



Culture of Sewing

TEXI XYZ 2518

CUT Operation Examples



CATALOGUE

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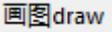
1. Coordinate System (Note: The unit is mm)

The coordinate system in the “cut” is as shown below:



2. Drawing and Modifying Graph Size

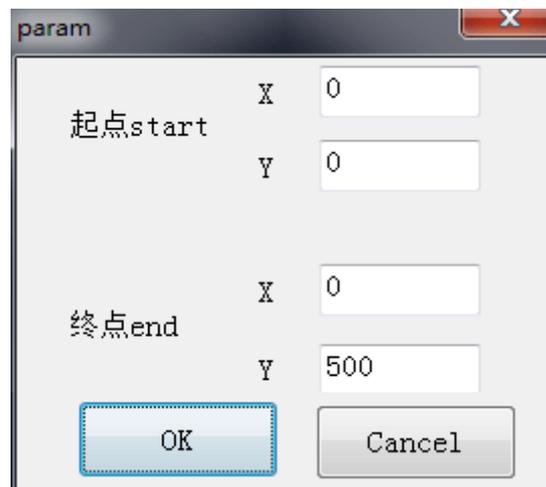
(Note:The “cut” isn’t a professional drawing software, only several simple graphs can be drawn by it.)

Click , the following drop-down box is displayed:



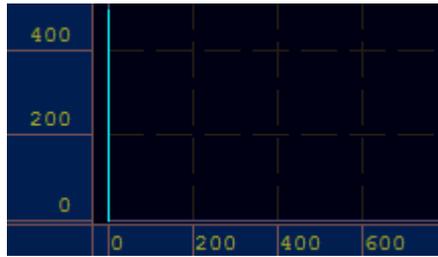
2.1 Line

Click **【line】**, as shown below:



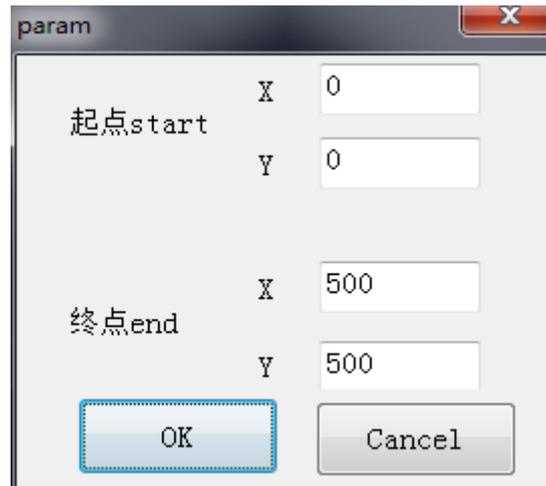
(1) **【start】** is the graph start position, usually they’re 0, **【终点 end】** is the farthest position of the graph, that is, the size of the graph.

(2) For, set start as 0, end X as 0, end Y as 500, then the straight line is a straight line in Y direction with a length of 500mm, as shown below:



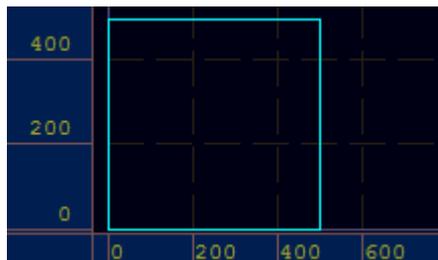
2.2 Rectangle

Click **【rect】** , as shown below:



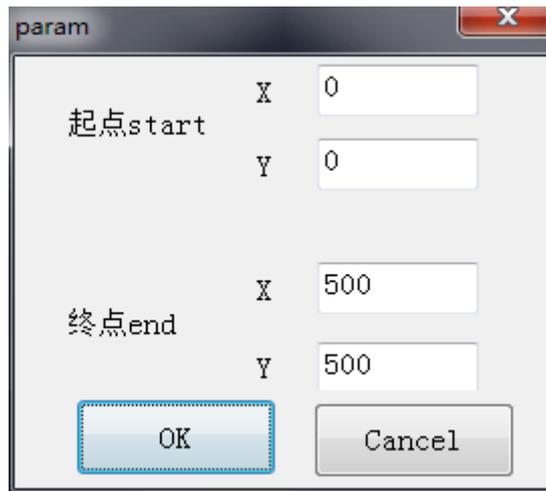
(1) Set **【start】** as 0, the X and Y values of **【终点 end】** are the side length of corresponding X direction and Y direction respectively.

