Activity 9: Use a color setup to align a press with an industry specification for gray balance

Background

Contents

You can align a printing device with an industry specification by creating a color setup, adding your device as the PCO, and selecting the industry specification as the PCO simulation target.

The PCO may have a colorimetric response or a tonal response, depending on the color response type in its device condition and the way the simulation target is defined:

- If the device condition in the PCO has a color and tonal response, you can generate ICC Device and DeviceLink profiles and use the tonal-match method or the gray-balance method to generate curves.
- If the device condition in the PCO has a tonal color response, or if the simulation target contains only tonal data (for example, if the simulation target is an ISO TVI curve), you can only use the tonal-match method to generate simulation curves.

Tasks

Goal

Create a color setup and add a press as the PCO, and then import a measurement data file to establish a colorimetric response and a tonal response. This generates gray balance curves to align a press with an industry specification. Note that the device profile is only required if you are generating DeviceLinks. For this activity, there is no need to create a DeviceLink for final output so you don't need to generate the device condition profile and the PCO profile.

Task 1: Create a new color setup and add a press as the PCO

- In ColorFlow, click the Color Setups tab, and then click the Add button +.
- The **Devices** dialog box appears. If necessary, open it manually by selecting **View** > **Devices** or by doubleclicking the **color setup viewer**.
- 3. From the **Devices** dialog box, add a new offset press device:
 - a. Click Add Device.
 - b. In the **Device Type** list, select **Offset Press - Sheetfed**.
 - c. Name the device as **Press A**.

- **d.** Drag **Press A** to the center of the viewer window.
- 4. In the **Color Setups** table, double-click the name of the color setup you just created and enter GRACOL C1 2006.
- 5. Select the **Show in Prinergy** check box.
- **6.** Click the **Properties** icon **i**con and define new properties for the device condition:
 - **a.** Click the **Edit** button next to the **Plate Setup** list.
 - b. In the Plate Type list, add or select Kodak Thermal Gold.
 - c. In the Screening list, add or select 200 lpi.
 - d. In the Plate Line list, add or select 100.
 - e. Click OK.
 - f. In the Substrate list, add or select Type 1.
 Note: if you select properties that were used in a previous activity, the message Use Existing Device Condition appears. For the purpose of this training, you must use unique properties.
- 7. Click the **Measurements** icon 🧐.
- 8. In the Charts list, click P2P25Xa i1iSis (or P2P25 i1iO).
- **9.** In a real-life situation, you would need to export the chart, output the chart from Prinergy, and then measure the chart in ColorFlow. For the purpose of this training, you import a sample data file from your ColorFlow installation folder:
 - a. Click the Measurement tab.
 - b. Click Import.
 - **c.** In the dialog box appeared, keep the default value and click **OK**.
 - d. Browser and select \Program Files\Kodak\ColorFlow\SampleData\Measurements\ ColorFlowSheetfed200lpiType1Linear.cgt
 - e. Click Open.
 - f. Click Close.

Task 2: Complete the color setup

- **1.** Click the **Simulation** icon 📿
- 2. From the Target list, select GRACoL 2006 Coated 1.
- 3. From the **Curves** list, select **Gray Balance**.
- 4. From the **DeviceLink** list, select **None**.
- 5. Click **OK**.

Task 3: Output a page using the color setup in Prinergy

- In Prinergy, create a new job, and name it as XX Press to Industry Spec (where XX = your initials).
- 2. Refine GrayBalanceTestFile.pdf with 1stRef-Normz.
- 3. Create a new Loose Page Output Process Template, and name it as VPS GRACoL:
 - a. In the Output To list, select Virtual Proof.

- b. Select the ColorFlow
 Color Relationship Management check box.
- c. For Halftone Output Mode, select Print Production
- d. In the **Snapshot** list, select **Current State**.
- e. In the Color Setup list, select GRACoL C1 2006.
- f. In the **Device** list, select **Press A**.
- g. Select the Device Condition.
- h. In the ColorConvert settings, leave the Match Colors In Page Content check box cleared. Color matching will not be applied on output.
- i. Save the process template.
- **4.** Select the test refined file, and process it with the process template **VPS GRACoL**.

Outcome

You have created a color setup to align a press to the GRACoL specification. The advantage of using a color setup rather than a print calibration curve to align a press with a specification is that you can align other printing devices with your press by adding them as the SCO in the color setup.