

I N T E R N A T I O N A L

DAIRY

May/June 2026

magazine

PROCESSING | INGREDIENTS | PACKAGING | IT | LOGISTICS

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Dairy-Technology-Award

Award ceremony: February 2027 at Anuga FoodTec



Supported by the dairy trade publications **IDM International Dairy Magazine** and **molkerei-industrie** and the Society of German Dairy Engineers (Ahlemer Ingenieure), the Dairy Technology Award aims at highlighting successful innovations in dairy and food technology. The prize has been awarded since 2009 to companies in the dairy and supplying industry and relevant service providers.

The Dairy Technology Award focuses on processes, equipment, complete production units and problem solutions that are of benefit to the overall dairy industry.

JURY

Applications will be judged and awardees will be selected by a jury consisting of these renowned experts:

- » Prof. Dr.-Ing. Jörg Hinrichs, Dep. Soft Matter Science and Dairy Technology, University of Hohenheim
- » Dipl.-Ing. Klaus Schleiminger, KSI Engineering, Krefeld
- » Prof. Dr.-Ing. Saskia Schwermann, University of Applied Sciences and Arts Hannover, Faculty of Mechanical and Bioprocess Engineering
- » Prof. Dr.-Ing. Matthias Weiß, University of Applied Sciences and Arts Hannover, Faculty of Mechanical and Bioprocess Engineering

CALL FOR ENTRIES

The call for entries for the Dairy Technology Prize is now open and ends on September 30, 2026.

Awards will be made in these field

- » Process & Automation Technology
- » Packaging & Filling Technology
- » Environment & Sustainability Improvement (saving of energy and resources)
- » Process Management & IT
- » Logistics
- » Food Safety

HOW TO APPLY

Only in digital form, a condensed application is requested first. It should include:

- a) Reason for application
- b) Description of company/innovator with a short portray of the applicant and its professional background.
- c) Title of the application and area of development
- d) Description of the innovative project/the innovation on max. 3 pages A4 incl. illustration (photos, graphs, tables, sketches) centering on the special innovative development and, if applicable, quoting sources. (After checking, the jury might ask for further documentation or an on-site inspection)

Send applications to:

Anja Hoffrichter, Editor molkerei-industrie/IDM International Dairy Magazine, Email: ah@blmedien.de. Questions will be answered by email or phone: +49 178 23300474.

AWARDING

The prize winning developments will be presented at the trade show Anuga FoodTec in February 2027.

Awardees will receive a certificate, the winning developments will be presented to an international readership in the magazines **IDM International Dairy Magazine** and **molkerei-industrie** as well as on the websites **international-dairy.com** and **moproweb.de**.

UTP Revision

Fairness must not become overregulation



Anja Hoffrichter
Editor IDM
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The planned revision of the EU rules on unfair trading practices (UTP) is based on a legitimate objective: creating fairer relationships along the agri-food supply chain. Few would dispute that strong concentration in European food retail has created structural imbalances in negotiations between retailers, processors and suppliers. In several European markets, a small number of retail groups control significant shares of food distribution, increasing pressure throughout the supply chain.

At the same time, however, the current political debate increasingly raises concerns within the dairy industry that the discussion is moving beyond the prevention of genuinely unfair practices and towards broader intervention in market mechanisms and contractual relationships.

For Europe's dairy processors, this comes at a particularly sensitive moment. The sector is already operating in an environment shaped by volatile milk supply, geopolitical instability, rising energy and logistics costs, sustainability requirements and growing international competition. Dairy companies across Europe are expected to invest heavily in decarbonisation, energy efficiency, animal welfare, digitalisation and resilient supply chains – all while maintaining competitiveness on global export markets. This requires one essential prerequisite: planning certainty.

Yet parts of the current UTP debate risk weakening exactly this stability. Discussions around mandatory pricing mechanisms, production cost models or stronger intervention in long-term contractual arrangements may appear politically attractive, but they do not necessarily solve the structural challenges facing Europe's dairy markets. Milk production systems, cost structures and cooperative models vary significantly across member states and regions. A one-size-fits-all regulatory approach risks creating unintended distortions.

There is broad consensus that abusive practices must be addressed effectively. Short-term unilateral contract changes, unjustified deductions or the misuse of bargaining power can undermine trust and economic stability throughout the food chain. However, there is an equally important distinction between preventing unfair practices and introducing indirect price regulation through the back door.

The European dairy sector remains highly capital-intensive and export-oriented. Investment decisions in processing capacity, energy systems, logistics and product innovation are based on long-term business models and predictable supply relationships. Excessive regulatory intervention may ultimately reduce the investment capacity needed to achieve many of the EU's own strategic goals for sustainability and food security.

Thinks
Anja Hoffrichter

Krones Group

New Chairman of the Executive Board

The Supervisory Board of Krones Group appointed **Thomas Ricker** as the new Chairman of the Executive Board with effect from June 11. He succeeds Christoph Klenk, who, as part of a long-term succession plan and with the approval of the Supervisory Board, is stepping down early on June 10– following the Annual General Meeting (June 9, 2026).

With the appointment of the new Chief Executive Officer (CEO) and two further members of the Executive Board, the Supervisory Board has also approved a new Executive Board structure with corresponding resort responsibilities, to take effect from July 1.

In addition to the CEO role, **Thomas Ricker** will continue to serve as Chief Sales Officer (CSO) on the Executive Board, thereby ensuring continuity in the areas of market and customer focus.

The Chief Financial Officer (CFO) position will continue to be held by **Uta Anders**. Her area of responsibility includes the core commercial functions as well as HR. In addition,

she will take over Sustainability from July 1.

Markus Tischer has been appointed Chief Technology Officer (CTO) and will be responsible for the core functions of technology, innovation and digitalization, as well as for Machines and Lines for filling and packaging technology.

Reinhold Jung is taking over the responsibility for International Operations and Services (IOS) from Markus Tischer.

Bülent Bayraktar is taking over responsibility for Process and System Solutions. This new resort combines Process Technology, Intralogistics and Advanced Molding Technology.

Under the new management structure, **Ralf Goldbrunner** will continue to lead the Operations resort until December 31, after which the unit will be transferred to the area responsible for Machines and Lines for filling and packaging technology, and will remain under his leadership. Ralf Goldbrunner will continue to build on the successful progress made in this key role.

GEA SecurityPartner

New industrial security offerings for GEA customers

With GEA SecurityPartner, GEA introduces a comprehensive, modular portfolio of industrial security services for existing and future customers. The offering is designed to protect production environments in which GEA equipment is deployed and to support secure, resilient operations in increasingly connected industrial settings.

As connectivity in production environments grows and regulatory requirements continue to increase, strong and auditable security practices are becoming essential for business continuity and trusted industrial partnerships. GEA SecurityPartner combines operational technology security expertise with GEA's established internal capabilities, built through securing its own global production networks. The portfolio is based on independently audited competencies aligned with ISO/IEC 27001:2022 and ISA/IEC 62443.

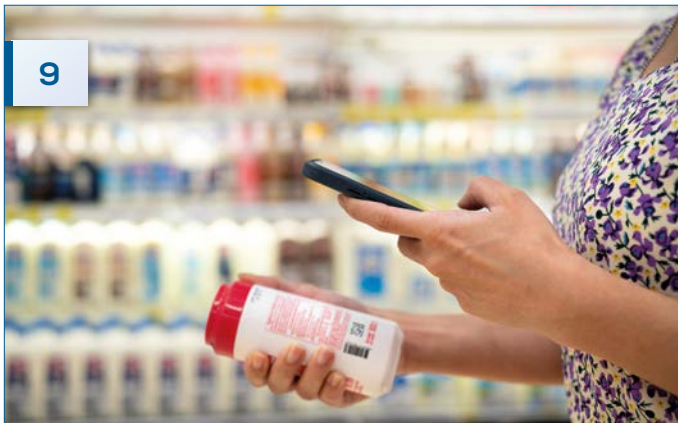
Over recent years, GEA has developed substantial information security expertise by implementing a holistic security approach across its own organization. This has in-

cluded strengthening the security of global production and product development environments and certifying an increasing number of sites according to recognized international standards.

GEA SecurityPartner transfers this proven in-house experience into scalable customer offerings. The portfolio helps customers address regulatory requirements such as the EU NIS 2 Directive and the EU Cyber Resilience Act, improve operational resilience, support the secure operation of IT/OT environments, protect connected equipment throughout its lifecycle, and establish secure industrial architectures.

The approach follows a clear, structured process: starting with an initial assessment to define objectives and regulatory context, followed by an analysis of the existing IT, OT, and product security posture. Based on these findings, GEA develops a tailored action plan and implements measures step by step in line with customer requirements, maturity level, and existing operational processes.

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What the cottage cheese buzz means for dairy producers



Author: Joanna Ilczyszyn, Commercial Manager Cheese, Tetra Pak

Fuelled by social media buzz and growing consumer interest in high-protein, lighter food choices, cottage cheese is seeing a huge surge in popularity: CAGR for the global cottage cheese subsegment is projected to reach nearly 4.1% for the period between 2025 and 2030¹. Forward-thinking dairy producers will see this as an opportunity to adapt and innovate to take advantage of evolving demand.

In today's dairy market, cottage cheese is a product that ticks many boxes. The versatile food works as a savoury snack, a sweet treat with fruit, part of a full meal or a base for protein-packed recipes. As a high-margin, fast-growing food segment that can be captured using existing production lines, cottage cheese is well positioned for new product development and presents an exciting innovation opportunity for dairy producers.

Existing capabilities, products

For many dairies, which already produce fresh products like yoghurt or kefir, diversifying into cottage cheese doesn't require



photos: Tetra Pak

starting from scratch. Milk and cream preparation systems, fermentation tanks and cold storage equipment can often be adapted to produce cottage cheese. In fact, it's possible for the same production line to switch back and forth between products simply by cleaning the equipment and switching over.

Cottage cheese production also lends itself to modular configuration, which means dairy producers can start with a core setup, and scale capacity or refine recipe formulation in line with demand.

This principle is at the heart of the Tetra Pak best-practice line (BPL) for cottage cheese. Producers can start with the Tetra Pak® Grainy Cheese Vat E4, which integrates heating, cooling and dressing addition within a single enclosed system. Automated cutting supports consistent curd structure while clean in place (CIP) design reduces contamination risk. Capacity can then be expanded by adding components such as the Tetra Pak Drum Drainer 2 and Tetra Pak Blender VCC. For a high-capacity, advanced level line, a Tetra Pak

Drainer Washer 2 and a Tetra Pak Cooling Tower produce clean label cottage cheese with liquid sweet dressing or cream.

The vertical design of the Blender VCC supports both cost efficiency and sustainability goals. This long-term efficiency leads to savings that bring down costs measured across the life of the equipment. It's crucial that dairy producers consider total cost of ownership when it comes to equipment,

not just initial capital investment, to avoid greater costs further down the line.

Innovating to unlock premium products

The true growth potential of the cottage cheese category lies in innovation. As seen previously with Greek yoghurt and skyr, a high-protein niche can evolve into a diversified, premiumised category. Beyond the

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basic cottage cheese formulation, potential premium variations include creamier textures or indulgent flavour combinations such as honey or savoury herb variants. Innovation can also tap into the wider wellness movement with options such as lactose-free recipes and functional formulations enriched with additional protein, biotics or vitamins.

As a bonus, cottage cheese production comes with opportunities to make use of side-streams that might otherwise go to waste. Classic full-fat cottage cheese ends up containing only around a quarter of the fat from the raw milk input. If milk contains 4% fat, then for every 1,000 litres of milk, around 30kg of valuable fat is left over². This can be channelled into parallel production of high-margin products such as butter, ice cream, whipped cream desserts or anhydrous milk fat.

Dairy producers can innovate in production processes as well as with ingredients when delivering differentiated products. Starter culture handling, curd treatment and blending all influence final texture and flavour. Optimising recipes and production, in combination, allows producers to move beyond commoditised foundational offerings and consider tapping into higher-margin ones.



More than a cottage industry

Cottage cheese is having a moment, but it's more than a passing trend. Its appeal reflects several long-term consumer priorities, such as wellness, convenience and premium options.

For dairy producers, there is an opportunity to move fast by leveraging existing infrastructure, launching efficiently and scaling with a modular approach. Investing in robust production and processing solutions allows consistent quality, high yield and innovation that unlocks high-margin products. Whether creating high-protein variants, lactose-free versions or

flavour-driven formats, the right technical foundation helps producers capture new cottage cheese opportunities.

- 1 Tetra Pak cottage cheese production: <https://www.tetrapak.com/en-ca/solutions/categories/cheese-whey/white-fresh-cheese/cottage-cheese#:~:text=1,America%2C%20Oceania%20and%20Central%20Asia>.
- 2 https://ec.europa.eu/eurostat/data-browser/view/apro_mk_fatprot/default/line?lang=en

ELEFQ Market Solutions

UV-C liquid processing system for the European dairy industry

Germany-based ELEFQ Market Solutions (located in Hamburg and Kiel) will represent US based FloUV across the European market, holding exclusive agency for the dairy sector. The partnership marks FloUV's first dedicated European commercial representation and opens new market opportunities for liquid processors seeking sustainable, heat and filtration-optional processing solutions.

