MUTOH

How to
Make a print to cut file
Using a ValueJet & Summa

ValueJet

Summa®

How to: Print to cut using a ValueJet and Summa cutter

This documentation will explain how to make all needed settings when you want to print using a ValueJet and cut the printed file afterwards using a Summa Cutter.

Please be aware that this documentation was written for Illustrator CC 2017 in combination with Onyx 12.1. Other software combinations might work as well, but the procedure might differ.

Items needed information

Make sure all necessary software and firmware is installed.

- ValueJet
  - Latest firmware
  - Up to date RIP software
- Summa
  - USB driver for the summa cutter
  - Illustrator Plug in (Summa cutter tools)
  - WinPlot

Before starting

- Make sure the printer is in good condition and all nozzles are available
- Make sure the step adjust is set correctly
- Verify the maximum media size of your cutter
  (to avoid loading media sizes in your printer which are too large

Preparing your print and cut contour design

Be aware of the size of your cutter. Since this is the final stage, it is an important step to keep in mind. If you print on a 64” roll but your cutter only can take rolls up to 137 cm, you will not be able the cut the printed file and will have to restart

In this document I will give a brief example on how to make a simple design in Illustrator CC. Other software packets such as CorelDraw can be used as well and work in a similar way.

When using a vector file

Creating a CutContour line

If you want to print and cut a vector file, perform following steps

1. Open or import your vector image in Illustrator

2. Select the outer vector shape to reference your contour line

⚠ Notes ⚠

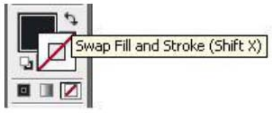
- Make sure only the outer line / shape is selected. If selecting more, the image might end up looking very strange in the next step.

3. Browse to object > path > offset path.

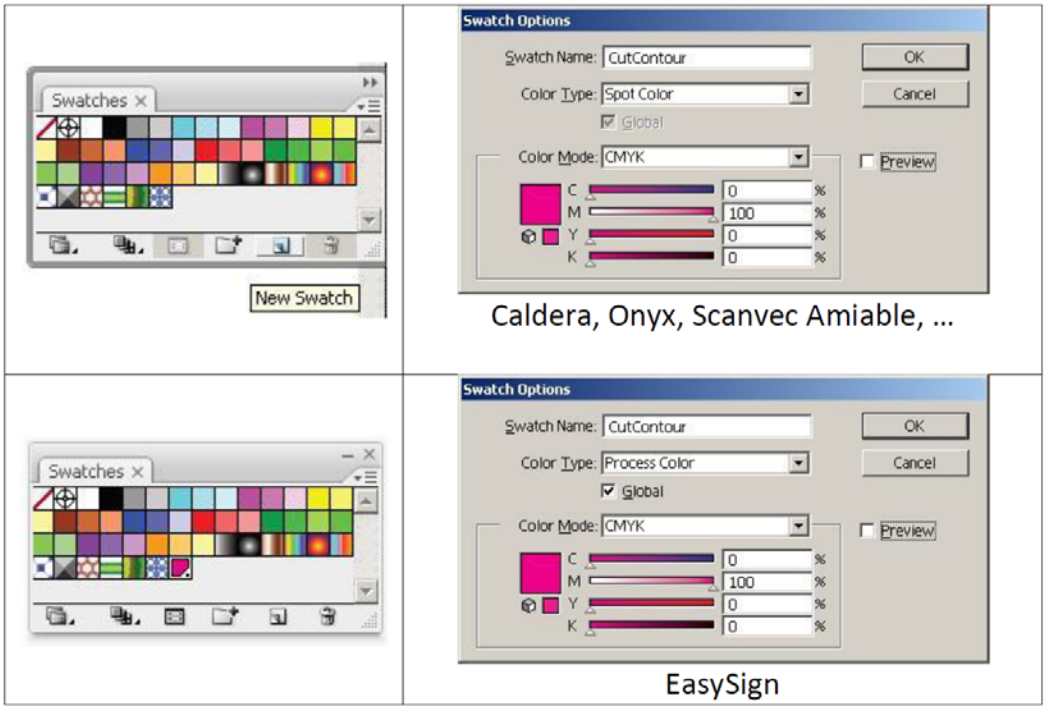
4. Fill in the offset distance. A positive value will give you an offset line that is larger than the image and as such leave some white space when cutting.
   A negative value will give you an offset line that is smaller than the image and as such cut in the printed image.
   In this demonstration, we opted for a value of +1.25 mm

- As a result, a new vector shape (contour) will be generated now

5. Swap your background and stroke colors to obtain an empty fill and colored stroke path



6. Related to the RIP software, the contour lines should be labeled accordingly. Therefore, in Illustrator, create a new swatch and redefine your swatch options of your contour lines to distinguish contour data from other vector presences.



