Issue 1 2026

IN FOOD

PROCESSING & PACKAGING

KEEPING UP WITH

MODERN TASTES AND MARKET DEMANDS

IN THIS ISSUE

16

34

2b Publishing

Publisher
David Webb
d.webb@2bpublishing.co.uk

Editor
Jon Hughes
jon@industrialnews.co.uk

Design
2b Media

Partnerships
Jenn Blakesley
jenn@industrialnews.co.uk

Published in Birmingham, UK.

With special thanks to

EURILAIT

trovr

Making Plastic Smarter
Symphony environmental

STILL ON THE BOIL

by Jon Hughes, Editor, IN Food

Food manufacturing rarely gets the luxury of pause. Lines run, orders land, audits arrive, and the gap between decision and consequence is usually measured in shifts rather than quarters. The past year was no exception — a year of steady production under unsteady conditions, with enough noise in costs and demand to keep planning permanently provisional.

As 2026 begins, food manufacturing looks much as it did through most of 2025: lines running to demanding schedules, technical teams balancing risk and cost in real time, and decisions being made with one eye on the next audit and the other on what the customer is prepared to pay. There was no neat shift from disruption to stability, but there was a grudging acceptance that volatility is now part of the operating model, whether it shows up in ingredients, energy, packaging, freight, or labour.

Commodity pricing, in particular, refused to settle into anything that procurement could responsibly describe as “predictable”. The FAO Food Price Index averaged 127.2 points in 2025, up 4.3% year-on-year, and it was the category swings — from oils to dairy to cocoa — that did the damage, because formulation, availability, and customer pricing rarely move in sync. Demand also remained value-led across large parts of the market, which kept buyers sharp on price while continuing to tighten expectations around specification, reporting, and performance.

The businesses that held up best tended to be those that made the factory floor boring, in the most complimentary sense. Maintenance discipline, hygiene and contamination controls, inspection capability, and packaging that behaves properly at line speed all became competitive advantages, because every unplanned stop costs margin twice — once in waste, and once in lost capacity that does not come back. Capital spending stayed selective, but it did not stop; projects were approved where payback was provable, whether that meant incremental automation to protect throughput, better sensing and control to reduce giveaway, or upgrades that make changeovers and compliance reporting repeatable across shifts.

That focus carries into 2026, although the pressure increasingly arrives with dates attached. Packaging regulation is tightening across Europe, extended producer responsibility costs are becoming harder to ignore in the UK, and traceability expectations continue their slow march from "customer preference" into contractual requirement. Packaging, data, and provenance therefore stop being parallel workstreams and become a single specification problem, with direct implications for material choice, line settings, supplier qualification, reporting burden, and product economics.

The first IN Food magazine launches against that backdrop precisely because that *is* the backdrop, and because food manufacturing deserves to be covered as the industrial system it is. This magazine will treat processing, packaging, automation, and supply chain performance as connected engineering and commercial decisions, and it will focus on what survives contact with the high-pressure reality of production: throughput, yield, compliance, and margin.

ISHIDA ADVANCES PROTEIN PACKING WITH ROBOTGRADER ACQUISITION

Following a deal announced in December, **Ishida** — a leader in end-to-end weighing, packing and quality control solutions — has acquired **RobotGrader AB**, a Swedish robotics specialist whose fixed-weight tray-packing systems are widely used in automated protein lines.

RobotGrader, based in Mölndal, Sweden, was founded in 2004 by Sverre Stenbom and designs robotic equipment that combines weighing, grading, and pick-and-place functions. Ishida said the companies have worked together since 2014, with Ishida acting as RobotGrader's exclusive European distributor and installing systems in 13 countries.

Darren Chandler, General Manager for Protein Solutions at Ishida Europe, said: "RobotGrader has long been known for its innovative robotic grading systems, and this move brings together two family-owned businesses with a shared commitment to engineering excellence and quality service. We are excited to build on the success we've experienced already." He added: "Precision tray-packing technology is becoming ever-more important to improving performance while reducing food waste and giveaway."

Dave Tiso, Managing Director at Ishida Europe, said: "With automation high on food manufacturers' agendas, we are pleased to be able to offer RobotGrader solutions as a direct part of the Ishida portfolio." He added: "With Ishida's experts in weighing, packaging and quality control, and RobotGrader's mechatronics specialists working more closely together than ever before, we can provide even deeper integration to serve the needs of protein processors globally."

Stenbom will remain actively involved in the business, commenting: "This is a very positive move for both companies and clearly demonstrates the ambition of Ishida to be a major contender in the protein packaging and automation sector. I am looking forward to seeing what the future holds." Ishida said new product development is already underway, alongside expansion plans intended to strengthen service, spares availability, and system optimisation.

SABERT ROLLS OUT PFAS-FREE PULPULTRA RANGE

Sabert Corporation Europe has launched PULPUltra™ across Europe and the UK and Ireland, scaling up after early deployments in Ireland (children's meal packs) and France (its Gastronorme range). The company is positioning the formulation as "no-intentionally-added-PFAS", targeting foodservice buyers looking to reduce exposure to "forever chemicals" scrutiny without dropping performance.

PULPUltra is based on more than 95% bagasse fibres, with a barrier spray coating of under 5%, and is designed for direct-contact hot food applications where oil and grease resistance typically pushes packaging towards laminated structures. Sabert says the material is also freezer-safe, microwave- and oven-compatible, and suitable for PET sealing and multi-welding, while carrying a recyclability claim under the UK's Recycling Assessment Methodology and TÜV OK Compost Industrial certification.

The EU Packaging and Packaging Waste Regulation — Regulation (EU) 2025/40 — entered into force on 11 February 2025, with Article 5 substance requirements, including PFAS limits for food-contact packaging, applying from 12 August 2026. "Every product we make is rigorously tested to comply with food safety standards," said Isabelle Ernotte.

FENTON PACKAGING COMPLETES £250K DIGITAL OVERHAUL

Fenton Packaging Solutions has completed a year-long digital transformation, investing close to £250,000 to replace an ageing on-premise platform and paper processes with a cloud stack. It deployed Access ERP, integrated Salesforce, introduced Asset Hub, and upgraded warehouses with handheld scanning and real-time tracking.

The company says teams now work from live data rather than overnight updates, cutting admin, speeding decisions, and improving accuracy for customers. Sales can confirm stock, pricing, and order history at the point of order, while warehouse staff track every pallet movement and customer service pulls answers from a single system. Management points to better customer insight, identification of demand patterns, and fewer stockouts through improved planning and supplier negotiation.

Alongside the systems work, Fenton appointed Mark Woods as Business Development Manager and Alex Breeze as Internal Sales and Customer Service Manager. It also secured Great Place to Work accreditation, scoring 87%, above the 65% benchmark.

TNA SHOWCASES FULL CONFECTIONERY LINES AT PROSWEETS

At ProSweets 2026 in Cologne (1–4 February), **TNA Solutions** is presenting its end-to-end processing and packaging capabilities for confectionery and nutraceutical producers from stand D-059 in Hall 10.1.

The company is leaning on starch-moulding expertise brought in via its 2017 acquisition of NID, and says it has continued to modernise the portfolio around simpler operation, higher throughput, and cleaner changeovers. On-stand hardware includes the tna robag 3e, paired with configurable tna intelli-weigh scales for sticky products such as liquorice and gummies, and long-format items including lollipops and “snakes”. TNA is also detailing dust extraction and integrated sieving on linear feeders for sugar-rich environments, alongside sealing technology aimed at fast, reliable fin-seal packs using multi-layer films.

tna conti-oil system

For finishing, the tna conti-oil system is positioned for continuous oil coating of jelly and gum confectionery, using a rotating stainless-steel drum and claiming output up to 2,200 kg/hr.

