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WEEKLY NEWSLETTER

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SPECIAL FEATURE

New Standards in Sustainable Practices





Sourcing Matters: Consumers Seek Transparency in Food Origins and Farming Practices



By committing to transparency, sustainability, and ethical practices, industry leaders are not only responding to consumer demands but also setting the stage for a more sustainable future.

Tudor Vintiloiu

Food sourcing has become an important priority for consumers, manufacturers and governments alike, not only for animal-based foods but across the entire supply chain. Demand for more transparency around food origins combined with the unprecedented investment in food tech, e-commerce and delivery is having long-term disruptive implications for food supply chains and consumers' path to purchase.

Consumers choosing sustainably produced brands are buying into the ethical or environmental purposes espoused by that product. Claims like organic, fair trade, free range, charitable support or locally sourced all refer to specific elements of a product's origins. Many consumer surveys, however, reveal a lack of trust in such labels. This skepticism underscores the need for robust digital traceability tools that can enhance transparency from farm to fork.

The Federation of European Manufacturers and Suppliers of Ingredients to the Bakery, Confectionery, and Patisserie Industries (Fedima) recently published its Code of Conduct for Responsible Sourcing, underscoring the industry's commitment to sustainable and innovative practices.

Fedima's Code of Conduct serves as a comprehensive guideline for its members and suppliers, emphasizing compliance with existing laws and regulations, ensuring product safety and quality, and promoting ethical business practices. Jean-Philippe Michaux, Chair of Fedima's Sustainability Committee, articulates the significance of this initiative by highlighting the unique position of the European bakery ingredients industry at the crossroads between production and consumption. The Code's standards advocate for a healthy and safe work environment, reduced environmental impact, and supply chain transparency, which collectively aim to foster trust and accountability within the industry. By committing to transparency, sustainability, and ethical practices, industry leaders are not only responding to consumer demands but also setting the stage for a more sustainable future.

As the industry progresses, professional bakers, snack producers, and equipment manufacturers must continue to embrace these changes, ensuring that their practices align with the evolving expectations of consumers and regulators alike. The future of the baking industry lies in its ability to adapt and innovate, fostering a supply chain that is as ethical and sustainable as it is efficient and profitable. •



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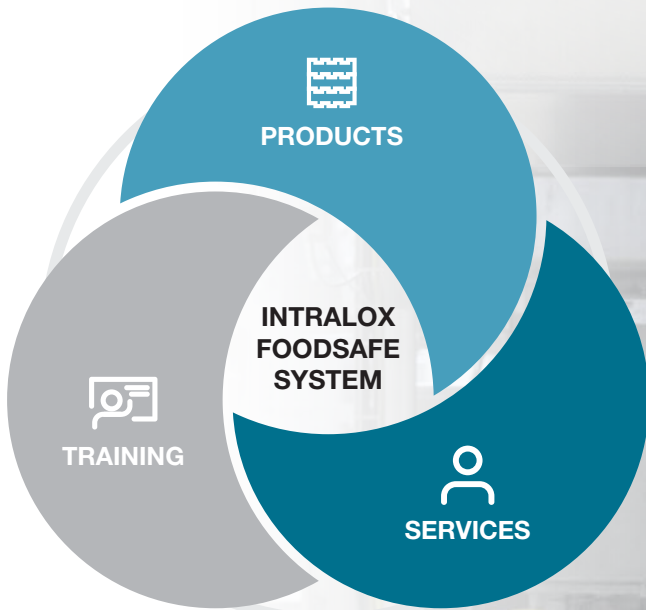
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> RELIABLY INVENTIVE

BENEEO, Puratos And Other Major Ingredient Players Unite To Support Sustainable Farming



Raffinerie Tirlemontoise, a beet sugar producer, BENEEO, a leading manufacturer of functional ingredients, and Puratos, a global leader in bakery, patisserie, and chocolate ingredients, have joined forces to launch a pioneering Climate Farming Project. The ambitious initiative supports Belgian farmers in implementing more sustainable farming practices and promotes regenerative agricultural principles that contribute to enhancing soil

health and reducing environmental impact. Empowering farmers through training and stimulating the exchange of knowledge are key components of this joint commitment. The project is already underway and will run until 2025, involving 15 pilot farms across Belgium. Together, they will cultivate sugar beet, wheat and chicory according to various regenerative farming methods in an area equivalent to the size of more than 1,100 football fields.

Olivier Roques Appointed CEO Of BENEEO

BENEEO, a leading manufacturer of functional ingredients for food, feed and pharma, appointed Olivier Roques as CEO and new member of its Executive Board of Directors at BENEEO GmbH, effective from 1st June 2024. With an engineering degree in agronomics and a Master's degree in Business Administration, Roques brings more than three decades of experience within the international ingredients industry to this new role. He started his career in the dairy and flavour industries, followed by more than twenty years in leadership roles in the USA and Europe at Agrana Fruit, a world leading manufacturer of fruit preparations. This included positions in sales, food safety and quality and new product development. Prior to his new role at BENEEO, Olivier was positioned as CEO of Agrana Fruit Europe. In addition to being BENEEO's new CEO, Roques will also be responsible for overseeing all sales and marketing as BENEEO's new Chief Sales Officer, succeeding Dominic Speleers.



Tate & Lyle To Acquire CP Kelco For USD1.8bn



Tate & Lyle announces that it has entered into an agreement to acquire the entire issued share capital of CP Kelco U.S. CP Kelco China, and CP Kelco ApS together with each of their respective subsidiaries. CP Kelco is a leading provider of pectin, specialty gums and other nature-based ingredients, formerly owned by J.M. Huber Corporation. The transaction amounts to USD1.8bn.

Over the last six years, Tate & Lyle has been executing a major strategic transformation to become a growth-focused specialty food and beverage solutions business aligned to attractive structural and growing consumer trends for healthier, tastier and more sustainable food and drink. This transformation has included a much sharper focus on customers and key categories, increased investment in innovation and solution selling capabilities, and the significant strengthening of its Sweetening, Mouthfeel and Fortification platforms through new product development and acquisitions. This transformation was completed with the announcement on 23 May 2024 of the proposed sale of Tate & Lyle's remaining interest in Primient.

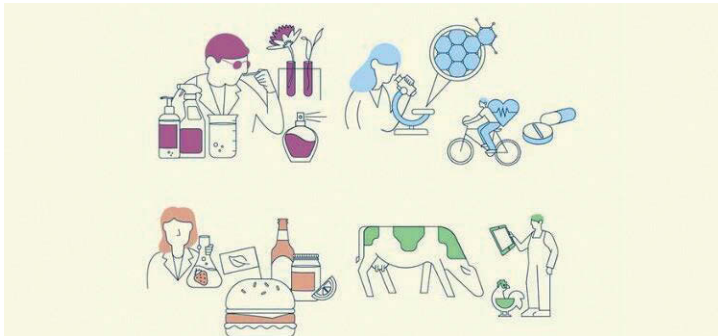
Baker & Baker Invests GBP2.9m In New Cookie Line

European bakery products manufacturer Baker & Baker has made a significant investment in one of the American Bakery style cookie lines at its Wirral site. The investment, totalling almost GBP2.9m, has been made over a number of months to increase capacity and introduce new machinery to improve the quality and output of the line. The machinery installed includes a wirecutter, mixer and mixing bowls and weighing hoppers. New workspaces, including washrooms and sieving and de-boxing areas have also been created on the factory floor. At the end of January, two bulk silos were installed to complement the existing units on site, which contain bulk ingredients such as sugar and flour.

The investment will also see an upskilling of existing site teams to operate the new equipment, and eight new full-time positions have been created to manage the additional capacity.



Dsm-Firmenich Sells Yeast Extract Business To Lesaffre



Dsm-firmenich announced an agreement to sell its yeast extract business to Lesaffre, a key global player in fermentation and micro-organisms. Yeast Extracts is part of dsm-firmenich's Taste, Texture & Health business unit, with annual sales of about EUR120m.

As part of dsm-firmenich's tuning of its portfolio, the company de-prioritized certain business segments. The divestment from Yeast Extracts is an outcome of that strategic review process, which was announced on June 3. As part of the transaction, Lesaffre will enter into an agreement to supply yeast extracts to dsm-firmenich for its Savory business. In addition, dsm-firmenich and Lesaffre will enter a technology partnership for the development of yeast extracts.

After the completion of the deal, dsm-firmenich will continue to supply yeast extracts produced in Delft to Lesaffre until the end of 2025, after which point the yeast extracts production in Delft will be discontinued.

Raymond Nogael Appointed President Of MECATHERM

MECATHERM, a world leader in automatic production lines and equipment for industrial bakery, pastry and confectionery products, announces the appointment of Raymond Nogael as President. He succeeds Olivier Sergent, who continues his duties as President of TMG, the parent company of MECATHERM, ABI and MaMaTa.

As President of MECATHERM, Raymond Nogael will be responsible for pursuing MECATHERM's development strategy, based on the following pillars: innovation, operational excellence, excellence in customer relations, sustainable development and the management of talent and knowledge within the company. Raymond Nogael is a graduate of IPAG Business School and



the University of Westminster and holds a diploma in Executive Management from INSEAD. Throughout his career, he has held numerous marketing and sales positions. He began his career at ArvinMeritor, where he notably held the position of Sales & Marketing Director Europe before joining CNH Industrial (FIAT Group) as Senior Marketing & Communication Director EMEA.

Koelnmesse Celebrates 100th Anniversary

To mark its 100th anniversary, Koelnmesse is hosting a grand opening ceremony for Europe's most cutting-edge event and congress center: Confex.

The technologically and environmentally groundbreaking new building creates new opportunities for innovative event formats in the region. After almost three years of construction, a core element of the one-billion-euro investment programme Koelnmesse 3.0 is launching on schedule.

"For 100 years, Koelnmesse has been a center for ideas and innovations from all over the world. Confex will secure this special position for the next generation," says NRW Minister-President Hendrik Wüst on the occasion of the opening. "It was the wish of former Mayor of Cologne and Koelnmesse founder, Konrad Adenauer, that the trade fair should grow into a place of encounter – a place that contributes to understanding between nations, between Germany and neighboring European countries. That is truly a success."



Fi Europe 2024 Registration Opens With Early Bird Offer

Registration has opened for Fi Europe 2024. Those who register before 14 July qualify for an introductory rate of EUR49, which includes entry to the Fi Europe Conference. The 2024 edition will offer a host of new features, including an expanded Food Manufacturing Technologies & Solutions Area and the Pet Food Suppliers' Hub.

A vast and vibrant show floor is the core of Fi Europe's value proposition and the format is constantly evolving in line with market trends. Informa is expanding the Food Manufacturing Technologies & Solutions Area for 2024, dedicating a larger space to solutions that can help food & beverage businesses secure their supply chains and future-proof their operations. Denmark, Thailand and Latin America will be among the countries participating in this capacity for the first time this year.

This year, for the first time, entry to the Fi Europe Conference will be free of charge for visitor pass holders, making this knowledge gathering forum accessible to all.

Frozen to the **Perfect** **Temperature**

Freezing technology has revolutionized the bakery and pastry industry, transforming everything from product development to daily operations. It's not merely about preservation; it's about enhancing quality, efficiency, and creativity in ways that were once unimaginable.

By **Bogdan Angheluță**

For bakeries and pastry shops, both large and small, freezing capabilities have become as essential as ovens. This technology allows for more flexible production schedules, reducing the need for round-the-clock baking while still ensuring fresh products are available on demand. Bakers can now prepare items in advance, freeze them at peak freshness, and finish them just before sale, maintaining quality without sacrificing convenience. The evolution of freezing equipment has been particularly impactful. Modern blast freezers and cryogenic systems can rapidly chill pastries, preserving their structure and flavor far better than traditional methods. While the initial investment in such equipment can be significant, the long-term benefits in terms of product consistency, reduced waste, and expanded menu offerings make it a worthwhile consideration for many businesses. For larger operations, freezing technology has opened new possibilities in production and distribution. Seasonal fluctuations in ingredient availability are less of a concern, as items can be produced in bulk when costs are low and stored for future use. This not only stabilizes pricing but also allows for a more consistent product range throughout the year. Even smaller artisanal bakeries have found freezing technology to be a game-changer. It allows them to offer a wider variety of products without the pressure of daily production for each





item. Moreover, it has elevated the art of cake decoration, allowing for more intricate designs that can be prepared in advance and preserved perfectly until needed. As freezing technology continues to advance, its role in the bakery and pastry industry is likely to grow even further. From improving food safety to enabling new product innovations, it has become an indispensable tool in the modern baker's arsenal. In an industry where freshness and quality are paramount, freezing technology has paradoxically become the key to serving up the freshest, highest-quality baked goods to an increasingly discerning customer base.

