





# Creating a print calibration curve

1. In the **Print Curves** tab, under **Calibration Curves**, click the **Add** button .
2. [Add the print device](#) and drag it to the viewer window.
3. Click the **Properties** icon  and [define the device condition properties](#).
4. Create a measurement chart and measure device output samples:
  - a. Click the **Measurement** icon .
  - b. Do one of the following actions:
    - If you already have the measurement data file for your print device, you can [import it](#).
    - If you only want to generate a [tonal match](#) curve, [create a tint ramp chart and measure it](#).
    - If you want to generate [gray balance](#) curves, [measure a built-in P2P25 or P2P51 chart](#). You can also use a Full Color chart.
  - c. When you launch a measurement or import operation, in the Print Characterization Curve dialog, select the curve that you used in Prinergy when you output the test chart.

This is typically Linear, but may be a cutback curve for high-gain printing, or a bump curve for flexographic printing
5. Select the print curve target and define calibration:
  - a. Click the **Calibration** icon .
  - b. If you want the curve to be visible in Prinergy, select the **Show in Prinergy** check box.
  - c. Click the **Process Inks** tab and select the desired target device condition from the **Target** dropdown list.

ColorFlow provides a list of built-in industry CMYK specifications that you can use as your target response. If you can't find the desired target from the list, you can [create a custom CMYK Reference device condition](#) as your target.

If you selected the **G7** check box, the G7 target is automatically selected and the **Target** list is not available for selecting an alternate target.
  - d. Select the desired curve method from the **Curve Method** dropdown list. If only one curve method **Gray Balance** or **Tonal Match** is available, the selected target does not contain both response types. See [Characterizing color and tonal responses of a device condition](#).
  - e. Optionally click **View Curves...** to check the shape of the calibration curves. If curve method **Gray Balance** is selected and the curve correction appears too aggressive in the 3/4-tone and shadow region, adjust the **3/4-tone Correction** slider. This may occur if the 100% CMY patch has a strong cast.
  - f. If you have added and measured one or more spot inks, in the **Spot Inks** tab, select a target from the **Target** list and select a curve method, as follows:
    - If you have measured the SCTV response of spot inks, select **Target: Linear** (selected automatically). This sets the **Curve Method** to **Linear SCTV**.
    - To calibrate spot inks to an EDA or TVI target, select any **Target** value other than **Linear** or **None**. This sets the **Curve Method** to **Tonal Match**.
    - To generate linear curves that can be manually adjusted, select **Target** value **None**. This sets the **Curve Method** to **Manual Adjustments Only**.
    - **Note:** For a spot ink whose response has *not* been measured, the following settings always apply: **Target: None** and **Curves Method: Manual**

**Adjustments Only.** You can view the **Curve Method** for each spot ink by clicking **Details...** in the Calibration definition dialog.

g. Click **OK**.

**Notes:**

1. If the calibrated output device condition has [extended process inks](#), possible curve methods are renamed **Gray Balance and Spot Color Tone Value** and **Tonal Match and Spot Color Tone Value**. For either method, extended process inks are calibrated to match the [Spot Color Tone Value \(SCTV\)](#) response of same-named inks present in the selected target. For extended process inks not present in the target, linear SCTV calibration is performed.
2. When you create a print calibration curve, the output device condition also appears as an SCO in a color setup whose PCO is the simulation target device condition. The curve can be selected in Prinergy by either its curve name, or by the color setup and output device condition.