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WORLD BAKER & BISCUIT

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WEEKLY NEWSLETTER

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CRAFT BAKING

The Heat Is On: Modern Deck Ovens for Flexible, Front-of-House Baking



Tariffs and Treats: A Bitter Recipe for Transatlantic Bakers



So while leaders toast stability, bakers face a new balancing act: absorbing the costs, passing them on, or looking elsewhere.

Tudor Vintiloiu

For a trade deal hailed as historic, the final US–EU tariff agreement leaves a bitter aftertaste in many corners of the baking sector. Yes, it averted a full-scale trade war. Yes, it brought predictability after months of uncertainty. But let’s not pretend it was balanced.

As of this summer, nearly all EU food products exported to the US—including baked goods, cereals, and industrial bakery equipment—are now subject to a flat 15% tariff. That’s more than twelve times the pre-2025 rates. Meanwhile, US access to the European market is expanding, with many industrial goods facing zero tariffs and a commitment from Brussels to channel hundreds of billions into American energy and defense. For bakery operators, especially in Europe, this shift cuts deep. From grains and oils to precision mixers and tunnel ovens, the flow of goods has become more expensive overnight. Those sourcing American wheat or upgrading with US-built equipment may feel short-term relief—but for most exporters, the cost curve just steepened. And in a market already struggling with inflation and shrinking margins, that’s no small thing. The framework may be signed, but key mechanisms—such as exemptions for specific food ingredients or quotas on steel and aluminum—remain unresolved. The ink is dry on the headline, but the fine print is still being negotiated. So while leaders toast stability, bakers face a new balancing act: absorbing the costs, passing them on, or looking elsewhere. And while tariffs may be set at 15%, the real price—in terms of competitiveness, innovation, and growth—remains to be seen.

To explore the full impact of the US–EU tariff agreement on bakery trade, as well as the critical developments shaping the North American market, turn to our special section on the IBIE Baking Show in Las Vegas. This edition also includes our North America Overview supplement—an essential resource for understanding where opportunities still rise, despite the heat. •



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Fazer Invests EUR400m in New Chocolate Factory in Finland



Finnish food giant Fazer is embarking on a major renewal of its chocolate production with an investment of approximately EUR 400m in a new state-of-the-art factory in Lahti, Finland. The factory, which will be located in the Pippo industrial area, is scheduled to begin operations in 2028. Construction will commence this summer following a real estate transaction with the City

of Lahti. The project is expected to generate over 500,000 working hours and employ hundreds during the build phase. Covering roughly 33,300 square metres, the new facility will combine automated production, cutting-edge technology, and sustainability features to deliver completely new chocolate product types. While chocolate production will continue in Vantaa, the new facility will strengthen Fazer's position as the leading confectionery producer in the Nordics and is expected to significantly boost Finland's food exports—of which Fazer already contributes around 15%.

Ferrero to Acquire WK Kellogg Co in EUR2.87bn Deal



Ferrero Group has announced a definitive agreement to acquire WK Kellogg Co for EUR2.87bn (USD3.1bn), bolstering its strategic expansion in the North American breakfast market. The all-cash deal, priced at USD23.00 per share, represents a 40% premium over WK Kellogg Co's 30-day volume weighted average trading price. The acquisition brings Ferrero ownership of a portfolio of iconic cereal brands, including Kellogg's Frosted Flakes, Special K, Froot Loops, and Rice Krispies, as well as better-for-you labels like Kashi and Bear Naked. These will now sit alongside Ferrero's existing North American offerings, which include Nutella, Kinder, Keebler, and Blue Bunny. The move further diversifies Ferrero's reach across more dayparts and strengthens its U.S. supply chain, where it now counts over 14,000 employees across 22 plants and 11 offices.

Polish Baker Inter Europol Buys Croatian PAN-PEK

Inter Europol acquired a 100% stake in the Croatian company PAN-PEK, one of the country's leading producers and distributors of bakery products. This represents a significant step forward in the development and positioning of the Inter Europol Group in the emerging FMCG segment, as well as in the Balkans and Southern Europe. PAN-PEK, established in 1992, is one of Croatia's leading bakery producers with two production plants in Zagreb and Dakovo, and also operates its own retail network of over 70 locations. PAN-PEK offers a wide range of high-quality breads, cakes, snacks, sandwiches and regional specialties, which are supplied to modern retail chains, retail customers, and the hospitality sector. The company employs nearly 800 people. Inter Europol Group acquired several bakery brands in the past years, including Bezgluten, Primavika and Trimar. This is the first international acquisition for the Inter Europol Group. As with previous acquisitions, the purpose is to expand product offering and open new markets while preserving local traditions and retaining existing employee teams. The two companies did not disclose the value of the transaction.



Nexture Debuts as Holding Company for CSM Ingredients and Italcanditi with EUR425m Bond Pricing

A new global force in food ingredients has officially launched with the debut of Nexture, a holding company bringing together the CSM Ingredients Group and the Italcanditi Group under a unified banner. Headquartered in Milan, Nexture's creation is backed by Investindustrial and marks a key step in the evolution of the Ingredient-Tech Platform established in 2022.



The launch coincides with the successful pricing of EUR425m in Senior Secured Floating Rate Notes due 2032, which are expected to be issued at 99.000% and listed on multilateral trading facilities in the EU. The notes carry a quarterly reset rate of three-month EURIBOR plus 4.00%, with a 0% floor. Subject to closing conditions, the transaction is expected to complete on July 24, 2025.

Mars-Kellanova Merger Gets U.S. Green Light, Faces Scrutiny from EU Regulators

Mars Inc. has secured clearance from the U.S. Federal Trade Commission (FTC) to acquire snack manufacturer Kellanova in a EUR35.9bn deal, but now faces an in-depth investigation by the European Commission over potential competition concerns.

The FTC confirmed on June 25 it had concluded its year-long probe without conditions, paving the way for the merger in the U.S. Mars CEO Poul Weihrauch welcomed the decision, noting the company has now received 27 of 28 required global approvals. The final hurdle is the European Commission's Phase II review.



The EC announced its formal investigation earlier the same day, citing preliminary concerns that the acquisition could give Mars excessive bargaining power in the European Economic Area. This, it warned, could lead to higher prices for consumers already strained by food inflation.

Lallemand Acquires AIT Ingredients to Expand Global Baking Solutions Portfolio

Lallemand has completed the acquisition of AIT Ingredients from Moulins Soufflet, a subsidiary of Groupe InVivo, in a move that significantly enhances its position in the global baking market. AIT Ingredients, known for its technical and creative solutions for the bakery, flour milling and pasta sectors, will be integrated into the Lallemand Baking Solutions (LBS) unit. LBS specialises in clean-label baking technologies and serves customers worldwide. "This acquisition is a perfect fit for both companies," said Mario Pires, President & General Manager of Lallemand Baking Solutions. "Together we represent a wealth of application knowledge across a wide spectrum of bakery applications that will allow us to better serve our customers with a broader and innovative portfolio."



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IBIE Is the Place Where Doors Open

IBIE, The Baking Expo, takes place this year on September 14-17 at its historical location, the Las Vegas Convention Center. In a world challenged by social unrest, international armed conflicts, supply chain woes, ever-changing laws and customer preferences, and commercial tariffs, the trade show wants to be a beacon for the baking industry, a safe place where professionals can advance their knowledge and improve their businesses among like-minded people.

Baker Perkins
whomprocess group

“What truly sets IBIE apart is our world-class education program,” said Eric Dell, the President and CEO of the American Bakers Association, in an interview with European Baker & Biscuit. The IBIEducate offers sessions that dive into some of the most important trends, like global and flavor innovation, clean label and allergen-friendly baking, and functional ingredients that support health-conscious and specialty diets. ABA will specifically provide education sessions on the current advocacy landscape on issues at both the federal and state levels that impact the commercial baking industry. “These sessions are laser-focused on the baking industry and always leave you with something new from a fresh idea, a valuable contact, or a practical application of technology. It’s an unparalleled opportunity to deepen your understanding of emerging trends and walk away with insights you can apply immediately.”

Another exciting feature of the trade show is the impressive number of new product launches and innovations. An event of such scale allows us to see how manufacturers are reimagining long-standing equipment to make it easier to operate, clean, or maintain. “That kind of thoughtful engineering signals a bright future for our manufacturing environment and workforce,” said Dell.

And, for everyone attending, the networking opportunities are through the roof. “Meeting new people and reconnecting with long-time industry peers adds real value to the IBIE experience,” said Eric Dell. “What makes it even more powerful is the diversity of attendees from foodservice to frozen foods, co-manufacturing, and all aspects of commercial baking. If your bakery is looking to enter new distribution channels or build strategic partnerships, IBIE is the place where those doors open.” •





special report

IBIE®



AMERICAN BAKERS
ASSOCIATION



*Retail
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America*

What's in Store at **IBIE 2025?**

The International Baking Industry Exposition (IBIE) 2025 brings together more than 850 top manufacturers and suppliers from around the world. Spanning an expansive 10 acres at the Las Vegas Convention Center, the show floor offers attendees hands-on access to the latest in baking technology, ingredients, packaging and equipment.

By Jo Ilie



Visitors can explore the full spectrum of industry solutions—from production machinery and packaging systems to refrigeration, sanitation, and transport logistics. Live product demos and direct engagement with technical experts help buyers evaluate innovations that can enhance efficiency, streamline operations, and drive profitability.

IBIE's educational program, IBIEducate, runs alongside the exhibition, offering tailored learning tracks focused on current industry challenges and opportunities. Led by industry leaders, the sessions deliver practical strategies for improving product quality, optimizing processes and increasing sales. Attendees can also look forward to continuous live demonstrations and high-energy competitions designed to spark creativity and celebrate excellence in baking. We highlight some of the most exciting events in these pages.

COUPE DU MONDE DE LA BOULANGERIE

Americas Selection (Brazil, Canada, Costa Rica, Ecuador, Mexico & USA) For the first time at IBIE, the Americas Selection of the Coupe du Monde de la Boulangerie will bring together international baking teams from across the Western Hemisphere to compete in three categories: Bakery, Viennoiserie, Artistic Bread Showpiece and Savory Baking. Two winning teams will earn the honor of representing the Americas at the World Cup of Baking in Paris, France.

When: Sept. 14-17

Where: North Hall #7971

WHOLESALE BAKERS CENTER

Explore in-depth discussions led by expert speakers covering vital topics such as sustainability, workforce development, operational efficiencies and more. With carefully crafted programming, this space offers a tailored learning experience designed to address the unique challenges and opportunities for commercial bakers.

When: Sept. 14-17

Where: West Hall #1245

RBA RETAIL BAKERS CENTER

Get creative ideas and practical tips at the show-stopping RBA Retail Bakers Center. Within this popular show feature, you'll discover riveting baking competitions, inspiring stories, and live demonstrations from some of the biggest names in the industry.

When: Sept. 14-17

Where: North Hall #5874

CHEF TALKS

New to IBIE 2025, Chef Talks, presented by Mexipan, features top baking voices from Mexico and Latin America. This speaker series explores innovation, flavor trends, and entrepreneurship—presented in Spanish and open to all attendees on the show floor, with real-time translation in 60+ languages.

When: Sept. 14-17

PANETTONE WORLD CUP

Don't miss the Panettone World Cup debuting at IBIE 2025. This renowned competition showcases panettone's history, technique and global appeal. Experience the excitement of this festive baking competition and see who will advance to the global grand championship. The Americas Selection is open to contestants throughout the Western Hemisphere. The winners will represent their country in the world final in Milan, Italy, in November 2026.

When: Sept. 16

Where: West Hall #3245

WORLD BREAD AWARDS USA

The World Bread Awards USA will once again take place at the Baking Expo to celebrate exceptional loaves. Judges will examine entries from over 13 product categories covering an array of bread products from baguettes and bagels to sourdough and flatbread.

When: Sept. 15-16

Where: West Hall #3245

CREATIVE CAKE DECORATING COMPETITION

Creativity will take center stage as six teams of elite professional cake

decorators challenge each other to a contest of imagination, artistry and skill during one of baking's most prestigious competitions. The Creative Cake Decorating Competition consists of four categories: wedding cake, rolled fondant, sculpted cake, and buttercream.

When: Sept. 14-16

Where: North Hall #5874

BEST IN BAKING - INDUSTRY AWARDS

These industry awards recognize suppliers and bakeries committed to positive transformation in the industry through the BEST in Baking industry awards. Established in 2010, these award categories have expanded to honor leaders across several paramount topics, including sustainability, workforce development, sanitation, packaging innovation, plant efficiency, and automation/robotics.

ARTISAN VILLAGE

The Artisan Village is an interactive, innovative hub offering exceptional learning opportunities and exciting competitions. It's a prime destination for bakers looking to hone their skills, make connections and walk away inspired for growth in every aspect of their business. With talks celebrating all things craft, whether it be bread, bagels or pastry—there's no shortage of insights here.

When: Sept. 14-17

Where: West Hall #3245

GREAT AMERICAN PIE FESTIVAL

At the Great American Pie Festival, attendees can taste-test to their heart's content at this show feature, where they'll find a variety of ready-made pies crafted with different cutting, filling and baking equipment. Expo-goers are in for a treat, buyers for supermarkets or restaurants can shop around, and suppliers can assess the finished products made with particular ingredients or equipment.