(2) For example, set start as 0, end X as 500, end Y as 500, then the rectangle is a square with a side length of 500mm, as shown below:



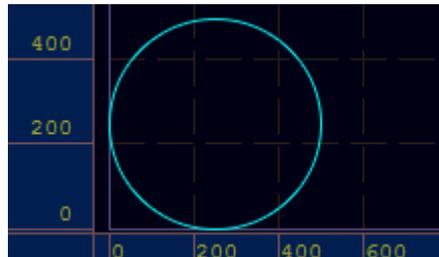
2.3 Ellipse

Click **【ellipse】** , as shown below:



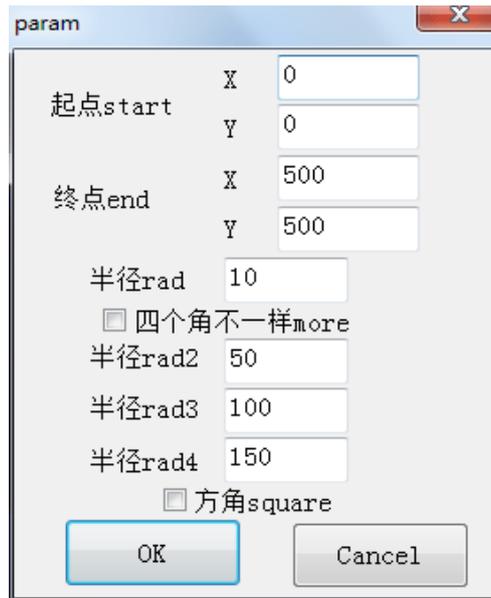
(1) Set the values of **start** as 0, the X and Y values of **end** are the length of the corresponding ellipse center cross X direction and Y direction respectively.

(2) For example, set start as zero, end X as 500, end Y as 500, so the ellipse is a circle with a diameter of 500mm, as shown below:



2.4 Rounded/square rectangle

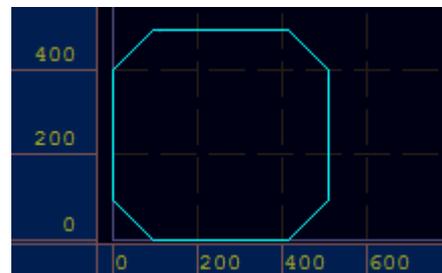
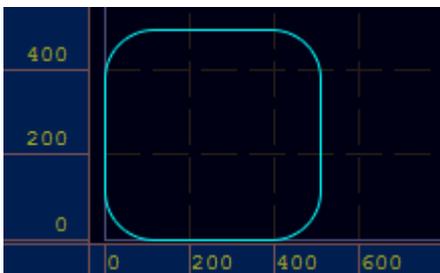
Click **round rect** , as shown below:



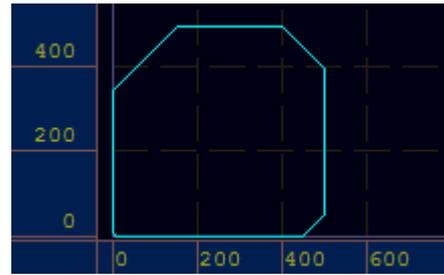
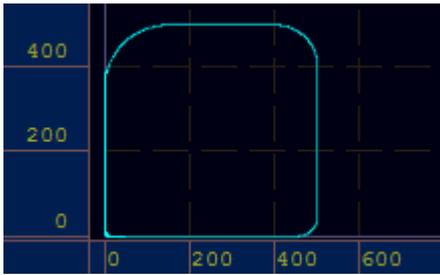
(1) Set **【start】** as 0, the X and Y values of **【end】** are the corresponding side length of the X direction and Y direction respectively.