FloUV, a US-based deep-tech company and Tennessee State University (TSU College of Agriculture) spin-off specializing in precision UV-C liquid processing technology, and ELEFQ Market Solutions, a German sales cooperation based in Hamburg and Kiel, have entered into an exclusive commercial agency agreement for the European market. Under the agreement, ELEFQ acts as the exclu-

sive agent for FloUV within the European dairy sector and supports FloUV's broader European market development across adjacent liquid food and beverage applications. European customers will contract directly with FloUV; ELEFQ serves as the first point of commercial contact and supports technical qualification, market access, and account development.

The partnership becomes effective immediately.

FloUV is a precision UV-C liquid processing system designed to achieve validated microbial inactivation in opaque and viscous liquids, including milk, whey, brine, juice, and beverage streams, with or without the application of heat.

NEWS

Preparing dairy production for Sunrise 2027

Improving efficiency, traceability and consumer engagement with GS1 Digital Link



Author: Rémy Fontanet, Solutions Business Development Manager at Markem-Imaje

The dairy industry is chartering a multitude of challenges today: rocketing costs, supply chain disruptions, as well as increasing pressure on labelling, coding and data accuracy. At the same time, consumer expectations continue to shift, with growing demand for transparency, traceability and sustainability. Against this backdrop, the GS1 Sunrise 2027 initiative is accelerating the adoption of 2D barcodes and connected packaging as a practical way to improve efficiency, traceability and recall management at the dairy production level. For manufacturers working with highly perishable products and fast-moving volumes, these capabilities are becoming essential rather than optional.

Markem-Imaje, is working closely with food producers to implement GS1 Digital Link barcodes at production speed, helping them to optimise labelling and coding

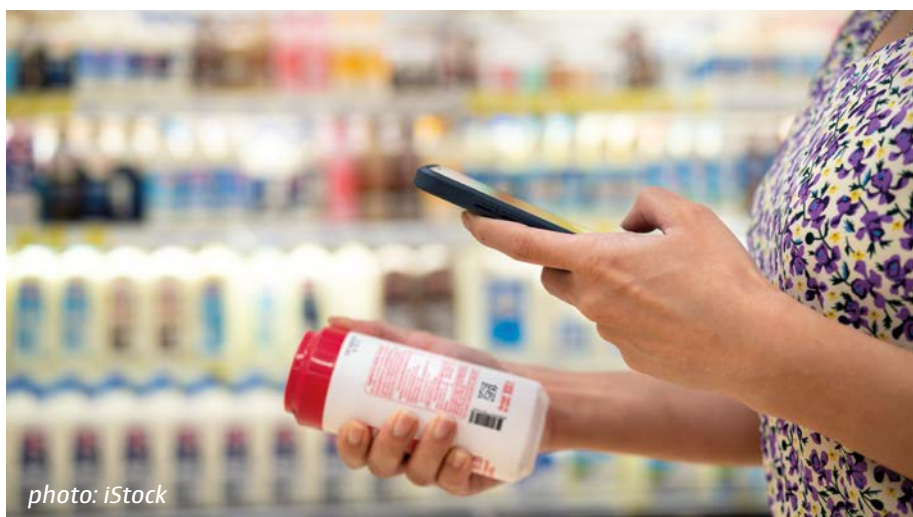


photo: iStock

operations while unlocking new value from granular product data.

Explainer: GS1 Digital Link, 2D barcodes and connected packaging

Major changes are transforming how product data is shared. GS1's Sunrise 2027 initiative is driving the transition from traditional 1D barcodes to GS1 Digital Link 2D

barcodes, allowing a single code to connect each product to the entire value chain – from manufacturer and retailer through to the end consumer.

Unlike basic 1D barcodes with limited data supporting only regular point-of-sale transactions, GS1 Digital Link QR codes act as a dynamic gateway to digital information. Through an embedded URL, they can connect to data such as batch and expiry

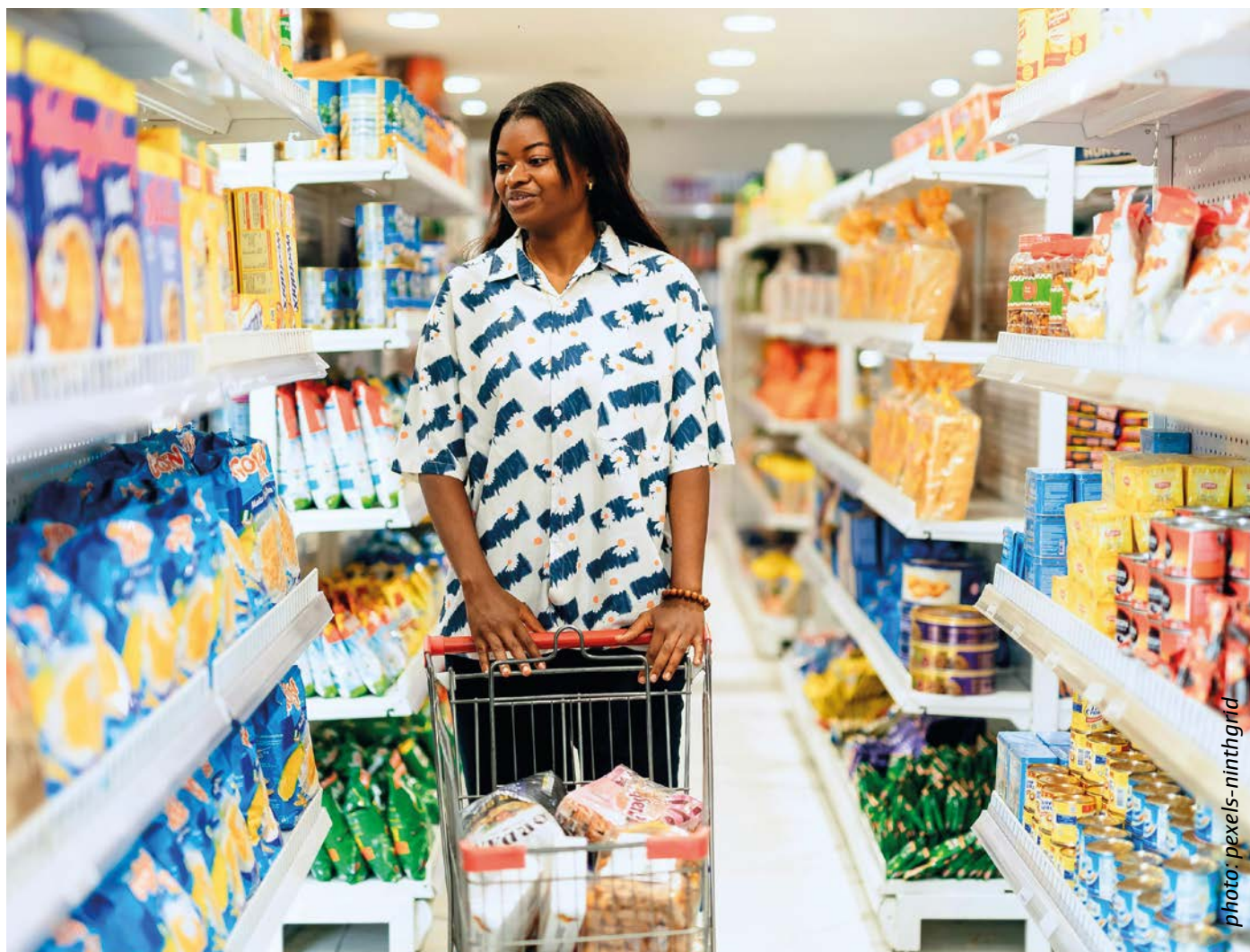


photo: pexels-ninthgrid

information, origin, nutritional details and sustainability credentials, while also enabling real-time updates and digital content.

For dairy manufacturers, this shift represents an opportunity to replace multiple codes with a single, standardised identifier – simplifying packaging, improving data accuracy and ensuring readiness for both retailer requirements and future regulation.

QR codes for effective labelling, coding and data on dairy products

By complementing or replacing traditional 1D barcodes with a single, connected 2D code, dairy manufacturers can significantly improve operational efficiency, supply chain visibility, inventory management and traceability, while also opening new

channels for consumer engagement. This is particularly important in a sector where shelf life is short and precision is critical. Dairy products require accurate, real-time data on batch, expiry and storage conditions to maintain quality and minimise waste. By embedding this information within a scannable, connected code, manufacturers and retailers can make faster, more informed decisions across the supply chain. For example, enhanced visibility of expiry data enables more effective stock rotation and dynamic pricing strategies, helping to reduce food waste – an issue that still affects around one third of global food production. At the same time, improved traceability allows manufacturers to respond more quickly and precisely to quality issues or recalls, limiting both financial and reputational impact.

The dairy production line: opportunities and challenges

The introduction of 2D barcodes creates significant opportunities to improve coding, labelling and data accuracy across dairy production lines. By linking each product to a digital record, manufacturers gain a more complete and reliable view of production, packaging and distribution processes. However, implementation must account for the realities of dairy production. High-speed lines, diverse packaging formats and strict hygiene requirements mean that coding solutions must be robust, flexible and capable of operating at scale. In addition, the wide variety of dairy products – from milk and yoghurt to cheese and desserts – introduces complexity in terms of packaging materials and formats. Ensuring consistent, high-quality code

printing across these variations is essential to maintain readability and compliance. This is where scalable, production-ready solutions become critical. Manufacturers need to ensure that any transition to 2D barcodes does not slow down operations, disrupt workflows or introduce risk to product quality.

Full lifecycle solution – from QR creation to inline printing

To support this transition, Markem-Imaje offers an end-to-end, modular approach that enables manufacturers to implement GS1 Digital Link at their own pace. Producers can start inline printing with Markem-Imaje's scalable solutions, depending on their operational requirements. The company's flexible deployment approach ensures that implementation aligns with existing production environments without compromising speed or efficiency.

The end-to-end platform integrates seamlessly with existing workflows, supporting manufacturing efficiency through code management, printing, data flows, custom landing pages, business system integration, analytics and professional services. This not only supports compliance with GS1 standards and retailer expectations but also enables manufacturers to unlock additional value from their packaging through data insights.

Key benefits include:

- » The reduction of costly production reworks, scrapped products, duplicated tasks and operator errors.
- » Increased production output by reducing line downtime.
- » The protection of brand value by ensuring regulatory and supply-chain compliance.
- » Benefitting from future-proof solutions for data-centric applications.

Crucially, the ability to manage and verify codes at production speed ensures that every product leaving the line carries accurate, reliable information – supporting both operational excellence and regulatory readiness.

Getting started

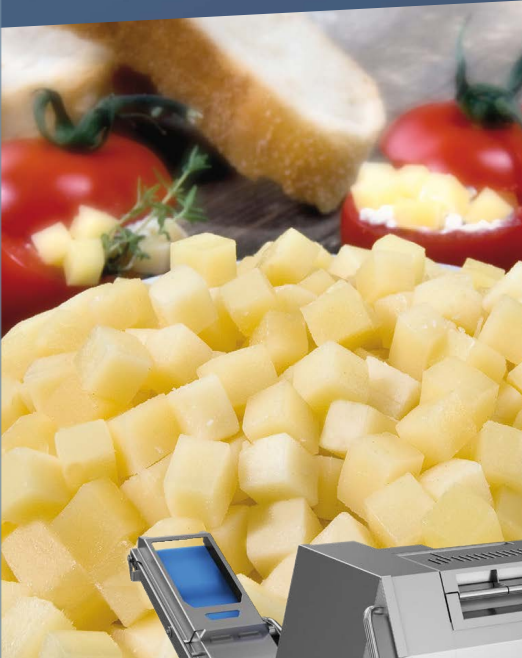
As GS1 Sunrise 2027 approaches, dairy manufacturers have a clear window to prepare for this transition. While the shift to 2D barcodes and connected packaging requires careful planning, it also presents a significant opportunity to modernise labelling and coding processes, improve data accuracy and strengthen supply chain collaboration.

In an increasingly competitive and regulated market, those who act early will be best positioned to reduce waste, enhance efficiency and build stronger connections with both retail partners and consumers. With the right technology and strategy in place, GS1 Digital Link can become a powerful enabler of smarter, more resilient dairy production.

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Smart fill level adjustment

Key to reducing waste and protecting margins



Author: Frank Borrmann, Market Manager for the Strategic Business Unit Checkweighing & Vision, Mettler-Toledo Garvens

There is no prestige in giving away product. Yet across production lines everywhere, that is exactly what happens when filling processes are left to drift. A few extra grams here, a wider tolerance there, and it quickly adds up. As raw materials grow more expensive and sustainability targets become sharper, more manufacturers are turning to fill level adjustment as a smarter way to close the gap between target weight and actual pack contents.

Smart fill level adjustment uses dynamic feedback from checkweighers to automatically regulate filling equipment in real time. Rather than relying on manual checks or occasional adjustments, the system monitors the average weight of a series of packs and instructs upstream filling machines and multi-head weighers to make micro-corrections. The result is a tighter weight distribution, reduced product giveaway and more consistent pack quality.

