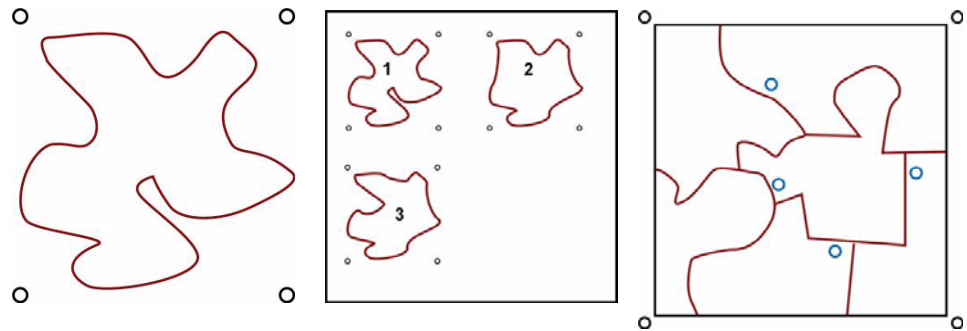# I-CUT CROP MARKS

This document describes how to set up EFI XF to produce i-cut crop marks for the MGE i-cut software.

- i-cut level 1 (rectangular cutting) is supported in all program versions from EFI XF 3.0.

- i-cut level 2 (contour cutting) is supported in all program versions from version EFI XF 3.1.4. For i-cut level 2 crop marks you require a license for the Production Option. furthermore, it is recommended that the Spot Color Option is installed on your computer, as otherwise only separated files can be processed as i-cut level 2.

i-cut crop marks

General

There are three different types of crop marks: i-cut filled, i-cut reverse, and i-cut ring.

The communication between EFI XF and i-cut is based on the i-cut language i-Script. For i-cut level 1 crop marks, EFI XF creates a so-called *.cut file. For i-cut level 2 crop marks, a *.cut and an *.ai file are created.

The *.cut file describes the position (coordinates) of the crop marks; the *.ai file contains the contour information. During printing, the cut information is extracted from the bounding box of the incoming job.

i-cut level 1

You select i-cut crop marks on the Marks tab of the Layout bar.

i-cut crop marks

The crop marks define the position of the substrate on the table and are automatically placed around the image for which they have been selected. You can adjust the position of all crop marks in relation to the image by editing the bleed value on the Marks tab. However, it is not possible to add, delete or change the position of individual marks.

The crop marks are printed as well as saved to a cut file. You define where the cut file is saved on the Cutting tab of the Layout bar. If no path is defined, the files are saved automatically to the default folder ...\EFI XF\Server\Output for all non-VUTEk printers. If you are printing to a VUTEk printer, cut files are saved by default to the same folder as the RTL file.

i-cut crop marks
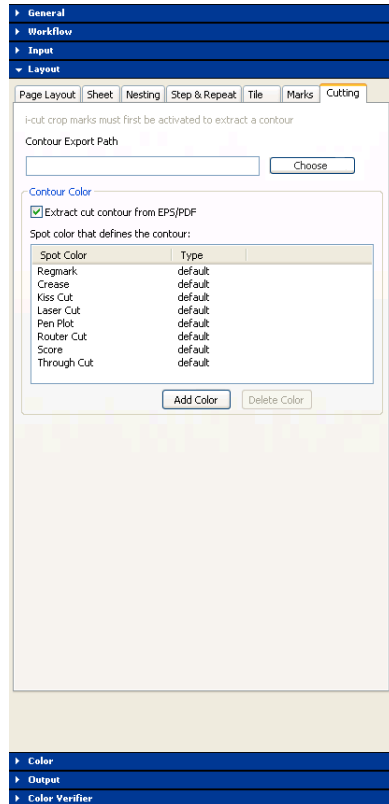
i-cut level 2

i-cut level 2 enables EFI XF to process and save to file complex, irregular cutting paths defined in any popular graphics application. Afterward, images can be trimmed using the MGE i-cut software.

i-cut level 2 contour cutting can be applied to all EPS and PDF print jobs and allows you to:

- Extract cut contours

- Nest multiple images with cut contours

- Extract i-cut crop marks

- When processing PS-based files, it is not possible to use the RGB working color space in conjuction with i-cut marks. This is because all spot colors are converted to RGB and can, therefore, not be extracted.

Preparing i-cut files in the graphics application

In order to apply i-cut level 2 cutting in EFI XF, it is important to observe the following when creating the image file in the graphics application:

- The contour must be defined as a separate layer.

- Different contours can be saved in different layers.

- The contour must be defined as a spot color.

EFI XF provides the following set of default contour spot colors commonly used in the industry. Each name represents a particular cutting type.

- Regmark

- Crease

- Kiss Cut

- Laser Cut

- Pen Plot

- Router Cut

- Score

- Cut

EFI XF automatically detects separated files with these default names.

