PACKAGERS FLOCK TO GLOBAL SHOW:
Interpack happens once every three years in Düsseldorf, Germany, drawing tens of thousands to see the latest packaging innovations.

New look in labels
Linerless design boosts graphics, cuts waste

Dependable heavy lifter
Creating shipshape labels
Machinery sales outlook
In spring 2010, linerless prime labels made their North American debut on Hatfield Quality Meats’ 48- and 16-oz lines of packaged sausage products. A familiar product in grocery cases across Europe and Asia, linerless labeling technology is steadily gaining momentum in the U.S. protein packaging sector. Hatfield purchases the labels from Hub Labels for the company’s Ravenwood Packaging Nobac 500 applicators that apply the UV flexo-printed 8- and 9-color linerless labels to the company’s range of premium pork products.

UK-based Ravenwood Packaging has been a company at the center of linerless growth worldwide, with the company’s Comac coating and Nobac linerless applicator systems. “We have more than 750 applicator lines across the globe applying more than 10 billion labels per year,” comments Paul Beamish, managing director of Ravenwood. “Currently, the key areas for linerless growth include the fresh protein sectors, including meat, chicken and fish, in addition to ready-made meals.”

To effectively penetrate the North American market, Ravenwood needed a high-quality prime label manufacturer and, since 2009, has partnered with Hagerstown, MD-based Hub Labels. Hub converts its range of linerless label applications on Gallus 13-, 16- and 20-in. UV flexo in-line press systems. The labels are specifically formulated for Ravenwood’s Nobac applicators using proprietary technology.

The building blocks of linerless technology include a printed roll of labels, the underside of which carry strips of adhesive. The face of the labelstock carries a release coating to prevent the labels from adhering to those wound underneath. Labels are guillotine-cut in the application line and then applied.

For the consumer, linerless equates to a streamlined aesthetic capable of achieving more printable real estate for showcasing graphics, ingredients and instructions compared to p-s labels. “In many cases, our clients are converting from, let’s say, a collection of pressure-sensitive (p-s) labels on their product,” says Tony Dahbura, vp for Hub Labels. “I call it the ‘steamer trunk’ look, with labels plastered all over the product. A linerless C-wrap or sleeve label offers a cohesive package decoration system that eliminates the need for multiple labels on a single product.”

Hatfield launched the first linerless labels on sausage products using a C-wrap format. It decided to launch the products with linerless, replacing the traditional approach of a top and bottom label, enabling it to reduce inventory and obsolescence risk while improving application line efficiencies.

Some of the advantages of the linerless technology include:
- Full color, high-end graphics.
- Option to print on the back of the label (reverse-side printing) for promotional, coupon and instructional applications.
- Optimum adhesive placement (no exposed adhesive on package lip).
- Wrinkle-free attachment on low-stability surfaces.
- Thermal transfer variable print ability (such as bar codes, weight, price and item name) at time of application.

Label it ‘green’

The estimated $12 billion North American labeling industry is increasingly being held under the sustainability microscope. Pressure-sensitive labels, the sector’s largest application market, are comprised of two primary components ultimately headed for landfills—one, the waste matrix generated during the die cutting process and, two, the liner.

While liner recycling initiatives have become a priority for some p-s label manufacturers, the number of North American companies that have implemented programs to recycle liner waste remains in the single digits. Beamish explains: “Linerless labels generate minimum waste compared to pressure sensitive. If you consider the matrix and the liner, that’s on average 50 to 60 percent of the material that goes into making...”
Ravenwood Packaging Nobac 500 applicators apply the UV flexo-printed eight- and nine-color linerless labels to Hatfield Quality Meat’s range of pork products.

label material and the vast majority of this material ends up in landfills. The matrix and liner are taken out of the equation in the linerless label manufacturing process so the sustainability benefits are considerable.”

As major retailers’ green initiatives push transparency requirements down the supply chain, consumer packaged goods companies are placing more pressure on their packaging vendors to deliver innovative solutions that speak to environmental stewardship without adding costs. One of Hatfield’s objectives in implementing linerless was the technology’s environmental benefits.