7. Select the CutContour line you created earlier and Change the color to the created swatch color.

- In case you have an image with overlapping contour lines, you need to “Unite” them otherwise the cutter will cut each line separately.
  Example. We want to cut out the square and star as one piece.

If we select the outer line of both the star and the square and create an offset line, you can see that the offset lines interfere with each other

In this example, the cutter will cut out the star and the box separately, this is not what we want.

Solution: Unite both objects.

- Select both cut contour lines and go to Pathfinder ► Unite.
- The cut contour line will now look like this

As you can see, the line goes around the images and there is no interference.

Creating a CutContour Flex line.

A CutContour flex line lets you cut not only through the upper layer of the media, but also through the backing. As such you can pop out the cutted image completely.

For example: we want a CutContour flex line around the sticker so that we can pop out the sticker.

- Draw for example a rectangle around the sticker.
- Define a new swatch called CutContour_Flex and give it a different colour that the CutContour line.
- Select the square and give it the new CutContour_Flex swatch colour.

Save the design as a Pdf. The design is now ready to print.

Browse to the topic “Printing the file using Onyx”.

Making a print using Onyx

Before you start printing, you need to choose how you will cut the file later on since there are several methods. You can either choose the Winplot method or the Barcode method.

The Winplot method is commonly used when only printing / cutting 1 object.
In case you have serval print files, we recommend using the barcode method.

Using Winplot

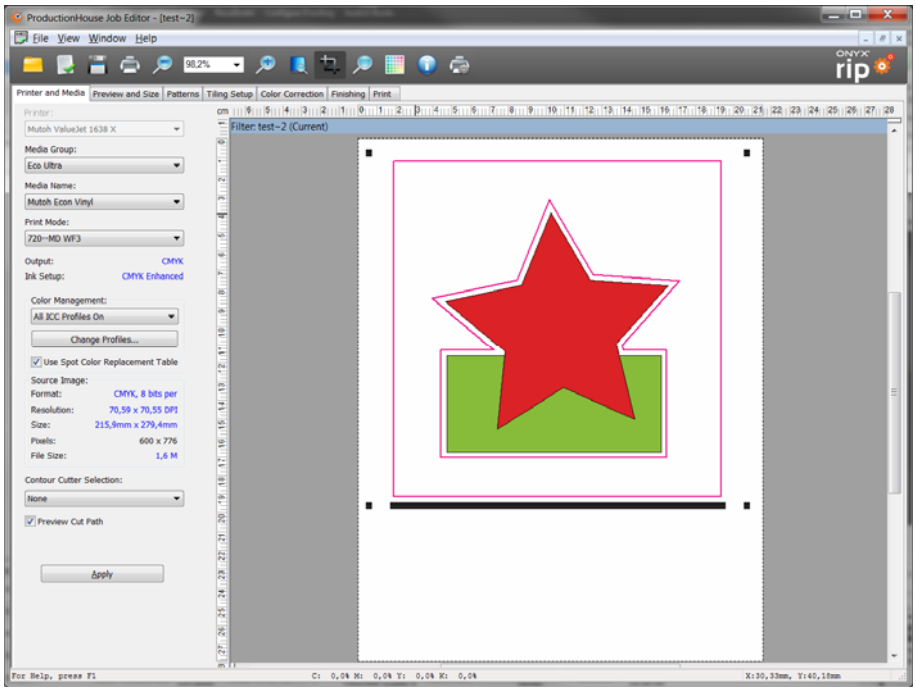
1. Open the print file in Illustrator
2. Browse to File ► Summa ► Add OPOS XY registration marks
   - Cutting marks will appear on your print file

⚠ Notes ⚠

- Make sure that all marks are visible within the artboard.

