

Xerox[®] DocuColor[®] 7002/8002 Digital Press

Calibration and Profiling with ILS on CX Print Server

The Automated Color Quality Suite (ACQS) on your Xerox[®] DocuColor[®] 7002/8002 Digital Press includes software and an Inline Spectrophotometer (ILS). This suite and the ILS assembly work with your print server to provide unique calibration and profiling capabilities:

ACQS Function	CX Print Server, Powered by Creo [®]
Color Calibration with ILS	Semi-Automated <ul style="list-style-type: none"> • Operator initiated • Scans and measures targets automatically without an external spectrophotometer • Resets color tables to original values to maintain consistent color
Profiling with ILS	<ul style="list-style-type: none"> • Operators can create destination profiles without having to scan targets with an external spectrophotometer. The press prints color targets while the ILS measures them. The system then develops a map so that output colors can be produced that accurately replicate a known standard such as GRACoL or SWAP. The mapping is written into the profile for the type of media and line screening being used.

Performing Color Calibration with ILS

Daily calibration keeps the color consistent over time because a press may drift from its original color output. This happens because of normal use, changes in temperature and humidity, and changes in paper. When you calibrate, you bring the press back to its original high-quality output.

Step 1: Verify that Inline Spectrophotometer is set as the calibration device

1. From the *File* menu, select **Preferences**.
2. Select **Calibration and Color**.
3. Click the radio button for: **Calibration is done using Inline Spectrophotometer**. This is the default and will be selected, unless changed by an administrator.
4. Click **Save**.

Step 2: Create a Calibration Table

1. Suspend the Process Queue and set the Print Queue to release jobs.
2. From the *Tools* menu, select **Calibration**. The ILS Calibration Tool window opens.
3. From the drop-down menus, select the **Coating, Weight** and **Tray** for the paper you want to calibrate on.
4. At the press feeder trays, verify that the stock selected in the last step is loaded in the selected tray.

5. For Screening, select the **line screening** you want to use. **Dot 200** is selected by default. If you select more than one line screening option, separate calibration tables are created for each one.
6. Click to accept the **default name** for this calibration table, or enter a **custom name** in the *Save As* field. The selected screening option(s) that you selected is appended to the default table name when it is saved.
7. Click **Calibrate** to begin the calibration process. During the calibration process, a progress bar appears at the bottom of the ILS Calibration Tool window. The progress bar indicates the calibration stages: printing the charts, measuring them, and saving the measurements.
8. Click **Close** when the calibration completes and green check marks appear next to each line screening selected for the calibration.

The new calibration table is added to the list of calibration tables in the Calibrations window in the Resource Center (available from the Tools menu). You can also link a calibration table so that it is automatically applied when a stock and screening are selected for a job. To link a calibration table, double-click the Job and select: **Color > Calibration > Linked**. You can also apply any other saved calibration to a job using this same menu.

Creating a Destination Profile with ILS

Colors can look different when printed on different stocks, especially stocks that have a different gloss or a different color. When a profile is created for each different stock, the system develops a map so that the output colors on that stock will match a known standard. The mapping is written into a profile for the type of media and line screening used. Once created, the custom profile can be applied to jobs. The profile automatically adjusts the output color for a job so that the color is accurate for the media being used. Profiles ensure accurate and consistent color across different media as well as the same media used at different times. Because they replicate color from a known standard such as GRACoL or SWAP, they also ensure accurate and consistent color across output from different presses.

When creating a profile, you use some of the same settings as when performing a calibration.

1. Suspend the Process Queue and set the Print Queue to release jobs.
2. From the *Tools* menu, select **Profiling Tool**.
The Profiling Tool window opens.
3. In the *Warm up Print* field, verify that the quantity is set to **10**.
This option lets the press warm up by printing a number of copies of a file before the standard ECI chart is printed and measured by the Inline Spectrophotometer. This warm-up process helps ensure the best profiling results.
4. From the drop-down menus, select the **Paper Coating, Weight and Tray** for the stock that you want to profile.
5. At the press feeder trays, verify that the stock selected in the last step is loaded in the selected tray.
The paper stock used must be loaded as SEF (short edge feed).
6. For Screening, select the **line screening** you want to use. **200 Dot** is selected by default. If you select more than one line screening option, separate profiles are created for each one.
7. For the Profile Name, the Profiling Tool automatically names the profile using the paper stock selected. Click to accept the default name for this profile, or enter a custom name in the *Save As* field.
8. In the *Save in* area, leave the default location set to **Profile Manager**.

9. Click **Create Profile** to begin the profiling process.
During the profiling, a progress bar appears at the bottom of the Profile Tool window. Copies of the Warm up chart are printed first, followed by 71 sheets of 11 x 17" (279 x 432 mm) size paper consisting of the ILSECI2002 chart. During this time, the file is printed and measured. If Letter size paper (or A4) was selected, the quantity is doubled.
10. Click **Close** when the profiling completes and green check marks appear next to each line screening selected for the profiling.

It takes about 10 minutes for the server to process the profile before making it available. The new profile is added to the list of profiles residing in the Profile Manager located in the Resource Center on the server. If a profile with the same name exists in the Profile Manager, the new profile overwrites the existing one.

Applying a Destination Profile

1. From the *Tools* drop-down menu, select **Resource Center**.
The Resource Center window opens.
2. From the *Resource* drop-down menu, select **Media and Color Manager**.
3. On the left of the window, select the **coating and weight** of the media that you want to link to the profile.
4. Under *Screening*, click the **line screening** for the profile that you want to link to the selected media.
5. Under *Profile*, select the specific **Destination Profile** that you want to link to the selected media.
6. Under *Calibration*, select a specific **Calibration** to apply to the selected media.
7. Click **Close**.

A paper stock is now linked to a destination profile and also a calibration table. When this stock is used for a job, these color controls will automatically be applied to the processing and printing.