When: Sept. 14-17

Where: West Hall #2051 ●



Angel Yeast

North Hall, Booth 7805

Angel is a global yeast and biotech company that develops natural ingredient solutions for the food & beverage, nutritional, and biotechnology industries. As a yeast supplier with a global presence, Angel has 33 Production Facilities across the globe, with products and services supplied to more than 170 countries and regions. Over 12,000 employees worldwide share the same vision: to innovate for a healthy and sustainable future. Our business activities range from baking to food taste, nutrition & health, and biotechnologies.

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West Hall, Booth 2101

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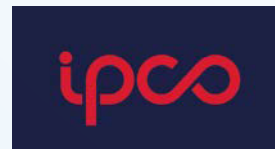


Intralox L.L.C.

West Hall, Booth 2965

Intralox is the global conveyance solutions leader, offering direct service for a broad range of industries in more than 100 countries. We specialize in innovative technologies, including Modular Plastic Conveyor Belting, ThermoDrive® technology, DirectDrive™ Spiral Systems and Activated Roller Belt™ (ARB™) equipment. Our products, combined with a powerful blend of engineering expertise, services and global support, are backed by the strongest written performance and delivery guarantees. Working with Intralox allows customers to experience our uncompromising commitment to providing sustainable solutions that create lasting value. Some in the bakery industry think of us solely as a conveyor belt manufacturer. But we're so much more than just that. We provide a complete range of conveyance solutions for all types of bakery plants, including bread/bun, pastries and confections, cookies, crackers, and tortillas and flat breads. Our belt and equipment technologies can handle a wide variety of baked and pre-baked goods and packaging, efficiently and without damage. Our bakery industry solutions help you realize key improvements, including: - Improving food safety and operational effectiveness in dough-handling areas - Maintaining orientation and eliminating jams on pan lines - Optimizing spirals for freezing, cooling, and proofing - Ensuring maximum return on investment for major back-end projects

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West Hall, Booth 1311

PCO is the world's leading manufacturer of steel belts and food processing equipment for a wide range of food products, such as pastillation of chocolate. Our fully trained and equipped global service team, as well as a Special Engineering team who can travel anywhere in the world.

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KÖNIG

König

West Hall, Booth 3865

The Koenig Group is the global leader in bakery equipment with around 750 employees worldwide. It offers a holistic portfolio from mixing through proofing and stamping until freezing that fits both, small and medium bakeries as well as industrial bakeries. The subsidiary in U.S., under the leadership of Jake Levy strengthened its position in the U.S. market through innovation, sales growth, and customer trust. Jake Levy, the company's longest-serving employee, brings extensive experience from various roles including service, sales, and management. He now leads the company with a commitment to continued growth and customer value.

Koenig's U.S. subsidiary, founded in 2005 and based in Ashland, Virginia, remains a key hub for service and spare parts, supporting nationwide operations. The leadership change reflects Koenig's focus on long-term stability and excellence.

www.koenigusa.com

Rademaker

Specialists in food processing equipment

Rademaker

West Hall, Booth 3445

Rademaker is a global leader in providing industrial production equipment to the baking industry. Our solutions can be found in every corner of the globe, providing world class production solutions for Croissant, Bread, Danish and Puff Pastry, Pie and Quiche, Pizza, Donuts, Pita and other Flatbreads.

Our expertise manifests itself in providing efficient production solutions, high quality automation, hygienic design at the lowest cost-of-ownership possible. Dedicated professionals and state of the art engineering techniques provide you with solutions that live up to your (best) expectations.

Rademaker Showcases Cutting-Edge Innovations at IBIE 2025

Rademaker, a global leader in industrial production equipment for the baking industry, is set to unveil its latest advancements at IBIE 2025. With world-class solutions for croissants, bread, Danish and puff pastry, pies and quiches, pizza, donuts, pita, and other flatbreads, Rademaker continues to push the boundaries of efficiency and innovation in bakery production.

www.rademaker.com



Reading Bakery Systems

West Hall, Booth 3811

At IBIE, RBS will showcase our full portfolio of innovative snack solutions, including the new Emithermic XE Oven, designed to replace DGF ovens with a more sustainable, consistent baking process. We will also feature our latest sheeting line design and the Low Pressure Extruder that creates a wide range of baked bread snacks and pretzels.

Additionally, RBSCoast Controls are being featured as part of our ongoing commitment to Industry 4.0 innovation, as well as Exact Mixing continuous mixers and Reading Thermal oven profiling. These systems help customers optimize their processes for efficiency, product quality, and energy savings.

www.readingbakery.com



Verhoeven Bakery Equipment Family

West Hall, Booth 2070

At IBIE in Las Vegas, we continue to think beyond the horizon. Under the inspiring theme "The Sky is Not the Limit", we want to show our strong belief that thinking outside the box can take us further than what is considered standard. At our booth, we will take visitors on a journey through three of our solutions:

1. **Turnkey Solutions**, which integrate seamlessly into every step of your process.
2. **Vacuum Cooling & Baking Solutions**, which take efficiency and quality to the next level.
3. **Bread Recycling Solutions**, which put sustainability into practice by reducing waste.

We are proud to introduce the innovative concept: RepeatLoaf – The Final Concept. This innovative machine concept is a fully automated process to ferment return bread. Within just 24 hours, the bread is converted into a dry, stockable powder. The end product has many applications: it can be used as an alternative to flour, as decoration or to enrich dough. At our booth, you will find a mysterious black box in which this theme comes to life. A visual experience that takes you into our view of the future in the baking industry.

Of course, we will also once again be demonstrating the impressive world of Vacuum Cooling & Baking live in our booth, where you can see and taste for yourself how this innovative technology works.

www.verhoevenfamily.com

The US and EU Bakery Markets: **A Challenged Friendship**

With a shared estimated value of over USD250bn, the US and EU bakery markets are facing challenges with the newly agreed tariffs that affect both the final products and the industrial development that supports the market. Let's look at some of the implications of this situation.

By Jo Ilie

On May 19 2025, at iba Düsseldorf, three industry leaders participated in a panel on inflation and tariffs in the baking industry. Frank Kleiner, CEO of Harry-Brot GmbH, Sebastian Gooding CEO of Ditsch, and Eric Dell, President & CEO of American Bakers Association, brought together two perspectives, one European, one American, on how the expected new tariffs would influence their businesses and their market. They discussed the challenges faced by bakers on both sides of the Atlantic - inflation, decrease of volume - but also opportunity - "we all want that treat," said Dell, hopeful that consumers will still want to enjoy life and celebrate birthdays and life events.

Tariffs, however, were seen as hitting the industry differently in Europe. "Any equipment we buy, any buildings we would introduce, are substantially higher in cost than the machinery and the equipment and the buildings we have running today," said Ditsch's CEO, "which means that future production is automatically more expensive than current production. And this is a challenge we really have to deal with. And that makes our investment strategy, which is clear, much more difficult at the moment to fund, invest and, and accelerate."

The two European business leaders vocalized concerns that became true with the final trade agreement that the EU

negotiated with the US Administration in July. But first let's look at the way the two markets are entering this deal. The US baking industry in 2025 is robust, economically significant, and evolving rapidly in response to both consumer trends and mounting operational challenges.

THE TWO MARKETS

The US bakery market is valued at approximately USD95.2bn in 2025 and is projected to reach USD140.8bn by 2032, with a strong compound annual growth rate (CAGR) of 5.8%, according to two market research companies, Persistence and Cognitive.

In-store bakery (ISB) sales alone account for USD22.6bn in 2025, reflecting sustained demand for fresh, high-quality, and accessible baked goods.

Nearly 800,000 Americans are employed in the baking sector, which contributes over USD186bn annually to the US economy and pays over USD42bn in wages, according to American Bakers Association.

The EU bakery products market is valued around EUR161bn (USD157bn) in 2025, with forecasts projecting growth to about EUR232bn (USD231bn) by 2033, reflecting a compound annual growth rate (CAGR) of approximately 3.1% to 4.1% over the next decade, according to Market Portal Analytics and Cognitive Market Research. Some forecasts (Future Market and Statista) suggest a slightly higher CAGR of around 5.2% to 5.6% in particular segments like bakery mixes.



Bake Shop

THE TARIFFS

As of August 1, 2025, the United States has imposed a baseline tariff of 15% on almost all European Union (EU) goods, including baked goods and industrial equipment for the baking industry. This tariff rate was agreed upon after extended negotiations to avert an even higher proposed tariff of 30% that had been threatened earlier in the year. This 15% tariff applies broadly to food imports from the EU, and baked goods are explicitly mentioned among the highest-profile affected categories, as well as industrial machinery, mechanical appliances, electrical equipment, and various manufacturing tools.

This is significantly higher than pre-2025 rates, which were around 1.2% for most EU goods, and also up from the 10% tariff implemented in April 2025.

The tariff is blanket in nature, meaning it covers almost all EU food and agri-food exports, with baked goods highlighted among the top categories now facing these import duties.

At print date, the agreement is not fully finalized—there remain some ambiguities and outstanding details, but the 15% is now the operative tariff rate, with the cap stated not to exceed this rate for the near future as negotiations continue.

IMPACT

Despite its political importance, the trade deal's economic impact is difficult to predict, both for the US and the EU. "It's worth recalling that tariffs distort trade and increase costs for

both sides", wrote Cinzia Alcidi, Senior Research Fellow and Head of the Economic Policy and Jobs & Skills Units at Centre for European Policy Studies (CEPS), in a recent analysis.

"Most estimates suggest larger losses and higher prices in the US than in the EU. The estimated GDP fall for the EU typically ranges from 0.2% to 0.8%, depending on the scale of the tariffs and the EU's response. The fall also won't hit Member States equally."

Countries like Germany, Italy and Ireland – whose exports to the US are significant – are expected to be disproportionately affected. So will sectors like automotive, industrial machinery and agriculture. "Yet, ultimately, the tariff pass-through, or how far tariffs will result in higher prices for US consumers/buyers, will determine the outcome," said Alcidi. In some cases, EU exporters may absorb some or all the costs to preserve their market share. In others, the tariff may be fully passed on, leading to potentially reduced demand but higher US prices. The balance between the two options will vary across products and sectors and will determine the final impact on the economy.

"One silver lining is that US consumption remains robust, buoyed by the extraordinary performance of the US stock market, which boosts households' income and spending power. This may cushion the demand for EU goods... at least for now," concluded Alcidi in a positive note. It remains to be seen... •

Lines That Deliver: Conveyor Technology Driving Bakery Efficiency

In modern largescale bakeries, conveyor systems are foundational to both product quality and operational economy. From the bakeoven belt that comes into direct contact with the dough, to hygienic spiral belts and highthroughput vibratory conveyors, every component must support efficiency, cleanliness and longevity.

By [Tudor Vintiloiu](#)

Three key players—IPCO, Ashworth and Key Technology—provide complementary strengths, and their innovations illustrate the industry’s direction towards smarter, cleaner and more durable systems.

IPCO brings nearly a century of experience as the world’s foremost supplier of precisionengineered steel bakeoven belts. These solid and perforated belts are designed to endure repeated exposure to temperatures up to 450°C while maintaining flatness, structural stability and surface consistency. A wellmaintained steel belt often delivers 20 years of reliable service, and it is not unusual for properly cared for systems to remain in operation for 50 years. Compared with mesh belts, IPCO’s perforated designs reduce weight, leading to energy savings of up to 30 percent in oven reheating and drive energy. The smooth, crevicefree surface also promotes hygienic operation, minimising carbon deposits and simplifying manual and automated cleaning.

Recognising that daily operation demands effective maintenance, IPCO now offers onsite laser cleaning that can remove bakedon residue at rates of 10 to 15 square metres per hour. Delivered by technicians using a highpower laser head mounted above the moving belt, this noncontact method burns off deposits while vacuuming them simultaneously, with no downtime on adjacent lines and full production restarting immediately. The process doesn’t damage the belt surface, requires no water or chemicals,

and avoids waste water or risk of corrosion. To support alignment control, IPCO’s Compact Belt Tracker system retrofits existing conveyors with a tiltroller mechanism that responds in real time to edge sensors, delivering tight tracking accuracy and automatic tension correction—even through thermal cycles or short interruptions in power or air supply. Together, these services extend belt life while avoiding costly full replacement, typically at 25 percent less expense than installing a new belt.

Ashworth targets complex product flow and sanitation challenges with hygienefocused spiral and belt systems. As the originator of the Lotension spiral conveyor concept, the company now offers a full portfolio that includes the newly launched HeavyDuty Small Radius OmniGrid 360 Weld belt—a breakthrough for tightradius spiral or turncurve applications with a tension rating of over 400 lb and a patented 360° buttonless weld. This design combines greater strength, easier cleaning and tighter turns in limited space. Alongside the OmniGrid series, Ashworth’s omniPro and OmniFlex belts remain strong performers, while PosiDrive Spiral belts—which use a direct, nochain drive system—are ideal where oily, heavy or fragile products demand consistent position and reduced lateral movement under load. All belts feature coining or smooth finishes to eliminate burrs and crevices, improving sanitation and reducing wear.

Ashworth reinforces its belt solutions with realtime monitoring platforms such as SmartSpiral® for spiral

RADINI

by Rademaker



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systems and its newer SmartOven® system, enabling remote performance tracking and early fault detection. Their global AshPro technical service team ensures uptime through maintenance contracts, emergency servicing and belt/system refurbishment—backed by the most patents in the foodprocessing belt sector and expertise spanning both plastic and metal belting applications.