3. Safe the file as PDF and open Onyx Rip queue
4. Open Onyx RIP queue and select the printer you want to use
5. Open the file you want to print

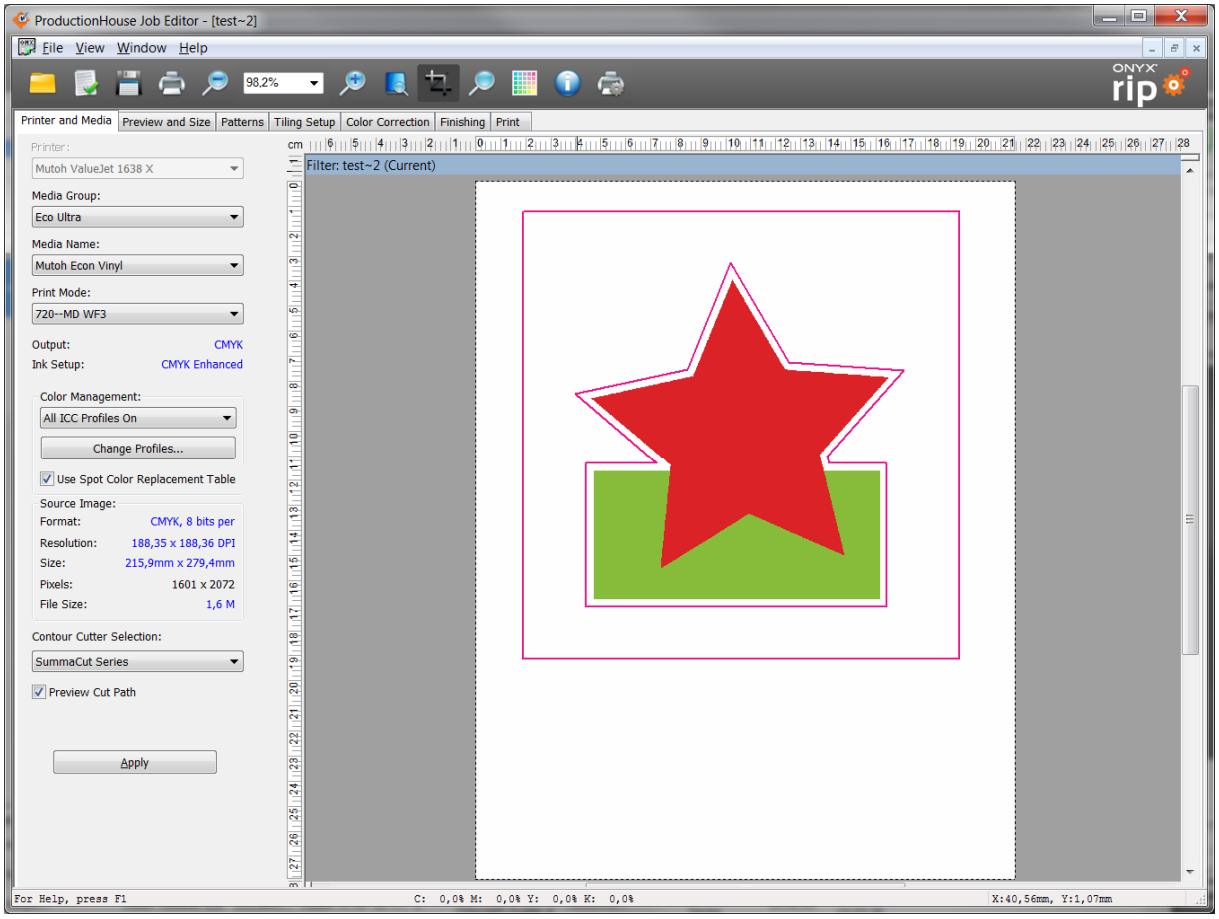
6. The production manager opens



7. Make the correct settings for Media Group, Media Name and print mode.
8. Make sure that Contour Cutter Selection is set to None.
9. Verify the cutting lines are ok by checking and unchecking Preview Cut Path
10. Once all settings are made, select apply and open the Print tab and click submit.
11. The file is now being ripped in the production house rip queue.
12. You are now ready to print
13. As soon as the file is printed, you can take it out of the printer and load it into the Summa Cutter.

