

► The world's first high barrier, clear aseptic stand-up pouch – the Tetra Wedge Aseptic Clear – can be “see through”, or printed as seen here



You can re-seal them, unzip them and even cook in them. Pouches are outperforming alternative formats as the preferred consumer choice in added convenience packaging, reports Des King

POUCH

While still representing only a fraction of total flexible packaging, pouches are emerging as the format that most closely reflects current lifestyle trends in convenience and functionality.

Initially adopted within the petfoods sector, they are now extending across mainstream applications as a packaging delivery mechanism for products as diverse as fresh asparagus and frozen ice-cubes. Brands and retailers love them for their light-weighting and longer shelf-life attributes; consumers for their flexibility and re-usability.

According to a recent survey conducted by the US food packaging sector consultancy, Freedonia, demand for pouches will be one of the principal drivers in boosting adoption of flexible packaging in the US at the expense of more rigid formats. With demand for converted flexible packaging forecast to rise by about 4% a year to \$14.4 bn, pouches are predicted to account for 40% of total sales.

“Growth will be attributable to cost, performance and source reduction advantages over most rigid packaging formats,” says industry analyst Esther Palevsky. “Heightened barrier requirements in many markets will drive increased demand for value-added materials to enhance shelf life or product protection. Gains will outpace the overall market as a result of increased demand for convenience-oriented or other processed food items, with the fastest growth occurring in the fresh produce, meat and related products, and beverage segments.

“Advances will be propelled by a rapid expansion for stand-up pouches, often in preference to rigid containers, based on advantages of excellent visual appeal, product differentiation,

convenience, portability and re-closability. Demand for flat pouches will also increase as a result of improved barrier structures and the addition of convenient features such as re-sealable zippers.”

US market trends are likely to be mirrored on this side of the Atlantic. According to researcher Euromonitor, the UK food packaging market is predicted to grow by 2% to reach 72.4bn units in 2009, with flexible packaging occupying a 55% market share. Strong gains are expected to come from plastic pouches, which are forecast to continue their advance into various categories, including dried processed food, sauces, dressings and condiments, soup, and sweet and savoury snacks. Liquids too.

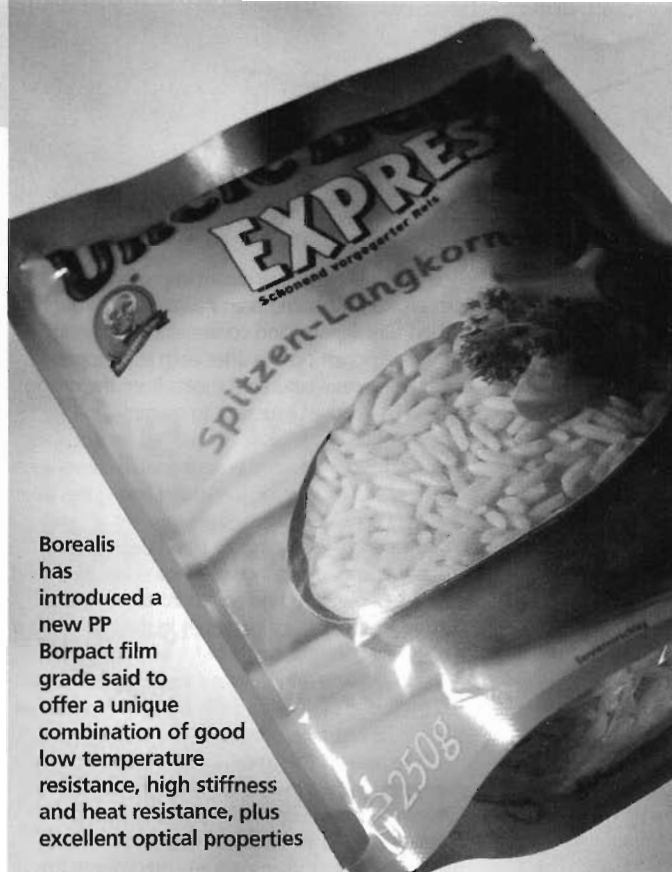
Tetra Pak has recently introduced what is claimed to be the world's first high barrier, clear aseptic stand-up pouch – the Tetra Wedge Aseptic Clear. Initially trialled via a leading South American fresh juice producer, the format is currently being extended to selected European markets, with full commercialisation on schedule for early 2007.

