

# Auto-Aligning System (AAS)

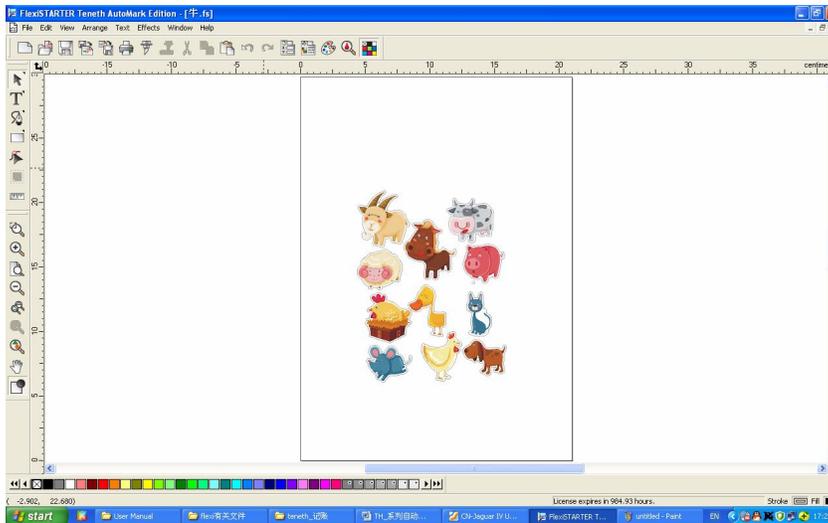
## Introduction

The TH-A series cutting plotters feature a Auto -Aligning System to guarantee auto contour cutting by detecting the registration marks printed around the graphic.

## Steps of Flexi

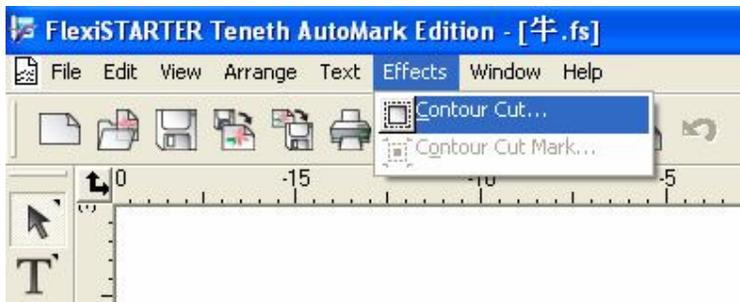
### 1. Prepare the graphic

The marks length is 20mm . For finding the marks, Margin must have 25mm at the four sides of the graphic at least.

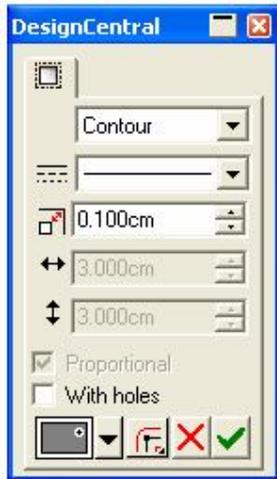


### 2. Create a contour for the graphic

click the menu as following picture



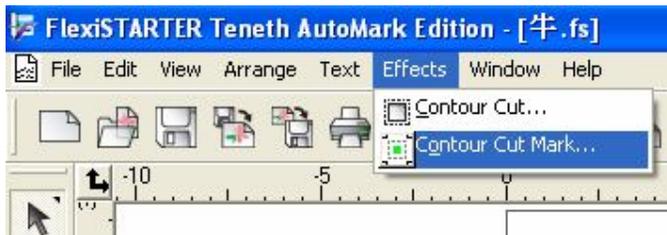
Show the parameter dialog box as following



