The Future of Package Printing (Part I)

PMMI

 Modern packaging goes far beyond its primary objective of protecting the contents within it. The fact is, it serves as a critical communication platform. Think of the ingredient and nutritional information it lists and how it displays expiration dates and tracking codes to ensure freshness and product safety. It also projects the personality of a brand to help build connections with consumers.

What makes all of these functions work? Printing technologies. The wide range of printing technologies and processes exhibited at PACK EXPO International 2012 offered a clear view of advancements in this sector. It also lays a strong foundation for continued innovation in 2013, which brand owners can discover at PACK EXPO Las Vegas 2013 [1] from September 23–25 at the Las Vegas Convention Center.

Graphics Grow Up

When it comes to package graphics, food and beverage manufacturers are increasingly turning to in-mold labeling (IML) to improve product visibility in a cost-effective manner. Europe was first to embrace this technology, which is now making inroads in the United States.

IML is a one-step package decorating method that integrates labeling directly into the forming process by essentially forming the container around the label and fusing the label to the resin. Regardless of the chemistry involved, IML often leads to a more durable container, and a resulting in a reduction in total resin. IML also offers recycling advantages over separately-applied labels that often use adhesives.

Suppliers continue to innovate in this area, with some offering metallic, color-changing and textured labels. Others offer uniquely shaped labels that boost

product visibility when used with clear resin or can help reinforce brand image.

IML is not for every product, so suppliers continue to improve other resin container printing processes. For example, a computer-to-plate, dry-offset printing process generates higher-definition graphics in bolder, truer colors that allows high-quality photographic imagery to be applied to plastic food containers.

Additionally, a patent-pending printing technology allows for direct-to-plastic printing prior to thermoforming. The technology uses specialty heat-tolerant inks that dry instantly when applied to roll-fed plastics, yet remain malleable during forming. Eye-mark indexing ensures that the thermoforming step won't distort or deform the graphics. This technology provides substantial cost savings, as it eliminates the need for label application. It works with all types of printing methods, allowing for high-definition, full-color printing.

Companies that produce small runs of product — particularly makers of local or hand-crafted goods — typically prefer to print and apply labels. Continued growth among artisan companies that aim to evoke a premium look has prompted suppliers to refine tabletop label printers, making them faster and more versatile in handling different materials and ink formats, and ultimately enabling the production of high-resolution images.

Staying Flexible

Flexible package printing has come a long way and has become more economical, thanks to advances in digital printing. Traditionally, most flexible packages were printed using the more expensive rotogravure process. Today, many printers offer flexographic printing options, and they are transforming the way flexible packaging is used. In fact, the Flexible Packaging Association (FPA) recently honored U.K. retailer Tesco with a Silver Award for printing achievements for the Tesco Finest Soups retort pouch. The pouch represents a marked departure from standard rotogravure-printed retort pouches: Its matte finish and styling have high shelf impact and replace the more traditional rigid formats for retort soups. Through engineering and technical expertise, the supplier was able to overcome the demands of the retort process without sacrificing print quality.

Interest in flexographic technology is also growing in the States. For example, Campbell's Soup used flexographic printing for the debut of its new Campbell's Skillet Sauces line in an effort to move beyond its iconic can packaging and attract younger consumers.

Shrink sleeve suppliers are also staying competitive by getting creative with new printing and labeling options. Jose Cuervo Tradicional Tequila uses thermochromatic ink on its shrink sleeve labels to indicate optimum drinking conditions. The ink changes color in reaction to changes in temperature, and accordingly, as the liquid chills, the bottle's tattoo-like skeleton and floral image becomes deeper and more striking. When the design is fully revealed the tequila is at optimal temperature for consumption.

PMMI *[2] is a trade association of more than 600 member companies that manufacture packaging, processing and related converting machinery in the United States, Canada or Mexico; machinery components and packaging containers and materials. PMMI's vision is to be the leading global resource for the packaging and processing supply chain, and its mission is to improve and promote members' abilities to meet the needs of their customers. PMMI organizes the* PACK EXPO *[3] trade shows: PACK EXPO International, PACK EXPO Las Vegas and EXPO PACK México, connecting participants in the packaging and processing supply chain with their customers around the world. Coming Up: EXPO PACK Guadalajara, Feb. 27–March 1, 2013, in Guadalajara, Mexico; EXPO PACK México, June 18-21, 2013 in Mexico City, Mexico; PACK EXPO Las Vegas at the Las Vegas Convention Center, September 23-25, 2013. Learn more about PMMI and the PACK EXPO trade shows at* PMMI.org *[2] and* Packexpo.com *[3].*

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