“As global demand for gummies, jellies, and other confectionery formats continues to grow, manufacturers are seeking reliable solutions that combine flexibility, hygiene, and high product quality,” said James Hosford, Regional Solution Specialist, TNA Solutions.

GNT GROUP TAKES ECOVADIS PLATINUM

GNT, a supplier of the EXBERRY plant-based colours range, has secured a Platinum medal, placing the business in the top 1% of rated food manufacturers with a 2025 score of 86/100 (99th percentile). It follows Silver and Gold results in earlier assessments.

Assessors highlighted improvements in resource efficiency and waste reduction, stronger ethics and compliance checks, tighter supply-chain risk management, and increased supplier oversight.

“This Platinum medal is the result of a continuous improvement journey,” said Rutger de Kort, Sustainability Manager. The company says this supports secure, lower-carbon, ethical sourcing..

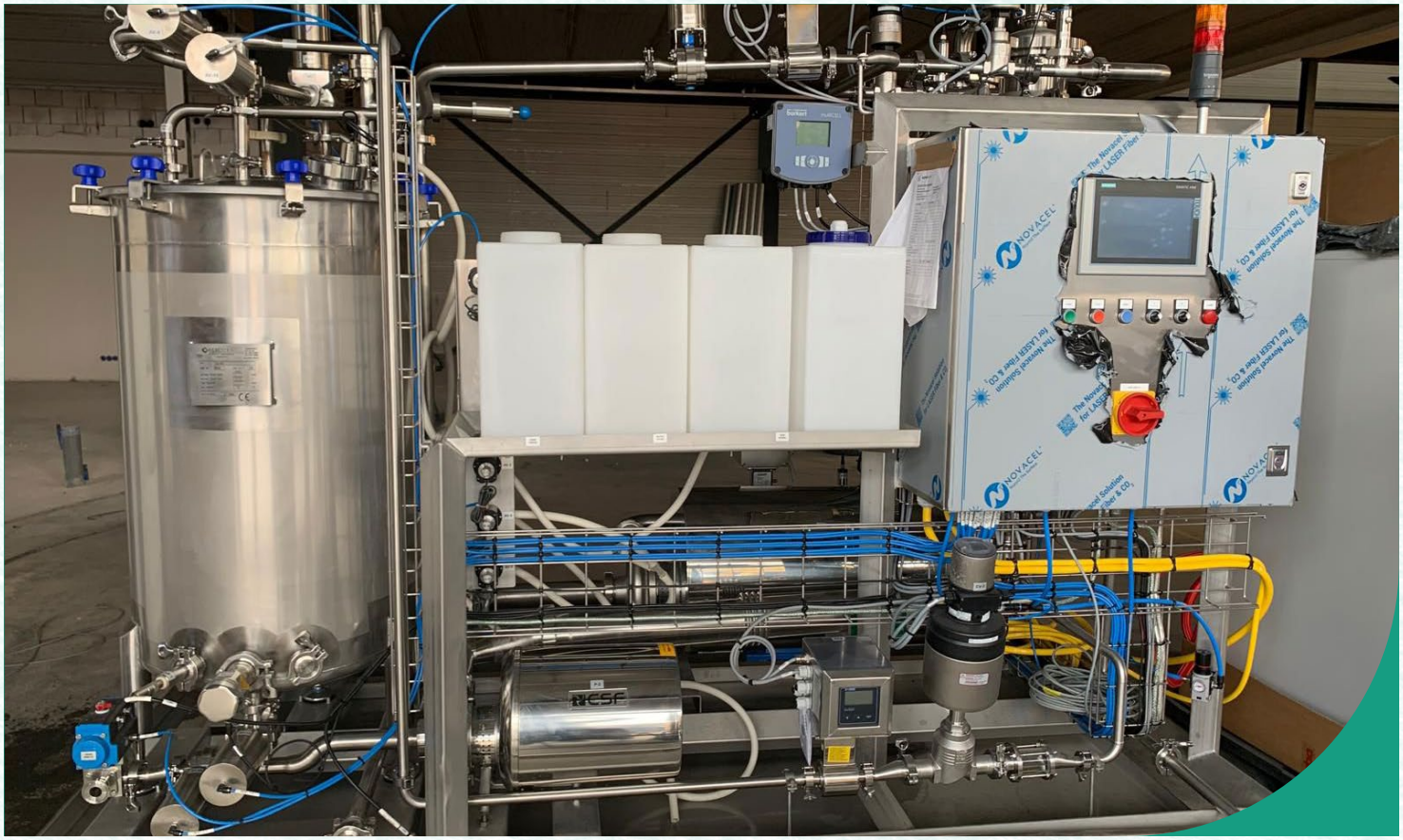
MEMBRACON AND IMI BUILD DISINFECTANT MIXER

A food processing company has commissioned a bespoke on-site disinfectant mixing system designed to withstand aggressive chemical inputs while meeting demanding hygiene routines between production shifts.

Working with OEM **Membracon**, **IMI** supplied pneumatic control and valve technologies to automate the dosing and mixing of four separate disinfectant ingredients stored in barrels. The brief was straightforward but unforgiving: generate consistent volumes of disinfectant on demand, without exposing components to corrosive media, and without introducing reliability or safety risks into daily cleaning operations.

Membracon's machine design uses IMI PBM pinch valves to control the flow of each ingredient. Because the valve actuates by pinching the tube rather than exposing internal wetted parts, the media does not contact the valve body, supporting durability when handling harsh chemicals. For system-level control, Membracon integrated an IMI Norgren VM10 valve island to manage multiple pinch and ball valves from a centralised platform, supported by IMI Norgren Excelon Plus pressure regulators for stable pneumatic performance.

"This collaboration across IMI sectors brought together complementary expertise to deliver a seamless solution," said Lourens Derksen, Team Leader Field Sales BE & NL, IMI Industrial Automation.



IN THE MARKET

New food launches to take note of

VALEO FOODS UK HOPS INTO EASTER WITH POPPEGGS

Valeo Foods UK has launched Poppeggs under its Poppets brand, with January 2026 availability in an 80g bag at a £1.50 RRP.

The proposition is simple — mainstream seasonal chocolate at a price point designed to hold rate-of-sale as shoppers scrutinise basket spend — but the manufacturing side is decidedly more complex. Easter is frequently being treated as a repeatable, industrialised peak rather than a one-off marketing moment, which places disproportionate value on fast SKU insertion and clean exit.

For plants and co-packers, this type of seasonal pouch SKU concentrates risk in three places: packaging-component lead times (and artwork lock dates), changeover execution on high-speed bagging, and finished-goods exposure if retailer resets or promotional phasing move.

It's the latest in a trend of operational agility being monetised through seasonal calendars by the ability to run short, ramp early, and taper without write-offs.

IRN-BRU'S 125TH BIRTHDAY MAKEOVER

AG Barr is rolling out a phased Irn-Bru packaging refresh across early 2026, including renaming Sugar Free to Diet, and Xtra to Zero, while keeping recipes unchanged.

This is emblematic of a wider soft drinks trend: low- and no-sugar variants are being normalised through nomenclature and pack architecture, rather than reformulation alone, which pushes manufacturers toward more frequent, faster packaging cycles.

Executing that without cost leakage depends on packaging-spec governance, print inventory run-down strategy, and fault-intolerant master data control (barcodes, case codes, retailer files, and QA release), because a naming change creates SKU risk even when the liquid is identical.

OREO ZERO SUGAR COMES FOR MINDFUL SNACKING MARKET

Mondelēz is introducing Oreo Zero Sugar in the US as of January 2026, following a development programme reported as roughly four years, and positioning it as a permanent range addition. The cookies are sweetened with maltitol, polydextrose, sucralose, and acesulfame potassium, and reporting indicates a move to a stand-up bag pack format versus the standard tray.

