,Can rotate pattern 180 degree in clicked center point, Grain line is **【Four-way】** ,rotate 90 degree, **【Any】** rotate in anyway.

**Operation:**

**Refer to center rotation**

**Tip:**

With number 1(clockwise) or number 3 (anti-clockwise),Rotate a little, Press one time rotate one degree ,You can click **【option】 -- 【Set parameter】 -- 【degree】** to input value.

 left align  right align  up align  down align

---

**Function:**

Same as “Marker” menu list.

## Section 10 Menu bar

File[F] Piece[P] Marker[M] Options[O] Nesting[N] Cutter[C] Calculate[L] Cap Nesting[K] Help[H]

### File menu



File menu has various commands including **【New】**, **【Open】**, **【Merge】**, **【Save】**, **【Plot】** and **【Print】** etc. These commands such as **【Open a pattern file】**, **【New】**, **【Open】**, **【Merge】**, **【Save】**, **【Save current nesting】**, **【Print】**, **【Preview】**, **【About】**, **【Help】** have the corresponding icons in file toolbar.

- **Open HPGL file 【H】**

---

**Function:**

It is used to open HPGL file from exported from other CAD software, then output through Plotter.

**Operation:**

1. Click **【File】** — **【Open HPGL file】** ,
2. come out the dialog box of **【Open】** to select files with HPGL format, then double click Open
3. Click **【Plot】** to plot this file.

- **Close HPGL file 【L】**

---

**Function:**

It is used to close opened HPGL file.

**Operation:**

After open HPGL the file, click **【File】** — **【Close HPGL】** , then you can close this file.

- **Out put to DXF**

---

**Function:**

Save marker as dxf format, Other Cad system can use, So match with other CAD

- **Import PLT**

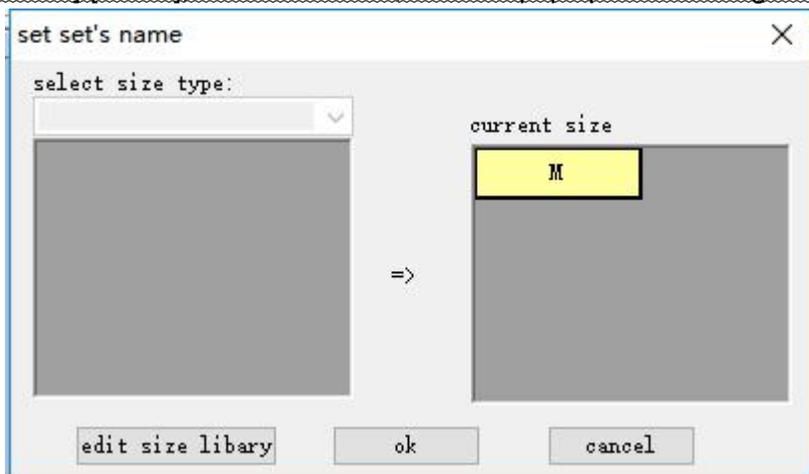
---

**Function:**

Import PLT file, and marker in the software.

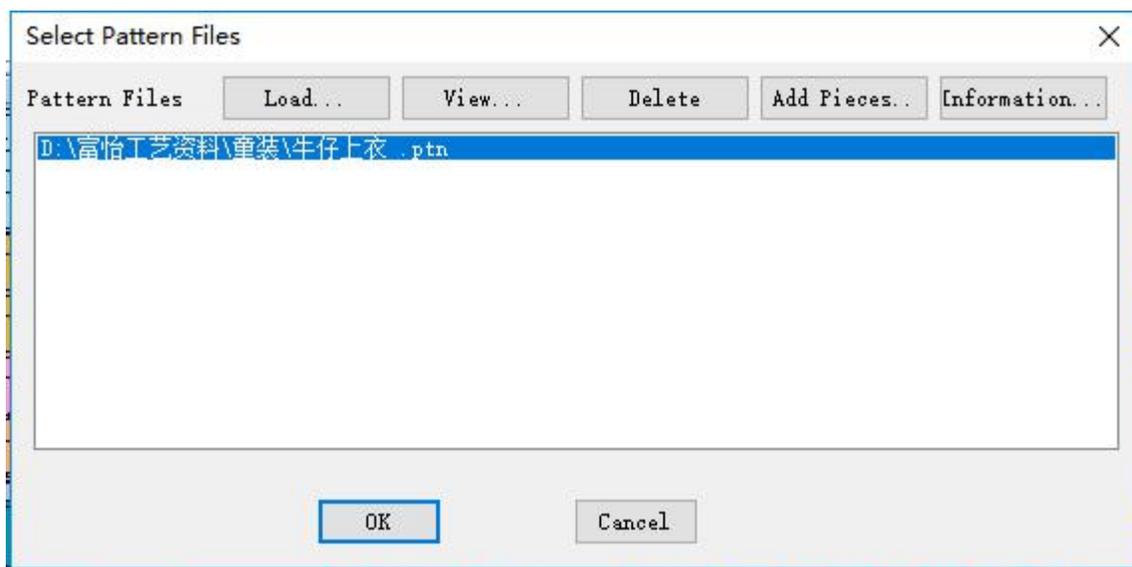
**Operation:**

1. click [file]-[Load .PLT file]-[HPGL], select a PLT file, then will pop up the following dialog:

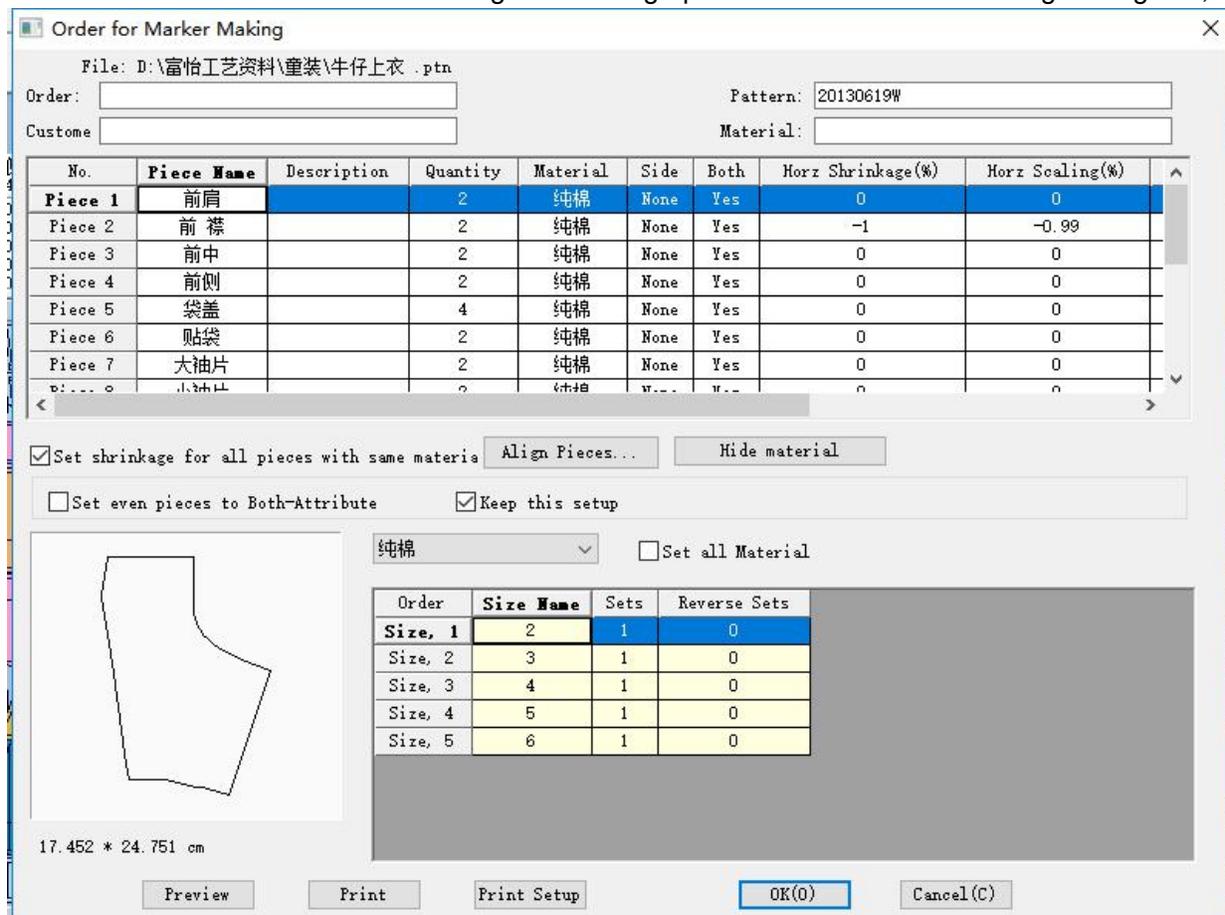


2. If the default display is the number type you want, click on the minimum code, the right side of the dialog box will use the code as the first code from top to bottom, from small to large arranged number type display, As shown above, click "OK", the imported PLT file will be displayed on the truss from left to right in accordance with the right side of the dialog box from small to large to display the various types of patterns;

3. The setting of the ratio of marker: click to open the style file icon , the [select pattern files] dialog box will pop up;



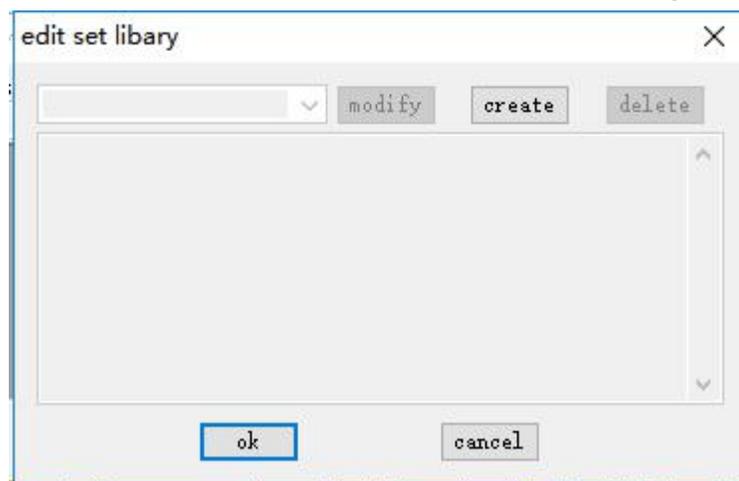
4. Double-click on the file in the above dialog box to bring up the "Order of marker making" dialog box;



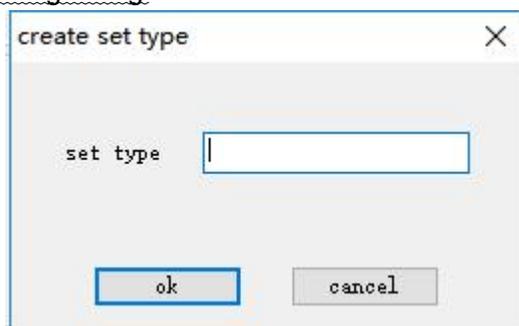
5. Input the sets of each size and click ok, then you can use supernest in GMS.

**【Edit set library】** Dialog box description:

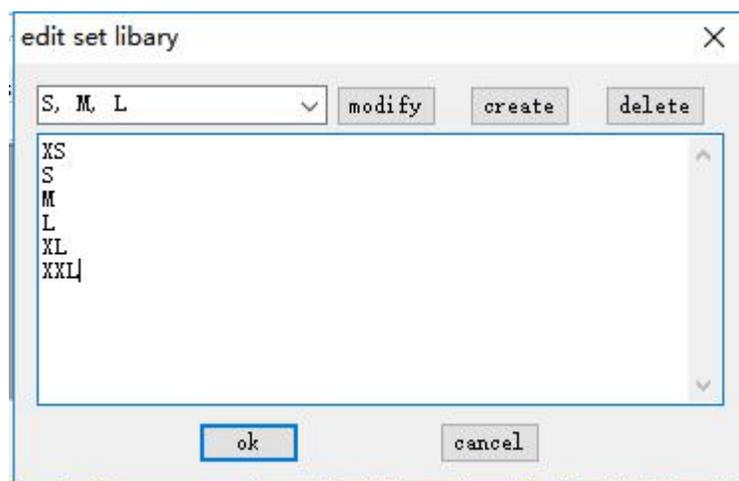
1. Click "Edit set library", pop up the following dialog:



2. Click "Create", pop up the following dialog:

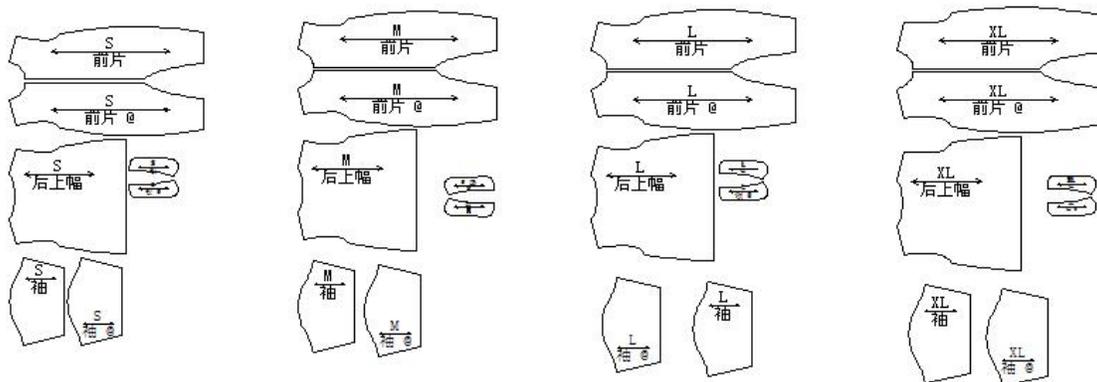


3. Input the size name in "Set type", then will pop up edit size dialog, As the following icon from top to bottom enter the type name from small to large, click OK to save.



Use PLT file nesting in Richpeace GMS, when output the PLT files in other software, please note:

As shown in the figure below, a distance of more than 1mm shall be reserved for each pattern (There must be no overlap between the patterns);



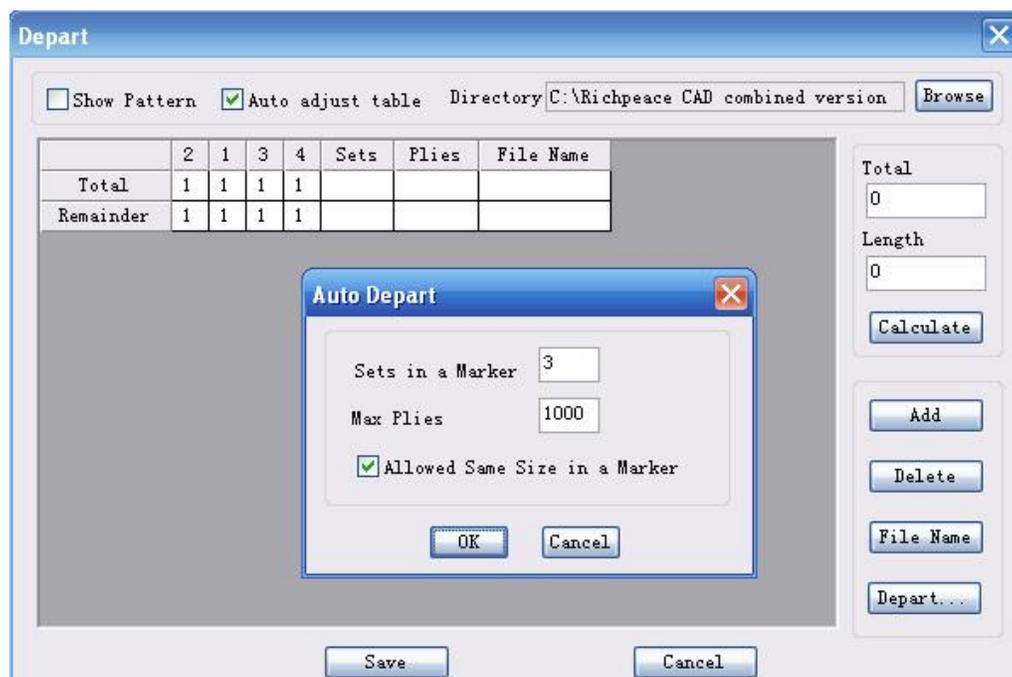
As shown in the figure above, each number must be grouped in a single area, from left to right in order from small code to large code, and a distance of more than 5CM is reserved for each type.

Each size only needs to output one set.

- Depart with single material 【T】 Ctrl+T

#### Function:

It is used to save the current opened marker as multiple marker files according to sizes.



**Operation:** (refer to fig. as above)

1. Click **【File】** — **【New】** to set marker, select and load file.
2. Click **【File】** — **【Depart with single material】** to get the dialog box **【Depart】** .
3. Click **【Auto Depart】** to pop up the dialog box **【Auto Depart】** , and then edit each item as you require. Click **【Ok】** , the system will automatically depart the marker for you; you can also depart it by yourself. Click **【Add】** and then input the quantity of each size under the relevant size name. Add markers one by one in the same way until you complete all.
  1. You can input the filename to the text box **【Filename】** or click **【filename】** at right to create filename automatically.
  2. Click **【Browse】** to select saving path.
  3. Return the original **【Depart】** dialog box, click **【Save】** .