Using the Summa barcode

1. Open Onyx Rip queue
2. Select the printer you want to use and open the file you want to print
    - The production manager opens



3. Make the correct settings for Media Group, Media Name and print mode.
4. Make sure that Contour Cutter Selection is set to the correct Summa cutter.
5. Verify the cutting lines are ok by checking and unchecking Preview Cut Path
6. Once all settings are made, select apply and open the Print tab and click submit.
7. The file is now being ripped in the production house rip queue.
8. You are now ready to print
9. As soon as the file is printed, you can take it out of the printer and load it into the Summa Cutter.

Cutting the printed file

1. Make sure your Summa cutter and PC are connected via USB cable
2. Load the print into the cutter (refer to the summa user's guide for more information)
3. Verify that the speed and pressure are ok.

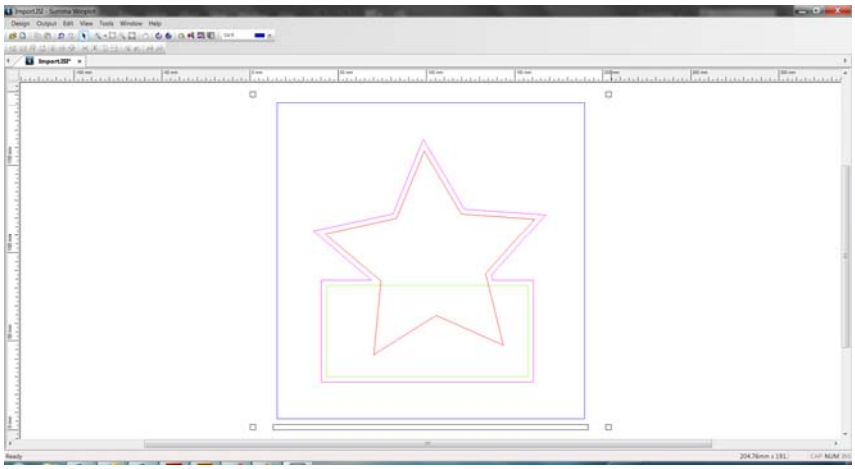
⚠ TIP ⚠

- START WITH A SPEED OF 600MM/S AND A KNIFE PRESSURE OF 90. PERFORM A CUTTING TEST AND ADJUST AS NEEDED.
- IF YOU ARE USING THE CUT THROUGH ACTION, BROWSE TO MENU ► SYSTEM SETUP ► FLEXCUT STANDARD, AND TEST WITH A PRESSURE OF 250

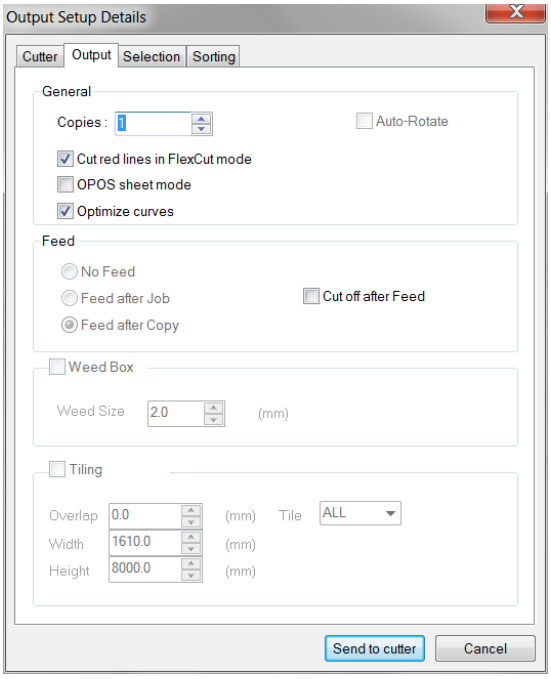
Once these tests are ok, you have two options, depending on how you have printed the file.

Using Winplot.

1. If you have earlier chosen to work via Winplot, reopen the file in illustrator and go to file ► summa ► send to WinPlot
    - Winplot opens and the file will be visible.