(2) Under the premise of not selecting **【square】**, **【rad】** is the rounded corner radius. Under the premise of not selecting **【more】**, the radius of every rounded corner is **【rad】** value. Under the premise of selecting **【more】**, the radius of every rounded corner is the corresponding value of **【rad】** **【rad2】** **【rad3】** and **【rad4】**. If selecting **【square】**, the corners of the rectangle are the line segments.

(3) For example, set start as 0, end X as 500, Y 为 500, **【 rad】** as 100. In the left figure the **【more】** and **【square】** are not selected, in the right figure the **【more】** is not selected but the **【square】** is selected, as shown below:



(4) For example, set start as 0, end X as 500, end Y as 500, **【rad】** as 10, **【 rad2】** as 50, **【 rad3】** as 100, **【 rad4】** as 150. In the left figure **【more】** is selected, but the **【square】** is not selected. In the right figure **【more】** and **【square】** are selected, as shown below:



2.5 Arc

Click **【ARC】** , as shown below:



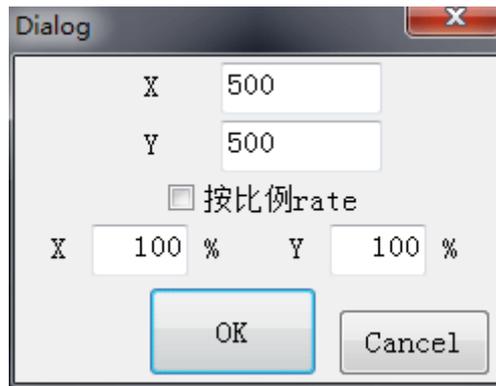
(1) **【center】** is the coordinate of the arc center, **【degree】** is the arc degree, 180 degree is a semicircle, 90 degree is the quarter circle.

(2) For example, set start as 0, center X as 100, center Y as 0, degree as -180° , as shown below:



2.6 Resize

Select the graph which needs to be change the size, click **【resize】** , as shown below:



(1) X and Y values are the side length of X direction and Y direction of the selected graph. The X and Y values can be changed directly to change the graph size. (Note: **【info】** → **【info】** also can be used to check the graph size.)

(2) X 100% and Y 100% indicates that the size can be changed by changing the side length rate. (Note: The **【rate】** has to be selected when use this method.)

3. Select Graph and Change SP number

3.1 Select graph by click mouse

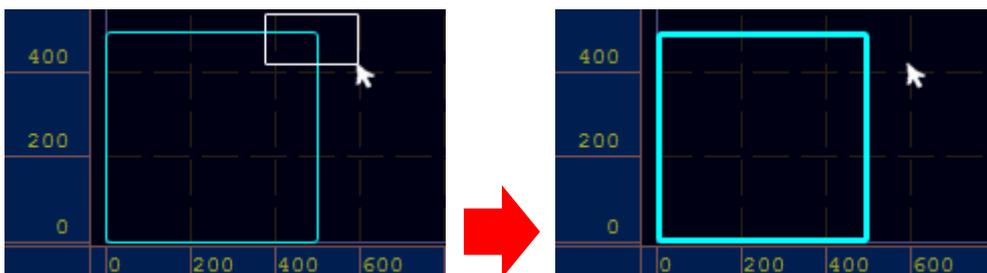
Move the mouse on the line to be selected and press the left mouse button to select it, as shown below:



(Note: The line will be wider after being selected.)

3.2 Select Graph with Mouse Frame

Press and hold the left mouse button, when the line to be selected is in the white frame, release the mouse button, and the line in the white frame will be selected, as shown below:



3.3 Press the Keys on the Keyboard to Select Graph



(Note: Click **all** by mouse to select all graphs.)