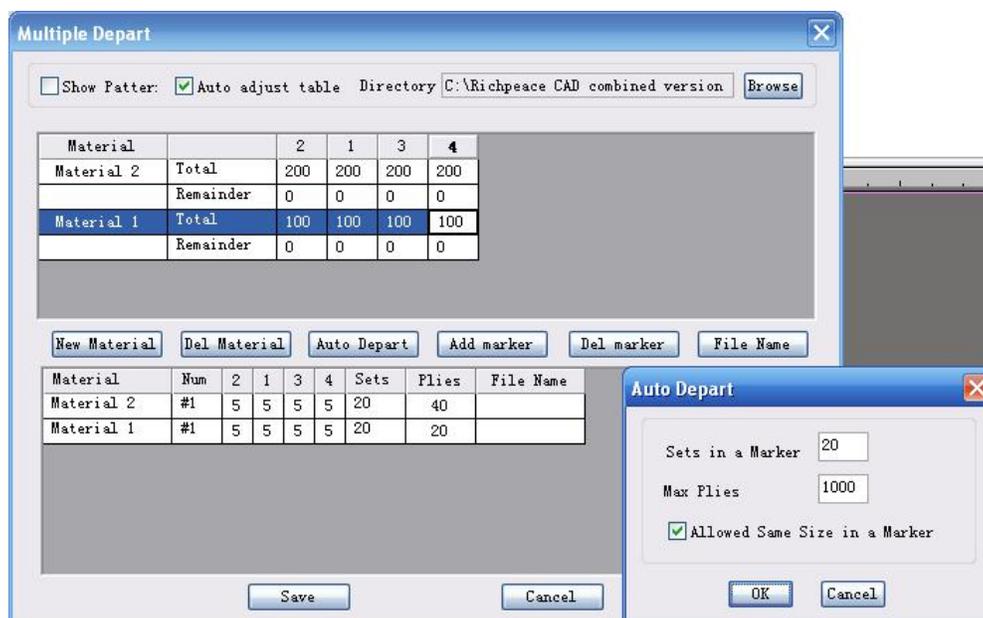
**Note:**

Click  then you will find the new departed files already there. Open a file and you will see that the selected sizes in size list have been put on one marker. If you need make your marker, you can do it by using automatic marking or manual marking. Finally click  to save the marker.

- **Depart with multiple material**    **【R】**    **Ctrl+R**

**Function:**

It is used to save the current opened marker as multiple material marker files as per the color of cloth and unit as set.



**Operation** (refer to fig. as above)

1. Click **【File】** — **【New】** to set marker, select and load pattern files, then click **【OK】** .
2. Click **【File】** — **【Depart with multiple material】** to get the dialog box.
3. Click **【Add】** to add the material number, click once for one number.

4. Input the number of sets for each size of each marker according to different material numbers.
5. Click **【Auto depart】** to get the dialog box **【Auto depart】**, edit each item as you demand, click **【OK】**.
6. Input the filename in **【Filename】** or press **【filename】**, the system will create a filename automatically.
7. Click **【Browse】** to select saving path, and then click **【OK】**.
8. Return to the original depart dialog box, and then click **【Save】**.

**Note:**

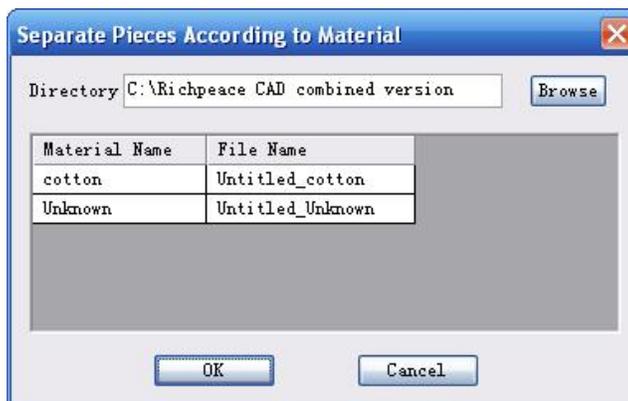
Click  to get the dialog box, then open a file in it, you will see that the pieces with the same material number has been put on one marker. If you need make the marker, you can do it by using automatic marking or manual marking. Finally click  to save the marker.

## Separate pieces according to material

---

**Function:**

It is used to save the opened marker as multiple material marker files according to material.



**Operation:** (refer to fig. as above)

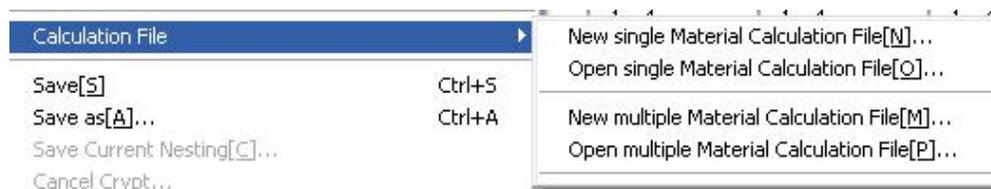
1. Click **【File】** — **【New】** to set marker, select and load pattern files, then click **【Ok】**.
2. Click **【File】** — **【Separate pieces according to material】** to get the dialog box.

3. Click **【OK】** .

**Note:**

Click  to get a dialog box. Open a file and you will see that the pieces of the same material have been placed on one marker. If you need make your marker, you can do it by using automatic marking or manual marking. Finally click  to save the marker.

● **Calculation File**



Calculation file includes: New single Material Calculation file, Open single Material Calculation File, New multiple Material Calculation file, Open multiple Material Calculation file. If you want to align only one material, you can select the single Material Calculation file; if you want to align more materials, you can select multiple Material Calculation file.

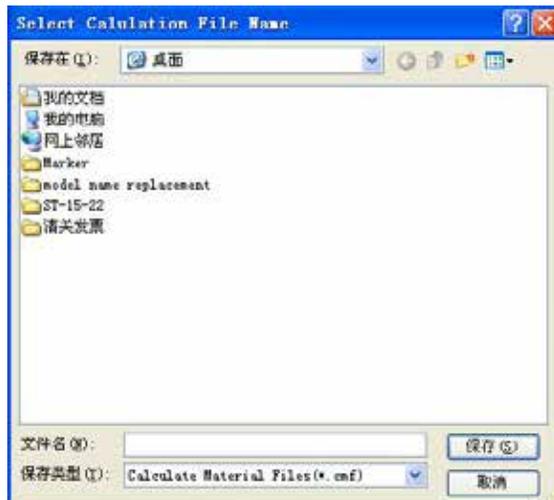
**New single Material Calculation file 【N】**

**Function:**

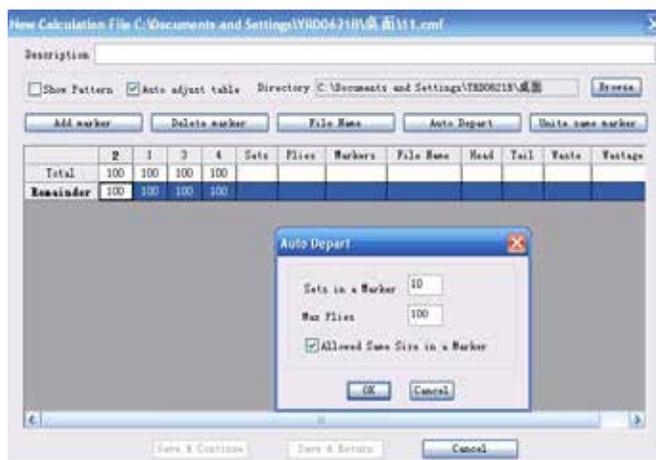
It is used to calculate the total cloth quantity used for one order instantly.

**Operation:**

1. Create a new marker, load a pattern files, click **【File】 — 【Calculation file】 -- 【New single Material Calculation file】** .
2. Come out a dialog box to input a file name to click **【Save】** to save this file.



3. Come out a **【New Calculation】** file and input the set quantity in the **【Total】** .



4. Click **【Auto Depart】** to pop up a dialog box.

5. Input the set amounts which needs to lay per marker in **【Sets in a Marker】** , the max plies amounts in **【Max Plies】** and select **【Allowed Same Size in Marker】**, if it is allowed to have the same size in marker. Then click **【Ok】** .



**Operation :**

1. Click **【file】 - 【Calculation file】 -- 【Open single material calculation file】** ;
2. After checking,Click [ok].
3. Also you can open one marker file directly.

**Open Multiple Material Calculate File****Function:**

It is used to calculate the total cloth quantity used for one order as per difference material instantly.

**Operation:**

Like new single material calculate file. Add an option" add material".

**Open Multiple Material Calculate File****Function:**

It is used for opening calculation file which have saved.

**Operation:**

1. Click **【file】 - 【Calculation file】 -- 【Open Multiple material calculation file】** ;
2. After checking,Click [ok].
3. Also you can open one marker file directly.

**● Save as Ctrl + A**

---

**Function:**

It is used to open the saved calculation files.

**Operation:**

Click **【File】**——**【Save as】**to get the dialog box **【Save as】**, input the file name and select the path to save, then click **【OK】** .

**Note:**

The system will add the same extension name .MRK to each marker file automatically.

- **Cancel encrypt**

---

**Function:**

Cancel encrypt for already encrypt file.

**Operation:**

Click **file** Menu-- **Cancel encrypt**, Input password in dialogue table,Click ok.

- **Size Exchange**

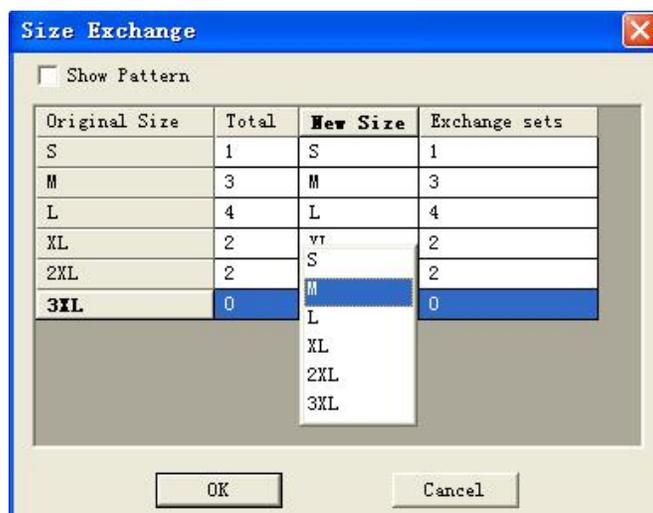
---

**Function:**

In order to improve efficiency,Replace one or more size on finished marker.

**Operation:**

1. Click **file** -- **size exchange** , You can see following dialogue table:



2. Select size will your want to change in **Size exchange** , Click **OK** . Select **show pattern** , You can show style name.

3. If there are internal or overlap, Please adjust first ,and then click save as.

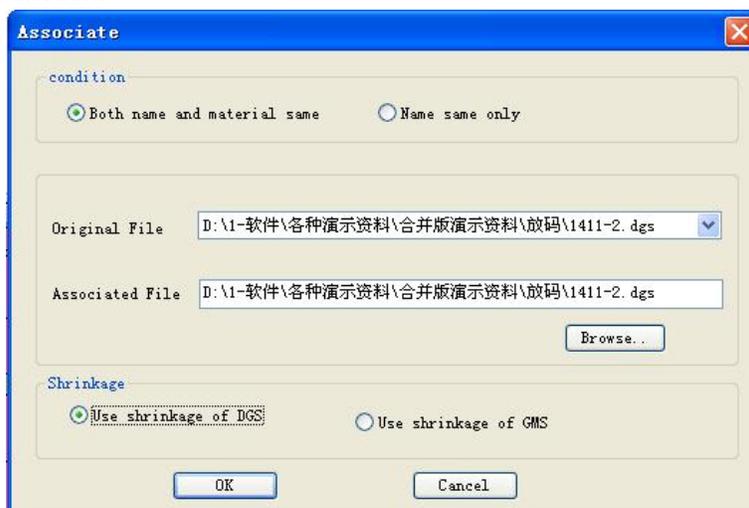
## ● Associate

### Function

It is used if piece is required to be revised in DGS after it aligned on marker. But by this function, after revision, this piece updates automatically on the previous marker and does not need to re-align again. (File name can not be amended)

### Operation:

1. Click **【File】 — 【Associate】** to get a dialog box.
2. Select the path for **【Original File】** and **【Associate File】**
3. Click Ok to fulfill this function.



### **【Associate】 Parameter instruction:**

#### **Both name and material same:**

Order for marker making pattern name, Material same as name and material in dgs file;

#### **Name same only:**

Pattern name in dgs and in order for making is same, But material is different, If front Material is A in gs, But in gms front do not have material name or other, Select this option;

One: For marker which have finished, after change shrink in dgs and save, When use

Associate function in gms, Select original file

When load more pattern and make marker, Default file is loaded first time, If associate other file, Need to select browser find file;

### Use shrink of Dgs:

Two: For marker which have finished, If changed shrink in order for maker making, but

Ever change pattern in dgs(grading or curve shape or internal line) and save file,

Select use shrink of GMS.

#### Note:

1. Pattern name should not same in dgs.
2. When make marker, Shrink can not change freely, Please understand the meaning clearly, Please do not change shrink freely.

## ● Plot Preview

---

### Function

You can plot files by select the page.

### Operation:

1. Click **【File】 — 【Plot Preview】** .:
2. System will divide it to different page automatically, See following picture;



3. Click **【File】 -- 【Plot】 — 【Plot Selected Pages】** . You can select the page to plot.

- **Export Bitmap**

---

**Function:**

It is used to export the whole marker including some information as a .bmp format file. Person who do not have cad, also can check marker.

**Operation:**

1. Click **【File】** — **【Export Bitmap】** .
2. Edit the length and height of the bitmap and then click **【OK】** .

**Note :**

The width of the bitmap is the length of the marker.

- **Printer Setup**

---

**Function :**

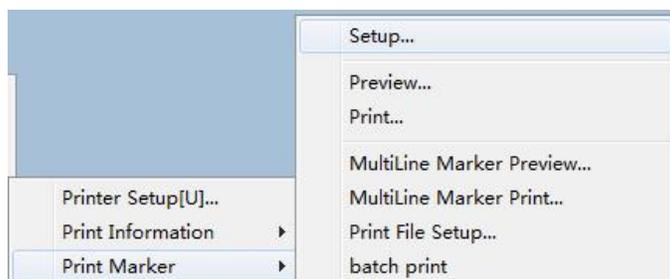
It used for setting printer type, Paper size and print direction etc

**Operation :**

1. Click **【File】** - **【Export】** - **【Printer】** -- **【Printer Setup】** .
2. Set the parameters according to the dialogue box.

Note: Just set once.

- **Print Marker**



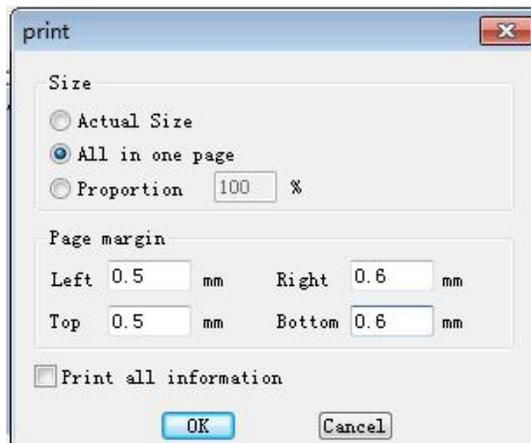
### 【Print Marker】Parameter instruction

#### Function :

It is used for setting marker size and page border.

#### Operation

1. Click **【File】 - 【Export】 - 【Printer】 -- 【Print Marker】 -- 【Setup】** .
2. Come out a dialog box of **【Print】**;
3. Select the proportion for the marker after outputting in **【Size】** and input the **【Pager Margin】** in the blank of Left, Right, Top and Bottom if needed.



### Preview:

It is used to check the printing result of marker.

### Option:

1. Click icon print preview  on file toolbar or Click **【File】 - 【Export】 - 【Printer】 -- 【Print Marker】 -- 【Preview】**

2. It will come out the interface of print preview, if you are satisfied with the interface, you can click **【OK】** .

### Print

#### Function:

Output marker to printer in small proportion.

#### Operation:

1. Click plot icon  on file toolbar Or Click **【File】 - 【Export】 - 【Printer】 -- 【Plot】** ;
2. You can see **【Print】** dialogue table,Click **【OK】** then plot.

#### Note:

Click **【Property】** ,Click paper,Select direction of paper

### Multi-Line Marker Preview

#### Function:

It is used to review the printed effect for **Multi-Line Marker**.