2. Browse to Output > Send to Opos cutter.
    - A new window opens



    - When going to the option Output (see above) you see the option Cut red lines in FlexCut mode. Select this option to be able to cut through and as such cut out the sticker.
3. Press cancel and verify the colour of your flex line. As you can see in the picture above, it is blue. Change the colour to Red.

4. As you can see, the file contains a lot of other lines, which do not need cutting. To make sure these lines are not cut, select the flex line and contour line and browse to Output > Send to Opos cutter.

    - Cutter: make sure to select SummaCut and USB
    - Output: make sure to select Cut red lines in FlexCut mode (see before)
    - Selection: Select Current Selection
5. Press Send to cutter.
6. The cutter will now ask to position the knife above the first black square. Do this and press Enter.
7. The cutter will measure the media and start cutting.
    - Please be aware that the cutter uses the values for speed and pressure you tested earlier on.

Using the bar code server

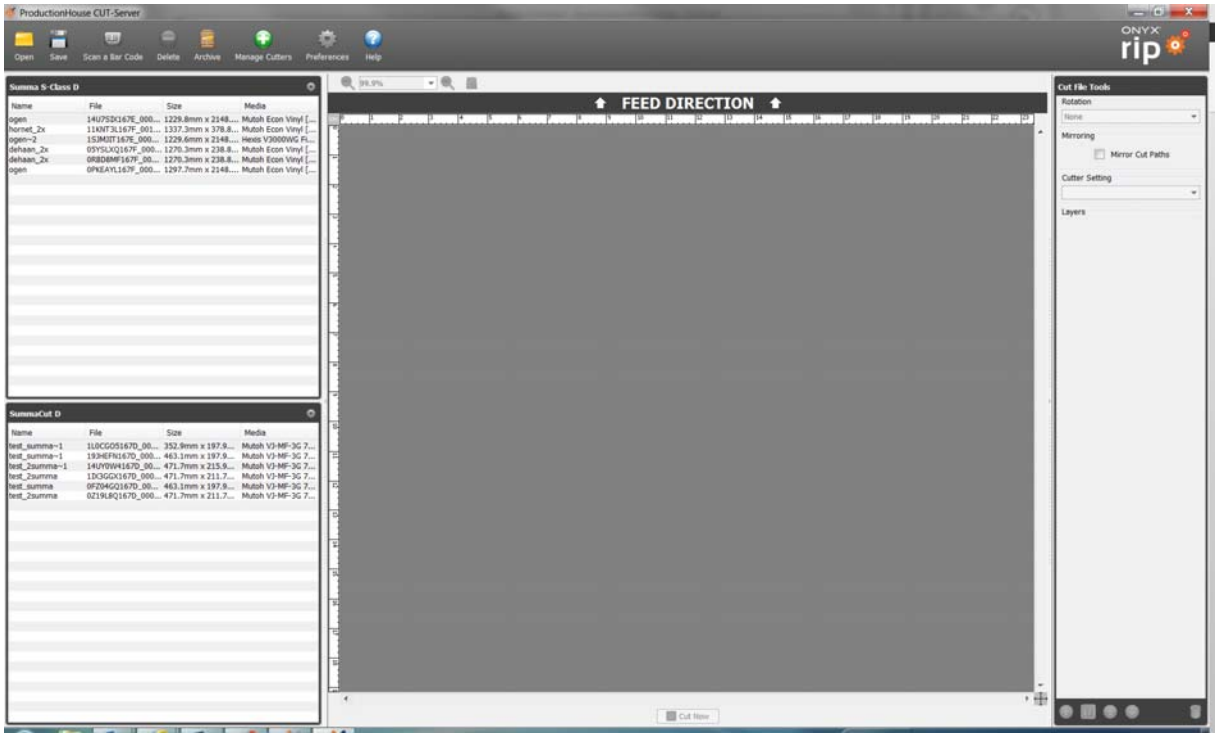
In case you have used the bar code method earlier, proceed as follows