(1) Line of SP 1, 2, 3, 4, 5, 6, 7, 8, 0 can be selected by pressing the corresponding number key in the main keyboard area of the keyboard. For

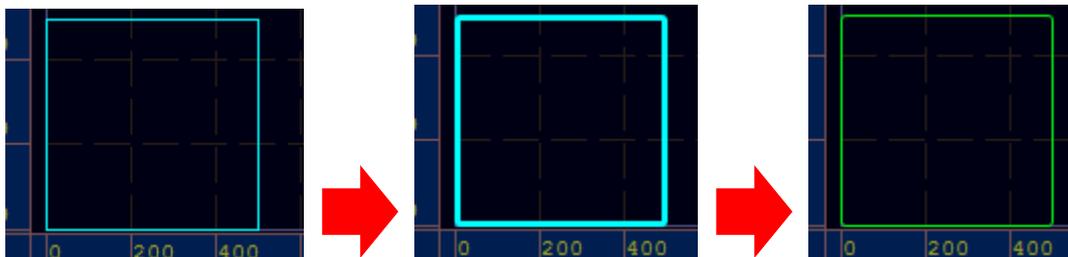
example, line of SP4 can be selected by pressing  in the keyboard, as shown below:



3.4 Change SP number

Select the graph to be changed the SP number, then click the destination SP number or press the corresponding key in the keyboard. For example, change the SP4 square in the following left figure to SP3, select it

first, then click  or press  to change it:



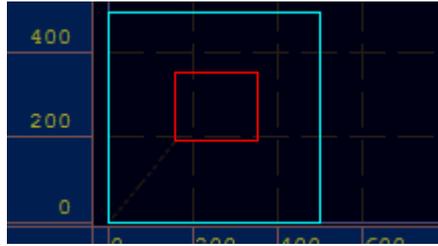
4. Change Processing Order

4.1 Processing Order

By default, no matter whether the SP number is the same or not, the principle of drawing first and processing first is followed.

4.2 Change Processing Order of Different SP Number Graph

(1) As shown below, the red rectangle is SP1, the blue one is SP4:

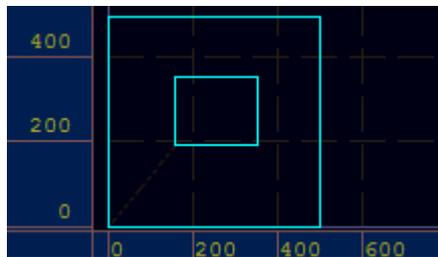


(2) Click **优化optimize** → **排序笔号order SP**, then it will process the red one first

(Note: After click **排序笔号order SP**, the default order is SP1→SP6.)

4.3 Change Processing Order of Same SP Number Graph

(1) As shown below, both rectangles are SP4:



(2) Select the smaller one, then click **编辑edit** → **排到最前面first [A]** or click **前移forward**, then it will process the smaller one first. (Note: The larger one also can be selected first, then click **排到最后面last [L]** or **后移backward** to change the order.)

5. Simulation and Start, Node, Dry Run of Graph

Click **视图view**, there will be a drop-down box as shown below:



5.1 Simulation

Simulate the processing process in “cut”

- (1) **【simulate】**:fast speed simulation of processing process.
- (2) **【simu(slow)】**:low speed simulation of processing process.
- (3) **【cancel simu】**:stop simulation, click right mouse button also can stop simulation.

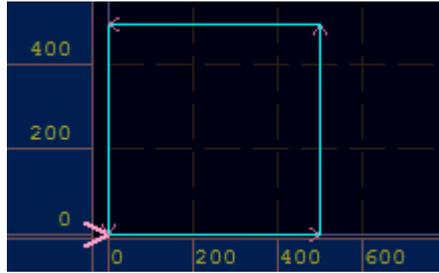
5.2 Start Point of Graph Processing

Select **【show start】** to show the start point,as shown below:



5.3 Graph Node

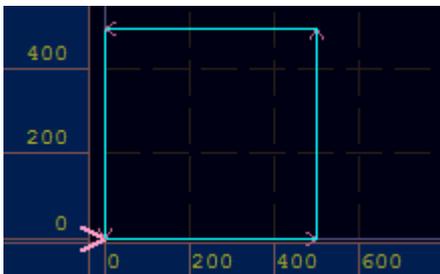
Select **【show end】** to show graph nodes,as shown below:



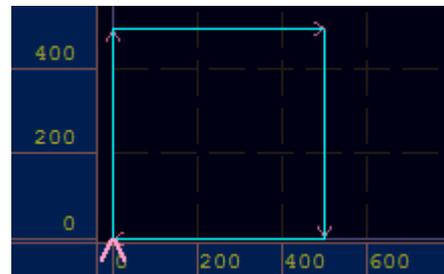
(Node:After selecting **【show end】** , the start point will be shown automatically and it can' t be hidden.)