It follows the mindful snacking trend, but the industrial story is sugar removal as a process-control problem. Sugar carries bulk solids and affects rheology, water activity, and bake development; replacing it with polyols and high-intensity sweeteners alters mixing behaviour, moisture management, and texture stability, tightening the operating window for throughput and waste.

PRINGLES EMBRACES THE MYSTERY MOVEMENT

Pringles has launched a Fallout 76 Mystery Flavour in the UK and Ireland, with availability from 28 January 2026 and a flavour-guessing promotion running until 7 May 2026.

Mystery-flavour activity is increasingly used to drive trial and participation without committing to long-lived flavour architecture, but it introduces manufacturing complexity that sits primarily in seasoning, QA, and packaging execution.

Seasoning industrialisation is the first constraint: blend manufacture, powder flow, particle size distribution, and dosing stability determine flavour consistency and yield at line speed, while any allergen delta versus base schedule expands cleaning validation and sequencing constraints.

Packaging is the second: licensed artwork approval cycles, print lead times, QR and code legibility requirements, and tight reconciliation of promotional stock against a fixed window.

DAIRY SOLUTIONS FOR THE UK MARKET

Based in the village of Evercreech, in the heart of Somerset, Eurilait is one of the UK's leading suppliers of high-quality and innovative speciality cheeses and dairy products, for the UK retail, industrial and foodservice markets.

As the subsidiary of two leading French dairy cooperatives – Laïta and Eurial – Eurilait exists to support the long-term future of more than 8,500 farmer members. With these strong cooperative roots, the company shares collaborative, responsible, and sustainable values across their business.

Eurilait provides an extensive range of speciality dairy - including traditional French cheeses, regional cheeses from all over Europe such as feta, halloumi, gouda, British territorial cheeses, yoghurts and deserts. Each product is selected for its exceptional quality and heritage.

Thanks to their unique facility and 120 employees in Somerset, the company offers a variety of services to bring value to the UK market. From sourcing new products, precise cut-and-pack services tailored to specific requirements, and co-packing solutions, to full-scale development of new products from concept to completion — Eurilait offers agility and bespoke solutions.

Eurilait combines the flexibility, passion, and agility of a small manufacturer with the scale, reliability, and integrity of a global producer. The company provides solutions not only for retailers, industrial and foodservice partners, but also for other manufacturers who lack the scale, facilities, or equipment to adapt their products to the market.

And it's not just about dairy. Eurilait welcomes any project that requires creativity, technical expertise, or tailored solutions, helping partners turn ideas into reality.

COMPREHENSIVE CHEESE SOLUTIONS

We provide a full-service offering in cheese cutting, packing, and national distribution, tailored for UK retailers, wholesalers, and food service providers.

RELIABLE & SCALABLE SERVICE

Our adaptable approach supports businesses of all sizes with high-quality, efficient supply chain solutions.

SPECIALIST PACKING CAPABILITIES

Our expertise includes contract packing solutions for both chilled and ambient products.

- **Hand assembly and manual repack** including applying promotional stickers, adding leaflets, collating multiple SKUs into a mixed case, repacking bulk into smaller retail units, case packing for retail, gift boxes.
- **Sleeve application** (heat-sealer, flow-wrapper, sleeve applicator)
- **Labelling or Date Coding**
- **Metal Detection**

"Customers today need reliability, flexibility, and inspiration from their suppliers. At Eurilait, we focus on genuine partnership, working closely with our customers to find the right solutions, whether that's traditional favourites or innovative new products, formats, or packaging."

— **Rocky Page, Head of Sales, Eurilait**

U.S CHEESE DEMAND RISES, IMPORT SPACE SHRINKS

North American cheese consumption is forecast to climb through to 2034, and UK exporters are being told — again — that the region is open for business. The numbers behind that message are not wrong, but they are incomplete, because the US is building the processing capacity to absorb much of that incremental demand domestically, and procurement teams tend to treat imports as a precision tool rather than a standing default once local supply can meet spec at scale.

The Agriculture and Horticulture Development Board's outlook work points to an average 11% rise in cheese consumption across North America by 2034, with the US singled out as the priority market for UK dairy, helped by familiarity with British brands, and a consumer base prepared to pay for perceived quality.

In 2024, the US was the UK's largest dairy export market outside Europe, with total dairy exports valued at £85m, while cheese shipments were put at 9,900 tonnes, worth £75m.

That footprint is not trivial, yet it also underlines the problem, because growth narratives tend to flatten the US into "a market", when it is more accurately a set of channels, specifications, and risk appetites that change quickly when domestic capacity comes onstream.

The channel split alone should temper any optimism that rests on a single headline forecast. AHDB estimates UK cheese exports to the US are split roughly 53% retail and 47% foodservice, a mix that demands very different product behaviour. Retail wins and loses on shelf-life validation, packaging integrity, complaint rates, and whether the product performs the same after weeks of refrigerated distribution as it did at release.

Foodservice, by contrast, is less interested in a romantic story on pack than it is in the boring, decisive details: shred integrity, melt profile, oiling-off, browning, salt delivery, and whether the product behaves predictably in a high-throughput kitchen that cannot afford variability.

USDA reporting put US cheese production in 2024 at 14.2bn lbs (excluding cottage cheese), and industry investment has been following the volume, with multiple new or expanded plants designed to push more milk into cheese and whey streams. AHDB's modelling, drawing on OECD-FAO projections, forecasts US cheese production rising materially by 2034, while US cheese imports are projected to decline over the same period, with at least half a dozen new cheese plants flagged as due online in 2025, and further capacity planned for 2026 and 2027.

The direction is clear enough to make one operational point unavoidable for UK processors: growing consumption does not automatically translate into growing import opportunity, especially when the largest buyer in the region is explicitly investing to reduce reliance on external supply.

When import demand tightens, it rarely disappears, but it does change shape, and it becomes less forgiving. Imports get pulled in where domestic product cannot hit a particular sensory profile, functional parameter, or brand proposition, or where buyers want portfolio insurance against local price volatility, supply disruption, or abrupt swings in spot markets. In that environment, the UK's "heritage and provenance" line has limited utility unless it is backed by repeatable technical performance, because US buyers will tolerate a premium only when the cost is anchored to measurable outcomes, such as reduced waste, fewer defects, or predictable end-use behaviour.

For UK dairy processors chasing North America, that pushes the conversation away from broad market enthusiasm and towards manufacturing discipline. If the landed-cost gap cannot be closed — and, for many SKUs, it cannot — then the product has to defend its place through specification control and a demonstrable functional advantage. That means tighter management of moisture, salt, pH, and texture targets across lots, and a willingness to engineer the product for its actual use case rather than its origin story, whether that is foodservice shredding, slicing, or portioning, or retail performance over an extended chilled life. It also means packaging and logistics become even more integral parts of product planning.

The UK has been active in the US market-building work, including buyer engagement efforts that put multiple British dairy exporters in front of large numbers of US customers. A capacity ramp through 2025 to 2027 is precisely when procurement teams start asking harder questions about why an import line remains in the range, and those answers will be judged on consistency, compliance, and performance long before they are judged on marketing. North American demand is rising, but the import window is not expanding in parallel, and processors planning for the US should treat that as a technical challenge to be solved first and foremost.

ENGINEERING THE NEXT MASTERPIECE IN CONFECTIONERY INNOVATION

Luca Menassi, General Manager Asia, **TNA Solutions**

Confectionery production can, at times, feel as much like composing a symphony as it does like orchestrating high-intensity operations. On one hand are the familiar notes of classic gummies, marshmallows, and liquorice, whose repeatability consumers expect. On the other hand, there are the improvisations: new plant-based recipes, textural innovations, exotic flavour trends, and health-conscious functional gummies designed for wellness, emerging from a proactive approach to well-being. Consumers are redefining their gummy consumption as more conscious, with people buying only what they need, understanding the cleaner and greener ingredients derived from natural products.

