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GUIDELINES FOR RUNNING QUALITY TWO-COLOR WORK WITH AREAS OF "OVERPRINTING" (direct color on color) ON A T-51 COLOR PRESS EQUIPPED WITH AN AQUA-FLOW DAMPENING SYSTEM

1. Run the dark color of ink in the T-51 and the light color of ink in the parent press.
2. Use a fully transparent color. DO NOT try to use a semitransparent or opaque ink as they will not trap properly.
3. The dark color of ink should have less tack than the light color of ink. If necessary, reduce the dark color with a paste compound type of tack reducer.

Note: 1, 2, & 3 above need not be followed in a regular printing operation if you are not overprinting.

4. One step fountain solutions that are mixed in a 30 to 1 ratio for rubber base inks work very well in the T-51 regardless of what is being used in the parent press. This mixture should produce a pH of approximately 6. Certain oil base inks may require a stronger fountain solution mixed in a 15 to 1 ratio which will produce a pH reading in the 5.5 range.
5. Paper can make tremendous difference in the finished appearance of the two-color work. Use a high grade paper that offers good ink holdout.
6. Use a good blanket that is free of glaze. Prefer a hard rather than a soft blanket for quality of reproduction and faster sheet release.
7. The water form roller should lay a 3/32 inch (2.4mm) stripe on the plate.
8. Set the ink form rollers to lay a 5/32 inch (4mm) stripe on the plate.
9. The plate to blanket stripe should be set at 1/8-3/16 inch (4mm).
10. Ink all the water rollers in the T-51, except the fountain roller, with a fairly heavy lay of ink. The fountain roller must be desensitized until it runs clean. Most chrome cylinder cleaners work well.
11. Position the parent press image on the paper first. then adjust the T-51 to put the colors in register.
12. Turn the T-51 ink and water controls off and run the parent press by itself to set the ink flow. Do not run the color heavier than its intended strength when overprinting.

13. While running alone, set the parent press water control by decreasing slowly until you experience toning and then increase just enough to eliminate the tone. The ink flow must be set before adjusting the water.

14. You can achieve a more even ink distribution on heavy coverage by setting the T-51 ink ratchet on six or seven notches and then adjusting the amount of ink you need with the individual fountain keys.

15. The T-51 should always be run with a minimum of water to assure best results. You must also remember, however, that moisture on the plate during the printing operation is the condition that allows the single blanket principle its high degree of success. Consequently, if either plate becomes dry it will pick up any color of ink it comes in contact with. You must not let either plate work itself into a dry condition. The T-51 will pick up and use excess moisture from the blanket while you are running. This allows you to run the T-51 with a lower setting on the water control for two-color printing than would be required if you were running single-color on the T-51. Since the water is cut back for two-color printing, you may experience difficulty starting up after being idle for a period unless you add some moisture. For this reason, we recommend that you wipe the plates down with fountain solution before starting. This will provide "start up" moisture until you are running and the plate is in contact with the blanket.

16. Use the following sequence of operation when starting the press:

- A. Turn on the main switch.
- B. After two or three revolutions, turn on the T-51 water form roller.
- C. Turn on the parent press rollers.
- D. Turn on the T-51 ink form rollers.
- E. Look at both plates to be sure they are running clean.
- F. Turn on the paper feed.
- G. After at least two or three sheets have fed through the press, engage the T-51 plate to blanket pressure handle.

Note: Do not let the press idle for more than a few revolutions with the ink and water turned on as this will cause the ink to emulsify.

When stopping the press, reverse the above being sure at least two sheets feed through the press after you turn off the T-51 plate to blanket pressure handle.

17. Always be sure both plates are free of superfluous marks such as punch holes or a corner that may not have been covered when the plate was burned. These marks, if left on the plate, will build up a heavy ink deposit on the blanket as you are running, and may cause color contamination.

18. When printing a two-color job using camera direct or metal plates, use the maximum recommended plate size listed in the parent press specifications. Color contamination may occur if the plate cylinders carry ink beyond the edges of the plates. To correct this situation, the plate cylinders must be desensitized. Treat the plate cylinders the same as the water fountain roller. If the image area of the form will allow it, you can also use a blanket that is slightly narrower than the plate.