Create Simulation DeviceLink Profile for Process Colors dialog box

Minimum Highlight Dot: Simulate

> **Note:** The **Simulate** settings support both Kodak and custom media configurations.

Lets you specify whether to simulate the highlight dots seen in flexographic printing and which technique to simulate. A range of highlight dots is too small to image on flexographic plates. The dots that can't be imaged must be removed from the tint scale or moved into the portion of the tint scale that can be imaged. Select one of the following options:

- **No Highlight Adjustment**—turns off the minimum dot simulation.
- **Highlight Bump**—simulates the technique that moves the fine highlight dots into the tint scale that can be imaged on a flexographic plate. The technique is sometimes called a bump curve. For example, when 5% is the smallest highlight tint that can be imaged on a flexographic plate, all tints from 0 to 4.9% are moved into the tint scale between 5 and 100%. As a result, printed images appear darker.
- **Highlight Minimum Dot**—simulates the technique that removes the fine highlight dots from the flexographic plate, and images them at 0% or paper tint. As a result, printed images appear to lack detail in highlight areas.

The appropriate press characterization data is required to simulate flexographic highlight dots. The following table summarizes how the characterization data works with the different **Simulate** options.

Simulate option	Press characterization data
No Highlight Bump	Select characterization data that reflects a press run without flexographic highlight dot adjustments.
Highlight Bump	Select characterization data that reflects a flexographic press run with plates imaged for a highlight bump. For the best results, the characterization data should reflect the number(s) that you type in the Minimum Dot on Plate (%) area in the Cyan, Magenta, Yellow, and Black boxes. For example, type 8.0 in the Minimum Dot on Plate (%) boxes when you are using the sample characterization file named IT874_Highlight_Bump_8.cgt.
Highlight Minimum Dot	Select characterization data that reflects a flexographic press run with plates imaged for a highlight minimum dot. For the best results, the characterization data should reflect the number(s) that you type in the Minimum Dot on Plate (%) area in the Cyan, Magenta, Yellow, and Black boxes.

Minimum Dot on Plate (%)

Use the **Cyan**, **Magenta**, **Yellow**, and **Black** boxes to identify the smallest tint imaged on the flexographic plate. Type a percentage from 0.1 to 10.

Minimum Dot Printed on Press (%)

(Optional) If you measured the printed target that you used to generate the characterization data, complete this area. Otherwise, leave the area blank. Remember that the **Minimum Dot Printed on Press (%)** option reflects how the press currently prints; it does not reflect how you *want* the press to print. Use the **Cyan**, **Magenta**, **Yellow**, and **Black** boxes to identify measurements of the minimum dot printed on press. Type a percentage from 0.1 to 10.

Proofer Separation Control

A black generation strategy is a method of determining how much black ink, versus a combination of cyan, magenta, and yellow, is used to generate a particular color.

Full Reseparation

Completely reseparated. Solid colors in the original file may not remain solid. The black generation parameters that you specify are used, which may result in using less chromatic ink and more black ink. Use the black-generation settings to customize the DeviceLink.

Color and Black Purity—Maintain Solids

Maintains color made with only one or two inks. No other inks are added to these colors. Solid (100% tints) primaries and secondaries are not affected and remain solid.

Color and Black Purity

Same as **Color and Black Purity—Maintain Solids** but solid colors may be reduced to a tint. You can enter a number in the **Total Ink Limit (%)** box.

Black Purity Only

Any colors other than black channel (solid K, K-grays) may be adjusted. You can enter a number in the **Total Ink Limit (%)** box.

Retain CMYK Integrity

All color builds may be adjusted. Black will not replace any gray components. You can enter a number in the **Total Ink Limit (%)** box.

Choose this option when you want to match the color and original inking, including the relative proportion of black in the original recipe.

Rendering Intent

Select a rendering intent for the DeviceLink:

- **Relative**—transforms colors without simulating a paper tint. The **Relative**rendering intent clips out-of-gamut colors.
- **Absolute**—transform colors and simulates a paper tint. The **Absolute**rendering intent compresses out-of-gamut colors and maps them to the edge of the gamut.
- **Perceptual**—transforms colors without simulating a paper tint. The **Perceptual** rendering intent compresses all colors to map them to the smaller color space.

Simulate Substrate

When the **Rendering Intent** list displays **Absolute**, you can choose to define a substrate in the inkjet proofer color space (not the press color space). The software will override the substrate definition in the characterization data with the new substrate definition.

- **Leave Unchanged**: turns off the override, and uses the substrate definition in the characterization data.
- **Edit CMYK**: lets you define the substrate in CMYK tint percentages. Type a percentage from 0 to 100. Changes will be spread to colors near the white point.
- **Edit L*a*b*:** lets you define the substrate in L*a*b* color space. In theL*box, type a number from 0 to 100. In thea*box and theb*box, type a number from -128 to 127. Changes will be spread to colors near the white.
- **No Paper Tint:** Sets the White Point CMYK value to zero; while leaving all other colors around the white point unaltered.

Proofer Separation Control

- Black Strength: To specify the relative quantity of black vs cyan, magenta, and yellow used to generate the neutral gray component of colors. As you increase the strength, colors can contain more black.
- Start Black: Specify the start point on the neutral axis for black ink. For example, if you set the start point value to 20%, tones less than 20% will print with CMY inks only.
- Max Black: Specify the maximum allowable percentage of black ink used in the black separation.
- Total Ink Limit: Specify the maximum sum of tint values of all the inks.

Simulation Source

Select an ICC Source Profile or a CGATS5 File of spectrophotometer measurements of the IT8.7/4 chart printed on the press or proofer that you want to simulate.

Note: The supplied CGATS files are located in the Proofer Client > Docs folder

Media Configuration

Select a media configuration to use with the DeviceLink.

Proofer Profile

Specifies the proofer profile with which you will use the simulation DeviceLink. The software uses the proofer profile to create the DeviceLink. (The proofer profile is used as the destination profile when creating the DeviceLink.)

Parent topic: ICC device and DeviceLink profiles