Today's consumers want the best of both worlds: the familiar, dependable taste of their favourite jellies, gummies, marshmallows and liquorice, along with exciting new twists in the form of everything from plant-based and fortified varieties to seasonal creations and premium, indulgent flavours.

REFLECTING ON 2025

Confectionery in 2025 was defined by the intersection of technical precision, consumer-driven flexibility, and manufacturing innovation. As demand shifted more toward plant-based, functional, clean-label and sensorially rich products, success depended on the ability to optimise processes, adopt new technologies and maintain quality across increasingly complex product portfolios.

Entering 2026, manufacturers that invest in agile systems, smarter automation and advanced ingredient solutions will be best positioned to compose the next generation of confectionery masterpieces.

And the pressure to deliver these masterpieces is growing. The global confectionery market was valued at $225 billion in 2024 and is forecast to grow at a compound annual growth rate of 3.6 per cent between 2025 and 2029. Sugar-free products are at the forefront of change, already accounting for 35 per cent of all new product launches in 2024.

Yet this growth has been tempered by volatility, with cocoa prices at record highs putting significant pressure on chocolate margins. For producers heavily dependent on chocolate, the cocoa shock was a defining feature of 2025. For manufacturers in the jelly, gummy and marshmallow categories, it created space to consolidate growth and demonstrate resilience.

Within the broader market of sugar confectionery, jellies and gummies stand out as a primary growth engine. The segment was valued at $38.18 billion in 2024 and is projected to achieve a CAGR of 3.8 per cent through to 2030. North America holds the largest share, with gummies becoming a popular delivery format for functional and nutraceutical products.

Europe remains a stronghold for sugar-free and vegan confectionery, alongside a long-established pick-and-mix culture. Asia-Pacific continues to be the fastest-growing region, with annual growth rates of up to 12.9 per cent, fuelled by rising disposable incomes, rapid urbanisation and an increasingly health-aware consumer base.

Consumer expectations drove much of this momentum. Plant based formulations moved into high performance territory, functional and fortified wellness gummies gained market share and consumers sought transparency and clean labels.

Indulgence retained its place in the composition, with berry flavours, hybrid textures, tropical blends and centre-filled or multi -layered textures providing variety and novelty. Innovation in format and texture became as important as flavour, with freeze-dried gummies and crunchy clusters adding new dimensions to the sensory experience.

As ever, convenience also played its role, with gummies and jellies thriving as portable, on-the-go treats, supported by seasonal tie-ins and brand collaborations that kept ranges vibrant and engaging.

The challenge for confectionery manufacturers lay in keeping the rhythm steady while improvising where needed. Efficiency remained critical as rising input costs and energy prices squeezed margins. Flexibility became indispensable, with short-run lines, seasonal SKUs and flavour rotations all requiring rapid changeovers and minimal downtime. Sustainability pressures continued to mount, with starch containment, reduced energy and water use, and recyclable packaging formats all on the agenda.

READY FOR 2026

At TNA Solutions, these priorities come together in the way we support our customers. The tna mogul provides precision starch moulding for gummies, jellies, marshmallows, fondants , crème centres, liquorice and centre-in-shell gummies, combining the repeatability needed for established classics with the flexibility to create innovative new designs. Depositing systems allow fast format changes, supporting limited-edition runs and multi-layered products.

The tna robag® with auto-splice delivers high-speed bagging with minimal film waste, while the tna ropac® 5 enables efficient case-packing for small formats that reflect the rise in portion-controlled packs. Together, these systems create an integrated confectionery processing line that ensures every part of the production process plays in tune.

And as we enter 2026, confectionery will be about balancing comfort with curiosity, delivering the repeatability consumers trust while surprising them with bold new experiences. Functional and nutraceutical confectionery is expected to expand further, moving from niche to mainstream. Plant-based alternatives will grow in scale, even as producers continue to grapple with cost and textural challenges. Premium and seasonal lines will proliferate, increasing pressure on lines to manage rapid changeovers and shorter runs.

This may seem like more of the same from the past 12 months, but there is one critical new ingredient: regulation. The EU's Packaging and Packaging Waste Regulation and its ban on PFAS in food-contact packaging will take practical effect in August 2026. In the United States, new traceability requirements under FSMA 204 will also apply from early in the year. Each of these changes demands reformulation, packaging redesign or digital record-keeping, placing greater pressure on manufacturers to adapt without compromising efficiency.

Confectionery's enduring appeal lies in its, interplay of indulgence and innovation, comfort and surprise. In 2026, this duality will intensify as consumers, regulators and global markets demand greater variety, cleaner labels, and more sustainable production practices. Manufacturers will be challenged to deliver novelty without compromising consistency, efficiency or compliance. The leaders in this next era will be those who master composition: achieving a precise harmony between repeatability and adaptability, ensuring every product is both reliably crafted and dynamically responsive to emerging trends.