#### Operation:

1. Click **【File】 - 【Export】 - 【Printer】 -- 【Print Marker】 — 【Multi Line Marker Preview】 .**
2. Come out the interface, if you are satisfactory with the effect, you can click **【OK】**

Note: Line change place operation Click <b>【Marker】 — 【Define enter line 】</b>
--

### Multi-Line Marker Print

#### Function:

It is used to print the **Muti Line Marker**

#### Operation:

1. Click **【File】 - 【Export】 - 【Printer】 -- 【Print Marker】 — 【Multi-Line Marker Print】 .:**
2. Set parameter in dialogue table,Then click **【OK】**

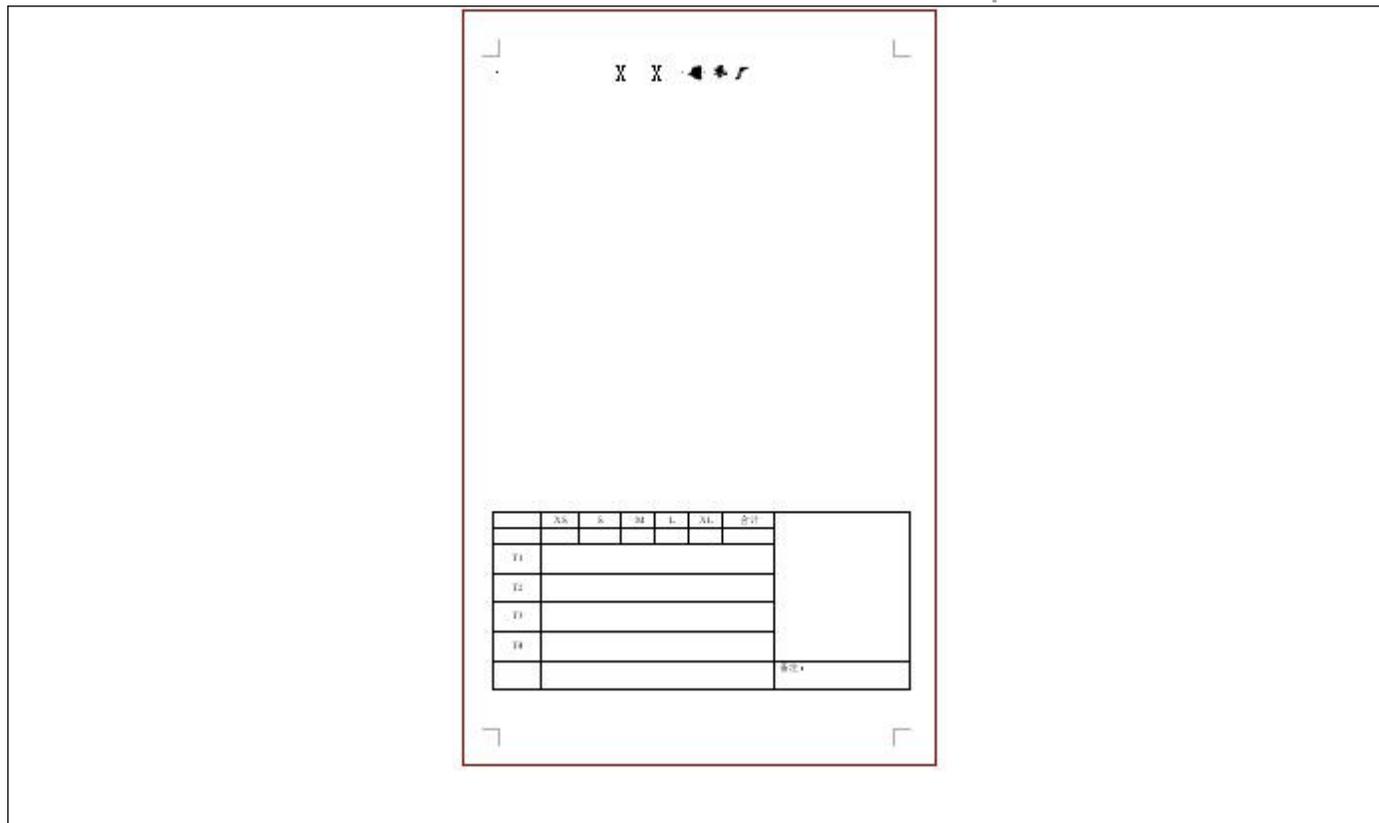
### Print File Setup

#### Function:

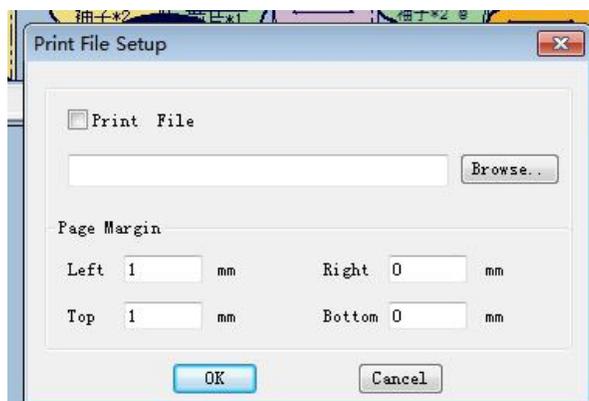
It is used to define a file with work or Excel format under the printed marker. Normally it is applicable to **Multi-Line Marker Print**.

#### Operation:

- 1.Click **【File】 - 【Export】 - 【Printer】 -- 【Print Marker】 — 【Print File Setup】**
2. come out the dialog box of **【Print File Setup】** , and click **【Browse】** to open a file, then click **【Open】** to return to the previous dialog box.;



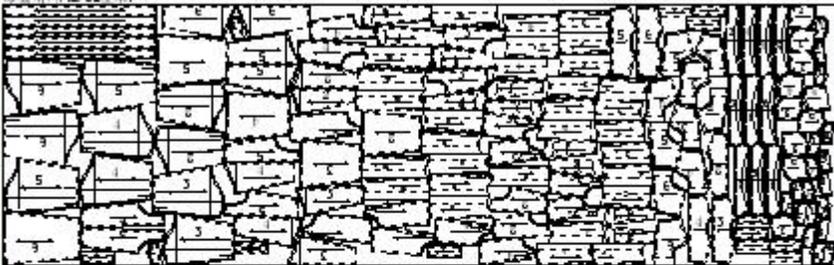
1. Select **【Print File】** Set **【page margin】** , Click **【OK】** ;



2. Click **【File】 - 【Export】 - 【Printer】 -- 【Print Marker】 -- 【Multiple marker print】**

X X 制衣厂

订单号: 20082001-0721:  
 客户名: CIBIT:  
 颜色: 32.69英寸:  
 腰围: 57.0英寸:  
 袖长: 92.81厘米:



	XS	S	M	L	XL	合计	
T1							
T2							
T3							
T4							
							备注:

Batch printing

**Function :**

Print more than one marker at the same time.



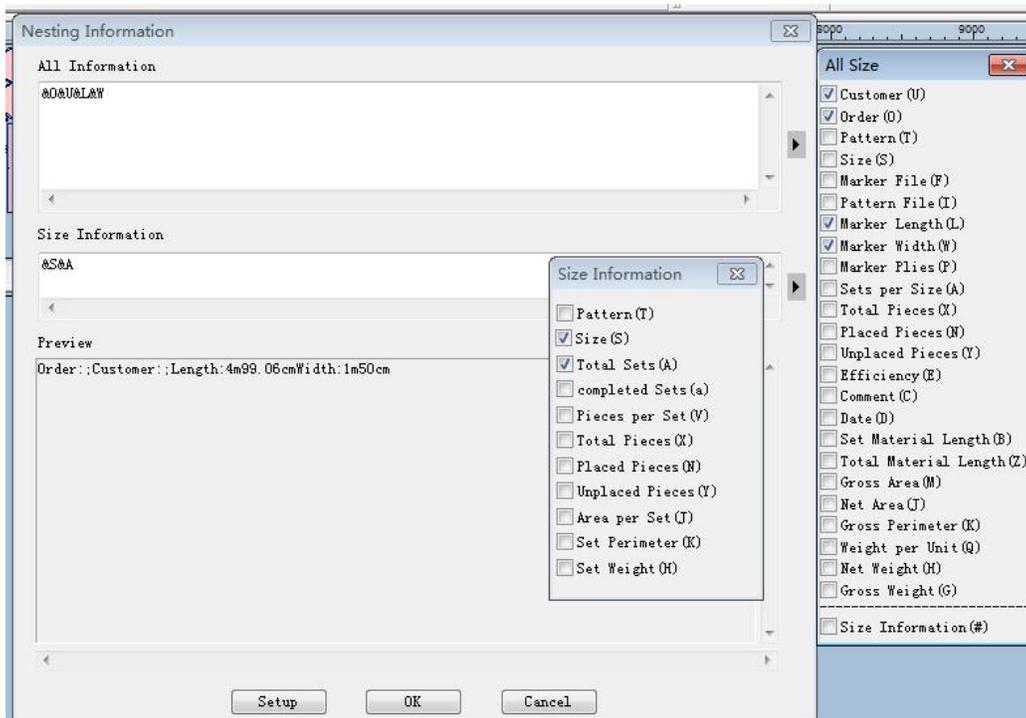
you need.(In this dialogue table, You can change line, insert or delete)

4. ou can also check and edit again all contents in the text box **【All Info】** and **【Size Info】** . And these contents can be shown in the **【Preview】** ;

5. Finally click **【OK】** .

### Note:

If you want to display the contents selected in **【Size Info】** , you must tick the **【Size Info】** in the last option **【All Size】** .



## Plot Preview

### Function

You can plot files by select the page.

### Operation:

1. Click **【File】** menu— **【Plot】** - **【Plot Preview】** .
2. Pop up the print preview interface, and click **【Print】** when satisfied.

### The last five files used before

#### Function:

It is used to open the last five file used before.

#### Operation:

Click **【File】** to select a file on the list, then you can open this file.

### Exit Alt+F4

#### Function:

It is used to end the operation of this system.

#### Operation:

Click this command to exit the system.

#### Note:

Click on the top right of the system interface, you can also exit this system

### Piece menu (P)

Information[I]...	I
Flip piece[F]...	Shift+F
Rotate[R]...	Shift+R
Cut[U]	Shift+U
Delete[D]	Shift+D
Rotate Piece on Marker[O]	
Internals[N]...	
Global Internals[T]...	
Edit Weave Line[W]...	
Edit Weave Line of All Pieces[A]	
Set all pieces's count to 1	

**Function:**

It contains some commands directly relate to the operation and attributes of pieces, such as

【Pieces info】 , 【Rotate pieces】 , and 【Internals】 parameter etc. (see fig. as above)  
【Information】 , 【Flip piece】 , 【Rotate】 , 【Cut】 and 【Delete】 , all these commands have the shortcut icons in pieces toolbar and the operation please refer to the instructions.

**● Internals**

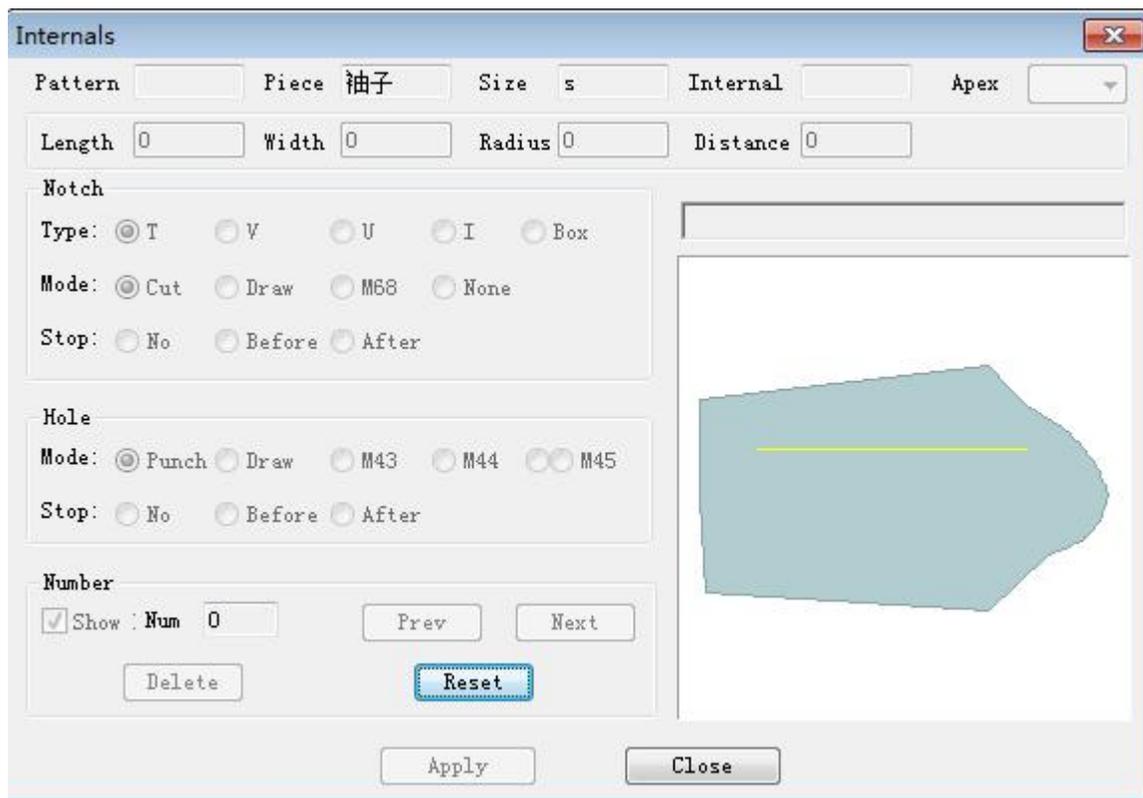
---

**Function:**

This command is used to revise the attributes of all internals such as notches, holes and buttons. Users can check and revise their size, type, etc.

**Operation:**

1. Click the piece on marker that you want to revise some attributes of its internals.
2. Click 【Piece】 -- 【Internals】 , to get the dialog box 【Internals】 ;
3. Select the internals and revise the attributes of it in the dialog box;
4. Click 【Close】 after you complete the revision.



**【Internals】** parameters instruction:

**【Previous】** , **【Next】** :

Click **【Previous】** or **【Next】** to select the previous or next internal to be edited in the right preview window.

**【Internals type】** :

The types of internals such as notches and buttons will be shown in this dialog box. Internals type contains three forms: notch, button hole and apex.

**【Notch】** :

After you select a notch from the selected piece, the contents of **【notch】** in the dialog box of

**【Internals】** will light and you can alter its type like T, U, and Box etc. Input new values in the Text box following **【Length】** and **【Width】** .

**【Hole】** :

While you select a button from the selected piece, only one text box **【Length】** is light. Input a

new value in this text box then press **【Apply】** to alter the length for button hole.

**【Apex】 :**

Select a Dart from the selected piece. If there are notches and holes at the dart apex and dart waist, all these contents of **【notch】** and **【Hole】** in the dialog box of **【internals】** will be light. The following setup about notch and hole please refer to the instruction of Drill in DGS manual and Notch previous mentioned.

Note:

Two options **【Radius】** and **【Distance】** are listed in **【Hole】** . It shows the radius of the drilled hole and distance between this hole and the apex of the dart. Input the value, and click.

**【Apply】**

Tick this option, the series codes of various internals will be shown in the right preview window.

**【Number】 :**

This option is used to alter the arranging order of the selected internals by inputting a new number.

**【Delete】 :**

**It is used to delete the selected internals.**

**【Apply】 :**

You must click this option after you edit internals of one piece; it can't take the editing result effect immediately.

- **Global Internals 【T】**

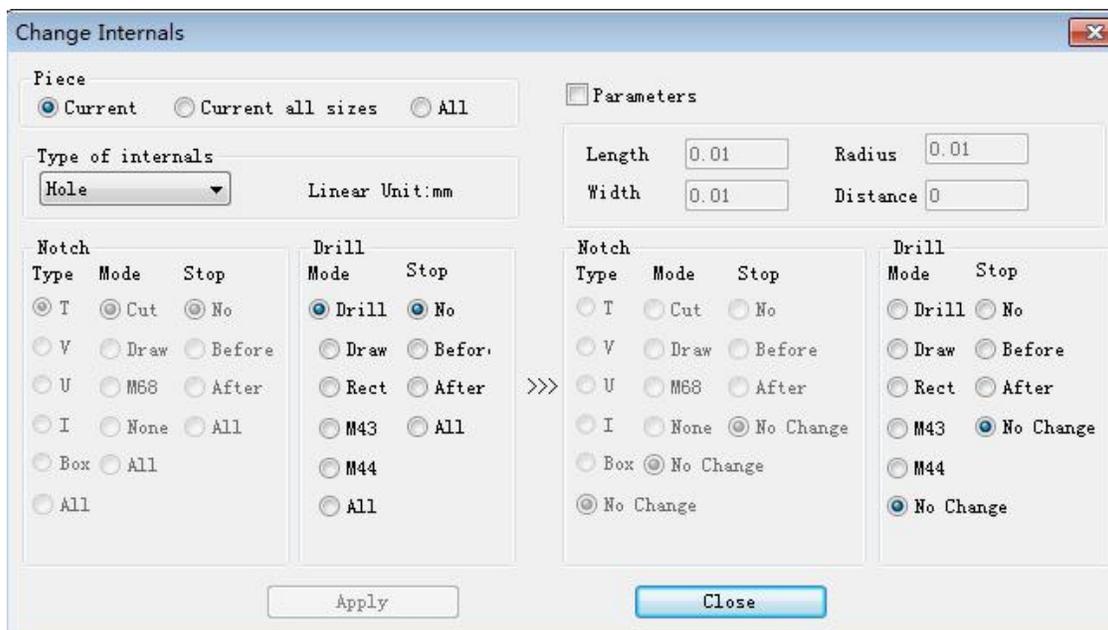
---

**Function:**

This command can be used to alter internal attributes of the pieces. It is often used to simultaneously alter one internal attribute for all pieces on marker, and the above command

**【Internals】** just can alter the attribute of one internal in one Piece.

**【Global internals】** Parameters Instruction:


**【Piece】**

Current While you tick this option, it only aims at one current size of the current selected piece.

The attribute of selected internals for the current selected size will be altered;

Current all sizes. While you tick this option, it aims at all sizes of the current selected piece.

The attribute of selected internals for all size will be altered.

All. While you tick this option, it aims at all pieces of all sizes. The attribute of selected internals for all pieces will be edited.

**【Type of internals】**

There are several kinds of internals in this item like **【Drill】**, **【Notch】** and **【Dart】** etc. When you select one internal, the system will show you the current state of it in this dialog box and you can edit it in the right area.

