



The Ben Lid in development for the drinks-to-go market by Nippon Closures

Sun rises on innovation

From pack design to raw materials, Tokyo Pack is an important event showcasing the latest developments around Asia and the Far East. *Joanne Hunter* made the trip to find out more

For the domestic Japanese and Asia-based industries Tokyo Pack is an important shop-window for new developments in pack design, print technology and materials; for overseas companies with ambitions to market products on the other side of the globe, it is a window onto a different world of business-to-business buying and selling and where the congregated local competition can be sized up and studied.

Attending the show is revealing about Japanese business culture, in the way that mingling with supermarket shoppers gives insight into how retailing works in Japan. A would-be supplier has to know that their product line accommodates the needs of the distribution chain, retailers and consumers; and from a Japanese perspective, does it have the required environmental credentials and people-friendly design.

For example, retort pouches topped all previous sales figures this



Easy-open pouches are a DNP speciality

year and the sector had its strongest-ever showing at Tokyo Pack this year. With so many players seizing on an opportunity for a slice of a growing market, newcomers must expect to bring a high-level of differentiation.

With a foot on Japanese soil, Swedish pouch manufacturer Ecolan competed for business for the first time on equal terms with domestic suppliers in, arguably, the toughest testing ground for quality. While the Australian specialist in bio-based lidding films Plantic, represented in Japan by distributor Kururay, gave the industry notice that it was eyeing pouches as its future new target application.

Both incoming players believe their systems put pouches on a better environmental footing. A pouch 40% made from chalk (calcium carbonate) easily stands out from the current crowd and the European alternative has other highly sellable features from a Japanese point of view: an air-filled handle for comfort while pouring, a re-closing feature to help prolong product freshness, the option of transparency for added shelf appeal.

Ecolan scaled up its activities in south east Asia by opening a Japanese office a year ago in a fashionable quarter of Tokyo, and unveiled the latest in a family of smaller volume Air Aseptic pouches

to an audience of key potential customers. The 125ml pouch was commercially launched in Pakistan recently, with a dairy-based product for hot tea market. Pakistan is one of Ecolan's biggest aseptic markets and half a billion packs have been supplied to two customers there this year, says company spokesperson Hanna Jeppsson.

Plantic exhibited tray-lid applications for biodegradable films 85% made from renewables and is working on a thinner films of 50 micron or less, which are expected to bring results in "one or two years". *Packaging News* asked Plantic researcher Yuki Morino about developments around the corner, and got the answer: "The future is in pouches."

Sole UK exhibitor Advanta, a metal tray manufacturer positioned first and second in the UK in all its market sectors, came to Tokyo Pack to explore the potential of Japan, company managing director Steve Pinhome told *Packaging News*. He said if plans go forward, the business will need to adapt its thought processes to that market and possibly take on a local partner to "overcome the challenges". In addition to language and business style, there's a big difference in the way the Japanese traditionally cook in the home and this, he thinks, will impact on pack design.

Taking the story back to pouches is a cat-food brand by Hagoromo Foods that became the first commercial use of a combination inkjet and water-based white colour gravure printing system, suitable for retort application. Developed by Fuji Tokushu Shigyo and winner of a Japan Good Packaging Design Award, it marks a "first in a digitally printed package", says Hiroshi Umemoto, head of the sales division for Fuji MO technology.

Ease-of-use

User-friendly or "accessible" design is a must-have for the Japanese. DNP's latest pouch designs include a concept for one-handed opening that uses two materials that can be easily separated for disposal; and a tearable film for making a pouch simpler to pull open.

A new hinged ring-pull bottle cap shown by Nippon Closures has a depression that allows the finger to access the ring and pull, for easier opening. It is expected on-shelf in 2017, available in standard red, green and gold and custom colours, sizes 26mm and 32mm. A version for granular foods without a ring-pull tab won a 2016 Good Packaging Award. The Ben Lid being developed for the drinks-to-go market can reopen to extract the teabag and add milk and sugar and stir, and is lockable to improve safety.

A near-invisible barcode known as digital watermarking was shown by DNP, license holder for the Asia region for a "unique" technology by Digimarc. Datalogic Magellan 9800i scanning machinery developed for the Japanese market will be launched in summer 2017 giving retailers the chance to offer a speedier checkout service. Shoppers can scan the code with a smartphone for allergy information and to obtain vouchers.