MGE provides a plug-in for Adobe Illustrator, which makes it easier to set up contours. The plug-in is available as a free download from http://www.mge-us.com.

If the contour is saved under a non-default name, you must define it in EFI XF. This enables in-RIP separation which makes it possible for the contour information to be exported as a separated file. If in-RIP separation is not enabled, the contour layer is simply output as part of the composite print job in accordance with the setting defined for the handling of unknown spot colors.

For EPS files, in-RIP separation must be set to Force. You will find this setting on the PS/PDF tab of the Input bar.

Settings in System Manager

The workflow template Contour cutting (i-cut) is provided with all program versions of EFI XF 3.1.4 and later. This template contains predefined settings for outputting i-cut level 2 print jobs.

If you print to a workflow that is not based on the i-cut workflow template, you must first select i-cut crop marks on the Marks tab of the Layout bar. This is because i-cut level 2 is supported only in conjunction with i-cut level 1.

On the Cutting tab of the Layout bar, select the check box Extract cut contour from EPS/ PDF. This setting ensures that the contour information is extracted from EPS and PDF print jobs and a cutting file is created during job processing.

The list box contains a global list of default contour types that are commonly used in the industry. If the cutting path is defined as a spot color with one of the default contour color names, the job can be output without further ado.

If the name of the cutting path does not match any of the default contour color names, you must define it EFI XF. Otherwise, an error message is displayed during job processing to indicate that the contour is an unknown spot color.

To add a contour color to the list, click Add color. This adds a new row to the table of global contour colors. Use the edit box to type in the name of the contour color, making sure that you use the same name defined in the application. Then, press Enter to save. Contour colors created in this way are added to the global list and are available for all workflows. Once you have defined a contour color, the cut data can be extracted to file.

Outputting i-cut level 2 print jobs

In Job Explorer, contour colors can be selected but not defined. This means that:

- Default contour spot colors are processed automatically and cut data is extracted to file.

- Non-default contour colors that have previously been defined in System Manager are also processed automatically and cut data is extracted to file.

- Non-default contour colors that have not previously been defined in System Manager are detected as "unknown". In this case, you are requested to select the contour color from the drop-down list box. If the name is not available for selection, the cutting contour is output as composite with the rest of the print job.

Removing visible contour markings from the printout

Normally, contour markings are not visible in the printout. However, occasionally, the contour may be seen as a white outline. This is because the overprinting attribute of most contours is set to knock out and not to overprint.

Result of knock-out setting

In this case, you need to open the file in an external application such as Enfocus PitStop and set the overprinting setting to overprint.

Correct setting in Adobe Illustrator

The following illustration shows the effect of applying the overprint setting.

Correct setting in Adobe Illustrator

Printing without cutting data

In some instances, you may wish to remove all evidence of cutting data from a print job. You can do this by deselecting the check box Extract cut contour from EPS/PDF on the Cutting tab. This ensures that no cutting file is created.

If you do not want the cutting contour to be printed as part of the composite printout, deselect the contour color on the Spot color tab.

Deactivating a contour color
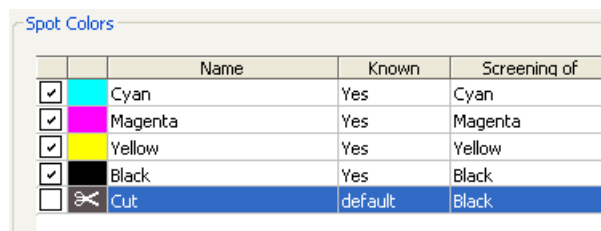
Workflow examples

The following table illustrates some examples of how EFI XF behaves when certain jobs are loaded.

Defined cut path colors in EFI XF	Colors included in job	Defined cut path colors in the job	Behavior
Cut Kiss Cut Cut Through	Cyan Magenta Yellow Black	Kiss Cut	The job is output without error.
Cut Kiss Cut Cut Through	Cyan Magenta Yellow Black PANTONE 130 CV	Kiss Cut	The job is output without error.
Cut Kiss Cut Cut Through	Cyan Magenta Yellow Black		If the the process colors are not defined as spot colors, the job is output but no cut data is extracted.
Cut Kiss Cut Cut Through	Cyan Magenta Yellow Black PANTONE Hexachrome Blue	Dieline	Depending on the spot color definitions, the job is output. However, no cut data is extracted.
Cut Kiss Cut Cut Through	Cyan Magenta Yellow Black	Kiss Cut Cut	Job processing is not possible because multiple contour colors are detected.

Processing i-cut level 2 files in the MGE i-cut software

EFI XF exports two files — an *.cut file and a *.ai file. It is important that both are located in the same folder, otherwise the MGE i-cut software is not able to process the file.

The names of the contour paths defined in the graphics application and in EFI XF are included in the *.cut file. Each stands for a particular cutting type. However, the cutting properties of each type can be adjusted in the milling tool of the MGE i-cut software, if required.