1. In the Production House Rip queue, click on Cut-Server
   - The Production House Cut-server will open

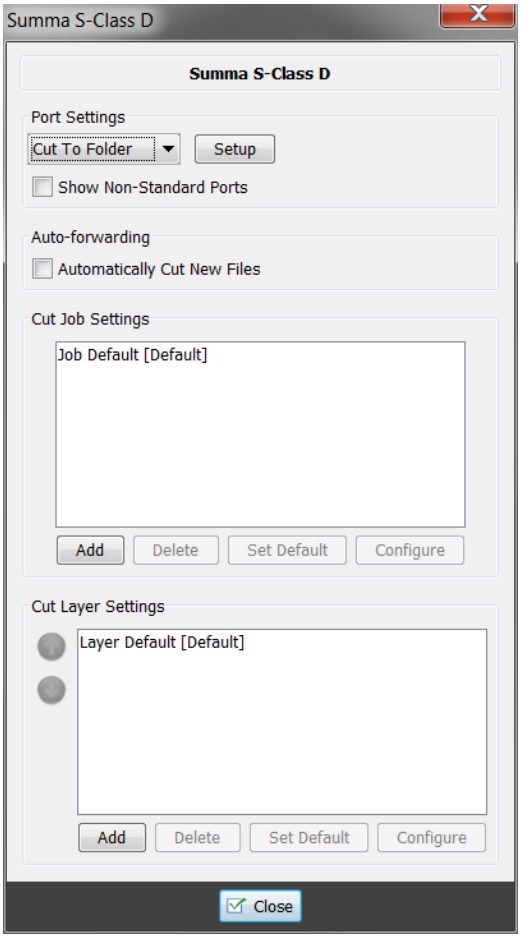
⚠ Notes ⚠

- IN CASE THE CORRECT CUTTER IS NOT AVAILABLE YET, BROWSE TO MANAGE CUTTERS AND INSTALL THE NEEDED CUTTER.

2. In the left column, search for the file you need and click on the gear wheel.



- A new window opens

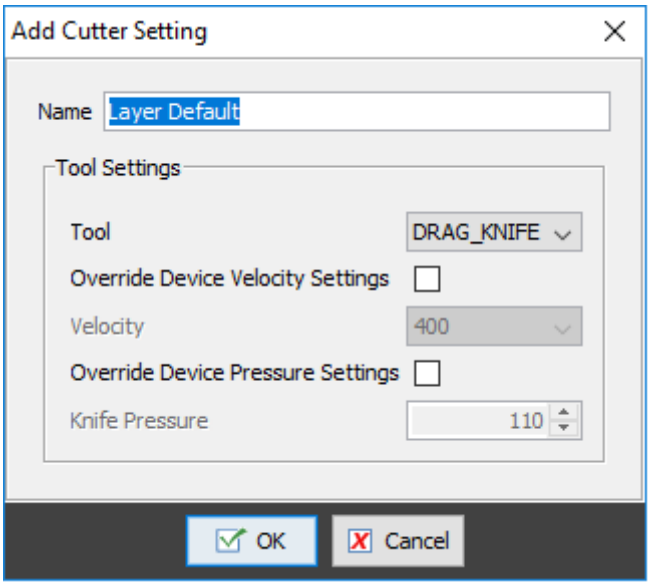


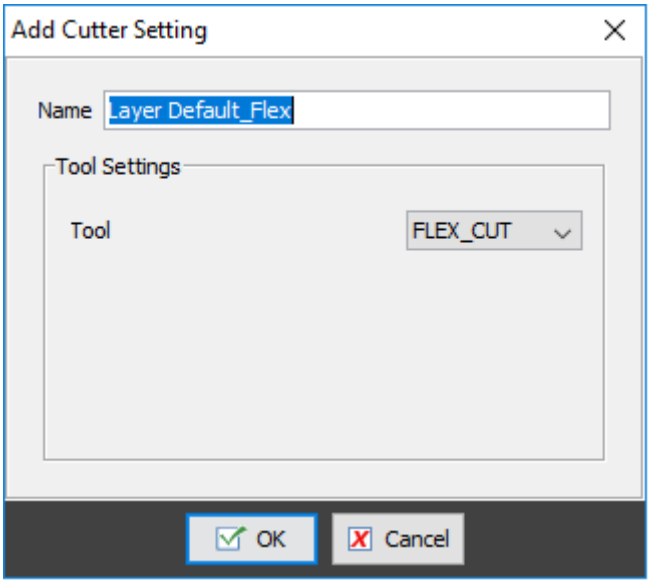
3. In the port settings, select Cut to folder and via setup determine where the file needs to be saved.