LONGER RUNNING, BETTER PERFORMANCE

The newest member of JBT's freezer range, the Frigoscandia GYRoCOMPACT 70 Spiral Freezer (GC70), is now available with Sequential Defrost; an addition which means producers can benefit from the GC70's capacity increase for up to two weeks of continuous running, according to company representatives. By incorporating this option into the GC70, producers can enjoy not only prolonged running time but also a 20% capacity upgrade without compromising the footprint when compared to its predecessor. The new function means the GC70 can run longer continuous times without stopping and without any need to halt production for defrosting at regular intervals. A new iteration of the JBT Frigoscandia GYRoCOMPACT range of spiral freezers – the industry standard for spiral freezer technology across the globe – the GC70 not only includes a 700mm wide belt, but also a range of key features which have been optimized to work better, smarter, and more powerfully than ever before. The addition of the Sequential Defrost option enables the GC70 to operate continuously for up to two weeks without the need for frequent defrosting, ensuring uninterrupted production. "This is a specially tailored option designed to meet the running requirements of the GC70," says Torbjörn Persson, JBT's director of Global Sales Support & Product Line Management for Frigoscandia Freezers. Capacity is another key feature of the GC70. To overcome space restrictions in many facilities, JBT has increased the overall capacity of the GC70 by building up, maximizing the amount of freezer that can cover the same area of floorspace. The overall achievement is a capacity increase of up to 20%. "The capacity is the big advantage of the GC70: in a relatively small space, we have managed to squeeze more capacity out of the freezer by increasing the headroom, which is of considerable benefit to customers," Persson adds. Improved drying functions also play a key role in the updated GC70. The improvements, which are focused on quicker and more efficient drying of the belt, save up to an hour compared with previous functions. This, says Persson, translates to a big saving on customers' turnaround times. "In older models, you had to dry for a longer period: this new version is a lot quicker, which means you cut delays in

restarting production,” he explains. More than this, JBT technicians also took a deep dive into all the food safety and hygienic aspects of the freezer design. The result has been an opening of all the profiles on the machine to make it simpler and more straightforward to clean. A final detail is the addition of JBT’s OmniBlu platform. A performance optimization system, which gathers and analyses data, insights and airflow control provided by OmniBlu enhances freezer performance and efficiency.



AUTOMATION USED TO IMPROVE PERFORMANCE

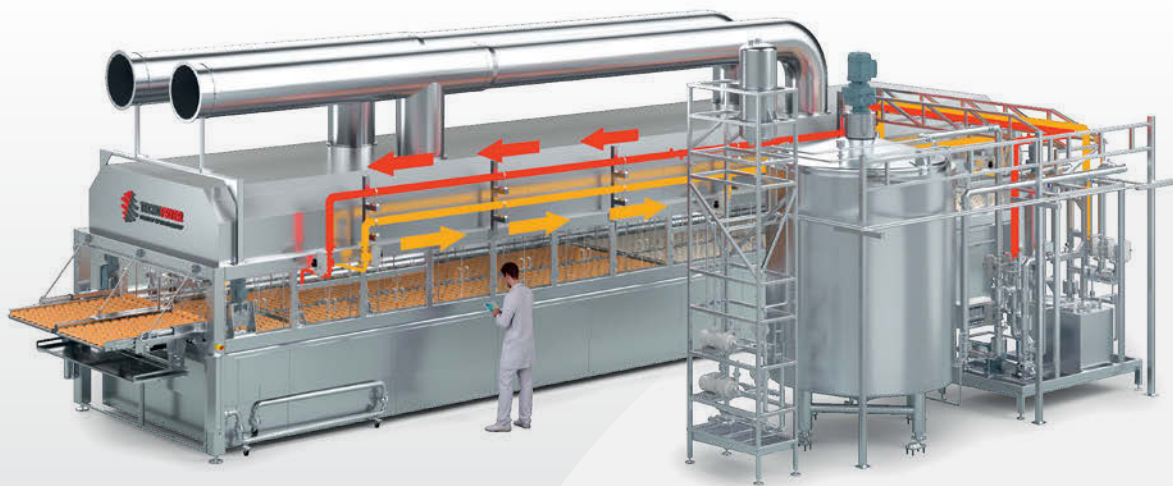
To expand operations and maintain its position as a major player in the international market, Mantinga, a leading Lithuanian bakery that specializes in frozen bakery and convenience foods, partnered with equipment supplier Starfrost to design and install its newest high performance spiral freezer system. Mantinga has constantly made investments in its expansion, most recently investing GBP18m into cutting-edge facilities and cutting-edge processing lines, including automated freezing systems. Mantinga boasts an astounding yearly export of over 1 billion items to more than 40 nations. Mantinga first teamed up with Starfrost in 2015 to install a spiral freezer system and revolutionize its freezing process. This action replaced the labor-intensive IQF blast freezers with an automated version of the bakery’s manual freezing process. As a result of the success of their initial partnership, Mantinga chose Starfrost as its preferred vendor for cooling equipment solutions. The installation of additional equipment later helped

the bakery expand, and each project benefited greatly from Starfrost’s experience. The most recent project that Starfrost and Mantinga worked on together was the design, production, and installation of an extra Helix spiral freezer for the bakery. With the capacity to freeze more than 1.5 tonnes of laminated dough products per hour, this state-of-the-art freezing machine is now Mantinga’s fourth Starfrost freezer. Mantinga has been able to extend its bakery operations and substantially boost its production capacity thanks to the integration of the most recent spiral freezer from Starfrost. The four Helix spiral freezers have streamlined freezing procedures, made it easier to add new production lines, decreased energy costs, and optimized Mantinga’s production area as part of the productive partnership. Starfrost has only recently introduced an energy comparison service to assist frozen and chilled food manufacturers in managing the ongoing rise in gas costs. This tool helps food processors assess the shift from expensive cryogenic to more affordable mechanical freezing, typically yielding a one-to-two-year return on investment. As energy costs continue to soar, it is crucial for food manufacturers to make informed decisions about their freezing methods. Starfrost is offering a comprehensive analysis of operating costs associated with mechanical and cryogenic freezing technologies, allowing processors to evaluate the financial implications of each option, available to newcomers entering the industry as well as established food processors contemplating an upgrade from their current cryogenic freezers. “Our energy comparison service equips businesses with the essential insights needed to optimize their freezing and chilling processes and sheds light on real costs and payback returns. As a comparative example, the operating costs per kilo of finished product for mechanical freezing are notably 85-90% lower than those incurred with nitrogen cryogenics, an astonishing reduction,” said Samuel Welch, UK sales manager at Starfrost. “Our mechanical freezing equipment doesn’t just deliver high-performance and high efficiency but also guarantees the highest quality results in the end product. We aim to share our expertise and emphasize a profitable freezing solution without compromising the food product’s quality or sacrificing system flexibility.” Starfrost’s experts are able accurately compare the costs of mechanical and cryogenic freezing processes, considering factors such as gas prices, long-term agreements, and market volatility. By leveraging this data, processors can gain valuable insights into the potential savings and return on investment associated with the different freezing technologies. To showcase the effectiveness of this service, Starfrost recently collaborated with a prominent UK seafood processor. By investing in a mechanical spiral freezer and utilizing the energy comparison service, the food manufacturer achieved substantial annual cost savings of GBP624,071 (based on 50 weeks of production, processing 1000kg per hour of seafood products). The return on investment for this customer will be achieved in just over one year when compared to the operating costs of their previously used cryogenic freezer. ●



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Bank on Precision: **Innovative Depositing Solutions**

Depositing machines, designed to precisely portion and deposit a variety of doughs, batters, and fillings, are an essential tool for both small-scale artisan bakers as well as large industrial producers. Equipment manufacturers that produce depositors for the baking industry all agree that the most important feature for this type of hardware is precision.

By Tudor Vintiloiu

Accurate depositing means efficient production and low losses, and delivering in this respect is the best selling point for any such machine. Recent advancements in depositing technology exemplify the trend towards increased automation, precision, and versatility, catering to the diverse needs of the baking industry.

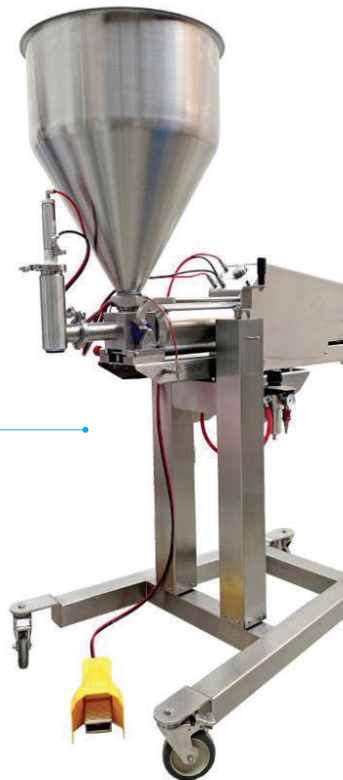
European Baker & Biscuit looked at equipment manufacturers Handtmann, Unifiller and GEA to get a better understanding of the features and particularities of modern depositing equipment and what bakeries should be looking for when purchasing such a machine.

Handtmann, a leading player in the field, recently introduced their new DS 554 and DS 560 P depositing systems. These machines cater to a broad spectrum of applications, from start-up and artisan operations to fully automated industrial production lines. The DS 560 P model, in particular, stands out with its multi-lane design, capable of high line output. This model excels in handling a wide range of products,

from fluid and low-viscosity substances to chunky and pasty fillings. The integration of servo-controlled lifting and lowering mechanisms, coupled with servo-driven flow technology, ensures drip-free and weight-accurate dosing. "One of the key features of the DS 560 P is its innovative valve technology, which includes options for different outlet diameters and cutting functions. This versatility allows bakers to switch between various products and portion sizes effortlessly, saving time and costs while expanding their product range," the company explains.

The DS 554 model is tailored for single-lane operations and shines in dosing chunky, fibrous, and inhomogeneous filling products with precise portioning accuracy. Both systems emphasize ease of use, thanks to their intuitive control panels and seamless interface capabilities. The intrinsic safety features of these machines, combined with their advanced valve technology, make them a reliable choice for modern bakeries looking to enhance efficiency and product quality.

Unifiller has also made significant strides in the depositing arena with the launch of their Pro4000i depositor. This heavy-duty machine is designed for high-precision portioning and is capable of handling a wide range of product viscosities, from liquid to viscous substances, including those with particulates. "The Pro4000i can deposit portions ranging from 445 mL to 4440 mL, making it ideal for commercial kitchens, institutional catering, and large-scale food manufacturing facilities. Its ability to perform up to 60 cycles per minute drastically reduces production time while maintaining consistent quality," Unifiller points out. Unifiller's Pro4000i also prioritizes food safety and ease of maintenance. The machine's design facilitates quick cleaning and maintenance, ensuring minimal downtime and maximizing production efficiency. Available in both low-level and high-level models, the Pro4000i can be





seamlessly integrated into various production lines, including form, fill, and seal operations, or large tub/bag portioning processes. This versatility, combined with its robust performance, positions the Pro4000i as a significant asset for food producers aiming to increase efficiency and reduce waste.

GEA, another leader in bakery depositing solutions, has introduced the GEA Bake Depositor MO. This volumetric cylinder depositor is specifically designed for depositing muffin, cake, and cupcake mixes with high accuracy. A standout feature of the GEA Bake Depositor MO is its innovative design, which allows for easy maintenance and cleaning without the need to remove the entire machine head. This design minimizes downtime and ensures a hygienic production environment.

The GEA Bake Depositor MO utilizes a servo motor to move the dosing piston, significantly reducing pneumatic consumption and operating costs. “With 12 dosing cylinders under its control, the system can cut annual operating costs by approximately €5,000 and significantly reduce CO2 emissions. The machine’s flexibility is evident in its various configurations, including fixed, vertical

movement, and combined vertical and horizontal movement heads,” GEA representatives explain. This adaptability, coupled with the use of brushless motors to drive the depositing head, enhances throughput, capacity, and weight accuracy, making the GEA Bake Depositor MO a versatile and efficient solution for modern bakeries.

INSTALLATION CHALLENGES

When considering the installation of these advanced depositing systems, several factors come into play. Firstly, the integration of these machines into existing production lines requires careful planning to ensure compatibility and optimal performance. The interface capabilities of the Handtmann systems, for example, facilitate seamless integration with packaging machines, enhancing the overall efficiency of the production process. Similarly, the Pro4000i’s compatibility with various production lines and the GEA Bake Depositor MO’s ability to operate on continuous running conveyors or with tunnel ovens underscore the importance of flexibility and adaptability in modern depositing systems.

