



Converting Tips for Thin Film Liners

Press

- > Your press should be in good working condition and capable of converting films. Nip rollers should be functional to properly control web tension.
- > Ensure that the press and all in-line components, like automatic unwind and rewind stations, are properly grounded to control static.
- > Examine the entire web path for frozen idler rollers and ink/adhesive build-up.
- > Keep UV lamps and dryers on the lowest setting possible, while still maintaining ink cure.
- > Keep web tension as low as possible, while still maintaining print registration. Unwind and rewind tension should be 1 pli or lower.
- > Rewind onto 6" cores instead of 3" to prevent compression of the labels closest to the core.

- > Bearer wipers should be oiled (avoid over saturation) and free of debris or buildup. Worn wipers must be replaced.
- > Vortex compressed air coolers are useful in reducing excessive heat build-up on bearers, but avoid nozzle placement that inhibits flow of lubrication or blows lubricant off of the bearer.
- > Use of razor knives for trimming, after matrix stripping, provides the cleanest edge. If using scoring knives, make certain they are sharp, clean, and spin freely.

Die Cut Quality Control

- > Evaluate the die cut during set-up, after the press is warmed up, and for every roll you produce.
- > Visual Evaluation
 1. Remove labels from the liner across the full width and repeat of your die.
 2. Look for a clear imprint of the die to be visible on the liner for each die cavity. If you do not see an imprint, or there are gaps in the imprint, the adhesive may not be completely cut.
 3. Make certain that the die pressure isn't so great as to "emboss" the liner. You should see an imprint, but the liner should not be deformed by the die cut.
- > Snap Test.
 1. Pull a length of web off of the press that is at least twice the die repeat length.
 2. Cut the web into individual lanes to represent the width of each finished roll of labels.
 3. Take each length of labels and individually "snap" them by pulling the web in opposite directions using both hands. If the web breaks, inspect the web, die, and anvil for the source of the break.
 4. Evaluate weak spots in the web by trying to push a thumb or finger through the die cut areas that are questionable.

Tooling

- > Work with your equipment supplier to verify the suitability of any existing magnetic cylinders and anvils. Tooling tolerances recommended for the .92 gauge liner are tighter than for conventional materials, so cylinders may need to be retooled or replaced.
- > Use dies that have been specifically designed for the facestock and liner combination you are converting. A hardening process is usually recommended to extend die life.
- > Consult with your die manufacturer for design recommendations. Some of the options suggested include: a staggered die cavity configuration, wider bearers, and slightly bowed leading and trailing label edges. These design options help to reduce heat build-up, which is a common cause of die cutting issues with thin liners.
- > Die bearers and bearings must be well lubricated at the start of every job and maintained throughout the run to keep the die cool.