Key Technology focuses on highcapacity vibratory conveyors built for modern bakery and foodhandling environments. Updated in late 2024, their IsoFlo, Impulse, Zephyr and Marathon conveyors transport up to 100,000 lb (45 000 kg) per hour on belt widths exceeding three metres. These systems are customtuned in stroke, frequency and bed rigidity for functions like grading, aligning, dewatering or spreading—even feeding downstream sorters and packaging lines. Their open stainlesssteel bed and oilfree drive design simplify sanitation, while singlemotor configurations reduce energy use and maintenance compared to multiple smaller conveyors. Built in the US and Netherlands and supported globally, Key's conveyors come with their industryleading fiveyear warranty.

Together, IPCO, Ashworth and Key offer bakery processors an integrated spectrum of solutions. For direct baking conveyors, IPCO's steel belts excel in durability, thermal performance and cleanability, while maintenance features such as optical tracking and laser cleaning preserve uptime. Where product handling, orientation and cleanability are critical, Ashworth's spiral belts offer both mechanical strength and sanitation efficacy in tight layouts. For processors scaling volume or combining grading, spreading or washdown requirements, Key's vibratory conveyors deliver throughput and hygiene without compromising energy efficiency or footprint.

HYGIENIC BY DESIGN

Beyond these specialist suppliers, hygienebased design trends are transforming belt cleaning and maintenance across the conveyor market. Toolfree belt removal systems, such as those offered by Fortress Technology, restore alignment immediately after washdown and eliminate loss of parts during sanitation. Pneumatic belt trackers, like those from

Continuous Process Solutions in the UK, maintain alignment through thermal expansion, with tracking tolerances as low as ± 4 mm under environmental stress.

When integrating new conveyors or retrofitting existing lines, a careful audit of product flow, floor space, and future expansion is essential. Vertical integration using spiral or incline conveyors enables processors to optimize cubic plant space. Automation of belt startup through sensing or PLC control reduces idle operation time and wear, while consolidating drives reduces motor count and energy demand. Selecting correct belt materials—for instance steel for butter cookies and brownies versus plastic or mesh solutions for crackers or chilled products—must align with both hygiene regimes and production goals.

UPGRADE OR UPDATE

Although retrofit often enables significant performance gains at lower cost, some processors may choose entirely new installations when space or process requirements demand custom design. However, the return on investment of bolton upgrades—such as IPCO's laser cleaning, tracking retrofits or Ashworth belt monitoring enhancements—can be compelling. Belt selection, tracking, cleaning and automation must happen as an integrated strategy to ensure consistent product quality, energy control, reduced waste and minimized downtime.

Conveyor belts are no longer just passive transporters of product. In today's highperformance bakery, they act as quality platforms, hygiene barriers and efficiency enablers. IPCO continues to extend the lifecycle of steel bakeoven belts while innovating in cleaning and tracking. Ashworth delivers precision spiral belting that meets rigorous sanitation demands and layout constraints, backed by remote monitoring and engineering service. Key Technology scales automation through vibratory systems that reduce labor and energy costs while handling vast throughputs. Combined with emerging trends in toolless sanitation and smart control, these solutions give bakery processors the tools to meet tightening margins, hygiene expectations and throughput pressures. •

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Fill, Don't Spill: **A Closer Look at Modern Depositors**



Depositing equipment over the past decade has gone from simple batter portioning tools to digitally controlled precision systems capable of adapting to complex product profiles. As bakery operations—whether artisan, mid-size or industrial—face pressure to scale, diversify SKUs, and reduce waste, the right depositing solution is nothing less than a strategic asset.

By Tudor Vintiloiu

In a market increasingly defined by customization, hygiene, and speed, choosing the right depositor is no small task. The technological playing field is diverse, and the stakes are high: weight precision, product integrity, and changeover times directly affect profitability and brand consistency.

For many bakery producers, Unifiller's CMD Series Depositors represent a compelling entry point into digitally enhanced portioning. Developed by Unifiller Systems, a Coperion Food Health and Nutrition company, the CMD line merges pneumatic reliability with features that mimic servo precision—at a notably lower cost threshold. While traditional pneumatic depositors are valued for their simplicity, the CMD Series pushes that legacy further. Pre-charge functions, splash control, and deposit pressure management are all handled via Bluetooth-connectable tablets preloaded with the CMD+ software. This allows operators to save and recall recipes without the need for physical dials or manual recalibration. According to Sonia Bal, Director of Global Marketing, the CMD Series offers “servo-like features without the servo,” simplifying both maintenance and operator training. Built to IP69 standards and engineered for tough industrial wash-down conditions, these depositors are well-suited to high-turnover environments such as ready meals, sandwich assembly, and sauces—segments that demand both precision and frequent recipe variation.



INDUSTRIAL SOLUTIONS

At the industrial end of the spectrum, Rademaker's depositing technologies serve as a benchmark for process-driven, high-capacity bakery production.

Designed explicitly to handle the challenges of diverse ingredient types—ranging from smooth chocolate and batters to chunky pie fillings and viscous fruit particulates—Rademaker systems deliver weight-accurate deposits with minimal waste. Their lineup includes Mohnopump depositors for



particulate-heavy materials, piston systems for high-volume bakery fillings, gearwheel models for doughs and thick batters, and target depositors optimized for speed.

What unites them is a commitment to recipe-driven automation: servo-controlled units with integrated algorithms ensure repeatability, even when ingredients vary in texture or consistency. The systems can operate with individually controlled nozzles, ensuring that product isn't wasted on belt gaps, a seemingly small detail that adds up to significant cost savings over time.

This precision also underpins speed—

Rademaker's machines are built to thrive in 24/7 production cycles. Their validation trials and use of high wear-resistant materials point to long equipment lifecycles and minimal downtime, key concerns for industrial clients managing hundreds of product variations per week.

LINE INTEGRATION

While Unifiller and Rademaker represent two distinct ends of the depositor market, Handtmann enters the scene with a focus on modular flexibility and integration, particularly into packaging environments. Launched at Anuga FoodTec, the DS 554 and DS 560 P models extend Handtmann's offering into the domain of direct-to-packaging precision. The DS 560 P is a multi-lane depositor optimized for high-throughput lines, capable of dosing low- to high-viscosity fillings,

including inhomogeneous and chunky materials. What sets it apart is the interface design: the servo-controlled lifting and lowering device, combined with a cutting valve function, allows for clean, drip-free transitions from dosing to packaging. The result is weight-accurate filling with minimal mess, which in turn supports speed and hygiene



on automated lines. The DS 554, a single-lane version, caters to applications where fibrous or irregular fillings pose a challenge to consistency. Both models integrate seamlessly into existing vacuum filler controls, allowing operators to centralize settings and reduce the training burden. Their design anticipates market demands for flexibility—the ability to quickly switch portion sizes or ingredients without retooling or manual recalibration.

Despite differences in form and market positioning, these three solutions converge around a few shared imperatives: accuracy, hygiene, adaptability, and integration. The shift toward servo controls or digitally-enhanced pneumatics illustrates how software is becoming just as critical as stainless steel. Manufacturers are no longer just buying a machine—they're buying the embedded logic, the recipe management capabilities, and the algorithmic consistency that ensures tomorrow's croissants, muffins or quiches look exactly like today's.

MARKET DEMAND

This is particularly relevant as bakeries of all sizes continue to grapple with labor shortages and rising ingredient costs. Depositing systems that minimize giveaway and reduce operator dependency offer not just production efficiency but business resilience. In the case of Rademaker, years of handling varied ingredient types have translated into

built-in intelligence that compensates for changing staff experience levels. For Unifiller, the decision to embed control into a tablet-based interface reflects a focus on intuitive user experience. And with Handtmann, the interplay between dosing and packaging suggests a future where portioning is no longer a stand-alone function, but a fully integrated stage of the packaging process.

Where the market goes next will likely be shaped by two parallel forces: automation and modularity. Automation, as seen in servo-driven controls and Bluetooth-linked tablets, continues to redefine what precision means in a bakery context. Meanwhile, modularity—the ability to plug depositors into diverse line configurations without wholesale redesign—makes it easier for bakeries to scale or adapt to new products without excessive capital expenditure. In this context, depositors become enablers of SKU proliferation rather than bottlenecks.

As bakers look to meet consumer demand for novelty, customization and consistent quality, the right depositing technology doesn't just deliver filling—it delivers flexibility, efficiency and control. And with the technology advancing across all tiers of the market, from pneumatic to servo and single-lane to high-speed multi-lane, choosing the right equipment will remain one of the most strategic decisions a bakery can make. •



TECHNOLOGY MEETS BAKER'S CRAFT.

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The Bakery Sector's Packaging Reckoning

A growing body of scientific evidence is revealing that everyday food packaging may be an overlooked source of contamination—raising concerns for bakers and food producers committed to product purity.

By Tudor Vintiloiu

A new study led by the Food Packaging Forum in Zurich and published in NPJ Science of Food has demonstrated that routine interactions with plastic packaging, such as opening sealed containers or heating food, can release micro- and nanoplastics directly into food and beverages. While plastic particle contamination in items like beer, salt, and canned goods has been observed before, this marks the first time researchers have identified a causal link between consumer use of packaging and the release of plastic particles into food.

The implications are particularly serious for baked goods and snacks, where direct packaging contact is extensive, and heating processes are often involved. “The number of microplastics increases with each bottle opening, so therefore we can say it’s the usage of the food contact article which leads to micro- and nanoplastic release,” noted Lisa Zimmermann, Scientific Communication Officer at the Food Packaging Forum. Further aggravating the issue are factors common in baking logistics and retail—such as mechanical stress during distribution, reheating in microwavable trays, or reuse of containers—all of which intensify plastic shedding.

Industry professionals can no longer afford to view this as a peripheral issue. A single liter of bottled water was found to contain up to 240,000 plastic particles, 90% of which were classified as nanoplastics. These findings are accompanied by growing concerns in the medical field, where recent research has detected microplastics in the bloodstream,

lungs, and even human brain tissue. The bakery sector, reliant on high-volume packaging for ambient, frozen, and chilled products, must now navigate the dual pressure of protecting shelf-life while avoiding contamination.

MOVING AWAY FROM PLASTIC

This has sharpened the focus on alternative materials—those that can maintain barrier and performance properties while offering lower health and environmental risks. One of the most ambitious research efforts comes from AIMPLAS, the Plastics Technology Centre in Valencia, which is working to close the performance gap between bioplastics and conventional fossil-based polymers. Their BIOPROCESS initiative, supported by the European Regional Development Fund, explores how natural polymers such as plant proteins and potato starch can be enhanced for use in flexible packaging. By applying Machine Direction Orientation (MDO) extrusion technology, the project seeks to improve the mechanical strength and moisture barriers of bioplastics without compromising compostability.

For bakers, such developments are especially relevant. Packaging for bread, cakes, and pastries must retain structural integrity and prevent humidity ingress—traditionally achieved with multilayer films that complicate recyclability. The use of starch-based or protein-enhanced bioplastics not only aligns with EU packaging directives but also opens the door for organic recovery through composting when packaging is contaminated with crumbs, icing, or fats that obstruct conventional recycling.



WASTE TO PACKAGING

Another promising material innovation is ReKrill, a biopolymer developed by Italian firm Krill Design. Derived from citrus peels and other non-edible food waste, ReKrill offers thermal stability and mechanical durability comparable to traditional plastics but leaves no microplastics behind upon degradation. While originally designed for luxury applications, the material's compatibility with standard industrial machinery suggests broader applicability—including premium baked goods, seasonal assortments, or limited-edition collections where aesthetics and sustainability are both brand assets.

Fiber-based packaging also continues to evolve, with solutions emerging that blend form, function, and recyclability. In New Zealand, the research organization Scion is incorporating agricultural waste—such as blueberry pomace and avocado stones—into molded fiber trays. The goal is to enhance moisture resistance and structural strength, two performance attributes particularly relevant for trays used in pre-packaged cakes, pies, or ready-to-bake items. These innovations not only valorize agricultural byproducts but also address the issue of food-packaging compatibility by ensuring that end-of-life scenarios are circular.

Collaborations between large players are also bearing fruit. Metsä Group and Amcor have partnered to develop a recyclable 3D molded fiber solution that combines Muoto™, Metsä's wood-based molded material, with Amcor's high-barrier films. The result is a hybrid package suitable for sensitive food applications, including bakery snacks and filled pastries, with a CEPI recyclability score above 80%.

Crucially, it supports heat-sealing, a requirement for many modified atmosphere packaging formats in industrial baking. Similarly, UPM Specialty Papers and Eastman have introduced a paper-based packaging solution with bio-based additives that offer grease and oxygen resistance—key for baked goods containing butter, chocolate, or fillings. With minimal coating thickness and compatibility with existing extrusion equipment, this solution answers both environmental and economic demands, allowing bakeries to scale change without retrofitting entire production lines.

THE QUEST TO COMMERCIAL VIABILITY

While the scientific case against conventional plastic packaging continues to build, these materials show that viable alternatives already exist. However, transitioning to safer, more sustainable packaging will require deliberate alignment between product requirements, packaging performance, and end-of-life considerations. For the baking industry, where brand reputation is tightly bound to quality and consumer trust, the pressure to act is immediate. The challenge is not simply to replace one material with another, but to redefine packaging as a system that supports food safety, reduces contamination risks, and fits into a circular economy. Whether through compostable films, upcycled fibers, or biobased coatings, the solutions are beginning to rise. The question now is whether the baking industry can scale them in time.

