

FLEXICRAFT® and No-Tox® Waterbased Inks

TROUBLESHOOTING GUIDE

NS12
(02/12)

Dirty Printing:

- Check for worn or dirty anilox. Clean or replace if necessary.
- Wash plates
- Ink may be drying too fast. Adjust with slower drying blend.
- Viscosity may be too high. Reduce ink by adding the following and blend thoroughly:
 - a.) Water
 - b.) Water/propylene glycol blend
- Check heaters/air flow. Too much heat directed on plates may inhibit ink transfer to substrate.
- Check pH of ink. Optimum range 8.8-9.5. If below 8.8, slowly raise by adding small amount of aqueous ammonia.

Ink Drying Too Slow:

- Check airflow from dryers. Clean if appropriate and raise temperature if possible. Balance.
- Ink viscosity may be too low (too much water present). Add fresh ink.
- If ink can tolerate a viscosity reduction use either a 2:1 or 1:1 blend of water: isopropyl alcohol.

Never add alcohol alone!

Mix with water before adding.

Ink Drying Too Fast:

- Adjust dryers and airflow to minimize direct contact with printing plate or fountain.
- Add water, propylene glycol, or a blend of the two to retard drying.
- Check pH. Adjust to 8.8-9.5 if necessary.

Color Too Strong: *(when checked at running speed)*

- Reduce with required diluent (depending on drying conditions-see above) to no lower than 25-30 sec. #2 Zahn Cup.
- If still strong at 25-30 sec. and print quality o.k. do not use additional solvent. Use extender varnish to reduce color strength.

Color Too Weak: *(when checked at running speed)*

- Check anilox. If dirty, clean. If graphics will tolerate, change anilox to increase cell volume.
- Raise viscosity with fresh ink, being careful not to negatively alter drying rate.

Foaming:

- Check ink level in pump and fountain. Keep as full as possible. Pump slowly, not at high speed.
- Increase ink viscosity by addition of fresh ink.
- Use defoamer, a 50:50 blend with isopropyl alcohol or a 50:50 blend of water and isopropyl alcohol. Spray gently over foaming surface.

Adhesion: *(especially to non-porous substrates)*

- Allow ink to thoroughly dry. Printing onto non-porous materials may require higher temperatures than when printing porous substrates.
- Check pre-treatment level of stock if ink not adhering. Try fresh stock, or treat, if possible.
- Increase viscosity by adding fresh ink.

Pinholing: *(non-porous substrates and some coated papers)*

- Check treatment level of stock if appropriate. Try fresh stock, or treat, if level too low.
- Add crawl retarder/pinhole compound to ink (1-2% maximum)
- Clean anilox or switch to greater cell volume (ink starvation)
- Check viscosity, may be too thin.

Clean-Up:

- Clean as soon after press is turned off as possible. Do not allow ink to set and harden on press parts or plates.
- Most clean-up can be achieved with a blend of water and alcohol. If ink has hardened, however, a commercial ammoniated cleaner and scrubbing may be required.