5.4 Change Processing Direction

Select the graph to be changed processing direction,click **编辑edit** → **反向reverse [B]** , as shown below:



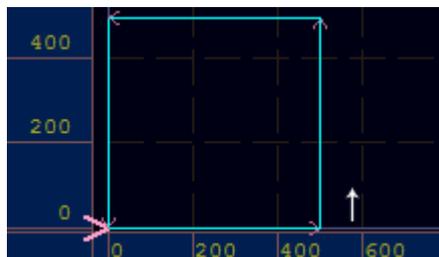
Default Processing direction



Changed Processing Direction

5.5 Change Start Point

(1)The start point only can be change to the location of the existing node, Click **操作模式status** → **设定起点change start** , mouse will become to arrow shape, as shown below:



(2)Move mouse to the right bottom corner of the square,click left mouse button, finish changing, as shown below:



(Note: Click right mouse button to exit the changing start point mode.)

5.6 Delete Node

(1) Click `操作模式status` → `删掉节点del point`, mouse will become to arrow shape, as shown below:



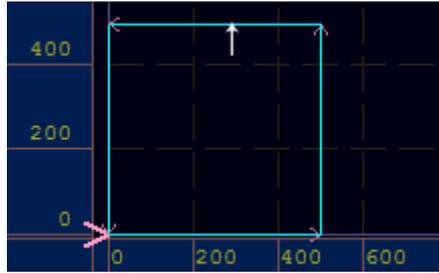
(2) Move mouse to the node location at the left upper corner of the square, click left mouse button, finish changing, as shown below:



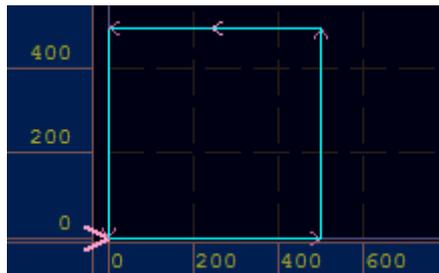
(Note: Click right mouse button to exit the deleting node mode)

5.7 Add Node

(1) Click `操作模式status` → `添加中间节点add mid`, mouse will become to arrow shape, click left mouse button, as shown below:



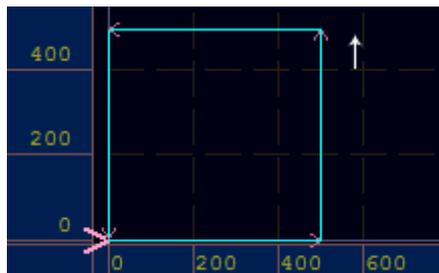
(2) Move mouse to the line position above the square, mouse will become to arrow shape, click left mouse button, finish changing, as shown below:



(Note: 1. Click right mouse button to exit the adding node mode; 2. The node only can be added to the middle position between the existing two nodes.)

5.8 Break Line

(1) Click **操作模式 status** → **端点处断开 break**, mouse will become to arrow shape, as shown below:



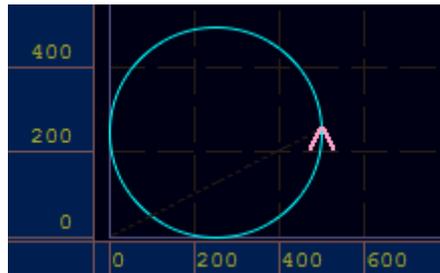
(2) Move mouse to the node location at the right upper corner of the square, click left mouse button, finish changing, as shown below:



(Note:1. Click right mouse button to exit the breaking line mode; 2. Only the node position can be broken.)

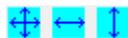
5.9 Dry Run Path

Select **【show penup】**, the dry run path will be displayed, it's the path that the machine moves but not processing during it is working. The dry run path is the dotted line which is from the left bottom corner to the start point. As shown below:



6. Move Graph, Copy and Paste Graph

6.1 Move the Graph



(1) : Select the graph to be moved, click , press and hold the left mouse button in “cut” to drag the graph to realize any position movement.

