

Modifications/adjustments to label applicators to open the label decoration process window for downgauged label stocks and PET liners

DOWNGAUGED LABEL STOCK APPLICATOR PRE-CHECK RECOMMENDATIONS

1. Sharpened peel tip

0.04 – 0.025"/1.016 – 0.635 mm tip thickness found to be optimal. Always test current peel tip initially with a modified peel tip as back up.

2. Angle of peel tip to container surface

Adjustments may need to be made based on initial testing at current angle. There are no "optimum angles", as the angle would be label format and bottle contour specific.

3. Peel tip proximity/distance from container surface

With downgauged films, we have found that reducing the distance as much as possible is optimum due to downgauged films having less "body" than thicker films.

4. Label to line speed setting

This may need to be adjusted based on initial test results. Typically, it will be reducing the label speed very slightly to line speed.

5. Wipe down method

There are multiple methods to wipe a PS label – wipe pads, squeegee, open and closed cell foam roller, coated foam roller or a mix of these. With downgauged films, the wipe down method becomes much more critical, and even more so when the container panel surface has compound or multiple compound curves.

6. Pre decoration of containers prior to filling

If the applicator is equipped with air inflation of container at labeling, this allows for a more uniform, firm panel to apply and wipe the label onto. Amount of air inflation requires on-line testing, as too much inflation can cause the panels to bulge.

DOWNGAUGED PET LINER RECOMMENDATIONS

7. Sensors on applicator

If transitioning from paper to film liners, you will need to validate that the current sensors on the applicator are able to sense the clear film. Many sensors have sensitivity adjustments which allow for use with both liner types. Ultrasonic or Capacitive are optimal.

8. Web tensions through the applicator web path

This becomes increasingly critical as the web width narrows. Below 2.5"/63.5 mm web tensions to high may cause stretching of the PET liner which can cause label application issues such as registration and wrinkles.

9. Static causing application issues

PET liners can build static when traveling over surfaces which are not moving at the same speed. This static can be simply eliminated by grounded tinsel, deionized air bars or many other methods, if it becomes high enough to cause label application issues. Static becomes increasingly more of an issue on high-speed applicators...200 bpm and above.

10. Liner slippage through nip roll units causing label application issues

When transitioning from paper to PET liner, there may be adjustments to the nip roll pressures due to the difference in liner calipers to eliminate slippage. Typical paper liner, 40# glassine is 2.2 mil/55 micron, whereas the typical PET liners being utilized are 1.2 mil/30 micron to 0.92 mil/23 micron.

11. Broken web detector

If the line currently has a micro switch type detector that contacts the liner to verify presence, this will perform on PET liners as well. If there is a sensor, the sensor will need to be validated for a clear film liner. Refer to Item #7 above.