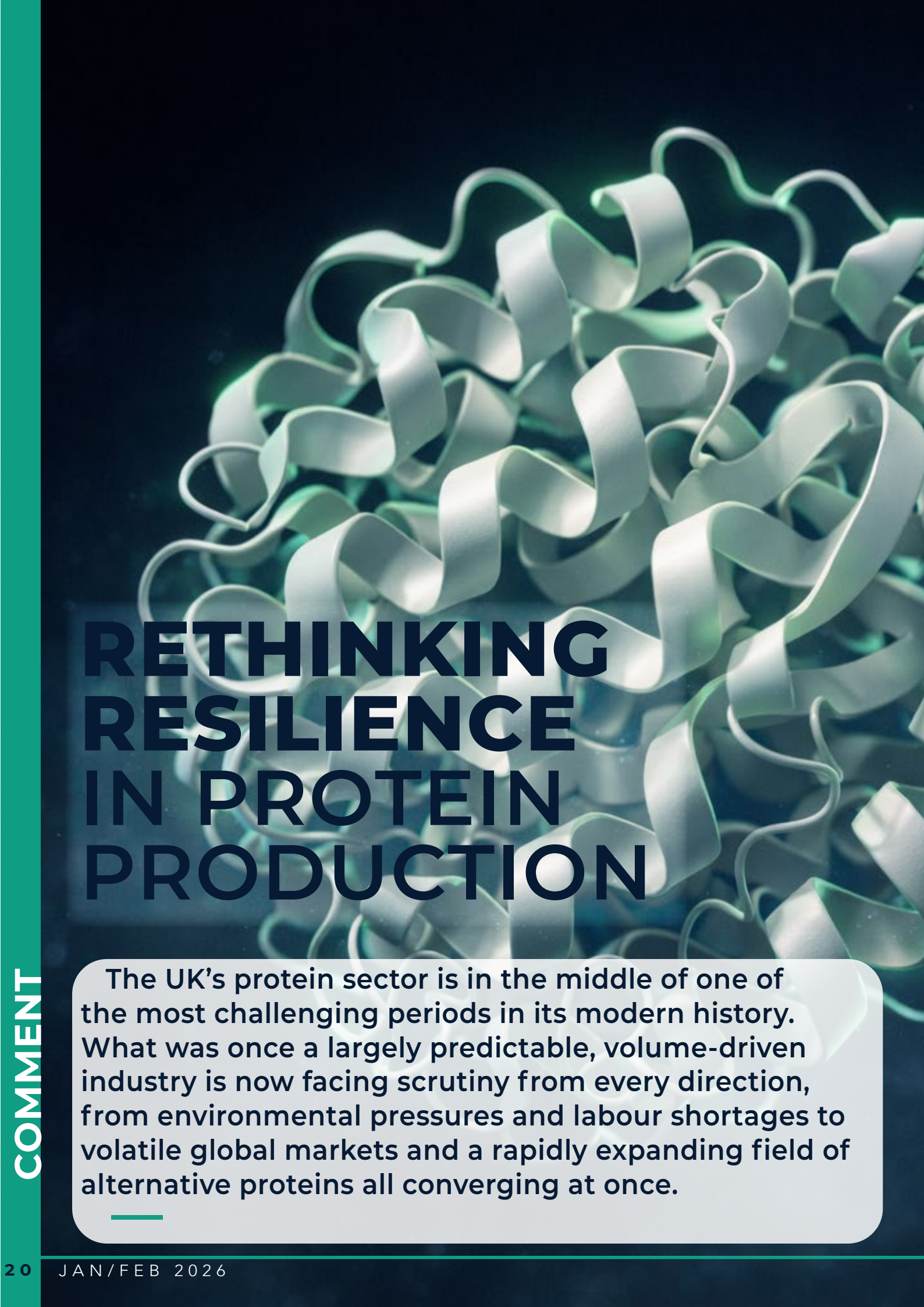
WHERE INDUSTRY SPEAKS AND GETS HEARD

From automation to aerospace, energy to supply chains, Industrial News carries the stories that shape the industrial landscape.

Make sure your next move is part of the conversation.

Our readers are the leaders, engineers, and decision-makers driving change. They expect insight. We put it — and you — at their fingertips.

Join our 2026 plan today.



RETHINKING RESILIENCE IN PROTEIN PRODUCTION

The UK's protein sector is in the middle of one of the most challenging periods in its modern history. What was once a largely predictable, volume-driven industry is now facing scrutiny from every direction, from environmental pressures and labour shortages to volatile global markets and a rapidly expanding field of alternative proteins all converging at once.

As Ian Hart, Business Development Director at **adi Projects**, explains, the sector's next phase will demand a very different way of thinking about production infrastructure.

"Protein production today isn't simply about output," he says. "It's about designing operations that can survive disruption and respond to change, while remaining competitive in a far less forgiving environment."

Across meat, dairy, fish and plant-based manufacturing, environmental compliance has moved from a compliance exercise to a strategic driver. From emissions and water usage to waste treatment and local planning scrutiny, every aspect of production is under a sharper lens.

Hart notes that sustainability is now a starting point, not an afterthought: "You can't retrofit environmental performance into a plant and expect it to deliver. Efficiency and responsible resource use have to be engineered into the foundations of a facility, otherwise you build in vulnerability from day one.

"We have seen a noticeable shift in the questions producers are asking at early design stages, with energy reduction and water efficiency given equal weight to throughput and line speed. The result is that the industry is beginning to view environmental resilience as core commercial resilience."

SUPPLY & LABOUR

The UK's reliance on imported protein feedstocks, particularly soya for pigs, poultry and aquaculture, has created a layer of fragility that producers can no longer ignore. Combined with an ageing estate of production facilities, many businesses are finding that their infrastructure is not built for the volatility they now face.

"Producers want to know how to design sites that aren't trapped by single feedstocks, single product categories or single market assumptions," Hart explains. "The more flexible a factory is, the more resilient the business behind it becomes.

"That flexibility increasingly means rethinking how sites are laid out and how raw materials move through a process. Our recent programmes have placed greater emphasis on modularity and reconfigurability, allowing factories to shift as supply chains do."

Labour shortages continue to cut across virtually every part of the protein sector. From dairy units to poultry processing lines, producers are facing a structural lack of skilled and semi-skilled workers.

"You can't remove the human element from food production," Hart says. "But you can design plants that make it easier to recruit and retain good people.

"The most forward-thinking manufacturers are increasingly focusing on ergonomics, safer workflows, intuitive control systems and cleaner, more accessible plant layouts. These investments are not framed as automation for automation's sake, but as a means of reducing physical strain and making the workplace more appealing to the next generation of operators.

THE RISE OF ALTERNATIVE PROTEINS

While livestock-based protein still dominates UK diets, the growth of plant-based and cellular proteins is steadily reshaping the innovation pipeline. Businesses exploring these areas face a dual challenge in developing unfamiliar processes while maintaining the performance of their established operations.

Hart continued: “Alternative proteins aren’t a different universe. The engineering principles look very familiar, from high-care design and process control to temperature stability and hygienic construction. What’s different is the uncertainty, because these processes evolve quickly.

“Across adi Projects, our teams working in food, beverage and controlled-environment agriculture are now supporting clients who want to trial new raw materials or explore vertical-farming-based ingredient streams. These projects are bridges between traditional protein production and the emerging technologies that could define the sector’s next decades.”

DESIGNING A FUTURE THAT MOVES FASTER THAN THE PAST

“Infrastructure must be designed for a market that is more changeable than anything the UK protein sector has seen before.

“The biggest risk for any producer is locking themselves into an inflexible facility. The pace of change means factories need to be adaptable from day one. If you build for stability rather than rigidity, you give your business space to grow rather than space to fail.

“The producers who will thrive are those who view investment not as isolated capex projects, but as long-term resilience strategies. In that context, the role of engineering partners becomes less about installation and more about shaping systems that can respond to whatever the next decade brings.

“Protein production is an essential part of the UK’s food landscape,” Hart concludes. “The challenges are real, but so are the opportunities. If we design with resilience in mind, we can build facilities that actively benefit from change.”

ORIENTAL MOTOR ADDS IP69K WASHDOWN MOTOR

Oriental Motor has added an IP69K-rated brushless DC motor to its BLE2 Series, targeting food processing and packaging machines that face routine high-pressure, high-temperature washdowns. The motor is designed for conveyors, fillers, sealers, portioning systems, and packaging machinery where motors are frequently exposed to spray, foam, and caustic cleaners at line speed.

The unit's sealed stainless-steel housing and smooth, crevice-free exterior are intended to prevent moisture and oil ingress during cleaning. The design is aimed at reducing failures linked to water, steam, or chemical ingress, including short circuits, bearing corrosion, insulation breakdown, and contamination risk around product zones.

"Manufacturers of food processing and packaging machinery are under intense pressure to improve hygiene while maximising uptime," said Mike Larsen, Marketing Manager at Oriental Motor. "Our new BLE2 brushless motor provides a long-term solution to moisture-related failures — reducing downtime, simplifying cleaning procedures, extending equipment life and marking a genuine step forward in washdown-ready motor technology."

OVERCOMING INSPECTION CHALLENGES IN MANUFACTURING PLANT-BASED MEAT PRODUCTS

Miriam Krechlok, Segment Marketing Manager,
Mettler-Toledo Product Inspection

Plant-based meat alternatives has moved from niche to mainstream as consumers balance health, sustainability and cost in their diets. Global plant-based meat and seafood retail sales were estimated at USD 6.1 billion in 2024, and the broader plant-based meat market is projected to grow from around USD 7 billion in 2023 to nearly USD 25 billion by 2030 (CAGR ~ 19 %).

For processors, this represents both opportunity and challenge. Unlike traditional meat, which follows a long-established production model, plant-based meat products are engineered from plant-derived ingredients such as soy, wheat and peas, combined with fats, flavourings and binders. Replicating the taste and texture of meat requires complex processes, and each step introduces unique inspection demands.

Plant-based production environments are very different to those in meat processing. Raw materials vary widely in water and salt content, which creates unpredictable product effects in some product inspection technologies. This can mask physical contaminants, reduce detection sensitivity and increase the risk of false rejects.

Non-uniform densities are another challenge. Fibres, structured proteins and added ingredients create natural variability that can resemble or hide foreign bodies during the contaminant detection process. Meanwhile, many plant-based products have short shelf lives, so any interruption from recalls or rework has an immediate commercial impact.