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Better Dough, **Better Bread**

Dough improvers help bakers address inescapable issues that derive from supply chain interruptions, reformulations for allergen-free products, and the need for a longer shelf life. Improvers - also called conditioners - help with better volume, faster fermentation and better crumb and ensure consistent output even when the flour or the eggs are inconsistent.

By Jo Ilie

Dough improvers are ingredient blends formulated to optimize the quality and performance of bread dough. Used widely in both industrial and artisanal baking, they help ensure consistent results by enhancing dough properties, supporting fermentation, and improving final product characteristics such as volume, texture, and shelf life. But dough improvers are more than just leavening aids. They contribute to several key aspects of dough development and bread quality. They enhance elasticity by making dough easier to stretch, shape, and handle during production. They support fermentation by feeding and stabilizing yeast activity, accelerating fermentation and improving gas retention. They strengthen the gluten network, which results in a more uniform crumb structure and better oven spring. They improve texture and softness and help finished loaves be lighter, airier, and more appealing to consumers. Last, but not least, they extend the shelf life by slowing down staling and maintaining freshness for longer. Dough improvers can be divided into natural and commercial categories, depending on the ingredients used and their intended scale of use. Natural improvers are single ingredients or simple combinations that enhance dough performance without synthetic additives. Common examples include: ascorbic acid (Vitamin C), which acts as an oxidising agent to strengthen gluten, vinegar, which helps tighten the dough and improve shelf life, honey or malt, which provides natural sugars to boost fermentation. Commercial improvers are professionally formulated blends used in larger-scale or high-speed baking environments. They typically contain a combination of enzymes (to modify starches and proteins for better dough handling and volume), and emulsifiers (such as lecithin or DATEM, to improve dough stability and softness), oxidising and reducing agents (to fine-tune gluten strength and dough extensibility).

CORBION'S ORIGIN RANGE, A GAMECHANGER

One of the most reputed producers of improvers, Corbion, recently launched a range designed to meet the EMEA's evolving preferences for more natural ingredient solutions. Origin, a plant-based dough improver, is derived from sustainably sourced acerola cherry, a fruit naturally high in vitamin C. "This vitamin acts as a dough conditioner, helping to strengthen the gluten network through oxidation", says Dieneke van Houwelingen, Business Development Manager EMEA, Corbion. "The result is improved dough elasticity and structure — key attributes for achieving better volume, texture, and overall quality in baked goods."

By strengthening the gluten network, these natural improvers enable excellent gas retention — so dough can hold onto the gases produced by yeast more effectively, resulting in lighter, fluffier breads with a more even crumb structure. Bakers also benefit from reduced dough relaxation, which helps maintain volume and quality throughout processing. "On top of that, Origin ingredients can improve dough handling, reduce stickiness, and boost machinability — making life easier in busy production environments", says van Houwelingen.

Everything Corbion develops is guided by three core principles: working in harmony with natural fermentation, supporting more responsible consumption and production, and delivering consistent results that bakers can rely on. "Our goal is simple: preserve what matters," says van Houwelingen. "We're committed to helping bakers balance outstanding product quality with sustainability and consumer trust."

Because reformulating can bring its own set of challenges, switching to nature-based solutions shouldn't come with performance risks, says the company.



“Our experts work side by side with bakers, providing practical support from pilot testing to process optimization,” says van Houwelingen. “We help troubleshoot, refine recipes, and run shelf-life and sensory tests to ensure the end product meets expectations batch after batch. Our collaborative approach means bakers can adapt with confidence, knowing they have a team behind them every step of the way.”

DEUTSCHEBACK'S SOLUTION FOR SOFTNESS AND SHELF LIFE

Another new-generation improver comes from functional baking ingredients specialist DeutscheBack, which has introduced earlier this year TopBake Mixed Bread Fresh, a new low-dosage freshness improver designed to extend softness and shelf life in mixed wheat and rye breads. The solution offers an alternative to conventional enzyme-heavy freshness systems, achieving equal or superior results at just 0.1 kg per 100 kg of flour. According to the company, this represents a significant cost advantage, requiring far less product than traditional solutions — often by a factor of 2 to 10.

The formulation combines specific enzymes with ascorbic acid to improve dough handling and retain moisture in the crumb, resulting in bread that stays softer for longer. “With TopBake Mixed Bread Fresh, we offer a highly effective, low-dosage solution for bakeries seeking long-lasting freshness and softness,” said Roman Gradert, Head of R&D at DeutscheBack.

DeutscheBack estimates that bakeries processing 150 tonnes of

flour can save five figures annually by switching to the product, due to the lower volume required. TopBake Mixed Bread Fresh is suitable for both artisan and industrial-scale bakeries.

ANGEL YEAST'S “NEEDS-PRODUCT-VALIDATION” APPROACH

Angel Yeast, a global biotechnology firm, has developed a series of sustainable, natural, improvers based on yeast. The company recommends bakers adopt a “Needs-Product-Validation” approach. First, bakers need to identify the key technical challenges - whether it's achieving softer crumb (e.g. sweet bread), crispier crust (e.g. baguette), or better freeze tolerance (e.g. frozen dough). Then, select a corresponding improver series, each engineered for specific pain points - like Angel's concentrated formula of Sweet Bread Improver that ensures softness while reducing costs, or F-99 specifically addressing ice crystal damage in frozen dough. For validation, conduct tests using actual production parameters, evaluating three dimensions: basic performance (volume/texture), process adaptability (operation simplification), and economic benefits (unit cost optimization).

CONCLUSION

Bread improvers evolve along with the industry and what customers expect from their bakers. Beyond consistency, they give bakers an opportunity to improve their processes, make better decisions for their businesses and offer outstanding products that pass the test of time - in more ways than one. •



Maximising Dough Performance: The Strategic Role of Dough Improvers in Modern Baking

Dough improvers have become an essential component in industrial baking, helping manufacturers meet the demands of consistency, efficiency, and high-quality end products. From enhancing mechanical processability to improving fermentation stability, these solutions support bakeries in navigating today's technical and commercial challenges.

By Angel Yeast

Angel Yeast, a global biotechnology firm with 33 production bases and national R&D centres, has developed highly specialised dough improvers tailored to specific industrial applications. We interviewed Modern Xu, Director of Dough Improver R&D Center, about the many options Angel Yeast offers bakers and what are the best practices in choosing the right improver.

HOW CAN BAKERS CHOOSE THE BEST IMPROVERS FOR THEIR PRODUCTS?

Selecting dough improvers requires a comprehensive evaluation process. We recommend bakers focus on two critical dimensions: first, choosing trustworthy suppliers, and second, identifying solutions that truly meet product requirements.

Supplier selection is paramount—a global R&D and manufacturing system forms the foundation of quality assurance. Take Angel as an example: as a multinational biotechnology company serving over 170 countries and regions, we operate 33 production bases and national-level R&D centers. This industrial scale ensures full-process control from raw materials to finished products. Next, bakers must pinpoint their most pressing technical challenges—whether achieving softer texture, more stable

fermentation, or extended shelf life—and select improvers that specifically address these needs.

In practice, bakers should prioritize evaluating a supplier's global supply chain capabilities and R&D investment, as these directly determine an improver's consistency and innovation potential. Only then should they match solutions to specific product requirements.

WHAT ADVANTAGES OFFER ANGEL'S DOUGH IMPROVERS?

Today's baking industry faces five major challenges: inefficient dough processing, frozen storage damage, unstable fermentation in sugar-free/low-fat products, short shelf life causing waste, and compromised texture in healthier bread varieties.

Angel's dough improvers provide targeted solutions through precision formulation:

- For mechanized production issues like dough sticking and dividing difficulties, our improvers optimize gluten network structure, maintaining ideal extensibility even under high-speed mixing.
- Addressing the critical frozen dough challenge of yeast damage and gluten deterioration, our F-99 improver employs proprietary technology to minimize freeze-thaw damage.

- For sugar-free breads struggling with slow fermentation and small volume, the synergistic action of maltogenic and amylolytic enzymes ensures consistent fermentation and dough stability.
- To extend product shelf life - a key concern for retailers - our compound formulations effectively delay staling.
- For whole grain products with texture challenges, our improvers enhance bran-gluten interaction to improve mouthfeel.

These solutions go beyond singular improvements, integrating multiple technologies to deliver comprehensive benefits: enhanced production efficiency, reduced ingredient costs, and increased product value.

WHAT ARE YOUR RECOMMENDATIONS FOR BAKERS WHEN TESTING YOUR IMPROVERS? WHAT SHOULD THEY PAY ATTENTION TO?

As professional baking solution providers, we recommend bakers adopt a “Needs-Product-Validation” approach: First, identify the key technical challenges - whether it’s achieving softer crumb (e.g. sweet bread), crispier crust (e.g. baguette), or better freeze tolerance (e.g. frozen dough). Then select our corresponding improver series, each engineered for specific pain points - like the concentrated formula of Sweet Bread Improver that ensures softness while reducing costs, or F-99 specifically addressing ice crystal damage in frozen dough. For validation, conduct tests using actual production parameters, evaluating three dimensions: basic performance (volume/texture), process adaptability (operation simplification), and economic benefits (unit cost optimization). Our technical team offers end-to-end support from formula adjustment to process optimization, helping transform lab results into consistent production advantages.

WHAT ARE THE FINANCIAL BENEFITS OF USING ANGEL'S DOUGH IMPROVERS IN PRODUCTION?

Angel’s dough improvers create multidimensional economic benefits through technological innovation. Firstly, the precise formulations optimize ingredient utilization efficiency, reducing production costs. Secondly, by enhancing dough stability and processing performance, they significantly decrease waste and rework during production. In terms of product quality, the improvers ensure batch-to-batch consistency, minimizing losses caused by quality variations.

Most importantly, the shelf-life extension feature directly reduces store waste, which is particularly crucial for chain bakeries. Our frozen dough improvers also enable more flexible supply chain management by extending frozen storage periods to optimize production planning.

HOW DO IMPROVERS AFFECT THE FINAL PRODUCT?

In terms of physical properties, our improvers optimize gluten network structure and gas retention, resulting in more uniform volume and regular shape. For instance, the sweet bread improver creates finer honeycomb texture, while the baguette-specific formula promotes ideal crust crispness and color.

Regarding sensory quality, specialized ingredients in the improvers delay starch retrogradation, maintaining soft and moist texture. Meanwhile, controlled fermentation develops richer flavor profiles. Our whole wheat improver also reduces bran coarseness, delivering healthy products with excellent mouthfeel.

For process stability, the improvers effectively compensate for ingredient variations and processing deviations, ensuring consistent quality across batches. They particularly excel in maintaining stable product quality despite environmental fluctuations like temperature and humidity changes.

These improvements represent not just single-parameter enhancements, but a systematic optimization from raw materials to finished products, ultimately delivering consumers an all-around premium experience in visual appeal, texture and taste.

WHAT DO BAKERS HAVE TO LOSE IF THEY DON'T USE DOUGH IMPROVERS?

The absence of professional dough improvers presents multiple challenges in bakery production. On the production side, inconsistent dough handling properties may reduce equipment operating efficiency and require more frequent manual adjustments, ultimately affecting overall output. In terms of product quality, greater batch-to-batch variations can occur in key parameters like volume, color and texture. At the consumer level, shorter product freshness and compromised eating quality regarding texture and appearance may negatively impact customer satisfaction and repeat purchases. Collectively, these factors can influence a bakery’s production cost control, product competitiveness and brand reputation. ●



Shaping Sustainability in 2025

The baking industry's efforts to be more sustainable are constantly shaped by public policies, consumer demand, technological innovations, and the companies' own objectives. Here's what the most successful practices look like in 2025.

By Jo Ilie



CARBON REDUCTION AND NET ZERO GOALS

Baking companies are adopting science-based targets and lifecycle assessments to cut emissions across the supply chain. This includes investing in energy-efficient ovens, switching to renewable electricity, and improving transport logistics to reduce emissions. Syntegon's 2024 Sustainability Report shows how this leading global technology company and strategic partner to the pharmaceutical, biotech and food industries measures progress in environmental, social, and governance topics with a focus on sustainable solutions and reinforces Syntegon's long-term ambition to achieve net-zero emissions by 2040. One of the most important milestones was the validation of the company's climate targets by the Science Based Targets initiative (SBTi). This endorsement confirms Syntegon's commitment to reduce emissions aligned with the 1.5 C goal of the Paris Agreement. The sustainability report demonstrates tangible progress, with the company achieving a 36% reduction in CO₂ emissions compared to 2019 and a 7% decrease in energy consumption year-on-year.

SUSTAINABLE INGREDIENTS & WASTE REDUCTION

There's growing demand for sustainably sourced and upcycled ingredients.

Regeneratively farmed grains and certified sustainable palm oil are gaining traction. For example, a new multi-stakeholder partnership is set to transform palm oil production in Indonesia, with a strong focus on sustainability, inclusivity, and resilience. The Rokan Hulu Landscape and Livelihoods Initiative brings together global palm oil producer Musim Mas, confectionery group Ferrero, and NGOs Preferred by Nature, Agriterra, and the Sustainable Agriculture Network (SAN), with support from Denmark's Danida Green Business Partnerships (DGBP) programme.

The five-year project aims to support 5,400 independent smallholders in adopting regenerative agricultural practices and improving climate resilience, while promoting compliance

with international sustainability frameworks including the EU Deforestation Regulation (EUDR). The initiative will help 2,500 farmers achieve RSPO and ISPO certification and support two farmer organisations in building financial sustainability. A further 2,000 community members - 60% of them women - will benefit from diversified income opportunities.