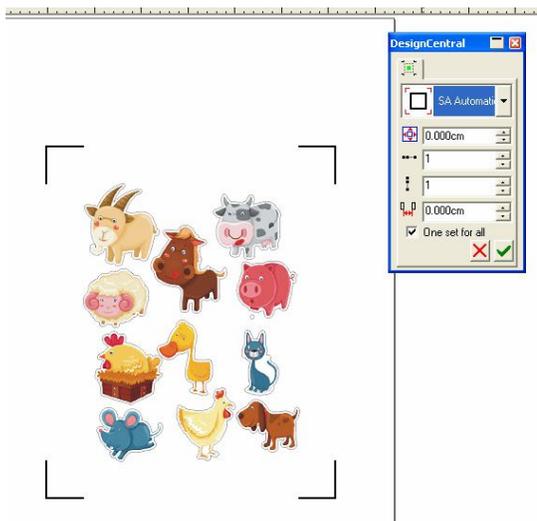
choose appropriate offset value (usually 0.1mm) and click the button , contour creation finished.

3. Add the registration marks

click the menu as the following picture



Show the parameter dialog box as following



choose the registration marks as the above picture show and

click , marks adding is finished.

#### 4. Print the Graphics

Print the graphic and the marks with your printer .

Scaling must be 100% .

#### 5. Load the printout onto cutter, be care of the original point.

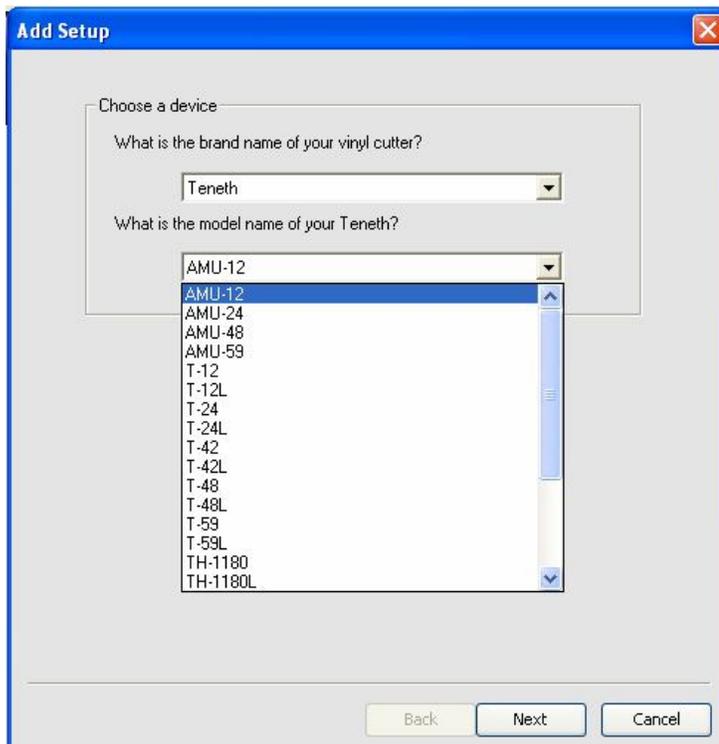
Please make sure the media is fed with correct direction.

Move the 4 direction keys to adjust the position, put the scan point to the center of the original L shape , as following

