

Applying ColorFlow curves and making tonal adjustments

If a printing plate has imaged and run on press, but the press is not printing with the desired response, you may need to recreate the plate using a different ColorFlow curve channel for one or more separations. You can also make tonal adjustments to the assigned ColorFlow curve channel. These adjustments, made on-the-fly from the Start Process dialog box, are appended to the ColorFlow calibration curves and have no effect on ColorFlow colorstores.

Applying a custom ColorFlow curve channel may be required if you have a spot color that cannot use the default calibration curve—for example, a metallic spot color. In such a situation, you can define a custom curve channel in ColorFlow for Metallics. When a job is run, selected spot color separations may be mapped to this (or another) curve channel.

Tonal adjustments may be required because of mechanical problems on the press or by lithographic problems caused by press ink/water adjustments. Or, a customer might simply want a color change. A common solution is to remake one or more plates with an adjusted calibration curve.

Note: This is different from the Plate Remake feature, where the primary purpose is to produce an *identical* plate to replace a worn or broken plate, using the same unique plate ID number, and the same settings and output device that were used to output the original plate. Tonal adjustment is used when you need to produce a different version of the plate.

1. In Workshop, start a final output process.
2. In the Start Process dialog box, click the **Tonal Control** button.
The Tonal Control dialog box opens, automatically populated with the information from the separations in the surfaces of the job selected for output.
3. From **Separation** list, select the first separation that you want to work on.
The **Curve Channel** list displays the ColorFlow curve channel that has been assigned for the selected separation.
4. From the **Curve Channel** list, select a different curve channel, if required.
The details of the curve channel that is selected are displayed in the values and slider positions in the **Curve Adjustments** section.
5. In the **Curve Adjustments** section, drag the sliders to make adjustments. Alternatively, you can type the values in the boxes under the sliders. The adjustment controls include:
 - The **Midtone (50%)** control affects the full tonal range. The **Quartertone**, **3/4 Tone**, **Highlight**, and **Shadow** points are adjusted according to the values in the **Midtone** control.
 - The **Quartertone (25%)** control affects the lower half of the tonal range. The **Highlight** point is adjusted according to the value in the **Quartertone** control.
 - The **3/4 Tone (75%)** control affects the upper half of the tonal range. The **Shadow** point is adjusted according to the value in the **3/4 Tone** control.
 - The **Highlight (10%)** and **Shadow (90%)** controls are the most localized, and do not affect any other adjustment points.
 - A Mindot (value%) also appears if a curve has been defined as a flexo curve with a bump. The value displayed is whatever value was defined as the minimum X value, but typically this value is 0.4%.
 - Clicking **Reset** restores the tonal adjustment values to 0.0 and the sliders to midpoint.
6. Repeat the process for any other separations that require tonal adjustment.
7. Click **OK** to return to the Start Process dialog box.
The calibration curve channels are modified according to the specified tonal adjustments.

Notes:

- If you remake a plate using the **Tools > Plate Remake** menu item, all the tonal adjustments applied to the original plate will be applied to the remake. You cannot make further tonal adjustments to a remade plate.

- It is not possible to reduce solid colors (with 100% ink) using a calibration curve adjusted with tonal adjustment. This is a limitation of Adobe. If you want to reduce 100% solid colors (in particular, spot colors), you need to set the **Output PT** parameter so that the **Screen Solids** value is 90%. For example, in **Final Output > Calibration & Screening**, the **Screen Solids** value is set to **90%**.