Japan leads the world in developing a circular economy and Crown Packaging has become expert at producing paper and board made from recycled paper pulp, which is blended with discards from food and drink manufacture. Subtle hints of purple, green, pink and brown and natural flecking give away the origins of the Smartpapier range: safflower petals from the making of red food dye, green-tea processing waste, cacao bean husks and palm husks. The latest new material Berry-Mix uses blueberry skins from juice production. A sustainability 'champion' in Japan, Crown's seminar audience heard about its campaigning for the Tokyo 2020 Olympics and Paralympics to promote FSC paper standards, starting with the ticketing. Another Crown scheme recycles the 10 million origami paper cranes, or Irizuru, sent annually to the Hiroshima Peace Memorial Park.

Paper is still king as a packaging material in Japan. Hexa presented a light, durable and eco-friendly paper honeycomb for producing alternatives to pallets made of wood and plastics. It is claimed to be strong enough for making furniture or building exhibition stands.

Refillable concepts are key to Japan's circular economy ambitions and their designs are constantly reviewed and refreshed, and the best of them pop up as winners in the annual Good Packaging Awards. A "clean, easy and stress-free" pouch-exchange type refill system for shampoo skips the capping process after filling and aims to keep the contents fresh until the last drop is pumped out, by Japan Gateway and



Ecolan's 125ml pouch was first used in Pakistan



Sports mania has come early to the host nation of future world sporting events



A pouch-refill system by Kao for dispensing product more smoothly



Crown Packaging is trialling Berry-Mix paper made using blueberry skins



First used for a cat food pouch, Fuji MO technology by Fuji Tokushu Shigyo marks a "first in a digitally printed package"

PacPlus. A pouch-refill system by Kao has made it easier to dispense a high viscosity shampoo by adding top and bottom gussets to help give a steady flow. An "easily detachable" refill container by U Co avoids oxygen ingress to keep contents fresher.

Sporting events

Besides serious technology, visitors enjoyed the fun of the fair. Sports mania has come early to the host nation of the 2019 Rugby World Cup and 2020 Olympics and Paralympics, judging from the "Be Active" theme of Toyo Seikan's booth. The sporty design brief produced novel results, including containers shaped like dumbbells. While a theatrical display of the company's wide-ranging plastics and glass portfolio encapsulated the allure of Tokyo and Japanese aesthetics.

Fanuc introduced a high-speed pick-and-place system that captivated its audience, and a robotic workmate for packaging-line operatives. The CR-7iA/L with a payload of 7kg and roam freely around the factory-floor thanks to intelligent safety functions. Responsive to physical impact, depending on the level of force it will pause then continue, or else come to a full stop and require a manual restart. Future users are considering how to apply the robot and it will be developed accordingly, says Fanuc's manager for sales in India, Hiroshi Ota. Last year, Japan Pack (a biennial packaging machinery show that alternates with Tokyo Pack) introduced its big brother – the CR-35iA – with a payload of 18kg, in the car-making industry since mid-2015 but still waiting for its break into packaging.

To see close-up the Japanese working the trade-fair floor is enlightening about the way corporates very effectively promote themselves externally. The Japanese are masterly when it comes to communication and overcome perceived barriers. Graphics are employed as a universal language on all their packaging and at exhibitions. An interested visitor is left alone barely moments before assistance arrives and someone wearing an "English Speaker" armband is easily found on most booths. Also helpful are product summaries with English translations that serve as introductions to many of the exhibits.

Respecters of history and tradition, the Japanese do everything in their own inimitable way. Companies that engage characteristic caution and meticulous care when showing their corporate face to the public, also know how to entertain the masses. Multi-media spectacles kept crowds temporarily pinned to the spot: a spoof newscast reported 'breaking news', a dynamic flashing illuminated booth sign brought a taste of Tokyo's hotspot Shibuya (or Times Square, New York).

The Japanese are keen to bring in overseas technologies and welcome global collaborations. Sweden's packaging industry in particular has forged strong links with Japan, resulting this year in a Sweden Packaging Seminar that focused on sustainably-based systems. Helén Williams, senior lecturer at Karlstad University, talked on how to change perceptions of packaging from environmental villain to hero. Innventia, Mondi and Innoscenia took part and topics of high interest to the Japanese industry included digital monitoring for food security and communicative packaging devices.

Tokyo Pack, and its biennial sister packaging-machinery show Japan Pack, are run respectively by the Japan Packaging Institute and Japan Packaging Machine Manufacturers Association. Their unique character and the business opportunities they open up are not to be missed, as they come as part of an extraordinary Tokyo experience. ■