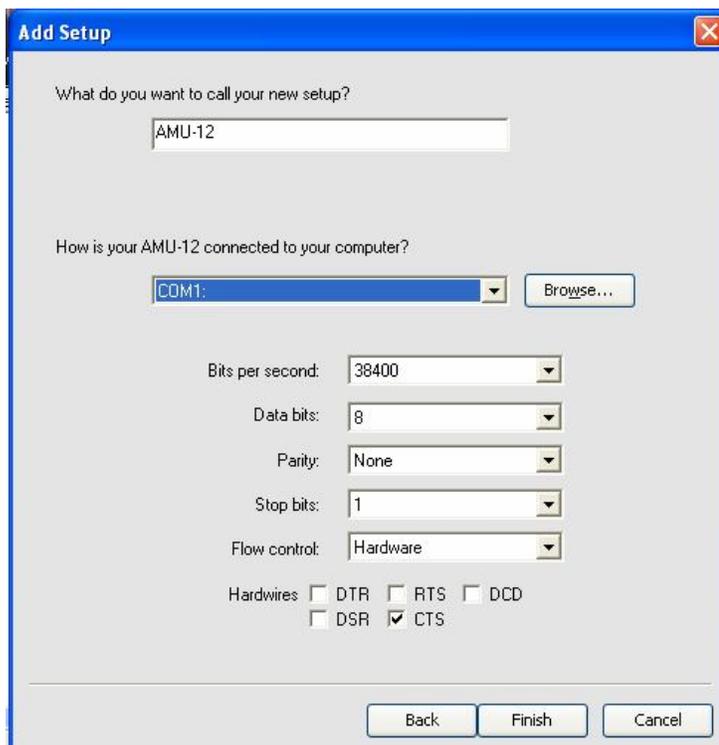


6. Choose the menu  to putout contour, if the first time to use the software , need to add the machine first,choose the

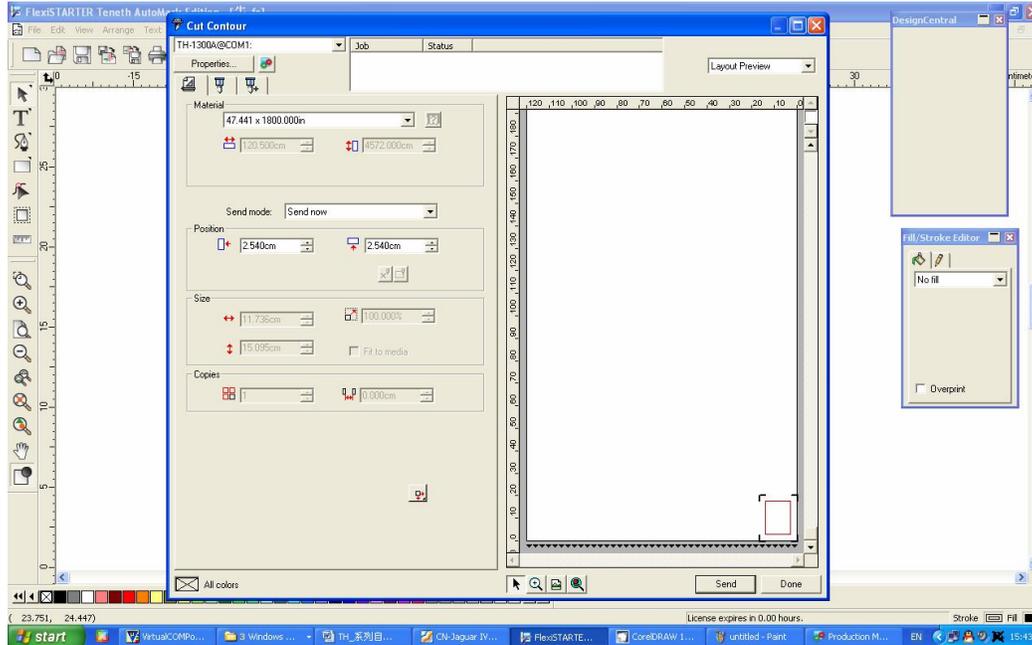
machine Model with “AMU-” , as following



