

## Preface

This document describes the contour cutting workflow for SLB Printing state of the art printing, cutting and RIP software. It will guide you through the design process of contour cutting images using Adobe Illustrator as the design software.

## What is Contour Cutting?

Contour cutting is the process of printing an image, or set of images, and then using the *ProCut Servo 4800* cutting device to cut portions of that image, for example, printing and cutting cartoon character stickers along the edge of the image, on a self-adhesive media. To do this, you prepare a file with a specialized spot color which acts as a cut path. Then, SLB Printing will print your image or images using the *HP DesignJet L25500* Latex Wide Format Printer with ONYX® RIP-Queue software. Once we complete the print, a cut file is produced and sent to the RIP CUT-Server application. From there, the cut file is sent to the cutting device which uses the cut path to determine where the image needs to be cut.

## Creating Spot Data - Overview

The first step in the contour cutting workflow is preparing your file. To prepare your file, you must define the cut path in a vector-based drawing program such as Adobe Illustrator. The cut path may be as simple or complex as needed. It can range from a circle around a bitmap image to an outline of script text.

Once you have created the cut path, you must assign a spot color to it. This spot color (specifically the name, not the color) is the most important part of preparing the file as it allows the cutter software to determine where the cutter should cut. The name you assign to this spot color must have a unique prefix which matches the prefix assigned in our RIPQueue. The default prefix for the cut path spot color is ‘*CutContour*’.

When we process and print your file, the path, with this specially named spot color, will not be printed with the rest of the image. Our RIP software processes the spot color as a cut path and creates a separate cut script file for our cutting device. This file is sent to CUT-Server from which we send it to the cutting device.

## Defining the Cut Path in Illustrator

The following steps are specific to Adobe Illustrator. The most important part of creating a cut path is creating a ‘Spot Color’ named ‘*CutContour*’ and applying the color to the cut path element.

To define a cut path in Adobe Illustrator:

1. Open the desired file within Adobe Illustrator.
2. Create a new layer (Window > Layer > New Layer) and select that layer.
3. Draw your cut path using the box/ellipse, pen, or pencil tool. Make sure that you close all paths because you will assign the spot color either as a fill or as an outline (Figure 1).

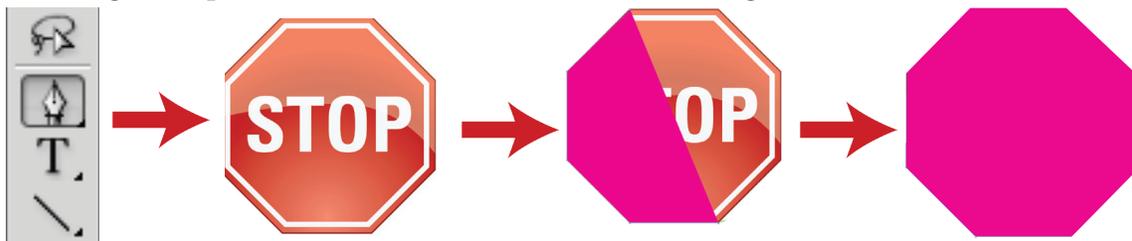


Figure 1

## Assigning a Spot Color

To assign a spot color to the cut path in Adobe Illustrator:

1. Within Illustrator, open the Swatches palette. If the Swatches palette is not visible, select Swatches from the Window menu.
2. Click the arrow in the upper right-hand corner of the Swatches palette to display a secondary menu and select New Swatch to display the New Swatch dialog, or click the New Swatch icon on the Swatches toolbar (Figure 2).

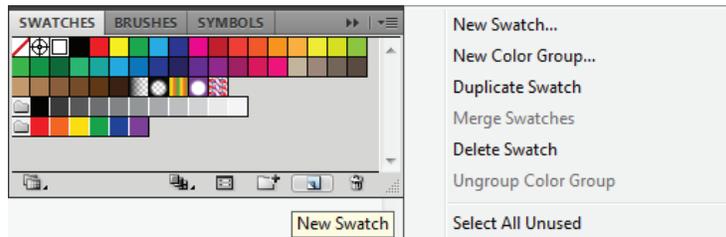


Figure 2

3. Within the New Swatch Dialog, enter a name for the swatch color using 'CutContour'.
4. Select Spot Color from the Color Type drop-down menu.
5. Use the slider bars to create a CMYK color (Figure 3). Because the color will not be printed, we recommend you make the color easily identifiable in your image to ensure it is recognized in the RIP-Queue (Figure 4).