At the same time, consumer and regulatory expectations are rising. Plant-based brands trade heavily on health, sustainability and transparency. A single mislabelled pack or

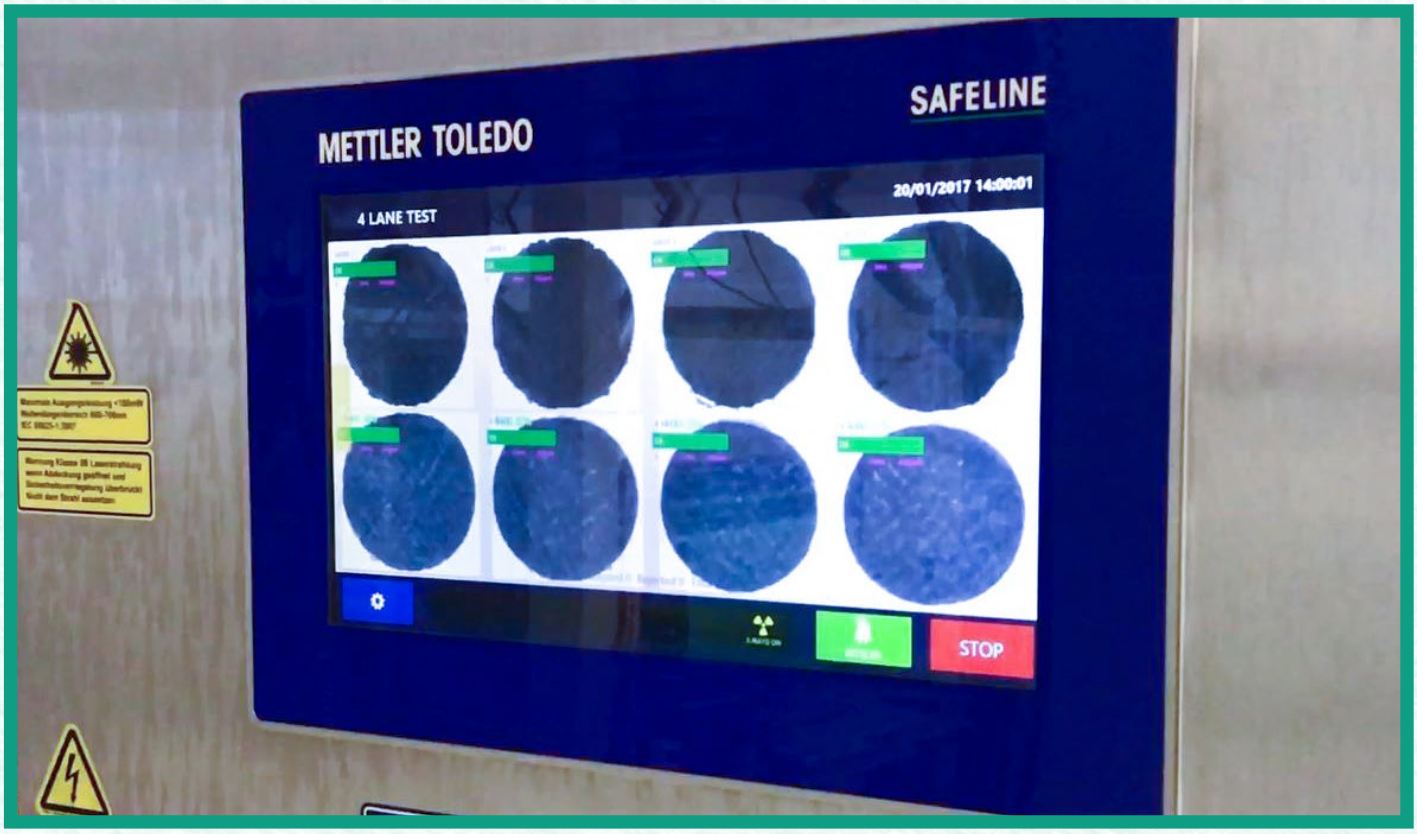
contamination issue can undermine trust in a highly competitive market. Robust inspection is therefore not only about compliance but about brand survival.

INSPECTION CHALLENGES IN PLANT-BASED PROCESSING

For manufacturers, product inspection is both a regulatory requirement and a way to compete confidently in fast-growing markets.

Checkweighing is an ideal technology for weighing plant-based products, particularly for items such as patties and nuggets which are manufactured to uniform shapes. However, high moisture content or soft textures can lead to water loss or deformation during product handling, creating inconsistent weight readings. Frozen products that release surface water as they thaw add further variability. Smart, dynamic checkweighers help maintain portion accuracy even under these conditions.

Many plant-based materials can contain conductive ingredients that cause a phenomenon called product effect. Product effect can lead to a reduced sensitivity and more false rejections as traditional metal detection (single frequency) cannot manage the variability caused by these conductive ingredients. Advanced metal detectors that use Multi-Simultaneous Frequency and product signal suppression technology combine multiple frequences together and use the 3s algorithm (complex algorithms) to remove product effect increasing sensitivity and brand protection as well as reducing false rejects to increase productivity.



X-ray inspection is valuable for detecting a wide range of physical contaminants, including glass, metal, stone and dense plastics. Yet some plant-based products may have non-uniform densities caused by fibres and structured proteins, which can mask foreign bodies. Advanced x-ray systems address this with adaptive algorithms that filter out natural variability and highlight genuine hazards, helping manufacturers maintain quality and consumer trust.

Vision inspection is especially important in plant-based meat products, where packaging and labelling carry strong health and allergen claims. Soy, wheat and pea proteins must be declared clearly, and retailers expect accurate on-pack communication. Vision systems verify barcodes, text and graphics in real time, reducing the risk of mislabelling, rework or retailer rejection.

To reduce allergen risks, as a result of processing multiple raw ingredients, all systems must be hygienically designed. Open frames, smooth surfaces and easy-to-clean components allow rapid changeovers between products while reducing the risk of cross-contamination.

LOOKING AHEAD

The next decade will see plant-based proteins expand further alongside meat, poultry and seafood. But growth depends on managing complexity, such as expensive ingredients, variable formulations and evolving labelling rules. In the US, oversight is split between the FDA (plant-based) and USDA (meat), while in Europe debates continue over whether terms like “burger” or “sausage” can apply to plant-based foods. Product safety regulations are also moving towards stricter traceability and digital transparency under regulations such as FSMA, pushing producers to adopt connected data and blockchain systems.

Sustainability is another driver. Regulators and consumers alike are scrutinising the environmental footprint of production, from ingredient sourcing to waste management. Product inspection technologies support these goals by reducing product giveaway, cutting rework and providing the data to track performance and efficiency.

Inspection in plant-based meat production is about more than compliance. It helps brands deliver consistent quality, protect consumers and maintain trust in a rapidly expanding market. By detecting physical contaminants, maintaining weight accuracy and verifying labelling, product inspection strengthens both food safety and brand reputation. It also delivers the digital traceability that regulators and retailers increasingly expect, giving manufacturers confidence to grow across diverse markets.

Together with the established world of meat production, plant-based proteins highlight the growing diversity of global diets. Product inspection is the constant across both, helping producers cut waste, protect margins and prepare for the next generation of protein creations.

INSPECT. PROTECT. COMPLY.

Mettler-Toledo Product Inspection will use Interpack 2026 (Hall 11, Stand A60) to show how its inspection hardware, ProdX™ software, and global service support can help food, pharma, and packaging manufacturers manage contamination risk and tightening compliance requirements under the theme “Inspect. Protect. Comply.”

