



Gans Ink & Supply Company, Inc.

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PROCESS CONTROL REQUIREMENTS for G7 GRAY-BALANCE and ICC PROFILING

The following checklist has been compiled to identify the necessary process control tools and conditions that ***must*** exist in order to create and maintain a color-managed workflow. These are the minimum requirements and are non-negotiable if even a modest level of process consistency is desired.

Do you have a person on-staff that can navigate your front-end workflow RIP or RIPs?

You must be able to calibrate and linearize your proofing device(s) and platesetting device(s). You must be able to input correction curves into both the proofing device(s) and platesetting device(s). You must be able to input a source ICC profile and a destination ICC profile.

Do you have a standardized D50 viewing condition? All color evaluation/matching is dependent on the light source reflecting back to the human eye. Pigments do not react the same under different lighting conditions. In order to determine if colors are properly matching it is necessary to analyze them under a D50 light booth or light source conforming to ISO 3664.

Do you have a handheld densitometer or spectrophotometer that is properly calibrated and the press operator is familiar with? If you have not been in the habit of using a densitometer on press in the past it will become necessary to utilize one in order to maintain a color-managed workflow. It is also strongly recommended that you acquire and use a plate reading device for an additional level of process control in the pre-press/platemaking area.

Is your printing press ready to be profiled? It is critical that your press(es) be in optimal mechanical and chemical condition. There can be no movement (slurring) on the sheet, excessively high or low dot gain on any individual printing unit or unevenness in densities across the width of the sheet. Any of these conditions will render all data useless. It is not necessary that the press be in "perfect" condition, but it is critical that it be in a consistent and stable condition.

Do you have a test form with the necessary targets for determining gray-balance and profile characterization? Gans Ink strongly recommends that you use our test form file as it has been developed specifically for gray-balance evaluation and profile characterization. This form is provided to our customers free of charge.

Do you have the time? The full press calibration process requires a minimum of 2 press runs per press, 3 or more if any problems on press are detected. Each of the 2 press runs will take approximately 2 hours, with about 2 hours in-between for calculations and a new set of plates. The second "qualification" run may go faster, unless there is inconsistency detected somewhere in the process. Both of these press runs should be scheduled for the same day, with the same equipment and press crew. For proofing devices the same steps are required, but usually less time is necessary. Calibrating and profiling one or more proofing devices should be scheduled for a different day than the press qualification.

If you answered NO to any of these questions then consistent color matches between the proof and the press will not be possible due to inadequate process controls. Gans Ink & Supply can help you acquire these process control tools and achieve the necessary conditions for a fully color-managed and consistently performing workflow.