Upcycled by-products like spent grains, fruit pulp, and potato peel, but also old bread, are being turned into flour or functional ingredients. For example, Verhoeven Family of Companies unveiled "Repeatloaf" at IBA 2025 - a compact system that transforms leftover bread into a shelf-stable, fermented powder ingredient in under 24 hours. The innovation tackles food-waste emissions - which account for roughly 6 % of global greenhouse gases - by upcycling surplus loaf into a functional raw material for dough production and bread enhancement. Bread alone represents the largest single contributor to food-waste volumes, with some 15 % of European output - about 15 billion kg annually - sent to landfill. Repeatloaf redirects this waste stream. By converting stale product into "RL precision fermented powder," bakeries can avoid the 64 % of CO₂ emissions tied to pre-bakery stages (from field to mill) and preserve the 1 500 L of water and up to 5.5 MJ of energy normally consumed per kilogram of bread.

In emerging markets, where demand surges and supply chains strain, the technology offers supply-security benefits alongside sustainability gains. It supports UN Sustainable Development Goal 12 on responsible consumption and production, and complements the EU's targets to slash food waste by 10 % in industry and 30 % at consumer level by 2030.

Beyond its environmental impact, Repeatloaf embodies circular-economy principles—reclaiming raw materials, easing pressure on natural resources and cutting pollution. "Give Loaf a Second Chance" is more than a slogan: it signals a shift from linear production toward upcycling, turning what was once waste into a performance-boosting bakery ingredient.



ECO-FRIENDLY PACKAGING

Packaging is undergoing a major shift, with a strong move toward mono-materials that are easier to recycle, compostable and biodegradable films, and packaging reduction at source (e.g. thinner films, lightweighting, and bulk formats). Recent innovations by companies like Schubert, Syntegon, and WECARRY highlight the range of approaches being taken to address these challenges. At the core of Schubert's approach is the rethinking of traditional carton-based packaging. "Because it is made from renewable raw materials, cardboard packaging comes across as sustainable at first glance. However, it is as a rule not entirely recyclable due to the glue used to seal the cardboard packaging." This glue not only hinders recyclability but is also energy-intensive to manufacture. Schubert's answer is its Dotlock technology: "With its new Dotlock technology, several layers of cardboard can be joined completely glue-free by reshaping them, similar to clinching metal. To achieve this, the layers are pierced from one side with a needle, creating a collar on the other side. This is then pressed onto the cardboard, creating a stable force and form fit." This innovation allows manufacturers to create fully recyclable mono-material packaging without compromising strength or efficiency.

AUTOMATION FOR RESOURCE EFFICIENCY

Digitalisation and AI are being used to reduce resource use and optimise energy, from predictive maintenance to real-time yield monitoring. Smart factories allow for more precise controls over baking processes, cutting waste and boosting sustainability metrics.

One example comes from Alfa Laval, which has recently unveiled Clariot, a next-generation AI-powered condition monitoring system designed specifically for hygienic processing environments. The solution provides real-time diagnostics and performance insights for rotating equipment such as pumps and agitators, aiming to reduce downtime, extend equipment life, and optimize resource efficiency. Clariot combines hardware, AI-driven analytics, and secure connectivity to provide proactive diagnostics. Its VX sensors - uniquely developed for wet environments and frequent product changeovers - can detect process, installation, and mechanical faults before they escalate.

TRANSPARENT ESG REPORTING

Large bakeries and suppliers are investing in traceability tools and third-party certifications to meet retailer and investor expectations. Carbon labelling, blockchain-backed sourcing data, and annual ESG reporting are becoming the norm.

Cargill announced, for example, a transformation of its global cocoa supply chain, unveiling a series of interconnected investments that reduce carbon emissions, eliminate waste, and boost efficiency from cocoa origin countries in West Africa to processing hubs in Europe. The company's upgrades span renewable energy, circular logistics, and smart infrastructure. In Côte d'Ivoire, cocoa shells once discarded, are now used

to fuel biomass boilers. In Ghana, a solar plant powers production in Tema, and new ISO tanks are replacing disposable packaging, providing the opportunity to cut up to 100 metric tons of waste each month.

After processing, cocoa shells are reused again—this time as fuel in Cargill's new biomass boiler in Amsterdam, which will cut greenhouse gas emissions by nearly 19,000 tons each year. Together with the wind farm Cargill and Vattenfall operate in partnership with Windpark Hanze, the CO₂ emissions reduction reaches more than 31,000 tons per year – representing a reduction of site CO₂ emissions of up to 90%.

The final leg of the journey continues with low-emission transport. Semi-finished cocoa products are shipped to Wormer—home to the world's largest cocoa processing site—using BIO LNG trucks, and finished cocoa powder is stored at a next-generation warehouse in Zaandam. Operated in partnership with Green Valley Cocoa Logistics, the facility features solar panels, automated vehicles, and intermodal rail and barge connections to reduce last-mile impact.

Cargill's semi-finished cocoa products are delivered to its own chocolate processing sites and its customers across Europe using renewable fuels and short sea shipping, supporting the company's global target to reduce supply chain emissions by 30% per ton of product by 2030.

At the same time, Givaudan announced new Rainforest Alliance certification for a selection of its vanilla extracts marketed in Europe. The certification attests to the company's longstanding commitment to supporting communities and protecting the environment, embodied by its Sourcing4Good programme.

"This certification not only meets the growing demands of environmentally conscious consumers but also fosters a sustainable future for communities and ecosystems alike," said Gwen Kastler, Regional Product Manager Vanilla.

"Givaudan's Rainforest Alliance certified vanilla products empower our customers to proudly showcase the frog seal on their packaging, helping consumers to make more conscientious purchasing decisions."

Rainforest Alliance offers a widely recognised certification programme for sustainable agricultural practices that supports farmers in implementing practices that protect the environment, improve their livelihoods, promote the human rights of farm workers, and help them mitigate and adapt to climate change. SOMAVA, a joint venture between Givaudan and Henri Fraise Fils et Cie begun in 2014, works directly with farmers in Rainforest Alliance Certified villages. The certification enables full traceability for a selection of vanilla beans cultivated in Madagascar for use in one of the company's European extraction facilities, located in the Netherlands.

CONCLUSIONS

While sustainability is a complex issue, especially when it applies to an industry that involves agriculture, transportation, and processing, as well as the social impact of all these aspects, we can see many great ideas put into practice that, together, can make an impact. •

The Intralox logo is located in the top left corner. It features the word "intralox" in a white, lowercase, sans-serif font on a red rectangular background. Below the text is a white graphic element consisting of a horizontal line with several small circles and a larger circle at the end, resembling a conveyor belt or a chain link.

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| CONDITIONING



| PACKAGING

Via Oliveto takes leap from racks to tunnel oven

Reading Bakery Systems helps small Canadian bakery position "Pasquale's Glorious Flatbread" for wider success





Pasquale Zappia and his sons Patrick and Adriano.

When Italian-born Pasquale Zappia and his wife Mayra opened Via Oliveto in Toronto in 1988, the business was a combination restaurant/bakery serving area hotels, restaurants and caterers. A baker by trade, Pasquale handled the bakery. His wife ran the restaurant, followed by their sons Patrick and Adriano when they were old enough. Pasquale had always put his own spin on Italian breadmaking, but when he began baking crispy artisanal flatbread crackers — essentially a European-style flatbread cracker — he truly found his niche.

As demand for the triangular flatbread spiked among their food service customers, it became Pasquale's sole focus. In 2006, the family sold the restaurant, and the sons joined their father in the bakery as it relocated to a 2,000 square-foot facility in Toronto. In 2007, they started packaging the product

for retail sales in a few local food shops and "Pasquale's Glorious Flatbread" was born. Soon it was also selling in area supermarkets, and by 2009 Via Oliveto moved into an 8,000 square foot location in Vaughan, just north of Toronto.

The manual production process

To produce the flatbread, the family evolved a unique, labor-intensive process involving convection baking in rack ovens. Their 24" wide system included a bowl mixer, a three-roll sheeter, three gauge rolls and 18" by 26" pans. Semi-automatic equipment sprayed the cut triangular pieces of dough with water, salt, seeds and herbs before the trays were manually placed into the rack ovens to bake, then manually removed to cool. This process included four double rack ovens with 32 aluminum racks and 2,500 baking pans, all of it handled by four people.



Dough feeds into a sheeter and 2 gauge rolls.



Dough travels through the rotary cutting station.



Rotary cut dough pieces pass through the cooler.

Production on this system peaked at about 100 kg per hour, and it made growing the bakery a challenge. In 2015, Patrick's wife, Rachel, began managing the business and relieved much of the administrative pressure, but the production pain points remained. The Zappias knew they wanted to upgrade to a more automated, labor-saving solution, they just didn't know how.

The family began reaching out to tunnel oven manufacturers in 2019 to explore their options. Their efforts included a trip to the International Baking Industry Exposition (IBIE) in Las Vegas, where they met more oven manufacturers and got system quotes. Some of those OEMs didn't quite understand what the Zappias needed, and others proposed oven systems that were either too big, or too expensive. The family found the process overwhelming, but luckily, found their way to the RBS booth.

Meeting RBS at IBIE

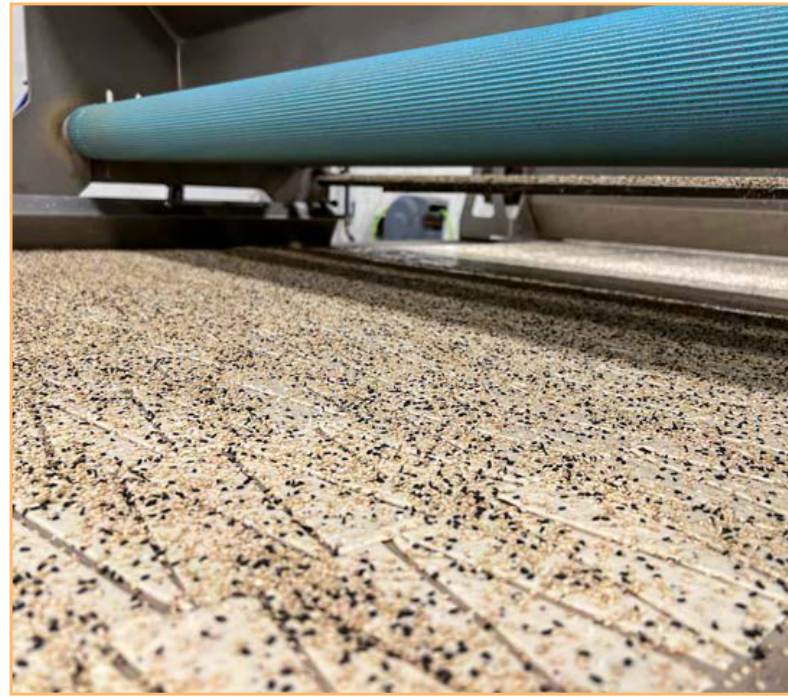
The Zappias were struck by how confident RBS was that they could help Via Oliveto move from rack ovens to a tunnel oven system. "We thought, how could this be so easy for them?" recalls Patrick Zappia. "We thought it was going to be such a challenge – but, RBS made it sound like the opposite." The family was impressed by the company's willingness to work with such a small bakery. They also liked that RBS, unlike some of their competitors, was proposing a one-stop-shop solution that featured an integrated sheeting line and oven, and the flexibility to produce new products in the future.

Eager to take the next step, the Zappias invited RBS to Via Oliveto to observe their production process and further assess their requirements. After seeing the family's flatbread line in action, RBS technical sales reps proposed a configuration of the modular, fully automated Multi-Crisp Baked Snack System. The Zappias were impressed with the RBS visit and proposal but remained wary of making such a big move. To help allay their concerns, RBS invited the Zappias to the company's Science & Innovation Center for a flatbread trial run.

R&D product trials at RBS

In January 2020, Pasquale, Patrick and Adriano made the eight-hour drive to the RBS Science & Innovation Center to see how the Multi-Crisp System would handle their five flatbread varieties. The pieces of the system were all available for demonstration in smaller, pilot-sized equipment. The Zappias wanted to be sure that the final products would be similar enough to what they were already producing that their customers wouldn't notice any difference.

Their concerns were addressed quickly. Although the Innovation Center was booked for a two-day trial, they successfully created all the flatbread recipes on the first day. In fact, the Multi-Crisp System actually improved product quality. By eliminating the hot and cold spots the family faced with their rack ovens, the RBS system delivered a more even baking process that gave the flatbread a better mouthfeel.



Topping dispensers distribute salt, seeds or herbs as each recipe requires.

After seeing the Multi-Crisp System up close and tasting the results, the Zappias were convinced that going with RBS was the right decision. Within a few months, Via Oliveto and RBS closed the deal, even as COVID-19 quarantines were in full swing.

Complications during the pandemic

Despite the pandemic, Via Oliveto's orders remained steady as RBS manufactured their production line. Meanwhile, Rachel searched for both a larger facility to fit the new line and funding sources to pay for it all. She found an 18,000 square foot facility in Barrie, Ontario that was still under construction when the family committed to it in February 2021. In March 2021, she learned that Via Oliveto had secured a \$500,000 repayable contribution from the Canadian government for which she had applied months earlier.