A stand-out launch is the global debut of the M50 R-Series metal detector, pitched as the next generation in the company’s metal detection portfolio, with improved sensitivity and features intended to raise productivity while simplifying compliance. X-ray inspection will also take centre stage, including the first European showcase of the X3 Bulk Series for loose-flow, unpackaged products on conveyors, alongside X2 and X6 systems for packaged formats. Checkweighing will be represented by the C35, which Mettler-Toledo says can run at more than 800 packs per minute, supporting weight control and reduced giveaway.

The company will also highlight new-generation Combination Systems (CM and CX), integrating metal detection or x-ray with checkweighing, and optionally label inspection, to reduce footprint and streamline line integration.

ProdX™ will be demonstrated connected to 25 devices, including a continuous loop, with a VR experience showing line-wide data capture, traceability, and audit-ready reporting. Service teams will be on hand to discuss preventive maintenance and performance verification.

HOW CAN FOOD MANUFACTURERS KEEP UP WITH THE MODERN MARKET?

Connor Sharkey, Regulatory & Specifications Manager,
Food Nutrition Partners

As consumers increasingly look to take control of their health, the free-from market — comprising food that doesn't contain certain common allergens — is growing fast for food businesses.

According to the Food Standards Agency (FSA), 2.4 million people in the UK, which is around 6% of the population, live with a clinically confirmed food allergy. Free-from product ranges have been developed to meet the requirements of this growing audience, after grocery giant Tesco first championed the product category more than 20 years ago. And as vegan, gluten free and alternative diets are rising in popularity amongst those without a clinical condition, as well as those newly diagnosed, the market is shifting. Free-from has moved from a specialist area of production to something that every food business could and should consider.

Doing so comes with unique complexities and challenges to get it right though, especially at scale. For those who get it wrong, the repercussions could be huge, including legal and financial consequences as well as a lack of consumer trust. Competency, compliance and keeping up with industry best practice in free-from food production is essential during every process, from initial formulation, to the factory and the shelf.

The first most important area of getting free-from production right, is developing a viable product that doesn't contain the target allergen. Certain ingredients may be a derivative of the allergen in question, and you'll need to consider being able to source the new or substituted ingredient from somewhere you can trust. Extruded nutritional food bars, which are our specialism, often contain oats, for example. To extend a range of protein bars with a free-from product, the first thing to do is to find an oat replacement that is safe for the consumer to consume, while also being good quality, offering the same functionality and coming at the right cost.

When it comes to production, every credible food manufacturer will already have robust processes in place, but producing genuinely free-from products requires additional layers of control and a shift in mindset. It's not enough to just make a product that doesn't contain the allergen. The factory process needs to be transformed to safeguard it from being exposed at any stage, which comes with challenges, especially for businesses producing multiple different ranges simultaneously.

When a product is labelled as free-from, the tolerance for error is far lower than for products carrying precautionary allergen statements, meaning sourcing, segregation and process design must be far more tightly controlled. Systems such as sequencing are key here, to ensure production is done using a clean line, rather than mid-way through following a batch that could contain the ingredients that we want to avoid.

Rigorous supplier verification and controlled ingredient sourcing are essential foundations, but they must be supported by continuous monitoring throughout production, and robust validation to ensure compliance before a product goes to market. Manufacturing facilities with industry certifications such as BRGCS can give reassurance that this high standard is followed.

Typically, this includes passive monitoring through real-time data capture, active oversight from on-site quality assurance teams, routine audits against documented procedures and regular reviews whenever ingredients, suppliers or processes change - all of which are critical to preventing costly mistakes and recalls.

Even the most well-designed systems are vulnerable to change though, whether that's a supplier reformulating an ingredient or an unforeseen issue on the production line. The 2024 urgent warning around mustard powders that had been contaminated with peanuts was a high-profile recent example of this. Manufacturers must be equipped to identify and respond to risk quickly and effectively, which can sometimes be challenging for smaller, less experienced teams.

MAKING LABELS MATTER

Once a product is made, labelling and packaging is an essential next step. Any mislabeling on a free-from product could do far more than cost a business time and money – it could cost someone's life and have far-reaching legal consequences too.

While a business may already have 'precautionary allergen labelling' on their products, free-from items must reassure the customer that the allergen is not in the product at all. Labels need to be very clear and justified in order to keep consumers safe.

I'm seeing a growing trend of precautionary allergen labelling being used with a scattergun approach to 'cover all grounds', which can make

it less meaningful. Moving forward, a more targeted and stats-based approach to allergen labelling would benefit both manufacturers and consumers, helping to preserve the significance of allergen warnings for those who rely on them.

New EU regulations are making this a reality overseas, and I'm sure it won't be long until pressure from consumers in the UK causes us to catch up. We've already seen the effect that Natasha's Law had on the direct food sector, so making investments now to give you the ability to add further transparency on your labeling could help to put you at the forefront for the free-from customer.

FUTURE TECHNOLOGY TO BRING EFFICIENCIES

It's difficult to ignore the impact of AI on every touchpoint in life, and the same is true for food manufacturing, making the need for clear ingredient labelling – informed by robust and traceable manufacturing processes – even more key. From a consumer level, brands could ask online shoppers for any allergies, before using AI to find and remove access to any at risk products when browsing, but this will only work if the labelling is right.

The integration of AI into the wider food sector could also help to gather data in real time and spread quick industry-wide alerts for ingredient changes, sent directly to businesses who it affects. It's exciting to think how advanced technology and innovation, paired with human oversight and expertise, could ensure allergen risks are identified and managed more quickly, streamline production processes and give manufacturers greater confidence in delivering genuinely free-from products at scale.

With demand and expectations rising, free-from is no longer a 'nice to have' but an essential part of modern food production, with huge market potential. This inevitably brings greater risk and responsibility for a business just starting out in this area, but it also presents an opportunity for innovation and positive change.

For more than 40 years our team at Food Nutrition Partners have been working with businesses to help them overcome production challenges like this, and as the world of free-from continues to develop, I'm looking forward to working together to drive more standards and progress forward.

IN CONVERSATION MICHAEL LAURIER, SYMPHONY ENVIRONMENTAL

Symphony Environmental is a world-leading developer of technology to make ordinary plastic biodegradable. And with food waste figures climbing, Michael Laurier, the company's CEO, believes that making the shift is essential.

Tell us about the business, and your d2p technology.

"Symphony was founded 25 years ago, to research and develop ways in which plastic could be made more useful and sustainable. Our first product to go commercial was a masterbatch called d2w, which manufacturers include at very little extra cost in polyethylene and polypropylene products at the manufacturing stage.

"The result of this is that if the product finds its way into the open environment as litter, it will safely biodegrade instead of creating microplastics and lying or floating around for decades. This technology is now in use all over the world, and is actually compulsory in the Middle East.

"More recently our scientists have developed a range of masterbatches which are sold under our d2p brand. These are also included in the plastic product at the manufacturing stage, and they provide protection against bacteria, fungi, viruses, insects, rodents, odours, food-waste, and fire."

What are the applications of d2p, specifically in the food and drink sector?

"If our d2p anti-microbial masterbatch is included in bread-packaging it will extend the life of the bread and will therefore reduce food waste. The largest bread producer in the western world (Grupo Bimbo) is using this, and has also been using our d2w biodegradable technology for its bread-wrappers for more than ten years.

"In bulk food-packaging d2p anti-insect will prevent insects penetrating the plastic packaging, laying their eggs, and despoiling the food. Similarly, d2p anti-rodent will protect the package against rats and mice in food stores."

How does d2p compare with competing ethylene-control technologies?

"A d2p ethylene-adsorber masterbatch can be used at low cost in the manufacture of plastic packaging for fruit and vegetables, to adsorb the ethylene inside the package which causes the food to decompose."