Another crucial consideration is the ease of use and maintenance of these machines. The intuitive control panels and user-friendly designs of the Handtmann and Unifiller depositors simplify operation and reduce the need for extensive training. Additionally, the emphasis on hygienic design, as seen in the GEA Bake Depositor MO, ensures that cleaning and maintenance can be performed quickly and effectively, minimizing downtime and maintaining high standards of food safety.

Furthermore, the choice of depositing system should be guided by the specific needs of the bakery. For instance, small-scale or artisan bakers might benefit from the precision and flexibility of the Handtmann DS 554, while large industrial producers may find the high output and versatility of the DS 560 P more suitable. Similarly, the Unifiller Pro4000i’s broad portioning range and rapid cycle rate make it an excellent choice for high-volume production environments, whereas the GEA Bake Depositor MO’s specialized design is ideal for bakeries focused on muffin, cake, and cupcake production.

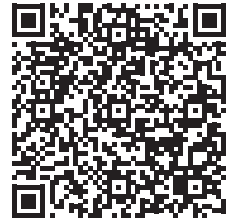
THE QUEST FOR CONTINUOUS IMPROVEMENT

The latest advancements in industrial bakery depositing systems, exemplified by the offerings from Handtmann, Unifiller, and GEA, demonstrate the industry’s move towards greater automation, precision, and versatility. These state-of-the-art machines not only enhance productivity and product consistency but also offer significant cost savings and environmental benefits. As the baking industry continues to evolve, the adoption of these advanced depositing solutions will be crucial for bakeries aiming to stay competitive and meet the growing demands for high-quality baked goods. •

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New Standards in Sustainable Practices

Sustainability is a core business value, otherwise it can't have a real impact on a company's carbon footprint or the financial bottom line. By integrating sustainable practices, the baking industry can contribute to a healthier environment, achieve economic benefits, comply with regulations, and fulfill social responsibilities, all while meeting the evolving demands of conscious consumers.

By Jo Ilie

Sustainable practices in the baking industry are important for a series of key reasons. The baking industry, like many other food production sectors, can have a significant carbon footprint due to energy consumption and emissions from transportation and production processes. Implementing energy-efficient practices and using renewable energy sources can help reduce greenhouse gas emissions. In the same line, efficient waste management practices, including recycling and reducing food waste, are crucial. For instance, unsold bakery products can be donated or

repurposed, and packaging materials can be recycled or made from biodegradable substances.

Well planned sustainable practices lead to cost savings in the long run. Energy-efficient equipment, waste reduction, and optimized resource use can lower operational costs. And, as consumers are increasingly seeking environmentally friendly and ethically produced products, bakeries can differentiate themselves in the market, potentially leading to increased sales and customer loyalty. Last, but not least, an important part of sustainability consists of resource preservation. Sustainable practices

help preserve natural resources, ensuring that raw materials remain available for future generations. This is particularly important for ingredients like wheat and other grains used in baking. In addition, ensuring that ingredients are sourced ethically supports fair trade practices and improves the livelihoods of producers in developing regions.

We asked four global ingredient companies how they approach sustainability, both for their production processes and for their customers, the bakers and manufacturers who need their expertise to improve their own sustainable practices.

SVZ: 100% SUSTAINABLE FRUIT AND VEGETABLES BY 2030

SVZ supplies high quality processed fruit and vegetable ingredients to food and drink manufacturers around the world. With over 150 years of experience across the agro-supply chain, SVZ's operation is built on sustainable agricultural practices.

"One of our top priorities as a business is to increase the share of sustainably-grown fruit and vegetables," says Silvi Navarrete, Sustainability Manager. "This year, we achieved 74% sustainable sourcing of core ingredients in our supply chain and have set an ambitious goal of reaching 100% sustainable core ingredients by 2030." To support this objective, SVZ provides year-round assistance with auditing and certifications to our partner growers, encouraging them to make incremental improvements that collectively lead to a significant impact.

One of the biggest challenges the company faces is energy usage. To address this, they implemented strategies that significantly reduce our environmental impact. For example, in 2022 they acquired a new pasteurizer for the Belgium processing plant, to significantly increase the capacity of the aseptic puree filling line, while reducing heat consumption and consequently CO2 emissions. "We expect the new pasteurizer will reduce emissions by 19% - a crucial step in SVZ's journey to decarbonization," says Navarrete.

At SVZ Spain, they installed 220 solar panels on the roof of our plant, generating 200 MWh annually - about 3.5% of the facility's total energy consumption and reducing CO2 emissions by 44 tons. Currently, they're installing solar panels in Belgium too, which will meet 100% of the energy needs, in compliance with Flemish government requirements for 2025.

"Here, our focus extends beyond technology implementation; we aim to monitor our highest energy consumption areas and explore opportunities to share surplus electricity," says Navarrete. "This forward-thinking approach not only supports our sustainability goals but also contributes to the broader energy grid." The SVZ expert considers the lack of industry-led initiatives a significant challenge: "many companies operate in silos rather than collaborating on industry-

wide sustainability projects. This fragmented approach hinders the sharing of best practices and the development of standardized sustainability metrics." Accurate measurement and data collection are essential for tracking progress, but many companies lack the necessary tools and systems, making it difficult to identify areas for improvement and demonstrate the impact of sustainability initiatives. "There is a perception that being more sustainable is a charitable endeavor, rather than a core part of business, but that mindset is changing," says Navarrete. "It's now possible to calculate your impact on the planet in financial terms. Everything can – and should – be measured, which is how companies will thrive moving forwards."

While the definition of sustainability is widely understood the same way, "a fundamental step in our journey has been recognising that sustainability means different things in different countries," says the SVZ expert. "The approach of a grower in Spain can significantly vary from that of a farmer in Poland. Therefore, we have adapted our strategies to align with local definitions and practices of sustainability to ensure that our efforts are both relevant and effective in each region."



DSM-FIRMENICH: NET ZERO CARBON EMISSIONS BY 2045

"Much like the ingredients in a recipe, there are many different aspects to our sustainability strategy," says Fatima Zoundri – Director of Sustainability. "On an organizational level we are working towards our goal of net zero carbon emissions by 2045 by switching to renewable energy sources, optimizing efficiency across our operations, and boosting our R&D efforts in the realm of lower carbon ingredients."

Looking at the baking and confectionery market specifically, the sustainability concerns proving most challenging for dsm-firmenich' customers are minimizing food waste, product, safety and 'naturalness' and lowering energy consumption.



It's a staggering statistic, says Zoundri, but the World Wildlife Fund (WWF) estimates that between 33-40% of all food produced globally is wasted, generating up to 8% of the world's greenhouse gas emissions. "The main concern here is of course the impact on the planet, but food waste is as much an economic issue as one of sustainability. Food and beverage manufacturers around the world lose significant portions of potential profit to wasted food, at the production and retail level. Add to this the fact that there are expected to be 11 billion people on our planet by 2100 - all needing consistent sources of safe, wholesome nutrition - and it's clear that bakers need to act to prepare their businesses for the challenges – and opportunities – ahead."

One approach with a big impact is investing in R&D for ingredients that help combat food waste, such as label-friendly baking enzymes. "Take our solution BakeZyme Master for instance – by producing softer, more resilient bread with delayed staling for a longer shelf life, it helps bakers cut down on the estimated 10-15% of bread discarded at a retailer or consumer level," says Zoundri. "The result is a more than 10% reduction in a bread product's carbon footprint, and increased consumer satisfaction thanks to bread that stays fresher for longer." Because eggs are the biggest contributor to the carbon footprint of a cake or pastry product, their CakeZyme Smart enzyme helps optimize egg usage for lower raw ingredient needs through advanced lipase technology which improves the emulsifying properties of egg lecithin. Better emulsification results in a lower volume of egg being used to create the same effect, delivering a 6% reduction in a cake's carbon footprint.

PURATOS: CARBON NEUTRAL BY 2025

Puratos evaluates the impact their products have on the planet using the Product Environmental Footprint (PEF), the EU recommended Life Cycle Assessment (LCA) based method. They measure the environmental impact of a product throughout its life cycle, from the sourcing of all raw materials and resources to the end of its life. "One of our main environmental objectives is to become carbon neutral by next year," says Francesca Angiulli, Group Sustainability Director. "In order to achieve this, we have transitioned fully to 100% renewable energy and are simultaneously improving our energy efficiency. Alongside our efforts to reduce our environmental footprint, responsible and transparent sourcing is a key focus for us. Our certified Cacao-Trace program and product range exemplify this commitment by allowing us to trace the entire journey from cocoa bean to finished product. Cacao-Trace also provides farmer training and resources such as schools and hospitals to cocoa-growing communities." According to the Puratos expert, one of the big challenges in being sustainable is measurement: "identifying where the gaps are and the impact of the actions we undertake." During the process to become sustainable, a major learning has been that a significant portion of their impact comes from raw

material procurement. "As a result, in recent months we reinforced our commitment to responsible sourcing, including sustainable ingredients sourcing. For example, we invest in partnerships with farmer cooperatives to support the transition to regenerative agriculture practices and currently have several ongoing pilots to learn more about best practices and measure their impact on climate change, soil health, and biodiversity."

ANGEL YEAST: ENERGY SAVING SOLUTIONS

Angel has supported bakeries in achieving sustainable operations through innovative products and solutions, providing clean label, healthy, and natural food ingredients for their end products.

In 2023, Angel introduced FrozDo, a freeze-tolerant dry yeast specifically designed for frozen dough. FrozDo eliminates the need for extensive storage space and energy to maintain stability, effectively reducing resource waste in yeast storage and handling for bakers. This helps lower energy consumption and the carbon footprint during production. "The consistent quality and performance of FrozDo ensure consistent fermentation results, enabling bakers to precisely control dough fermentation and reduce bread wastage," says the company. "This contributes to cost savings and minimizes food waste."

Looking down the line at different points of carbon emissions, such as meat and egg production, Angel has launched high-protein bread solutions based on yeast protein to meet the needs of vegetarian and allergen-free consumers. Yeast protein serves as a complete protein containing all essential amino acids required by the human body, with a protein content exceeding 80%. It offers a sustainable alternative to traditional plant and animal proteins. "Importantly, its production bypasses the need for farming or livestock, making it an eco-friendly choice that aligns with our commitment to environmental sustainability." Through these initiatives, Angel provides bakers with versatile solutions that support high-quality product development while promoting environmental friendliness and sustainable practices.

To further its impact on finished products' carbon footprint, Angel plans to launch an innovative range of clean-label dry yeast products, completely free of E numbers. This innovation is the result of optimizing specific yeast strains, allowing them to create a more sustainable baking solution without the need for emulsifiers. This is particularly important for bakers committed to sustainable practices, as it not only helps maintain the natural qualities of bread and achieves a clean label but also reduces the environmental impact. Angel's latest biological preservation technology for baking is soon to be launched, providing a significant alternative to traditional chemical preservatives. These bio-preservatives match more closely consumers' preferences for natural and healthy foods, particularly appealing to those who choose products with no additives or minimal additive content. •



BAKE A BETTER FUTURE

Angel is committed to creating a win-win situation for both global bakers and sustainable development.

By developing eco-friendly baking solutions, we empower our clients to achieve energy conservation, efficiency enhancement, and sustainable baking practices, thereby creating a better future.



Food Safety in the Automation Age

Automated equipment helps bakers control the cleaning processes better and with less human error. It's also time, water, energy and chemicals-saving, which means it allows manufacturers to achieve their sustainability objectives easier.

By Jo Ilie

According to the 'Codex Alimentarius', 600 million people fall ill every year as a result of around 200 different types of food poisoning. These illnesses affect in particular the poor and young sections of the population, and are also responsible for 420,000 preventable deaths each year. That is why safety is paramount to food production.

Safe food is not only the result of suitable industrial processing methods. The machines and equipment used must not only be easy to clean, but they also have to be washed down quickly and reliably with minimal use of energy, water, cleaning agents and disinfectants, says the Food Processing and Packaging Machinery Association in Germany, one of the largest European professional associations. Sensors to detect the hygiene status of critical areas of machines and systems or the quality of rinsing water, or camera-supported, automated container cleaning with rotating nozzles or jet cleaners are just a few examples where research and mechanical engineering are jointly driving forward important developments.