Just as things appeared to be falling into place, construction delays at the new facility in Barrie forced the Zappias to stay in their old location longer than they wanted. The delays also meant the new facility would not be ready for the scheduled delivery date of the RBS Multi-Crisp System. RBS was able to hold on to the system components for several more weeks, a critical delay that gave the Zappias the extra time they needed to find a storage solution.

System installation and setup

RBS installed Via Oliveto's new Multi-Crisp System in September 2021 as the family kept baking in their old facility. The roughly three-week overlap was made easier by the RBS project team responsible for installing the new system and instructing the Zappias on its operation. "We needed a lot of



Dough pieces exit the 48" wide SPECTRUM OVEN® and head for packaging.

handholding," Patrick recalls. "But the RBS project managers were amazing and always available."

The RBS system configured for Via Oliveto uses a non-RBS mixing bowl, as the Zappias wanted to upgrade to a larger model of the same mixing bowl they were already comfortable with. The bowl mixes 200 kg batches of dough at a time, which a bowl elevator then dumps into a hopper that feeds into a 3-roll sheeter, two gauge rolls, then a rotary cutter with two die rolls – a docking roll that puts holes in the dough so it won't pillow in the oven, and an acetyl rotary cutting roll that creates the triangular flatbread pieces.

Next, the cut dough moves on a conveyor into a caustic cooker, where it is doused with pressurized water before RBS Omega topping dispensers distribute salt, seeds or herbs as each recipe requires. The dough pieces then travel into a 48" wide SPECTRUM OVEN® with two baking zones and an open weave baking mesh.

Via Oliveto today and tomorrow

At the time of this writing, Patrick and Adriano have been running the Multi-Crisp System for about 15 months. Flatbread production has quadrupled to 400 kg per hour, and the brothers are setting their sights on a long-term goal of 600 kg. What used to require three to four people can now be accomplished with "one-and-a-half to two," notes Patrick.

While his father Pasquale is no longer physically involved in the line operation, the brothers look to him for his baking wisdom and experience. And thanks to the automated features of the Multi-Crisp System, they now have more time and freedom to integrate his advice. As Patrick explains, "We don't have to worry about opening oven doors, checking on the product, adding baking time, closing oven doors – the oven part of our production is now 100% hands-off, so we can really focus on other parts of the process."

The flexible Multi-Crisp System has also allowed them to start baking a "pretzelized" version of their flatbread, or as Patrick calls it, "a European-style artisan pretzel." Currently the Zappias produce the pretzel for private label sales but soon intend to offer them to the Canadian and US supermarkets now stocking their flatbread. To do so, they are awaiting the installation of a new automated packaging system they recently ordered. Once it's in place, they plan to boost production overall and aim all their products at more supermarkets and big box retailers.

So, what closing words of advice does Patrick have for other small bakeries thinking about working with RBS? "Do it! Throughout this whole process I always felt like we've been listened to and that we were working with a company who's going to do everything they can to make us a success."



"Pasquale's Glorious Flatbread" varieties

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- Herbs and Onion
- Sesame Seed
- Everything
- Cranberry and Pumpkin Seeds



Transforming Food Waste



Use of upcycled food ingredients is one way of improving sustainability and reducing waste within the bakery industry.

By Jonathan Thomas

Much of the growing interest in upcycled food ingredients can be attributed to rising concerns over food waste and its effects upon the environment. Traditionally, the bakery industry has been one of the main contributors towards food waste – according to data from the United Nations (UN), over 13% of all food produced worldwide is lost between harvest and retail, while around 19% is wasted in households and via industrial and foodservice channels. The bakery industry is one of the worst offenders, mostly due to the relatively short shelf-life of products such as bread and cakes, as well as overproduction by some leading operators.

It is estimated, for example, that although more than 100 million tonnes of bread are produced worldwide every year, more than 1 million tonnes are wasted. One of the worst culprits in the European region is the UK, where standard bread

represents the second most wasted food in households and accounts for an 80% share of all annual wastage from the bakery industry. According to data from the Waste and Resources Action Programme (WRAP), around 900,000 tonnes of bread is wasted in the UK every year, equivalent to 24 million slices per day. The cost of this food waste within the UK bakery industry is estimated at GBP1.1bn per year.

Bakery companies with large-scale manufacturing operations are especially prone to generating food wastage due to the higher volumes involved in the production process, examples of which include dough trimmings and expired ingredients. Food waste within sectors such as bread also encompasses products that do not meet various cosmetic or aesthetic standards, although they remain perfectly edible. Typically, much of the waste generated by the bakery industry is disposed of via composting or landfill, the latter of which results in anaerobic



decomposition and the production of methane. Some is also used in the manufacture of animal feedstuffs.

Legislative measures are now being introduced to try to reduce the amount of food waste being generated at the commercial level, which will impact upon many bakery operations. In the UK, new regulations covering England came into force during March 2025, which aim to improve waste management procedures and boost recycling rates. Under the terms of the new legislation, companies and other organisations that produce over 5kg of food waste per week must now separate food waste from other waste streams, by placing it in separate bins and arranging for its collection by licensed carriers. The government in the UK hopes to eliminate food waste from landfill by 2030, preferring it to go for anaerobic digestion treatment where it can be used in the manufacture of biofuels.

Over the last few years, some bakery companies have been making serious efforts to reduce food waste. One such example is Fazer Group of Finland, which aims to reduce the amount of food waste generated by half by 2030. Between 2020 and 2024, it achieved a reduction of 13%. One of its key initiatives within this area has been increased adoption of upcycling – for example, its Vantaa bakery facility has invested in a recycling machine that reuses surplus dough to make new bread, and which has reduced annual food waste by more than 300 tonnes. The company has also introduced its ‘Brewed with Fazer Rescued Bread’ concept in collaboration with Teerenpeli Brewery & Distillery. This includes the use of surplus rye bread as a raw material in the beer brewing process as a partial replacement for malt.

In the UK market, the company Earth & Wheat is committed to reducing waste in the bakery industry, mostly via the ‘rescue’ of high-quality bakery goods which otherwise would have been wasted. This includes bakery goods such as pancakes, crumpets and flatbreads, which are largely rejected by supermarkets and other retail outlets for cosmetic reasons. Since 2021, the company claims to have rescued over 600 tonnes of food, a significant portion of which is sold on to customers in the form of subscription boxes.

Elsewhere in the UK, market leader Warburtons claims not to have sent any food waste to landfill since 2015. The bakery chain Gail’s reuses surplus ingredients such as dough trimmings and cheese rinds, as well as offering a Waste Not range that uses unsold bread loaves to create new products for sale the next day. Examples from the Waste Not range include croissants (e.g. Almond and Ham & Cheese), sourdough bread, Cheddar Cheese crackers and Chocolate Babka. Meanwhile, Aldi UK has started using unsold bread to manufacture new eco-conscious beers, as part of its goal of reducing operational food waste by 50% by 2030.



UPCYCLED FOOD INGREDIENTS

Using upcycled food ingredients represents a key area of opportunity for bakery industry operators, especially smaller firms needing to reduce their operational costs. Much of the current growth within the sector is being driven by greater consumer demand for products offering health claims such as clean-label and minimal processing, as well as concerns over sustainability within the food industry. Research from the French-based firm AIT Ingredients, for example, found that 57% of consumers expressed a strong interest in purchasing foods made using upcycled ingredients.

The growth of the sector can be illustrated by the formation of the Upcycled Food Association (UFA) in the US. Created in 2019, it has since expanded and now encompasses more than 200 member companies. The organisation, which offers a global certification scheme, defines upcycled foods as ‘foods that use ingredients that otherwise would not have gone to human consumption, are procured and produced using verifiable supply chains and have a positive impact upon the environment.’ In Europe, efforts are being made to develop the sector. During April 2025, the Federation of European Manufacturers and Suppliers of Ingredients unveiled a grant programme available to companies within the region’s bakery and patisserie industries to boost sustainable production, including using upcycled ingredients.

One of the main types of upcycled food ingredients used in the manufacture of bakery goods such as bread and pastries is flour made from brewery spent grain (BSG). An estimated 40 million tonnes of flour made using BSG is generated by the global brewing process every year and is produced as a by-product of extracting wort (the liquid extracted from the mashing process) from malted grains such as barley. After the mashing stage, the remaining solids constitute BSG, which accounts for a sizable percentage of the total waste generated during the brewing process.

Flour made from BSG tends to be darker than conventional equivalents and offers a nutty, malty taste. It also has significant health benefits, with high levels of both protein and fibre, as well as fewer net carbohydrates than regular flour. For bakery manufacturers, BSG flour offers the opportunity to stand out from the competition

by producing breads and pastries with a distinct flavour and mouthfeel, as well as addressing demands from consumers following specific diets (e.g. gluten-free) and seeking out alternative flours. It also has the advantage of lower greenhouse gas emissions.

One company which competes in the BSG sector is Upcycled Foods of the US, whose range includes ReGrained SuperGrain+, a flour made from BSG. According to the company, it contains almost four times as much dietary fibre as regular white flours and twice as much plant protein. It is suitable for applications such as bakery goods and snack foods, having been used in the manufacture of new own-label breads launched by Misfits Market in February 2025. The breads, which were launched in Multigrain and Honey Wheat varieties, appeared under the Odds & Ends label.

Another company present within this sector is EverGrain, which was created by the global brewing giant AB InBev. It produces around 1.4 million tonnes of BSG per year, while its range includes EverPro barley protein. Meanwhile, AIT Ingredients of France supplies Vital Painte, a bakery premix made using BSG flour, which was developed in partnership with Maltivor. In July 2025, AIT Ingredients was acquired by Lallemand Baking Solutions (LBS), a supplier of clean-label ingredients such as yeast and enzymes to the bakery industry.

Fruit represents another form of upcycled ingredient used in bakery applications such as pastries and cakes. Typically, this takes the form of bruised, overripe, misshapen or nearly expired fruits used in the manufacture of products such as jams, compotes and fillings. Furthermore, fruit by-products such as peels and seeds can also be used in the manufacture of flours. Flour made from breadfruit can be used in the manufacture of bakery goods such as pastries. Breadfruit is a starchy tropical fruit grown in parts of the world such as the Caribbean, parts of Africa and various Pacific islands, although it has a relatively short shelf-life due to its high respiration rate once stored and wastage levels can therefore be high. This is the main reason it is rarely

exported outside tropical regions. Up to 80% of all breadfruit produced in Nigeria's south-western regions, for example, is wasted due to deterioration or lack of use.

Some bakeries in the world's tropical regions routinely use flour made from breadfruit in bakery applications such as bread and pastries. It represents a suitable alternative to wheat flour for those following a gluten-free diet and is also high in nutrients such as fibre, potassium and vitamin C. Additionally, it has a low glycaemic index. In the US, breadfruit flour received approval from the Food and Drug Administration (FDA) as an ingredient in 2016, since when companies such as Upcycled Foods have been working with farmers in tropical regions to support its upcycling.

In areas where it is grown, breadfruit is also used in bakery applications in a more traditional manner, e.g. being mashed or sliced and then incorporated into pastries and cakes.

Upcycled fruits are also used in bakery applications due to their natural sweetness, which can help reduce the amount of sugar used, as well as adding novel or innovative flavours to foods. By-products such as fruit pulp and purees are often used in these instances. During 2022, the US-based company FruitSweet Inc. acquired certification from the UFA for its upcycled fruit-based ingredients produced using its Cold-Press fruit processing system. In a similar vein, cacao fruit is also assuming increased importance within the market for upcycled food ingredients, due in part to its sweet flavour. The beans used in chocolate manufacture account for only 30% of cacao fruit, with the remainder (i.e. pulp and peel) often discarded. However,

confectionery manufacturers such as Barry Callebaut have been working to develop ingredients such as sugar substitutes for use in food applications based on pulp and peel from cacao fruit. Pectin is another fruit-based by-product widely used in the market for bakery goods and elsewhere in the food industry. It is a natural substance found in the cell walls of many fruits and is frequently extracted from apple pomace (the leftover pulp resulting from the production of apple juice) and citrus peel. As a food ingredient, it is often used as a gelling and/or thickening agent, as well as a sugar replacer in applications such as low-calorie foods. It can also help to extend the shelf-life of foods.

In the US, Ingredion Inc. has recently started using waste streams from the production of pectin to develop new upcycled ingredients, namely citrus fibres. These can assist in providing unique textures and sensory experiences for foods such as bakery goods, as well as controlling moisture and binding fats.

THE FUTURE

Use of upcycled food ingredients such as grains and fruit within the bakery industry appears set to continue increasing, as efforts to encourage more sustainable production and use of natural resources become more widespread. Future growth is likely to depend heavily upon investment and support at the corporate level, although the recent interest shown in the sector by various trade and regulatory bodies suggests it has the potential to expand further. •

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The Heat Is On: **Modern Deck Ovens for Flexible, Front-of-House Baking**

Choosing the right oven is one of the most critical—and visible—decisions a retail bakery can make. For those focused on crust, character, and consistency, the deck oven continues to earn its keep, delivering performance that stands up to tight footprints and tighter margins.

By **Tudor Vintiloiu**

But with manufacturers offering increasingly modular designs, smart controls, and energy-saving features, today's deck ovens come in more shapes and systems than ever—turning a straightforward purchase into a strategic decision. Navigating this landscape means weighing not just baking quality, but also how each oven aligns with staffing, layout constraints, and long-term operating costs.