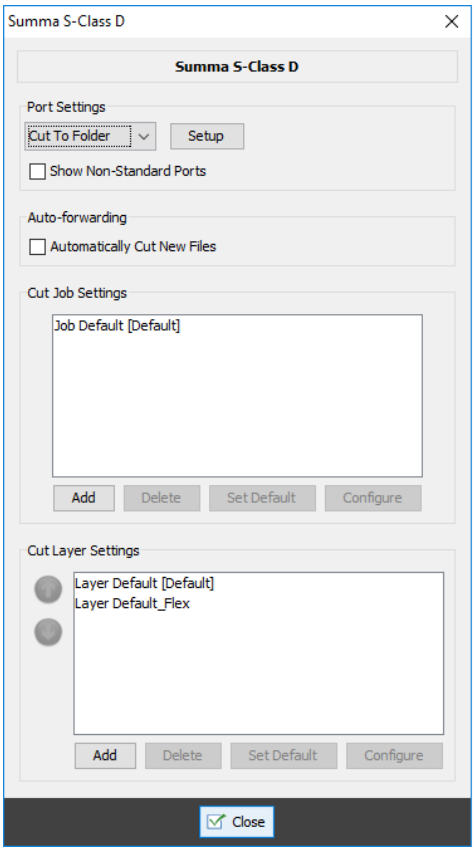
⚠ Notes ⚠

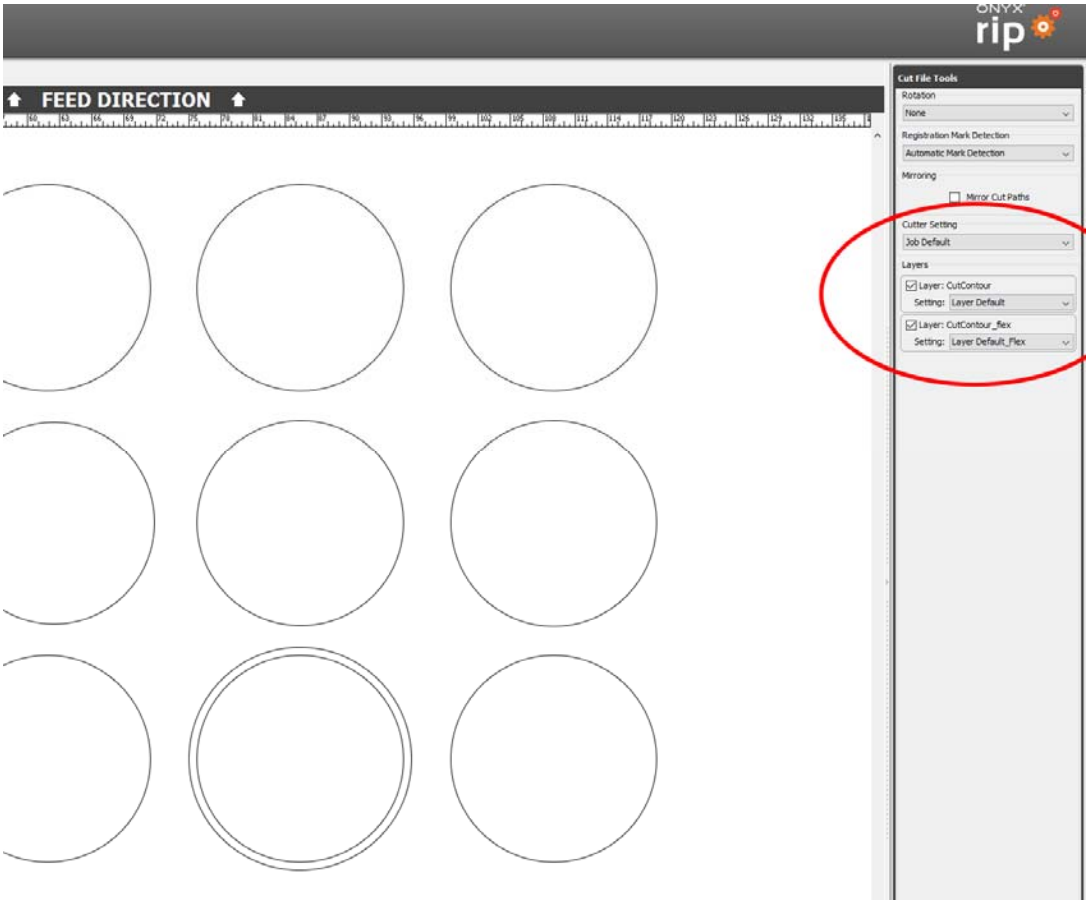
- IF YOU LEAVE THIS OPTION TO TCP/IP, THE CUTTER WILL START AS SOON AS YOU PRESS CUT NOW, HOWEVER, IT WILL ONLY CUT THIS FILE AND NOT ALL OTHER FILES.

