

Windmöller & Hölscher machinery delivers **new efficiencies** for flexible packaging films.

This world-leading manufacturer of machinery for producing flexible films for packaging has blown film equipment with up to eleven-layer capability that enables extruders to create multilayer lidding films for use with single-layer mono PET trays.

Customized equipment for a complex market

Depending on the market and the regulations governing them, today's packaging needs to meet a variety of criteria. It requires customized equipment such as the VAREX multilayer blown film equipment by Windmöller & Hölscher.

A world-leading manufacturer of machinery for the production of flexible films, Windmöller & Hölscher knows how to increase productivity and sustainability. Its VAREX II is an up to eleven-layer universal high-output blown film line for demanding applications that offers many advantages, including:

- Precisely metered resin feed for consistent product quality
- Extruders designed for excellent melt quality
- Die for perfect layer thickness distribution and short changeovers
- High-output air ring for high output rates
- Film sizing cage for bubble stability
- High-precision thickness gauge and control for minimum gauge tolerances
- Long bubble collapsing frame for good film flatness
- Oscillating haul-off for optimum film roll quality
- Large winder portfolio for all applications
- Comfortable, intuitive operation through integration of automation modules

With this machinery—and Eastman Eastobond™ copolyester as a sealant layer in lidding—it's now possible to switch to single-layer mono-PET trays, improving both productivity and recyclability.

Creating the ideal seal

Traditional multilayer food contact lidding for some food contact applications requires a two-layer tray consisting of both polyethylene (PE) and polyethylene terephthalate (PET), which can increase costs and hinder recycling efforts. But with Eastman Eastobond™ 19412 copolyester as part of the sealing film, food packaging manufacturers can switch to single-layer mono-PET trays.

That's because Eastman Eastobond 19412 acts as a universal sealant layer. It requires a lower heat-seal initiation temperature and adheres to monolayer PET trays of different compositions.

Eastobond 19412 is suitable for sealing technologies, including:

- Locked sealing
- Reclosable sealing
- Peelable sealing

Preserving sustainability

Eastobond 19412 has been cleared for use for food contact applications under European Union Commission Regulation (EU) No. 10/2011.

As a sustainable solution, Eastobond:

- Eliminates the need for PE lamination on the food tray, allowing brands to feature food packaging with fully recyclable trays
- Seals to monolayer PET trays of different compositions, eliminating the need for adhesives and their associated volatile organic compounds (VOCs)
- Enables lighter packaging due to removal of the PE layer; plastic films are also lighter than traditional plastic lids or packaging made with metals or glass

More than a seal—it's a deal.

Using Eastman Eastobond™ copolyester as part of a multilayer lidding film may provide cost-saving advantages too, including:

- Reduced cycle times on food packing lines due to lower seal initiation temperature
- Reduced energy usage
- Less industrial waste—all PET tray waste can be reground and reused
- Elimination of the secondary process of PE lamination on the PET tray



To learn more about how Eastobond can be processed on Windmüller & Hölscher equipment, email Windmüller & Hölscher at info@wuh-group.com.

An example of multilayer lidding

LDPE

LDPE

HDPE

Tie 1

PA

EVOH

PA

Tie 2

Eastobond 19412

Bottom tray

PET

Choosing lidding with Eastobond enables the use of a monolayer tray, increasing the recyclability of packaging.



WINDMÖLLER & HÖLSCHER

To see how Eastman Eastobond™ copolyester can help you create the ideal seal, contact your Eastman representative.

EASTMAN

The results of insight™

Eastman Corporate Headquarters

P.O. Box 431
Kingsport, TN 37662-5280 U.S.A.

U.S.A. and Canada, 800-EASTMAN (800-327-8626)
Other Locations, +(1) 423-229-2000

www.eastman.com/locations

Although the information and recommendations set forth herein are presented in good faith, Eastman Chemical Company ("Eastman") and its subsidiaries make no representations or warranties as to the completeness or accuracy thereof. You must make your own determination of its suitability and completeness for your own use, for the protection of the environment, and for the health and safety of your employees and purchasers of your products. Nothing contained herein is to be construed as a recommendation to use any product, process, equipment, or formulation in conflict with any patent, and we make no representations or warranties, express or implied, that the use thereof will not infringe any patent. NO REPRESENTATIONS OR WARRANTIES, EITHER EXPRESS OR IMPLIED, OF MERCHANTABILITY, FITNESS FOR A PARTICULAR PURPOSE, OR OF ANY OTHER NATURE ARE MADE HEREUNDER WITH RESPECT TO INFORMATION OR THE PRODUCT TO WHICH INFORMATION REFERS AND NOTHING HEREIN WAIVES ANY OF THE SELLER'S CONDITIONS OF SALE.

Safety Data Sheets providing safety precautions that should be observed when handling and storing our products are available online or by request. You should obtain and review available material safety information before handling our products. If any materials mentioned are not our products, appropriate industrial hygiene and other safety precautions recommended by their manufacturers should be observed.

© 2018 Eastman. Eastman brands referenced herein are trademarks of Eastman or one of its subsidiaries or are being used under license. The ® symbol denotes registered trademark status in the U.S.; marks may also be registered internationally. Non-Eastman brands referenced herein are trademarks of their respective owners.