“We were looking to utilize an environmentally friendly product, which we viewed as very important to support our commitment to sustainability,” says Michael Bracrella, vp of engineering and facilities for Hatfield. “We also wanted to find a product that would allow us to have the same labelstock and have the ability to direct-print for multiple products.” Hatfield currently uses linerless labels for five of the company’s 48-oz and nine 16-oz sausage products.

Label it efficient

Sustainability isn’t the only market driver behind increasing adoption rates of linerless application systems in the global food packaging sector. The removal of the liner means extracting a layer from the total material cost compared to the technology’s linered counterparts.

While a cost component gets eliminated, press efficiencies rise due to the roll-to-roll printing of linerless not requiring in-line die-cutting, a hinderance to maximizing press speeds. Hub Labels’ Dahbura explains: “With linerless, you’re achieving efficiencies in several areas. First, the cost of the liner is driven out and because there is less material, there is a cost savings there. Secondly, due to the way the applicators are designed, downtime is minimized because it takes less time to change the rolls of labels in addition to eliminating one of the primary hassles of applying a linered product—the liner breaking and having to stop the application line to troubleshoot liner breakage and tension points. We’re able to show our customers that using linerless labels on a typical line can save them tens of thousands of dollars per year.”

Efficiencies extend beyond the press and application lines. Due to the liner’s elimination and the downgauging of total substrate bulk, the same diameter roll carries a much higher volume of linerless labels compared to one carrying linnedependent p-s labels. Inventory, freight and shipping costs are minimized as a job’s spatial footprint decreases with the use of linerless labels.

An added benefit of the Ravenwood linerless system is that, since an eyemark is printed on the reverse side, so customers can opt for reverse-printed text in applications that might require the label to carry regulatory information, recipes, instructions or a product promotion. In the Ravenwood system the adhesive is applied in strips rather than flood-coated, offering additional savings on adhesive costs and further positioning the environmental friendliness of the labels.

A brave new (linerless) world?

Ravenwood’s Beamish cautions North American consumer packaged goods companies not to make the mistake of assuming linerless is an unproven, nascent technology.

“What American companies need to realize is that, while linerless is a fairly new technology in this market, it’s not in most other regions of the world,” he says. “When you have retailers like Walmart in Europe using Ravenwood linerless labels to package food products like meat, pizza and gravies, you know it’s a technology that has not only been proven, but also carries cost and efficiency benefits over and above other technologies due to how thoroughly a company like Walmart carries out cost-benefit analyses.”

Look to expand to other sectors

Given the technology’s performance track record and high marks received from both consumer packaged goods companies and consumers, Hub Labels’ Dahbura envisions linerless successfully expanding beyond the meat packaging market into other packaging sectors. “The biggest near term market is trays in the protein packaging market—fish, poultry and seafood,” Dahbura states.

“However, I see this technology being conducive to round container applications as well, and there the possibilities are endless. It’s just a matter of configuring the system to accommodate different packages.”

With the continued success of linerless in the North American market, expect to see packages labeled with the technology coming to a grocer’s freezer, or supermarket shelf, near you in the not so distant future.

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Founded in 1978, Hub Labels is one of the largest and most diversified manufacturers of pressure-sensitive labels and related products in the U.S. We serve many of the most prestigious companies in the world, some for nearly 30 years. All of our customers, big and small, expect superior quality and timely delivery — it's simply a way of life at Hub Labels!

Our 110,000 square foot facility in Hagerstown, Maryland is one of the largest sites in the U.S. dedicated to pressure-sensitive labels and is strategically located along key transportation corridors: I-70 and I-81. With more than 16 narrow-web presses, we take pride in our unparalleled capacity and ability to serve all of your label needs nationwide.

Our five Gallus state-of-the-art UV-Flexo rotary screen combination presses with widths up to 20 inches and recent upgrades in Linerless Label coating put us at the forefront of the industry in terms of capabilities, award-winning quality and consistency for your Linerless Labels, Pressure Sensitive Labels and Packaging needs.

Hub Labels has always been on the forefront of advances in the label printing industry, having been among the first to introduce four-color process, computer-to-plate technology, digital printing, servo-driven presses, HoloFX and most recently Linerless Labels. The customer base has grown from a handful in the 1970s to over 700 active customers today, with several multinational accounts and customers based all over the USA. And to this day, Hub Labels steadfastly maintains its family-owned tradition and dedication to quality and service that has made it one of the industry's success stories.