Could this technology meaningfully reduce household food waste, or is its impact primarily upstream?

"If d2p ethylene-adsorber and anti-fungal and bacterial masterbatches are included in food packaging, they will reduce food waste in the household and also upstream."

Can packaging innovation alone solve the food-waste crisis?

"Packaging innovation is one of several ways to reduce food waste, and packaging in plastic is much more effective than packaging in paper or cardboard, or supplying fruit and vegetables with no packaging at all. Our d2w and NbR plastic mulch films can also help farmers to produce more and better food. We don't think there is any need to make plastic from vegetable resources — which should be used for food."

What barriers have slowed widespread adoption so far?

"The need for testing and regulatory control. For example it took three years and a lot of expense to obtain FDA approval for our antimicrobial film for food packaging. Also many potential users still don't know that these technologies are commercially available. Your publication will help."

What would success look like five years from now if d2p was widely adopted?

"Success would mean that d2p technologies are used for packaging most food products which would include fruits, bakery goods, vegetables etc. together with a wide range of non-food applications such as anti-microbial water pipes and tanks, anti-insect irrigation pipes and fire-retardant plastic products. This would be in addition to our d2w biodegradable plastic technology being used in all plastic products which are currently found in the environment as litter."

IN CONVERSATION NICK YEATMAN, TROVR

Trovr is a recycling tech startup with big ambitions. Namely, transforming how single-use drink containers and nudging the world closer to a circular economy. With the launch of its recent QUBE unit, it's helping retailers drive revenue from recycling — and Nick Yeatman, Trovr's founder and CEO, says this is just the beginning.

With the DRS finally landing on 1 October 2027, what do independent retailers still most misunderstand about what they will actually have to do in-store?

"The critical misunderstanding is that independents face a binary choice: invest £10,000+ in supermarket-grade machinery or resort to unhygienic plastic bags behind the counter, yet they're legally required to participate. Many retailers perceive DRS purely as a financial burden and compliance headache rather than recognising it as a genuine footfall opportunity.

"Each container sold will carry a 20p deposit that must be scanned and verified through a national DRS database before refund, but retailers haven't grasped that becoming a convenient return point could be as commercially valuable as hosting an ATM or parcel drop-off. The operational reality — scanning, weighing, secure storage, and fraud prevention — remains poorly understood, as does the handling fee revenue potential that could make participation profit making in a fairly short time depending on the retailer's participation."

For a typical corner shop, what are the real-world consequences of DRS non-compliance — and how much of that pain does the Trovr QUBE realistically remove?

"Failing to engage with DRS could lead to fines when the scheme begins in October 2027, but the commercial damage extends beyond penalties. Retailers could lose customers to competitors offering convenient returns, as shoppers gravitate toward stores where they can reclaim their 20p deposits.

"The Trovr QUBE eliminates the operational challenge of manual handling - no bags of sticky containers behind tills, no hygiene risks, no staff time wasted counting and verifying deposits. At roughly ATM-sized with a 0.45m² footprint, it's disruptively cheaper and considerably smaller than RVMs (reverse vending machines), fitting near entrances without disrupting workflow. The Trovr zero-upfront subscription model removes capital expenditure barriers, while handling fees of 1-2p per container can drive profitability for those retailers who engage their community effectively."

How does the Trovr QUBE work and what was the biggest engineering hurdle in keeping it "ATM-sized" but fully compliant?

"Customers deposit cans or bottles which are scanned, weighed, and securely stored inside the unit, with a unique anti-fraud verification system ensuring only eligible containers are accepted. Unlike RVMs that crush containers, the Trovr QUBE scans, weighs, and stores them, keeping technology simpler and more affordable whilst preventing fraud practices sometimes associated with manual collection.

"The device can connect to the national DRS database for real-time verification, operating via WiFi, Ethernet, or 4G - or completely offline when needed. The engineering challenge was building secure IoT barcode and weight-sensing technology with remote telemetry into a small footprint while maintaining regulatory compliance. The company invested €3 million+ in product development and long-term testing to ensure durability and deliver a fully EU-compliant product, balancing compactness with fraud prevention and operational reliability."

What does a credible payback picture look like for a busy independent handling a few hundred returns a day?

"For those purchasing outright, payback is typically 2–2.5 years at locations handling 160+ daily transactions. Under Trovr's subscription model - which covers hardware, maintenance support, and software access - retailers can be cost-neutral from month one if they fully embrace and promote DRS to their customers.

"However, the real value proposition extends beyond handling fees.

High consumer participation rates present a commercial opportunity, as being a recognised recycling return point could prove as important for driving footfall as having a parcel drop-off or ATM in-store. Retailers can use the Merchant in app Dashboard to create custom in-app discounts converting recycling activity into repeat visits, turning depositors into purchasers.

"Combined with revenue share from Trovr's retail media screen network, the payback equation shifts from pure handling fees to a footfall-plus-media-plus-basket-uplift model. The lease model ensures retailers can think about this as a revenue opportunity, not a capex burden, with profit accumulating through increased transaction frequency from day one."

You are already live in Malta, Romania, Poland, and Austria. What have those rollouts taught you that directly shapes how you're approaching the UK?

"In EU countries where machines are operational, retailers appreciate how the system integrates seamlessly into operations without disrupting workflow or taking up valuable space. The feedback revealed that real-time data visibility through dashboards and eliminating staff manual handling of containers were the biggest operational wins - no bags behind tills, no hygiene risks, no staff involvement costs.

"Most European DRS countries achieve average return rates above 90%, validating that consumer adoption is rapid when infrastructure is accessible. These markets proved the commercial model: retailers initially sceptical about DRS compliance discovered the footfall opportunity was genuine. The UK approach now emphasises positioning the Trovr QUBE as revenue generating DRS infrastructure, learned directly from watching EU retailers shift perception from burden to business advantage through measurable traffic and engagement increases."

How much are you expecting independents to lean into the Merchant Dashboard and app-driven rewards - and what usage behaviours are you already seeing that actually move the needle on footfall?

"Retailers tell us they love the real-time data through the Merchant Dashboard - they can see exactly what's being recycled and create custom in-app offers to drive repeat visits. The expectation is that revenue driven independents will actively use targeted promotions, converting one-time depositors into regular customers through time-limited vouchers and basket incentives.

"The app provides a digital ticket option removing paper waste, a digital DRS payment system, loyalty points platform for retailers, plus in-app advertising, with future expansion into payment cards and DRS savings accounts. Early EU data shows retailers who actively engage the dashboard - monitoring peak deposit times, launching offers around recycling activity - see measurably higher return visit rates. The behavioural insight: recycling becomes a habitual store interaction, and each deposit is a micro-engagement opportunity. Retailers treating the dashboard as passive compliance miss the commercial upside entirely."

If the UK hits 90%+ return rates and Trovr scales as planned, what visible changes do you expect to see on UK high streets by 2030 - and what is your own hard metric for success?

"Visibly, independent stores will display "DRS Return Point" signage as prominently as ATM or PayPoint branding, positioning recycling infrastructure as competitive differentiation. With a target of 20,000 UK machines and 50-100+ daily interactions per machine, we're talking about a platform offering significant consumer marketing reach - a million+ daily touchpoints creating genuine high-street recycling culture.

"You'll see Trovr media screens in convenience store, branded app promotions, and charity partnerships making deposit donations visible community contributions. For me, success is personal — making a real dent in the plastic crisis, with millions of tonnes entering oceans yearly equivalent to dumping a garbage truck of plastic every minute. The hard metric comes down to helping achieve the EU's mandated 90% recycling rate, and we're already seeing measurable increases in plastic recycling at sites where our machines are operational. What matters is that the environmental impact is validated by verified tonnage data - real numbers from actual collections, not theoretical projections or estimates."


2b Publishing