AVAILABLE OPTIONS

DEBAG's longstanding DECON family, while often associated with its convection-based multitasking, remains highly relevant in the deck oven conversation—especially when paired with the DEDEC deck module. This combination offers

a three-in-one solution: convection oven, steamer, and classic stone deck oven, integrated into a single compact baking station. For bakers seeking both flexibility and artisanal authenticity, the DECON-DEDEC pairing supports a wide range of applications—from pastries to rustic breads to hot meals—all within a small commercial footprint. Aided by DEBAG's e.BAKE.solutions suite, including One-Touch Control and the FilialNet networking platform, operators gain centralized control across multiple ovens and store locations. Though introduced in 2018, the system's modular variants—such as DECON 5, 12, 5/5, and 12/5—have remained popular thanks to their adaptable capacity and compatibility with base frames and proofing chambers. The PCS energy management feature, now available for

HELIOS deck ovens, helps minimize power peaks and operating costs—supporting the growing imperative to reduce energy use in commercial baking.

MIWE's contribution to this segment focuses on precision, modularity, and consistency. The MIWE condo, a longstanding favorite for both ISBs and small production bakeries, remains one of the most versatile deck ovens on the market. Designed to offer bakery-grade results in a compact format, the condo supports a wide variety of products while maintaining high-quality standards across batches. Its modular design enables different baking chambers to operate at separate temperatures, and each chamber can be individually configured in terms of steam and control type. The result is a machine that doesn't compromise artisan results even when installed in space-limited environments like supermarkets or café bakeries. MIWE's ongoing investment in digital integration also means that ovens like the condo support remote monitoring and programming, reinforcing operational efficiency alongside product quality.

Sveba Dahlen, part of the Middleby Bakery Group, is also bringing new relevance to deck baking with the D-Series, and most recently with the introduction of the SD Amigo control panel. The D32E model—available with an integrated proofing cabinet—combines robust Swedish engineering with attention to baker-centric workflow. What sets this line apart is the SD Amigo interface, which preserves user settings and weekly baking schedules even in the event of a power outage—an overlooked but highly practical feature for high-turnover retail bakeries. The D-Series' success lies in its balance between premium baking performance and the modular scalability that allows shops to start small and expand over time, stacking up to five decks as demand grows. Energy-saving features such as eco-modes and optimized airflow help reduce operational costs without sacrificing baking consistency, while customization options enable adaptation to regional product lines or seasonal changes.

A NOD TO TRADITION

For bakeries that want to marry tradition with authenticity, WP's Matador Pellador offers a modern interpretation of the wood-fired deck oven. While not a conventional choice for ISBs, its relevance lies in its ability to deliver premium baked goods using pellet-fired combustion for uniform heat and artisan-quality crust. Though primarily targeted at specialty or flagship retail outlets, this model reflects a broader trend toward integrating sensory experience—crackling crusts, warm aromas, visual presence—into the front-of-house baking environment. WP has designed the Pellador with attention to efficiency and heat management, bringing solid-fuel baking into compliance with modern performance expectations.

THE RIGHT TOOL

Together, these innovations signal that the deck oven is no longer a static piece of backroom equipment. Instead, it is a programmable, modular, and visually compelling centerpiece of in-store baking operations. The ability to bake directly on stone surfaces, maintain independent temperature zones, and integrate with digital baking programs allows these ovens to serve diverse needs—from rustic loaves and butter croissants to reheated meals and specialty pastries. And as consumer preferences continue to tilt toward freshness, variety, and authenticity, deck ovens remain one of the few technologies capable of delivering both heritage and efficiency without compromise.

In the context of space-restricted shops, labour-conscious workflows, and energy-aware business models, the modern deck oven offers something other ovens cannot: full control over the final product's structure, texture, and presentation—qualities that define the bakery experience in the eyes of both professional bakers and everyday customers. For craft bakers and ISBs looking to align operations with artisan quality, investing in the right deck oven is less about matching a spec sheet than finding a tool that supports both the artistry and economics of daily baking. •



Cookie Almighty

The humble cookie, one of the first desserts a child learns to make, is also the most popular dessert in North America. Its everlasting success is based on its simple, but powerful flavors, nostalgia and the sense of comfort it brings to whoever picks one.

By Jo Ilie

Chocolate chip cookies, peanut butter cookies, snickerdoodles, oatmeal raising cookies, gingersnaps, macaroons, chocolate crinkles - these are some of the most popular desserts in North America and they start, more or less, the same. Butter is creamed with sugar, eggs are incorporated, then the various mixtures of flours, leavening agents, aromas and mix-ins. The result? One of the most satisfying desserts out there. Their estimated popularity is confirmed by Barry Callebaut's 2025 Bakery Trends Report. Cookies continue to lead the dessert category in North America, maintaining strong popularity driven by their convenience, variety, and broad consumer appeal. They are considered an affordable, convenient snack option, typically perceived as indulgent rather than health-focused. So much so that cookies are the most consumed dessert in the U.S., with 76% of consumers indulging. Flavor remains the key factor influencing cookie purchases, with chocolate emerging as the dominant preference among

consumers. Price sensitivity is also significant, although consumers prioritize overall value and are willing to pay more for premium options. Texture, specifically mouthfeel, significantly impacts consumer choice, highlighting the importance of sensory experience.

The study indicates a growing consumer willingness to spend more on cookies that deliver premium features. What defines a premium cookie experience include indulgence, high-quality ingredients, and innovative flavors - not, as with other baked goods, health, clean label or sustainability claims. Notably, chocolate inclusions and superior ingredient quality strongly signal premium positioning. Additionally, unique flavor combinations and handcrafted appearances enhance perceived value. Consumers say they are willing to pay as much as 2.96x for a premium product as opposed to a regular one.

The report highlights an example of innovative premium offering: the Cinnamon Caramel Stuffed Cookie, created by Chef Paul Yochum. This product incorporates cinnamon schmear, white ganache filling, and salted caramel micro truffles, appealing significantly to consumer interest



in novel, indulgent flavor profiles. Specifically, cinnamon salted caramel cookies are highly appealing, with many U.S. consumers eager to try them.

TRENDS ON THE RISE

A recent market report from Evidnt shows that the American market is dominated by a few major brands and there is little room left for newcomers or indie brands, although the latter are able to build a loyal following if they can differentiate themselves on the premium market.

America's favorite cookie is Oreo, with a 19% market share. Ores leads the pack thanks to its iconic sandwich design and ever-changing variety of limited-edition flavors. Chips Ahoy, very popular chocolate chip cookies, holds 11% of the market. The Bimbo Group, with a diverse product lineup, including multicultural favorites, accounts for 9% of sales. Gamesa is known for its substantial presence in Hispanic households and it captures 8% of cookie sales. And Marinela, popular for its distinctive cookies and pastries, rounds out the top five with 6% of sales. These brands dominate by consistently delivering quality

and familiarity to households nationwide, says Evidnt. The most popular cookie flavors in the US appear to be corresponding to the types of cookies the largest players make. Sandwich cookies and chocolate chips reign supreme, but there's a growing demand for unique flavors that evoke nostalgia or offer a twist on classics.

- **Sandwich Cookies with Fillings:** These cookies, led by Oreo, are the clear favorite and represent 27% of sales.
- **Chocolate Chip:** A timeless classic, chocolate chip cookies hold 18% of the market.
- **Wafer Cookies:** Loved for their light, crispy texture, wafers make up 12% of sales.
- **Other Flavors:** Peanut butter, oatmeal, sugar cookies, and snickerdoodle account for the remaining 43%, offering various options for different tastes.

Of course, cookies are not immune to viral Tik Tok trends. "Dubai chocolate" cookies, which are basically chocolate chip cookies filled with pistachio cream and kataifi, became omnipresent in social media in the last year. Matcha cookies, a nod to the rising trend of matcha lattes, are also a staple in high end bakeries. Not just matcha, but other Asian flavors came out in the last few years: miso, soy, gochujang - these also play on a new found love for sweet and salty combinations. With nostalgia influencing snacks everywhere, we also see many typical childhood flavors included in new cookies, and especially cereal. These are, however, fringe flavors, far from the popularity of the ones mentioned before.

A NEWCOMER'S SUCCESS STORY

Insomnia Cookies, a US bakery chain known for delivering freshly baked cookies directly to homes and businesses, began in 2003 when founder Seth Berkowitz launched the concept from his dorm room. The idea came to Berkowitz during his time at the University of Pennsylvania, where he baked and delivered cookies to fellow students late at night. After a local newspaper featured his unique late-night delivery service, orders surged to around 30 per night, prompting Berkowitz to expand his operations. Deciding to turn his hobby into a professional business, Berkowitz launched Insomnia Cookies with operating hours inspired by his campus deliveries—daily from 10 am to 3 am. After graduating, he opened three locations but initially struggled to settle on the ideal business model. Berkowitz first experimented with a delivery-only approach, then moved to selling cookies from trucks, before ultimately adopting a brick-and-mortar format. Today, Insomnia Cookies operates over over 300 locations globally. With a goal to reach 1,800 bakery locations worldwide over the next decade, the company is focused on scaling both its physical footprint and digital capabilities.

CONCLUSION

The unsuspecting round and flat dessert is a forever favorite, both for its snackability and its ability to reinvent itself with the times. As trends come and go, we can be positive cookies will always be a staple. ●

Raymond Nogael, MECATHERM/ABI:

"Our EYE-Q platform brings artificial intelligence directly into the heart of baking production."

European Baker & Biscuit caught up with Raymond Nogael, President & CEO of Mecatherm, during this year's iba trade show, to discuss the company's strategic direction in the age of smart manufacturing. In a wide-ranging conversation, Nogael shared insights into MECATHERM's investments in digitalization, artificial intelligence, and plug-and-play solutions designed to support industrial bakers facing labor shortages and growing demands for flexibility. He also spoke candidly about the future of predictive maintenance, the evolving role of sustainability across the baking value chain, and MECATHERM's continued growth in key markets such as Eastern Europe and North America.

By Tudor Vintiloiu

Technology and AI are becoming increasingly integrated into industrial processes. What do you see as the main challenges in this transition?

I think technology is catching up, with AI and smart machines now taking over areas where previously you needed a lot of trained manpower. The main challenge we all face in the industrial context is finding people—and more specifically, qualified people. Once you find them, you need to train them and then retain them. That's one of the biggest challenges we have for the future: how to address knowledge management and how to help operators on the shop floor. Maybe tomorrow there will be less people in the factory. How can the industry adapt to this? At MECATHERM, this perspective is part of our strategy. That's why we're investing significantly in digitalization.

What steps are you taking in that direction?

We created a company called MaMaTa. This company supports MECATHERM and ABI in developing all the digital IT solutions. We are investing significantly in that area because I really believe in it. We can improve product quality, industrial performance, and address sustainability. All our equipment is now fully connected. All new lines come with access to MyMecatherm free of charge during the warranty period. After

that, there's a fee, but the first year allows customers to get familiar with and adapt to the tool.

How do you see these digital tools—like MyMecatherm—changing the relationship between equipment producers and industrial bakers? Does it facilitate communication or increase trust?

That's a very good question. At Mecatherm, we are an organization—like most companies selling production lines—that operates globally. We've sold almost 1,000 lines worldwide, and it's difficult to track each one. But we want to be more supportive to customers than ever before. I push for us to stay close to our customers and help them, for the reasons I just mentioned. Digital tools help maintain that relationship, especially with customers who are far away. You don't visit them every day, but even when you're not there, you can still stay connected, offer support, and be proactive—if they agree, since not all customers accept that. With this system, you have a complete record of your relationship. It's a never-ending story. Like with your phone—you can localize, call, send messages anytime. You're always connected. We've improved equipment performance, anticipated breakdowns, and enhanced the line's profitability. That already brings a lot of satisfaction.



What feedback have you received from clients who have already adopted the system?

Very good. We're still at the beginning, but customers are happy and satisfied—although also very demanding. The more they use the tool, the more requests they have. It's like using any app. Customers' engagement with the tool pushes us to improve and enhance its capabilities in the future.

You have different packages for clients—like a free version, Care, and Care Plus. Could you elaborate on what each one is offering?

Yes. Today, most customers choose Care. That package includes basic performance monitoring—a simple dashboard to know what's going on in the factory. But the package that people

should move toward is the predictive one, because it helps anticipate breakdowns. However, it requires more information, more education, and a better understanding of how it works. Shows like this are important because we can explain, discuss, and especially listen—to evaluate how to address this topic. Predictive maintenance is important, but it needs to be adapted to each case. Customers are concerned they might pay for something and then nothing happens. I say: it's like insurance. You pay every year hoping nothing happens, but when it does, you're glad you're covered.

Tell me a bit about your R&D process. What drives the transition from technical feasibility to finished product—market demand, client feedback, or trends?

MECATHERM has always been an innovative company. Every time we come to a show, we win an award or have a distinction. Innovation is in our DNA. But now we are also very focused on continuous improvement. It's one thing to launch innovation, but if you truly listen to the market, there's always room for improvement. Since we produce the equipment, we understand it, but our customers are the ones using it every day. I really believe research is important, but development is critical. Ninety percent of what we develop is based on customer feedback. The remaining 10% comes from research. We evaluate ideas, make pilot tests at our facility, and then test them at customer sites.

And what kind of solutions are you preparing?

We need plug-and-play solutions. Labor is decreasing, and fewer people want to travel long distances. So we aim to deliver solutions that customers can install themselves—even for large lines. Everything should be manageable remotely. If the customer wants more supervision or on-site support, that becomes an extra service. Plug-and-play is the direction we're heading.