This approach is especially valuable in high-speed environments where small inefficiencies compound quickly. It is already being adopted across a range of industries, from frozen food to

snacks and confectionery. The common denominator is a shift in mindset, from accepting giveaway as a cost of doing business to actively managing it with intelligent automation.

The case for tighter tolerances

The business case is clear. Every extra gram of product represents money lost and raw material used unnecessarily. In categories with thin margins or expensive ingredients, even minor improvements in fill accuracy can lead to substantial gains.

Traditional filling processes often rely on conservative tolerances to reduce the risk of underfilling. But this comes at a cost. Wider margins may keep lines running smoothly, but they also increase the likelihood of overpacking, particularly as machines drift over time or respond to subtle changes in product flow.

Fill level adjustment addresses this by creating a feedback loop. As the checkweigher gathers real-time data, it adjusts the filling system automatically to maintain a tighter, more predictable

package weight. This not only reduces giveaway but also supports greater line stability, especially during changeovers or when dealing with variable product formats.

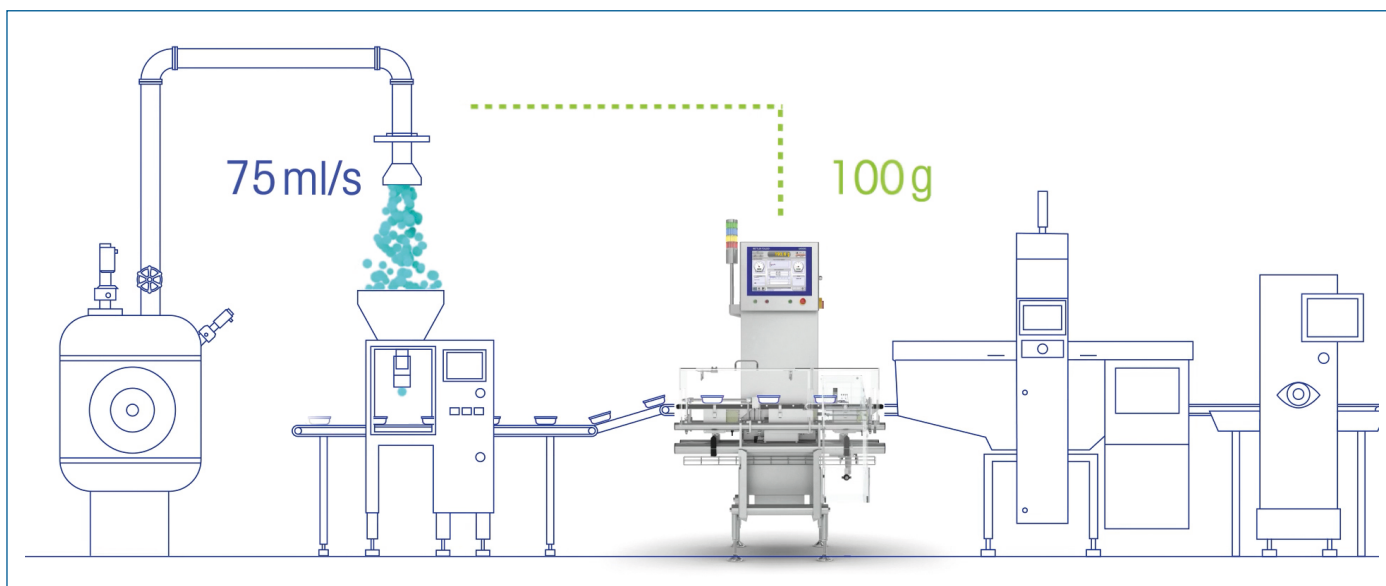
Making smarter use of existing technology

One of the strengths of modern fill level adjustment is that it does not require a complete overhaul of the line. In many cases, it can be integrated into existing checkweighers and filling equipment with a software upgrade and some configuration support. That makes it a cost-effective and scalable option for manufacturers looking to boost performance without introducing complexity.

The return is not only financial. By reducing reliance on manual intervention, the system also supports consistency, frees up operator time and lowers the risk of human error. As many manufacturers face labour shortages or shifting staffing patterns, this level of automation helps build resilience into the process.

Real-world impact

At Greenyard Frozen Belgium, which produces millions of frozen fruit and vegetable packs each year, fill level adjustment has already delivered measurable improvements. One of its packaging lines reduced excess weight from 0.69 percent to 0.14 percent.



photos: Mettler-Toledo

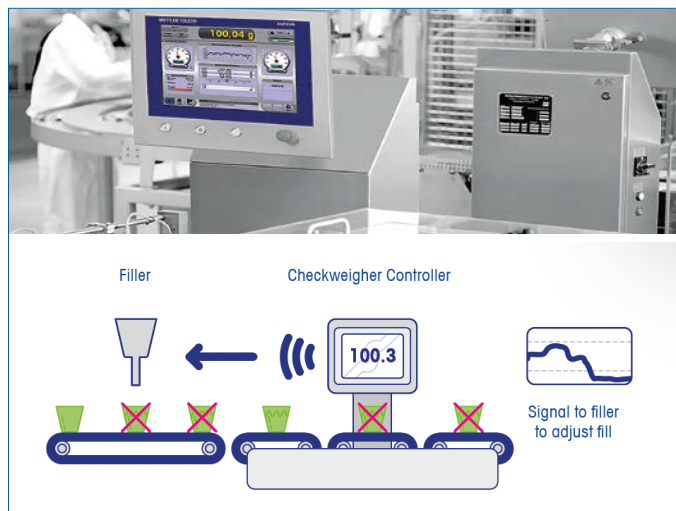
On another, the figure dropped from 0.3 percent to 0.11 percent. Those numbers translate directly into reduced waste, lower costs and more efficient use of materials.

“That may not seem like much, but if you calculate it on an annual basis over large volumes, you are talking about considerable quantities of product that you no longer unnecessarily pack,” said Dominiek Vierstraete, Technical Manager at Greenyard. “That is beneficial for the cost price and for reducing waste.” The company now uses fill level adjustment on all six of its small pack lines, a move that supports both sustainability goals and operational consistency.

Looking forward

As material costs remain volatile and consumer expectations continue to rise, manufacturers will need to find new ways to optimise their processes without compromising quality. Fill level adjustment offers a clear path forward. It addresses a known source of waste, requires minimal disruption to implement and can unlock performance gains almost immediately.

The technology is also evolving. As communication between systems becomes more streamlined and visual interfaces improve, operators gain even more transparency into line performance.



“You can immediately see how the average weight develops via a visual interface,” said Vierstraete. “After a few hours of testing and adjustments, the system runs stably.”

For manufacturers ready to take tighter control of their line efficiency, fill level adjustment is no longer a niche add-on. It is fast becoming a standard expectation in high-performing production environments.

BERICAP

Acquisition of Embankment Plastics

BERICAP announces the incorporation of its 31st company with the acquisition of Embankment Plastics in Ireland.

Located near Dublin, Embankment Plastics was founded in 1977 and has remained a private business to date. Their primary business has been in the dairy, food and technical closures. The aim is to combine the comprehensive BERICAP product portfolio of plastic and aluminium closure solutions for the beverage, food, liquor and chemical industries with current and new local opportunities and continue to develop the site into another BERICAP facility providing local service and expertise.

The future BERICAP Ireland will become a subsidiary of BERICAP UK to enable the benefit of appropriate shared resource whilst maintaining local control. Short term it will continue to trade as Embankment Plastics.

“This research provides a foundation for designing next-generation cultures that can better withstand phage challenges,” said Prof. Douwe van Sinderen, senior author of the study.



BERICAP announces the acquisition of Embankment Plastics in Ireland (photo: BERICAP)

The project exemplifies successful collaboration between academia and industry. dsm-firmenich contributed bacterial strains, genomic data, and dairy-derived phages, ensuring that the results are relevant for large-scale dairy applications.

Bioprotection in dairy production: sustainable control of spoilage and pathogenic microorganisms

Author: Julien Dherbécourt, Dairy Culture & Technology Expert, [Lallemand Specialty Cultures](#)

The dairy sector is evolving in an increasingly demanding environment, characterized by stricter sanitary requirements, greater expectations for natural processes and ingredients, and the need to preserve the sensory quality of products. Microbiological control therefore remains a key challenge for both artisanal cheesemakers and industrial producers, whether working with raw or pasteurized milk.

Spoilage microorganisms, as well as certain pathogens, can compromise product shelf life, regulatory compliance, and food safety. Beyond hygiene practices and process control, the use of bioprotection is attracting growing interest. Based on the use of selected microorganisms for their antagonistic interactions, bioprotection is part of a well-established fermentation-driven approach already familiar in cheesemaking.

This article provides a technical overview of bioprotection in dairy products, including its principles, mechanisms of action, and practical applications, with a focus on the control of fungal spoilage and *Listeria monocytogenes*.

1. Bioprotection in dairy products: principles and mechanisms of action

1.1 Définition

Bioprotection is defined as the use of antagonistic microorganisms to inhibit undesirable microorganisms, with the aim of improving shelf life and/or food safety while minimizing changes to organoleptic properties (Souza et al., 2022).

In the dairy sector, most cultures used for this purpose belong to the lactic acid bacteria group, known for their long history of safe use and their antagonistic action against spoilage and pathogenic microorganisms (Bintsis & Papademas, 2024).

In practice, bioprotection strategies are adapted depending on the target microorganisms and the cheesemaking technology involved. They rely on selected strains with specific modes of action and compatibility with dairy matrices. Dedicated bioprotective culture ranges, such as LALCULT® Protect, include targeted solutions for:

- » The control of fungal spoilage (yeasts and molds),
- » The control of pathogenic microorganisms such as *Listeria monocytogenes*.



It should be noted that bioprotection does not replace hygiene and process control, but complements good manufacturing practices and environmental management.

1.2 Main mechanisms of action

The effectiveness of bioprotection in dairy products generally relies on the combination of several mechanisms acting simultaneously (Siedler et al., 2020; Crowley et al., 2013):

- » Competition for nutrients: rapid consumption of residual sugars, amino acids, vitamins, and minerals.
- » Competition for space: early and rapid colonization of ecological niches, particularly on cheese surfaces.
- » Production of antimicrobial metabolites: organic acids, hydrogen peroxide, bacteriocins, peptides, and other inhibitory compounds.

2. Yeasts and molds: technological challenges and bioprotection

2.1 Impact of fungal contamination in cheese production

Yeasts and molds are among the main causes of economic losses in cheese production. Their development may lead to visual defects, off-flavours, gas formation or, in some cases, food safety risks linked to mycotoxin production.

Several studies show that molds from the genus *Penicillium* represent a major share of contamination in cheeses, particularly in soft and semi-hard varieties, where they are commonly dominant in processing environments (Kure & Skaar, 2019).

2.2 Antifungal bioprotection: general principles

Fungal bioprotection mainly relies on the activity of lactic acid bacteria capable of producing antifungal metabolites that inhibit spore germination, mycelial growth, or sporulation.

This approach offers continuous protection throughout the product shelf life, while maintaining a limited impact on acidification and the aromatic profile when properly managed.

In this context, bioprotective cultures such as LALCULT® Protect MC1, based on selected strains of *Lactiplantibacillus plantarum* and *Lactiacaseibacillus paracasei*, are used to limit the development of undesirable yeasts and molds in both fresh and ripened dairy products, while preserving technological and sensory balance.

An experimental protocol was implemented to evaluate the effectiveness of LALCULT® Protect MC1 in controlling *Penicillium* mold growth in fresh cheese.

The protocol included the following steps:

1. Fresh cheese production with direct inoculation of LALCULT® Protect MC1 into the milk
2. Controlled contamination through surface inoculation of 50 *Penicillium* spores per unit
3. Storage at 4°C for up to 56 days.

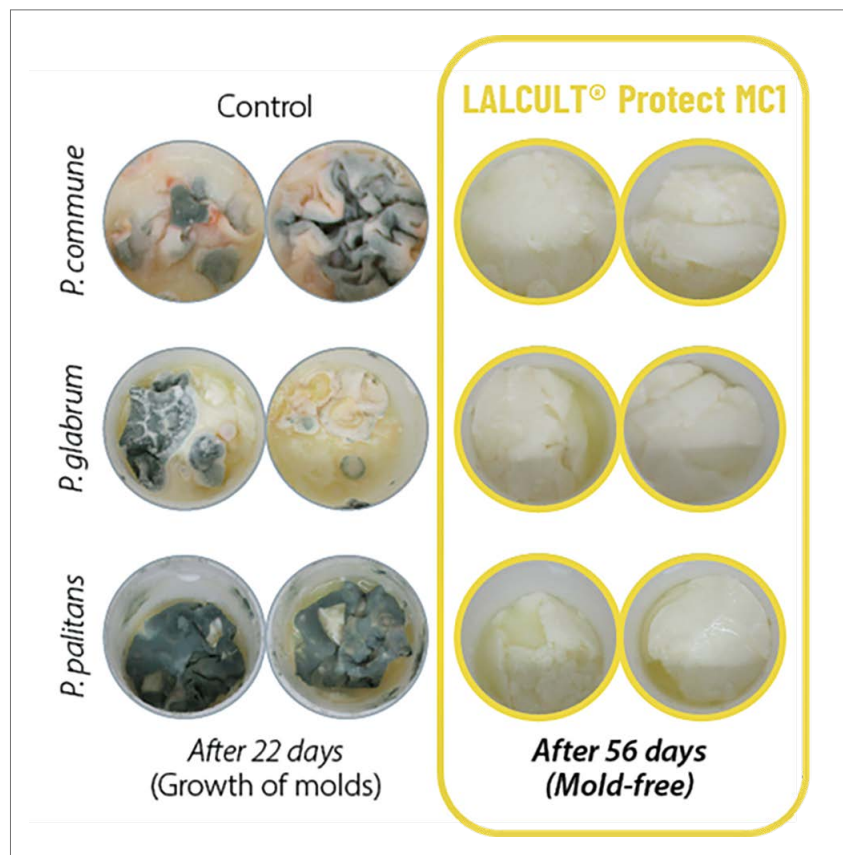
These challenge tests were conducted at ENILBIO (Poligny, France).