AUTOMATION FOR EMPLOYEES' SANITATION DEVICES

Sanitizing footwear soles and hands can be a challenging process and vulnerable to human error, even with the best practices and intentions. Meritech, a leader in automated hygiene technology, created equipment that helps with eliminating risk, such as the CleanTech EVO Stations. The next evolution of CleanTech includes intuitive sensors, state-of-the-art solution cartridges and a full-color interactive display to help enhance the perfect automated hand wash that is

effective, easy to use, and environmentally sustainable. The CleanTech EVO line consists of four systems that are all produced at Meritech's Colorado HQ: the EVO One which is a free-standing single station system, the EVO Wall which is a wall mounted system, the EVO Three which is a high-throughput triple-station system and the EVO In-Counter which is a system that fits into an existing countertop.

"EVO is the result of a two-year effort by our talented and dedicated team to develop the next evolution of our hand washing technology," says David Duran, Chief Executive Officer. "Our goal with this new generation of systems is to increase the depth of our engagement with the user, improving the experience, driving higher levels of hygiene compliance and minimizing our environmental impact."

CleanTech EVO is the world's only automated handwashing station clinically proven to remove more than 99.9% of pathogens with each hand wash. The stations have 2 cylinders with 40 nozzles each that rotate around the hands during the 12 seconds automated hand wash, whisking away harmful pathogens.

Intuitive sensors on the CleanTech EVO systems ensure that the temperature, flow, pressure, and overall water conditions are ideal for the highest level of compliance and efficacy. There's also zero touch points or cross-contamination between users thanks to a photo-eye sensor and closed-loop drainage system.





The recyclable materials used in the CleanTech EVO solutions cartridges not only help in reducing landfill waste but also contribute to a sustainable environment. Additionally, the new display screen features an interactive countdown timer for users and a compliance monitoring screen that offers detailed usage data at different intervals.

The EVO systems can be configured with additional EVO Enhancements such as the Sole Clean Low-Moisture Automated Footwear Sanitizing Pan. This groundbreaking solution sanitizes any style of footwear in just 12 seconds, with a fast-drying footwear sanitizer specifically catering to dry or semi-dry production facilities.

Proper footwear cleaning is a crucial aspect of any food safety program within a facility. Pathogens like Listeria and Salmonella can easily spread and contaminate surfaces due to inadequate footwear hygiene practices. The Sole Clean Low-Moisture Automated Footwear Sanitizing Pan features a fast-evaporating alcohol-quat sanitizing solution that eliminates pathogens from footwear and evaporates quickly post-application, reducing moisture introduction into production zones. By combining hand and footwear hygiene into a single step, it saves valuable space and time in busy production environments. Additionally, the system guarantees that footwear receives twelve seconds of contact time with the sanitizing chemical in the footwear pan, a feature unmatched by most other methods of footwear hygiene. This guarantees thorough sanitation and peace of mind, knowing that stringent hygiene standards are consistently met.

AUTOMATION FOR CLEANING EQUIPMENT

“Automatic cleaning in the Food & Beverage Industry has seen a significant increase in interest,” says the Danish cleaning solutions company Foamico. “We believe this is due to awareness of the environmental impact of cleaning within this industry, a higher focus on extended shelf-life combined with labor shortages and more expensive labor.” Foamico says their automatic solutions address all of these concerns and are a good choice for the environmentally conscious consumer.

Foamico’s automated conveyor cleaning solution uses a

process that combines water and cleaning agents to remove dirt and contaminants without damaging the conveyor. It is an efficient and cost-effective way to clean conveyor belts, reducing downtime and labor costs. The Automatic Mainstation, which can be added to any production line, has a built-in pump which puts out cleaning solutions through nozzles and effectively removes dirt, grime, and bacteria, improving hygiene levels and reducing the risk of contamination.

Automatic cleaning can decrease the time spent on cleaning, reducing water- and chemical usage and releasing cleaning staff from long and tedious cleaning steps. It thereby reduces the environmental impact of the cleaning process significantly. The shorter total cleaning time makes it possible to clean the processing equipment more frequently, which prevents microbial growth. At the same time, the work environment improves as tedious and physically demanding cleaning tasks decrease.

CONCLUSIONS

These technologies complement other built-in features more and more baking equipment comes with these days, such as the self-washing deck oven from Eurofours or the Hygienic Design Wendel Mixers from DIOSNA, which were created to be easily cleaned between batches, to avoid contamination of any kind. For sure, more solutions will be available in the future, reducing health risks and making the world safer. •



Enzymes **to the Rescue**

Enzymes are the little secret in every baker's arsenal. They help with all dough challenges, from unpredictable gluten content in wheat flour to the finickiness of gluten-free and plant-based products.

By Jo Ilie

Enzymes, including dough improvers, are fast and efficient ingredients that require small quantities - in the range of 10-150 parts per million (ppm) - to get the needed results. Which makes them helpful both for the baker and for the consumer, who wants clean(er) label baked products that ease their mind from fears of unknown ingredients but also have a long shelf life and help them fight food waste. Ingredient companies came up with a series of solutions in the past years. Kerry's Biobake Fibre Helps Dough Processability and Increases Volume in Rye Bread

Kerry, a market leader in taste and nutrition, launched its new Biobake Fibre enzyme solution into Europe's EUR17bn traditional and organic rye, rye-wheat and wholemeal bakery markets. This innovative solution delivers superior finished bread quality, improves volume and softness, and works to sustainably reduce energy and operational costs by maintaining good dough processability and ease of slicing. Biobake Fibre is a patented solution that delivers these product benefits with no negative impacts on the traditional taste and authentic aromas of rye bread formulations over their shelf life.

Rye or rye-wheat blended breads are a significant category in European bread markets, comprising 17% of the almost 15,000 new bread launches that occurred globally between 2021 and 2023. Rye bread is considered to be a quality source of healthy fiber and, in fact, "high source of fiber" is the third-ranked claim on rye bread launches conducted over the same time frame. As consumers sought healthier alternatives coming out of the pandemic, there was a 16% rise in consumption of rye bread globally in 2022 and 2023.

Biobake Fibre allows for significant productivity gains by increasing bread volume up to 24% and softness up to 55%; improving softness will naturally reduce the likelihood of waste. Since bakery products represent the world's largest category of food waste, enhancing

softness and eating quality is a sustainability benefit that both customers and consumers will appreciate. The new enzyme solution maintains good dough processability, improves bread slicing, and has no negative impact on taste or aroma. Additionally, it is organic, kosher, halal and vegetarian.

"This technology delivers improved finished product quality, optimized slicing, and good dough machinability," said Deborah Waters, PhD, Global Product Director, Enzymes at Kerry. "This can help reduce process downtime and support a sustainable reduction in operational costs that will appeal to bakers looking for ways to be more cost-efficient, and reduce bread waste."

The Biobake Fibre enzyme solution works on rye's high concentration of non-starch polysaccharides (NSPs)—important functional components, certainly, but ones that tend not to be process-friendly during dough handling. In rye dough, NSPs are functionally more important than protein given that rye proteins are unable to form gluten in the way wheat proteins can. NSPs negatively affect water distribution during dough production because of their water-binding properties, resulting in a dough that is difficult to process; this ultimately leads to reduced bread volume and limits final bread quality. Biobake Fibre reduces the NSP water-binding capability and allows for better hydration and dough development. The NSPs then create consistent dough rheology, improving tolerance and gas retention, and in turn will increase specific volume, leading to enhanced crumb texture, and avoiding creation of small crumb bubbles that can make slicing more difficult.

Kerry also launched Biobake EgR, an innovative enzyme solution that decreases the number of eggs needed in a wide variety of baking applications, enabling European manufacturers to make the switch from caged to free-range or organic eggs without facing increased costs.



IFF'S ENOVERA 2000 RANGE STRENGTHENS DOUGH

A next-generation enzyme dough strengthener, ENOVERA 2000 range is designed for bakery manufacturers interested in vital gluten replacement, particularly in challenging applications such as whole wheat bread. This breakthrough enzymatic innovation allows operational cost reductions without quality or volume trade-offs.

The dough strengtheners deliver dependability throughout production and provides superior finished product quality for whole wheat bread in comparison to existing alternatives in the market. An enzyme technology, ENOVERA 2000 range performs equivalently or better than traditional emulsifiers and with a reduced dependence on aids used to compensate for inconsistencies.

“Managing productivity and protecting cost margins is key for bakeries in Europe right now,” said Aurelie Gammelin, global product manager for Bakery IFF. “ENOVERA 2000 range is a true industry breakthrough; it reduces up to 50 percent of vital gluten and brings functional equivalence to traditional emulsifiers—handling process variances and overdosing, as well as whole wheat applications. Our solution gives bakers the peace of mind they need to achieve their immediate business goals and operational priorities while still creating a great eating experience for consumers.”

LALLEMAND BAKING'S ESSENTIAL GR 1620 REPLACES GLUTEN

Canadian yeast and ingredients maker Lallemand Baking developed an enzyme-based gluten replacer that helps bakeries struggling with supply chain problems strengthen their dough. Natural and clean label, Essential GR 1620 is a dough strengthener that can be used to reduce gluten usage in whole wheat and whole grain bread by enhancing gluten functionality. Depending on the application, our product allows a gluten reduction of 20-50% in high fiber bread formulations. This solution will also allow bakeries to improve dough stability while reducing mix time, increases gluten functionality in frozen dough. Many bread dough formulations contain 1-2% (baker's percent) vital wheat gluten, says the company. This ingredient is used to improve dough strength for processing and to ensure that proper volume, shape and size are achieved in the finished baked loaf.

CONCLUSIONS

The potent enzymes, used accordingly, help bakers tackle a lot of dough problems that are inevitable when working with different suppliers of bakery ingredients. Sooner or later, the flour will be different, the yeast will be a new batch, the water will be harder or softer than usual. That is when enzymes can help, correcting these variations in order to ensure a consistent result. Like magic. ●



Navigating the Barriers to **Automation in the Baking Industry**



The shift towards automation in CPG (Consumer Packaged Goods) warehouses is not just an opportunity, but a necessity in today's competitive and fast-paced market. The benefits of automation—enhanced efficiency, reduced costs, improved accuracy, and greater scalability—are too significant to ignore. For CPG companies and their 3PL (Third-Party Logistics) partners, embracing automation is a strategic move that can ensure long-term success and resilience.

By PMMI



As we look to the future, it is clear that the integration of advanced technologies will continue to revolutionize warehouse operations. By staying ahead of the curve and investing in automation, CPG companies can meet the evolving demands of the market, deliver exceptional customer experiences, and achieve sustainable growth.

In this guest column, experts from *PMMI (The Association for Packaging and Processing Technologies)* delve deeper into the specific technologies driving this transformation, the implementation strategies that can help overcome common challenges, and the success stories that highlight the real-world benefits of warehouse automation. Read on as we explore how the warehouses of the future are being shaped today, and what this means for the baking industry and beyond.

A LOOK AT THE BAKING INDUSTRY

The push toward fully automated operations in the baking industry promises enhanced efficiency and reduced labor costs. However, transitioning to a more automated bakery environment presents several unique challenges. Drawing from insights from the *Packaging and Automation in the Warehouses of the Future* report from PMMI, The Association for Packaging and Processing Technologies, here's a look at the key obstacles and strategies for overcoming these hurdles.

LABOR AND SKILLS SHORTAGES

One of the most significant barriers is the shortage of skilled labor capable of operating and maintaining advanced automated systems. With older generations retiring, there's a noticeable gap in the technical expertise necessary to optimize these technologies. This shortage can slow the integration of new technologies and increase reliance on manual processes, which are less efficient and more prone to error.

Baking companies are increasingly turning to training and development programs to upskill their existing workforce. Additionally, partnerships with culinary and technical schools can ensure a continuous supply of workers skilled in modern baking technologies and automation.



HIGH COSTS AND LONG RETURN ON INVESTMENT (ROI)

Automation technology requires a significant upfront investment, which can be prohibitive, especially for small to medium-sized bakeries. Moreover, the time it takes to achieve ROI can be lengthy, posing a risk for businesses with tight margins.

Adopting scalable and modular automation solutions allows bakeries to automate incrementally. This approach helps spread out costs over time and scales automation efforts as the business grows, making the financial burden more manageable.

INTEGRATION CHALLENGES

Integrating new automation technologies with existing systems can be complex and costly, often requiring significant modifications to legacy systems. This integration is crucial for seamless operations but can be a barrier due to compatibility issues and the disruption it may cause.

Leveraging open architecture and industry-standard protocols can alleviate these challenges. When selecting new automation technologies, bakeries should prioritize compatibility and ease of integration to ensure smooth transitions and maintain continuous operations.

PHYSICAL AND INFRASTRUCTURE LIMITATIONS

Many baking facilities were not designed with automation in mind. Space constraints and outdated layouts can limit the ability to implement effective automation solutions. Adopting mobile robots and modular systems can be a viable solution for bakeries where major renovations are not feasible. These technologies provide flexibility and can be adapted to fit within existing spaces without extensive modifications.

