Labels

US Industry Study with Forecasts for 2015 & 2020

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Although pressure sensitive labels will expand at a healthy rate, they will continue to face growing competition from alternative methods such as stretch sleeve, heat-shrink and in-mold labels.

**US shipments to rise 4.8% annually through 2015**

US label shipments are forecast to rise 4.8 percent annually to $20 billion in 2015. The pressure sensitive segment will continue to dominate output, accounting for more than 70 percent of the total. Although pressure sensitive labels will expand at a healthy rate, they will continue to face growing competition from alternative labeling methods such as stretch sleeve, heat-shrink and in-mold labels. Among these, heat-shrink labels are projected to advance at the fastest rate through 2015, with gains attributable to their ability to form-fit contoured containers, providing 360-degree graphics and a broad promotional area which enable consumer products to stand out on crowded store shelves.

**Paper to continue losing market share to plastic**

Paper will remain by far the leading stock material in the label industry for the foreseeable future. However, it will continue to lose market share to plastic, which will account for more than one-quarter of label shipments in 2015. Plastic stock materials will gain popularity due to their aesthetic and performance advantages over paper, as well as a broad shift in favor of plastic packaging. Moreover, plastic is heavily utilized in pressure sensitive, heat-shrink, stretch sleeve, in-mold and thermal transfer labels, each of which is expected to grow at a healthy rate. Among plastic label resins, polypropylene and polyvinyl chloride are widely used, although the latter will lose out to other plastic substrates with lower perceived environmental and health risks. In particular, trends favoring more environmentally friendly substrates will propel gains for polylactic acid, albeit from a very small base.

**Digital to be fastest growing printing method**

The large majority of US label shipments are printed in some manner before sale to the final user. Flexography represents the leading printing method, benefiting from its prominent position in the pressure sensitive and sleeve label segments. Among other printing technologies -- lithography, screen, letterpress, digital and gravure -- digital printing will enjoy the most rapid gains, expanding at a double-digit annual pace through the forecast period. Label converters will increasingly invest in digital presses to capitalize on trends favoring shorter label runs and mass customization, particularly as product personalization functions as a key marketing tool. Different printing processes can also be combined in an effort to create higher quality label graphics. This trend will have a positive effect on the use of screen and digital technologies.
FUNCTIONS

Beverages

Through 2015, label demand in the beverage industry is forecast to expand 4.3 percent annually to $1.3 billion, matching gains in primary packaging labels overall. Advances will be driven by efforts among beverage producers to differentiate their products in an increasingly competitive market. The differentiation of products and attempts to target particular consumer segments will result in shorter press run lengths in the beverage labeling market. This, along with greater use of limited edition, seasonal and other promotional labels, will favor the utilization of digital printing technologies. Other technological solutions aimed at optimizing efficiency include greater online communication and automation of prepress workflows, as well as color management and three-dimensional virtual prototyping.

Gains will further be driven by a shift in the product mix toward higher-value labels, as beverage producers seek to give their products a premium image through the use of different materials and finishes. This is often accomplished through the use of clear heat-shrink, full-body labels, and clear pressure sensitive labels, both of which will continue to take market share away from glue-applied types. Trends favoring the use of label-intensive plastic bottles over aluminum cans will continue to provide opportunities for labels, as aluminum cans are typically direct litho printed. Interest in product differentiation will generate demand for clear films as well as textured paper and even foils. Tactile printing is also expected to grow in use, and high quality inks and printing technologies will be more widely used, at least in the higher-value segments of the beverage market where the greater expense can be justified.

Labels used in beverage packaging must be able to withstand varied environments, remaining securely attached during washing, pasteurization, filling, transportation, chilling and drinking. Due to the importance of product image and visual appeal in the highly competitive

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<td>Nondurable Goods Retail Sales (bil $)</td>
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<td>2463</td>
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<td>$ labels/000 $ retail sales</td>
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<td>370</td>
<td>400</td>
<td>450</td>
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Graphic Packaging Holding Company manufactures paperboard packaging, folding cartons, coated recycled boxboard and specialty bag packaging. The Company operates in two segments: Paperboard Packaging and Flexible Packaging.

The Company is involved in the US label industry through the Flexible Packaging segment, which had 2010 sales of $676 million. The segment comprises operations for the manufacture and sale of labels, multiwall paper bags, plastic packaging and other products. GPHC’s labels include heat transfer, cut and stack paper and film, roll-fed paper, and recyclable in-mold labels for use in the food, beverage, household, pharmaceutical, detergent, health and beauty care, automotive, and industrial product markets. The Company manufactures labels at facilities in Norwood, Ohio and St. Charles, Illinois.

GPHC manufactures heat transfer labels under the DI-NA-CAL brand name. DI-NA-CAL products feature reverse rotogravure-printed graphics and are designed to create a seamless, no-label look. These labels are also available with DI-NA-SECURE security inks, which

<table>
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<td>PLASTIC LABEL SHIPMENTS BY APPLICATION METHOD</td>
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<td>(million dollars)</td>
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<tr>
<td>Sleeve &amp; Shrink</td>
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</tbody>
</table>

“Demand for plastic resins (including additives) used in the production of labels is expected to rise at a 4.0 percent annual rate to 380 million pounds in 2015, outpacing gains in the paper segment. Advances will be fueled by the many advantages -- both in terms of aesthetics and performance -- that these labels have over paper types. Additionally, plastic labels will further benefit from trends favoring plastic containers, as these are complementary packaging products. Moreover, ...”

--Section IV, pg. 78
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