2.3 Cheese surface ecosystems and role of ripening microbiota

In bloomy and washed rind cheeses, surface microbiota management is critical. Certain yeasts, such as FLAV-ANTAGE® DH (*Debaryomyces hansenii*), contribute to lactate consumption, surface pH increase, and rapid surface colonization, creating favourable conditions for the development of desirable ripening flora.

Conversely, undesirable yeasts or molds may colonize cheese surfaces, negatively affecting appearance, technological performance, and sensory quality.

Effect of LALCULT® Protect MC1 on the growth of Penicillium molds, commonly found in fresh cheese contamination.



Surface cultures such as *D. hansenii* or *Geotrichum candidum* contribute to maintaining microbial balance. Their activity can be combined with bioprotective cultures such as LALCULT® Protect MC1, which provides complementary protection without interfering with their development when properly dosed.

Specific case: control of *Mucor* in bloomy rind cheeses

Mucor is a particular concern in soft cheeses with bloomy rinds, due to its rapid growth and strong visual impact, which can quickly lead to non-compliance.

The use of selected surface cultures such as VELV-TOP® PC PSM2 (*Penicillium candidum*) allows effective control of *Mucor* through fast and uniform surface colonization.

3. *Listeria monocytogenes*: regulatory context and bioprotection

3.1 A highly monitored pathogen

Listeria monocytogenes remains one of the main pathogens of concern in the dairy sector due to its ability to grow at low temperatures, tolerate salt, and persist in processing environments.

The European regulatory framework has recently evolved with Regulation (EU) 2024/2895 (amending Regulation (EC) No 2073/2005), applicable from July 1, 2026. This update extends the requirement for control throughout the entire shelf life of ready-to-eat products.

For products supporting the growth of *Listeria monocytogenes*, food business operators must demonstrate that the limit of 100 CFU/g is not exceeded until the end of shelf life. Otherwise, the stricter criterion of absence in 25 g applies.

This evolution requires reinforced integrated control strategies combining environmental management, process control, formulation adjustments, and complementary approaches such as bioprotection.



3.2 Bioprotection solutions

Scientific studies have shown that certain lactic acid bacteria can contribute to the control of *Listeria monocytogenes*, through ecological competition and the production of antimicrobial compounds (ANSES, 2025).

In this context, dedicated bioprotective cultures have been developed to limit the growth of *Listeria monocytogenes* throughout the product shelf life.

For example, LALCULT® Protect LC1, developed by Lallemand Specialty Cultures, is based on a specific strain of *Carnobacterium maltaromaticum* isolated from raw milk. Its effectiveness has been validated in different cheesemaking technologies, demonstrating sustained limitation of *Listeria monocytogenes* growth without impacting acidification or sensory properties.

Conclusion

Bioprotection is now a relevant technical solution to strengthen the microbiological control of spoilage and pathogenic microorganisms in dairy production. Its implementation in cheesemaking provides an effective response to evolving regulatory requirements, particularly those related to *Listeria monocytogenes* applicable from July 1, 2026.

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Règlement (UE) 2024/2895 (Commission européenne, 2024), modifiant le règlement (CE) n° 2073/2005 relatif aux critères microbiologiques applicables à *Listeria monocytogenes*

How cheese is balancing indulgence and nutrition in 2026



Author: Jess Ryall,
Content and Marketing Executive at FMCG Gurus

This article is based on FMCG Gurus:
The Global Dairy Landscape – Global Report 2026.



Cheese has often found itself caught between indulgence and nutrition. However, changing consumer attitudes towards health, wellness, and everyday eating habits are reshaping perceptions of the category. Today, consumers are looking for foods that offer comfort and enjoyment, whilst still aligning with wider health and lifestyle goals. Cheese is well-positioned to meet this demand.

According to FMCG Gurus' consumer insights, 45% of global consumers say they eat soft cheese at least weekly, whilst 41% say the same about hard cheese. This highlights how cheese remains a staple product that appeals across multiple occasions, whether as part of meals, snacking, or moments of indulgence.

Consumers want balance, not sacrifice

Modern consumers are becoming skeptical of restrictive approaches to health. Instead, they are seeking balance and moderation,

looking for products that can deliver both taste and nutritional value simultaneously.

This is particularly important during times of uncertainty, when consumers continue to seek comfort foods that offer familiarity and emotional reassurance. FMCG Gurus' consumer insights shows that consumers still place greater importance on taste than price when choosing fresh dairy products (74% versus 68%).

For cheese brands, this creates an opportunity to position products around permissible indulgence. Rather than focusing solely on calorie reduction or restriction, brands can emphasize authenticity, enjoyment, and naturally occurring nutritional benefits such as calcium and protein.

Realness and transparency matter

At the same time, consumers are becoming more attentive to ingredient integrity and product transparency. Clean-label



positioning is increasingly shaping perceptions of quality, especially within dairy categories.

Globally, 73% of consumers say natural claims are appealing when choosing dairy products, whilst 62% say free-from additive claims resonate with them. Additionally, 74% of consumers say that "produced on" dates help shape perceptions of freshness.

This reflects a wider desire for reassurance. Consumers want dairy products that are perceived as real, authentic, and minimally processed. Within cheese specifically, traditional production methods, provenance stories, and shorter ingredient lists can therefore become key differentiators.

Plant-based competition still faces challenges

Whilst plant-based dairy alternatives continue to grow, cheese remains one of the more difficult categories for alternatives to replicate successfully.

FMCG Gurus' market research shows that only 12% of consumers who purchase plant-based dairy products say they turn to plant-based cheese. This is likely linked to ongoing concerns around texture, taste, and formulation quality. Indeed, 75% of consumers who avoid plant-based dairy say they simply prefer real dairy, whilst 50% believe alternatives lack taste.

This reinforces the importance of sensory appeal within the cheese category. Consumers are willing to prioritize enjoyment and familiarity, especially in categories strongly associated with indulgence and comfort.

Quality and authenticity will define success

Looking ahead, cheese brands have an opportunity to strengthen their position by focusing on authenticity, quality, and simple nutrition. Consumers are seeking foods that feel trustworthy, natural, and emotionally satisfying, without compromising on taste.

Brands that can communicate provenance, ingredient integrity, and balanced wellness credentials, whilst still delivering indulgent experiences, will be best placed to resonate with consumers in 2026 and beyond.



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From 7 to 13 May, 2,804 exhibitors from 65 countries and trade visitors from 161 countries came together in Düsseldorf on the fully booked exhibition grounds. Of all visitors, 75 per cent came from outside Germany, including 28 percent from outside Europe. Around 100 additional companies were represented at components, the supplier trade fair held in parallel.

Automation, data-based applications and flexible plant concepts have arrived in industrial practice and were presented at interpack as concrete applications of smart manufacturing. In the field of materials, the focus was on innovative solutions that work under real-world conditions and meet regulatory requirements. Future skills became tangible wherever connected and data-driven systems require new competencies in production. IDM was on site and reports on some interesting new developments.



AMPACK: New dosing technology for low-foam aseptic bottle filling

Ampack focused on a new dosing technology for aseptic bottle filling designed to reduce foaming when filling sensitive liquid foods. The company presented the system at its stand in Hall 6 together with additional filling and sealing technologies for hygienic applications.

According to Ampack, products such as clinical nutrition, baby food and drinkable meals often create significant foam during filling, affecting process stability and filling accuracy. The new dosing system addresses this by guiding the product gently along the inner wall of the bottle via side openings in the piston. Depending on the bottle format, the technology can achieve outputs of up to 36,000 bottles per hour.

The new dosing unit is integrated into Ampack's modular FBL linear bottle filling machine, introduced in 2024. The system is designed for aseptic filling of preformed HDPE, PP and PET bottles used for sensitive liquid food products that do not require refrigeration.

In addition to filling technology, Ampack also presented an expanded after-sales service portfolio at the show. This includes customised service agreements covering spare parts supply, maintenance and preventive servicing for filling lines. According to the company, the aim is to improve planning reliability and minimise downtime throughout the machine lifecycle.



Thanks to its flexible handling and sterilisation system, the FBL fills different bottle formats and materials while protecting the product (photo: Ampack)

METTLER-TOLEDO: Product inspection solutions

Mettler-Toledo Product Inspection presented new technologies designed to support smarter and more connected food production environments. The company focused on inspection systems for contamination detection, weight control, label inspection and connected software solutions.

Among the highlights were the new M50 R-Series AdvancedLine metal detectors, developed to improve detection sensitivity, traceability and data connectivity in modern production environments. The company also showcased the X56 DXD+ dual-energy x-ray inspection system for complex packaged applications. The system is able to detect low-density contaminants such as plastics, rubber and wood, even in products with overlapping textures or varying densities.

Another focus was AI-supported x-ray inspection technology designed to improve inspection accuracy and reduce unnecessary product rejection. Combination



systems integrating checkweighing, metal detection, x-ray and vision inspection within a single solution were also demonstrated.

In addition, the company presented its ProdX software for real-time monitoring, traceability and centralised production data management.

Among the highlights were the new M50 R-Series AdvancedLine metal detectors (photo: Mettler-Toledo)

DOMINO: **New Gx Series PRO Print-head**

Ahead of Interpack 2026, Domino Printing Sciences introduced the new Gx Series PRO Printhead, a thermal inkjet solution developed to support the transition to GS1 Digital Link and variable 2D codes. The system is designed for applications requiring larger print areas, high contrast and reliable high-speed coding on complex production lines.

According to Domino, the development focused on three key areas: waste reduction, speed and compliance. The printhead supports applications such as dynamic pricing, automated expiry checks and product traceability through integrated 2D codes containing batch and best-before information. In combination with Domino Automation software and the R Series smart vision system, the solution enables automated in-line code verification and centralised label management.

The Gx Series PRO Printhead offers a print height of 23 mm as well as high optical density, high resolution and a long throw distance. Domino highlighted its suitability for food packaging applications, including meat, fish and poultry products, as well as pharmaceutical and direct-to-box printing applications.



Domino Printing Sciences introduced new Gx Series PRO Printhead (photo: Domino)

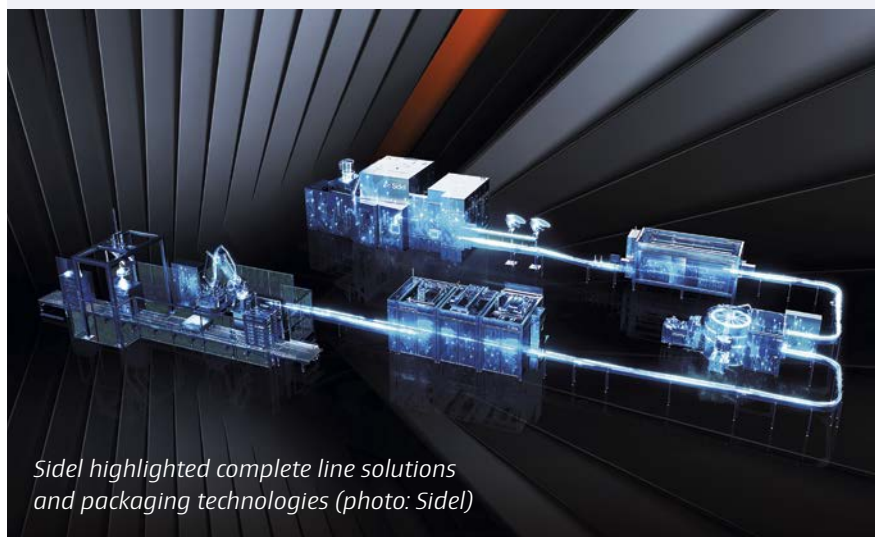
SIDEL: Complete line solutions

Sidel highlighted complete line solutions and packaging technologies for the food, beverage, home care and personal care industries. The company focused on integrated systems designed to improve productivity, flexibility and line efficiency while addressing increasing packaging complexity.