(2) : Select the graph to be moved, click , press and hold the left mouse button in “cut” to drag the graph to realize horizontal position movement

(3) : Select the graph to be moved, click , press and hold the left mouse button in “cut” to drag the graph to realize vertical position movement.

6.2 Copy and Paste the Graph

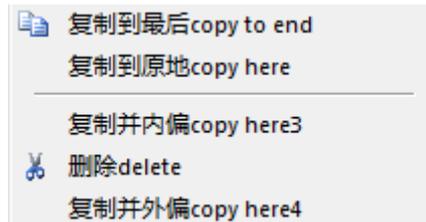


(1) : Copy and paste all graphs horizontally.

(2) : Copy and paste all graphs vertically.

(3) : Select the graph to be copied, click  to copy and paste the graph horizontally, and the distance between the new graph and the original graph is the value in **优化optimize** → **配置选项config... [P]** → **move step 移动步长** .

(4) Copy and paste function in **编辑edit**, as shown below:



① **复制到最后copy to end** is same with .

② **复制到原地copy here**: Copy and paste the current selected graph, the new graph will coincide with the original graph completely.

③ **复制并内偏copy here3**: Copy and paste the current selected graph, the size of the new graph will be smaller than the original one according a certain value which is the value in **优化optimize** → **配置选项config... [P]** → **offset dist 偏移距离** multiplied by 2. For example: The size of the original graph is 500X500, and the new one will be 496X496. (Note: 1. The center of the new graph is the same as that of the original one; 2. The new graph SP number is SP5, it can be changed according to the actual situation.)

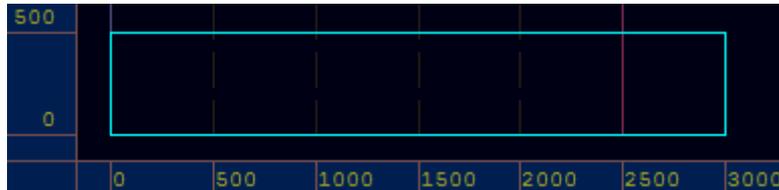
④ **复制并外偏copy here4**: Copy and paste the current selected graph, the size of the new graph will be larger than the original one according a certain value which is the value in **优化optimize** → **配置选项config... [P]** → **offset dist 偏移距离** multiplied by 2. For example: The size of the original graph is 500X500, and the new one will be 504X504. (Note: 1. The center of the new graph is the same as that of the original one; 2. The new graph SP number is SP5, it can be changed according to the actual situation.)

7. Modify the Graph for the Auto-feeding Machine

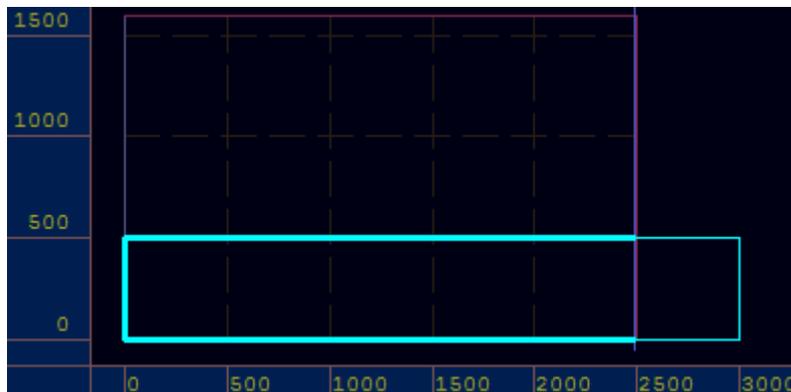
Click **优化optimize** → **配置选项config... [P]**, and select **enable_page** / **启用分页**.

7.1 Modify the Graph Which Is Out of the Work Area

For example, the work area of the machine is Y: 1600, X2500, the size of the rectangle to be cut is 500X3000.