**【Original notch area】** and **【Original drill area】**

This area is used to select the type of the current **【Notches】** or **【Drills】**. For example, there are three types of notches in a piece: T, V and U. If you want to change all type U into type T, and change all type V into type BOX, firstly you need select type U from **【Original notch area】** in the left, then select type T from **【Alter notch area】**, then click **【Apply】** to change type V into type BOX in the same way.

#### **【Parameters】**

1. You can tick the box to alter attributes of the selected internals such as notch, button and drill etc.
2. Length and width. You can edit the length and width of notches and buttons here.
3. Radius. It is used to control the radius of the drills and buttons.
4. Distance. While you edit the dart, you can control the distance between drill point and the dart apex or dart waist.

#### **【Alter notch area】** and **【Alter drill area】**

It is used to alter and edit the attributes of notches and drills. Please refer to the detailed instruction in above example **【Original notch area】** and **【Original drill area】**.

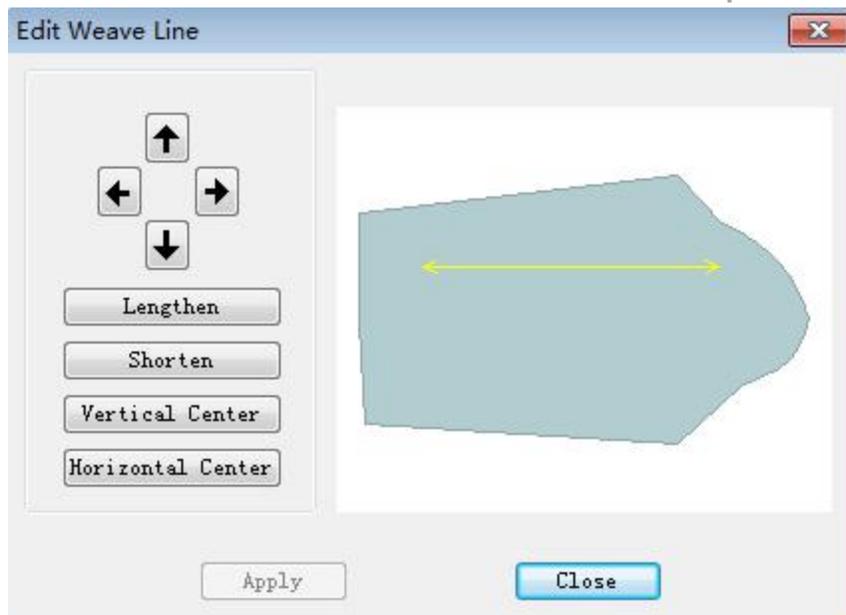
### ● **Edit Weave Line**

---

#### **Function:**

It is used to adjust the weave line of selected piece.

1. Click **【Piece】** — **【Edit Weave Line】**.
2. Pop up a dialog box of **【Edit Weave Line】**. You can click the four arrows to adjust the position of weave line.
3. **【Lengthen】**, **【Shorten】**, it can lengthen and shorten the weave line.
4. **【Vertical Center】**, **【Horizontal Center】**, it can make the weave line center vertically and horizontally.
5. Click **【Apply】** to close the window if you finish the adjustment.



- **Edit Weave Line of All pieces**

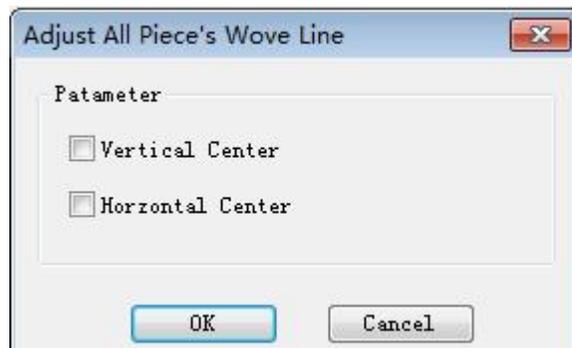
---

**Function:**

It is used to adjust the weave line for all pieces.

**Operation:**

Click **【Piece】—【Edit Weave Line of All Pieces】** to get the dialog box, click the **【Vertical Center】**, **【Horizontal Center】** to make the weave line center vertically and horizontally for all pieces.



- **Set All Piece's Count to1**

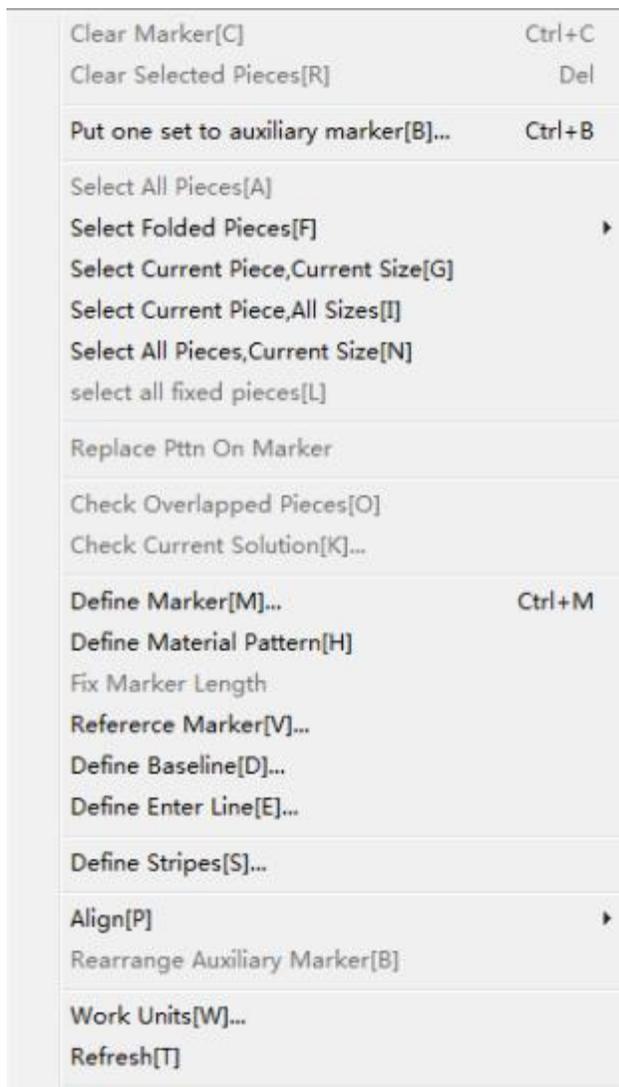
---

**Function:**

It is used to set the quantity of all pieces as 1.

**Operation:**

1. Click **【Piece】** — **【Set All Piece's Count 1】** .
2. The quantity of all pieces is displayed as 1 in Piece Window
3. If you need to turn back to the previous quantity, you can follow below instruction.
  - 1) Click  to open pattern file
  - 2) Pop up the dialog of **【Select Pattern Files】** , click file name and select **【View】** .
  - 3) Pop up the dialog of **【Order for Maker Making】** , click **【OK】** to return previous dialog box and click **【OK】**, the quantity in Piece Window is resumed

**Marker Menu (M)**

**Function:**

This menu contains some commands related to marker and marker making. Through these commands, you can specify the size of your marker, clear marker, put pieces on marker, move pieces out of marker and check the overlapped pieces etc.【Clear marker】, 【Clear selected pieces】, 【Define marker】, 【Reference Marker】 and 【Work units】, all these commands have the corresponding icons in Utility toolbar.

- **Select All Pieces**

---

**Function:**

Select all pattern in marker with this command.

**Operation:**

Click **【Marker】 — 【Select All Pieces】** , then all the pieces on the marker are selected

- **Select Folded Piece 【F】**

---

**【Piece on marker top】****Function:**

All the marker fold on the top.

**Operation:**

Click **【Marker】 Menu-- 【Select folded pieces】 -- 【Pieces on marker top】** ,All the pattern folded on the top of marker will be selected.

**【Piece on marker bottom】****Function:**

All the marker fold on the bottom.

**Operation**

Click**【Marker】Menu--【Select folded pieces】--【Pieces on marker bottom】**,All the pattern folded on the bottom of marker will be selected.

**【Piece on marker Left】****Function:**

All the marker fold on the left.

Operation:

Click **【Marker】** Menu-- **【Select folded pieces】** -- **【Pieces on marker left】** ,All the pattern folded on the left of marker will be selected.

All folded pieces:

Function

All the folded pattern is selected.

Operation:

Click **【Marker】** Menu-- **【Select folded pieces】** -- **【All folded pieces】** ,All the pattern folded on marker will be selected.

- **Select Current Piece, Current Size**

---

**Function:**

Selected pattern current size all pattern is selected.

**Operation:**

Click **【Marker】** menu— **【Select Current Piece, Current Size】** , then all patterns of the pattern corresponding to the size are selected.

- **Select Current Piece, All size**

---

**Function:**

Selected pattern All size all pattern is selected.

**Operation:**

Click **【Marker】** — **【Select Current Piece, All size】** , then all sizes of current piece are selected.

- **Select All Piece, Current Size**

---

**Function:**

Select all pattern of current selected pattern.

**Operation:**

Click **【Marker】 — 【Select All Piece, Current size】** , then all pieces with same size are selected.

- **Select all fixed pieces**

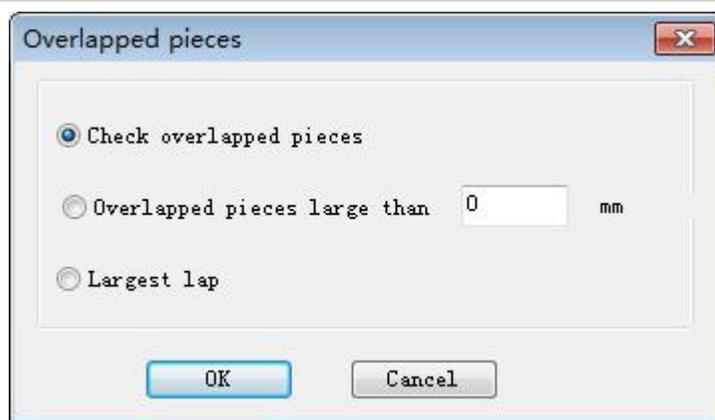
**Function:**

All the fixed pieces is selected.

**Operation:**

Click **【Marker】 Menu- 【Select all fixed pieces】** ,All the fixed pieces is selected.

- **Check Overlapped Pieces**

**Operation:**

1. Click **【Marker】 menu—【Check overlapped pieces】**, or press Alt+M+O, pop up a dialog box of **【Overlapped Pieces】** .

2. Tick **【Check overlapped Piece】** and click **【OK】** , then the all overlapped pieces on marker will be lighting. In addition, the overlapped pieces are non-filled and a Warn dialog box will be pop up automatically.

3. **【Overlapped pieces large than】** , and type the value in the blank, click **【OK】** to get a dialog box to inform you that how many pieces to satisfy the this condition.

4.The **【Largest lap】** , click **【OK】** to get the dialog box to inform you of the largest overlapped value.

- **Check Current Solution**

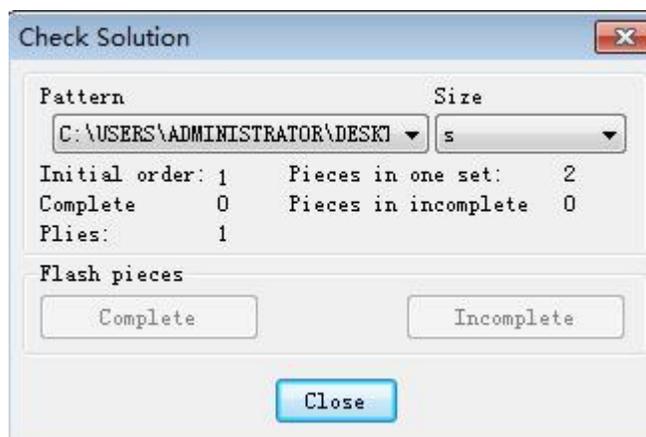
---

**Function:**

While pieces are placed on marker, you can check the current marker solution. You can check the completed sets, uncompleted sets and overlapped pieces through this command. In the meanwhile, you can also view the original sets, piece quantity for each set and incomplete piece etc.

**Operation:**

1. Click **【Marker】** — **【Check current solution】** , or press Alt+M+K to get the dialog box **【Check Solution】**.
2. Select the **【Pattern】** and **【Size】** by clicking the pull-down arrow to check the size for needed pattern.
3. Select **【Complete】** or **【Incomplete】** to check pieces.

**【Check solution】 parameters instruction:****【Pattern】**

It shows you the path and filename of the current piece. If you want to check another file,you can click the pull-down slider and select the required file in this list.

**【Size】**

It shows you the current size. You can select another size by clicking the pull-down slider on the right side of **【Size】** and check all info about each size.

**【Initial order】**

It can show pieces sets required to be completed in the marker.

**【Complete】**

It shows you the total quantity of sets completed on marker.

**【Plies】**

It shows you the plies of cloth on marker. You can alter it in **【Marker】** --- **【Define Marker】** .

**【Pieces in one set】**

It shows you the quantity of pieces in each set.

**【Pieces in incomplete】**

It shows you the quantity of the pieces for the specified size on marker after making marker.

**【Complete】**

Click this button then all pieces in complete sets will flash, finally all these complete pieces will be shown in selected state.

**【Incomplete】**

Click this button then all pieces in incomplete sets will flash, finally all these incomplete pieces will be shown in selected state.

- **Define Material Pattern**

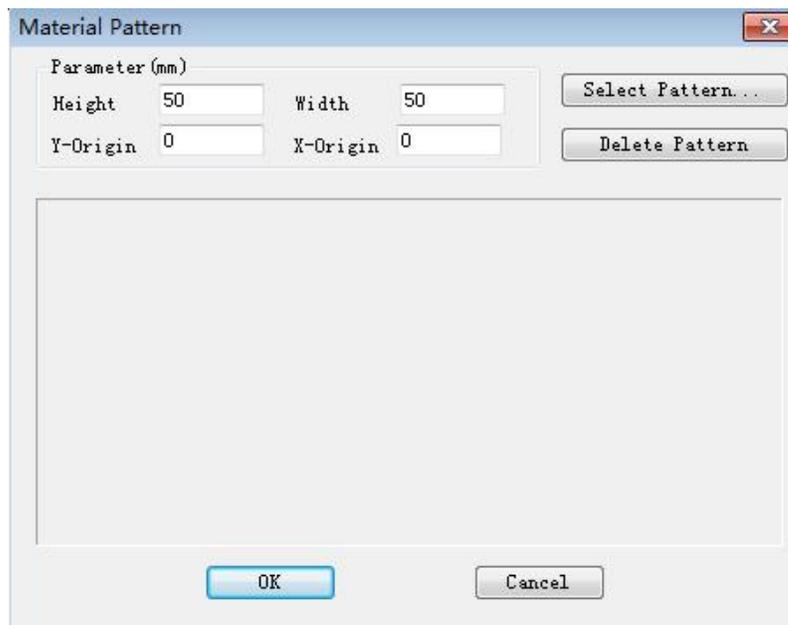
---

**Function:**

**It is used to show the material pattern on the marker.**

**Operation:**

1. Click **【Option】** — **【Show Piece's pattern】** .
2. Click **【Marker】** — **【Define Material Pattern】** to get a dialog box. Click **【Selected Pattern】** , **【Open】** dialog pop up again.



3.Pick out the required material pattern and click **【Open】**;

4.Then click **【OK】** , the pattern is shown on the marker.

5. If you want to alter or delete the material pattern, you can click **【Marker】 — 【Define Material Pattern】** to get a dialog box. Repeat step 2, then you can alter the pattern; if you click **【Delete Pattern】** , pattern on the marker can be removed.

- **Fix Marker Length**

---

Function:

It is used to fix the marker length.

Operation:

Click **【Marker】—【Fix Marker Length】** , marker length will be fixed as per the current length.You can alter the marker length in the **【Marker Definitions】** by clicking icon .

- **Define Baseline**

---

**Function:**

Make sign on marker, Can refer when making marker, Show align line, When move different Direction, Can make pattern align according to this line, Also can confirm pin situation On strip marker, Also can print bas line situation and distance on print(Usually used in pearl ,cap nesting, high or lower maker making)

Operation:

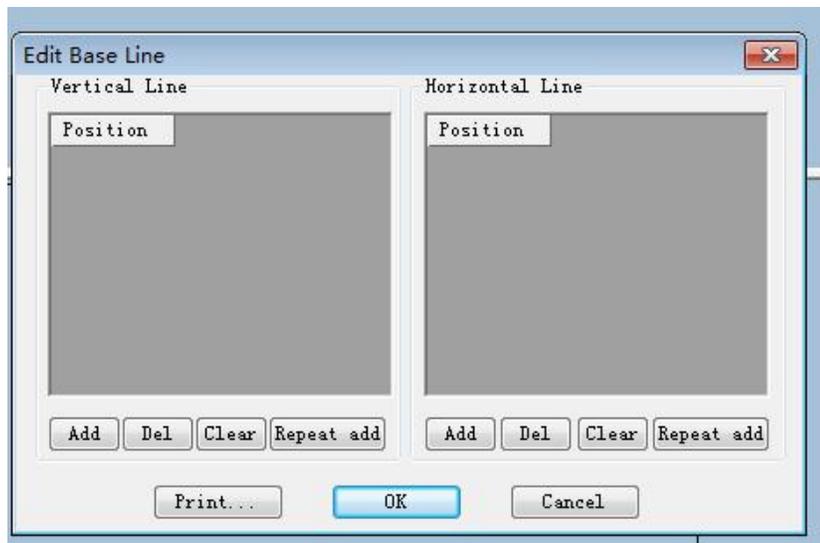
1. Click **【Marker】** — **【Define Base Line】**:

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300

2. It will get the dialog box **【Edit Base Line】** . Click **【Add】** under the column **【Vertical Line】** and **【Horizontal Line】** and input the value to define the position for one Vertical Line and horizontal base line. Defining all horizontal and vertical lines one by one in the same way.

