

Fasson® Global MDO Next Generation

Machine direction oriented (MDO) technology can deliver high quality printing, high speed dispensing and superb on-container appearance needed for semi-squeeze applications. Global MDO Next Generation is the perfect label material as it balances the rigidity required for dispensing with the flexibility needed for semi-squeeze applications. The combination of thin face and liner thickness achieves significant gains in sustainability and productivity. The following guidelines will maximize processing efficiencies when converting and dispensing Fasson Global MDO Next Generation label materials.



Printing

- Global MDO Next Generation has an engineered print surface that is corona treated for excellent ink anchorage
- The print surface is designed for on-press corona treatment for superior ink wet-out and anchorage to flexo water and UV ink system as well as UV inkjet ink system.
- The print surface will also accept hot and cold metal foils.
- Machine Direction Orientation (MDO) and composition of the film provides for excellent press registration control.
- Higher nip roll pressures are recommended on press to maintain good control of the new thinner web.
- As compared to paper liners, lower press tensions and web temperatures have been found to minimize potential stretching of the PET liner to maintain registration.
- When using Global MDO Next Generation with CleanFlake™ technology please refer to the CleanFlake Technical guide when choosing inks.

Varnishes

- Global MDO Next Generation is a high clarity, low haze and high gloss film. It gives no label look appearance.
- Printed surface is to be over-varnished to protect the ink and film surface from processing damage and defects.
- Varnish choice is important in order to provide a low friction surface to minimize scuffing during labeling and packaging.
- Varnish must be compatible with the underlying inks and maintain minimal shrinkage to prevent label curl and label lift

Die Cutting

- Dies are recommended to be tooled specifically for Global MDO Next Generation and the liner thickness as dies designed for paper liners are not suitable. Dies already tooled for current Global MDO will work with Next Generation.
- Dies designed for PE and PP may be suitable but for optimal results, dies should be designed for Global MDO Next Generation.
- Solid rotary dies are suitable for Global MDO Next Generation and die makers will recommend die hardness and coatings based on cost and anticipated wear rates.
- Flexible magnetic steel dies are also suitable for Global MDO Next Generation. Laser hardened dies have been found to provide the longest life.
- Die manufacturers are generally familiar with MDO films and PET liners and are capable of producing good dies.
- It is strongly recommended that artwork be designed so that the printed areas are not die cut, especially in the case of heavy ink and varnish laydowns. This prevents ink chipping at the die cut edges and localized die wear.
- To verify acceptable die strike with for PET liner, a Snap Test may be used. Contact your Avery Dennison Technical representative for training.

Rewinding

- Minimal tension on press upwinders and label rewinders is recommended to minimize winding impressions or other defects in face or liner.

Dispensing

- Global MDO Next Generation dispenses well on typical pressure-sensitive labeling machines consisting of a peel tip and wipe down components.
- Squeegees are recommended to completely wipe down the film label to remove air bubbles. Should mar or scratches appear, use a soft squeegee or soft bristle brush for complete wipe down.
- Label sensors designed for clear or white labels on a clear film liner such as ultrasonic and capacitance, are required for proper label dispensing and placement of the label on a container.
- The combination of film MD stiffness and release force off of the PET liner allows Global MDO Next Generation to peel cleanly from the liner at the peel tip.
- Once dispensed, the CD softness allows Global MDO Next Generation to wipe down easily and smoothly as it conforms to the shape of the container.

Static Control

- It is strongly recommended that anti-static equipment be installed on all press, rewind and dispensing equipment to minimize handling and other defects.
- As compared to paper liners, PET liner is susceptible to static buildup during processing which can result in print defects, dust issues and registration problems on press, and application defects while dispensing.

Application Performance

- When used as recommended, Global MDO Next Generation will provide excellent on-container performance in terms of appearance, semi-squeezability and durability.