(1) Click **优化optimize** → **配置选项config... [P]** → **断开长条break long** → , as shown below:



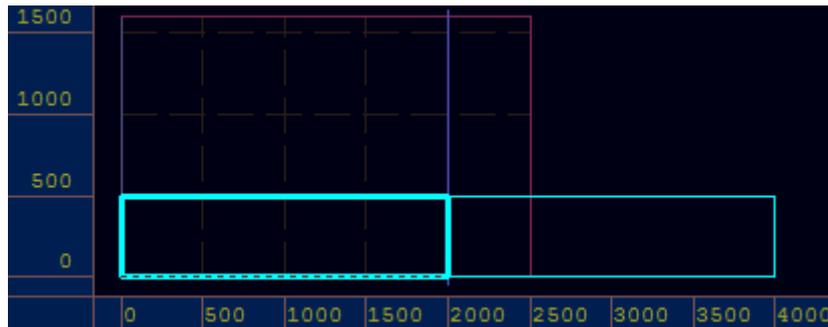
(2) After sending it to the machine, the zero point on the machine table must be set at the most edge position in the X- direction, otherwise, there will be a message which shows the graph is out of XY on the panel, and it cannot be processed. (Note: The **【auto drag】** function in the **【config】** page of the panel needs to be enabled.)

7.2 Modify the Graph Which Is Not Out of the Work Area

For example, the work area of the machine is Y: 1600, X2500, cut two rectangles of size 500X2000:



(1) Click , as shown below:



(2)After sending it to the machine, the zero point on the machine table must be set at the most edge position in the X- direction, otherwise, there will be a message which shows the graph is out of XY on the panel, and it cannot be processed. (Note:The **【auto drag】** function in the **【config】** page of the panel needs to be enabled.)

8. Modify the Graph Used for Milling Tool (SP6)

If a milling cutter with a diameter of 4mm is used to cut a 500X500 square, the actual graph size after cutting is 498X498, therefore, it is necessary to make corresponding settings to compensate the offset. The method is as follows:

8.1 Set Offset

(1) **优化optimize** → **配置选项config... [P]**

(2)Change **offset dist 偏移距离** to **offset dist 偏移距离** that is, the value of milling cutter radius divided by 2.

(3)Change **【外刀 outer】** as shown same to **外刀outer** .

8.2 Modify the Graph

(1)Click **优化optimize** → **其他优化other** → **补偿刀半径offset radius** to modify.

(2)Press **【C】** in the keyboard or click  to move the graph to the left bottom corner of the work area in “cut”.

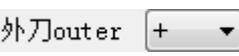
(3)The rectangle size after modification is 502X502.

8.3 Cut Ring

If a milling cutter with a diameter of 4mm is used to cut a concentric ring with outer diameter of 500mm and inner diameter of 400mm, set as

follows:

(1)  (1) **优化optimize** → **配置选项config... [P]** → **offset dist 偏移距离 2** → **offset dist 偏移距离 1**

(2) Change **【outer】** as shown same to  **外刀outer +**

(3) Change **【inner】** as shown same to  **内刀inner -**

(4) Click  **优化optimize** → **其他优化other** → **补偿刀半径offset radius** to modify graph.

(5) Press **【C】** in the keyboard or click  to move the graph to the left bottom corner of the work area in “cut” .

9. Small V-Cut Tool and V-Groove (SP5)

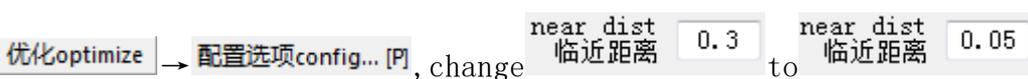
The Graph Setting of V-groove Cutting With smaller Knife V-Cut tool. For example, cut a circle with v-groove, set as follows:

(1) Select the circle, change it's SP number to SP5.

(2) Click  **编辑edit** → **其他other edit** → **添加返程线add reverse line** to modify.

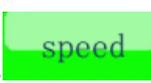
10. Small Size Circle or Arc Optimization

10.1 Settings in “Cut”

(1)  (1) **优化optimize** → **配置选项config... [P]**, change **near dist 临近距离 0.3** to **near dist 临近距离 0.05**

(2) Click  or  **优化optimize** to realize optimization.

10.2 Settings in the Control Panel

Press  **speed**, change the value of  **lim dia 10** to 80.