

Flair's *Sharing the Knowledge* quarterly newsletter was created to share new information, packaging concepts, and samples that might be of interest to your company. This issue highlights Flair's decisive shift from co-extruded blown film production to the co-extruded cast film process and explains what that means to our customers and our company. Also, we highlight Flair's patented Permazip™ technology that goes a long way to ensure food safety while minimizing waste and conserving energy. We hope you find this information useful. As always, please do not hesitate to contact us if you would like additional information or samples.

## Cast in a New Light

### **Flair Completes Transition from Blown to Cast Co-extruded Film Production**

It's time to shine the spotlight on Flair Flexible Packaging and our successful switch from blown to cast co-extruded film production. Up until recently, Flair Flexible Packaging produced film through a co-extruded blown film process. This process vertically extrudes molten resin pellets in a tubular shape that cools, collapses and winds up as a thin film. In comparison, co-extruded cast film production improves on many important physical properties of the film, especially as they are applied to thermoforming and high barrier efficacy. As of May 2011, Flair Flexible Packaging has entirely shifted its film production method to cast co-extrusion. H.I. Lee, VP of Technology for Flair, recently explained some of the benefits of cast coextruded film.

### **Better Formability**

Blown films are pre-stretched by virtue of their manufacturing process, which is somewhat more challenging to thermoform (stretch and mold) than cast films. Because cast film does not have significant orientation in MD (machine direction) and TD (transverse direction), cast films arrive at customers' converting and packaging lines minimally stretched. Therefore, the depth of thermoforming, especially deep drawing (for a large cheese block or multiple layers of stacked hot dogs, for example), is significantly improved when using cast film instead of blown film.

This is especially obvious when a customer is deep drawing the thermoforming films around the bottom four corners of the aforementioned cheese block. These are the most critical points on the cheese block for hermetic packaging due to the weight of the cheese and the exposure to environmental stresses, including transport and handling.



Thicker, more even distribution of the cast film's structure makes this a better, more quality choice for deep draw thermoforming applications.

### **Higher Barrier Efficiency for Gases, Moisture and Aromas**

When high barrier films are required to prevent the transmission of gases, moisture and aromas, co-extruded cast films effectively extend product shelf life. Overall cast film thickness and the more evenly distributed layers of the polyolefins in cast film structures make them an optimal choice.

EVOH (ethylene vinyl alcohol copolymer) is the chemical resin that contributes these high gas barrier characteristics. EVOH is shown to be more effective when co-extruded in a cast versus blown film extrusion process. The resin, while used in both cast and blown films, benefits from shorter periods of cooling and crystallinity formation when cast, thus increasing its effectiveness.

### **Positive Customer Feedback**

According to H.I. Lee, feedback from customer trials of the cast film line has been very positive. "Customers appreciate the easier thermoforming, the enhanced contact clarity and better resistance to pinholes and punctures. We continue to seek resins and film manufacturing processes that result in the best cast coextruded film performance. Quality and performance are our most important goals, not just at the beginning, but as a continuous process." 

**Take 10% Off your Order  
of Thermoforming Cast Film!**

# Permazip™ Pouch-Sealing Technology Ensures Food Safety, Cost Savings

Supermarket and deli operators now have a new praiseworthy alternative to rigid dome and tray containers for their roasted chicken and meat offerings in the Permazip™ packaging technology from Flair Flexible Packaging.

- Permazip™ boasts a tamper-resistant permanent zipper on a flexible film pouch that ensures food safety while reducing waste and shipping expense.
- The Permazip™ closure eliminates concerns about steam pressure causing deli pouches to open and other tampering concerns.

■ If a permanent seal is desired, the simple easy-to-close pouches eliminate the need for specialized sealing equipment in the deli.

Upon sealing, food is kept air-tight and safe from contamination throughout its point of purchase. A secondary recloseable seal can be added below the Permazip™ for retail customers' use. Flair Flexible Packaging's vibrant 10-color custom reverse rotogravure graphics complement any combination of functional films and sealing alternatives. As packaging consultants, designers and producers, the team at Flair Flexible Packaging works with customers to determine pouch and closure design to meet any given product's size, temperature and display requirements. 

More information is available at [www.flairpackaging.com](http://www.flairpackaging.com) or by calling (920) 574-3121 from within the United States or (403) 207-3226 from within Canada.

Custom-designed deli pouches with Permazip™ from Flair Flexible Packaging

## Special Introductory Pricing on Flair Forming Film

# 10% off

**all orders of NEW cast forming film**  
September – October – November 2011

For a limited time, Flair is offering an introductory discount for our new cast forming film.

- Superior barrier qualities (gases, moisture, aromas)
- Excellent forming properties
- Enhanced contact clarity

For more information, e-mail [marketing@flairpackaging.com](mailto:marketing@flairpackaging.com) or call 920-574-3121 (within the USA) or 403-207-3226 (within Canada).

For closeout pricing on our discontinued blown film (while supplies last), please contact your customer support or sales representative.

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