CULTURAL RESISTANCE

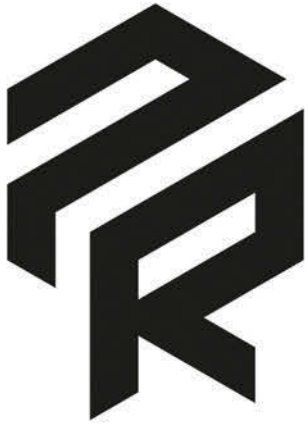
Workers often resist the shift toward automation because they fear job loss or the erosion of traditional baking skills. Clear and transparent communication about the benefits of automation, coupled with involving employees in the transition process, can help mitigate these fears. Retraining programs also can reassure employees that they will be upskilled rather than replaced, fostering a more accepting culture toward automation.

While the road to automation in the baking industry is lined with challenges, the potential benefits of increased efficiency, reduced labor costs, and enhanced production capabilities are compelling.

With 64% of consumer-packaged goods companies, including bakeries, increasing their investment in new automation machinery in recent years, it's clear that overcoming these barriers is both necessary and beneficial. As the industry continues to evolve, those who can effectively navigate these obstacles will be well-positioned to lead in the future of automated baking.

Manufacturers in the baking sector can find solutions to these challenges and connect with top suppliers to discover packaging and processing innovations at PACK EXPO International 2024 (Nov. 3–6; McCormick Place, Chicago). This major event will offer insights and innovations tailored to the unique needs of the baking industry, providing a platform for industry professionals to advance their operational capabilities through automation.

The most expansive and all-encompassing packaging and processing industry event in 2024, PACK EXPO International, will feature 2,500 exhibitors offering solutions to many of today's biggest manufacturing needs for 40-plus vertical markets. More than 45,000 attendees from consumer-packaged goods companies worldwide will converge, searching for innovation, connection, and insight. To register, go to packexpointernational.com. •



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OUT OF THE BOX PACKAGING NEWS





From Subs to Naans: Exploring the Globe's Most Beloved Carriers

The sandwich bread market represents a significant segment within the broader baking industry, characterized by a blend of tradition and innovation, driven mainly by evolving consumer preferences.

By Tudor Vintiloiu



The sandwich bread market is vast and diverse, encompassing various types of bread that cater to different consumer needs and occasions. The global sales of rolls and buns, for instance, have shown resilience, particularly post-pandemic, as the market recovers from the impacts of lockdowns on foodservice establishments. This recovery is not just a return to pre-pandemic levels, but an evolution influenced by changing consumer behaviors and preferences. Europe presents a rich offering of bread varieties that reflect regional tastes and traditions. In the UK, the market for bread and morning rolls is notably large, with products like baps, barm cakes, Dorset knobs, and Kent huffkins representing regional specialties. These products are deeply ingrained in local cultures, each with unique ingredients and uses. For instance, baps, believed to originate from Scotland, are popular for breakfast fillings, while barm cakes from the North-West of England are soft rolls traditionally used as carriers for chips. Beyond the UK, the European market features a plethora of bread types, such as kaiser rolls from Austria and ciabatta buns from Italy. These varieties offer different textures and flavors, catering to a wide range of consumer tastes. The market has also seen an increase

in whole grain and sourdough products, reflecting a broader trend towards healthier options.

CONSUMER PREFERENCES AND HEALTH CONSIDERATIONS

Consumer preferences in the sandwich bread market are increasingly influenced by health considerations. Manufacturers are reformulating products to address concerns related to high levels of salt, saturated fats, and calories. This trend is evident in the growing demand for whole grain products, which offer better nutritional profiles. The global market for gluten-free bread and bakery products is also expanding, driven by the rising prevalence of coeliac disease in Europe and North America. This growth is exemplified by companies like Warburtons in the UK, which have extended their gluten-free range, and Canyon Bakehouse in the US, known for its gluten-free sub rolls and burger buns. In addition to health, convenience is a significant driver of consumer preferences. The concept of “snackification” of meals, where traditional meal occasions are replaced or supplemented by snacks, is gaining traction. This shift is particularly relevant for breakfast and lunch, as consumers seek portable, on-the-go options. Bakery brands are responding with



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innovative products that meet these needs, such as grab-and-go sandwich carriers and bakery-based snacks. For instance, New York's Bantam Bagels has capitalized on this trend by offering portable, high-quality breakfast options that cater to busy lifestyles.

INNOVATION AND PRODUCT DEVELOPMENT

Innovation is at the heart of the sandwich bread market's evolution. Manufacturers are experimenting with new flavors and textures to differentiate their products and attract consumers. This is evident in the variety of burger buns available, ranging from traditional brioche buns to more novel options like bao buns and pretzel buns. The latter, although less common, combine the chewy texture of pretzels with the convenience of burger buns, offering a unique alternative for consumers.

The trend towards artisanal and healthy breads is also driving innovation. Doughs with longer fermentation times and healthier ingredients are becoming more popular, necessitating adjustments in bakery equipment to handle these more challenging dough types. Equipment manufacturers like Handtmann and Rademaker are developing flexible and customizable solutions to meet the specific needs of bakers. For example,

Rademaker's sheeting modules have been adapted to minimize stress on dough, preserving its structure and quality.

The barbecue and outdoor cooking market has emerged as a significant driver of demand for burger buns and hot dog rolls. The popularity of barbecues, particularly in the UK, has surged, with annual sales of barbecue foods exceeding GBP2.2 billion. This market segment benefits from innovative products like burger bao buns, which cater to the growing interest in diverse and sophisticated barbecue options.

MARKET CHALLENGES AND OPPORTUNITIES

Despite the promising trends, the sandwich bread market faces challenges that require strategic navigation.

The crowded landscape, with competition from grocery stores, convenience stores, and coffee shops, demands that bakers continuously innovate to maintain a competitive edge. Meeting

consumers' quest for value, taste, and freshness while balancing expectations for choice, speed, and convenience is crucial.

Investing in research and development is essential for staying ahead in this dynamic market.

Monitoring trends and consumer behaviors allows companies to anticipate and respond to market shifts effectively. For example, the trend towards on-the-go breakfast options has prompted the development of portable and convenient products, addressing the needs of modern, busy consumers.

Furthermore, the market for gluten-free products presents a significant growth opportunity. With an annual growth rate exceeding 9%, the gluten-free sector is expanding rapidly, driven by health-conscious consumers and those with dietary restrictions. Companies that can effectively cater to this niche, while maintaining product quality and taste, stand to gain a considerable market share.

FLATBREADS AS CARRIERS FOR OTHER FOODS

Flatbreads offer a versatile and convenient base for a wide variety of dishes. As the demand for global cuisines grows, so does the popularity of these breads, which can serve as carriers for numerous ingredients, providing endless culinary possibilities. From traditional meals to modern fusion dishes, flatbreads have become an essential component in both home kitchens and the foodservice industry.

TORTILLAS & WRAPS

Tortillas represent one of the most popular forms of flatbread globally. Originating from Mexico, tortillas have become a mainstay in many countries, thanks to the rising popularity of Mexican and Tex-Mex cuisines. They are used as carriers for dishes such as burritos, tacos, and quesadillas, offering a versatile base that can be filled with a wide range of ingredients including meats, beans, vegetables, and cheeses. The adaptability of tortillas has also led to their use in various non-traditional dishes, such as wraps filled with deli meats and salads, making them a popular choice for quick, on-the-go meals.

The global tortilla market is substantial, with a value exceeding USD 23 billion in 2022. This figure is expected to grow to USD 36 billion by 2030, driven by a 6% annual growth rate. Mexico remains the largest consumer and producer, accounting for about 40% of global output. In the United States, the market is also robust, with around 120 million tortillas consumed annually. In Western Europe, the tortilla market, including related products like tortilla chips and taco shells, was valued at USD 3 billion in 2023, with a projected annual growth of 7%.



INDIAN FLATBREADS

India is home to a variety of flatbreads, each with unique characteristics and culinary applications. Naan, a leavened bread traditionally cooked in a tandoor, is perhaps the most well-known. It is often served with curries and grilled meats, and comes in various flavors such as garlic, keema, and peshwari. Parathas, another popular flatbread, are layered with ghee and can be stuffed with vegetables, meats, or lentils, making them a hearty meal option. Chapati and roti are unleavened flatbreads commonly used to scoop up food or as wraps for various fillings.

The versatility of these breads has led to their widespread use beyond traditional Indian cuisine. For instance, naan has been adapted into naanwiches, where it is used to encase fillings similar to those found in sandwiches. Parathas have also found a place in the frozen food market, available as ready-to-eat options stuffed with a variety of ingredients. These innovations have made Indian flatbreads accessible to a global audience, further boosting their popularity.

MEDITERRANEAN & MIDDLE EASTERN FLATBREADS

The Mediterranean and Middle Eastern regions offer a rich variety of flatbreads that have found favor worldwide. Pita bread, with its characteristic pocket, is perhaps the most famous. Originating from Greece and widely used in Middle Eastern cuisines, pita is often filled with meats, salads, and

spreads like hummus and baba ghanoush. Its versatility makes it suitable for a range of dishes, from gyros and falafel wraps to more contemporary creations like pita pizzas.

Lavash, a traditional Armenian bread, is another notable example. Thin and soft, it is used to wrap meats, cheeses, and vegetables. In Turkish cuisine, breads like bazlama and yufka are integral. Bazlama, often described as a cross between naan and pita, is soft and fluffy, making it perfect for dipping into olive oil or using as a base for sandwiches. Yufka, a type of unleavened bread, is used to make dishes like börek, a savory pastry filled with cheese, spinach, or meat.

In recent years, Middle Eastern flatbreads have gained prominence in Western markets. For instance, the Israeli pita chain Miznon has expanded into cities like Paris, Vienna, and London, offering pita-based dishes that blend traditional flavors with contemporary ingredients. This trend underscores the growing appeal of Middle Eastern cuisines and the central role that flatbreads play in these culinary traditions.

TRENDS AND INNOVATIONS

As health consciousness rises, flatbread manufacturers are innovating to meet consumer demands for healthier options. Whole grain and multigrain tortillas, for example, offer higher fiber content and improved nutritional profiles compared to traditional white flour varieties. Gluten-free options made from ingredients like almond flour, chickpea



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flour, and cassava are also gaining traction, catering to those with dietary restrictions. In the Indian flatbread sector, there has been a move towards using ancient grains like millet and sorghum, which are not only nutritious but also environmentally sustainable. These grains are incorporated into traditional recipes, offering a modern twist that appeals to health-conscious consumers.

The Mediterranean and Middle Eastern flatbread markets have also seen innovations. For instance, low-carb pita bread options made with high-protein ingredients like flaxseed and chia seeds are now available. These cater to the growing number of consumers following low-carb or ketogenic diets.

FLATBREADS IN FOODSERVICE

Flatbreads are a staple in fast-casual dining, offering a quick and satisfying meal option. Chains like Chipotle and Subway have incorporated tortillas and flatbreads into their menus, providing customizable wraps and flatbread sandwiches.

In the gourmet sector, chefs are experimenting with flatbreads as canvases for creative dishes. Naan pizzas, where naan is used as the base for pizza toppings, are a popular fusion dish. Similarly, Mediterranean-inspired flatbreads topped with ingredients like lamb, feta, and olives offer a sophisticated twist on traditional recipes.

The catering industry also benefits from the portability and ease of serving flatbreads. They are ideal for buffets and events, allowing guests to create their own wraps and sandwiches with a variety of fillings. This flexibility makes flatbreads a favored choice for both casual and upscale catering.

THE ROLE OF EQUIPMENT MANUFACTURERS

Equipment manufacturers play an important role in the sandwich bread market by providing the technology and solutions that enable bakers to produce high-quality products efficiently. The demand for customization and flexibility in production lines is increasing, as bakers seek to meet diverse consumer preferences and adapt to market trends.

Companies like Handtmann and Rademaker are at the forefront of this innovation, offering tailored solutions that cater to different production scales and requirements. For instance, Handtmann's range includes equipment for both emerging market bakers and high-speed, fully automated bakeries, ensuring that all customers can achieve the desired product quality and production rates. Rademaker's focus on minimizing dough stress and ensuring consistent product weight demonstrates the importance of technical precision in maintaining product quality.

