

Healthy, sustainable plus affordable: a challenging equation for snacks

Italian creativity and vitality were back in full at the recent Ipack-Ima exhibition at Fiera Milano in Milan. After scouting the fair, looking for innovation in the snack segment, Dominique Huret from Cape Decision discusses the latest innovations in processing and packaging for the category



Clextral shelf

Due to ever-changing industry requirements and customer demands, the snack world is in a constant state of evolution: making them healthier, packaged more sustainably and at a competitive price. This is a challenging equation to solve. Food machinery suppliers are coming up with new solutions and technologies to fit in with today's demand.

Getting taste and texture right but without the calories

Puffed cereal and no-fried snacks are, no doubt, a booming category in savoury snacks today. These products are also appreciated as healthy alternatives to conventional bread, valued for their versatility by professionals and consumers. Carbs are supplied during meals, crunchy snacks for a quick bite or fancy decorations to dishes and desserts. To accommodate this growing demand and with an innovative attitude, Italian Re Pietro produced its Popping Machine RP Evo, that can produce both cereal cakes and no-fried snacks, simplifying the production of these products.

Once the mould has been chosen and installed, the Popping RP Evo transforms the cereals and/or the micro-pellets into cakes or snacks. Equipped with a hydraulic system that produces the high pressure needed for the expansion of the cereals or micro-pellet. The volumetric dosing is carried out by a pneumatically operated feeding plate. A wide choice of flavours is possible and many possibilities of moulds and shapes suitable on Re Pietro new press. Customised moulds can be done on customers' requests.

Present in 12 countries, French equipment Clextral is a well known specialist in twin-screw extrusion lines. Twenty years ago, the company patented its technology. Today the market demand is waking up to the numerous opportunities offered. So Clextral showcased Evolum+ dryer their latest machine, setting a new standard for drying and processing technologies in food and feed. Back in 1975, Clextral worked with Danone to produce the Craquette, crispy bread. Today it is still an undeniable success and so

many other products have been developed with Clextral equipment.

"For snacks but also for pasta, cereals, alternative proteins offer many advantages that are essential to consumers. They are environment-friendly, with a much lower footprint compared to meat and healthier. We have a technique to produce snacks made of 100 per cent peas, couscous made of lentils suitable for the gluten-free diet. We see sustainable production via pulses as the future of food," says Ludovic Lacau, Clextral area manager for Europe & Sub-Saharan Africa.

Mobile and multifunctional equipment is hype

Italian Idealmac is a specialist in construction and design of puffing machines for the production of puffed cereal cakes and non-fried snacks. The company produced rice cake production tools since 2004 but sold this in 2016. In 2019 Idealmac was created with the expertise and know-how acquired over more than 20 years as manufacturers of cakes/snacks.

On the stand, the Green PUFF equipment was on demo Giovanni Lavista Idealmac managing director explains: "This is a compact, mobile and multifunctional machine that compresses and cooks the snacks. Composed by two independent presses, powered by compressed air and electricity, which are placed on a structure with pivoting wheels and a drawer in the lower part to collect production waste. All the movements of the machine are pneumatic and ensure the necessary power to expand a variety of cereals and/or pellet with a high expansion quality and texture.

"The installed software includes the possibility to choose what to produce between cakes or snacks just setting the parameters on the control panel before starting the cycle. We strongly believe our equipment is in line with today's developing demand."

It was the first exhibition for Italian Cepi, manufacturer of fully automatic turnkey silo-plants to store as well as dosing for raw material for the food industry. The company showcased its three in one (weighing, filtering, blending) equip-



CEPI



Clextral



Frederico Pavan

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ment which weighs the ingredient, separates air from product during pneumatic transport and at last blends, all in a single unit. The vertical blender inside is a system for the production of premix that ensures the highest flexibility across a wide range of food sectors. It is fast, accurate and clean, delivering a homogeneous mix of powders even for quantities lower than one per cent in the span of three to five minutes. Hygienic design with total discharge, easy to clean, fully inspectable and washable. The products targeted are confectionery, ice cream and food premix.

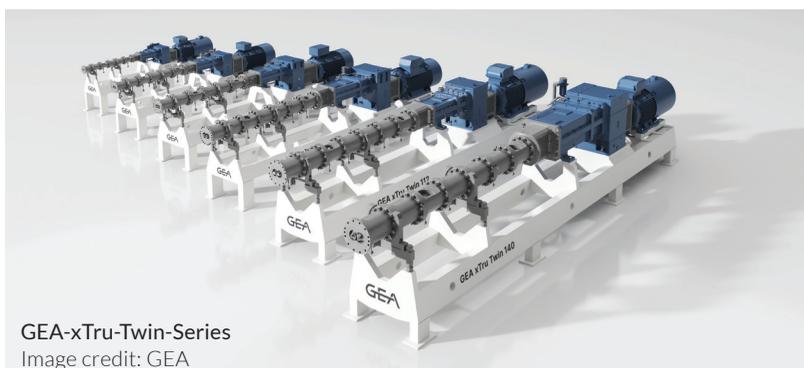
German's creativity with Cinderella slipper

Buzzing with entertainment, German GEA's huge stand could not be missed.

"Propelled by changing consumer expectations, the new food sector is growing rapidly. This presents exciting growth opportunities; by sourcing alternative raw materials such as grains and proteins, we can produce new products, focus on ideas such as meat analogues, healthy snacks and high-protein pasta, for example, which will be key levers as we help our customers to succeed in these markets," says Massimiliano Bizzarri, head of BU Pasta, extrusion and milling technologies

For new food applications, such as meat analogues, protein-plus pasta, healthy snacks and organic/gluten-free bakery products, GEA is looking to improve technology or machines that already exist or create something new. During grain processing, for example, by-products are produced after the conversion or sedimentation-based malting stage. To overcome this issue, in a collaborative project with another global company, EverGrain by AB InBev, GEA has successfully managed to convert the so-called brewer's spent grain into both short cut and long cut dry pasta.

"What was once a waste product destined for biogas is now being used within the food chain as



GEA-xTru-Twin-Series
Image credit: GEA

a high-quality ingredient," says Davide Di Nunno, director R&D, pasta and snacks.

On display was the xTru Twin series of extruders, high-capacity extrusion equipment for the food and pet food industries. GEA engineers have used their experience and know-how to increase the cross-sectional area, rotation speed and pitch of the screws on the new machines, all while maintaining the extruder footprint and screw length. Retrofit-compatible with a production capacity of more than 3 tons of pellets and 10 tons of pet food kibble an hour, it's ideal for cereal-based snack pellets, breakfast cereals, dry pet food and any other extruded food product.

Example of the performance of the xTru Twin in action, GEA was tasked with making a snack that you could dip into any sauce without getting your fingers coated. It had to hold on to the sauce for the best possible eating experience, had to be versatile, appeal to a multicultural audience and, of course, taste great. The result is the "Cinderella's Slipper". "When creativity, innovation, know-how and great engineering come together, great innovation comes out. These same qualities can be applied to any opportunity to help manufacturers identify trends, adapt products, bring them to market profitably and become true market leaders by driving fashion, not following it. There is a lot of work behind this project, not a simple fairy story," adds Davide Di Nunno, director R&D, pasta and snacks. 



Clextra and craquette



RePietro stand



RePietro stand



Davide Di Nunno, GEA



Cinderella's slipper