Click **【ADD】** to create one baseline, Click **【Delete】** to cancel one.



3 . Finally click **【OK】**

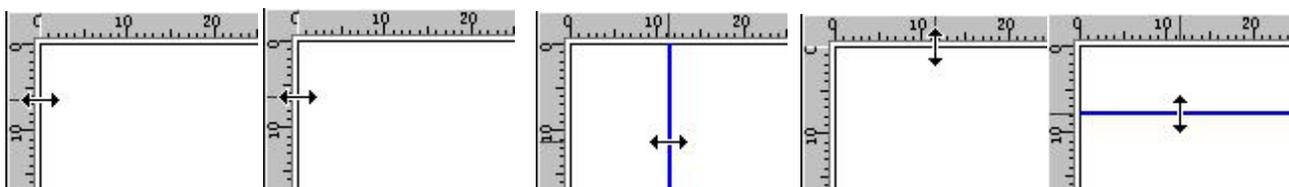
**Note:**

You must tick **【Show Base Line】** in the menu **【Options】** . Otherwise, it will not be shown.

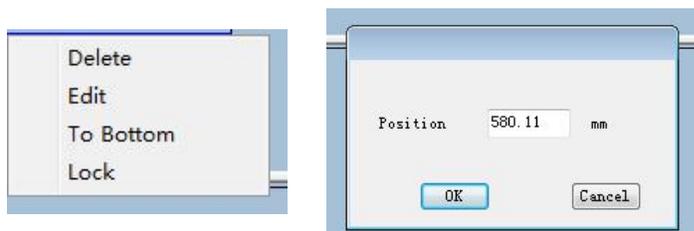
**Skill:**

You can drag base line from top and bottom.

1. Select “Move selected pieces” tool , Move mouse to marker left or top, When mouse turn to double direction arrow ,Move mouse can drag a vertical base line, Can drag more.



2. Mover cursor on baseline, When cursor turn to double arrow right click, Select delete will delete base line, Click Edit, Will appear dialogue table,Can modify base line.

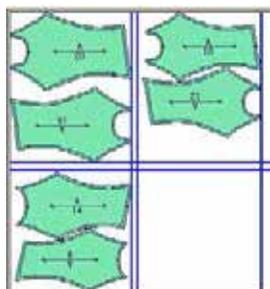


3. Click to right, Base line will near to marker length side



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- **Define Enter line**

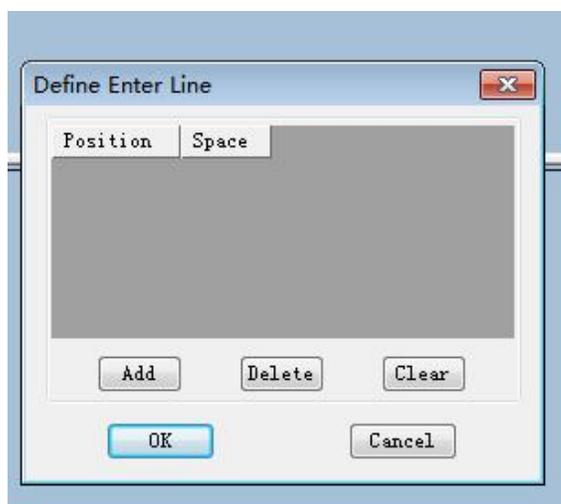
---

**Function:**

It is used to define the position where the page is separated when printing and plotting, or define the space between two markers.

**Operation:**

1. Click **【Marker】 — 【Define Enter line】** .
2. Come out the dialog of **【Define Enter line】** , click **【Add】** to input the value in the **【Position】** and **【Space】** . You can add, delete and clear the line by this way, then click **【OK】** .
3. The line is shown on the marker automatically. You can adjust the position by dragging the line with mouse.



4. Click **【Print Marker】 — 【Multi-Line Marker Preview】** .
5. You can view the printed effect with separated page.

- **Define Stripes**

---

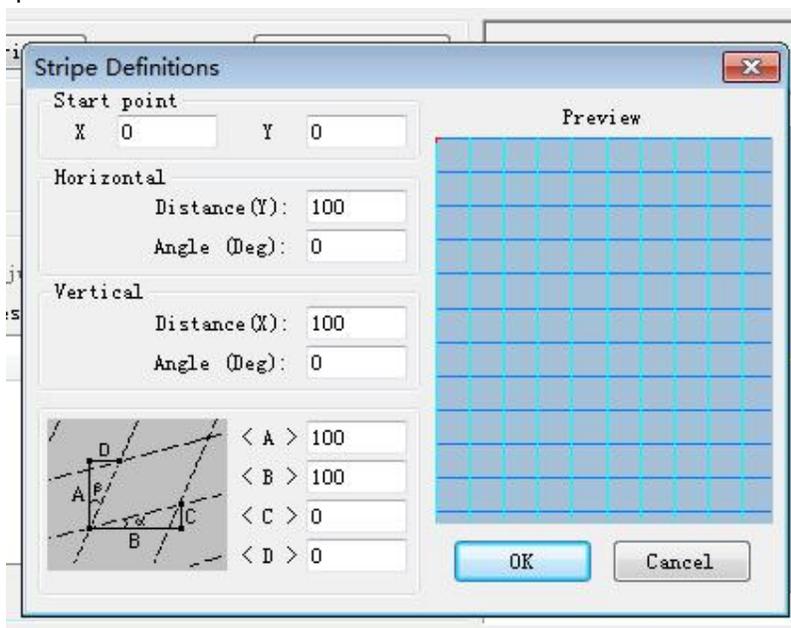
## Function

This command is used to define the stripes, grids, stamps or imitating design. When you want to place one piece in material with one specific design, and you also hope this specific design is in the specific position of the piece, you can use the command **【 Define Stripes 】**. This command can let the pieces be cut correctly to ensure the specific design is complete.

## Operation

Check quick accident.

**【Stripe Definitions】** parameter instruction:



### 【X】

This value is used to define the beginning of stripe (horizontal) in the X direction; it begins with the left side of marker.

### 【Y】

This value is used to define the beginning of stripe (vertical) in the Y direction; it begins with the topside of marker.

### 【Horizontal distance】

It can be used to input the distance between two horizontal stripes

### 【Vertical distance】

It can be used to input the distance between two vertical stripes.

### 【Horizontal angle】

It means the inclination between one stripe line and the horizontal line. We define the counter-clockwise direction as the positive direction.

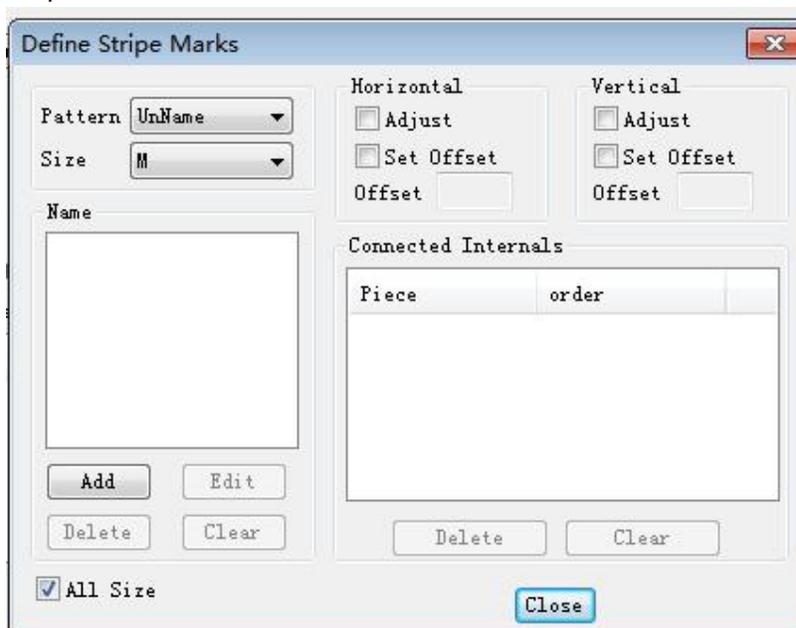
### 【Vertical angle】

It means the inclination between the other stripe line and the vertical line. We define the counter-clockwise direction as the positive direction.

### 【A, B, C, D】

It is another way to define the stripe.

**【Define Stripe Marks】** parameter instruction:



Connected Internals	
Piece	order

### 【Pattern】

It is used to show and select the style name for the loaded piece, this name has been input in

**【Piece Information】** of DGS.

### 【Size】

It is used to select the size with this defined stripe mark.

### 【Add】

It is used to add a new mark for stripe adjustment. Click it to pop up the dialog box **【Add mark】**, (refer to fig. as below), then input the mark name and tick **【horizontal】** --- **【adjust】** and **【vertical】** --- **【adjust】**, finally click **【Ok】**.

### 【Edit】

It is used to alter the stripe mark. Click it to pop up the dialog box **【Edit a mark】**, you can edit the selected mark again here.

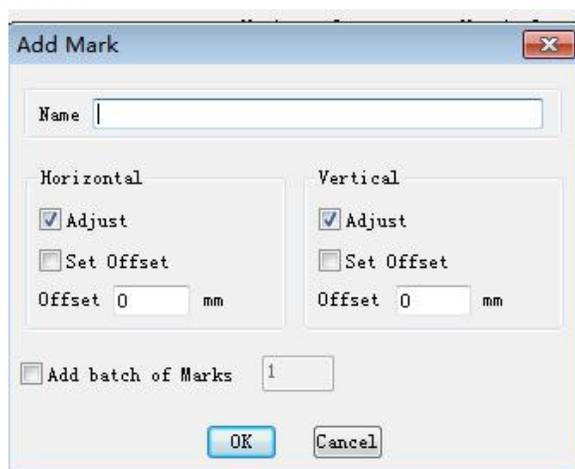
### 【Delete】

You can delete the current selected mark by selecting it then clicking this command.

### 【Clear】

You can click this button to delete all stripe marks.

### 【Add a mark】 parameter instruction



**【Name】** : You can input letters or numbers to name a mark.

**【Horizontal】** indicates the horizontal attributes of the mark, Select **【Set offset】**, Need to input distance with original point in **【offset】**

**Note:**

Select **【Set offset】** ,When strip, Sign must match set place, If do not select, **Pattern put to work area second time will strip basing on first pattern.**

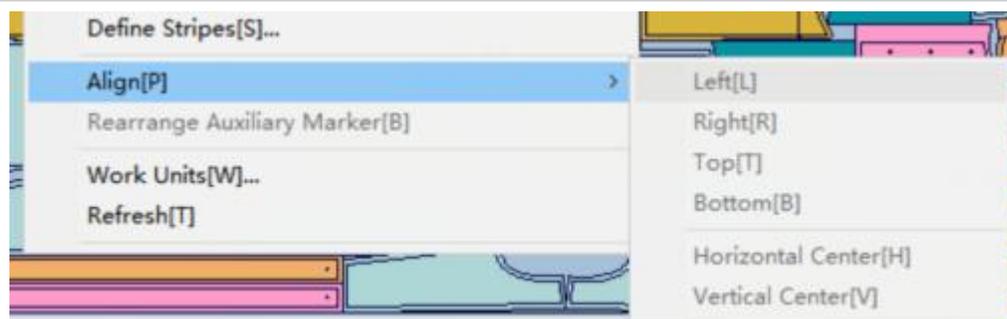
### 【Vertical】

Same as horizontal, Difference is vertical.

#### Note:

You must specify the same serial number (stripe mark), notch or button type for the matching points sewn together. For example, if the front piece and back piece need be sewn together, you must add the same notch and specify the same serial number for the matching position (such as the matching position both in front and back waist lines). If you want to sew a side pocket on the right of front piece, you must add one internal hole on both the front piece and side pocket respectively and specify the same serial number of the stripe mark. Then, while the first piece is placed on marker, the second piece will be decided its position to be placed according to the first one. Automatically all pieces with the same mark serial number will be placed in the right place on marker according to the first piece. Stripe adjustment doesn't work during automatic marking.

- **Align**



**Function:**

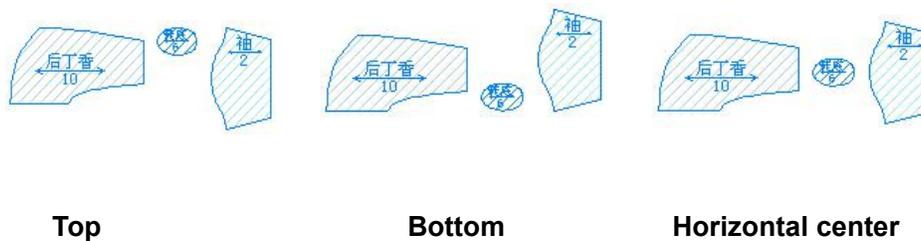
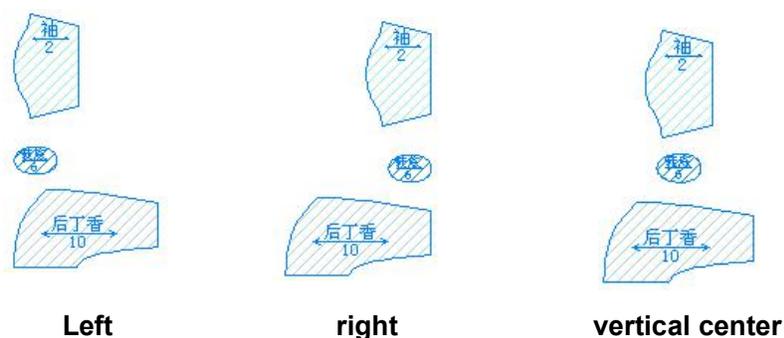
It is used to align the two selected pieces according to these commands.

**Operation:**

Click the blank on marker, and drag a rectangle marquee to select several pieces.

Click **【Marker】** — **【Align】**, select any of modes as required, such as **【Left】**, **【Right】**, **【Top】**, **【Bottom】**, **【Horizontal Center】**, **【Vertical Center】**.

Tick the required modes, the selected pieces will be aligned according to these modes.



- **Rearrange Auxiliary Marker** F3

**Function:**

Arrange Auxiliary pattern according to size

**Operation**

Click **【Maker】 — 【Rearrange Auxiliary Marker】** , pieces on the Auxiliary Marker will align automatically according to size.

**Note:**

Only used in Auxiliary marker

- **Refresh**            **F5**

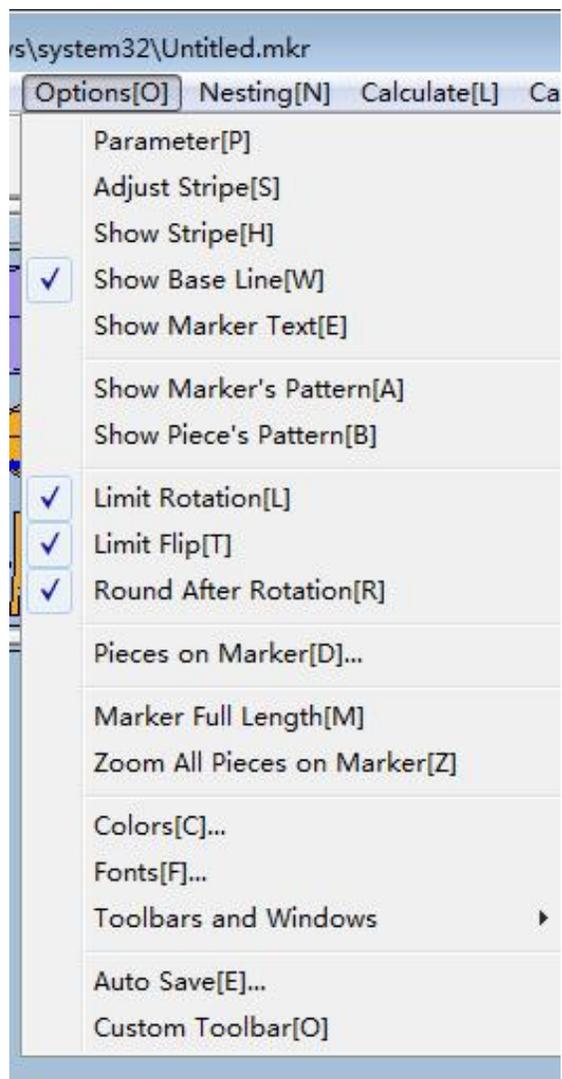
---

**Function**

It's used to clear the useless points created during running this program.

**Operation**

Click **【Marker】 — 【Refresh】** or click F5

**Options Menu (O)**

**Function:**

This menu contains some commonly used show/hide commands. (see fig. as above)

For the following items: **【Parameter】** , **【Limit rotation】** , **【Limit flip】** , **【Round after rotation】** , **【Colors】** and **【Fonts】** , you can find the corresponding shortcut icons in utility toolbar. Please refer to the detailed instruction introduced before.

- **Adjust Stripe**

---

**Function:**

This command is one show/hide command to be used for adjusting stripe position for the material with stripes and grids.

**Operation:**

Click **【Options】** — **【Adjust Stripe】** to tick for the adjustment of stripes and grids.

**Tip:**

The command **Stripe definition** in marker menu can be used to define the intervals between stripes or grids.

- **Show stripe**

---

**Operation:**

Click **【Options】** and tick **【Show stripe】** .

- **Show Base line**

---

**Function:**

It is used to show or hide the base line on marker.

**Operation:**

Click to tick **【Options】** — **【Show Base Line】** , and click again to cancel the tick

- **Show Marker Text**

---

**Function:**

It is used to show or hide the material pattern on marker.