CONCLUSION

The sandwich bread market is a dynamic and evolving segment within the baking industry, characterized by a blend of tradition and innovation. Consumer preferences are increasingly shaped by health considerations, convenience, and the desire for new flavors and textures. Manufacturers are responding with innovative products and reformulations that cater to these trends, supported by advanced and flexible equipment solutions. As the market continues to evolve, staying ahead requires a keen understanding of consumer behaviors, continuous investment in research and development, and the ability to adapt to changing market dynamics. •

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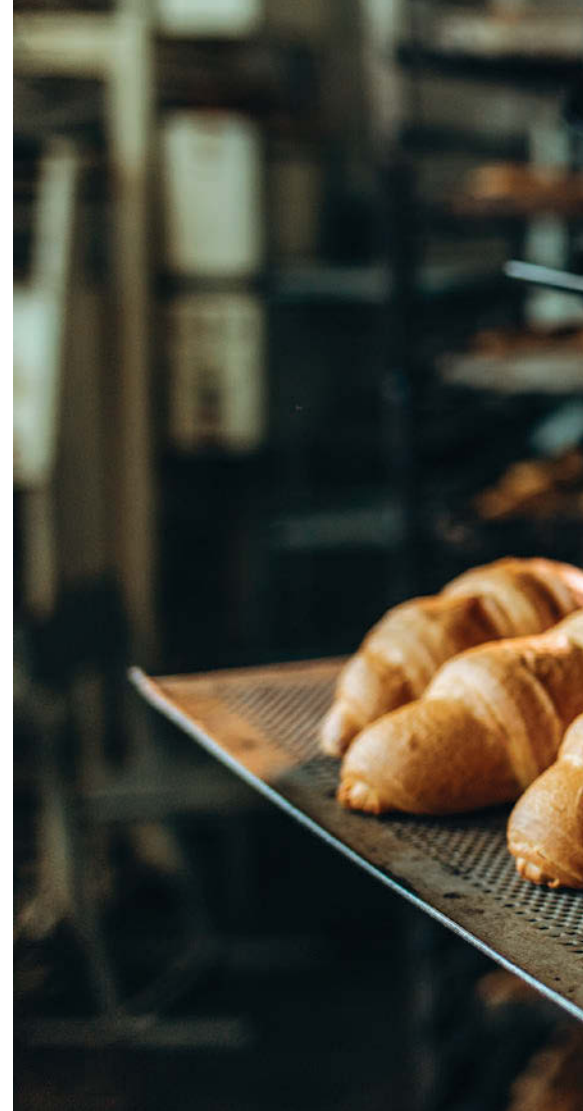
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Deck or Rack? Or Both?

Craft bakers and in-store bakeries rely on deck and rack ovens to put out consistent products. The latest models issued by the most important oven producers also step up their game to help bakers achieve their sustainability objectives. And, at least in one case, the option to not have to choose between the two systems.

By Jo Ilie



The biggest difference between a deck oven and a rack oven is the types of baked goods each is best suited for. A deck oven bakes up mouth-watering artisan breads. A rack oven, on the other hand, is used primarily for baking pastries, croissants, and cakes. When craft bakers consider which would be best for their business, they take into account what kind of products they put out and the volume, so they can choose the right equipment. The latest releases from the major oven producers bring even more features that help bakers.

DEBAG'S NEW DECK OVEN DEDEC CAN BAKE MORE

Still high-quality baking on stone slabs, but on a smaller footprint and with a significantly higher baking capacity: this is how you could summarize the advantages of the new deck baking oven from DEBAG. The DEDEC is slim (900 mm in the smallest version) and has the option of a double compact baking chamber with pizza function (0.96m²).

Depending on the type and quantity of baked goods to be produced, design requirements and available floor space, the DEDEC can be adapted exactly to the respective branch concept. The following can be selected: different oven heights, widths and depths; baking tray insertion: lengthwise or crosswise; design: stainless steel or black edition; number of ovens: up to 6. The new deck oven can

be combined with DECON - the award-winning in-store baking oven that has 8,5% less energy consumption than comparable ovens, steamer function and core temperature sensor.

In addition, the DEDEC already has the new standardized control generation D-Control – and can thus also be connected with the new networking software D-Connect.

MIWE'S CONDO WAS BUILT WITH ARTISAN BAKERS IN MIND

MIWE's condo can be found in bakeries and shops, pâtisseries, hotels and restaurants, as well as the catering business, as it features a multitude of features. These include individually adjustable upper and lower heat for each deck and the modern Touch-Control Steuerung MIWE TC. Equipped with a robust stone plate, the MIWE condo allows you to bake authentic stone-oven bread. With the





optional dynamic air flap control, the baking results are consistent regardless of fluctuating weather conditions and current air pressure, ensuring improved uniformity.

The MIWE condo is an electrically heated deck oven with a small footprint (from 0.24 sqm to 8.64 sqm baking surface). The top and bottom heat for each deck can be controlled individually, allowing bakers to produce the perfect baking conditions for each product. Thanks to the good insulation between the individual decks, it can simultaneously bake different products – even if they require diverging temperatures.

The MIWE condo boasts a multitude of thoughtful features. It offers separate control of the top and bottom heat for each deck, allowing precise temperature adjustments. With the modern MIWE TC touch control, operation is intuitive and convenient. The optional dynamic air flap control ensures consistent baking results, regardless of fluctuating weather conditions or air pressure, providing enhanced uniformity. Its stone slab offers intensive bottom heat, making it ideal for heavy rye breads, pizza and artisan bread. Each deck is equipped with its own steam device, so completely different products can be baked at the same time. Since each steam device has its own heater, the temperature in the baking chamber does not drop when the steam is added, creating ideal conditions for a great oven spring, a perfect shine and a crisp crust.

SVEBA DAHLEN'S RACK OVEN C-SERIES ARE QUIET AND ENERGY EFFICIENT

The C-Series is a roll-in rotating rack oven with a compact design and high capacity made in Sweden by Sveba Dahlen. They are not only quiet and energy-efficient but also designed to fit into small spaces. Available in four sizes, these rack ovens can be powered by electricity, oil, or gas, providing a versatile solution for various bakery needs. The smart digital control panel and well-conceived design ensure user-friendliness in a wide range of bakery environments. Featuring automatic rotation stop for easy unloading and spring-loaded door hinges that keep the door open during loading and unloading, the C-Series rack oven streamlines the baking process. The oven's



ability to bake evenly across the entire rack guarantees a perfect baking result every time. The C-Series feature frequency controlled fans which direct the airflow, an adjustable airflow of heat and steam when baking sensitive products such as meringues and macarons. The wide, split ramp is easy to remove for cleaning in front of the oven. Low angle makes for effortless loading and unloading of the trolley. The oven is prepared to be connected to the Cloud Service. And the maximum baking temperature is 300°C.

SVEBA DAHLEN'S COMBINATION OVEN S-SERIES ALLOWS BAKERS TO NOT CHOOSE

The S-Series is the ultimate combination oven that offers perfect baking in a variety of combinations of mini rack oven, deck oven and underbuilt proofer in different sizes. The flexibility makes it possible for every bakery business to find a combination that meets their needs. With a user-friendly interface and optimized systems for all parts of the baking process, including heating systems, steam systems and the underbuilt proofers proving function, the S-Series offer very flexible baking. And with the proofer placed beneath the oven, baking flexibility is significantly enhanced. Ferment below and bake at the top – at the same time.

The S-Series combination oven is equipped with features which makes it possible to bake everything from very delicate biscuits to larger pastries, bread rolls and stone baked sourdough bread with perfect results to the lowest cost per bake.

CONCLUSIONS

Bakers can choose their oven based on their primary products: types of bread or types of pastries. Deck ovens work better for bread, while rack ovens work better for pastries and other sweets. But when a bakery offers both types of products, there are technical solutions so they can provide all products at the same top-notch quality. •



‘Newstalgia’ Drives Flavors



The development of new and innovative flavors continues to represent a popular method for manufacturers of sweet bakery goods such as cakes, desserts, biscuits and cookies to attract consumer interest and make their products stand out from their rivals.

By Jonathan Thomas

Much of this has been driven by the fact that consumers’ palates throughout many western countries are becoming increasingly sophisticated, with greater exposure to foreign cuisines from regions such as Asia, the Americas and the Middle East and therefore different tastes. Sectors such as cakes are also witnessing the emergence of more fusion flavors, where various ingredients are merged to create new and interesting taste profiles.

Consumer interest in new bakery flavors shows no sign of abating. According to recent research conducted in the UK by Kantar, almost 30% of consumers claim that new and exciting twists on flavors would influence their decision to purchase bakery products such as cakes, pastries and cake bars. In North America, meanwhile, research carried out by Barry Callebaut in 2022 found that more than half of consumers would be motivated to purchase a cookie if it featured a unique or novel flavor. Significant regional variations exist within the European region in terms of preferred bakery flavors. According to research from Leisure Cookers, consumers in the UK and Ireland are drawn to Lemon Drizzle Cake (based on search volumes on Google), suggesting that citrus flavors are especially popular. Consumers in France, Belgium and Spain, in contrast, appear to prefer Carrot Cake, while Red Velvet Cake (which contains a subtle chocolate flavor) came out tops with people in Germany, Austria, Switzerland, the Netherlands, Portugal, Hungary, Poland and parts of Scandinavia.

‘NEWSTALGIA’

The nostalgia trend continues to shape flavor innovation within the European bakery goods market. Much of this has been attributed to the lingering effects of the pandemic, the uncertain economic climate and turbulent political events in certain parts of the world, as more people are inclined to look backwards towards happier times. A survey of almost 6,400 internet users aged 16-64 carried out in early 2023 by GWI Zeitgeist highlighted the fact that nostalgia for past times is apparent throughout all age groups. More specifically:

- Rather surprisingly, people belonging to the Generation Z category (i.e. those classed as being born between 1997 and 2006) were most inclined to be nostalgic for past times, with 15% preferring to think about the past instead of the future. Amongst this age group, 56% of respondents were nostalgic for the 2000s, whereas 42% were more positively inclined towards the 2010s.
- A slightly lower 14% of millennials (i.e. those born between 1983 and 1996) preferred to think about the past, rather than the future. By decade, 61% of this age group were nostalgic for the 1990s, a figure which compares with 42% for the 2000s.
- Almost two-thirds (65%) of Generation X consumers (i.e. those born between 1964 and 1982) were especially nostalgic for the 1980s, whereas 55% felt this way for the 1990s.
- Over two-thirds (67%) of baby boomers (i.e. those born before 1963) claimed to feel nostalgic for the 1970s, while 66% of this age group was positively inclined towards the 1980s.



Separate research carried out in the UK by Dr Oetker found that many bakery foods and dishes were fondly remembered by the country's population. A survey of 2,000 adults found that 26% of respondents cited Victoria Sponge as one of their most memorable foods from past times, a figure which decreased to 22% for Apple Crumble, 20% for both Chocolate Crispy Cakes and Iced Fairy Cakes and 19% for cupcakes. Lower down the list were other bakery foods such as Lemon Meringue Pie and Chocolate Fudge Cake, both of which were mentioned by 10% of respondents.

This ongoing passion for foods associated with yesteryear has led manufacturers in sectors such as bakery goods to develop flavors based upon them. In many instances, old recipes and ingredients are given a modern twist, creating what has been termed 'newstalgia.' Some of the typical flavors within the bakery sector which fall into this category include varieties based on popular desserts (e.g. Lemon Meringue Pie, Sticky Toffee Pudding, etc.) or seasonal garden fruits (e.g. rhubarb).

This type of flavor innovation has been apparent within the UK's in-store bakery (ISB) market, with Asda having recently launched a Rhubarb & Custard Danish pastry and Tesco having brought out Banoffee Tarts and Jam Trifle Buns. Staying in the UK, the Mr Kipling range was extended in May 2024 by owner Premier Foods with new Strawberries & Cream Fancies, which were targeted at the tea-time snacking market. Not only does this flavor play on memories from childhood, but it also ties in with the tennis tournament at Wimbledon, which is widely viewed as being synonymous with strawberries and cream.

FRUITY FLAVORS

Although various fruit varieties form the basis of flavors replicating the taste of desserts and other foods associated with yesteryear, they still represent a popular flavor in their own right as far as sweet bakery goods are concerned. Not only do consumers appreciate the distinctive tastes offered by fruit-based flavors, but more are increasingly demanding pieces of fruit within the bakery goods themselves, which can enhance both visual appeal and mouthfeel.

Flavors derived from berry fruits (e.g. strawberries, raspberries, blueberries and blackberries) are widespread within the bakery industry, as well as citrus varieties (e.g. orange, lemon and lime). Flavors based on tropical fruits such as mango, passion fruit, pineapple and watermelon are now featuring strongly within market sectors like cakes and desserts to create a more exotic taste and appearance, while manufacturers have also been experimenting with sour fruit-based flavors (e.g. cherry and grapefruit).