A central topic at the stand was Sidel's expertise in complete packaging lines for products such as edible oils, sauces, dressings and home care applications. The systems combine advanced engineering, project management and automation technologies to support reliable and efficient production processes.

Among the highlights was the new Cermex RoboSELEX robotic collating system for case packers, which was demonstrated live at the booth. The system is designed for lightweight bottles and supports flexible handling of different bottle shapes and batch configurations at speeds of up to 320 products per minute. Sidel also showcased the RoboAccess_Pal S palletising unit with an extended pallet height of up to 2,200 mm and compact installation dimensions for smaller production areas.

In addition, visitors could explore Sidel's aseptic filling technologies, including the Aseptic Predis X4, as well as the EvoBLOW Laser bottle blowing technology for PET packaging applications.



Sidel highlighted complete line solutions and packaging technologies (photo: Sidel)

SÜDPACK: Recyclable pouch concepts

SN Maschinenbau and SÜDPACK highlighted recyclable pouch concepts designed to meet future PPWR recyclability requirements. The focus was on two packaging solutions from SÜDPACK's CarbonLite film family: a PurePE stand-up pouch with zipper closure for grated cheese and a PP-based spouted pouch for fruit purée applications.

For pouch production, SN Maschinenbau showcased the FLH 300 hygienic packaging machine for high-speed production of flat and stand-up pouches. According to the company, the machine can achieve outputs of up to 270 pouches per minute and supports both conventional and recyclable packaging materials. The hygienic machine design is intended for demanding food packaging applications.

A second focus was the HSF 100 packaging machine for spouted pouches with small to medium production volumes. The compact rotary machine is designed for flexible filling applications and achieves outputs of up to 70 pouches per minute.

GRUNWALD: Ultraclean cup filling technologies

GRUNWALD showcased ultraclean cup filling technologies for dairy applications with an emphasis on hygiene, flexibility and efficiency.

The main exhibit was the eight-lane GRUNWALD-FOODLINER 20.000UC linear cup filling machine, designed for outputs of up to 20,000 cups per hour with dosing accuracy of $\leq 0.3\%$. The machine handles standard dairy cups with filling volumes of up to 500 ml and supports quick format changes at the push of a button.

A key topic at the stand was the company's ultraclean hygiene concept, which uses UV(C) sterilisation technology and cleanroom class 5 laminar airflow to achieve high hygiene and extended shelf life without chemicals.

GRUNWALD also demonstrated the compact rotary cup filling machine GRUNWALD-HITTPAC AKH-029S for smaller production areas. The machine handles standard cups, DUO cups and buckets with filling volumes of up to 1,000 ml and achieves outputs of up to 5,000 cups per hour.

Another focus was the integrated fruit mixer technology for flexible production of yoghurt and dairy products with different fruit preparations. The system reduces product loss and changeover times while supporting efficient production of small batches and frequent recipe changes.



A highlight of Grunwald's trade show presentation was the high-performance cup filler GRUNWALD-FOODLINER 20,000 UC (photo: Grunwald)

LEIBINGER: New coding technology

LEIBINGER presented 2DJET, a new coding technology developed for the growing use of GS1-compliant 2D codes in the packaging industry. The system delivers print resolutions of up to 300 dpi at speeds of up to 120 m/min and is designed for inline printing on a wide range of packaging materials and formats, including flexible films, plastics, glass and metal packaging.

LEIBINGER positioned the technology as a response to increasing requirements for traceability, digital product information and GS1 standards. The system enables the inline generation of QR codes up to 33 x 33 modules and is intended for integration into existing production lines with minimal disruption.

Among the features highlighted by the company were a continuous ink supply system for uninterrupted operation, cartridge replacement during production and fast-drying inks for high-speed applications. The printer is also designed for low maintenance and reduced operating costs through minimal spare-part requirements and tool-free handling.

LEIBINGER demonstrated the 2DJET concept and prototype live at the show. The commercial launch is planned for early 2027, with pilot projects scheduled for the end of 2026.

SÜDPACK presented a recyclable packaging concept for grated cheese in Düsseldorf (photo: SÜDPACK)



LEIBINGER presented 2DJET, a new coding technology developed for the growing use of GS1-compliant 2D codes in the packaging industry



KHS: ConnectApp Guide

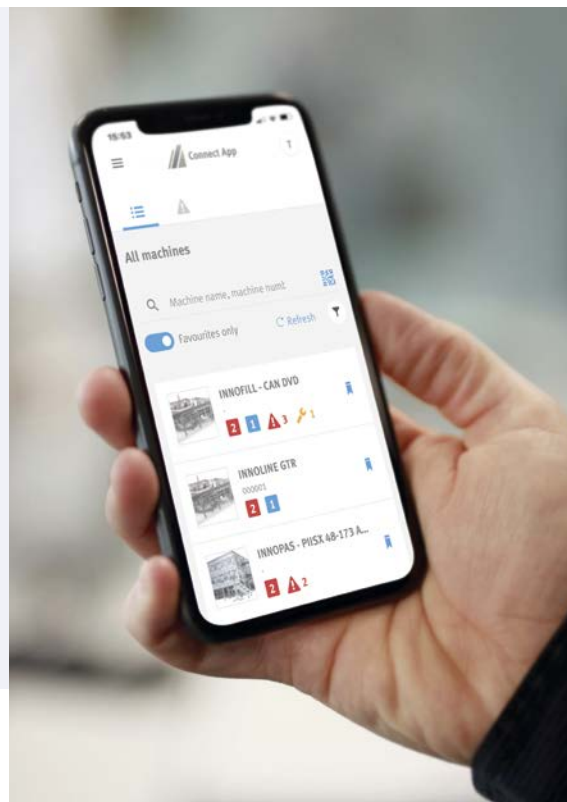
KHS highlighted new functions for its ConnectApp Guide digital maintenance assistant designed to improve servicing efficiency on the shop floor. The system digitalises daily maintenance routines such as cleaning, inspection and lubrication, replacing manual Excel lists and PDF-based maintenance schedules with app-based task management.

A central innovation is the introduction of dynamic, usage-based maintenance intervals. Instead of fixed schedules, maintenance tasks are now triggered according to actual machine operating hours. This helps reduce unnecessary inspections, conserve resources and improve line availability.

The updated system also includes integrated digital bills of materials, allowing operators direct access to spare-part information and maintenance data for individual machines. Combined with a direct link to the KHS Connect shop, required spare parts can be identified and ordered directly during maintenance procedures.

KHS stated that the app is designed to reduce downtime, simplify maintenance workflows and lower total operating costs. Pilot projects also showed significantly shorter operator training periods due to the system's intuitive interface.

KHS highlighted new functions for its ConnectApp Guide digital maintenance assistant (photo: KHS)



WEBER: Flexible slicing & cutting on a single machine

Weber presented a high-performance line for the flexible production of sliced cheese portions and cheese bars on a single machine. The integrated solution combines de-foiling, dividing, scanning, slicing, weighing and packaging technologies to increase flexibility, output and product yield while reducing labour requirements and investment costs.

Among the highlights was the new weDEFOIL 5000 automatic de-foiler, which removes film from up to six cheese blocks or wheels per minute. The connected weDIVIDE 7000 cheese block divider portions the products with high precision and yield optimisation. Weber also showcased the integrated weSCAN 5500 laser scanner for precise product measurement and improved slicing results.

A central innovation was the weSLICE 9500 slicer with the new Weber PowerCut system, presented as a world first. The system allows producers to switch between slicing cheese portions and cutting cheese bars on the same line. The solution combines high flexibility with maximum product yield and efficient use of raw materials.

Further components of the line included the weWEIGH 5000 scale, automated pick-and-place handling with the wePICK robot and the wePACK 7000 thermoforming packaging machine. Weber demonstrated sustainable flexible film packaging solutions as well as new movable cross-cutters designed to reduce investment costs and improve process flexibility.



Thomas Gärber of Weber explained the new high-performance line for the flexible production of sliced cheese and cheese pieces (photo: IDM)

Digital networking and integrated line control via Weber OneControl were also key topics at the stand. The system enables centralised operation, process monitoring and data exchange across the entire production line.

MULTIVAC: Integrated packaging and processing solutions

The MULTIVAC Group focused on integrated packaging and processing solutions combining automation, digitalisation and sustainability. At a press conference, CEO Christian Traumann and CSO Dr Tobias Richter outlined the company's business development and strategic priorities. According to MULTIVAC, turnover increased by 5.3 percent to 1.59 billion euros in 2025, while the global workforce grew to around 7,800 employees.

At the trade fair, MULTIVAC demonstrated digitally networked production concepts under the heading "Smart Production". Highlights included the compact NextGen slicing and packaging line with yield monitoring and hygienic design, as well as an AI-supported traysealer line designed for flexible multi-product processing. The company also showcased the RX Ultimate thermoforming packaging machine featuring multi-sensor control, online connectivity and technologies such as pixelHEAT and pixelSEAL for processing ultra-thin and sustainable films.

A further focus was Smart Packaging, where MULTIVAC highlighted packaging consultancy, recycling concepts and digital solutions aimed at meeting future PPWR requirements.



Dr. Tobias Richter and Christian Traumann reported on the MULTIVAC Group's business performance (photo: IDM)

SEALPAC introduced its new F-series thermoformer (photo: SEALPAC)

SEALPAC: New thermoformer

SEALPAC introduced its new F-series thermoformer, developed to improve machine availability, process stability and flexibility in packaging production. According to the company, the machine platform was completely redesigned with a focus on reducing downtime and increasing operational efficiency.

A central feature of the F-series is its intelligent control concept. Integrated packaging assistants continuously monitor and analyse machine processes in real time, automatically adjusting parameters where necessary. This is intended to improve process reliability and support predictive maintenance by identifying maintenance requirements at an early stage.

SEALPAC also highlighted the machine's energy-efficient design, including optimised heating and cooling systems aimed at reducing energy consumption without affecting packaging quality or output. Servo-controlled film transport and lifting systems ensure precise processing and consistent packaging quality.

The F-series supports a wide range of packaging applications, including MAP solutions and sustainable packaging materials. Additional features such as the EasyPeelPoint opening system can also be integrated. Standardised interfaces allow the thermoformer to be connected to existing production lines and digital production environments with Industry 4.0-compatible process control and traceability functions.



From milk to masterpiece: For excellence in cheese, there's only one way forward



Taste and texture. Nutrition and indulgence. Sustainability and clean labels. Today's cheese consumers want it all – and they're willing to pay for the right experience. But as market demands become more complex and margin pressures bite, producers are left juggling multiple, and often competing, priorities.

This is especially true when producers rely on a fragmented ecosystem of suppliers who deliver isolated solutions without considering the knock-on effects along the value chain. A disjointed approach therefore soon becomes its own challenge, as changes in one area of production introduce risks, costs, or inconsistencies elsewhere.

"Real impact can only come from a truly interconnected system," explains Evandro Oliveira de Souza, Global Senior Vice-President, Cheese, dsm-firmenich Taste, Texture & Health. "When departments operate in silos, cheese producers are constantly making trade-offs, which harm quality, function, and overall success."

From complexity to simplicity

But there's another way: "In a market that's more complex than ever, our customers trust us to make cheese easier," says Olivei-

ra de Souza. "Our unique offering provides integrated, end-to-end support throughout the full cheese lifecycle: from raw materials to regulatory compliance, and from sensory delight to shelf life."

That means one portfolio, with the broadest available range of complementary solutions. One team of world-leading experts on side, advancing innovation and delivering excellence. And one seamless path, from concept to commercialization.

According to Oliveira de Souza, this holistic approach is about solutions that work together, not in silos. "We bring everything together in one place, so producers can stop playing catch-up and instead focus on leading the evolution of this growing category."

One portfolio: Where science meets passion

In today's noisy cheese production landscape, dsm-firmenich presents a clear – and unique – value proposition. "Not only is our product portfolio the broadest in the industry, but it's also built on an unrivaled legacy of scientific rigor, continuously advanced through investment in innovation, and powered by our passion for the art of cheesemaking."

Covering acidification, coagulation, bio-preservation, coloration, surface protection, and taste, texture, and nutrition solutions, dsm-firmenich's portfolio brings together foundational elements and specialized options for all cheesemaking needs. This comprehensive range, combined with creative and culinary mastery, enables manufacturers to optimize existing products, develop new ones, and adapt to changing requirements and trends.

The result? Flexibility without fragmentation. "The unmatched breadth and depth of our portfolio gives customers everything they need, all in one place," Oliveira de Souza says. "From sensorial and functional excellence to quality and consistency, dsm-firmenich's products and solutions deliver as one – making it simple for producers to create distinctive cheeses to delight consumers everywhere."

One partner: Unlocking more value from every liter

Beyond ingredients, resilient performance requires producers to navigate technical



dsm-firmenich helps reduce risk, accelerate development, maximize efficiencies, and ensure products succeed at every stage of the life cycle. As Oliveira de Souza puts it, "From chefs who identify the right culinary imprint for your product to regulatory experts who assist with compliance and sustainability, our full-service partnership doesn't just unlock value at every process step: it joins the dots between them, so you don't have to."