**Option:**

Click the **【Options】** and tick **【Show Marker Text】** then you can show or edit marker text.

- **Show Marker's Pattern**

---

**Function:**

It is used to show or hide the material pattern on marker.

**Operation:**

Click the **【Options】** and tick **【Show Marker's Pattern】** , and click again to cancel the tick.

- **Show Piece's Pattern**

---

**Function:**

It is used to show or hide the material pattern on piece.

**Operation:**

Click the **【Options】** and tick **【Show Piece's Pattern】** , and click again to cancel the tick.

- **Piece on Marker**

---

**Function:**

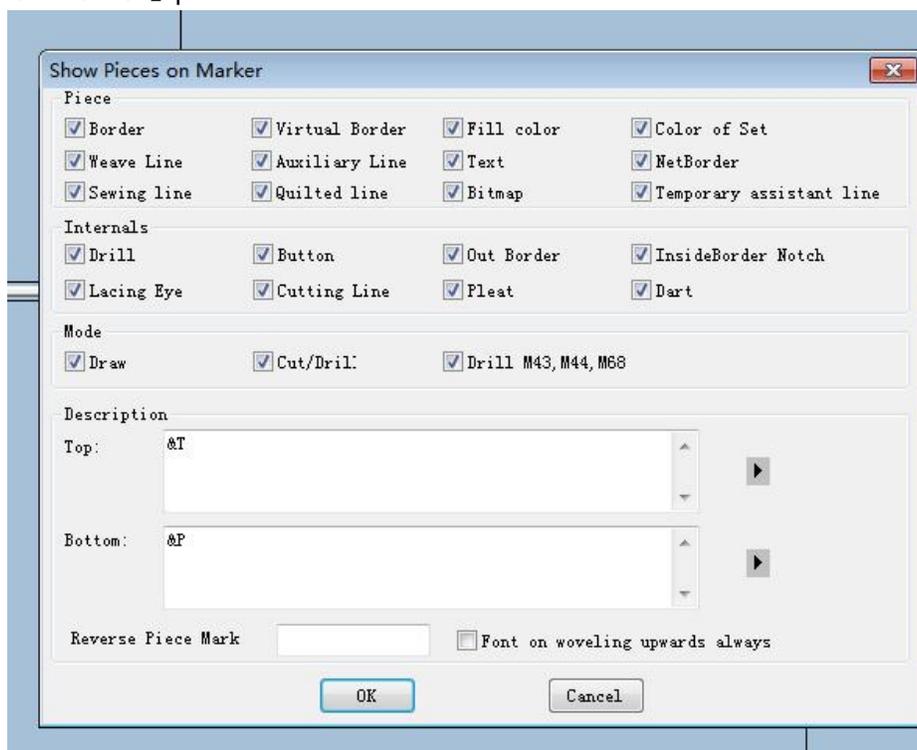
This command is used to show the specific information on pieces or export them together with files. All selected information you want to export will be shown in the screen.

**Operation:**

1. Click **【Options】** —— **【Pieces on marker】** , or press the shortcut key Alt+O+D to popup the dialog box **【Show pieces on marker】** .

2. Tick some options and click **OK** then some information related to the selected options will be shown in the screen and exported together with the files

**【Show pieces on marker】** parameter instruction:



**【Piece】 :**

**【Border】**

It is to output the marker by printer and plotter with border line. This option is suggested to tick.

**【Virtual Border】**

This option is used to control to show/off the buffer figure on the screen. You can export pieces with all attributes set here by a plotter. If you want to export the buffer figure through plotter, you should tick this option.

**【Fill color】**

It can be used to fill pieces. You can change the color through the command **【Color】** in

**【Option】** menu.

**【Color of set】**

Ticking this option then the system will show you the piece color according to set. On no ticking, it will show you the piece color according to size. You can alter the color of set and size through the command menu **【Color】** .

**【Weave line】**

It means to show the weave line by ticking this option, or hide it without ticking this option.

**【Auxiliary line】**

It means to show auxiliary line by ticking, or hide it without ticking this option.

**【Text】**

It means to show the texts on pieces that input through text tool in PDS or GGS by ticking, or hide them by no ticking.

**【Internals】****Drill, Button, Notch, Dart, Button Hole, Cutting line and Pleat:**

You can show and export the internals like drill, button, notch, dart, button hole, cutting line and pleat by ticking them or hide them without ticking.

**【Mode】** Option:

**【Draw】**

Select, Will show drill or notch mode etc in **【Internals】** draw Property.

Note: Internals show in which way, Can define in **【piece】** - **【Internals】**

**【Cut】 【Drill】 and 【Drill M43, M44, M68】 :**

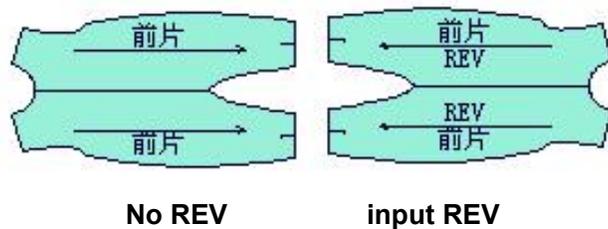
Select, Will show drill or notch mode etc in **【Internals】** draw property.

**【Description】**

You can click the arrow slider following the text box to get the pull-down list and tick the items you want to show above or under the weave line. You can also directly input text or the code of each command in text box. The texts or items you selected will be shown on pieces.

**【Reverse Piece Mark】**

Select, You can see reverse marker , Like REV, When nesting, You can see reverse pieces show reverse sign.

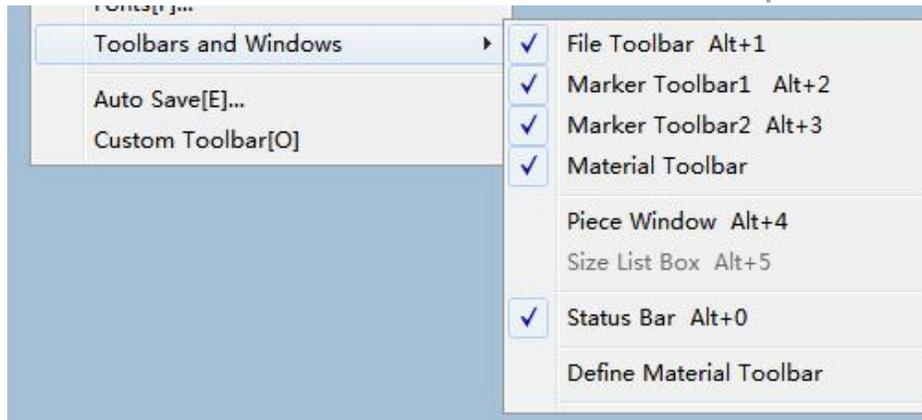


**【Font on Woveling Upwards always】**

Tick this option, the font on the weave line is shown always in upwards direction. Non tick, the font is shown in the opposite direction.



- **Toolbar and windows**



It is used for controlling toolbar show or not.

**Operation:**

Click **【option】** - **【Toolbar and windows】** -Select name of different toolbar,It will show, Otherwise will close,Default is select.

**Define material toolbar:**

It is used for define material toolbar size.

**Operation:**

Click **【Option】** Menu-- **【toolbar and windows】** -- **【Define material toolbar】**, Input a number  
In dialogue table, Click **【Ok】**

- **Auto save**

**Function:**

It is used for saving command.Different is that this command can set according to time,  
Save file according to original path and file automatically to avoid power off or other  
File lost.

**Operation:**

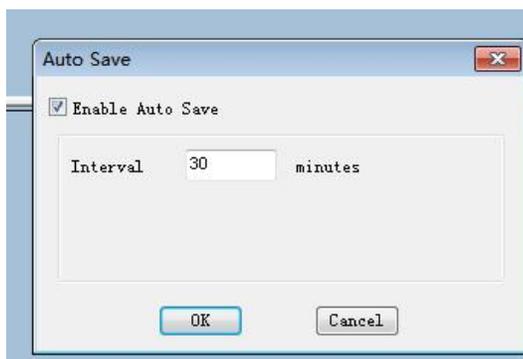
1. Click **【option】** -- **【Auto save】** , You can see **【Auto save】** dialogue table, Select **【Enable】**

auto save】;

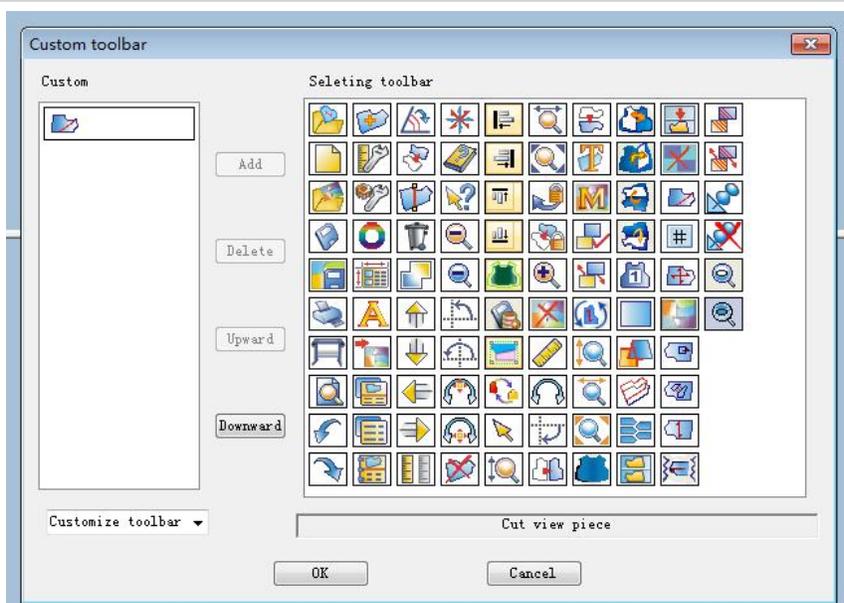
2. Input time in 【Interval】 , Click 【OK】 ;

3. If your marker already saved, Marker will save according to original path and file name when time get to,

4. If did not save before, Will appear save as dialogue table, Select path, Click save.



- Custom toolbar

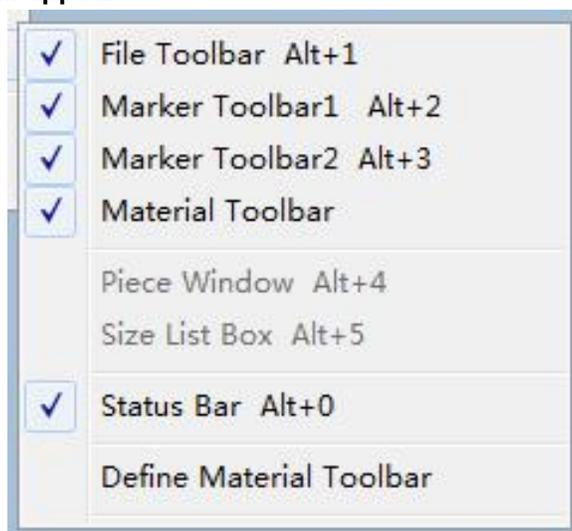


**Function:**

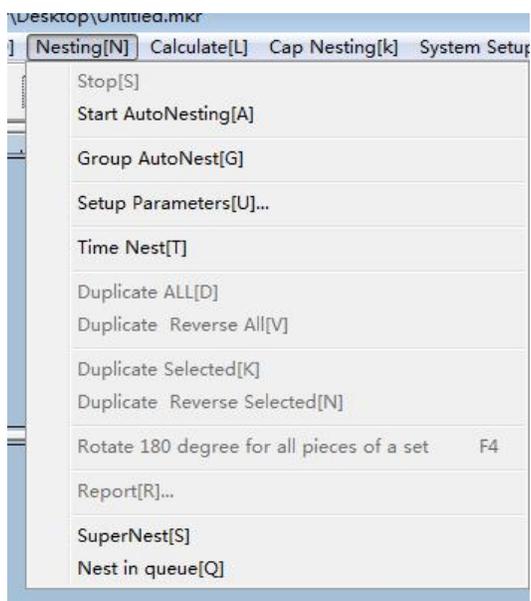
Add custom toolbar.

**Option:**

1. Click **【option】** - **【Custom toolbar】** ,You can see above dialogue table;
2. Select arrow on the left corner,Select Customize toolbar option your want to set;
3. Select icon on the right side which will add;
4. Click **【add】** ,Icon will appear on custom;
5. Click **【upward】**、**【Downward】**, Can move selected tool up or down;
6. Click **【ok】**;
7. After defining toolbar,Right click on any toolbar,You can see following picture;

**Select any custom toolbar will appear**

## Nesting menu (N)



It is including related nesting command.

- **Stop**

---

### Function:

It is used for stop auto nesting program.

### Operation:

1. Click **【Nesting】** — **【Start Auto Nesting】** .
2. If you want to stop the nesting process, you can press **【Nesting】** — **【Stop】** .
3. It will come out the dialog box **【Check solution】** .
4. If you want to continue the nesting, click **Nesting—Start Auto Nesting**.

- **Start Auto Nesting**

---

**Function:**

This command is used to start automatic marking.

**Operation:**

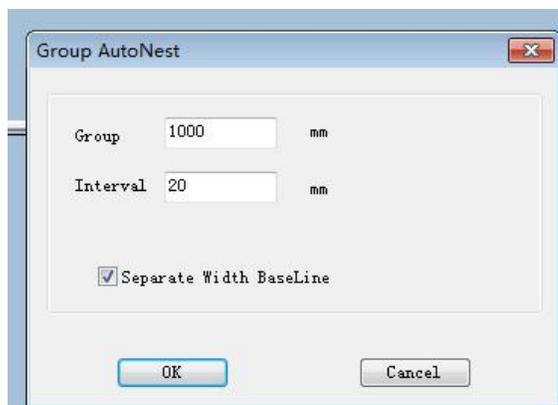
1. Click **【Nesting】** — **【Start Auto Nesting】** .
2. When completion, it will come out a dialog box of **【Check Solution】** .
3. If some pieces have already put on the marker, system continues to align the remained pieces and will finish nesting if you don't stop.

- **Group auto nesting**

---

**Operation:**

1. Click **【nesting】** -- **【Group auto nest】** ;
2. Input group and internal in dialogue table;



3. Click ok.

- **Setup Parameters**

---

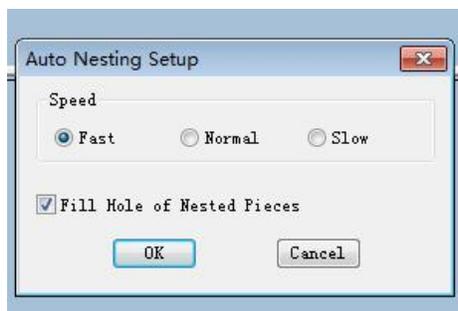
**Function:**

This command is used to set **Speed** for automatic marking. You can limit the whole automatic marking process according to the settings in this dialog box before starting your marking.

**Note**

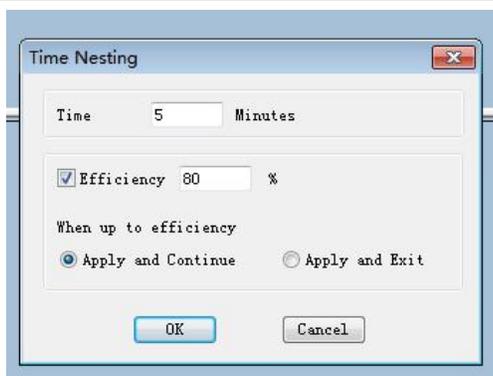
At normal or slow status, **Fill Hole of nested piece** effect.

**Auto Nesting Setup** parameters instruction:



**Fill Hole of Nested Pieces** : Tick this option, in the **Normal** and **Slow** speed; some little pieces are inserted intelligently in the hole between pieces for a nested marker.

- **Time nest**



**Function:**

It is used to set up the time and Efficiency when nesting.

**Operation:**

Click **【Nesting】** -- **【Time nest】**

**Instruction:**

Select **【Apply and Continue】** ,If get to set efficiency, System will nest continuously ,  
It will appear the highest efficiency marker,Select **【Apply and Exit】** ,If get to set efficiency,  
System do not make marker again.

- **Duplicate All**

---

**Function:**

While in manual marking, some pieces have been put on marker and you want to align remainder pieces refer to the completed parts. You can use this command to mirror and copy the position for each remainder piece.

**Operation:**

1. Select  , and then double click pieces in piece list box to place them on marker, move them to the right position.
2. Click **【Marker】** — **【Duplicate All】** , the remaining piece will be completed according to the previous pieces.
3. If there are incomplete sets, a dialog box will be popped out to query if you continue duplicating the remainder pieces. Clicking **【 Ok 】** to continue or click **【 No 】** to stop duplicating.
4. If you can not use this function to duplicate pieces, as to the following situation, you might notice it

A: Click **【Not duplication when insufficiency】** in **【Parameter】 — 【Parameter of Nesting】** , then the warning message of **【 Piece quantity is not enough 】** appear when you click

**【Duplication All】**. If you want to carry out this function successfully, you should add the pieces **【Quantity】** and **【Sets】** in **【Order and Marker Marking】** by clicking  then execute this command again.

B: Non tick **【Not duplication when insufficiency】** in **【Parameter】 — 【Parameter of Nesting】** , then the warning message of **【 Piece quantity is not enough 】** appear. Click **【Yes】** , then the pieces are duplicated, but the quantity in the **【Size List】** will represent minus count. If you want to calculate the material usage, it is better to add the quantity for the pieces, otherwise the calculation will be wrong.