Aimed at the fast growing market for children's “on the go” drinks, the Tetra Wedge pouch provides consumers with key benefits including 100% transparency and Tetra's patented barrier technology to seal in taste and nutrition. “Market research in Mexico has shown that the package is a clear hit with the 6-12 age range, who prefer it to other plastic packages because it's transparent and fun to play with,” said marketing director Robert Graves.

Ergonomically, the Tetra Wedge Aseptic Clear was designed with smooth sides and no sharp edges compared with several existing stand-up



▲ Amcor Flexibles' generic self-sevent pouch format has been extended for fresh produce applications as a combination of two and three-ply laminates



Borealis has introduced a new PP Borpack film grade said to offer a unique combination of good low temperature resistance, high stiffness and heat resistance, plus excellent optical properties



Sealed Air's new, patented "easy open, easy close" technology is said to differ from most other solutions in relying upon pressure rather than a zip

APPEAL

pouches and its slim 200 ml design makes it easy for small hands to cope with. Production cost is comparable to standard aseptic packages, and Tetra is likely to target a wide range of beverage applications in addition to juices, including flavoured waters, sports drinks and liquid electrolytes.

In addition to its distinctive look and feel, the Tetra Wedge is said to offer converters low investment costs compared with traditional plastic packages or other stand-up pouches. The pouch format uses PET/SiOx as a barrier to oxygen, is manufactured on a modified TBA/19 and comes with a Tetra Unit Conveyor 54, an ACHX 10 (Helix Accumulator) a Tetra Cardboard Packer 78 (TX10) and a Tetra Tray Shrink 51 with stacker and grouping belt.

Self-vent for fresh produce

Initially developed during 2004, Amcor Flexibles' generic self-vent pouch format was extended for fresh produce applications early last year as a combination of two and three-ply laminates, combining PET, OPA and cPP. In line with over 90% of UK fresh produce packaging, it is flexo printed, in this case on a Fischer & Krecke eight-colour 165 gearless press with in-line rotogravure antifog application. The material is treated with Amcor P-Plus patented MAP micro-perforation technology, which makes the pouch breathable and therefore suitable for all types of fresh produce. For the retailer, the pack's stand-up format offers excellent on-shelf presence; Tesco and Waitrose are amongst leading multiples to have already adopted the solution for own-label fresh produce lines.

"This format helps to differentiate between premium and standard products", says Amcor's fresh produce development manager Pete Ettridge. "You are giving a functionality to the consumer and a differentiation to the retailers. It is self-evident that it's an added value pack compared to, say, a conventional OPP pillow bag."

Key features include a reduction in cooking time by up to 70%; easy use and opening as the "self venting" nature of the pack in the microwave removes the need to pierce before use; enhanced shelf visibility; and a generally improved consumption experience, with the contents able to cook in their own juices.

According to Amcor, while some applications have been moved directly from OPP pillow bags into the self-vent pouch, other applications are generating a completely new crossover product group, somewhere between ready meals and fresh produce. These products can add value for the packer and retailer by combining premium fresh vegetables with herbs and dressings. The format is also claimed to provide important nutritional retention, including an increase in vitamin C content by 13%.

Added value is key to modern pouch design. Shifting products off retail shelves can be accelerated with Flexico zipper stand-up pouches, which again have been designed to be attractive for both consumers and manufacturers. The film, which meets recent EC recommendations, is said to have the brightness, touch and transparency required to boost sales across a range of categories.

The zipper technology makes the packs simple to open and reseal, says UK sales manager Paul



▲ Zip-Pak has recently supplied its press-to-close Inno-Lok barrier zipper for MasterPack Italy's Grana Padano grated cheese