One vision: Ready to capture the possibilities of cheese

Day-to-day cost pressures and fast-moving market developments can make it impossible for cheese producers to step back and take a long-term view. Yet that's exactly what they need to do if they're to respond to industry dynamics and successfully position themselves at the forefront of the cheese category.

"We bring together global R&D, an on-the-ground regional presence, and boundless curiosity for innovation in cheese," says Oliveira de Souza. "In other words,

dsm-firmenich has the big-picture perspective you need. Then, we apply our capabilities to enhance everything from yield to texture to safety, without compromise. After all, when consumers won't accept trade-offs, why should you?"

Crucially, dsm-firmenich's approach to innovation goes beyond incremental improvements: "We invest in advancing the science of taste, texture, and health to unlock more efficient, nutritious, delicious cheese that's sustainable for the planet as well as producers. We focus on solutions that our customers can feasibly integrate and scale. And our forward-looking mindset allows us to anticipate changing consumer expectations and tap into emerging trends, helping manufacturers to stay ahead of market changes – and shape what comes next."

A unique approach, from farm to fridge

Versatile, tasty, nutritious: it's no surprise that consumers can't get enough of cheese. The challenge for producers –

whether of traditional regional cheeses, high-volume industrial products, or next-generation alternatives – is to optimize the qualities consumers expect, while keeping their operations competitive in a tough environment.

dsm-firmenich is uniquely positioned among cheese players to provide end-to-end support along the entire value chain. "Through our world-leading portfolio, consultative partnership, and visionary R&D, we help our customers produce exceptional cheeses of every kind, under any conditions, for any market," says Oliveira de Souza.

This integrated approach ensures producers create more value at every step and realize consistent performance at scale. In turn, they achieve the high quality, market differentiation, and consumer trust they need to unlock opportunity and growth.

In the words of Oliveira de Souza, "With dsm-firmenich, you get one portfolio. One partner. And unlimited potential. And it all starts with one conversation."

Robot maintenance: balancing AI and customer focus

Ensuring availability, boosting performance, minimising downtime

Automated processes, AI-powered analytics and remote servicing are increasingly shaping plant operations in the dairy industry. Yet when it comes to the availability, performance and sustainable optimisation of robot systems, the human factor remains crucial. We spoke to Kai Höfer, Head of Service at KOCH Robot Systems, about how modern industrial service must be structured today – and why technology alone is not enough.

IDM: Could the maintenance of robotic systems be automated in the future – essentially a robot that maintains and repairs other robots?

Höfer: The idea sounds appealing at first. But I think we will never be able to completely replace humans. Robots are always specialists in their niche. Humans are simply all-rounders who can take on any challenge. The combination of outstanding mobility and fine motor skills, perception and intelligence in an autonomous machine will not be possible in the foreseeable future. So even if the entire production plant consists only of robots, there will always be a human in between to keep

things running. And people prefer to work with people.

IDM: So it is the human factor that makes working on and with robots work well?

Höfer: You could say that. The relationship between people is just as important to us as the technology. There is a positive working atmosphere – not only internally, but also with our customers. This enables us to learn from and improve together. For example, we have a positive error culture at KOCH. Everyone is allowed to make mistakes. Mistakes happen. We acknowledge our mistakes and correct them as quickly as possible, if necessary by working together. It is important to us that we learn from our mistakes in order to improve. And that is only possible if the interpersonal relationships are strong.

IDM: Can you give us an overview of the main tasks and scope of the technical service provided by your department?

Höfer: It is vital for our customers that their systems run reliably and efficiently. And if they do break down, they need to be back

up and running as quickly as possible. Our service is structured around these requirements: 'Maintenance' covers tasks such as maintenance and inspections, spare parts supply and plant safety. 'Performance' deals with upgrades and retrofits, performance optimisation and training. And then there is 'Troubleshooting'. These are our problem solvers providing remote and on-site service and our 24/7 hotline.

IDM: You offer a 'one-stop service', especially for systems from other manufacturers. What services does this include? Do you also carry out repairs?

Höfer: A single source means that we at KOCH Robotersysteme take care of everything. As a customer, I can contact our service department with any questions. For example, we have our own service programmers, electricians and mechanics who can deal with all technical requirements. If we reach our limits in the service department, our internal departments, such as design or electrical engineering and software, can help us. All this happens in the background, the customer is unaware of it and only has contact with our service employee.

When it comes to industrial robots, KUKA and ABB are the two main suppliers. Our service engineers specialise in both. This means that we can offer service and, of course, repairs for these robot types, regardless of which system manufacturer supplied them. In the case of mechanics and hardware, this is done according to the manufacturer's specifications. When it comes to software solutions, we familiarise ourselves with the programmes of other manufacturers. But because we know the robots and their programming languages, this is entirely feasible and economical.

Our customer database also includes a large number of third-party systems that we regularly maintain and repair. But we don't just do this for robotic systems; we are also happy to take on conveyor systems and other ancillary equipment.

IDM: How do you ensure that your services meet the individual needs of your customers?

Höfer: We are close to our customers. We pride ourselves on the personal relationship we have with our customers. Our people know how important the systems are to our customers and put their heart and soul into their work. Most systems are always serviced by the same technicians, who know their 'babies' inside out and act accordingly and purposefully.

IDM: You also offer preventive maintenance as part of your service portfolio. How does this benefit your customers?

Höfer: This regular maintenance and preventive servicing keeps systems operational and productive over the long term and significantly reduces unplanned downtime. And these regular checks are just as important for overall plant safety.

IDM: What technologies or innovations do you use in your service operations to improve plant performance for your customers?

Höfer: We focus on our customers' equipment so that they are always up to date. After each customer visit, our service

engineers also include suggestions for optimisation or preventive measures in their reports. If the customer requests an increase in performance, we take a close look at the plant with our specialists. This can be as simple as adjusting processes, existing designs, such as grippers, or adapting programmes. For more fundamental changes in technology, we offer retrofits and upgrades.

IDM: Smooth and efficient operation also requires well-trained personnel. Can you tell us a little more about the training service?

Höfer: We offer two main types of training: operator training and maintenance training. We prepare operators for their daily work with individual training courses, either at our headquarter in Dernbach,





*Kai Höfer, Head of Service
at KOCH Robot Systems
(photos: KOCH)*

Germany, or on site. Additionally, we offer practical training for maintenance and servicing. After all, well-trained maintenance personnel are key to reliable and smooth plant availability and minimal downtime.

Usually, training is done in groups of three up to a maximum of five technicians or employees. Experience has shown that this gives individuals enough space to ask questions, which simply makes the whole thing more efficient. Of course, we can also train individuals. Depending on the training required, this is carried out by our maintenance specialists or service programmers.

IDM: What technologies do you use to make your service more efficient and effective?

Höfer: It starts with a ticketing system that is tailored to the needs of our service and offers the possibility of customer integration. Then we have our 'smart glasses', the KOCH Smart-Remote-Service. This

software is constantly being developed and improved together with two partners. And specifically for use by our customers, we have developed KOCHnectivity, a software solution designed to help optimise plant performance: KOCHnectivity provides a clear overview of the status of a system and enables a precise analysis of the production structures. Based on these results, we can make specific recommendations as to whether the system needs to be upgraded, modified or retrofitted.

IDM: How important is digitalisation in service and what solutions are you already using?

Höfer: Digitisation is essential. If you do not keep up, you will fall behind. One example is remote maintenance: we have been offering this for many years and can access customers' systems and fix most malfunctions online. This saves a lot of time and thus money. These systems are

constantly evolving and have become indispensable.

IDM: What trends or challenges do you currently see in the service area and how are you addressing them?

Höfer: It is clear, that digitalisation will continue to increase. Customers want to be able to see what is happening with their systems in real time. The requested delivery times, for example for spare parts, and maintenance times will also continue to decrease. The example of Amazon shows what is possible, and our customers will expect a similar service. Then, of course, artificial intelligence will become a key issue, for example in terms of operation, operating instructions, spare parts identification and similar service-related areas. At KOCH, we have launched an 'AI project' to evaluate the possibilities and to use this technology ourselves and for our customers. This is an exciting and promising topic, and we are still at the very beginning.

Britannia expands its dairy beverage operations

Aseptic PET for value-added dairy drinks

Britannia Industries has expanded its dairy beverage operations in India with the installation of its first aseptic PET packaging line for the Winkin' Cow portfolio at its greenfield facility in Ranjangaon, Maharashtra. The project marks an important step in the company's development of value-added dairy drinks, a segment Britannia entered in 2018.

The new line was supplied by Sidel and is designed for aseptic filling of sensitive beverages in PET bottles. For Britannia, the investment was not only a packaging change, but also a strategic move to strengthen its position in a competitive market for ready-to-drink dairy beverages.

Why aseptic PET was selected

Britannia chose aseptic PET over alternatives such as carton packaging or HDPE in order to differentiate the product more clearly at the point of sale and to support on-the-go consumption. PET packaging also offered advantages for the sensory presentation of the beverage, allowing



Britannia Industries has expanded its dairy beverage operations in India with the installation of its first aseptic PET packaging line for the Winkin' Cow portfolio at its greenfield facility in Ranjangaon

consumers to see the product and experience it in a format aligned with indulgence-oriented dairy drinks.

For a brand such as Winkin' Cow, which addresses flavored and value-added dairy beverages, this packaging format was considered suitable both from a marketing and from a functional distribution perspective. At the same time, the aseptic approach supports ambient distribution with extended shelf life, an important factor in a market such as India with long supply chains and varying climatic conditions.

Requirements for product and market flexibility

The line was specified to meet several operational requirements. These included the ability to handle multiple beverage categories, such as flavored milk, juices and other value-added dairy drinks, while maintaining consistent product quality over large production volumes. Shelf life performance, hygiene standards and the preservation of taste, texture and nutritional value were central criteria.

Another requirement was flexibility. Britannia needed a system that could respond to changing consumer preferences, regional flavor trends and future product development. This is particularly relevant in India, where beverage manufacturers often need to adapt portfolios to diverse regional markets and broad distribution networks.

Line design and technical concept

At the core of the installation is Sidel's Aseptic Combi Predis system, running at 24,000 bottles per hour. The line integrates preform sterilisation, blow moulding, filling and capping in one aseptic process.

The Predis dry preform decontamination process uses hydrogen peroxide injected into the preform before it enters the oven. During heating, the hydrogen peroxide is activated, enabling decontamination before bottle formation. In practical terms, this approach reduces the size of the sterile zone and is intended to support process control and food safety for sensitive beverages.

The line also provides packaging flexibility. According to the project data, it can handle three bottle formats ranging from 180 ml to 1 litre. This gives the manufacturer scope to address different consumption occasions and price points within the dairy drinks category.

Integration into a greenfield dairy plant

Because the aseptic PET line was incorporated from an early stage in the planning of the Ranjangaon greenfield plant, the project team was able to align line layout, cleanroom zoning and material flow with the requirements of aseptic production. This early integration appears to have been an important factor in achieving an efficient plant design.

Particular attention was paid to utilities and infrastructure. HVAC, compressed air, water and power systems were planned to support continuous and energy-efficient operation. Product and packaging logistics were also arranged to enable a linear material flow from raw material intake through to finished goods handling.

The "Winkin' Cow" milk drink brand is set to expand further. This is especially relevant when entering a new packaging segment.





As in many greenfield projects, there were practical challenges, especially in relation to space optimization and utility routing. These issues were addressed through coordination between engineering, project and operations teams, allowing the line to be installed, validated and commissioned without reported disruption to operations.

Project timeline under pandemic conditions

Implementation of the line took around 24 months from project start to full commissioning. The timeline was longer than originally expected due to the COVID-19 pandemic, which affected global supply

chains and caused shortages in electronic components. Despite these conditions, the project progressed through close cooperation between the companies involved. The available information indicates that communication structures and a clear point of contact played a significant role in maintaining transparency during the lockdown period and in supporting project continuity.

Packaging and validation support

An important aspect of the project was that the scope extended beyond the supply of filling and packaging equipment alone. The support package included bottle and label design, packaging validation, filling tests and shelf-life studies. For dairy beverages, where product stability, packaging compatibility and market positioning all interact closely, this broader development approach can reduce risk during commercialization.

7C FLEXOGRAPHIC PRINTING

A standardised process with sustainability benefits

Switching to a standardized seven-color flexo print process can improve both sustainability and process stability in packaging production. SÜDPACK's SPQ approach expands the conventional CMYK palette with orange, green, and violet, enabling more than 85% of Pantone and spot colors to be reproduced within a defined color space.

The key difference is not simply the additional colors, but the standardized upstream workflow. Designs are prepared in prepress using a fixed seven-color system, supported by consistent color management and clearly defined process parameters. This helps reduce variability, setup times, ink and solvent consumption, film waste, and machine downtime.

According to a certified life cycle assessment, SPQ can lower CO₂ emissions by up to 18% compared with conventional flexo printing. The process also supports more stable repeat orders, tighter tolerances, and consistent print quality across runs and sites.

SÜDPACK made a deliberate decision to focus on 7C (photo: Südpack)

Most existing artwork can be converted to 7C without major changes. The approach is particularly useful for packaging variants, shorter runs, and projects with high quality and consistency requirements. While implementation requires adjustments in established workflows, the process offers measurable operational and environmental benefits.