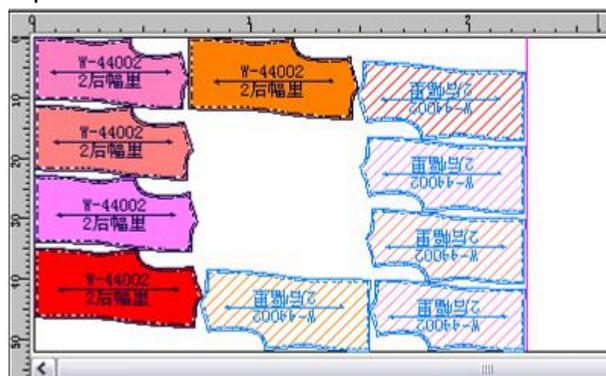
- **Duplicated Reverse All**

**Function:**

Select this option to make remained pieces aligned referring the completed parts and laid on the marker at 180 degree.

**Operation:**

After aligning some parts, click **【Nesting】 — 【Duplicated Reverse All】** , then duplicate the remainder pieces in the same nesting status and they are laid on the marker at 180 degree as well. Others, you can refer to Duplicate All



- **Duplicated Selected**

---

Function:

Select this command to make remainder pieces for selected pieces to align referring the completed pieces.

Operation:

After aligning some parts, click  or Ctrl +  to select the reference pieces, then pick out

**【Nesting】 — 【Duplicated Selected】** to duplicate the remainder pieces by the same nesting status and they lay on the marker flatly.

- **Duplicated Reverse Selected**

---

### Function

Select this command to make the remainder pieces for selected pieces aligned referring to the completed parts, and laid on the marker at 180 degree.

Operation:

After aligning come parted, click  or Ctrl +  to select the reference pieces. Then click

**【Nesting】 — 【Duplicated Reverse Selected】** to duplicate the remainder pieces by the same nesting status and lay on the marker at 180 degree

- **Rotate 180 Degree for All Piece of a Set**      **F4**

---

Function:

Select this command to rotate all pieces of a set for the selected pieces at 180 degree.

Operation:

1. Select on pattern on marker
2. Press F4 or click **【Nesting】 — 【Rotate 180 degree for all piece is a set】**

- **Report**

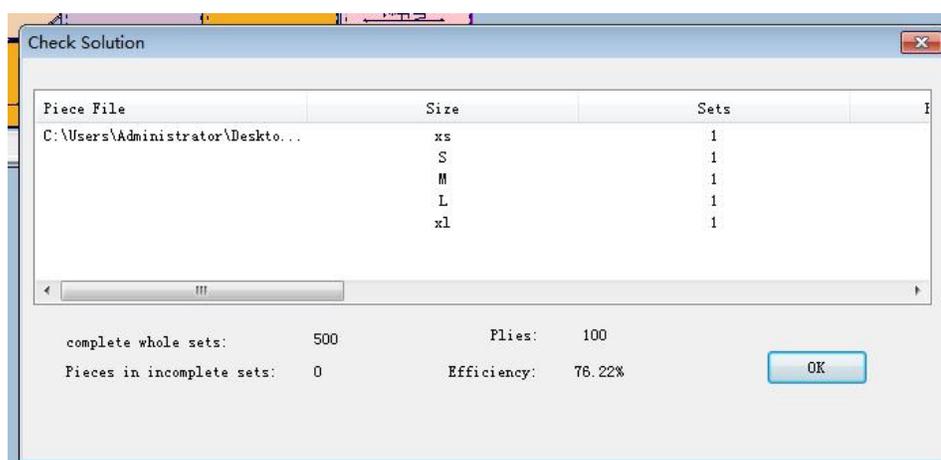
---

**Function:**

It shows that the current marking solution such as efficiency, complete sets, plies, size and quantity of one set, etc. (see Fig. as below)

**Operation:**

During or after marker making, click **【Nesting】** — **【Report】** to check the current marking solution. Click **【Ok】** after you view it.



- **Nest in queue**

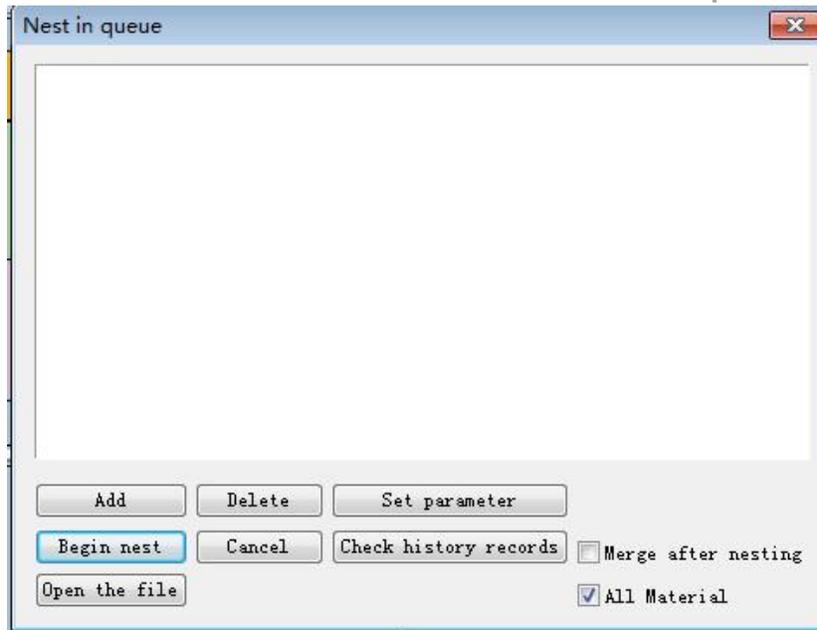
---

**Function:**

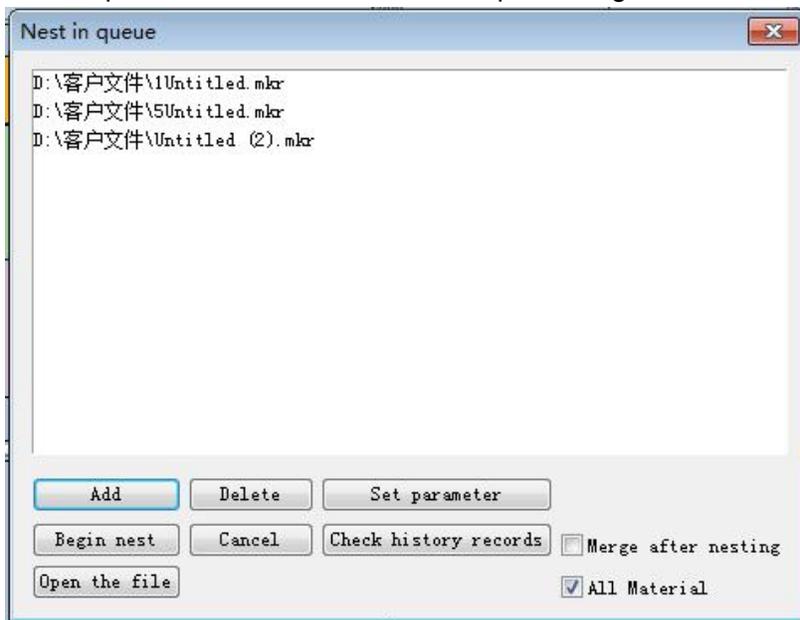
Queuing super-arranged in a nesting interface.

**Operation:**

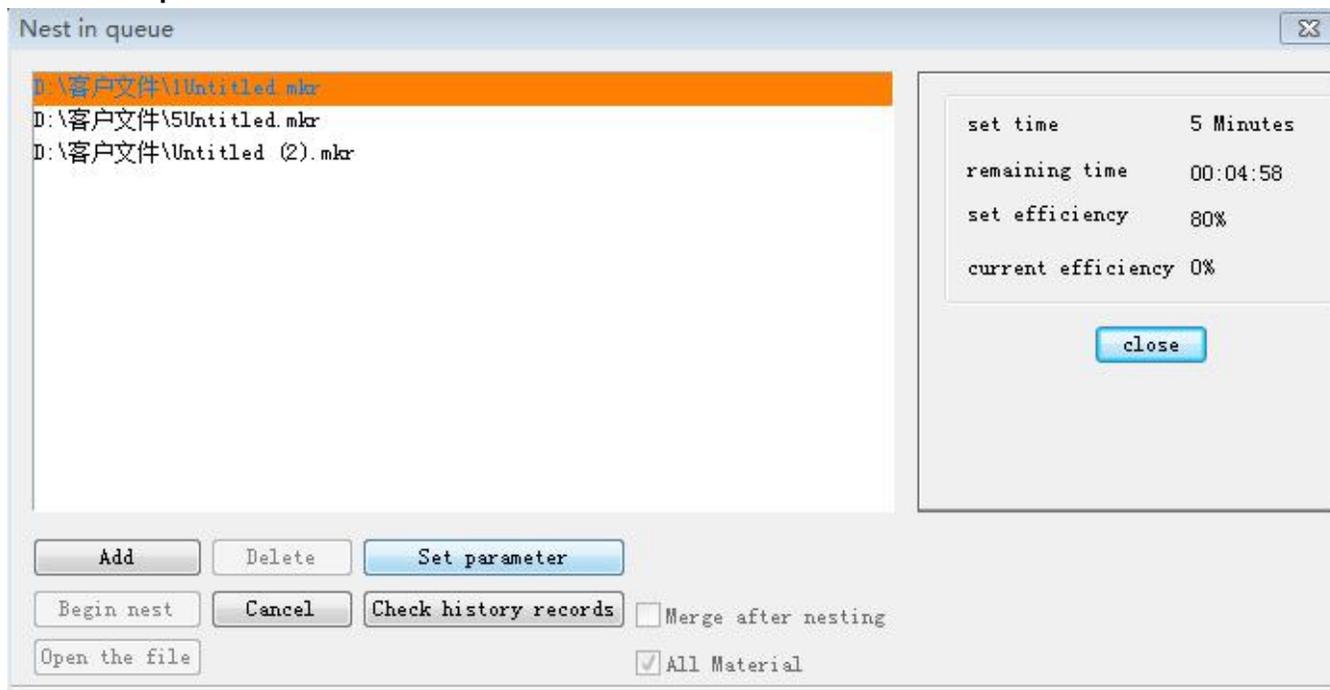
1. Click on the Marking menu - Queued Super Layout to bring up the queuing Super Array dialog box;



2. Click the "Add" button to open the truss that need to be super-arranged, as shown below;



3. Click the " " button to start the marker

**【 Nest in queue】 Parameter instruction:**


1. Add: Add truss files that need to be super- nest ; and the entire row displays the truss files added in with transparent text background; at the same time, the status bar information is "Waiting", utilization is "-" because it is unknown, and the file name column is displayed. The full path to the currently added truss file;
2. Delete: Delete marker files that do not need to be super- nest ;
3. Set the super nest parameter: After selecting a marker pattern in the list, you can set the super nest parameters of the marker pattern, and click the pop-up setting interface, which is the same as the pop-up interface that is clicked on the general "super- set " ;

**Set supernest** [X]

Time:  Minutes

Efficiency:  %

When up to efficiency:  Apply and Continue  Apply and Exit

Avoid color shade

Avoid horizontal color shade

Avoid vertical color shade

Avoid mixed color shade (Vertical sets:  sets)

Between pieces overlaped allowed  mm

According to set number

Arrange size per positive sequence

Arrange size per reverse sequence

Auto define size order

separate size per "-" sign

Only nesting main marker pattern

Clear aided marker all pattern

marker length no limited

Allowed slope

Arrange near left

sequence arrange based on size

Group AutoNest

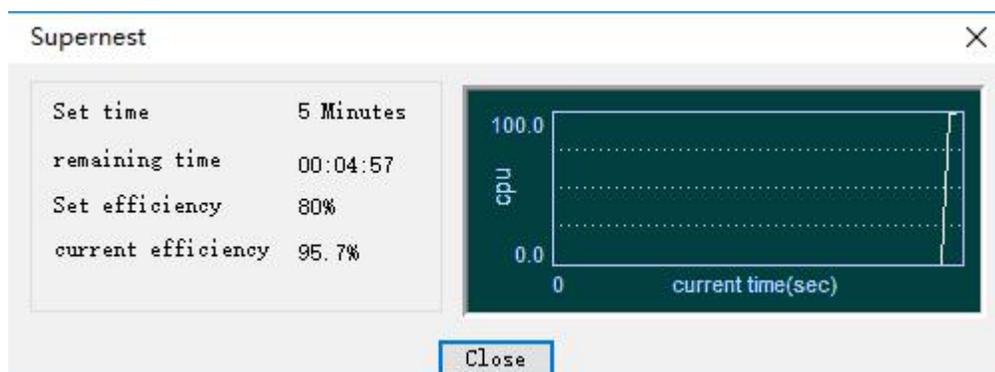
Horizontal seper

Vertical separat

Set distance of pattern

compact pattern  mm

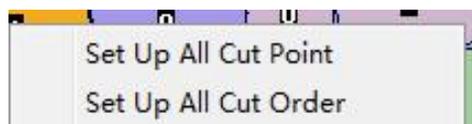
pattern space  mm



4. Open file: Open the selected truss file;
5. Display bar: Sets the display style of the list box, whether to display the grid line
6. After super nest : After checking, the marker lined up will automatically be merged into a marker frame, with the documents separated by a baseline;
7. Begin nest : Start ordering the files in the list box from top to bottom , super nest file , At the same time the window will expand, Display information currently being super nest.

8. If the super nest is successful, "OK" will be displayed in the status bar corresponding to the marker , and the entire line will be displayed in green.
9. If the super nest fails, an error message will be displayed in the status bar corresponding to the marker , and the entire row is displayed in red;
10. If you are super nesting, "Shower" will be displayed in the status bar corresponding to the marker and the entire line is displayed in yellow;
11. If you are waiting for a super nest marker, "Waiting" will be displayed in the status bar corresponding to the marker , and the entire line is displayed as the color of the list box.
12. It is also possible to manually end the super nest of the current marker file on the right side
13. When clicking on the column title bar of the list box, all the current items will be rearranged in reverse order. If the current marker super material has been completed, the next marker will be super-arranged, if the next one If the rack has been over-arranged, the file will not be super-arranged. Continue to search for the next file, and make the same judgment. If it has not been over-arranged, super nest it.
14. Cancellation: If you click Cancel, the list of currently added marker files will be cleared.
15. Check History records : check all your queued Super nest records;
16. Move up: Make the currently selected truss order up one position.
17. Move Down: Lowers the currently selected truss order by one position ;
18. Nest all fabrics: Check this item If there are multiple fabrics in the marker , then all the fabrics are in a row, otherwise only the fabrics displayed when the t marker are opened.

### **Cutter Menu (C)**



**【Edit cutting order】** already introduce in marker toolbar2

- **Auto Set cutting Order**

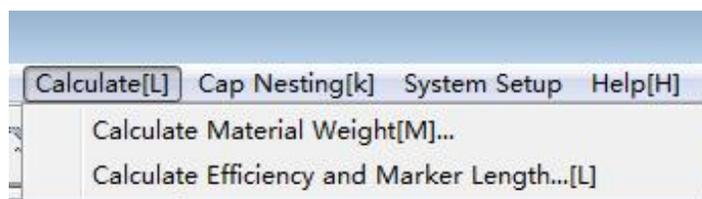
---

**Function:**

Manually edit the cropping order. Use this command to regenerate the cropping order.

**Operation:**

Click the [Cutting] menu - [Automatically generate cropping order] to regenerate the cropping order. Automatic cutting can be tailored in this order.

**Calculate Menu (L)**

- **Calculate material weight**

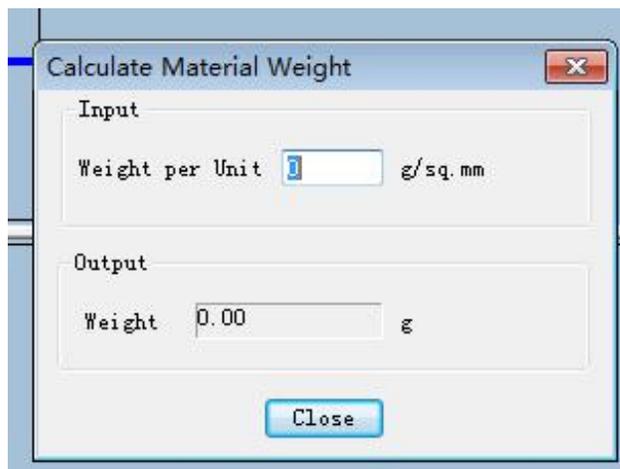
---

**Function:**

It is used to calculate the weight for used material.

**Operation:**

1. After pieces complete aligning, click **【Calculate Material Weight】** .
2. come out the dialog box to input the **【Weight per Unite】** . System will calculate the weight of material automatically (width\*length\*Plies\* weight per unite)



- **Calculate Efficiency and Marker Length**

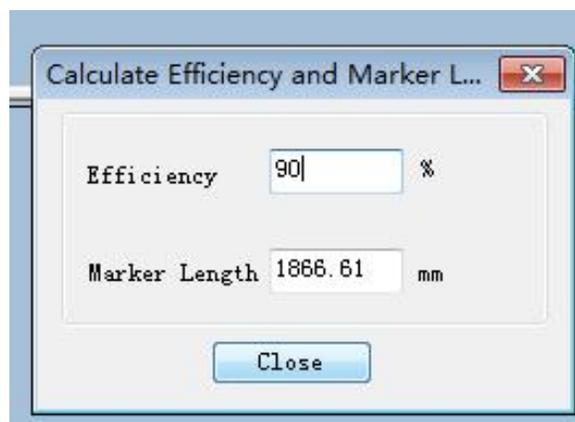
---

**Function:**

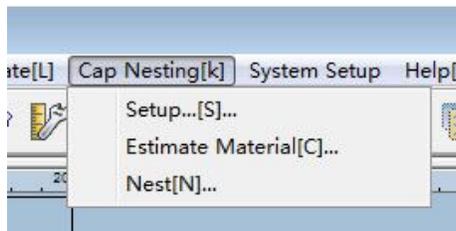
It used to calculate the marker length as per the efficiency.

