

Re: Preparing for a fingerprint – SGS Recommendations

Dear Printer,

Use of press time and materials for fingerprinting is an expensive, but important investment. Southern Graphic Systems respects this and is committed to helping you realize the best return on your investment. With this in mind, we would like to share some key recommendations that can help you better prepare for the fingerprint. Attention to these details can greatly advance our shared goal of an efficient, accurate, and reliable result.

Project Planning...

- Early on, fingerprint participants need to confirm and discuss project objectives, requirements, specifications, concerns, deliverables, and schedule. This is also an excellent time to review current graphic performance and identify improvement opportunities. A collection of print samples (web samples) will support this type of evaluation process. An SGS representative will work with you to arrange a time for these discussions.

Prior to the fingerprint date...

- Verify that all color standards are approved and available for press.
- Verify that a certified spectrodensitometer and its calibration tile, are available.
- Verify that fresh inks (types, colors, and quantity) are correct, and will be available.
- Verify that fresh substrate (types, and quantity) are correct, and will be available.
- Review the following with pressroom staff participating in the fingerprint...
 - (Keep in mind that the fingerprint may cross shifts depending on start time and duration.)
 - A coordinated plan for what order substrates and inks will be fingerprinted.
 - Standard setup conditions for the fingerprint(s). (refer to Trial Data Sheet)
 - Any special requirements or handling, i.e. ink, additives, color targets, substrate, etc.
- Fingerprint conditions should be normal and repeatable.
- If possible, please arrange for ink support to attend fingerprint for technical assistance.

General press preparation for fingerprint...

- Inspect impression rollers for any ink build-up, and verify their durometer.
- Install fresh doctor blades.
- Prepare fresh inks, both process and spot color(s).
 - (Do not use recycled or work-off inks during a fingerprint.)

Pressroom Fingerprint...

- Set up press as planned.
- Follow your standard practices on setup material if applicable.
- Balance doctor blade for even wipe.
- Make cautious adjustments.
- Final adjustments need to be determined from samples printed on target substrate.
- While maintaining stable and repeatable press/ink conditions...
 - Address any visual defects that influence accurate measurement of printed results. (see checklist)
 - Adjust ink for smooth, consistent lay, including white back-up, if applicable.
 - Adjust ink and doctor blade for clean, solid dots.
 - Adjust process color strength for target densities, and spot colors for target match (Visual & DE)
- SGS representative will be present to evaluate, collect, and manage samples leading to approval.
- Once approved, run press in best register (very important).

- Run press for approximately 10 minutes, enough to stabilize press conditions so that final sample is consistent with every day printed product. (If flying splice is an option, run 10 minutes, and splice to a new core and run about ½-1” of material.)
- Complete a Trial Data Sheet for each condition fingerprinted.
- Collect at least 40 repeats for each condition fingerprinted. (very important)

Trail Data Sheet...

The Trial Data Sheet attached is intended to help document each fingerprint result. This information will be very helpful as a ‘map’ back to the fingerprint results, or when working to isolate reproduction issues at press. This is the best place to document something that requires explanation, adjustment, or modification. It will also help identify what conditions were not fingerprinted, for future reference.

Report and Color Measurement...

After analysis of the fingerprint samples, SGS will provide a formal report back to you, the printer. It will include graphed results and measurements from the samples provided, predicted dot gains once use of the new press profile begins, a completed copy of the Trial Data Sheet, and any observations made during our analysis. Color spectrophotometer readings taken by SGS will be based on the following parameters...

Density: Status T Color: Auto Mode: Absolute Reference: Auto
 Color: Color Space: L*a*b* DE Method: CMC Illum-Obsrv: D50 / 2°
 Dot Area: N-Factor Off

We hope these recommendations will be helpful. Please let us know if you have any questions or concerns. We look forward to working with you.

Regards,

Southern Graphic Systems

A checklist of visual defects which can influence accurate measurement of print results...

- | | | |
|-----------------------------------------------------|---------------------------------------------|-------------------------------------------------------|
| <input type="checkbox"/> Poor register or fit | <input type="checkbox"/> Mottle | <input type="checkbox"/> Poor ink trap |
| <input type="checkbox"/> Spots | <input type="checkbox"/> Trailing | <input type="checkbox"/> Snowflaking or pin-holing |
| <input type="checkbox"/> Blade lines | <input type="checkbox"/> Flooding | <input type="checkbox"/> Excessive fisheyes or gels |
| <input type="checkbox"/> Color variation across web | <input type="checkbox"/> High dot gain | <input type="checkbox"/> Poor adhesion/rub resistance |
| <input type="checkbox"/> Streaks | <input type="checkbox"/> Poor white opacity | <input type="checkbox"/> Distortion |
| <input type="checkbox"/> Hazing | <input type="checkbox"/> Missing detail | <input type="checkbox"/> Stretch |
| <input type="checkbox"/> Blade chatter | <input type="checkbox"/> Screening | <input type="checkbox"/> Snapback |
| <input type="checkbox"/> Moiré or repeat patterning | <input type="checkbox"/> Dry-in | <input type="checkbox"/> Wrinkles |
| <input type="checkbox"/> Low/high density | <input type="checkbox"/> Pick-off | <input type="checkbox"/> Baggy edges |