And the machine itself will interact with the operator?

Yes. No more screens—you'll talk to it. You'll say, "This is the setting I want," or "What are the issues?" Everything will be virtual—like an avatar. I had this vision five or six years ago and people said "no way." Now, when I say you'll talk to your oven, everyone says, "Yeah, yeah, sure." The only question is how long it will take. The technology isn't fully there yet. What matters most is knowledge management: collecting data, validating it, qualifying it. You need to validate everything properly.

You've also innovated in oven energy sources—hybrid, electric. How is the market responding? Is the infrastructure ready?

Demand was high when gas prices went up and when environmental issues became a big topic. Everyone is talking about net zero by 2050. But right now, customers don't seem that much very interested in switching to hybrid or electric. In some countries, electricity is more expensive than gas. In others, electricity isn't greener than gas. We've done trials and comparisons, but there's little interest so far. That might change. The bigger issue is product quality. Gas gives better baking results than electric, and that's fundamental. Our customers are selling products, so we must deliver quality. The market just isn't ready yet.

Your EYE-Q product brings AI into production. What other areas do you see AI being integrated?

We're integrating AI across all our processes to reduce non-value-added tasks and save time. For example, EYE-Q Quality Control System from ABI uses deep learning and artificial intelligence to offer insights into production issues and bottle necks by classifying, tracking, and trending defect statistics to support operators as they resolve issues rather than simply

accepting or rejecting products. Another example, instead of checking five files and doing manual analysis, AI can provide a synthesis, so you can focus on making decisions. That's real added value. It saves time, improves time-to-market, and makes jobs more engaging. One of MECATHERM's current pillars is attracting and retaining talent. Showing we're evolving helps with that. Tomorrow, machines will understand you in your own language—Romanian, French, whatever. No more translation. That's the future. To get there, many modules need to be integrated.

Your sustainability charter calls for collaboration across the value chain. Where do you see this happening—upstream with ingredients, or downstream with packaging and automation?

It's not one before the other. We encourage everyone to work in the same direction—from agriculture to packaging. We're owned by a financial company that gathers all the wheat producers in France, so agriculture is in our DNA. Packaging matters too, even if it's not our job, because it impacts cost and the environment. We have to think about what kind of earth we're leaving for future generations. That's why we are committed to sustainable progress and organize seminars and webinars with ingredient and packaging companies. We believe that change can happen when the entire value chain is involved. Lastly, we are committed to genuine sustainability efforts and do not support greenwashing practices. For instance, I tend to remain skeptical when I see long-term promises to reach net-zero by 2050 without a clear roadmap.

Eastern Europe is seeing significant investment in baking. Is this a growth area for MECATHERM?

Eastern Europe has been our second-largest growth area for the past five years. There's a modernization of distribution channels— coffee shops, fast food, etc. Consumer habits are shifting toward American-style products, more variety, and more innovation. Poland was the first to accelerate, and we sold many lines there. Even though we no longer sell in Russia or Ukraine, we've reinforced our approach in other markets. We've hired a new sales representative and are recruiting technicians. It's not just about selling—it's about service. Right now, our main focus is North America and Eastern Europe.

One final question. What role do trade shows play in your growth strategy? Do they impact sales or improve trust and brand recognition?

We have to be here. MECATHERM has always supported these events. They're a great opportunity to meet most of our customers in a few days and identify new prospects. It's always a good return on investment. They help with brand recognition, and they're a great place to present innovations and get feedback from people around the world. It takes effort, energy, and money. Last year, we had a big oven at the show. People like to touch the steel. Maybe we'll need a more disruptive approach—but we haven't found it yet. •



PACKAGING REPORTER

Supporting the global packaging industry

OUT OF THE BOX PACKAGING NEWS





A Fall Full of Opportunities

While iba and IBIE, the biggest shows in the industry, seemed to grab all the attention this year, more specialized trade shows attract their own crowd of like-minded professionals and businesses that want to present their innovations and skills and laying the foundation for fruitful new partnerships.

By Jo Ilie

ANUGA 2025

October 4 - October 8

Koelnmesse, Koeln, Germany

Anuga not only provides a platform for networking but also offers profound insights into the pioneering developments of the industry. The congress and event program present a diverse range of conferences, workshops, experience areas, and speaker sessions. Key industry concerns are addressed, while innovations are showcased and discussed.

In addition to the conferences and workshops, special exhibitions like the Anuga Taste Innovation Show or “Meet more Meatless and Dairy Alternatives” provide relevant glimpses into sustainable advancements. By incorporating regional, plant-based ingredients, alternative proteins, and more resource-efficient production processes, manufacturers actively contribute to sustainable practices.

7.900

Exhibitors from 118 countries

Over **140.000** Visitors from 200 countries

10 Trade shows under one roof

94% of the exhibitors are international

EATS 2025

October 28 - October 30

McCormick Place,
Chicago, USA

EATS, The Equipment, Automation, and Technology Show for Food & Beverage, is the next step in the evolution of Process Expo, reimagined to meet the dynamic needs of the industry.

This key industry event will gather baking professionals, technology innovators, and equipment manufacturers from Europe, North America, Asia Pacific, and the Middle East. Attendees can explore cutting-edge baking technologies, automation solutions, sustainability practices, and industry trends shaping the future of baking. The three-day showcase also offers an extensive programme of expert-led seminars, live demonstrations, and networking opportunities designed to equip bakery professionals with essential insights to drive their businesses forward.

PACK EXPO 2025

September 29 - October 1

Las Vegas Convention Center,
Las Vegas, USA

PACK EXPO focuses on the latest developments in packaging machinery, materials, packages and containers, automation and robotics, digital printing and labeling and supply chain solutions. The most prominent companies in the industry will be exhibiting and making product introductions at the show. It is the industry gathering place for anyone in the following sectors: Food & beverage, life sciences, household/chemical, cosmetics/personal care, pet food & pet care, eCommerce/Warehouse distribution, and cannabis/CBD.

2,300 exhibitors

35,000 professionals from 40+ vertical industries

100+ free, on-floor educational sessions

2025 FEATURE PLANNING

1 JANUARY/FEBRUARY

Ad closing: Jan 31/Publishing: Feb 02

TECHNOLOGY

Sheeters & Laminators / Freezing Equipment

PROCESS

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

SPECIAL FEATURE

Business Outlooks 2025

EXPERT VIEW

Low Pressure / Extruded Snacks

FOOD SAFETY

Hygienic Equipment Design

INGREDIENTS & NUTRITION

Flours / Shelf-life Optimization / Botanicals / CBD

PACKAGING

Secondary packaging

MARKETS

UK & Ireland

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

Trade Shows Outlook 2025

2 MARCH/APRIL

Ad closing: Mar 14/Publishing: Mar 28

Includes Asia Pacific Overview Print Supplement



Trade Show Preview

TECHNOLOGY

Extruders / 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

Scandinavia

SNACKING TRENDS

Savory vs Sweet Biscuits

CRAFT BAKING

Kneaders & Mixers

SUPPLY CHAIN & LOGISTICS

Traceability

PRODUCT SPOTLIGHT

Traditional Bakery & Ethnic Sweets / Pies & Tarts

TRADE SHOWS

Bakery China / SIGEP China

3 MAY/JUNE

Ad closing: Apr 16/Publishing: Apr 30



Special Edition

TECHNOLOGY

Turnkey Lines / New Oven Technologies

PROCESS

Vacuum Cooling / Seasoning

SPECIAL FEATURE

Smart Production & AI

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

Germany

SNACKING TRENDS

Pies & Cakes

CRAFT BAKING

Dividers / Rounders

SUPPLY CHAIN & LOGISTICS

Supply Chains & NPD

PRODUCT SPOTLIGHT

Plant-based Bakery Products / Cookies

4 JULY/AUGUST

Includes North America Overview Print Supplement

Ad closing: July 10/Publishing: July 24



Special Edition

TECHNOLOGY

Turnkey Lines / Conveyor Belts

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

TRADE SHOWS

Pack Expo, Anuga

5 SEPTEMBER/OCTOBER

Includes Middle East Overview Print Supplement

Ad closing: Oct 01/Publishing: Oct 15



Special Edition

TECHNOLOGY

Software and Sensors / Proofers

PROCESS

Extrusion / Handling / Pick & Place

SPECIAL FEATURE

Sustainable Sourcing of Ingredients

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

Process Expo / Gulfood Manufacturing

6

NOVEMBER/DECEMBER

Ad closing: Oct 26/Publishing: Dec 10



Special Edition

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

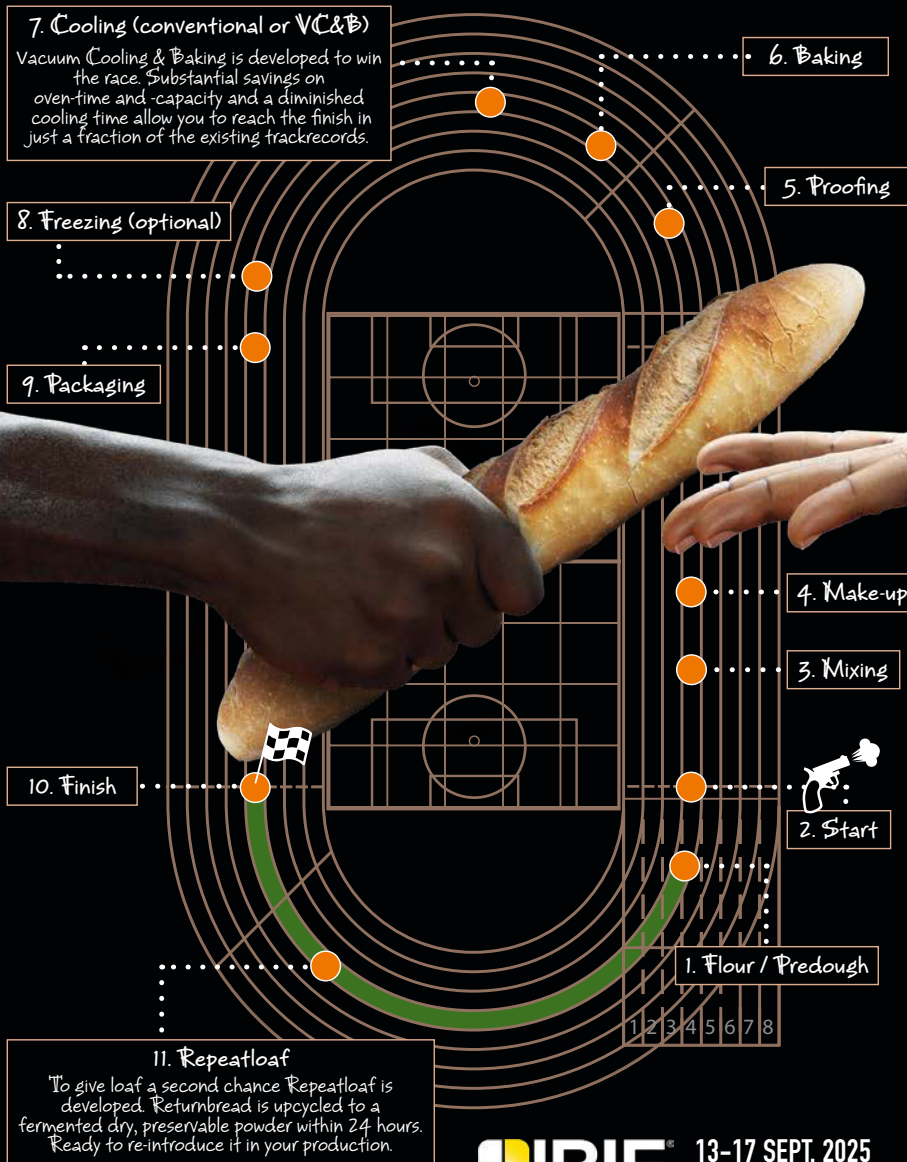
PRODUCT SPOTLIGHT

Winter Holiday Treats / Meringues



THE RELAY OF PRODUCTION

turnkey; from challenge to synergy



schnittstelle...interface?

Are you in the race? Are you one step ahead of the competition? How is your production going? Is everything working as smoothly as it should? The sum of intelligent and excellent elements can only work if the overall architecture is completely under control. We at Verhoeven Bakery Equipment Family look forward to meet you at the upcoming IBA and IBIE trade shows. We will show you the latest developments in innovative solutions, such as Vacuum Cooling and Baking or true upcycling of return bread with our Repeatloaf solution. We invite you to explore these innovations together in detail, but we will never lose sight of the big picture - your big picture.

Our turnkey solutions help you create true synergy in your production and maintain control. We ensure that your production flow runs as smoothly as a well-coordinated relay race. With every step in the process, from challenge to synergy, we hand the baton to the next station.

Verhoeven Bakery Equipment Family has a long and successful history of tailor-made development, engineering and production for the food industry. In the bakery market the family labels have established a strong position due to innovative and creative turnkeysolutions. We sell high-end production lines and state-of-the-art machines. Developed and made by a wonderful team of dedicated people. This makes us proud. We would love to show you why.

IBIE
INTERNATIONAL BAKING
INDUSTRY EXPOSITION
13-17 SEPT. 2025
LAS VEGAS
WEST HALL 2070

we make to bake

VERHOEVEN BAKERY EQUIPMENT FAMILY
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