**Operation:**

1. Click **【Calculate】** -- **【Calculate Efficiency and Marker Length】** .
2. Input the Efficiency. System will calculate the material length as per the efficiency.



## Cap Nesting Menu (K)



- **Setup**

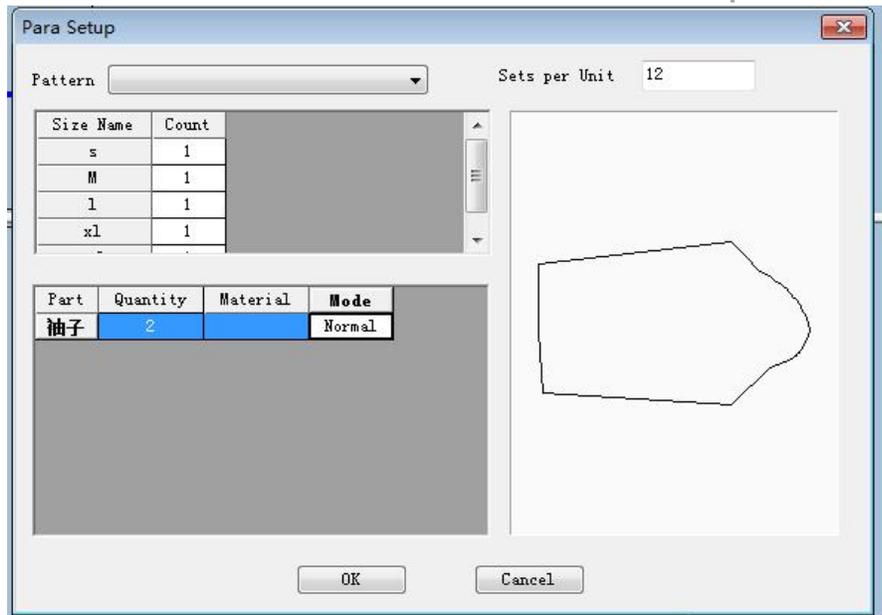
---

Function:

It is used to setup the parameters of the pieces of cap, here, most parameters are similar with the dialog of **【Order for Marker Making】**, including counts of each size, quantity of pieces, material and mode of nesting, you can define nesting mode for each mode.

**Operation:**

Click **【Cap Nesting】** — **【Setup】** to get the dialog box of **【Para Setup】**. You can input the **【Quantity】**, **【Sets per Unit】** in the dialog box and nesting mode under Mode in the right position, such as **Normal**, **Reverse**, and **Interleaving**



**Sets per unit:** Can set freely, How much set is one unit, 1、 6 or 12 ect;

**Count:** Sets in “order for marker making” Divide “sets per unit”, For example, Sets is 60 quantity, “sets per unit” is 5;

**Part:** It shows pattern name;

**Quantity:** How much pattern in one sets;

**Material:** Material type;

**Mode:** Select in Normal、 Reverse 、 interleaving、 @ Reverse、 @ Interleaving

- **Estimate Material**

---

**Operation:**

Click **【Nesting】 — 【Estimate material】** to pop up a dialog box, you can define the **【Unit】** and **【Wastage】** , when finish, click **【Calculate】** , then you can calculate the material usage for each size, then click **【OK】** .

Estimating Material

Case

Pattern	Count	Material	Width(mm)	Part	Quantity	Description	Mode	Count	Length(mm)	Width
s	0	棉	1000							
		棉		袖口	2		Normal			
#	0	棉	1000							
		棉		袖口	2		Normal			
1	0	棉	1000							
		棉		袖口	2		Normal			
sl	0	棉	1000							
		棉		袖口	2		Normal			
xl	0	棉	1000							
		棉		袖口	2		Normal			

Calculate average consumption Setup Print Setup Preview print Report File Report alt Close

**Pattern:** Show style name and size;

**Count:** Appear quantity in above“set”option;

**Width:** Material width;

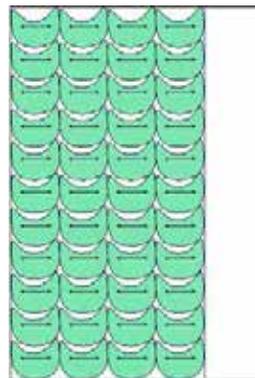
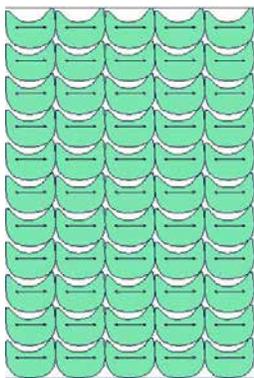
**Part:** Show pattern name;

**Mode:** Appear nesting mode in above “set”option

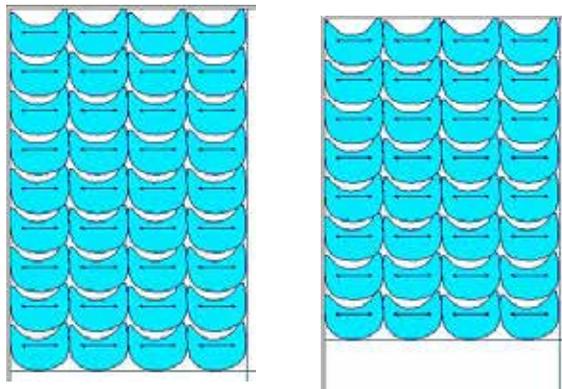
**When mode is normal:**

Count: Maximum pattern quantity in one line appointed width;

Length:Marker length minus less one line marker length;



Like above, Five line marker length is 98.9 cm, Four line marker length is 79.2cm, So Length is 19.7 (98.9cm-79.2cm) ,Width is maker width minus less on row marker width;

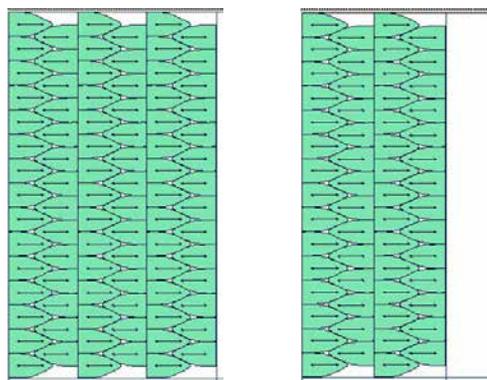


Like above picture, Nine row width is 121.45cm, Eight row width is 108.28cm, So width is13.17cm (121.45cm-108.28cm)

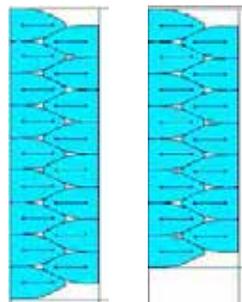
**When mode is reverse**

Count:Two line pattern quantity in appointed width;

Length:Marker length minus less two line marker length divide 2;



See above picture,Six line length is 86.23, Four line width is 57.49, So length is 14.37cm  $\left(\frac{86.23-57.49}{2}\right)$  Width is marker width minus less one repeat width;



See above picture, First marker width is 88.12cm, Second less one repeat is 78.33cm,  
So marker width is 9.79cm (88.12cm-78.33)

**When Mode is interleaving**

Count: One line pattern quantity in appointed width;

Length: One line marker length;

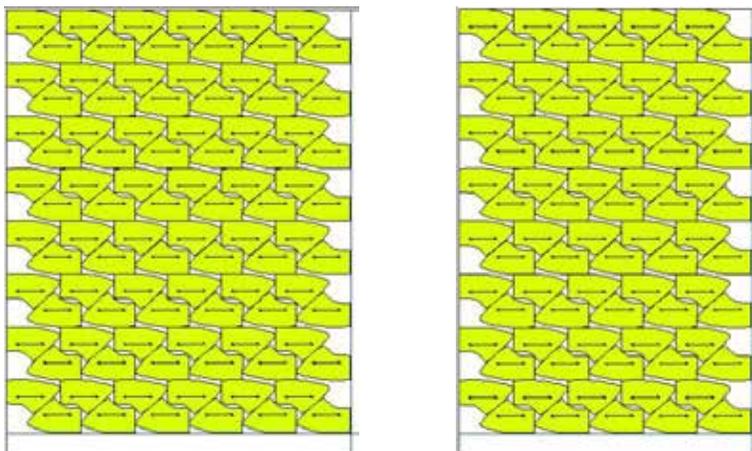
Width: Marker width divide maximum pattern quantity in one line;

**When mode is @ interleaving**

Count: Two lines pattern quantity in appointed marker width;



Length: Even line marker length minus less two line marker length



See above picture, First marker length 117.9, Second marker length is 99.45cm,

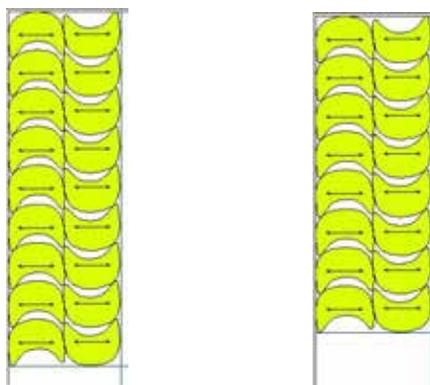
So marker length is 18.45cm, Width is marker width minus less one repeated marker width divide

## 2. When mode is @ interleaving

Count: One line pattern quantity in appointed marker width;

Length: Even line marker length divide line;

Width: Two line marker width minus less one line marker width;



See above, First marker width is 122.61 cm, Second marker width is 109.3cm, So marker

Width is 13.31cm (122.61cm-109.3cm)

**Consume:**

At length unit, Length divide count.

At area unit, Length divide count then multiply width;

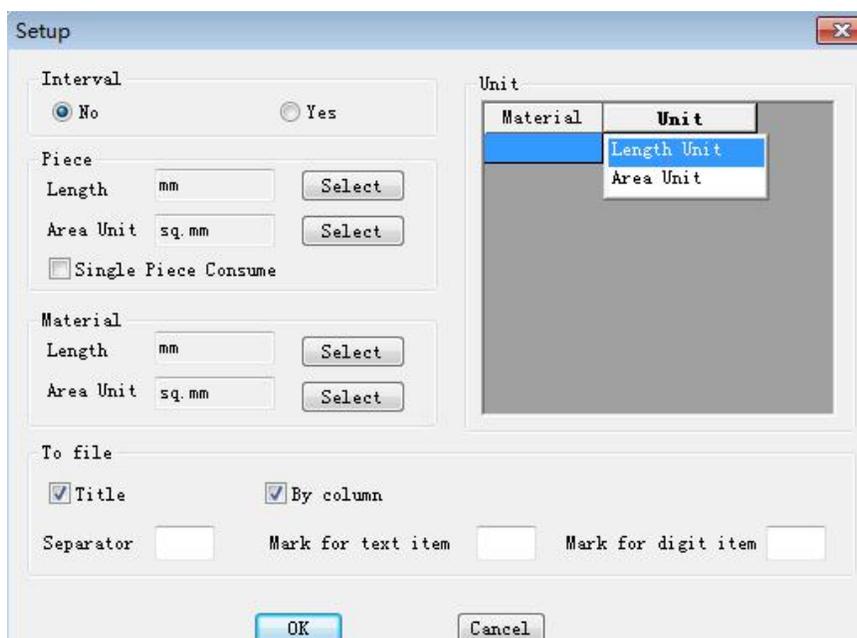
**Waste:** Can input material waste;

Material consume: One material consume in one size;

**Comment:** Can input special comment;

Calculate: This command is used for calculating material length;

**Setup:**



**Interval:** It is used for setting internal or no internal in width direction;

**Piece:** It is used for selecting available length or area unit;

**Single piece consume:** Select, It is one single pieces material consume, Do not select, It is one set pattern piece consume;

**Material:** You can select available length or area unit according to factory requirement;

**To file:** When export.txt file, Can select output Result;

**Unit:** It is used for selecting area unit or length unit in table;

**Print set:** It is used for setting page border、Printer type and print direction;

**Preview:** Preview before plotting

**Print:** It is used for plotting estimate material;

**Export file:** Can export \*.text file, Can check result at any computer;

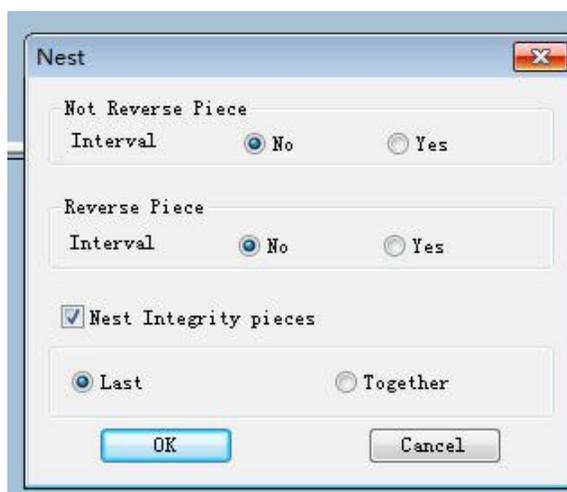
**Close:** Close estimate material window;

- **Nest**

---

**Function :**

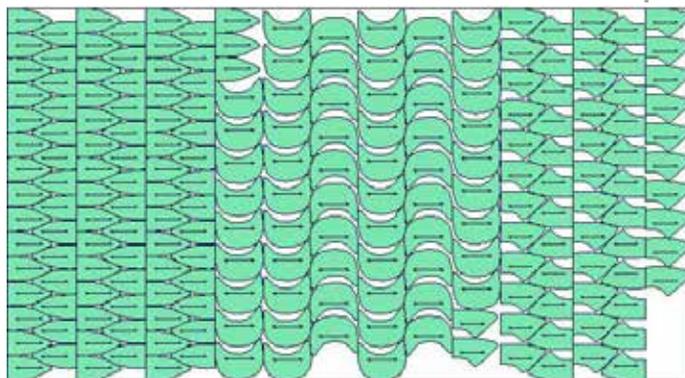
When use cap nesting, Nest all the pattern.



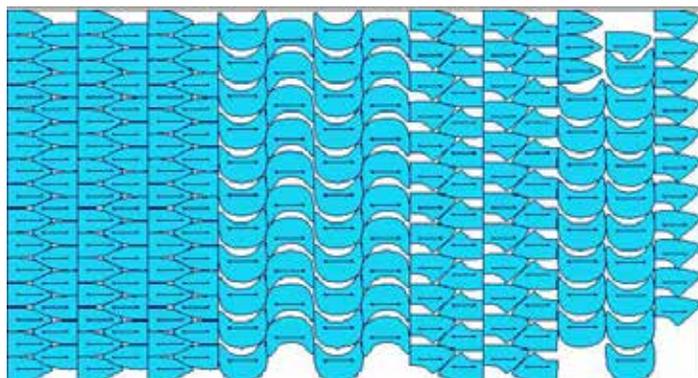
**Not Reverse piece:** No distance nest when Mode is set Normal, integrity, integrity, Also can select have distance;

**Reverse Piece:** It is refer to Mode is reverse, @reverse, Can select no distance nest;

**Nest integrity pieces:** The remain pieces did not form on line, Can select nest together or nest at last.



**Not one line nest**



**Not one line at last**

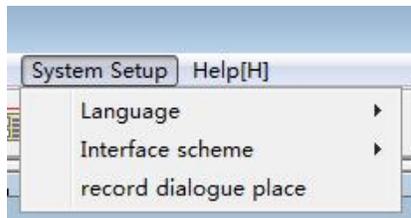
**Operation:**

Click **【Cap nest】** -- **【Nest】** , You can define the **【Not Reverse Piece】** or **【Reverse Piece】** .

Then click OK, system can do the nesting automatically.

**For a single pattern for the selected code, see Truss Tool Cap Nesting**

## system setup



- Language

---

### Function :

Switch between different language versions. Simplified Chinese to Traditional Chinese, English, Thai, Spanish, Korean, etc.

### Operation:

Click **【System Settings】** - **【language】** , Select the need language.

- Record dialogue place

---

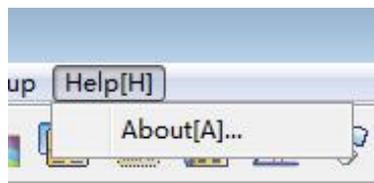
### Function:

Choose Record dialogue place of the last dialog and open the dialog again when it was closed.

### Operation:

Click [System Settings] menu---- **【 Record dialogue place】**, If there is a tick in front of it, it will not be ticked after the operation. If it is not ticked before, there will be a tick after the operation.

## Help menu (H)



- **About**

---

### Function:

Check version、VID、Copy right etc.

### Operation:

Click **【Help】** -- **【About】** ,You can see following dialogue , After checking, Click **【OK】**



## Conclusion

Thanks for reading the garment CAD user manual of Richpeace. This is a user manual especially for Richpeace garment CAD. If there are some operations in this book are different from the practical operations during using this software and hardware, you should refer to the practical operation. If some functions introduced inside this manual vary from real functions, it is possibly because you are using the different



## Richpeace Garment CAD V10.0

version from the book stated. Richpeace Company reserves the final interpretation right of usage of software and hardware. If you have any questions, please contact us by the following ways:

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