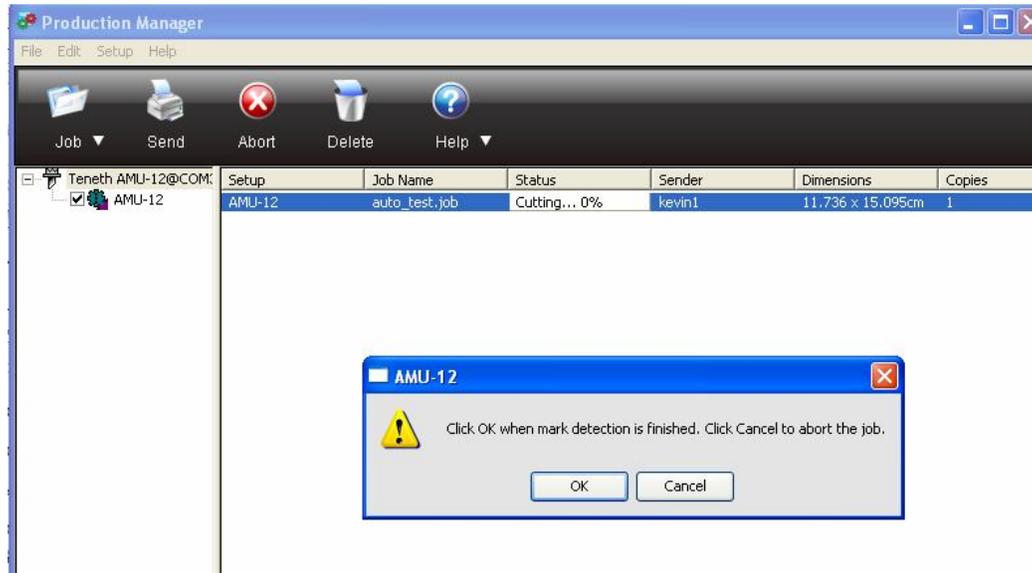
, click “next” ,



,click “finish” , display the dialog box



, click “send” , display the dialog box,



, machine start finding the marks. Click “OK” If it is successful or click “cancel” If it fails.

7. How to determine whether successful, if successful, pen or blade go to the center of the scan head, the laser is

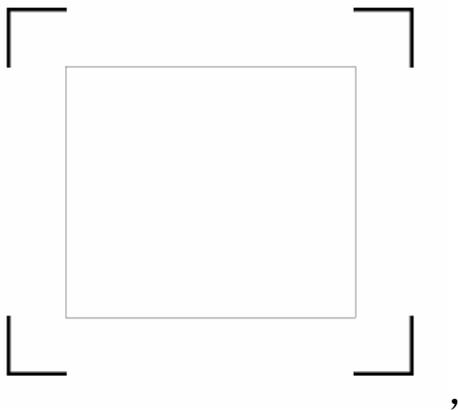
off at the same time. If not successful, the laser is on, the machine stop.

8. The solution if it fails is Press button “PAUSE” can cancel the work, or press the 4 direction keys to let the scan point go to the right position, and press button “enter” for repeat scanning, the following pictures are the positions when

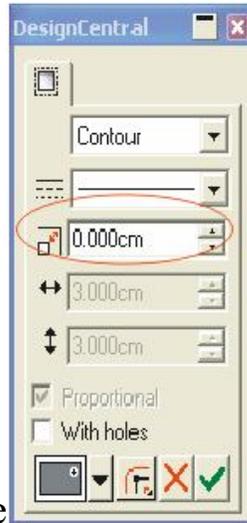
repeating finding  ,  ,  ,  .

## Media Calibration

Before performing AAS contour cutting, it's recommended to print out a test file that as following rectangle by 100mm \*100mm.



Choose the offset value is 0.0 when making contour , same as



the picture

If there is any adjustments had to be made, you can change the offset value by following the steps