Peach has also become a popular summertime flavor for bakery products, capitalizing on its seasonal image. During the summer of 2024, Dawn Foods UK & Ireland introduced a new limited edition Peach Melba frosting, which is suitable for decorating bakery goods such as cupcakes and doughnuts. To capitalize on the fruit's

popularity, Tesco has recently brought out a Peach Almond Danish pastry under its Finest label. In addition, the market has witnessed the emergence of more flavors derived from fruit sourced from overseas countries, examples of which include kumquat and yuzu.

OTHER SWEET FLAVORS

Chocolate is still one of the dominant flavors for bakery goods such as cakes, pastries, desserts, biscuits and cookies. Within the latter sectors, for example, products such as chocolate-coated biscuits and chocolate chip cookies account for a significant percentage of overall



sales in many western countries. However, the recent increase in global cocoa prices (which have been rising since the early months of 2022, although they are now falling again) have caused some bakery manufacturers to re-evaluate their chocolate usage. Recent trends in innovation have included the pairing of chocolate with spices or herbs to provide an enhanced flavor profile. Manufacturers have also been turning towards different forms of chocolate, as was illustrated in 2023 with the launch of McVities White Chocolate Digestives in the UK by pladis.

Caramel remains a widely used flavor for certain types of sweet bakery goods, especially biscuits and cookies.

It remains the number one flavor worldwide to be paired with chocolate, with Salted Caramel featuring strongly within this category – during June 2024, for example, the Fox's Crunch Creams range of biscuits in the UK was extended with a new Salted Caramel variant. At around the same time, pladis launched new Gold Digestives as part of its McVities range, combining the company's popular Digestives with the Gold biscuit bar, which features golden caramel rather than conventional milk chocolate for enrobing purposes. In a similar vein, more flavors are appearing based on Lotus Biscoff, the iconic caramelized biscuit produced by the Belgian-based Lotus Bakeries, while the use of dulce de leche (a type of caramel associated with South America) is believed to be growing.



For bakery goods such as cakes and biscuits, nuts can be incorporated to add flavor, as well as to enhance mouthfeel and texture. Nuts also carry strong health links, such as being rich in protein and linked with a lower risk of cardiovascular disease. Some of the more widely used varieties include peanuts, almonds, hazelnuts, walnuts, macadamia nuts and pecans – during September 2023, for example, the Fox's range of biscuits in the UK (which is worth GBP112m at the retail level) was extended with a new hazelnut flavored Chocolately Indulgent Cream variant. The rising popularity of many types of Middle Eastern cuisine has also increased interest in pistachios as an ingredient in bakery goods. One of the key indicators of the trend towards fusion flavors within the sweet bakery goods market is the incorporation of

various alcoholic beverages. This is most apparent within product sectors such as cakes and desserts, where the addition of alcoholic drinks like rum and whisky can boost flavor, as well as imparting a richness to the food itself. Other examples of fusion flavors include the blending of fruits with spices to create a sweet and spicy taste profile, or what has sometimes been termed 'swicy.' Examples have included mango habanero, maple jalapeno and honey chipotle banana. Non-alcoholic drinks also form the basis for many of the recent flavors, which have appeared within the market, with coffee one such example. The market has now moved beyond simpler recipes such as coffee cake to cakes and desserts incorporating flavors based on more specific drinks, examples of which include latte and cappuccino. Japanese tea varieties such as matcha and green tea are also used to create flavors for various bakery goods, as are soft drinks, examples of which include milkshakes and carbonated beverages. During June 2024, pladis extended its McVities Jaffa Cakes range with a limited edition Cola Bottle variant. The company has replaced the familiar orange flavored jelly with an alternative based on cola bottle sweets. Meanwhile, floral-based flavors have also gained a following for certain types of sweet bakery goods such as cakes and muffins, as well as elsewhere in the food and drinks industry. Not only do these flavors carry strong associations with health and wellness, but they offer bold yet not intensely sweet flavor profiles. Furthermore, they help to add a unique and sophisticated image, which makes them ideal for social media websites such as TikTok and Instagram. According to recent data from Mintel, rose accounted for a third of all new global food launches featuring floral-based flavors in the period between 2019 and 2023. This figure decreased to 13% for cherry blossom and 9% for hibiscus. Other popular floral-based flavors in the bakery sector include lavender and elderflower.

SAVORY FLAVORS

Flavor innovation is also highly apparent within the market for savory bakery goods such as biscuits and crackers. In western markets such as the UK, much of this has been influenced by the continued rise in popularity of various global and ethnic cuisines, with consumers more inclined to seek out flavors inspired by spicy foods when purchasing these products. Popular ethnic foods such as Mexican and Indian have traditionally been well-represented within this category, illustrated by flavor profiles based on jalapeno peppers, lime, chillis, etc. Meanwhile, emerging cuisines (e.g. Japanese, Korean and Moroccan) are also assuming greater significance, as been evidenced by the appearance of flavors based around foods such as shrimps, wasabi spices, squid, black sesame and nori seaweed.

Elsewhere, flavors based on popular herbs and spices are well-represented within the market for savory biscuits and crackers – examples include rosemary, chives and black pepper. At the same time, cheesy flavors remain popular with large segments of the population, although consumers are demonstrating more of an interest in bolder tastes and profiles. During February 2024, pladis extended the Jacob's Mini Cheddars brand (which is worth GBP82m per annum) with new flavors described as 'ultra-cheesy', namely Smoked Cheddar and Cheddar & Roasted Tomato. ●



Fiscal Measures to Protect the Baking Industry **Worked**

In the Iberian Peninsula, consumers faced significant inflation and that informed their purchasing decisions, especially when it comes to staple foods like bread. The fiscal measures the Spanish and Portuguese governments took in 2023 helped alleviate this trend and helped bakers and consumers alike.

By Jo Ilie

According to ASEMAC, the Spanish professional association of bakers, consumption of food and beverages remained almost stable in Spain in 2023 - declining by 0.7% compared to the previous year. The evolution of expenditure was higher, growing by 7.5%, reaching a total of EUR116m, or EUR2,732 per capita in 2023.

Regarding bread, on average, each Spaniard consumed 27.35 kg of bread in 2023, a 2.1% decrease compared to the previous year, representing 96 million fewer loaves sold. Bread now represents less than 5% of the total household basket volume in Spain. It is still a staple, though, and an important part of the local diet.

The market analysts at Euromonitor International looked at how the Spanish and Portuguese market evolved in the past year and what were the most important drivers of change, from changing lifestyles to fiscal measures to economic realities.

SPAIN

SALES STABILIZE IN 2023 AFTER A DIFFICULT COUPLE OF YEARS

According to Euromonitor International, despite the uncertainties arising from Russia's ongoing war in Ukraine and the delicate nature of the grain corridor deal between Russia and Ukraine, the prices of baked goods are increasing at a slower rate in 2023 compared to 2022. In an effort to mitigate the impact of inflation, the government has implemented a temporary measure for 2023 whereby it has reduced the value-added tax (VAT) on bread from 4% to 0%. This has helped to stabilize the category, with bread sales seeing a much smaller decline in retail volume terms in 2023 compared to the previous two years.

In 2022, baked goods experienced a significant decline in retail volume terms which was primarily driven by consumer efforts to reduce costs in response to a sharp rise in the cost

of living. This decline was particularly apparent in cakes. Consumers began to reduce the frequency of their purchases and showed a preference for packaged leavened bread over unpackaged, despite it being perceived as less healthy. The longer shelf life of packaged bread made it an appealing option during 2022 as it was seen to help reduce waste. However, in 2023, Spaniards have been gradually reverting to their previous consumption habits, which had been temporarily affected by the surging prices. Key factors such as healthy ingredients, freshness, and indulgence are once again becoming important considerations for consumers in their purchasing decisions when it comes to baked goods.

E-COMMERCE AND DISCOUNTERS CONTINUE TO GAIN SHARE AS CONSUMER SHOPPING HABITS CHANGE

Despite baked goods traditionally being purchased offline to allow consumers to inspect the freshness and quality, the pandemic encouraged more people to explore the benefits of online shopping. With consumers returning to busier lives now that the pandemic is over there is a growing need for convenience and this has encouraged retailers and manufacturers to venture into the e-commerce space.

Despite the rise of e-commerce, discounters has remained the most dynamic store-based distribution channel in 2023 for baked goods. The low-price model and wide selection of private label and branded options has found appeal with many consumers who remain price sensitive as the cost of living has continued to rise in 2023.

PORTUGAL

BAKED GOODS SUBJECT TO INFLATION AND CHANGING CONSUMPTION PATTERNS IN 2023

According to Euromonitor International, baked goods in Portugal in 2023 is seeing a shift in consumer purchasing patterns, predominantly influenced by the persisting impact of inflation. Despite a decrease in inflation rates, the purchasing power of consumers remains constrained. Bread, a staple in the Portuguese diet, has been relatively less impacted by

these changes. However, a trend towards economisation is evident, with consumers increasingly opting for more affordable bread varieties, such as those without seeds or speciality cereals. In addition, there is a trend towards purchasing smaller products and in reduced quantities. While the demand for pastry products continues, there is a noticeable reduction in volume consumption. Parallel to these economic considerations, health consciousness among Portuguese consumers is significantly influencing bakery product innovation, particularly in bread. Major grocery retailers are actively expanding their private label bread offerings to include healthier alternatives such as seed bread and chia and quinoa bread.

STRATEGIC REVISIONS TO COUNTERACT DECLINING CONSUMPTION

Facing a downturn in baked goods consumption in 2023, players need to strategize innovatively to reverse this trend in the future. This includes the introduction of healthier, more natural products and creating new consumption occasions.

The dramatic inflation surge, a consequence of global economic recovery and geopolitical tensions, has significantly increased operating costs for baked goods producers in Portugal. The government's interventions, such as the temporary VAT exemption for bread, provide some relief, but the challenges are expected to persist in the short term at least. ANCIPA predicts a tough trading environment, potentially leading to business consolidations, especially impacting artisanal producers and smaller industrial manufacturers who might struggle with cost absorption and rapid strategic adaptations.

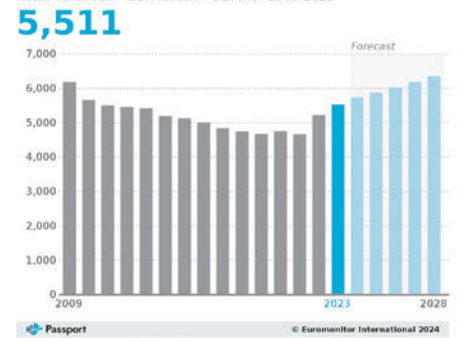
EMBEDDING SUSTAINABILITY IN CORPORATE STRATEGIES

Sustainability has become a crucial focus for companies, despite some initiatives having been delayed due to the pandemic. The emphasis is on adopting alternative energy sources, reducing plastic use in packaging and transitioning to recyclable materials.

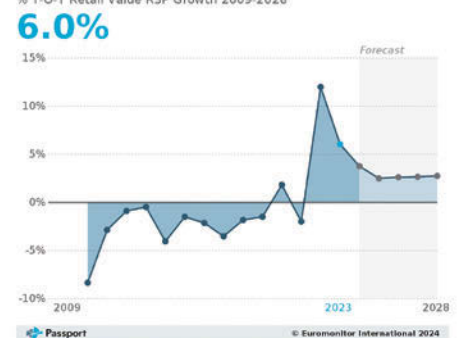
Market analysis based on data provided by Euromonitor International.



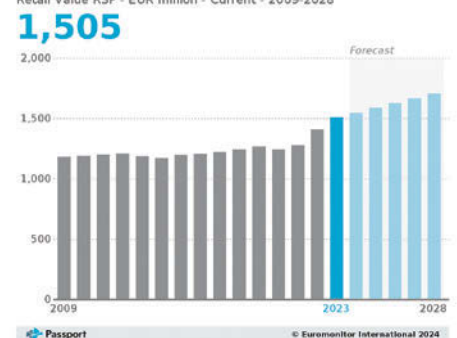
Sales of Baked Goods in Spain
Retail Value RSP - EUR million - Current - 2009-2028



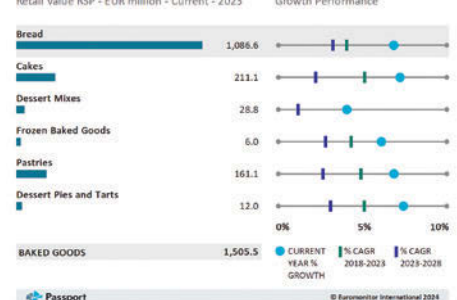
Sales Performance of Baked Goods in Spain
% Y-O-Y Retail Value RSP Growth 2009-2028



Sales of Baked Goods in Portugal
Retail Value RSP - EUR million - Current - 2009-2028



Sales of Baked Goods in Portugal by Category
Retail Value RSP - EUR million - Current - 2023



F&B Industry Gears Up for Fi Asia 2024 in Jakarta

Southeast Asia's Largest Food Ingredients Trade Show Returns in September 2024

Fi Asia, Southeast Asia's most prominent food ingredients event, is set to return to Jakarta, Indonesia, from September 4-6, 2024. This annual gathering is a must-attend for food and beverage professionals eager to delve into the burgeoning Southeast Asian market. Industrial and craft bakers, in particular, will find this event an invaluable opportunity to connect with investors, business partners, customers, and suppliers, and to stay at the forefront of industry innovations.