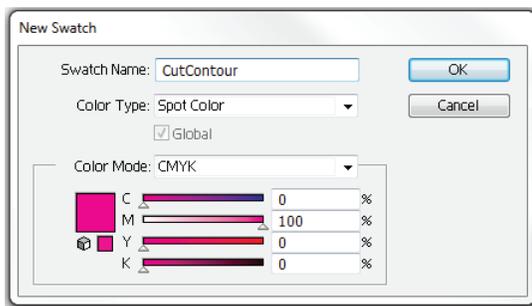


Figure 3

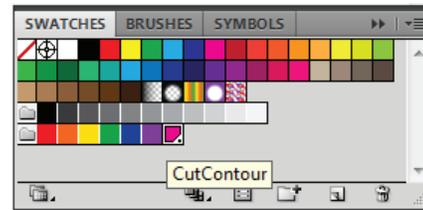


Figure 4

6. Click OK to close the New Swatch dialog.
7. Select your cut paths and assign the new swatch color.
8. Save the file as an PDF and select/check the options:
  - Preserve Illustrator Editing Capabilities.
  - Embed Page Thumbnails.
  - Create Acrobat Layers from Top-Level Layers.
 (See Figure 5)

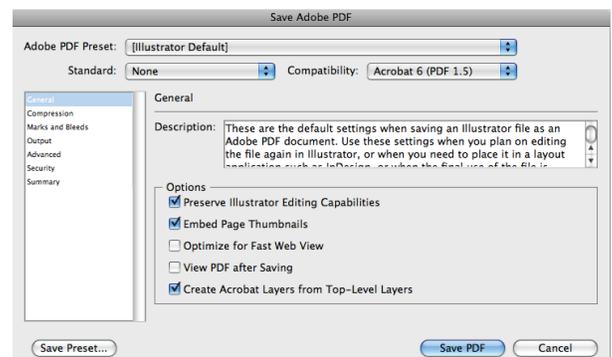
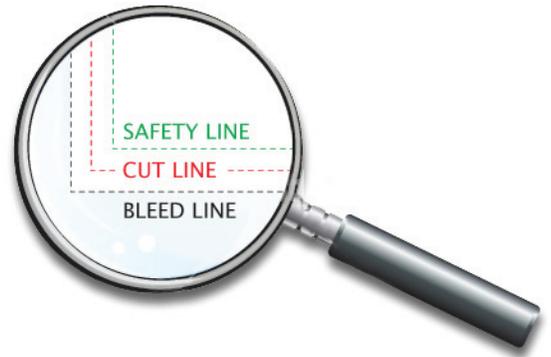


Figure 5

## Image bleed and safety area

### Bleed

When setting up your image files for contour cutting, it is crucial to have the proper amount of image bleed. The term "bleed" refers to a portion of your image that will extend beyond the cut lines (this is on your actual image, not on the cutting mask).



When an image ends at the edge of your cut line, allow it to extend 1/8" beyond the cut. This will compensate for minor fluctuations in the cutting path that could leave blank space between your image and the edge of the media, as opposed to a nice clean cut where the image meets the edge without any gaps.

### Safety Area

The safety area is just as it sounds, a safe space between the cut and any crucial type or images. Images that are a simple background or do not have any crucial edges can run off the edge of the media, but elements of your design that shouldn't be clipped must be a minimum of 1/8" inside of the design's edge.

If you set up your design with proper bleeds and safety area you'll end up with a final product that has no blank space around the edges and none of your crucial images will be damaged. Reminder: The cutting mask needs to be formed to the exact edges that you would like to have cut. No bleed or safety is necessary for the cutting mask, because it will not be printed. It is simply a guide for our cutting machines.

### We're here to help!

If you need assistance in setting up your files for contour cutting, contact our prepress team at SLB Printing.

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