Pouches challenge manufacturers to think outside the box
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As pouch volumes increase, food and beverage makers are seeing a drop in production costs in both materials and equipment.

Pyramid Global converts a number of retort pouches for the U.S. market for food items such as tuna, chicken, and rice.

THE APPLICATION OF STAND-UP, LAY flat, block-bottom, and other styles of flexible pouches continues to grow at impressive rates in North America. A popular package in Europe for many years, the stand-up pouch has now found popularity in the U.S. — so much so that it is now considered a mainstream package. Since 1993, the number of stand-up pouches consumed globally has increased 21% annually and is forecast to grow 17% through 2006, according to “Stand-up Pouches: Continuing Global Markets, Economics, and Technologies 2001-2006,” published by Packaging Strategies.

Consumers clearly understand the conveniences pouches offer such as resealability and portability. In addition production costs in both materials and equipment have decreased as pouch volume increases. “With the new equipment coming on line able to fill 500 stand-up pouches per minute and liquid beverages able to be filled at more than 1,000 pouches per minute, the costs are coming in line with the old packaging process speeds,” says Scott Lamerand, product manager, dry mix/confection, Pyramid Global.

Now that everything from cereals to soups to dried fruits to frozen potatoes are packed in stand-up pouches, what areas of conversion are left? “Any products still in boxes are great candidates [for conversion to stand-up pouches],” emphasizes Lamerand. “Other dry materials are sure to follow. A walk down the cake aisle in the grocery store alone shows the potential for conversion to stand-up pouches is vast.”

Because so many food and beverage products have moved into pouches, what was once a unique package on the shelf may now look commonplace. However, says Lamerand, “I see further differentiation taking place through unique shapes, inks and graphics.”

At the same time pouches are fighting to keep their distinction, brand managers are trying to keep their brand’s unique shape or graphics when transitioning from rigid packaging to pouches. “People spend so much building their brands and brand identities. When you look at the box to pouch movement, you see a lot of commonality of the old graphics and the new graphics just to hold the brand,” notes Lamerand.
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Children's drinks are prime candidates for the fun image of shaped stand-up pouches such as Disney Xtreme! Coolers, packed in 200ml pouches.

As pouches become mainstream among certain food and beverage categories, the next large area of conversion is retorts for shelf-stable foods. While this application has been around for nearly 25 years, mainly as a three-sided seal pouch for military use MREs, it took off in 2000 when H.J. Heinz debuted StarKist tuna in a multilayer four-side-seal retort pouch. The commercial success of this product proved that just about any product packed into a bottle or can and retorted is a candidate for replacement by a pouch. Emerging product categories in retort pouches include soups, sauces, fruits, specialty meals, meat and poultry items, and seafood.

Many things are driving the interest in retort pouches in North America, notes Dean Hoss, president of The Pyramid Group, converter of Heinz's StarKist tuna retort pouch. "We have had speeds increase from 30 a minute to over 500 a minute in just the last few years. This has aided in the transition from cans to pouches," says Hoss. International food companies that have been using retort pouches overseas are now looking to co-packers in the U.S. that have invested in the faster running machines, adds Hoss. This allows entry into a test market without capital expenditure.
Stick packs made by Curwood are used to package everything from yogurt and snacks to powdered milkshakes and infant formula.
Source: Bemis Company, Inc.

A variation on the stand-up pouch is the flexible stick pack pouch, which got its boost into mainstream markets with General Mill's widely successful Go-Gurt yogurt snacks. Now, one look in the yogurt section and you'll find a plethora of stick packs. Beyond yogurt applications, stick packs are now used for everything from pudding to applesauce to peanut butter. As more food companies adopt stick packs, are they losing their uniqueness on the shelf?

"Stick packs are still exciting as alternatives to traditional single-serve sachets among a diverse cross-section of marketing folks," notes Neil Kozarsky, president of T.H.E.M. of Mt. Laurel, NJ, a company that has brought numerous Japanese stick pack technologies to U.S. markets and has exclusive North American rights to the SlimStick packaging system from Sanko. "While sticks as 'go-snacks' have taken off, there remains significant uncharted terrain in additional powder applications, including drink mixes, milk powder, cocoa, nutritional supplements and even sugar/sweeteners."

According to Kozarsky, there is a "world of opportunity" for stick packs driven by consistent high marks from consumers, significant film efficiencies – up to 40% less material compared to three or four-sided seal pouches – and proven high-speed production. "Stick packs typically fare very well from a purely economic standpoint when compared to three and four-side seal pouches as they use significantly less film per impression," notes Kozarsky. "Stick pack machinery is now capable of running 80-90 cycles per minute across as many as 26 lanes, depending on the flowability of the product and pouch configuration."

Kozarsky adds that compared to thermoformed tubs and lid stock, the stick pack is less costly. "However, many companies inclined to switch to the stick have to grapple with machinery infrastructures that are fully amortized. Sticks will likely have a good chance to take over when new equipment is called for."

In terms of upcoming applications for stick packs, Kozarsky notes that technology breakthroughs in dairy and more recently aseptic stick packaging are opening up new doors, particularly for low-acid products.

Recently ConAgra's Hunt's brand Squeez 'n Go Portable Pudding debuted in a 2.25 oz. aseptic flexible stick pack. Curwood provided the three-sided film with a tear notch opening for the stick pack. The stick is produced at a speed of 400 packs per minute on a form/fill/seal machine from Hassia USA. The shelf-stable puddings are said to have a one-year shelf life.

References
1. Dean Hoss, The Pyramid Group, 562-690-2208, deanh@pyramidglobal.com
2. Scott Lamerand, Pechiney Plastic Packaging, 773-399-8025, scott.lamerand@pechiney.com
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