The event, which is organized by Informa Markets, boasts a dynamic show floor featuring over 400 exhibitors, alongside three days of curated conference content, exhibitor tours, and technical seminars. Fi Asia is recognized as a hub for introducing the latest advancements in food ingredients, making it a pivotal event for those in the baking industry.

INNOVATION AT THE FOREFRONT

ASEAN (the Association of Southeast Asian Nations) is acknowledged as a significant emerging market for food ingredients. Fi Asia plays a crucial role in bringing the latest innovations from factories and labs across the region to a centralized exhibition hall. This year, exhibitors will showcase cutting-edge developments in dairy replacements, emulsifiers, flavors, proteins, functional ingredients, and more. This diverse array of offerings provides bakers with fresh ideas for ingredient selection and new product development.

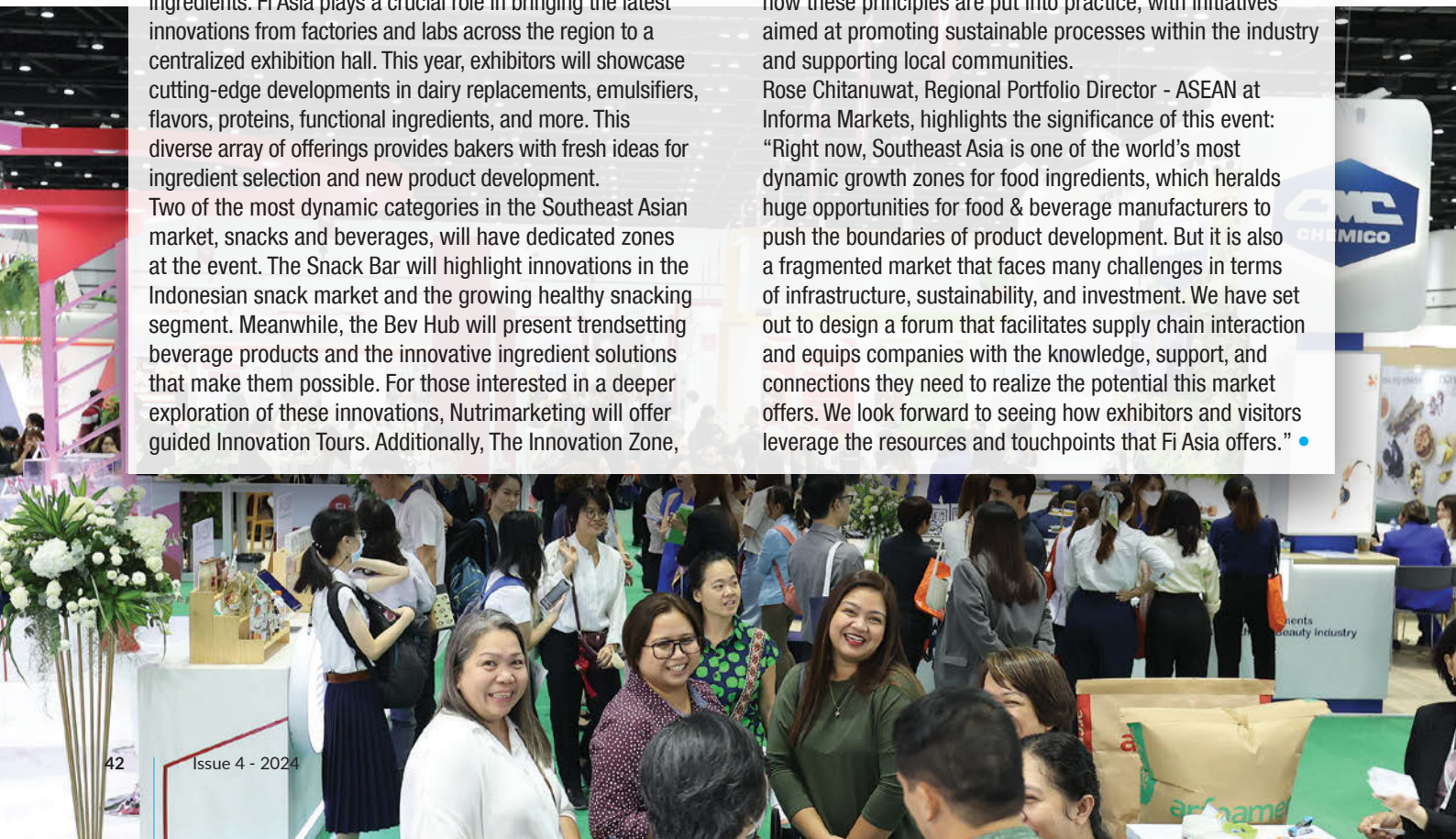
Two of the most dynamic categories in the Southeast Asian market, snacks and beverages, will have dedicated zones at the event. The Snack Bar will highlight innovations in the Indonesian snack market and the growing healthy snacking segment. Meanwhile, the Bev Hub will present trendsetting beverage products and the innovative ingredient solutions that make them possible. For those interested in a deeper exploration of these innovations, Nutrimarketing will offer guided Innovation Tours. Additionally, The Innovation Zone,

powered by Innova Market Insights, will serve as a platform for introducing emerging ingredients.

A FOCUS ON SUSTAINABILITY

In line with global trends, sustainability is a growing focus within the food and beverage industry. Fi Asia 2024 will address this critical issue through both its content and its organizational practices. Informa Markets adheres to three core sustainability principles: environmental responsibility, social responsibility, and inspiring sustainable development. At the event's Sustainability Square, attendees can observe how these principles are put into practice, with initiatives aimed at promoting sustainable processes within the industry and supporting local communities.

Rose Chitanuwat, Regional Portfolio Director - ASEAN at Informa Markets, highlights the significance of this event: "Right now, Southeast Asia is one of the world's most dynamic growth zones for food ingredients, which heralds huge opportunities for food & beverage manufacturers to push the boundaries of product development. But it is also a fragmented market that faces many challenges in terms of infrastructure, sustainability, and investment. We have set out to design a forum that facilitates supply chain interaction and equips companies with the knowledge, support, and connections they need to realize the potential this market offers. We look forward to seeing how exhibitors and visitors leverage the resources and touchpoints that Fi Asia offers." •



2024 FEATURE PLANNING

1 JANUARY/FEBRUARY

Anuga FoodTec Special Edition

Ad closing: Feb 14/Publishing: Feb 29

TECHNOLOGY

Sheeters & Laminators / Smart Bakery Systems

PROCESS

Designing & Commissioning / Production Lines / Cutting and Forming / Scoring

SPECIAL FEATURE

Boosting Productivity

EXPERT VIEW

Low Pressure / Extruded Snacks

FOOD SAFETY

Hygienic Equipment Design

INGREDIENTS & NUTRITION

Flours / Shelf-life Optimization / Botanicals / CBD

PACKAGING

Secondary packaging

MARKETS

Germany

SNACKING TRENDS

Expanded / Extruded / Snacks

CRAFT BAKING

Freezers, Display Freezers & Coolers

SUPPLY CHAIN & LOGISTICS

Storage & Warehouse Management

PRODUCT SPOTLIGHT

Pizza / Laminated Dough-based Innovation

TRADE SHOWS

AB Tech Expo, Sirha European, Pro Sweets + ISM

2 MARCH/APRIL

Includes Asia Pacific Overview
Print Supplement

Ad closing: Mar 28/Publishing: Apr 14

TECHNOLOGY

Conveyor Belts, Topping / Filling / Glazing

PROCESS

Inspection & Monitoring / Product Diversification

SPECIAL FEATURE

Energy Saving & Process Optimization

EXPERT VIEW

Sustainable Packaging Materials

FOOD SAFETY

Sanitation & Allergen Management

INGREDIENTS & NUTRITION

Oils & Fats / Flavors & Colors / Water

PACKAGING

Packaging Automation

MARKETS

UK & Ireland

SNACKING TRENDS

Savory vs Sweet Biscuits

CRAFT BAKING

Kneaders & Mixers

SUPPLY CHAIN & LOGISTICS

Traceability

PRODUCT SPOTLIGHT

Traditional Bakery & Ethnic Sweets / Pies & Tarts

TRADE SHOWS

Food Expo Greece, Pizza Expo, IFE, Anufood China, SIGEP China

3 MAY/JUNE

SnackEx Special Edition

Ad closing: May 14/Publishing: May 28

TECHNOLOGY

Turnkey Lines / Software & Sensors

PROCESS

Vacuum Cooling / Seasoning

SPECIAL FEATURE

Smart Production & Industry 4.0

EXPERT VIEW

Efficient Product Transport: Conveying Systems

FOOD SAFETY

Trainings and Program Implementation

INGREDIENTS & NUTRITION

Plant-based Bakery / Enzymes / Free-from Alternatives

PACKAGING

Packaging Design

MARKETS

Scandinavia

SNACKING TRENDS

Pies & Cakes

CRAFT BAKING

Dividers / Rounders

SUPPLY CHAIN & LOGISTICS

Supply Chains & NPD

PRODUCT SPOTLIGHT

Plant-based Bakery Products / Cookies

TRADE SHOWS

Food and Drink Expo, Thaifex - Anuga Asia

4 JULY/AUGUST

Includes North America Overview
Print Supplement

Ad closing: July 11/Publishing: July 28

TECHNOLOGY

Freezing Equipment / Extruders

PROCESS

Depositing / Mixing & Hydrating Ingredients

SPECIAL FEATURE

Sustainability: Challenges & Outcomes

EXPERT VIEW

Oils, Fats & Dough Rheology

FOOD SAFETY

Certifications, Regulations & Compliance

INGREDIENTS & NUTRITION

Dough Improvers / Inclusions / Pulses / DRI & EU regulations

PACKAGING

Sustainable Materials

MARKETS

Spain & Portugal

SNACKING TRENDS

Sandwich Breads / Flatbreads

CRAFT BAKING

Deck and Rack Ovens

SUPPLY CHAIN & LOGISTICS

Handling & Transport

PRODUCT SPOTLIGHT

Donuts / Cakes

5 SEPTEMBER/OCTOBER

Includes Middle East Overview
Print Supplement

Ad closing: Sept 19/Publishing: Oct 03

TECHNOLOGY

New Oven Technologies

PROCESS

Extrusion / Handling / Pick & Place

SPECIAL FEATURE

Product Quality Management

EXPERT VIEW

Plant-based Formulation & Production

FOOD SAFETY

IoT in Food Safety Management

INGREDIENTS & NUTRITION

Sweeteners / Emulsifiers / Antioxidants

PACKAGING

Robots / Cobots

MARKETS

Italy

SNACKING TRENDS

Enrobed / Filled Sweets

CRAFT BAKING

Pastry Equipment

SUPPLY CHAIN & LOGISTICS

Cold Chain

PRODUCT SPOTLIGHT

Frozen Pastry / Sourdough Bread

TRADE SHOWS

Fi Asia, Pack Expo

6 NOVEMBER/DECEMBER

Fi Europe Special Edition

Ad closing: Oct 29/Publishing: Nov 12

TECHNOLOGY

Dough Dividers/ Rounders, Mixers & Kneaders

PROCESS

Conveying / Hygiene & Sanitation

SPECIAL FEATURE

Sustainable Sourcing of Ingredients

EXPERT VIEW

Pans, Trays, Racks & Bakeware

FOOD SAFETY

Process, Product & Staff Protection

INGREDIENTS & NUTRITION

Yeast & Sourdough / Proteins & Fibers / Starches

PACKAGING

Active Packaging

MARKETS

France

SNACKING TRENDS

Wafers

CRAFT BAKING

Small Footprint Technology

SUPPLY CHAIN & LOGISTICS

Software Solutions

PRODUCT SPOTLIGHT

Winter Holiday Treats / Meringues

TRADE SHOWS

Free From Functional Food Expo / Health Ingredients.
Gulfood Manufacturing

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