NEWS

End-to-end digitalization of cheesemaking processes

Integrated production planning and digitalised manufacturing

“At Strähl, we understand digitalization not as a one-off project, but as a continuous improvement process. Whether in production, picking, or planning: Well-thought-out digital solutions help us to work more efficiently, respond faster, and at the same time, assure the quality of our products,”

Markus Egli, Operations Manager at Strähl Käse AG



Strähl Käse AG, a traditional Swiss cheese dairy, has a keen sense for innovation that extends well beyond the production of its specialty cheeses. By making forward-looking investments in state-of-the-art technology and comprehensive digitalization, the company has evolved into one of the region's leading milk processors.

Whether raclette, Tilsit, or cheese fondue – since 1935, Strähl has processed milk from regional farms in innovative, premium cheese products. The family business sees ensuring high product quality and continually improving the cheesemaking processes as their top priority. To reach these goals, Strähl relies on motivated people and the right technologies.

Since 2017, the Swiss cheese dairy has controlled its processes with the ERP system from CSB. What started out as a digitalization project in order entry and financial accounting now permeates the complete value chain, from production to shipping.

Progressive digitalization

Strähl Käse systematically drives its digitalization with an entrepreneurial vision. At the two production facilities in Siegershausen and Bürglen, they leverage synergies to efficiently implement innovative solutions. The processed cheese factory in Bürglen plays a central role being the pioneer in the digital transformation.

Thanks to the clear structure in production and the lean product portfolio, new technologies can be introduced fast and tested in practice at the Bürglen site. For example, the processed cheese plant was the first site to successfully introduce both the CSB-System's integrated production planning solution and fully digitalized manufacturing processes.

The data from the sales orders is joined in production scheduling. The consolidated overview allows accurate planning of production quantities and batches. The plan data is directly sent to



mobile ERP (MERP) in production to maintain a high degree of flexibility. Batches can be generated automatically, and production can be started.

The insights gained from the implementation have been incorporated into the subsequent introduction at the headquarters in Siegershausen, where a significantly greater number of different items is manufactured. This tried-and-true approach ensures that every digital innovation is tested and optimized in a reduced scope before it is integrated into the more complex processes at the main facility.

As a general rule, only solutions that provide an evident added value and a convincing cost-benefit ratio are used.

Efficient logistics

The efficiency in the logistics area at Strähl Käse also has been systematically improved over the past few years. In the past, order picking was still done using a pen and paper. The recorded data then needed to be entered manually into the system by the people in the sales back office.

Today, this process is paperless and much more efficient: Picking has been migrated to a modern mobile ERP application. The new shipping solution, combined with the use of SSCCs (Serial Shipping Container Codes), has significantly advanced the efficiency of order processing. The mobile ERP system also supports cross-docking for major customers.

The result: the order picking speed is enhanced significantly, inventory levels are available in real time, and products can be traced



A glimpse into production (photos: Strähl Käse)

seamlessly and reliably. What is more, the new solution enables automated communication with the customers. This means a substantial cost reduction.

Further business growth with ERP

At Strähl, the utilization rate of the ERP software has steadily increased. Large parts of the value chain are now portrayed in the integrated ERP system. The cheese dairy continually works on the development of its digital processes to unlock even more potential in the future.

“At Strähl, we understand digitalization not as a one-off project, but as a continuous improvement process. Whether in production, picking, or planning: Well-thought-out digital solutions help us to work more efficiently, respond faster, and at the same time, assure the quality of our products,” Markus Egli, Operations Manager at Strähl Käse AG, explains.

Where Europe still wins

The foreign markets that remain open to EU dairy



Author: Vladislav Vorotnikov

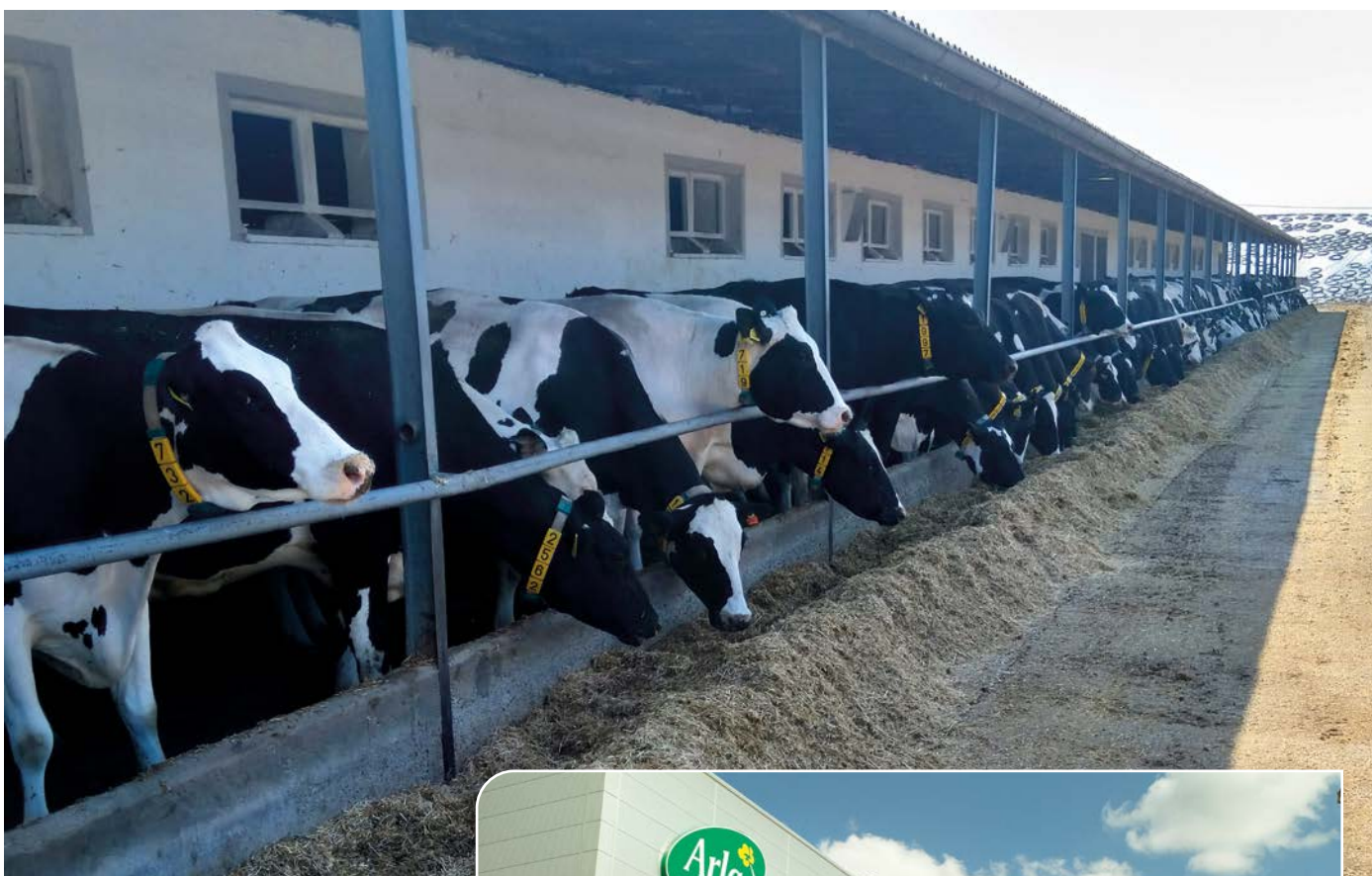
Europe's dairy industry has spent years warning that it is being squeezed on all sides – by tightening environmental rules at home, rising competition from low-cost exporters abroad, and a new wave of food protectionism reshaping global trade. The narrative of decline has become familiar: higher costs, eroding margins, and a gradual loss of ground in key international markets.

But the reality so far tells a different story. Despite mounting pressures, EU dairy export volumes and values are holding firm – and in some cases expanding – across a range of foreign markets. Driven by steady global demand for high-quality milk powders, cheeses, and specialty products, European producers are continuing to find buyers well beyond their borders.

The European Union's agri-food sector had another record-breaking year in 2025, with dairy products largely contributing to the positive trends, according to a March report by the European Commission. The total export volumes in milk equivalent increased by 0.5% in January-November 2025, and the export value rose by 6.1% to over EUR 14.66 billion. Skimmed milk powder exports jumped by 10%, largely driving the overall increase. Among the key destinations for dairy exports, the European Commission noted strong growth in sales in MENA countries, including Algeria, Egypt, and Saudi Arabia, and Asia, including markets like

Indonesia, Malaysia, and Vietnam. The European dairy industry performs well in both traditional and emerging markets, according to Laurens van Delft, director of Trade and Economics with the European Dairy Association. "The United Kingdom and the United States continue to be central destinations, but the EU's trade diversification strategy is clearly paying off," van Delft said. "Markets such as Canada and Japan are gaining importance, while emerging opportunities in Southeast Asia and Latin America are expanding the global footprint of European dairy".

In 2025, Europe expanded dairy exports to all key sales markets, except for Algeria, Japan, and Thailand, as revealed by Jukka Likitalo, Secretary General of Eucolait, the European Association of Dairy Trade representing European wholesalers, exporters, and importers of dairy products. Exports to China, the second-largest sales market, rose by 3%, and to the United States by 8%, despite Donald Trump's threat to subject EU agricultural goods to new tariffs. However, the emerging markets in the Middle East and Asia are where European dairy products are gaining popularity. Sales to Malaysia jumped by 21%, Saudi Arabia by 23%, and Vietnam by 25%, according to Eucolait data. "The global demand for dairy continues to grow, and many countries with a dairy deficit are importing more, not less," Likitalo said.



European dairy exports remains strong though herd is declining (photo: First Farms)



Arla is among the companies that warned about the impact of the EU environmental policy on dairy exports (photo: Arla)

A broad global footprint

Over the past few years, a growing number of dairy industry representatives across Europe have warned that the sector risks losing its competitive edge, owing to several structural pressures. Executives and industry bodies point to a combination of a shrinking dairy herd, increasingly stringent environmental regulations, and persistently high production costs as key factors weighing on output and investment.

Uncertainty about European environmental rules is deterring investment in food production and pushing up prices, Peder Tuborgh, CEO of Arla, the largest Scandinavian dairy manufacturer, said in an interview with the Financial Times in February 2025. "When you have uncertainty, as a farmer, then you don't invest in new stables," Tuborgh said. Rabobank has also warned that the European dairy industry, historically a global leader, is now under immense pressure due to multiple challenges. Declining self-sufficiency in milk fat has led to supply gaps and increased price volatility. "Additionally, rising production costs, stringent environmental



photo: Vaccine Valley



photo: Reddit

regulations, and a growing labor shortage are putting profitability at risk," Rabobank has warned. Separately, the European Dairy Association noted that "rising protectionism and new non-tariff barriers" have increasingly complicated market access.

The EU-China trade dispute has become the clearest example of how protectionism can affect dairy exports. In December 2025, China imposed provisional tariffs of 21.9% to 42.7% on a range of EU dairy products, including cheese, milk, and cream. The move followed an anti-subsidy investigation and was widely seen as retaliation amid broader trade tensions with the EU. In February 2026, China finalized tariffs at 7.4%–11.7% for five years – lower than initially proposed, but still clearly protectionist. But European dairy exports remain resilient despite a global trade environment growing more protectionist, van Delft said. Moreover, the European Commission's efforts to facilitate better access to European goods in new markets are clearly paying off. "Recent and upcoming trade agreements are reinforcing this [European dairy industry's] position," van Delft said. "Agreements concluded with Indonesia and Mexico in 2025 are expected to create new opportunities once implemented, alongside the EU-US "Turnberry" arrangement, which provides a degree of predictability for dairy trade," van Delft said.

In 2026, van Delft continued, further momentum is expected from agreements with Australia and the anticipated entry into force of the EU–Mercosur deal. Meanwhile, Southeast Asian

markets - particularly Indonesia, Thailand, Malaysia, and the Philippines - represent key growth opportunities, alongside continued strong demand in the Middle East, including the United Arab Emirates, according to van Delft.

Environmental standards: a double-edged sword

The EU's tightening environmental and animal welfare standards are having a distinctly mixed impact on dairy exports, market players believe. On one hand, stricter rules on emissions, land use, and livestock management are adding to production costs and compliance burdens, with industry representatives warning that they can squeeze margins and, in some cases, accelerate farm exits.

On the other hand, these same standards are reinforcing the bloc's position as a global benchmark for sustainable and high-quality food production.

For a growing segment of environmentally conscious consumers, particularly in premium export markets, "made in the EU" dairy carries added value - allowing European producers to differentiate their products and, in some cases, command stronger demand despite higher costs. "Ambitious environmental or animal welfare standards are positive for the long-term sustainability of the sector, but I agree that stricter rules governing production inevitably have an impact on competitiveness," Likitalo said. "The European dairy sector and policy-makers need to figure out how to limit and deal with the increases in production costs," Likitalo said.

