

## Guide to printing with Digital Plates

Digital plates provide the flexo printer/converter with the opportunity to improve the overall quality of their printing while obtaining measurable pressroom productivity improvements. Although similar to conventional plates there are a few differences in handling and press set-up that should be kept in mind to ensure optimum results.

### Trimming

Plates should be trimmed to size with polyester down, using a standard cutting knife or paper cutter. When trimming plates, avoid jagged edges on the polyester backing. Bevel the edges of the plate at an angle of 35° to 45° by holding the blade at an angle or placing cardboard or similar support on the bed of the paper cutter, this will help keep the plate from delaminating.

### Mounting

Digital plates have very little contrast between floor and print surface, this can make it difficult to see marks to line up by when mounting. Mounting chalk or a thin layer of ink can be rubbed on the surface of the plate where the marks are located to help in viewing during the mounting process.

### Tape

Use the same tapes you would for your normal process printing (low to medium density). Although your current tape may be satisfactory we recommend testing different densities to find a tape that achieves for you a combination of good solids and screens.

### Anilox

Anilox selection is the same as your conventional plates. The general rule is 4x's the line screen should not equal more than your anilox. Most high quality printing is done with anilox that are 5 or 6x's the line screen. You will find that your screens run cleaner with digital plates compared to conventional plates due to the uniformity of the digital plate. The ideal anilox is one that achieves good solids without printing dirty screens.

### Press Set-Up

Before inking up the plates it is good practice to give the plates 1 or 2 wipes with film cleaner or 50% alcohol diluted ethyl acetate, this will ensure removal of any residuals from the platemaking or handling processes. This is best if done once the plates are mounted and are in the press.

*Note: Do not over wipe, these chemicals will damage the plate. 1 or 2 wipes only.*

**Impression** - Digital plates have less relief than conventional plates. Proper setting of impression is the key to optimizing the quality and productive advantages of digital plates. All three steps should be carefully followed.

1. Set anilox impression - give adequate anilox impression to ensure uniform ink coverage across the plate without over impressing.
2. Set plate to substrate impression - Set plate to achieve good impression with all areas of the plate printing. Digital plate benefit from slight over impression, so set the impression slightly over kiss.
3. Re-set anilox impression - Once the plate to substrate impression is correct, fine tune your anilox impression by backing off until your image begins to fade, then come back in just enough to correct the fade with uniform image quality across the web.

*Note: Any time you reset your plate to substrate impression you should reset your anilox impression.*

### **Press Set-Up (continued)**

You may need to run your inks "wetter" due to the extremely small highlight dots on the digital plate. It may appear that your highlights are not printing because of impression or uneven plate surface but in fact it is because of the ink drying before it reaches the substrate. Contact your ink representative for the proper additives.

### **Cleaning**

Plates should be cleaned immediately and thoroughly of ink with a soft, natural bristle brush and compatible cleaner. Aggressive solvents, such as acetates, heptanes, or naphtha should not be used to clean plates. Above certain levels, these solvents can cause damage to the plate. Scrub plates until all ink is removed. However since the dots on a digital plate are smaller, it is recommended that care is taken not to scrub the dots off the plate. After cleaning the plates, blot or blow dry. Use a lint-free towel or cloth. Do not rub dry.

### **Storage**

Plates should always be thoroughly dried before storage. Protect the plates by storing them in a envelope or drawer. Avoid excessive exposure to UV light (sunlight, fluorescent, incandescent). If plates are stored in stacks, they should be interleaved with paper or foam. Do not stack over 6".

### **Additional Recommendations**

Always keep your original plate proof or a copy of the plate proof with your plates, this has your file# and date on it. This provides you with the information you need to reorder your plates. Without this file# and date you will be subject to a look up fee and we cannot guarantee locating your job.

### **Additional Assistance**

Please feel free to contact us with questions. (314)645-8700 or 1-800-833-8702