4. In the Cut Layer Settings window, verify if the Layer cut contour is named Layer_Default and the Layer Cut contour flex (Cut through layer) is named Layer_Default_Flex



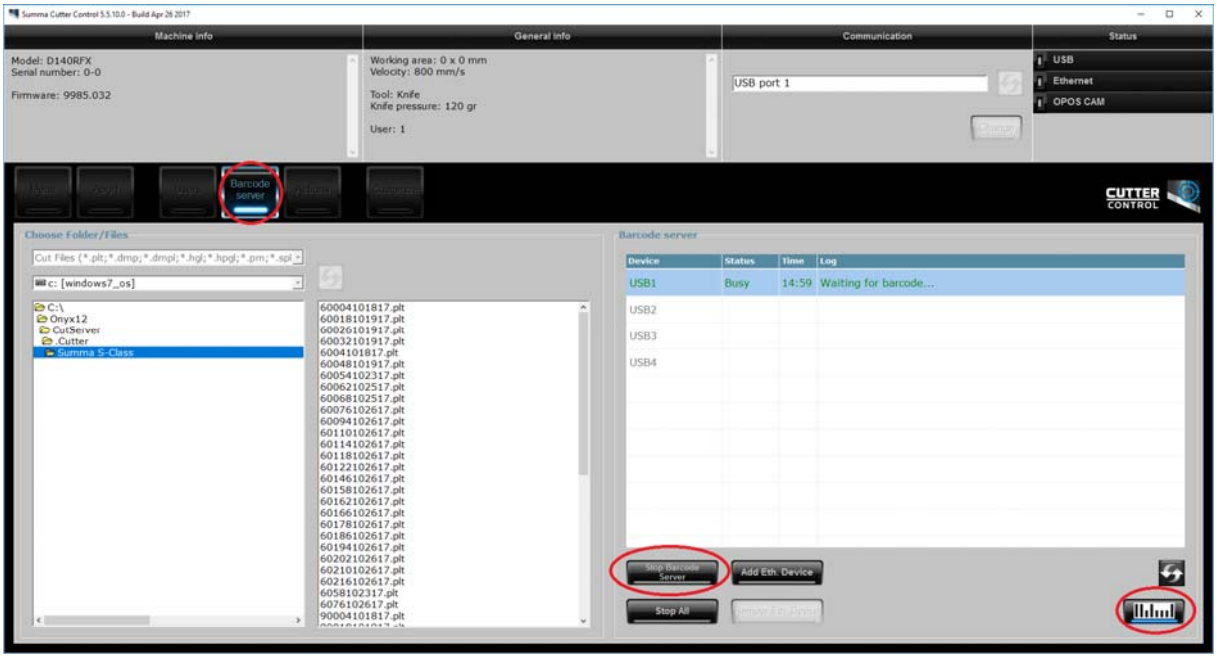






5. Click close

6. In the cut server press Cut Now
7. The file has been transmitted to the Summa Cutter control (barcode server)
8. Open the Summa cutter control tool.
9. Press Barcode server, start barcode server and finally on the barcode button



For your information; the numbers you see in the middle screen are all available cutting jobs on your computer. Such a number is also available on your print job. If the corresponding number is not available, the cutter will never start.

10. If you now have a look at the cutter display, you will notice the message “move knife under the barcode”.

11. Move the cutter head under the barcode of your print and press ENTER.

12. The head of the cutter will now read the barcode and the alignment marks.

13. As soon as this is done, the cutter will start the cutting job.