Stricter environmental and animal welfare standards can increase costs and, in some cases, accelerate structural change, particularly for more vulnerable producers, van Delft agreed. "As also reflected in our sustainability work, additional economic burdens need to be carefully managed to avoid unintended impacts at the farm level," van Delft added. At the same time, these standards are an integral part of the EU dairy model. "They underpin the sector's strengths in quality, safety, and sustainability, and support its positioning in higher-value segments globally. In that sense, while there may be short-term adjustment pressures, the longer-term impact is more nuanced," van Delft.

Crucially, this regulatory framework also enables EU dairy exporters to position themselves more firmly in higher-value, premium market segments of the global market. In this model, the industry is better able to pass through or absorb environmentally driven cost increases. "Overall, the EU dairy sector's competitiveness is less about cost leadership and more about value, differentiation, and trust - areas where these standards can ultimately reinforce its global standing," van Delft added.

Global reach stays strong

The EU economy is under clear strain, with major industrial pillars such as automotive production facing weakening demand, high costs, and intensifying global competition. However, all signs point

to the fact that the European dairy industry is not going to find itself among the segments experiencing huge problems in the coming years. The EU currently exports some 18% of its milk production and accounts for about 33% of global trade, Likitalo stressed. "We do not expect this picture to fundamentally change in the years ahead. Our key competitive advantages include strong, innovative companies and diverse high-value products," Likitalo added.

A major strength of the EU dairy sector lies in its uniquely global presence, with European companies operating and partnering across Latin America, North America, Asia, and Africa, van Delft added. "This footprint provides deep market insight and allows them to respond quickly to changing demand patterns worldwide," van Delft added. "At the same time, the sector benefits from a strong combination of high quality, innovation, and sustainability credentials, supported by well-established quality schemes such as geographical indications".

In general, observers note that even in a turbulent world, periodically shaken by trade disputes and regional conflicts, the EU dairy industry has repeatedly demonstrated its ability to successfully navigate a challenging global environment. Despite shifting trade barriers and geopolitical uncertainty, it has maintained its footing in key markets worldwide, which makes the future of the EU dairy exports promising.

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Also complete dairy factories

Dicer for small to medium-sized operations

Focus on cutting quality, hygiene, and ease of use



Thijmen Put, Product Manager at FAM STUMABO

The global cheese market continues to expand, with industry estimates valuing it at USD 98.0 billion in 2025 and projecting it to reach USD 154.4 billion by 2034 ¹ reflecting sustained demand across retail, food service, and convenience applications. Mozzarella, in particular, has become the most widely processed cheese type worldwide, driven by the global popularity of pizza and ready-to-eat formats, where consistent portioning and product performance are critical.

At the same time, dairy processors are operating under increasing pressure. Rising raw material and energy costs, labour constraints, and market volatility are forcing producers to focus more than ever on operational efficiency and margin protection. In this context, cutting performance becomes a critical control point in the process, where even small deviations can lead to measurable losses in yield and product quality.

A practical response

In response to these evolving requirements, FAM STUMABO introduces Flexifam.2, a dicer designed to deliver consistent performance in demanding cheese processing environments, with a capacity of around 1,000 kg/h depending on the cut size.

The new model is an evolution of the industry-standard Flexifam 55, further refined to meet the needs of small- to medium-sized processors.

“Processors today are under pressure to do more with less – less waste, less downtime, fewer skilled operators, and less margin for error.” What we see in the field is that cutting is often underestimated, yet it has a direct impact on profitability. With Flexifam.2, we wanted to offer a practical, accessible solution for small and medium processors who need reliable cut quality, easy sanitation, and low maintenance without complexity,” explains Thijmen Put, Product Manager, FAM STUMABO.

Practical design solutions

Flexifam.2 cuts product in three steps – slicing, strip cutting and dicing – using fast-rotating knife spindles rather than forcing product through a cutting grid. A shear plate enables a very small tolerance between the crosscut knives and the shear edge, reducing friction and delivering clean, consistent dice with minimal fines across a wide range of cheese types and textures. Variations in product size are accommodated by the large drum diameter enabling processors to feed larger formats without the need for pre-cutting. At the same

*Depending on the cut size,
the Flexifam.2 achieves a
capacity of up to 1,000 kg/h
(photos: FAM STUMABO)*



time, a 5.5 kW drive system and precise knife positioning contribute to stable, repeatable output, even when processing products with varying texture or moisture levels.

The machine can process products up to 135 mm in diameter and 270 mm in length. It delivers dice sizes ranging from 3 to 15 mm.

Flexifam.2 is particularly well-suited to mozzarella processing. Its large drum diameter accommodates the longer logs commonly produced by smaller and artisanal mozzarella makers, reducing or eliminating the need for pre-cutting.

In addition to mozzarella, it is also suitable for processing a wide range of cheeses, including Gouda, Emmental, cheddar, and other varieties.

Simplifying daily operations

Cleaning is facilitated by a hygienic design that includes a stainless-steel washdown motor, full stainless-steel construction, and easy access to key areas of the machine, enabling operators to perform thorough sanitation more quickly. Maintenance interventions are also simplified, with improved access to the drive compartment and a more ergonomic design that enables faster component handling, reducing a two-person maintenance job to a single person.

In addition, the cutting system allows quick, straightforward tool changes that can be completed in just a few minutes, making it easier to switch between different cut sizes and product types with minimal downtime.

- 1 Global cheese market size and forecast: IMARC Group, Global Cheese Market Expected to Reach USD 154.4 Billion by 2034, 5 February 2026

Six core highlights of CBB 2026 released

A premier gathering for global liquid food industry

International Brew & Beverage Processing Technology and Equipment Exhibition for China (CBB 2026) is set to take place from October 12 to 15, 2026 at Shanghai New International Expo Centre, gathering cutting-edge technologies and innovative achievements across the global liquid food processing and packaging industrial chain.

6 Core highlights and Series of Value-Added Services are launching, aiming to help international exhibitors maximize their ROI and navigate the Chinese market with ease:

- » **Innovative Solution Showcase:** Display full-lifecycle technical solutions for beverage and liquid food production, covering raw materials, processing, filling & packaging and supporting services like PET technology, water treatment and automation control etc.
- » **drinknova Hub:** Newly launch and beyond the traditional trade show booth here provided Think Tank, Inno Booth, Pitch slots, Match Making, Livestreaming and Thematic Tour
- » **Industry Awards & Display:** Present Green Packaging Award (GPA) and 2026 FBE Annual Innovation Award, showcasing top sustainable and innovative packaging and product solutions.
- » **New Stage, New Forums:** drinkSmart Stage for the new trend of smart automation of liquid-food, and drinkCool Stage for the new trend of Chinese beverage market.
- » **Match Making:** Launch targeted business matchmaking services and exclusive networking zones, empowered by authoritative industry media and KOLs to boost brand exposure.
- » **Immersive Tasting Experience:** drinkBeer Stage with professional judges, offering global beer and flavor tasting, technical sharing and supply chain exchanges. chinabrew-beverage.com



Call for Innovation: Apply Now to Join the drinkNova Hub @ CBB 2026

About drinkNova HUB

Get ready for the debut of drinkNova HUB, CBB 2026's newest flagship zone. We're putting the spotlight on the trio driving the industry forward: innovative ingredients, tech disruptions, and sustainable packaging. Whether you're a disruptive startup or an established innovator, drinkNova HUB is your platform to connect, collaborate, and turn bold ideas into commercial reality.

What We Offer (Our Services)

We provide a comprehensive launchpad to accelerate your market presence:

Inno Booth: Lightweight, "plug-and-play" booths with tasting counters

Inno Stage: 15-minute high-frequency pitches, focusing on pain points and breakthroughs.

Inno Tank: Data-driven industry radar features insights from Frost & Sullivan, Nielsen, Mintel, etc.

Inno Match: Social, net-working and matchmaking space with specialty drinks and snacks.

Media Promotion: Official and media exposure such as Livestreaming to amplify your innovation

Who Can Join drinkNova HUB

- » **Industry Architects:** Build corporate strategies with think tank expertise and chart growth in volatile markets
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- » **Flavor Architects:** Develop innovative ingredients and functional solutions to reshape color, aroma, taste and nutrition
- » **Sterilization Experts:** Deliver preservative-free freshness using HPP and other technologies
- » **Digital Pioneers:** Optimize full-line efficiency with digital tools
- » **Packaging Carbon Reduction Officers:** Advance sustainable and low-carbon packaging
- » Any team or individual with small but meaningful innovations in **raw materials, equipment, packaging or software etc**

"Your every innovation, no matter how small, is defining the next generation of liquid."



Celebrating World Milk Day

Advancing agrifood sustainability, resilience and investment:
EDA co-hosts private sector dialogue with FAO



*Alexander Anton,
secretary general
of EDA, and
Raschad Al-Khafaji*

1 June 2026 marked the 25th anniversary of World Milk Day. First designated by the FAO in 2001, this day, we recognise milk and dairy as cornerstones of nutritious and sustainable food systems worldwide.

Dairy is unique and well worth celebrating. It is an affordable, nutrient-rich source of essential vitamins and minerals that contributes to good health and balanced nutrition at every stage of life, from childhood through to older age. Beyond its nutritional value, dairy also plays an important socio-economic role, supporting rural communities and livelihoods around the world. Recognising this impact, the FAO has long highlighted dairy as an important tool in the fight against poverty and malnutrition, particularly in

developing regions where access to nutritious food remains a major challenge.

EDA is proud of its longstanding cooperation with the Food and Agriculture Organization (FAO) of the United Nations and of our shared commitment to innovation, sustainability and food security.

Last month, EDA and the FAO co-hosted a high-level private sector dialogue in Brussels on sustainability, resilience and financing of agrifood systems, bringing together around fifty stakeholder representatives from EU agrifood industries, European organisations and EU institutions.

This marked the first FAO policy dialogue co-hosted with private sector organisation, the consultation was a key opportunity to present and discuss the FAO Strategy for Private Sector Engagement 2026–2030 with European stakeholders, highlighting its role in fostering more coherent and impactful partnerships.

Alexander Anton, secretary general of EDA, stated that the new FAO Strategy for Private Sector Engagement sends a clear signal for more a flexible and market-responsive approach while FAO remains true to its mission on agrifood sustainability and food security. The EU dairy sector is proud of its longstanding cooperation with FAO, including on projects on the ground. There are good reasons why FAO celebrates World Milk Day every year, even though it has not yet been made official by the United Nations.

Dr Lauren M. Phillips, Director of Partnerships at FAO, underlined the value of multisectoral collaboration with the private sector to shape sustainable and scalable solutions that work on the ground.

This cooperation between the sectors is exemplified by the partnership between Danone and the FAO, which promotes sustainable value chains, addresses the interconnectivity of humans,

animals, and the environment through the One Health approach, and strengthens public-private capacities to deliver climate goals in the agriculture and land-use sectors.

The dialogue helped shape the key messages brought forward at the FAO Regional Conference for Europe (ERC35) in May, focusing on advancing sustainable agrifood systems through integrated approaches to climate action, biodiversity conservation, land restoration, and the development of the rural economy.

Innovation, biotechnologies, and sustainable financing are essential drivers of productivity, sustainability, resilience, and improved nutritional outcomes within sustainable agrifood systems. The challenges linked to climate change demand investment in science-based, economically sound and innovative solutions.

The European dairy sector remains committed to contributing to a nutritious and sustainable food systems through innovation, resource-efficient production practices, and active engagement in EU and international policy processes. By working collaboratively with public institutions and stakeholders across the agrifood chain, the sector supports practical and science-based approaches to climate action, biodiversity conservation, rural development, and improved nutrition outcomes.

IFF

Vanilla Innovation Center in Madagascar

IFF has opened a new Vanilla Innovation Center in Toamasina, Madagascar, strengthening its activities in vanilla research and product development. Located close to key vanilla growing regions and post-harvest processing facilities, the new site combines laboratory analysis, extraction, flavour creation and application development in one location.

According to the company, the center is intended to improve understanding of natural variability in vanilla production and support the development of flavour solutions based on conditions at origin. Vanilla quality is strongly influenced by factors such as climate, curing methods and post-harvest handling.

The 650-square-metre facility includes analytical laboratories, extraction equipment, flavour development units and application capabilities for dairy, bakery and confectionery products. A research greenhouse ("Bloomery") is also part of the site and will be used to study different vanilla varieties and post-harvest techniques.



IFF has opened a new Vanilla Innovation Center in Toamasina, Madagascar (photo: IFF)

IFF stated that the center will also support collaboration with local farmer networks and contribute to traceability and sourcing activities. In addition, the site will host training programs and workshops for customers, experts and local teams.

The Madagascar facility is integrated into IFF's global vanilla network and complements existing activities in sourcing, extraction and flavour development.

NEWS

Cheese Cutting Machines



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photo: Alpenhain

When the target profile isn't fully transparent
Interview



photo: Ortec

Why dairy supply chains can't rely on efficiency alone
Technology/IT



photo: Koch

High-capacity palletizing center for milk trays
Technology/IT



photo: Eberle

Automation of the ripening process
Technology/IT

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