1. Measure the offset values from the printed line and the actual cutting line

2. Press menu button  ,  ,  to the display

-X	Dx-0.3	+X
-Y	Dy0.5	+Y
原点	暂停	菜单
重复	测试	确认

-X	Dx-0.3	+X
-Y	Dy0.5	+Y
Origin	Pause	Menu
Repeat	Test	Enter

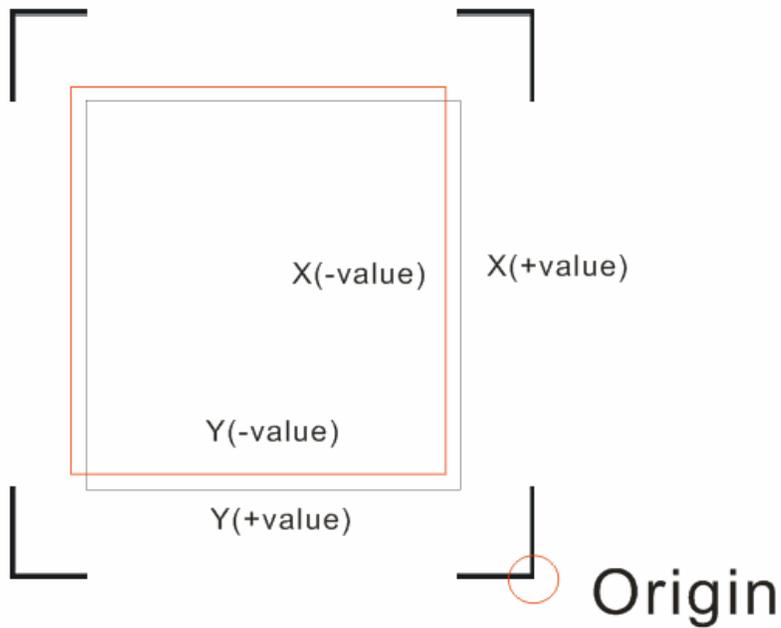
3. Press the 4 direction keys to set right value and press enter , Horizontal line is defined as X and vertical is defined as Y

4. When the actual cutting line and the printed line need to be changed towards the direction of origin mark, then simply add the negative value of the offset. If the direction is from the

opposite of the origin mark, then enter positive values for the offset. This method apply on both X and Y axle.

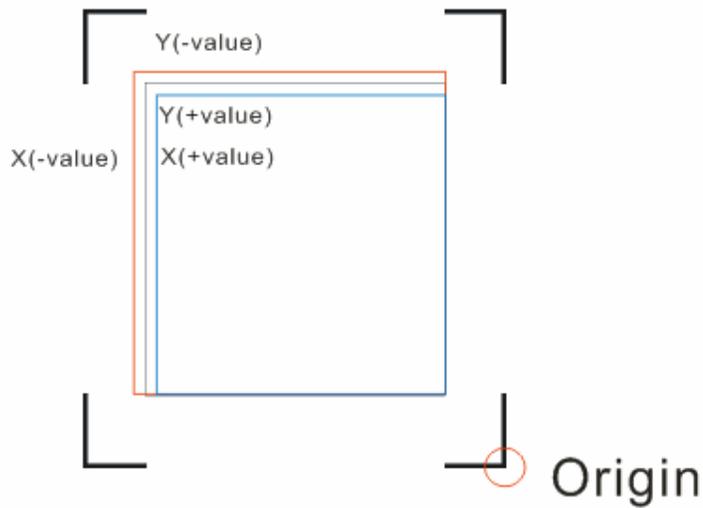
### **For example**

if the display is  $DX=-0.3$ ,  $DY=0.5$  As following picture:



The red line is the position of the real cutting , the offset value of the red line and the printed line is  $X=0.4$ ,  $Y=0.4$ , the new calculated value is  $DX=-0.3+(-0.4)=-0.7$ ,  $DY=0.5+(-0.4)=0.1$

## For another example



Black line is the original image, the red and the blue line is the actual figure drawing. the origin is alignment, but up-left is not, Parameters of BX and BY the value of the need to adjust.

## At the display

-X	Dx-0.3	+X
-Y	Dy0.5	+Y
原点	暂停	菜单
重复	测试	确认

-X	Dx-0.3	+X
-Y	Dy0.5	+Y
Origin	Pause	Menu
Repeat	Test	Enter

Press , , , display

-X	Bx0	+X
-Y	By0	+Y
原点	暂停	菜单
重复	测试	确认

-X	Bx0	+X
-Y	By0	+Y
Origin	Pause	Menu
Repeat	Test	Enter

If case like the red line is big ,please minus BX and BY the corresponding values.

If case like the blue one is small,please add BX and BY the corresponding values.

Again press  , 

Origin
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 , 

原点
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 redisplay

-X	Dx-0.3	+X
-Y	Dy0.5	+Y
原点	暂停	菜单
重复	测试	确认

-X	Dx-0.3	+X
-Y	Dy0.5	+Y
Origin	Pause	Menu
Repeat	Test	Enter

If you have any questions, please contact us or email to [admin@teneth-cnc.com](mailto:admin@teneth-cnc.com).